DEPARTMENT OF DEFENSE



NATIONAL GUARD AND RESERVE EQUIPMENT REPORT FOR FISCAL YEAR 2010

February 2009

NATIONAL GUARD AND RESERVE EQUIPMENT REPORT FOR FISCAL YEAR 2010

(NGRER FY 2010)

(In Accordance with Section 10541, Title 10, United States Code)

February 2009

Prepared by Department of Defense Office of the Assistant Secretary of Defense for Reserve Affairs Deputy Assistant Secretary of Defense (Materiel and Facilities)

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FOREWORD

Since 2001, the Reserve components (RC) have undertaken a dramatic change of responsibility from a strategic reserve to an operational reserve. Each of the Armed Services has made tremendous progress during the transformation while supporting two wars and hundreds of missions. In spite of these efforts there remains much work to be done.

Our purpose in Reserve Affairs is to set the conditions for a sustainable, seamlessly integrated and complementary Total Force. Our successes are measured by the degree to which we have advanced a culture of mutual appreciation and confidence in both the Active and RC. Such a culture will enhance readiness and ensure the continued viability of the All-Volunteer Force.

We fully support the force generation models of the Services which must be accompanied by training and equipping strategies that will provide first line equipment in the reserves. Our goal is to accomplish more training before mobilization and while at home station. A force that is well trained before it mobilizes and deploys requires sufficient stocks of modern equipment before it begins its post-mobilization, pre-deployment training.

On October 29, 2008, we published DoD Directive 1200.17, *Managing the Reserve Components as an Operational Force*. This directive defines the Operational Reserve, establishes the Secretary's principles and overarching policies for managing the RC in their operational and strategic roles, and provides substantive steps to further integrate the force.

Fiscal constraints make equipping the RC challenging. The Department has examined its current equipping processes and determined that improved financial transparency and better accountability of Guard and Reserve equipment, from budgeting through acquisition to equipment delivery, is required. We have implemented a Department-wide push to enhance budget justification material, coupled with a focused effort to improve tracking of equipment delivery. We recognize that these goals will not be achieved overnight. But we also recognize that we must make steady progress.

These initiatives establish a foundation and remove impediments for employment of the National Guard and Reserve as an operational force. They strengthen the RC role in providing strategic depth, and institutionalize the continuum of service. As a result they are part of the Department's top priorities and are being aggressively implemented.

I am hopeful these programs and initiatives move our conversations beyond the "history" of RC contributions and challenges and into a new way of thinking about what the RC can contribute to national defense in the resource-constrained environment we all know is ahead.

Sincerely,

minlofter

Dennis M. McCarthy

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Chapter 1 Overview

I. Strategic Context

A. Equipping Strategy

Our purpose in Reserve Affairs is to set conditions for a sustainable, seamlessly integrated, and complementary total force. Our methodology is to proactively deliver credible advice and information about the capabilities of the Reserve components (RC) and to develop the policies and resources necessary to fully exploit those capabilities. We will measure success by the degree to which we advance a culture of mutual appreciation and confidence in both the Active components (AC) and RC.

Force structure and mission changes have generated additional equipment requirements for each Military Department. Modernization, equipment replacement due to the war, and homeland defense (HLD) are the catalysts for a new approach toward equipping the RC, in particular the ground forces of the Army and Marine Corps.

We have undertaken the task of operationalizing the strategy for equipping the RC. The RC of each Military Department needs to be properly equipped not only for its mission when deployed but also for training at home station. We are designing the RC equipping strategy to assure transparency throughout the budget, procurement, and distribution processes; to maintain a level of readiness responsive to combatant commanders' requests; and to sustain capabilities for responding at home. The strategy will account for the Department's support to HLD missions while maximizing equipment availability throughout the force.

The Department's goal is to identify the greatest needs and design a strategy that best fits the operational reserve we have today. This requires new RC equipping concepts that focus on availability, access, and transparency in distribution of equipment and resources. It also requires a serious and intense effort to maintain a ready force.

Fiscal constraints present a challenge in equipping the RC. While the Department's ultimate goal is to fully equip units, it is developing a phased approach for providing an equipped, trained, and ready force at various stages of a new rotation policy. The phased approach to equipping will be needed until higher levels of equipping can be realized through the budget process in future years.

Determining readiness will require a change in metrics. Introduced in 2002, the Defense Readiness Reporting System (DRRS), an operational tool to manage readiness, will be the vehicle to support this change. The primary goal of DRRS is to measure the capability to perform specific tasks, above and beyond the readiness to perform directed combatant command missions. DRRS will extend readiness reporting into capabilities reporting via mission essential tasks (METs) and assessment of organizational capabilities to accomplish each specific task. In addition, readiness reporting will be expanded by complementing traditional resource-based reporting with embedded access to "authoritative" data collected directly from primary Service and DoD-wide data systems. The RC report readiness/capability through their parent service systems. At state level, DRRS is being implemented to capture both core National Guard wartime mission capabilities and domestic response capabilities for support to civilian authorities. Additional work is underway to capture the National Guard's Joint Capabilities Database and to create a comprehensive Civil Support Task List. RC data can now be easily queried online for purposes of analysis.

B. Managing the RC as an Operational Force

In January 2008, the Commission on the National Guard and Reserve released the final report of its 2½ year study of the roles and missions of the National Guard and the RC. After reviewing the report, the Secretary of Defense directed action on 82 of the report's 95 recommendations. The Department already had action completed or underway on 29 of the recommendations. A working group of senior executives developed detailed implementation plans for the 53 recommendations requiring new action.

The Department has submitted to Congress a detailed description of actions being taken on the Commission's recommendations in a separate report required by the FY 2009 National Defense Authorization Act (NDAA). Below we address actions from the report that influence equipping the RC.

1. Creating a Sustainable Operational Reserve

The Commission found that the "nation requires an operational reserve force, but that DoD and Congress…have not formally adopted the operational reserve. Steps taken…have been more reactive than proactive, more timid than bold, and more incremental than systemic. They thus far have not focused on an overarching set of alterations necessary to make the RC a ready, rotational force. Congress and DoD have not reformed the laws and policies governing the RC in ways that will sustain an operational force."

To formally recognize the operational role of the RC within the total force and to establish a systematic approach to managing the RC in their operational as well as strategic roles, the Department published DoD Directive (DoDD) 1200.17, *Managing the Reserve Components as an Operational Force*, on October 29, 2008. This directive established principles and overarching policies for managing the RC in both operational and strategic roles. The management principles will ensure that operational employment of the RC will be sustained, with rules governing the frequency and duration of activation. These rules are based on principles of judicious and prudent use of the RC and provide predictability to the member, family, and civilian employer.

The directive defines a RC operational force as a force that provides operational capabilities and strategic depth to meet U.S. defense requirements across the full spectrum of conflict. In their operational roles, the RC participate in a full range of missions according to their Services' force generation plans. Units and individuals participate in missions in an established cyclic or periodic manner that provides predictability for the combatant commands, the Services, Service members, their families, and employers. In their strategic roles, RC units and individuals train or are available for missions in accordance with the National Defense Strategy. As such, the RC provide strategic depth and are available to transition to operational roles as needed.

The following policies are established in DoDD 1200.17:

- The RC provide operational capabilities and strategic depth to meet U.S. defense requirements across the full spectrum of conflict.
- The AC and RC are integrated as a total force based on the attributes of the particular component and individual competencies.
- HLD and defense support to civil authorities (DSCA) are total force missions.
- Unity of effort is maintained consistent with statutory responsibilities in operations involving Federal forces and non-federalized National Guard forces with Federal forces under Federal command and control and non-federalized National Guard forces under State command and control.
- The RC provide connection to and commitment of the American public.
- Since expectation management is critical to the success of the management of the RC as an operational force, these rules enhance predictability and judicious and prudent use of the RC.
- The RC are resourced to meet readiness requirements.
- RC resourcing plans shall ensure visibility to track resources from formulation, appropriation, and allocation through execution.

2. Enhancing DoD's Role in the Homeland

The Commission made a number of recommendations regarding HLD and DSCA in 2007 and made additional recommendations in its 2008 report. The Department has completed action on most of the 2007 recommendations and has initiated several comprehensive assessments based on the additional 2008 recommendations. These include

- an assessment of the statutory authorities to provide support to civil authorities;
- an assessment of the adequacy of the plans of U.S. Pacific Command, U.S. Northern Command, and the National Guard Bureau to deal with a major catastrophe that has incapacitated the civilian government over a substantial geographic area;
- an assessment of the current and future roles of all components in HLD/DSCA and training for HLD/DSCA; and
- an assessment of the military force posture and distribution of capabilities to respond to domestic emergencies in addition to those already required by law.

The Commission also recommended that the RC have the lead role in, and form the backbone of, DoD operations in the homeland. We believe that this is a total force responsibility and should not discount any military capabilities that might be needed in the event of a major disaster in the homeland, whether natural or manmade. But we do recognize that there are particular competencies and in some cases unique capabilities resident in the Guard and Reserve that could be called upon to respond when a major disaster occurs.

3. Developing a Ready, Capable, and Available Operational Reserve

The Secretary of Defense has identified two special interest items to assure proper resourcing to develop and maintain a ready, capable, and available operational reserve.

The first special interest item is "funding an operational reserve." The Secretary directed that each biennial Program Budget Review shall propose appropriate funding for the readiness requirements necessary to prepare and employ the RC in their operational roles, based on the level of persistent conflict, and published utilization and fiscal guidance.

The second special interest item involves visibility and accountability of RC equipment. To improve financial transparency and accountability, the Department has implemented

- enhanced President's Budget Justification Material,
- a focused effort to improve tracking of equipment procurements to their delivery, and
- a disciplined semi-annual report to the Congressional Defense Committees notifying them of any funding or delivery changes throughout the appropriation cycle.

These improvements, targeted for FY 2010, will also provide the rigor and reporting structure necessary to support annual certification of equipment receipt within the National Guard, as required by the FY 2008 NDAA.

Further, the Secretary directed an assessment of equipment requirements for the AC and RC (as appropriate) for HLD, domestic emergency response, and DSCA, in accordance with the FY 2008 NDAA.

C. Summary

The Department's response to the Commission's report and recommendations was positive, proactive, and aggressive.

The priority the Department places on this undertaking is plainly stated in the January 29, 2009, memorandum approving the implementation plans. These plans will remove impediments to the employment of the National Guard and Reserve as an operational force, strengthen their role in providing strategic depth, and institutionalize the continuum of service personnel management construct. As such, these plans are part of the Department's top priorities and should be implemented aggressively. Over the past seven years, there has been a fundamental change in how the Guard and Reserve are used and the high value the Department places on them. There are no more "weekend warriors;" there are only citizen warriors who continue to answer the nation's call to serve.

The Global Status of Resources and Training System (GSORTS) has long tracked overall readiness as well as specifics on personnel availability, training, equipment on hand, and equipment readiness. DRRS establishes a capabilities-based, resource informed, adaptive, near real-time readiness reporting system, to assess and identify critical unit readiness deficiencies to provide the commander a tool to "manage" readiness.

II. Scope of the Report

The National Guard and Reserve Equipment Report (NGRER), mandated in Section 10541, Title 10, United States Code, is a statutory requirement that reflects Congressional interest in ensuring a well equipped and robust RC capability within the armed forces. The NGRER identifies major items of equipment in the RC inventories that are important to the Services, DoD, and Congress, and also outlines how that equipment is being acquired and disposed of by the Reserves for the budget year and the two succeeding years. Data on equipment included in the report consist of high-value, mission essential equipment requirements, critical equipment shortages, Service procurements, and supplemental funding for the RC, and items procured with National Guard and Reserve Equipment Appropriation (NGREA) funding.

The three charts that follow in this chapter present a broad overview of: previous major items reported in the NGRER, major item shortages in terms of dollar amounts, and the recent trace through the current budget year of procurement funding for each of the RC. These introductory charts are summary and historical in nature and do not indicate the comprehensive dollar requirement that would be needed to fully fund Reserve capabilities. Detail on potential costs such as modernization of existing systems is contained, where appropriate, in the chapters on the respective individual RC.

RC inventories include thousands of different types of equipment. The FY 2010 NGRER highlights 834 major equipment types whose total dollar value comprises approximately 85 percent of the value of all RC equipment. Results of analyses of RC inventories are based primarily on the dollar value of the equipment because that allows for aggregation, comparison, and summary of diverse types of equipment. The total requirement and inventory for each major equipment type is weighted by the equipment's procurement cost. The procurement costs, from the Services' official data, are either the latest procurement costs adjusted for inflation or the current replacement costs.

The FY 2008 NDAA directed new equipment reporting requirements for the National Guard. This guidance is highlighted in its entirety in Appendix A. The National Guard Bureau answers the requirements in Appendix B. The Services do not currently have the ability to provide the transparency required to complete the report but have been working with the Department to develop a process to more accurately answer these directives.

Chart 1-1 shows the number of types of equipment included in previous NGRER reports to Congress. These numbers are provided for perspective and comparison with previous reports and do not represent the entire inventory of RC major items.

Reserve Component	FY 2005 NGRER	FY 2006 NGRER	FY 2007 NGRER	FY 2008 NGRER	FY 2009 NGRER	FY 2010 NGRER
ARNG	130	129	129	231	421	411
AR	270	249	249	233	222	220
USMCR	152	151	157	161	200	101
USNR	35	36	36	33	33	35
ANG	30	27	33	31	33	31
AFR	28	19	19	16	17	17
USCGR	22	16	15	15	15	19
Total	667	627	638	720	941	834

This year's report does not include *Table 8, RC Significant Major Item Shortages*. It was not possible to produce this table due to the limited scope of the DoD FY 2010 budget preparation, which does not include information outside of FY 2010.

III. Equipment Shortages

The aggregate equipment shortage for all the RC is approximately \$42.5B. Chart 1-2 shows the dollar value of the current total major equipment requirements and inventories for each RC. This chart captures the requirement for new procurement for the RC; however, it does not indicate capabilities, shortfalls, or parity mismatch with the AC due to modernization requirements. For example, it does not include substitute items of equipment in determining shortages of Army RC equipment. Also, the ANG reflects a 1.7 percent shortage of its major items; however about \$6B of the ANG's equipment is not modernized to the level of its AC counterpart. These conditions are explained in more detail in each Service's respective chapter.

Reserve Requirements (\$)		On-hand (\$)	Shortage (\$)	Shortage (% of Reqd \$s)	
ARNG \$117,327,069,240		\$86,898,188,756	\$30.428,880,484	25.9%	
AR	26,567,884,642	16,598,194,662	9,969,689,980	37.5%	
USMCR 4,314,966,534		4,158,637,588	156,328,946	3.6%	
USNR	9,865,842,000	9,303,555,000	562,287,000	5.7%	
ANG	35,725,000,000	35,100,000,000	625,000,000	1.7%	
AFR	23,205,600,000	22,432,600,000	773,000,000	3.3%	
USCGR	36,260,000	30,812,790	5,447,210	15.0%	
Total	\$217,042,622,416	\$174,521,988,796	\$42,520,633,620	19.6%	

Chart 1-2 Beginning FY 2009 Reserve Component Equipment Shortages

Note: Requirements, on-hand, and shortage entries are total equipment value, excluding substitutes.

The Service plans for new equipment procurement, both AC and RC, are provided in their respective Future Years Defense Plan (FYDP). Each year, the President's Budget submission

provides the RC equipment procurement details in the P-1R. *Table 3*, which appears after each RC narrative section in this report, depicts the requested RC equipment procurements for FY 2010 through FY 2012.

IV. Equipment Procurement

Chart 1-3 shows funding levels from three RC procurement sources for FY 2004 through FY 2010. The FY 2010 funding does not include any NGREA or Congressional additions, since those funding amounts are not established until after the publication of the FY 2010 NGRER.

		RC Procurement Funding (\$ in Millions)							
FY	Procurement Funding Source	ARNG	AR	USMCR	USNR	ANG	AFR	Total	Grand Total
	President's Budget P-1R Submit	501.2	244.3	66.8	129.7	453.5	169.8	1,565.3	
0004	Congressional Adds to AC Accts for RC	290.8	6.7	0.0	63.4	45.4	0.0	406.3	
2004	NGREA	99.3	44.7	44.7	44.7	119.1	44.7	397.0	
	Total	891.3	295.7	111.5	237.8	618.0	214.5		\$2,368.6
	President's Budget P-1R Submit	586.8	302.5	55.6	127.2	425.9	134.7	1,632.7	
	Congressional Adds to AC Accts for RC	194.1	126.2	0.0	60.1	86.4	11.0	477.8	
2005	Supplemental	787.0	0.0	0.0	0.0	38.4	0.0	825.4	
	NGREA	110.6	51.8	49.8	43.8	98.6	43.8	398.4	
	Total	1,678.4	480.5	105.4	231.1	649.2	189.5		\$3,334.3
	President's Budget P-1R Submit	1,144.7	37.7	252.0	101.5	427.7	164.5	2,128.1	
	Congressional Adds to AC Accts for RC	59.3	97.5	0.0	1.5	257.8	26.1	442.1	
2006	Supplemental	1,403.0	520.0	67.0	0.0	10.0	0.0	2,000.0	
	NGREA	764.4	129.6	29.6	29.6	229.6	29.6	1,212.4	
	Total	3,371.3	784.8	348.6	132.6	925.0	220.2		\$5,782.5
	President's Budget P-1R Submit	2,115.6	391.8	120.4	60.0	628.8	234.1	3,550.8	
	Congressional Adds to AC Accts for RC	17.8	32.2	0.0	6.8	228.6	2.0	287.4	
2007	Supplemental	1,152.0	507.0	0.0	0.0	361.0	166.0	2,186.0	
	NGREA	1,074.7	89.9	34.9	34.9	74.7	34.9	1,343.8	
	Total	4,360.1	1,020.9	155.3	101.7	1,293.1	437.0		\$7,368.0
	President's Budget P-1R Submit	3,496.2	690.3	99.9	51.7	633.9	316.7	5,288.7	
	Congressional Adds to AC Accts for RC	45.2	0.0	0.0	7.8	17.9	0.0	70.9	
2008	Supplemental	1,294.0	590.0	0.0	0.0	25.0	10.0	1,919.0	
	NGREA	1,267.6	182.9	44.7	44.7	149.0	44.7	1,733.6	
	Total	6,103.1	1,463.2	144.6	104.2	825.8	371.4		\$7,278.6
	President's Budget P-1R Submit	5,443.4	1,235.2	109.5	201.9	1,214.2	445.0	8,649.2	
2009	Congressional Adds to AC Accts for RC	75.1	0.0	0.0	3.2	16.7	0.0	95.0	
2003	NGREA	778.6	127.3	62.4	62.4	154.4	62.4	1,247.5	
	Total	6,297.1	1,362.6	171.9	267.5	1,385.3	507.4		\$9,991.7
	President's Budget P-1R Submit	3,315.9	1,596.8	40.8	123.5	706.7	215.8	5,999.5	
2010	Congressional Adds to AC Accts for RC NGREA								
	Total								\$5,999.5

Chart 1-3 Reserve Component Procurement Funding

Note 1: USNR figures include USMCR aircraft procurement funds.

Note 2: The above figures do not include Ammunition procured for the RC.

Note 3: 2005-2009 NGREA include both Title III & IX funding.

Note 4: 2006 Congressional Adds for ANG include plus up for 2 C-130J aircraft scheduled for delivery to ANG.

Note 5: 2006 Supplemental includes equipment in Title IX of PL109-148 that Services identified to go to RC.

Note 6: 2010 Congressional Adds and NGREA values will not be available until after publication.

Recent Service procurements have not always been sufficient to meet growing requirements to replace and modernize the RC equipment inventories; therefore Congress provides additional funds for the RC in the form of NGREA. These funds which vary from year-to-year have helped significantly to alleviate shortfalls in RC equipment procurement. NGREA projections beyond FY 2009 are not provided because the Services do not budget for these funds.

V. The Reserve Components' Equipping Concerns

This segment briefly summarizes the principal equipping concerns of each RC. The components' individual chapters treat these subjects in more detail.

A. The Army National Guard (ARNG)

The ARNG continues to support overseas contingency operations (OCO) by mobilizing and deploying forces at the highest states of readiness, meeting all OCO mission requirements, and meeting a multitude of additional supporting requirements. Further, the ARNG has continued to provide trained and equipped forces to support domestic missions such as Operation Jump Start (southwest border mission); Hurricanes Gustav, Hanna, and Ike relief; and wildfire recovery efforts.

The Army, the Office of the Secretary of Defense (OSD), and Congress have made a concerted effort to equip the ARNG to levels commensurate with an operational reserve. Congressional support to the ARNG in the form of NGREA and Congressional Add funding has resulted in increased equipping levels. ARNG units are now being equipped to the same standard as their AC counterparts. Nevertheless, significant equipping challenges remain. To meet its mission to mobilize and deploy forces in support of OCO, the ARNG must continually cross level equipment to fill shortages. This results in significant amounts of equipment in transit, which puts pressure on our full time support (FTS) personnel, increases transportation costs, and decreases equipment availability.

While the Army's goal is to equip all components to the same level of modernization, deployments to OIF and OEF continue to highlight issues with compatibility. First, it is difficult to locate repair parts for systems no longer in the AC system. Second, obsolete ARNG equipment is less interoperable with modern AC equipment. For example, many ARNG communications and electronic systems are not interoperable and have less capability than the systems being used by the AC on the battlefield. For this reason, combatant commanders restrict the older equipment from theater. Third, system compatibility issues also impact the calculation of ARNG Equipment On-Hand (EOH). The Army provides guidance on what equipment is considered to be an authorized substitute for primary equipment. Although substitutes are counted in determining EOH, much of the substitute equipment is unsuitable for deployment due to interoperability issues.

The historic EOH percentage for the ARNG has been about 70 percent for ARNG Modified Table of Organization and Equipment (MTOE) and Table of Distribution and Allowances (TDA) units collectively. Due to cross-leveling of equipment to support immediate deployment requirements ARNG EOH declined to approximately 40 percent in FY 2006. ARNG EOH trended up to about 49 percent in FY 2007.

As of August 2008, the ARNG's total EOH percentage was 76 percent—63 percent of MTOE equipment was in CONUS available to the governors and 13 percent was deployed. This EOH percentage does not include TDA requirements, which are critical to Military Occupational Specialty (MOS) producing schools, Civil Support Teams (CSTs), pre-mobilization training, states' Joint Force Headquarters (JFHQs), and other ARNG TDA requirements. Additionally, some TDA equipment is critical in performing HLD/DSCA missions. The Army estimates that the overall MTOE EOH percentage will fall from 76 percent to 73 percent by FY 2010 due to increases in ARNG structure as a result of conversion of the force to modularity. The Army is actively working to fully equip all Brigade Combat Teams (BCTs) by FY 2015 and all remaining units by FY 2019. The ARNG expected to receive 185,000 pieces of equipment during FY 2008 and is currently reconciling records to ensure receipt.

The ARNG's top equipping challenges include the following:

Gaining transparency within the procurement process. A major concern is lack of transparency in the equipment procurement process. The FY 2008 NDAA requires the Chief, National Guard Bureau (CNGB) to annually certify whether National Guard units received all the new equipment programmed to be delivered in prior years. While the Department of the Army (DA) Staff has made improvements to its equipment procurement and distribution processes in recent years, concerns remain about the ability to fully account for equipment actually delivered to ARNG units compared to what was programmed, budgeted, and appropriated. Until the Army is able to track new equipment deliveries by component, funding source, and procurement unit cost (PUC), the ARNG will be unable to verify that it is receiving all the equipment programmed in the Army procurement budget and appropriated by Congress.

Equipping and modernizing the truck fleet. At current funding and production levels, the ARNG tactical wheeled-vehicle fleet will still have non-deployable, legacy vehicles (lacking interoperability with AC equipment) well beyond FY 2020. This will limit the ARNG's ability to surge in response to demands of the National Military Strategy (NMS) and to train effectively for current operations in Iraq and Afghanistan. For these reasons, trucks remain the ARNG's top equipping priority.

The Army and ARNG strategy is to simultaneously fill equipment shortages while modernizing the aging truck fleet. Even given a best case scenario, by FY 2015 the ARNG is projected to have only 88 percent of its Light Tactical Vehicle (LTV) requirement and 56 percent of its Family of Medium Tactical Vehicle (FMTV) requirement. The shortage of LTVs, FMTVs, Heavy Tactical Vehicles (HTVs), and their associated trailers and accessories (which are mutually supporting), is estimated at \$7.4B post FY2015. These continued shortages will force ARNG units to cross-level equipment or perform missions at a degraded capability in meeting wartime training requirements and supporting domestic operations.

Equipping for DSCA. Domestic response is another critical ARNG mission. Ensuring availability of equipment for this mission is a top priority and an ongoing challenge. The CNGB has pledged that 50 percent of Army and Air Guard forces will remain in the state to perform their HLD/DSCA missions. The goal is to equip these units to 100 percent of requirements to ensure that adequate dual use equipment remains in the state when a portion of its forces are deployed. Appendix B provides a detailed status of the program.

B. The United States Army Reserve (USAR)

The Army Reserve is an accessible and integral full partner of the Army. It is an operational, rather than a strategic, reserve, mobilizing and deploying Soldiers to provide needed forces for operations in Iraq and Afghanistan or where ever the Army is needed. As the Title 10 first responder to support civil authorities during a domestic emergency, the Army Reserve positioned equipment in 1,200 communities throughout our great nation. The key to being prepared for these contingencies is fully equipping Army Reserve units.

The Army Reserve's major challenges are sustainment of equipment, limited procurement resources, and equipment modernization. These challenges are summarized below.

Shortages of equipment on-hand, combined with significant substitute items in the Army Reserve's inventory, compromise our units' ability to train in support of the modular Army and to meet surge requirements. Critical factors in maintaining the readiness of unit equipment to support pre-mobilization training and deployment are the national level sustainment programs, such as Recapitalization and Depot Maintenance. It is imperative the Army Reserve receive critical modernization equipment. This includes FMTVs, battle command and control systems, logistics automation, and other technology enablers for the modular support force. This modernized equipment ensures mission capability, interoperability, and reduced risk to our Soldiers. Equipment compatibility is necessary for the Army Reserve pre- and post-mobilization training. The Army Reserve has an equipment shortfall of more than \$6.85B. Equipment shortages, if not addressed, may hamper future preparedness for missions, both foreign and domestic.

The pressure to fully fund ongoing operations and modularity conversions prevents the modernization of Army Reserve combat support (CS) and combat service support (CSS) forces. To fund other higher priority equipment systems, decrements and diversions from projected CS and CSS procurement funding are common. The DA is conducting a work group to improve visibility and increase transparency with regard to RC procurement funding and to improve DA's ability to track delivery of equipment.

CS and CSS forces resident in the Army Reserve must be modernized and recapitalized on a synchronized and complementary timeline with the combat forces. Significant reductions in the logistics footprint will not be attained unless key logistics enablers such as FMTVs, HMMWVs, materiel handling equipment (MHE), and communications systems are procured in sufficient quantities to support the requirements.

The NGREA has been vital to improving Army Reserve readiness. Over the past five years, the Army Reserve has received an average of \$72M NGREA funds annually to address critical shortfalls. This has procured end items the Army has been unable to furnish through the normal budget process. DA has been supportive of AR deploying unit requirements, yet future deploying units undergoing Modular Force transformation lag behind. Some systems (for example, Movement Tracking System [MTS]) are being fielded at a "good enough" level versus the required types and quantities. This approach adversely impacts training. Not enough installation kits are available to equip all vehicles to allow for interchanging of the limited hardware between vehicles. Added funding would be used to support Life Cycle Replacements and transformation shortfalls along with New Equipment Training and MTS vehicle installation kits.

The Army Reserve has about 73 percent of its required equipment on-hand, but some critical items remain at less than 50 percent fill. Further, modernized Basis of Issue Plans have not been fully applied, resulting in understatement of Army Reserve equipment requirements. The current equipment situation poses risk both for the ability to surge as an operational reserve for a foreign or domestic emergency and for the ability to prepare to replace deployed forces or serve as a strategic reserve.

Authorized substitutes enhance the overall equipment posture of the Army Reserve, but these items have limitations on their employment and training usefulness. Authorized substitutes are more expensive to maintain, less capable than Modular Force replacements, and less safe to operate. Approximately 10 percent of Army Reserve equipment is not currently acceptable for theater use.

Non-deployed units are using their equipment at rates higher than expected at the time of its design and procurement. Consequently, their Modular Force equipment will require overhaul and recapitalization earlier than projected. Additionally, they must sometimes transfer equipment to mobilization sites to meet demand for pre-deployment training sets, leaving them short of equipment required for training.

Projecting future equipment on-hand is difficult. The Army Reserve is projected to reach 85 percent fill of all requirements by the end of FY 2015. This projection is based on the programmed procurement for FYs 2010–2015; funding from the FY 2007, FY 2008, and FY 2009 Base Budget; the FY 2007 and FY 2008 Supplemental; and the expected force structure for FY 2015. This projection also assumes no diversion of funds or equipment to higher priorities. The Army is committed to 100 percent fill of CS and CSS units regardless of component by the end of FY 2019. This objective, however, does not necessarily include only Modular Force items nor does it address the needs of the Generating Force in training, sustaining, and deploying the Army.

C. The United States Marine Corps Reserve (USMCR)

As of the end of FY 2008, over 30,000 reserve Marines had been mobilized in support of OEF and OIF. The Marine Corps' equipping policy is to horizontally field or integrate new weapon systems and equipment to ensure compatibility and the highest degree of interoperability between the AC and RC.

Both the AC and the RC face two primary equipping challenges:

- Outfitting deploying Marines with the most recently fielded individual combat clothing and protective equipment provided to U. S. Forces in each theater
- Providing units with the right amount of equipment to effectively train in a predeployment environment.

Marines deploying as part of a reserve unit are provided the latest generation of individual combat clothing and protective equipment, which is the same equipment that is issued to the AC units. Training simulators save valuable time and resources while preparing the Marines to perform at higher levels in an adaptive and realistic training environment. With the NGREA

funds provided by Congress, Marine Forces Reserve (MARFORRES) has directly increased unit readiness by procuring training simulators such as the Virtual Combat Convoy Trainer and the Deployable Virtual Training Environment. MARFORRES has also reduced critical equipment shortfalls by purchasing such items as Brite Star Forward-looking Infrared (FLIR) and Tactical Remote Sensor Suites and by upgrading equipment such as the KC-130T multi-mode communication systems and the Multi-band Man Pack (Rover III) real-time-video link system. MARFORRES maintains the capability to operate and train with the same equipment being employed in theater.

Overall AC and RC equipment compatibility is satisfactory, however complete compatibility is difficult to achieve for several reasons:

- Continuing high equipment demand for force generation training support
- Attrition of equipment through wear, damage, and destruction
- Procurement over the past several years of small quantities of new non-Program-of-Record equipment through the Urgent Universal Needs Statement process to meet specific OIF and OEF mission needs
- Application of funds against ever-evolving higher priority requirements.

D. The United States Navy Reserve (USNR)

The Navy has established a seamless and fully integrated Total Force. It plans and programs all equipment inventories to provide the most capable systems to meet mission requirements and minimize the effects of equipment shortfalls and incompatibility throughout the mission spectrum of the Fleet. Equipment is used to generate and sustain fleet readiness during at-home training and forward-based operations and is ready to surge forward as combat replacement or capacity in response to a Request for Forces to be sourced by the Navy.

Navy policy for procurement and distribution of equipment states that RC units will be equipped to accomplish all assigned missions and will have an equipment and distribution program that is balanced, responsive to mission requirements, and sustainable. Units scheduled to deploy first, whether AC or RC, have priority for distribution of new and combat-serviceable equipment, with associated support test equipment.

The RC possesses 100 percent of the Navy's organic medium airlift, 75 percent of the adversary training capability, 20 percent of the maritime patrol squadron capability, 13 percent of the airborne early warning capability, 12 percent of the rotary-wing capability, and 9 percent of the carrier air wing capability.

Heavy mobilization of Navy Reserve expeditionary forces has led to an urgent need to modernize and replace their equipment. Additionally, RC aviation squadrons have transferred a significant number of aircraft to the AC to fill substantial inventory shortfalls. RC equipment and aircraft are now in critical need of recapitalization, all within a challenging budgetary environment.

The Navy must have interoperability between all elements of the Total Force to ensure a war winning team. AC and RC equipment acquisition, upgrade programs, and equipment redistribution from the AC to the RC have virtually eliminated capability and compatibility gaps between RC, AC, and Joint forces.

E. The Air National Guard (ANG)

The ANG comprises one-third of the combat capability of the Air Force. The operations tempo for the ANG has been high and prolonged. During FY 2008, the ANG flew over 45,000 hours supporting combat operations in Operation Noble Eagle, OEF, and OIF. The ANG supported state governors and civil authorities during rescue and recovery operations after Hurricanes Katrina and Rita ravaged the Gulf Coast; firefighting efforts in several states threatened by wildfires; and security operations for large scale events like the Super Bowl and both the Republican and Democratic Conventions.

Despite continuing fiscal restraints imposed by combat and other operations and by the need to balance recapitalization and modernization, the ANG was able to acquire capabilities that kept it relevant and ready. Targeted funding from Congress was instrumental in enabling key modifications over the past year, including defensive systems and completion of upgrades to precision targeting pods. These funds allowed the ANG to invest in increasing capabilities for responding to domestic emergencies and requests for support from civil authorities (for example, medical, rescue, communications, and vehicle equipment).

For FY 2009–2010, the ANG anticipates continued restraints on funding levels. Hard decisions and continued vigilance will be necessary to get maximum capabilities from existing funding. The ANG will continue to invest in targeting pod upgrades to meet current Central Command (CENTCOM) requirements, new NP-2000 propellers for the ANG-unique LC-130s (addressing emerging challenges found during the recent deployment to Antarctica), and installation of self-protection Large Aircraft Infrared Countermeasures (LAIRCM) systems on the C-130s. In general, the ANG will seek improved solutions for data link and gateway capabilities, data transfer improvements, better sensors and cueing capability, self-protection suites, and more robust simulation capability to include distributed operations.

Similar to AC aircraft, ANG aircraft need recapitalization. The ANG has followed a rigorous process for vetting and prioritizing requirements to modernize legacy aircraft and to obtain other tools to remain relevant in combat operations. Needed capabilities have been translated into specific programs that are commercial or government-off-the-shelf, requiring only non-developmental integration into a weapons system. The process includes command and control, intelligence, surveillance, and reconnaissance systems as well as weapons delivery, airlift, and tanker platforms.

In addition, investments for FY 2010 and beyond will include the NGB-led Essential Ten domestic response needs to ensure domestic security requirements are met. When the Congress gave the National Guard \$900 million for replacing, repairing, and upgrading equipment after Hurricanes Katrina and Rita, the ANG's share was \$200 million. The ANG empaneled a team to define requirements and assess the areas of greatest need. The items not funded became part of the shortfalls in the National Guard's Essential Ten capabilities. Today, the team continues to define, update, and prioritize capabilities needed to support state governors and civil authorities.

F. The Air Force Reserve (AFR)

The AFR is totally integrated into the AC of the Air Force. The AFR shares in the Air Force mission to fly, fight, and win in air, space, and cyberspace. The AFR also shares in the Air Force top priority, which is to modernize air and space inventories, organizations, and training. The primary equipment requirements for the AFR are defined by whether a flying squadron is unit equipped (possesses assigned aircraft) or is an associate unit (shares aircraft and equipment).

Currently the AFR has 33 flying wings with 31 unit equipped squadrons and 42 associate units. There are also eight associate units in the AFR operating space mission partnerships, including satellite command and control; missile warning; Joint Space Operations Center (JSpOC); warfare center research, development, and testing; space aggressor; and the National Security Space Institute. Additionally, AFR has more than 620 mission support units equipped and trained to provide a wide range of services including medical and aeromedical evacuation, aerial support, civil engineering, security forces, intelligence, communications, mobility support, logistics, and transportation operations. Total Force Integration initiatives currently underway will expand the AFR's role in multiple mission sets, both as classic associate and active associate partners.

AFR top equipping challenges include the following:

LAIRCM, Airlift Defensive Systems (ADS) and A-10 Missile Warning Systems: AFR A-10s have several modernization requirements. Installing an AAR-47 Infrared missile warning system will significantly improve situational awareness and survivability by automatically detecting launch of surface to air missiles. It will allow rapid targeting of sensors and advanced weapons and will help pilots stay aware of critical developments in flight.

Data Link and Secure Communications: Data Link Network supporting image/video, threat updates, and secure line-of-sight (SLOS)/beyond-line-of-sight (BLOS) communications for combat missions.

An example is the B-52H, which has an immediate requirement for tactical data link capability to provide near real time situational awareness updates of friendly positions and enemy air/ground threats. The battlespace can change significantly during the long duration of B-52H missions, and a data link system would provide critical target updates during flight. While the Combat Network Communications Technology (CONECT) program goes a long way toward providing the B-52 with a data link solution, the CONECT program cannot provide critical real-time friendly positions during close air support missions. Installing Enhanced Position Location Radio System/Situation Awareness Data Link (EPLRS/SADL) radios in conjunction with Avionics Midlife Improvement (AMI) is a potential interim solution to provide the B-52 with a tactical data link capability. The LITENING G4 Advanced Targeting Pod (ATP) spiral upgrade will improve the B-52 capability for target location and identification, weapons employment, and battle damage assessment. The B-52 has no flight data recorder. Now that the primary function of AFR B-52Hs is to support flying training, filling this void is imperative so the 917th Wing can properly debrief students.

C-5 Maintenance: The C-5 fleet is developing corrosion cracks which will result in a significant reduction in aircraft availability beginning in FY 2013. Six AFR C 5As do not have ADS to allow the aircraft to fly in hostile areas. Modifying these C 5As with ADS will reduce the

operations tempo on current AC ADS-equipped aircraft. LAIRCM for AFR C-5 aircraft is currently not funded. Reduced C-5 aircraft availability is projected due to reduced Weapon Systems Sustainment (WSS)/Depot Purchased Equipment Maintenance (DPEM) funding.

In summary, AFR units are fully capable of meeting required contingency response times. This impressive capability is the Reserve Component model of integration. Modernization is the key not only to maintaining this effective force but also to improving the capability of the warfighter. AFR has greatly increased capability to the warfighter through modernization such as adding SLOS/BLOS and data link communications, advanced digital/analog secure video data link to ground forces, and improved weapons employment in the F-16, A 10A+/C, the HH-60, HC-130, and B-52 AFR combat air forces. On the AFR mobility air forces side, the AFR has significantly enhanced combat defensive capabilities in both strategic and tactical airlift (to include combat search and rescue [CSAR] platforms) with C-5 armor kits, C-130/HC-130 LAIRCM, and improved all-weather situational awareness C-130 APN-241 radar. Over the next year the AFR will complete SLOS/BLOS on all AFR fighters, provide permanent tactical data link for AFR CSAR assets, introduce fourth generation LITENING ATP sensors and capabilities on AFR A-10A+/F-16/B-52 platforms, continue to advance airlift defense capability with C-130 SAFIRE tactical lookout, and start installation of C-5 ADS.

The AFR is committed to modernization efforts that meet the Total Force capability needs of the Air Force and the combatant commanders. For those modernization needs that remain unfunded, the AFR has an internal requirements review process that validates and prioritizes vital unfunded war fighter requirements for NGREA and supplemental funding consideration.

G. The United States Coast Guard Reserve (USCGR)

Today's Coast Guard and Coast Guard Reserve uniquely support the National Security Strategy through a broad spectrum of humanitarian, law enforcement, regulatory, diplomatic, and military missions. Coast Guard reservists are operationally ready to support maritime homeland security, provide domestic and expeditionary support to national defense, and respond to domestic disasters. Staffed with 8,100 personnel, which is about 20 percent of the uniformed Coast Guard strength, more than 80 percent of the Selected Reserve (SELRES) force is directly assigned to AC units. The rest are assigned to the Coast Guard's eight Port Security Units or to DoD units and staffs. Many are supporting OIF and OEF while others operate in Kuwait, Bahrain, and Joint Task Force Guantanamo, Cuba.

Equipment for domestic operations is provided from within the Department of Homeland Security (DHS). Equipment for mobilization or surge operations is provided by AC units from existing unit inventories, from supporting units, or through present day procurement policies using the DHS budget. Additionally, all RC equipment is owned and managed by the Coast Guard AC. DoD provides selected equipment for the Coast Guard to perform defense operations in support of the combatant commanders. This includes weapons and communications systems that are interoperable with the U.S. Navy and allied forces, and other special purpose equipment needed for the Coast Guard to meet DoD requirements. Full compatibility between Coast Guard AC and RC began in the mid-1990s and provides for a fully integrated operational reserve force that serves as a force multiplier for the AC in all missions. SELRES training and mission execution are performed side-by-side with AC personnel. There are no major equipment issues that prevent training and utilization of the reserve force.

Chapter 2 United States Army Reserve Components

I. Army Overview

A. Army Planning Guidance

The Army continues to be at the forefront of overseas contingency operations (OCO). Committed to securing U.S. interests at home and abroad and spearheading our nation's response to natural disasters, the Army prepares to answer across the full spectrum of conflict.

The immediate priority of the Army is to win the Global War on Terrorism (GWOT). An equal priority is resourcing the Army to meet homeland defense (HLD) and homeland security (HLS) requirements including natural disasters. To support this mission, funding is secured in accordance with the equipping strategy, which in turn is focused on achieving full spectrum mission capability across all Components.

Maintaining and improving unit readiness and capabilities through the issuance of equipment, resetting returning units, and restructuring into a modular force during a time of war are difficult tasks, but they must be realized. The integration of new technologies and capabilities is a high priority and one that must be achieved to ensure units are capable and ready to meet wartime and homeland missions. Establishing and maintaining high levels of unit readiness provides trained and ready Soldiers and units to meet these missions with success.

The Army is also continuously strengthening its joint and combined warfighting capabilities through the fielding of new systems and integrating new technologies and capabilities into existing systems for both the Active component (AC) and Reserve components (RCs). Soldiers, however, fight the wars.

B. Army Equipping Policy

The Army's overarching equipping policy is spelled out in Annex F, "Army Force Generation (ARFORGEN) Model," of the *Army Campaign Plan* (ACP). A significant fact is that ARFORGEN treats all AC and RC units equally. The Army will leverage ARFORGEN to rapidly tailor units to mission. The Army is committed to procuring 100 percent of the Army Acquisition Objective (AAO). In today's environment, it is not possible to always provide every Soldier with every item of equipment required by the Modified Table of Organization and Equipment (MTOE). Instead, the Army's goal is to meet the absolutely unequivocal goal to fully equip the Army. By equipping to mission, the Army ensures that units have the equipment they need to accomplish their mission at each phase of the ARFORGEN cycle. For example, the RESET phase requires minimal equipment and the strategy accepts that as an acceptable level of equipping fill. Units in the Train/Ready phase require more equipment but not always at full MTOE authorization or full modernization level. The Army synchronizes the warfight with the transformation process through the ACP. The ACP includes planning guidance for a balanced fielding of equipment to both AC and RC units to achieve timely and progressive operational readiness for the Army.

The Army G3 sets priorities for equipment fill in accordance with the Army Resourcing Priority List (ARPL), a sequential list of units in priority order for resources. The Army maintains visibility of equipment status at all levels. All equipment is considered Army equipment and will be positioned to support the National Military Strategy (NMS). The Army will minimize maneuvering equipment between components and will use existing guidance, such as DoDD 1225.6, to ensure accountability within the RCs, Army Commands, Army Service Component Commands, and Direct Reporting Units. Component Headquarters will ensure units have the required capabilities to maintain equipment readiness.

The Army's strategy seeks to develop and field combat-capable units through an appropriate mix of organizational restructuring into more modular units, insertion of new capabilities where and when feasible, selective procurement and fielding of new equipment, and restoring and preserving readiness of current equipment (reset), including the rebuilding and upgrading of existing equipment through recapitalization.

C. Plan to Fill Mobilization Shortages in the RC

The Army will ensure that units are always "Equipped to Mission." Units may not always have their full MTOE set of equipment; however, the Army mitigates by providing the necessary equipment for mission via Predeployment Training Equipment (PDTE) sets, which are prepositioned at key mobilization and training sites as well as Theater Provided Equipment (TPE) sets. These methods of managing friction will ensure that equipment is available to train and execute the mission.

D. Initiatives Affecting RC Equipment

1. Current Operations

The Army's operational tempo in support of OCO remains high and is placing a tremendous strain on the RC. The ARFORGEN cycle provides predictability and early identification of when units will deploy. Based on the ARFORGEN cycle, unit equipment goals are met prior to mobilization or in the Theater with Theater Provided Equipment (TPE). The Army's goal is to ensure that RC units are equipped properly with Critical Dual Use (CDU) capabilities to execute Home Land Defense/Defense Support to Civil Authorities (HLD/DSCA) missions effectively. The Army's strategy to procure 100 percent of AAO will provide a sufficient pool of equipment that, within the constraints of overall Army equipping levels, can meet the goal of ensuring that units are always equipped for their mission—whether that mission is in combat, to train for deployment, or to provide Defense Support to Civilian Authorities (DSCA) in either a Title 10 or a Title 32 role. For DSCA, the goal is to ensure that states and territories are always sufficiently equipped—with assigned equipment or by support from Emergency Management Assistance Compact (EMAC) arrangements—to provide the necessary level of response to any domestic operational requirement. To bring the RC capabilities in line with future demands, four focus topics are outlined as follows: Operationalizing the Reserves, Homeland Security, Reset, and What We Bring to the Fight.

2. Operationalizing the Reserves

The events of September 11, 2001 changed forever how we guard ourselves against terrorist attacks. To meet the new requirements, the Army has changed as well. Part of these changes is

the transformation of the RC from a strategic reserve to an operational force in recognition of the increased role it has in fighting OCO. The Army Chief of Staff stated that we must adapt our RC by transforming it from a strategic reserve to an operational reserve routinely employed at home and abroad. Transforming the RC will require national and state cooperation, as well as continued commitment from employers, Soldiers, and families. It will require changes in the way we equip, train, mobilize, and sustain the RC.

There are four critical readiness components to operationalizing the Army National Guard (ARNG) and the Army Reserve (AR) on a sustained basis: personnel, equipment, training, and leadership. Our nation's sons and daughters are the most critical component of the Army; the equipment provided to them, their training, and their leadership will win this and future wars. Training should be executed as much as possible prior to mobilizing a unit, shortening post mobilization training time and optimizing operational time. Our goal is to fully equip our units to meet mission requirements and to ensure they have the right equipment to train in advance of need or mobilization.

3. Homeland Defense and Homeland Security

The Army is playing an ever increasing role in HLD and HLS. In accordance with the Chairman, Joint Chiefs of Staff (JCS), Chemical, Biological, Radiological, Nuclear, and High Explosive (CBRNE) Consequence Management executive order, the Army is providing specific capabilities for the Civil Military Response Force (CCMRF) to provide federalized military assistance to civilian agencies in the event of an attack against the United States. These capabilities come from all Army components in support of U.S. Northern Command's (NORTHCOM's) mission to defend against attack and support civil authorities in the event of a disaster.

The RC has always played a role in this mission. ARNG units have always served as the first responders to their individual states, answering to the orders of each governor, and the AR has always provided support when called upon by the President. During 2008, the RC was called upon to perform many critical Homeland Security missions: from fighting wildfires in California; to completing Operation Jump Start supporting U.S. Customs and Border Protection; to supporting local, state, and federal authorities during Hurricanes Gustav, Hanna, and Ike, providing much needed resources to secure, safeguard, and provide relief support to the affected areas.

In 2008, RC Soldiers were deployed in support to these catastrophic events and OIF and OEF. As the role of the RC is redefined and expanded to include multiple overseas deployments, it is clear that both the ARNG and the AR will continue to play an indispensable role in these missions. Equipping for this dual role will remain critical to mission success. The Army needs Congress' continued support to ensure that RC units are properly manned, trained, and equipped to support not only the OCO, but also these critical HLD and HLS missions.

4. Reset

Reset consists of the repair, recapitalization, or replacement of equipment returning from OIF and OEF. The reset process incorporates critical material lessons learned from OIF and OEF.

The goal of reset is to restore and enhance combat capability for returning units to an equipment readiness level of R2 (80 percent or better) within a prescribed timeline dependent upon component, AC or RC. For AC units, the goal is to achieve R2 within Return+180 days of return; RC units will take longer and the goal for them is R2 at Return+365. Return is defined as 51 percent of personnel have arrived at home station. The Army is working with the ARNG and AR to improve visibility and coordination throughout the reset process. This is important as we prepare to meet requirements for global contingencies, and support HLS and civil authorities within the United States.

5. What We Bring to the Fight

The ARNG and AR continue to meet the HLS mission requirements. Overseas, the RC provides forces in Iraq and Afghanistan, and virtually the entire Balkan contingent. To these missions, the RC provides additional combat forces and unique capabilities critical to the Army's success, such as civil affairs, engineering, medical, and logistics.

The Army has made significant progress in the most comprehensive transformation of its forces since World War II. The Army continues to transform to improve the capabilities of Soldiers and the Joint Force to meet the challenges not only of today but of the future. To meet the future requirements, the Army has significantly accelerated the tempo of transformation and continues to adapt the resourcing processes to become more flexible, dynamic, transparent, and responsive.

Through the Rapid Fielding Initiative (RFI), the Army is purchasing and fielding state-of-the-art equipment at an unprecedented pace. Examples are full fielding of improved body armor to all Soldiers operating in Afghanistan and Iraq, advanced thermal sights, and personal equipment.

The Army also continues to field innovative technology solutions directly to operational commanders through the Rapid Equipping Force (REF). Such innovative solutions include a variety of robotic systems, Mine Resistant Ambush Protected (MRAP) vehicles, technologies used in high-risk searches, technologies to counter improvised explosive devices (IEDs), and extensive improvements in the armor protection of armored and light-skinned vehicles.

E. Plan to Achieve Full Compatibility between AC and RC

To achieve full compatibility with the AC, the Reserve Components are part of the Army Equipping Enterprise. These units provide essential combat and support capabilities and comprise over half of the Army's structure. The current shift from strategic reserve to an operational reserve force requires the assurance that RC units are equipped, trained, manned, and structured like the AC to provide the required land forces to support the nation's defense strategy and provide support to civil authorities. To accomplish this, the Army will equip through the ARFORGEN cycle, treating all AC and RC units equally. The Army also continues to pursue full transparency for tracking high dollar items going to the RC and asset visibility in order to track equipment through all stages of the equipment lifecycle, regardless of location. Together, these two elements ensure that all the Army's components have the information that they need to manage and allocate equipment in accordance with Army priorities and statutory requirements.

II. Army National Guard Overview

During FYs 2006, 2007, and 2008, the Department of the Army (DA) dedicated record levels of resources to ARNG equipment procurement and modernization. ARNG units are now being equipped to the same standard as their AC counterparts. Despite this positive outlook, significant equipping challenges remain. While the ARNG has consistently met its mission to mobilize and deploy forces, it must continually cross-level equipment to fill shortages in support of OCO. This action puts significant pressure on full time support (FTS) personnel levels and

Top ARNG Equipping Challenges

- Gaining transparency within the procurement process.
- Equipping and modernizing the truck fleet.
- Equipment for deployment and pre-mobilization training.
- Equipping for defense support to civil authorities (DSCA).
- Documenting the full ARNG equipment requirement.

transportation costs, and adds to the unavailability of future equipment in transit.

Domestic response is another critical ARNG mission. Ensuring the availability of equipment for this mission is a top priority and an on-going challenge. The Chief, National Guard Bureau (CNGB) has pledged that 50 percent of Army and Air Guard forces will remain in the state to perform their Home Land Defense/Defense Support of Civil Authorities (HLD/DSCA) missions. The goal is to equip units to 100 percent of requirements to ensure that adequate dual use equipment remains in the state when a portion of its forces are deployed.

Also of note is the fact that, at current funding levels and production rates, the ARNG tactical wheeled vehicle fleet will continue to retain non-deployable, legacy vehicles well beyond FY 2020. This will limit the ARNG's ability to surge to meet the demands of the NMS and to train effectively for current operations in Iraq and Afghanistan. For these reasons, trucks remain the ARNG's top equipping priority.

Another major concern is a lack of transparency in the equipment procurement process. The FY 2008 National Defense Authorization Act (NDAA) now requires the Chief, National Guard Bureau (CNGB) to annually certify whether National Guard units actually received all the new equipment programmed to be delivered in the prior year. Until the Army is able to track new equipment deliveries by component, funding source, and procurement unit cost (PUC), the ARNG will be unable to verify that it is receiving all the equipment programmed in the Army procurement budget and appropriated by Congress.

A. Current Status of the Army National Guard

1. Current Operational Overview

The ARNG continues to support OCO by mobilizing and deploying forces at the highest states of readiness, meeting all OCO mission requirements; as well as a multitude of supporting requirements. Since September 11, 2001, the ARNG has mobilized 336,342 Soldiers under U.S. Code Title 10 authority (Federal Orders). In FY 2008, 8,122 ARNG Soldiers were deployed in support of OEF, and 36,942 ARNG Soldiers were deployed in support of OIF. As of October

2008, an additional 84,385 ARNG Soldiers are presently on alert for future deployments in FY 2009. In addition, the ARNG has continued to support domestic missions such as Operation Jump Start (southwest border mission); Hurricanes Gustav, Hanna, and Ike relief; and wildfire recovery efforts by providing trained and equipped forces. The ARNG constantly strives to maintain the necessary equipment and training readiness levels that ensure accomplishment of all assigned missions.

a. Operational Force

In their dual-mission role, ARNG units continue to fight alongside their AC and AR counterparts in Iraq, Afghanistan, and other key areas throughout the world while supporting local, state, and federal authorities to ensure the security and defense of the homeland. At a strategic level, the ARNG is undergoing an extensive change to its force structure and transitioning from a strategic reserve to an operational force. As an operational force, the ARNG will continue to be decisively engaged in OCO, in the State Partnership for Peace (SPP) program in countries around the world, in Presidential call-ups in the Balkans and the Sinai, and in domestic operations that include securing the southwest border and responding to natural disasters caused by hurricanes, floods, forest fires, and tornados. Soldiers, units, and organizations of this all-volunteer force continue to perform these missions with excellence in a continuing resource-constrained environment.

b. Army Force Generation Model (ARFORGEN)

The ARNG applies a 5 year force generation model (ARFORGEN) using the ARNG Availability Matrix. The cycle includes a one year mobilization period and four years of dwell time. The ARNG Availability Matrix is the synchronizing tool used to align ARNG units in the five-year cycle and it prioritizes the ARNG's efforts to synchronize generating force functions. The model/process displays ARNG units in one of each of the following force pools—Reset, Train/Ready, and Available. Each unit in the ARFORGEN cycle rotates through the Reset period (one year), the Train/Ready period (three years), and the Available phase (one year).

ARFORGEN synchronizes all resourcing requirements (staffing, equipping, training, and funding). It reflects operating and generating force pools and aligns all the brigades with organic units, including Maneuver Enhancement Brigades (MEBs) and Battlefield Surveillance Brigades (BfSBs). The ARNG Availability Matrix provides the states and territories predictability of operational support over the five year cycle that defines resourcing of each ARNG unit. It allows input to the budgeting process and provides the initial input to the resourcing of ARNG units.

c. Modularity

The current and future challenge for the ARNG is to continue the transition to a modular force in parallel with the AC. In order to make the modular force and ARFORGEN work properly, the Army established a new equipping strategy in which AC and RC units have the same authorization documents and are equipped to the same levels of modernization. Modular units require more modern equipment to achieve the net-centric vision and interoperability requirements of the Army fighting in a Joint operational environment. The important benefits of equipping to a modular force structure with modern equipment are increased readiness and greater capability for homeland missions.

The Army is currently restructuring all of the ARNG combat units and associated support units into modular formations. The ARNG reorganization began in FY 2005 and will be completed at the end of FY 2009, with equipment deliveries continuing well beyond FY 2015. This transformation further organizes and equips the ARNG for the full spectrum of operations demanded by OCO, the NMS, United States Northern Command (USNORTHCOM) HLD/DSCA requirements, and state and territory government requirements.

At the end of FY 2009, the ARNG will have completed conversion to modular structure for the following units:

- All 28 Brigade Combat Teams (BCTs)
- All 8 Sustainment Brigades
- All 7 Fires Brigades
- All 6 BfSBs
- All 8 Combat Aviation Brigades (CABs).
- All 5 Theater Aviation Brigades
- All 17 Regional Support Groups (RSGs)
- 14 of 16 MEBs, with remaining 2 MEBs completed in FY 2011.

The equipping of these ARNG modular forces to an "S-2" level (80 percent equipment readiness) remains a significant challenge for the Army. This is due mainly to the increase in requirements resulting from the transition to modularity.

d. HLD/HLS/CCMRF

The Chemical, Biological, Radiological, Nuclear, and High Explosive (CBRNE) Civil Military Response Force (CCMRF), in accordance with Chairman, Joint Chiefs of Staff, CBRNE Consequence Management Execute Order (EXORD), dated June 27, 2008, is designated to provide federalized military assistance to a lead federal agency in the event of a CBRNE attack in the homeland. A CCMRF unit is composed of specific military capabilities and is taskorganized to be deployed at the national level. Each CCMRF unit is subject to a CBRNE Response Posture Level (CRPL) with "prepare to deploy" timelines determined in part by the Commander, USNORTHCOM, and the Secretary of Defense (SECDEF). The ARNG and Air National Guard (ANG) units sourced against a CCMRF will remain State National Guard units until the SECDEF determines the CBRNE event warrants a CCMRF Title 10 federalized response.

Initial ARNG participation in CCMRF will begin in FY 2009 as units from five states led by elements of the 218th MEB (South Carolina ARNG) train for 12 months to prepare for mission acceptance in the fall of 2010 and will be prepared to provide forces in a Title 10 federal response. Additionally, the 76th Infantry BCT (Indiana ARNG) was selected to lead the next ARNG CCMRF beginning in FY 2010.

ARNG also provided oversight on Operation Jump Start. Operation Jump Start's genesis came from the National Guard's HLD/DSCA capabilities and enabled the Border Patrol to use more of its agents for patrols and law enforcement. ARNG Soldiers performed functions including surveillance, air transportation, building, and fixing border fences and repairing roads along the U.S. and Mexican international border. As many as 6,000 Guardsmen, some just back home from overseas deployment, volunteered along the southwestern border in FY 2006. Their numbers were reduced in FY 2007 in accordance with a presidential directive. National Guard Soldiers completed their border work, which included numerous non-law enforcement tasks such as conducting surveillance, and welding and straightening steel posts on the international border fence. Operation Jump Start contributed to more than 176,000 illegal alien apprehensions, aided in the seizure of more than 315,000 lbs. of marijuana and 5,000 lbs. of cocaine, and helped rescue 100 aliens. After two years of supporting U.S. Customs and Border Protection under the provisions of Operation Jump Start, the National Guard completed operations in July 2008.

e. Essential 10 Capabilities/Critical Dual-Use (CDU) Line Item Number (LIN) List

Domestic response is a critical ARNG mission. Ensuring the availability of equipment for this mission is a top priority and equipping challenge. As stated previously, the Chief, National Guard Bureau (CNGB) has pledged that 50 percent of Army and Air Guard forces will remain in the state at all times to perform their HLD/DSCA missions. The CNGB also identified 10 capabilities essential to the HLD/DSCA mission: Joint Force Headquarters command and control, Civil Support Teams (CST), force protection, maintenance, aviation, engineer, medical, communications, transportation, security, and logistics. Similarly, the ARNG identified a list of "Critical Dual Use (CDU) Items" of MTOE equipment that support these "Essential 10 Capabilities." The goal is to equip units to 100 percent of requirements to ensure that adequate equipment remains in the state when a portion of its forces are deployed.

The ARNG currently has 65 percent of its CDU MTOE requirements on-hand for the states and, when deployed equipment is included, the equipment on-hand (EOH) percentage is 81 percent.

2. Status of Equipment

The ARNG has been called upon to effectively manage its available resources at a time when domestic missions are competing with OCO requirements for resources. Additionally, the ARNG must now fence resources for new, high priority missions, such as the CBRNE missions and the Reset Pilot Program. The fencing of resources for these missions reduces flexibility of the ARNG to shift equipment to mobilizing units and drives the need for increased procurement, production, and distribution of essential equipment.

a. Equipment On-hand

The ARNG is resourced at less than 100 percent of its equipment requirements. The historic EOH percentage for the ARNG has been about 70 percent for ARNG MTOE and Table of Distribution and Allowances (TDA) units collectively. ARNG EOH declined to approximately 40 percent in FY 2006 due to cross-leveling of equipment to support immediate deployment requirements and trended up to about 49 percent in FY 2007.

As of August 2008, the ARNG has 63 percent of MTOE equipment in CONUS available to the governors. Thirteen percent is deployed so the ARNG's total EOH percentage is 76 percent. This

EOH percentage does not include TDA requirements, which are critical to Military Occupational Specialty (MOS) producing schools, CSTs, pre-mobilization training, states' Joint Force Headquarters (JFHQs), and other ARNG TDA requirements. Additionally, some TDA equipment is critical in performing HLD/DSCA missions. The Army estimates that the overall MTOE EOH percentage will fall from 76 percent to 73 percent by FY 2010 due to increases in ARNG structure as a result of conversion of the force to modularity.

The ARNG's equipping program is managed to support mobilization and deployment of units in support of OCO. Critical events within this effort are equipping for pre-mobilization training, post-mobilization training, and deployment. The ARNG has consistently met its mission to mobilize and deploy forces but it has required extensive cross-leveling of equipment to fill shortages and must pass many equipment requirements back to the Army when unable to source requirements because of these chronic systemic shortages. The ARNG expected to receive 185,000 pieces of equipment during FY 2008 and is currently reconciling records to ensure receipt.

i. Mission Essential Equipment List

ARNG units mobilizing and deploying to OIF and OEF are required to deploy with 100 percent of their required equipment. Many ARNG BCTs deploy on missions with an expanded equipment requirement list, called a Mission Essential Equipment List (MEEL). The MEEL lists equipment the unit will need to perform its wartime mission. Units are often deployed to perform missions unrelated to their unit type; consequently, the equipment they have on-hand, as required by their MTOE, may not be the same equipment required to perform the mission as specified by the MEEL. For example, ARNG units are routinely assigned a security force mission. MEELs for these missions require equipment levels much higher than that specified by the unit MTOEs for certain equipment items, such as M4 Carbines, night vision goggles (PVS-7B/14), M9 Pistols, M240B Machine Guns, PAS-13 (v1/2/3) Thermal Sights, and PEQ-2/PAQ-4 Aiming Lights. An M9 Pistol MTOE requirement for an Infantry BCT is approximately 400 pistols while a MEEL requirements reduce the quantity of equipment available to CONUS units for training and HLD/DSCA missions.

ii. Training Requirements

In FY 2007, the Army adopted a 12-month mobilization policy for the ARNG that required a reduction of post-mobilization training to maximize "boots on the ground" (BOG) time. ARNG units must conduct pre-mobilization training that can be validated for deployment. The unit must have at least the minimum amount of equipment required to conduct individual and collective training tasks to shorten post-mobilization training. Although there are several modern systems that need to be fielded to units up to three years before mobilization to allow the unit to be fully trained and effective, most equipment must be provided to the unit no later than 12-months prior to mobilization.

In addition, post-mobilization training requirements compete with pre-mobilization training needs and domestic response preparedness. This directly impacts readiness of the non-mobilized units available to the governors for HLD/DSCA missions.

iii. Table of Distribution and Allowances

Domestic response missions have required not only the contribution of MTOE units but of TDA units as well. TDAs are authorization documents developed for non-doctrinal units that prescribe the organizational structure and the personnel and equipment requirements of a military unit to perform a mission for which there is no appropriate TOE. Although generally not a deploying unit, the ARNG does have requirements for units that contribute to the readiness and availability of the ARNG to respond to HLD/DSCA requirements. Such units include states' Joint Force Headquarters which consist of The Adjutants General (TAGs) and their staffs who provide command and control support for HLD/DSCA missions. Civil Support Teams (CSTs) are also TDA units. There are currently 57 CSTs throughout the U.S. CSTs are required to rapidly deploy to provide assistance to local first-responders in determining the nature of an attack and to provide medical and technical advice, and pave the way for arrival of follow-on state and federal military response assets. Other TDA units include logistics organizations, such as Aviation Classification Repair Activity Depots (AVCRADs), which have deployed in support of aviation units in OEF and OIF.

iv. Equipment Cross-leveling

From November 2002 until August 2008, the ARNG directed over 167,000 items to be crossleveled between states and territories to support ARNG mobilization requirements. In addition, the states and territories cross-leveled items internally to support pre-mobilization training and mobilization requirements. Cross-leveling to meet mobilization requirements negatively impacts ARNG unit readiness and presents an equipping challenge for the ARNG. Donor unit EOH is immediately reduced by the loss of equipment. The ability of units to continue to train without the necessary equipment becomes a challenge. Continual cross-leveling of equipment decreases the ARNG's ability to sustain the force through critical training periods in the ARFORGEN cycle; cross-leveling increases training time required as equipment is not available until late in the cycle. As a result, pre-mobilization training shifts to post-mobilization. Increased postmobilization training decreases BOG time in theater: decreased BOG increases the rotation of units, requiring additional cross-leveling of equipment.

v. Stay Behind Equipment: DoD Directive (DoDD) 1225.6–Equipment Diversion to Support Theater

In prior years, some units leaving theater were required to leave their equipment as Theater Provided Equipment (TPE) for use by follow-on forces of all components and Services. The ARNG has been directed to leave approximately \$3.2B of TPE in theater, since OIF and OEF began. Although \$993M of equipment was transferred to other ARNG units in theater and should eventually return with those units, there will be significant repairs/and or replacements needed at that time. states and territories have also reported total equipment losses of approximately \$339M to include \$257M in battle losses and \$71M in washout equipment losses. The ARNG is working with Headquarters, Department of the Army (HQDA) to maintain accountability of ARNG equipment that has become TPE. The purpose is to develop payback, return, or replacement plans in accordance with DoDD 1225.6–Equipping the Reserve Forces and the FY 2007 NDAA.

Currently, RC equipment may not be retained in theater without a written order from HQDA specifying the equipment to be retained and an associated payback plan for the RC's equipment. In addition, DoDD 1225.6 requires that the payback plan must be approved by the SECDEF prior to equipment diversion from a RC. This has greatly reduced the amount of equipment left

in theater by ARNG units. DoDD 1225.6 has been beneficial to ARNG readiness since it has helped to limit diversions that would have left even less equipment in the states for premobilization training or HLD/DSCA response. The ARNG, with the assistance of HQDA, is aggressively pursuing payback of theater-retained equipment. Payback plans are in process for approximately 91 percent of the items that were withdrawn in the first few years of the war, and states have begun to receive significant amounts of replacement equipment. The FY 2007 Bridge Supplemental provided \$1.7B to initiate procurement to replace a significant portion of those withdrawals. The Army and ARNG are currently working to validate additional items for replacement that will be included in FY 2010 budget requests.

TPE transfers have affected ARNG equipment for unit readiness, training of personnel, and the mobilization of units, but repayment actions are progressing. Most of the equipping solutions are slated for new production that started in the third quarter of FY 2008.

vi. Impacts of Transformation and Modularity

Transformation and modularity also challenge the ARNG's equipping posture. The ARNG has continued to support the Army's goal of restructuring its forces to modular designs offering stand-alone units capable of full-spectrum missions. A goal of the Army Modular Force is to establish one equipping standard for all components and units. Modular units generally require more modern equipment to achieve the net-centric vision and interoperability needs of the Army fighting in a Joint environment. As stated previously, the Army estimates that this percentage will fall to 73 percent by FY 2010 due to increases in ARNG structure as a result of transformation. Thirty ARNG brigades (27 percent of the total number of ARNG brigades) are transforming to the modular design in FY 2008 and FY 2009.

vii. Hurricane, Flood, and Wildfire Response Equipment

In June 2008, the Mississippi River valley experienced large-scale flooding from Wisconsin to Missouri. National Guard troops answered the calls of their respective governors providing sandbag operations, search and rescue, power generation, logistical support, debris cleanup, and law enforcement support. During recovery efforts, the National Guard established shelters and distributed food and water. Over a three-week period, 6,843 Soldiers from IA, IN, IL, MO, and WI provided their respective states with critical capabilities and reassured their communities that the National Guard is "Always Ready, Always There."

Starting on the 21st of June, the California National Guard (CAARNG) supported the efforts of the state of California to battle the wildfires throughout California. At the apex of the mission, CAARNG supplied more than 1,100 Soldiers to protect citizenry and property around the state, including 400 Soldiers deployed to the front lines to fight fires; the first time since 1977 that Soldiers have been used to fight fires on the ground in California. CAARNG also supplied six helicopters to assist in combating the wildfires. Twelve additional units from across the National Guard supported the state of California with assets to assist in this effort.

Tropical Storm Edouard made landfall on the 5th of August 2008 on the upper Texas coast between High Island and Sabine Pass, Texas. Edouard persisted over Texas dropping three to six inches of rain along its path before moving westward. As a result, a state of emergency was declared for 17 counties, some receiving up to 10 inches of rain. At the height of the emergency, 363 Texas ARNG Soldiers were utilized in State Active Duty (SAD) status.

FY 2008 is the third consecutive year that the ARNG and the Army have collaborated to ensure that hurricane-prone states and territories are adequately resourced with equipment to respond to a major hurricane event. The ARNG and Army redistributed or diverted equipment to selected states for the 2006, 2007, and 2008 hurricane seasons (1 June through 30 November).

Hurricane-prone states and territories projected their equipment requirements in preparation for the 2008 hurricane season. states and territories' requirements included engineer equipment (floodlights, augers, scoop loaders, dozers, boats, and graders), logistics equipment (fuel storage, food service, and forklifts), generators, trucks and trailers, and global positioning systems. Approximately 57 percent of the total equipment provided to these states was from new procurement, while the remaining 43 percent was transferred via redistribution actions and loans. Of the equipment provided, 98 percent was issued to the states on a permanent basis and 2 percent had to be paid back to loaning units.

Since Hurricane Katrina in September 2005, the hurricane-prone states and territories have improved their response capability to an acceptable level as most equipment is now issued permanently vice a loan issue. Figure 2-1 depicts the history of hurricane support since Hurricane Katrina struck the Gulf Coast.

Capabilities have increased since Katrina:

- Water Purification (Gal/Hour): 217% of 2005 levels
- HMMWVs (Eaches): 139% of 2005 levels
- Medium Cargo Trucks (STons): 128% of 2005 levels
- Heavy Cargo Trucks (STons): 145% of 2005 levels
- Fuel Haulers (Gallons): 151% of 2005 levels
- Engineer Equipment: 126% of 2005 levels
- Equipment delivered before the 2009 season will increase capacity by 10%

Figure 2-1. Equipment Support to Hurricane States and Islands

b. Average Age of Major Items of Equipment

Historically, much of ARNG equipment was received through cascade from the AC. Consequently, the equipment is now over or near the end of its planned service life. One of the ARNG's primary compatibility concerns is that the major systems are aging faster than they can be replaced or rebuilt. *Table 2* provides the average age of major items of ARNG equipment at the beginning of FY 2009.

c. Compatibility of Current Equipment with AC

While the Army's goal is to equip all components to the same level of modernization, deployments to OIF and OEF continue to demonstrate issues with compatibility. First, it is difficult to locate repair parts for systems no longer in the AC system. In addition, obsolete ARNG equipment is less interoperable with modern AC equipment. For example, many ARNG communications and electronic systems are not interoperable and have less capability than the systems being used by the AC on the battlefield. For this reason, combatant commanders restrict the older equipment from theater. *Table 7* provides a list of authorized substitutes currently employed within the ARNG and identifies those substitute items considered to be non-deployable.

Finally, the system compatibility issue also impacts the calculation of ARNG EOH. The Army provides guidance on what equipment is considered to be an authorized substitute for primary equipment. Although substitutes are counted in determining EOH, much of the substitute equipment is not suitable for deployment since it is not the most modern and capable equipment.

d. Maintenance Issues

One area of significant shortfall that challenges ARNG maintenance operations is technician manning. While the ARNG strives to maintain equipment to the Technical Manual 10/20 standard, the mobilization and shortage of key state/territory maintenance technicians create maintenance readiness challenges. Nationwide, shop technician authorizations are currently staffed at 70 percent of requirements. Technician shortfalls are exacerbated when unit mobilization occurs. The ARNG hires temporary technicians to alleviate the shortage of state maintenance technicians lost to mobilization. However, due to the limitation on full-time support, the states, on average, hire one temporary technician for every three maintenance technicians lost to mobilization. The ARNG transition to an Operational Force combined with new equipment being fielded at 100 percent of requirements will require a fully funded and staffed maintenance technician workforce.

Repair part problems create maintenance readiness challenges as well. The majority of ARNG equipment, primarily trucks and combat tracked systems that remain in CONUS, are older models, which have a scarcity of repair parts. One example is the M939-series truck, which has an obsolete power train; the MT654 Allison Transmission used by the M939-series has not been in production for almost six years. A large percentage of the ARNG fleet of rolling stock is considered non-deployable and in some cases obsolete.

i. Field Level Maintenance

The state of ARNG Surface Equipment Maintenance Facilities (SEMFs) such as Field Maintenance Shops (FMSs), Combined Support Maintenance Shops (CSMSs), Unit Training Equipment Sites (UTESs), and Maneuver Area Training Equipment Sites (MATESs) is also critical to maintaining a "ready-to-go" fleet. Older facilities designed for organizational maintenance missions are, in many cases, not readily capable of accomplishing field-level maintenance. The current draft Future Years Defense Program (FYDP) (FY 2010–2015) has budget lines for 27 ARNG SEMF projects costing \$467M (12.2 percent of the total \$3.825B Military Construction [MILCON] funding and 9.3 percent of the 290 total ARNG MILCON projects). In addition to these planned projects, the Planning Resource for Infrastructure Development and Evaluation (PRIDE) database Long Range Construction Plan shows 203 SEMF projects needed with \$1.8 billion in federal MILCON requirements for ARNG SEMFs.

ii. National Level Maintenance

The ARNG Depot Maintenance Program continues to be an integral part of ARNG sustainment activities. Depot overhaul and rebuild programs sustain ARNG EOH and extend the service life

of its aging fleet. Funding of this program is the key to maintaining readiness of the ARNG fleet. Currently, the ARNG depot maintenance program is funded at \$392.8M or 61 percent of its total requirement in FY 2010. Funding for the total program averages 70 percent from FY 2010 through FY 2015.

The ARNG's Readiness Sustainment Maintenance Sites (RSMSs) have also been vital to supporting mobilized units by filling MTOE shortages that would otherwise have been cross-leveled from other units. In addition to the Army depot programs, the ARNG is refurbishing High Mobility Multipurpose Wheeled Vehicles (HMMWVs), Heavy Expanded Mobility Tactical Trucks (HEMTTS), Palletized Load Systems (PLSs), M915-M920 series Tactical Wheeled Vehicles (TWVs), and M870-M872 series flatbed trailers to fill EOH shortages within the ARNG fleet. This maintenance is performed at the four RSMSs located in Kansas, Maine, Mississippi, and Texas. A fifth RSMS, located in Oregon, repairs night vision devices and generators. During the 12 month period (July 2007 to June 2008) the RSMSs completed production on over 7,000 pieces of equipment.

The ARNG will continue to rely on Army funding and Congressional supplemental funding to procure modern equipment to fill existing shortages. Depot maintenance will remain a challenge until the older/obsolete equipment is eliminated from the inventory. The ARNG's immediate goal is to eliminate the 3,598 M800-series 5-ton trucks and 5,252 M35 series 2 1/2-ton trucks that are non-deployable and approaching obsolescence. The decrease in reliability of these vehicles has created challenges in the HLD/DSCA mission areas as well. Modular conversion will fund some replacements, but because of the growth in requirements for wheeled vehicles, the ARNG is dependent on Congressional additions to Army funding and National Guard and Reserve Equipment Appropriation (NGREA) procurement.

iii. Home Station Reset

During FY 2008, the ARNG continued to restore its equipment returning from Iraq and Afghanistan with a program known as Home Station Reset (HS Reset). Initiated in FY 2007, the HS Reset program has rapidly returned equipment to the states' control for HLD/DSCA missions and to equip units mobilizing for overseas missions.

States prioritize the HS Reset workload to fulfill anticipated requirements. The HS Reset program has reduced the burden on active duty installations allowing them to concentrate on deploying units and their tenant activities. It has also saved the Army second-destination transportation costs.

iv. Automatic Reset Induction (ARI)

Under the ARI program all OIF/OEF units in theater are directed to induct 100 percent of identified equipment into Sustainment Maintenance under a Supply transaction prior to exiting theater. The list of equipment impacted by ARI is dictated by the Army. All ARI identified LINs are transferred to Army Sustainment Command (ASC) property book accounts under a supply transaction, dropped from the owning units' property books, and are subsequently shipped to one of the Army's depots for the actual reset. Problematic to the ARNG is, under the current system, the units and the ARNG lose visibility of this equipment once it has been inducted. There are no tracking systems available that afford the ARNG the ability to track its inductions and ensure proper return of equipment. This issue

is significant in that the depot has up to one year to return the equipment to the ARNG. If not returned, the equipment becomes a payback item to the ARNG under DoDD 1225.6.

e. Equipment Readiness

With the reset of units returning from deployments and units transforming under modularity, equipping levels reflect decreased readiness. However, ARNG readiness is managed by prioritizing limited resources using the ARFORGEN cycle in support of the NMS. Despite declines in equipment on-hand, ARNG units have successfully met all mission requirements and continued to support OCO. Although overall EOH is predicted to fall from 76 to 73 percent by the end of FY 2010, the Army is actively working to fully equip all BCTs by FY 2015 and all remaining units by FY 2019.

f. Rapid Fielding Initiative (RFI)

In May 2008, HQDA authorized a Rapid Fielding Initiative (RFI) pilot program that accelerates the fielding of specific types of Soldier and unit equipment from post-mobilization to premobilization for 5 ARNG BCTs and a CAB scheduled to deploy in FY 2010. The pilot pushes the fielding of RFI Soldier and unit equipment to these units approximately 13 months prior to mobilization rather than fielding to the units at the mobilization station. Early RFI equipment fielding enhances pre-mobilization certification training, reduces distracters at mobilization stations, and is a step toward reaching training parity with this equipment to the AC. The real benefit of early RFI fielding is enhanced training for ARNG units. Fielding RFI in the pre-mobilization phase facilitates the "train as you fight" concept and reduces post-mobilization training time. Pilot success will posture the ARNG to field RFI Soldier and unit equipment during pre-mobilization. Completion of the pilot program is projected for March 2009 upon mobilization of the last pilot unit.

B. Changes Since Last NGRER

One major change since the last NGRER is an increased emphasis on the need for improved transparency of the equipment procurement and distribution process resulting from the new reporting requirements of NDAA 2008. Despite the Army's efforts to improve its processes and automation systems, reliability and accountability issues remain.

Another significant change is the increasing imbalance between New and Displaced Equipment Training (NET/DET) requirements and funding. These issues are discussed in greater detail below.

1. Procurement Transparency

Improving transparency of equipment procurement and distribution process remains a top ARNG priority and challenge. The Department of the Army (DA) Staff has made improvements to its equipment procurement and distribution processes in recent years, but we still have concerns about our inability to fully account for the equipment delivered to ARNG units as compared to what was programmed, budgeted, and appropriated by Congress. The FY 2008 NDAA, Section 1826, directed that the CNGB provide an inventory each year of items of equipment for which funds were appropriated for the ARNG but which were not received by a National Guard unit. In order for the CNGB to report accurately, the Army needs to provide complete transparency and accountability of

all funding sources and associated equipment intended for the ARNG. The ARNG must have full visibility of these resources throughout the Planning, Programming, Budgeting, and Execution System (PPBES) process. Furthermore, DA must identify and staff proposed diversions of ARNG funding or equipment with all stakeholders, so as to comply with DoDD 1225.6.

Until these issues have been resolved, the CNGB cannot adequately address the reporting requirements identified in FY 2008 NDAA, Section 1826.

2. NET/DET

The past several years have witnessed a concerted effort on the part of the Army, the Office of the Secretary of Defense (OSD), and both the House and Senate to equip the ARNG to levels commensurate with an operational reserve. The Congressional support to the ARNG in the form of NGREA and Congressional Add funding has resulted in increased equipping levels. These increases have led to an additional requirement in the National Guard Personnel, Army (NGPA) appropriation to pay for the additional NET/DET, deprocessing and support costs. For example, the ARNG received \$31.5M in NET/DET (NGPA) funding in FY 2008. The actual amount expended on NET/DET in FY 2008 was \$45M. The difference was partially attributable to the influx of equipment purchased with NGREA funds received in FY 2006 (\$700M) and FY 2007 (\$1B), which was not produced and delivered until FY 2008. The Army Enterprise Equipping and Reuse Conference (AEERC), conducted in July 2008, identified all production deliveries for the rest of FY 2009 and FY 2009. The President's Budget provides the ARNG \$13.1M in NET/DET funding for FY 2009. The shortfall in NET/DET (NGPA), de-processing, and support for FY 2009, based on the AEERC, is in excess of \$87M and again is partially attributable to the NGREA (OPA) funding.

Details of the NET/DET shortfalls are outlined in the NET/DET Funding Wave chart (see Figure 2-2). Specifically, in FY 2006, the ARNG NET/DET request was \$27.3M, based on its anticipated equipment requirements. ARNG received \$14.7M in funding for training, and distributed 81.6 percent of the funded amount. Of the amount distributed, the execution rate was 97 percent for the year. In FY 2007, the ARNG NET/DET request was \$24.01M based on anticipated equipment requirements. ARNG received \$19.6M in funding for training, and distributed and executed 100 percent of the funded amount. In FY 2008, the ARNG NET/DET request was \$40.1M based on anticipated equipment requirements. ARNG requirements. ARNG received \$31.5M in funding for training, and distributed and executed 100 percent of the funded amount. Because of NGREA purchases in FY 2006 and FY 2007, ARNG requested, distributed, and executed an additional \$14M.

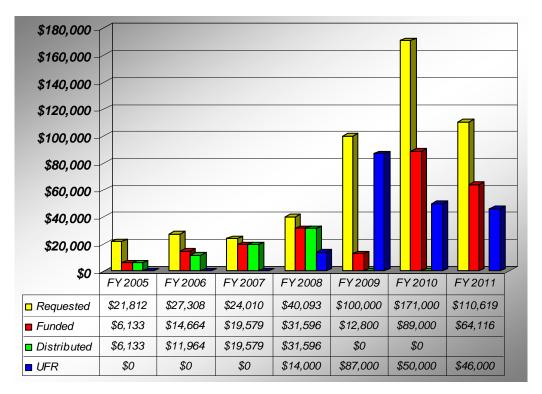


Figure 2-2. NET/DET Funding Wave

The ARNG can no longer afford the additional NGPA costs associated with the NET/DET, deprocessing and support funding requirements. A viable course of action is to obtain additional NGPA funding for NET/DET costs not covered in the President's Budget, and 100 percent of the ARNG's authorizations for full-time personnel requirements,.

C. Future Years Programs (FY 2010–FY 2012)

1. Anticipated Equipment Procurement

Congress and the Army are acting decisively to improve the ARNG equipping posture. The Army has programmed \$20.7B for ARNG equipment for FY 2010 through FY 2015. This funding will be used to procure new equipment and to modernize equipment currently on-hand. However, due to a shortage of funding for HMMWVs and production challenges for the Family of Medium Tactical Vehicles (FMTV) fleets, the ARNG will have a shortfall of over 20,000 vehicles even after the \$20.7B is executed. As stated earlier, the Army's goal is to fully equip all BCTs, regardless of component, by FY 2015 and remaining units by FY 2019.

2. Anticipated Transfers from AC

As a result of the huge influx of newly procured equipment into the AC over the next several years, the ARNG will receive a significant amount of cascaded equipment. For this reason, the Army is developing projections for expected equipment transfers to the ARNG for FY 2010. These cascades will be instrumental in filling current shortages and in replacing obsolete equipment. However, while the ARNG welcomes cascaded equipment, the Army must develop a strategy to ensure the long term interoperability of the entire force. *Table 5* reflects data regarding equipment transfers from the AC to the ARNG.

3. Anticipated Withdrawals from RC

The ARNG anticipates the receipt of new, rebuilt, reset, and cascaded equipment that will allow the withdrawal of the following models of obsolete equipment. Table 2-1 displays older or obsolete items in the left-hand column that will be replaced by more modern items in the right-hand column. The ARNG will continue to retire the oldest legacy aircraft (UH-1H/V and OH-58A/C) in accordance with the Army Campaign Plan, with all those aircraft out of the ARNG inventory by FY 2009 and FY 2014, respectively.

Old System	Replaced By
M35-series 2 1/2-ton Trucks	Light/Medium Tactical Vehicles (LMTV)
M800-series 5-ton Trucks	FMTV
M915A1 Tractor	M915A3/A4 Tractor
M920 Tractor	M916 Tractor
M109A5 and earlier Howitzers	M109A6 and M777 Towed Howitzers
M16A1 Rifle	M4 Rifle
M1 and M1A1 Tanks	M1A1 Abrams Integrated Management AIM
M2 Bradley Fighting Vehicle BFV	M2A2 Operation Desert Storm ODS
M3 BFV	M3A2 ODS
M113 APC Variants	M113A3, M577A3, M1064A3, M548A3 and M1068A3
AH-64A Attack Helicopters	AH-64D Attack or ARH-70A Recon/Attack Helicopters
C-23B Cargo Airplanes	C-27J Cargo Airplanes
CH-47D Cargo Helicopters	CH-47F Cargo Helicopters
OH-58A/C Scout Helicopters	UH-72A Light Utility Helicopters (LUH)
OH-58D Recon/Attack Helicopters	ARH-70A Recon/Attack Helicopters
UH-1H/V Utility/MedEvac Helicopters	UH/HH-60A or L Utility/MedEvac Helicopters
UH/HH-60A Utility/MedEvac Helicopters	UH/HH-60L or M Utility/MedEvac Helicopters
PVS-5 Night Vision Goggles	PVS-14 Night Vision Goggles
Dragon Anti-Tank Systems	Javelin Anti-Tank Systems

Table 2-1. Old versus New Systems

4. Equipment Shortages and Modernization Shortfalls

Despite the challenges currently faced, the Army and Congress continue to demonstrate their commitment to fully equipping the ARNG with modern equipment. Table 2-2 highlights resources allocated to address ARNG equipment shortfalls and modernization.

Budget Category	FY 2010 Funding (\$K)
Armored Security Vehicle	294,883
Bradley Fighting Vehicle System (BFVS) Recapitalization	668,694
Blackhawk Helicopter	1,495,344
Commercial Off-the-shelf (COTS) Tactical Radios*	6,386
Distributed Common Ground System Army (DCGS-A)	155,146
Enhanced AN/TPQ-36 (EQ-36) Counterfire Target Acquisition Radar	700,943
Fixed Wing Aircraft	1,048,790
Field Feeding Equipment	39,756

Budget Category	FY 2010 Funding (\$K)
FMTV	1,732,284
FMTV Cargo Trailers	104,017
HMMWV	794,285
Night Vision Devices*	122,476
Night Vision Goggles*	491,426
SINCGARS Radios*	25,164
Tactical Operations Centers (TOCS)/Standardized Integrated Command Post Systems (SICPS)*	124,014
Warfighters Information Network-Tactical (WIN-T)	91,628
Grand Total	7,895,236
*Category includes additional resources from projected FY 2010 Supplemental	

Table 2-2. FY 2010 PRESBUD

Additional highlights of the FY 2010–2015 President's Budget request (PRESBUD) and projected FY 2010 Supplemental request include \$4.8B for aviation equipment, \$2.4B for Logistics Field Systems Budget Operating System (BOS) equipment, and approximately \$5B for combat service support equipment.

ARNG requirements have increased since the January 2008 Army G8 post–FY 2013 unfunded equipment requirement (UFR) estimate was calculated for the ARNG. Additionally, funding projections have changed, and DA has established stricter business rules for including "in lieu of" equipment in their equipment-on-hand and UFR calculations. These factors are likely to significantly drive up the ARNG post–FY 2015 equipment shortfall UFR from current levels.

It is important to note that this UFR calculation will only represent the funding needed to fill all MTOE and TDA major end item shortages to 100 percent—it will not include the cost to fully modernize the force or to procure what are known as "stock funded" equipment items such as tents and tripods. Furthermore, there is a significant time delay in the Army's requirements documentation process. This means that, in many cases, equipment requested by commanders in the field, recently approved by U.S. Army Training and Doctrine Command (TRADOC), or decided upon by senior Army leaders, will not yet be recognized as requirements and will, therefore, not be captured in the UFR calculation process.

The mission of the ARNG is to provide combat ready units in support of the NMS to include OCO. To meet this challenge, the ARNG is transitioning from its former role as a strategic reserve to that of an operational force. To support this transition, the ARNG must be equipped to 100 percent of its MTOE and TDA requirement based on the Army's modular force design. Without continued support for equipment procurement, cascading of equipment from the AC, and funding received directly from Congress for NGREA and Congressional Adds, the ARNG will be limited in its ability to meet fielding, equipping, training, and warfighting needs.

Because the Army buys and uses many different types of equipment, the equipment types are grouped into categories known as BOSs. Table 2-3 provides a current and projected equipping and modernization status by BOS, where green indicates a 90 percent or better fill rate of modernized equipment, amber indicates a fill rate between 75 percent and 90 percent, and red indicates a fill rate for modernized equipment of less than 75 percent.

Budget Operating System	August 2008	June 2010	September 2015
Air Defense			
Aviation			
Battle Command			
Logistics Automation			
Logistics Field Systems			
Precision Strike (Fire Support)			
Intelligence and Electronic Warfare			
Maneuver			
Mobility			
Force Protection (Nuclear, Biological, and Chemical)			
Soldier Systems			
Transportation			

Table 2-3. BOS Status

a. Budget Operating Systems

The following paragraphs provide a brief synopsis for each BOS shortfall.

The Aviation BOS has a current requirement of 1,483 fixed and rotary wing airframes. Of those, the ARNG has 1,383 or 93 percent on-hand (this is a mixed fleet of new production aircraft and older cascaded aircraft). The ARNG is projected to have all 782 of its UH-60 Blackhawks by the end of FY 2009, all 96 of its AH-64D Longbow Apaches by the end of FY 2010, all 159 of its CH-47 Chinooks by the end of FY 2012, and all 200 of its UH-72A Lakotas by the end of FY 2015. Assuming funding in the current FYDP is executed as planned, the ARNG fleet will approach 100 percent of its aircraft requirement by FY 2015. However, funding issues remain for two modernization initiatives to include AH-64 A-to-D conversions and UH-60A-to-L conversions.

The Battle Command BOS contains multiple systems and subsystems. The major elements are: Army Battle Command System (ABCS), Warfighter Information Network-Tactical (WIN-T), and various radio systems. These systems are interoperable as well as interdependent and provide information, communication, and synchronization at all levels. Units without this equipment will be unable to communicate and synchronize operations within our Army's formations, and will be considered non-deployable. The combined post-FY 2015 shortage of this equipment is estimated at \$1.6B. The Army and ARNG strategy is to eventually bring all forces into full modernization and avoid the capability gaps and interoperability issues that will exist within units not equipped. Due to its complexity and nature, much of this equipment cannot be easily cross-leveled.

The Logistics Automation (LogSys) BOS contains transportation, quartermaster, and ordnance systems for all of the functions of combat service support. This includes maintenance, transportation, supply, combat health support, field services, explosive ordnance disposal, human resources support, financial management operations, religious support, legal support, and band support. It is responsible to equip, arm, fuel, feed, transport, and supply all Soldiers and has the responsibility of fixing forward and providing lifecycle management. The LogSys BOSs manage all classes of supply for these functions. There are many Standard Army Information Management Systems used to perform these functions, and the LogSys BOS is responsible for ensuring the Soldiers requirements are met and maintained. Current shortages are projected at

approximately \$30M with an equal amount of funding required each year for lifecycle management and post-production software support.

The Logistics Field Systems BOS contains medical, fuel, water, food, and power systems and their associated accessories. Each of these systems has a number of unique subsystems. The combined post-FY 2015 shortage of these vehicles is estimated at \$357.1M. The Army and ARNG strategy is to simultaneously fill equipment shortages while modernizing much of its aging equipment. Projections show that by FY 2015, the ARNG will only have 85 percent of its medical equipment requirements, 41 percent of its fuel support equipment, 67 percent of its water support equipment, 44 percent of its field feeding equipment, and 70 percent of its power generation requirement, even given a best case scenario. These continued shortages will force ARNG units to cross-level equipment or perform missions at a degraded capability in meeting wartime training requirements and supporting domestic operations.

The Precision Strike (Fire Support) BOS encompasses all fire support and related systems. The level of equipping and modernization for ARNG Strike systems overall is healthy and most systems are fully funded under the present plan in all major Strike platforms for which documented MTOE requirements exist based on documented FY 2015 requirements. Most systems will be fielded by FY 2013 pending any unforeseen changes to the ARFORGEN model and assuming funding in the FYDP is executed as planned.

The Intelligence and Electronic Warfare (IEW) BOS is comprised of a variety of Military Intelligence and Electronic Warfare Systems. Some noteworthy systems in the IEW BOS are: TROJAN Special Purpose Intelligence Remote Integrated Terminal (TROJAN SPIRIT), Prophet, Counterintelligence/Human Intelligence Automated Reporting and Collection System (CHARCS), and the Distributed Common Ground System–Army (DCGS-A). The level of equipping and modernization for ARNG IEW systems overall is healthy and fully funded under the present plan. Assuming funding in the FYDP is executed as planned, the ARNG will approach 100 percent of its IEW requirement by FY 2015.

The Maneuver BOS is comprised of a variety of combat systems. Abrams Tanks, Bradley Fighting Vehicles, Stryker Vehicles, Improved Target Acquisition System (ITAS), Javelin, and Long Range Advanced Scout Surveillance System (LRAS-3) are among the highlighted systems in this BOS. The ARNG is fully funded in all major armor platforms to meet FY 2015 requirements and expects to complete fielding of these systems by FY 2013.

The Mobility BOS is comprised of Engineer Systems designed for use in a variety of missions including: horizontal/vertical construction, bridging, and breeching. The systems highlighted in this BOS are: High Mobility Engineer Excavator Type III (HMEE III), High Mobility Engineer Excavator Type I (HMEE I), and the Hydraulic Excavator. By FY 2015, the ARNG will be short 101 HMEE III systems, 15 HMEE I systems, and 14 Hydraulic Excavators. The ARNG is programmed to receive 81 percent of its requirement for these systems by FY 2015 under current HQDA funding and procurement.

Nuclear Biological and Chemical is covered under the Force Protection BOS and contains over 60 separate systems for the ARNG. A large number of these systems are considered "legacy," or obsolete, and are currently being replaced by the more modern Battlefield Intrusion Systems,

Chemical Agent Detectors, Biological and Protective Shelters and Decontamination equipment. The on-hand quantities and modernization of these systems has improved significantly in the last several years, but still has shortfalls in several key areas mentioned above. The shortfall in modern Force Protection systems represents a UFR of over \$420.7M beyond the FY 2010–FY 2015 Program Objective Memorandum (POM). The majority of this shortfall is represented by one system, the Chemical Biological Protective Shelter System (CBPSS), which is currently undergoing a system configuration modification. Increased funding for the Force Protection BOS will improve the ARNG's ability to meet both homeland and war fighting missions.

The Soldier BOS includes Small Arms, Night Vision Goggles (NVGs), and Thermal Weapons Sights, along with associated accessories. Small Arms are fully funded in all systems with the exception of the M2 Machine Gun and the Mk 19 Automatic Grenade Launcher, which have a combined \$50M UFR. The ARNG has approximately 38 percent of required night vision goggles on-hand today with projected 100 percent fill by FY 2012. The ARNG has 14 percent of required Thermal Weapons Sights on-hand today and will be at 70 percent fill by FY 2015 with a projected shortfall of approximately 18,000 systems in FY 2015 if current funding projections do not increase.

The Transportation BOS contains Light Tactical Vehicles (LTVs), the Family of Medium Tactical Vehicles (FMTVs), Heavy Tactical Vehicles (HTVs), and their associated trailers and accessories. Each of these vehicle systems has a number of variants produced on a common or similar platform. While all of the vehicles perform a wide variety of missions, they are mutually supporting and of equal importance to the ARNG. The combined post-FY 2015 shortage of these vehicles is estimated at \$7.4B and accounts for more than half of the dollar value of the ARNG's post-POM UFR. The Army and ARNG strategy is to simultaneously fill equipment shortages while modernizing the aging truck fleet. By FY 2015, the ARNG is projected to have only 88 percent of its LTV requirement and 56 percent of its FMTV requirement, even given a best case scenario. These continued shortages will force ARNG units to cross-level equipment or perform missions at a degraded capability in meeting wartime training requirements and supporting domestic operations.

5. Requirements Documentation and Procurement Synchronization

The Army's process for documenting equipment requirements is not keeping pace with advances in technology and the needs of the warfighter. In many cases, the ARNG is receiving equipment for which it has no documented requirement. At the tactical level, this causes problems, such as an inability of the receiving unit to order spare parts to sustain the item. However, at the strategic level, a time lag in the requirements documentation process causes the Army and ARNG to constantly understate their true funding requirements to Congress.

D. Summary

Today and for the foreseeable future, ARNG Soldiers and units are, and will continue to be an Operational Force. Because the ARNG is now critical to the Army's long-term ability to support OCO, defend the homeland, and provide support to civil authorities, the Army leadership is committed to fully equipping and modernizing the ARNG to AC standards.

Until the ARNG is fully equipped and modernized, the ARNG will continue to work with the HQDA Staff to define the full ARNG equipment requirement. These requirements will be based

on a combination of the "AC like" FY 2015 MTOE and the ARFORGEN cycle. ARNG will then ensure that all its requirements are recognized in the budget request process. Finally, ARNG will distribute the equipment to the unit level in accordance with Army and ARNG priorities.

The ARNG will continue to work with the Army staff to request and leverage supplemental funding from Congress to replace RC equipment lost in battle, left behind in theater, or in need of reset or recapitalization. Ongoing supplemental funding is necessary to ensure timely payback of this equipment as required by DoDD 1225.6. Only by strictly adhering to this process can we ensure that RC units are equipped and modernized as an operational force and at the same level as their AC counterparts.

The Army has made strides in acquiring the funds necessary to equip and modernize the ARNG, but much work is still required, especially with regard to the ARNG truck fleet. As stated earlier, the Army's goal is to equip all components to 100 percent of their MTOE requirement over the next decade. This is an achievable goal and one that must be accomplished if the Army is to continue to fulfill its commitment to fight and win our nation's wars both today and tomorrow.

Consolidated Major Item Inventory and Requirements

NOTE: This table provides a comprehensive list of selected major items of equipment. It provides the quantity onhand (QTY O/H) projected to be in the inventory at the beginning/end of the selected fiscal year (FY). It also provides the quantity required (QTY REQ) needed to meet the full wartime requirements of the Reserve component. In accordance with Title 10, the QTY REQ number provides the recommendations as to the quantity and type of equipment which should be in the inventory of each Reserve component. Unit cost values are in dollars.

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ
AIRCRAFT - FIXED WING		0031			diri olin		
AIRPLANE, CARGO TRANSPORT, C-12D	A29812	\$1,967,301	2	2	2	2	1
AIRPLANE, CARGO TRANSPORT, C-12F	A30062	\$3,068,422	41	45	45	45	45
AIRPLANE, CARGO TRANSPORT, C-23B	A29880	\$7,424,158	28	32	32	43	59
AIRPLANE, CARGO TRANSPORT, C-26	A46758	\$800,000	10	10	10	10	11
AIRCRAFT - ROTARY WING							
HELICOPTER, ATTACK AH-64A (APACHE)	H28647	\$10,680,000	91	116	116	116	116
HELICOPTER, ATTACK AH-64D (APACHE)	H48918	\$25,128,800	78	72	72	72	96
HELICOPTER, CARGO CH-47D (CHINOOK)	H30517	\$5,000,000	129	136	141	158	161
HELICOPTER, OBSERVATION OH-58A (KIOWA)	K31042	\$92,290	77	95	95	95	15
HELICOPTER, OBSERVATION OH-58C (KIOWA)	H31110	\$190,817	120	104	104	104	96
HELICOPTER, OBSERVATION, OH-58D (KIOWA)	A21633	\$4,075,800	45	45	45	45	30
HELICOPTER, UTILITY, UH-1H (IROQUOIS)	K31795	\$922,704	37	42	42	40	19
HELICOPTER, UTILITY, UH-1V (IROQUOIS)	H31872	\$948,158	49	44	44	46	0
HELICOPTER, UTILITY, UH-60A (BLACK HAWK)	K32293	\$4,635,000	219	78	90	102	85
HELICOPTER, UTILITY, UH-60L (BLACK HAWK)	H32361	\$4,855,000	444	669	669	669	669
HELICOPTER, UTILITY, UH-60M (BLACK HAWK)	H32429	\$8,000,000	30	30	30	30	30
HELICOPTER, MEDEVAC, HH-60L	U84291	\$7,908,000	4	12	12	12	0
HELICOPTER, MEDEVAC, HH-60Q	U84541	\$7,908,000	4	4	4	4	0
HELICOPTER, LIGHT UTILITY, UH-72A	H31329	\$4,400,000	40	68	100	135	50
HELICOPTER, ARMED RECONNAISSANCE (ARH)	Z00691	\$760,000	0	0	0	1	0
AIRCRAFT SUPPORT EQUIPMENT							
UH-60A EXTERNAL STORES SUBS	E21985	\$676,111	97	97	97	97	654
HOIST, HIGH PERFORMANCE	H39331	\$111,580	187	194	194	194	434
POWER UNIT AUXILIARY, AVIATION (AGPU)	P44627	\$201,060	146	146	146	146	176
COMMAND SYSTEM, TACTICAL, AN/TSQ-221	C61597	\$3,000,000	19	28	26	24	20
RADAR SET, AN/TPN-31	R17126	\$3,701,502	13	14	14	14	14
RADIO SET, HF, AN/VRC-100(V)1	R81691	\$33,707	168	167	168	168	210
SHOP EQUIPMENT CONTACT MAINT (SECM)	S30224	\$10,500	42	113	191	369	369
TEST FACILITIES KIT, MK-994/AR	V61444	\$20,894	118	119	119	119	202
TEST SET, INSTRUMENT DISPLAY SYSTEM BENCH	T20861	\$76,859	112	118	120	122	101
TEST SET LINE, ADV FLIGHT CONTROL SYS CH-47D	T81985	\$71,921	74	80	82	84	71
TEST SET, TRANSPONDER, AN/APM-305	V99436	\$35,182	59	64	64	64	105
TOOL KIT TUBE SWAGING, SET B	T57982	\$29,168	88	100	127	127	242
TOOL SET, AVIATION FOOT LOCKER SPT PM ACFT	T65997	\$5,000	578	630	630	630	732
ARTILLERY & MISSILE							
COMMAND LAUNCH UNIT, JAVELIN	C60750	\$126,824	1,840	2,158	2,158	2,358	2,363
FIRE UNIT VEHICLE MTD, AVENGER	F57713	\$1,090,277	264	264	264	264	228
HIGH MOBILITY ARTILLERY ROCKET SYS (HIMARS)	H53326	\$2,500,000	128	146	167	204	216
MULTIPLE LAUNCH ROCKET SYSTEM (MLRS), M270	L44894	\$1,055,696	90	108	108	109	19
LAUNCHER, TOW II ATGM M220A1	L45740	\$133,000	469	505	505	505	62
LAUNCHER, MLRS IMPROVED, M270A1	M82581	\$2,168,500	57	57	57	57	54

	Equip	FY 2010	Begin	Begin	Begin	End	End
Nomenclature	Equip No.	Unit	FY 2010	FY 2011	FY 2012	FY 2012	FY 2012
		Cost	QTY O/H	QTY O/H	QTY O/H	QTY O/H	
TARGET ACQ SYS, TOW IMPROVED ITAS M41	T24690	\$920,000	352	446	446	454	628
TRAINING SET, MOVING TARGET SIMULATOR (STINGER/REDEYE)	X04802	\$4,377,780	1	1	1	1	52
HOWITZER, MEDIUM, SP, 155MM, M109A6	H57642	\$1,435,000	294	294	300	310	282
HOWITZER, MEDIUM, SP, 155MM, M109A2-A5	K57667	\$758,038	109	109	109	109	33
HOWITZER, LIGHT TOWED, 105MM, M119	H57505	\$1,100,000	275	308	324	384	326
HOWITZER, MEDIUM TOWED, 155MM, M198	K57821	\$1,032,337	77	113	126	154	12
BRIDGING EQUIPMENT							
BOAT CRADLE, IMPROVED (IBC), M14	C33925	\$22,064	104	104	104	104	174
BOAT BRIDGE ERECTION, MK1/MK2	B25476	\$210,000	98	85	132	184	172
BRIDGE ERECTION SET, FIXED BRIDGE, 97CLEO40	C22058	\$43,944	10	10	10	10	111
BRIDGE ERECTION SET, FIXED BRIDGE, 97CLE53	C22126	\$488,354	6	6	7	9	12
BRIDGE ERECTION SET, FIXED BRIDGE, 97CLE52	C22811	\$964,515	10	10	12	12	23
BRIDGE, FIXED HIGHWAY, MILB11844	C23017	\$303,673	8	8	8	8	110
BRIDGE HEAVY DRY, SUPT (HDSB) 40M MLC96	B26007	\$2,676,000	10	19	19	23	28
REINFORCEMENT SET, MEDIUM GIRDER BRIDGE	C27309	\$498,940	6	6	7	8	11
LAUNCHER, M60 TANK CHASSIS, AVLB	L43664	\$527,126	177	177	183	189	112
LAUNCHER, HVY DRY SUPPORT BRIDGE	L67660	\$937,000	8	11	12	12	32
INTERIOR BAY BRIDGE, FLOATING	K97376	\$62,910	269	304	344	364	364
PALLET, BRIDGE ADAPTER (BAP) M15	P78313	\$37,085	333	352	354	354	504
RAMP BAY BRIDGE FLOATING	R10527	\$70,575	96	116	116	116	146
COMMUNICATIONS & ELECTRONICS EQUIPMENT		<i></i>					
COMPUTER SET, OL-582/TYQ	C18446	\$5,000	4,170	4,266	4,471	4,766	4,353
COMPUTER SET, OL-584/TYQ	C18582	\$6,000	328	520	536	512	562
COMPUTER SET, OL-590/TYQ (SAMS 1 CONFIG)	C28078	\$19,571	1,196	1,426	1,466	1,471	1,494
COMPUTER SET, OL-591/TYQ	C18718	\$8,226	319	386	744	1,528	482
COMPUTER SET, OL-603/TYQ	C78827	\$14,899	292	296	300	302	262
COMPUTER SET, OL-604/TYQ	C18684	\$14,899	440	452	636	950	458
COMPUTER SET, AN/UYK-128	C18378	\$15,954	6,373	9,482	11,548	12,307	39,797
COMPUTER SYSTEM, AN/PYQ-10(C)	Z00384	\$1,973	31,713	41,139	46,914	51,483	87,706
COMPUTER SYSTEM, AN/TYQ-105(V)1	C27503	\$900	3,587	4,730	6,627	7,706	9,636
COMPUTER SYSTEM, AN/TYQ-109(V)1	C27707	\$5,000	2,953	3,221	3,278	3,283	1,516
COMPUTER SYSTEM, AN/TYQ-109(V)2	C27775	\$7,000	3,150	3,237	3,256	3,287	3,148
COMPUTER SYSTEM, AN/TYQ-129(V)1	C27367	\$9,999	102	165	210	224	197
COMPUTER SYSTEM, AN/TYQ-129(V)2	C27435	\$46,287	3,153	3,298	3,759	3,771	2,691
COMPUTER SYSTEM, AN/UYQ-90(V)2	C18278	\$5,650	6,241	9,631	10,774	11,720	20,318
COMPUTER SYSTEM, AN/UYQ-90(V)3	C78851	\$8,500	530	808	889	1,000	3,783
CENTRAL COMMUNICATIONS, AN/TSQ-190(V)3	C89935	\$1,500,000	32	23	23	23	20
DIGITAL TOPOGRAPHIC SYSTEM, AN/TYQ-67(V)	D10281	\$2,500,000	51	60	60	60	88
NAVIGATION SET, SATELLITE SIGNALS AN/PSN-13	N96248	\$2,822	42,092	58,403	59,777	65,486	72,173
NAVSTAR GPS AVIATION SET, AN/ASN-128 DOPPLER	Z46320	φ2,022 \$0	42,032	12	12	12	800
SATELLITE COMM TERMINAL, AN/TSC-85A	S78466	\$1,201,740	1	3	5	5	12
SATELLITE COMM TERMINAL, AN/TSC-93A	S34963			16	16		
		\$600,870 \$825,000	14			16	12
SATELLITE COMM TERMINAL, AN/TSC-154	T81733	\$825,000	55	59	64	64	92
RADAR SET, SENTINEL AN/MPQ-64	G92997	\$2,256,480 \$7,077,850	45	45	45	45	48
RADAR SET, AN/TPQ-36(V)8	R14284	\$7,977,850 \$5,400,000	18	18	19	28	28
RADAR SET, AN/TPQ-37(V)1	A41666	\$5,400,000	7	8	10	16	16
SM EXTEN NODE SWITCH, AN/TTC-48C(V)1	S25004	\$700,000	32	59	63	63	0

ARNG

		FY 2010	Begin	Begin	Begin	End	End
Nomenclature	Equip	Unit	FY 2010	FY 2011	FY 2012	FY 2012	FY 2012
	No.	Cost	QTY O/H	QTY O/H	QTY O/H	QTY O/H	QTY REQ
CONTROL RECEIVER TRANSMITTER, C-11561(C)/U	C05541	\$6,476	141	651	651	716	4,366
RADIO SET, SINCGARS AN/VRC-87A	R67160	\$12,109	532	660	659	651	59
RADIO SET, SINCGARS AN/VRC-87D	R67228	\$14,825	323	360	362	355	0
RADIO SET, SINCGARS AN/VRC-87F(C)	R67296	\$6,532	3,066	2,931	2,930	2,945	822
RADIO SET, SINCGARS AN/VRC-88A	R67194	\$12,519	1,345	1,486	1,526	1,493	256
RADIO SET, SINCGARS AN/VRC-88F(C)	R67330	\$7,123	4,654	4,482	4,592	4,639	2,388
RADIO SET, SINCGARS AN/VRC-88D	R67262	\$15,145	275	341	345	345	0
RADIO SET, SINCGARS AN/VRC-89A	R44863	\$22,822	981	1,029	1,023	1,027	259
RADIO SET, SINCGARS AN/VRC-89D	R44931	\$12,000	490	512	506	493	98
RADIO SET, SINCGARS AN/VRC-89F(C)	R44999	\$11,128	6,233	6,291	6,383	6,408	5,201
RADIO SET, SINCGARS AN/VRC-90A	R67908	\$13,178	1,997	2,415	2,784	2,920	2,919
RADIO SET, SINCGARS AN/VRC-90D	R67976	\$12,000	634	1,267	1,115	1,044	1,044
RADIO SET, SINCGARS AN/VRC-92F(C)	R45543	\$13,446	14,918	14,967	14,781	14,747	15,284
RADIO SET, SINCGARS AN/VRC-90F(C)	R68044	\$7,415	33,221	34,560	34,833	34,694	39,424
RADIO SET, SINCGARS AN/VRC-91A	R68010	\$23,249	917	865	853	795	163
RADIO SET, SINCGARS AN/VRC 91F(C)	R68146	\$11,817	10,734	10,959	11,127	11,197	11,404
RADIO SET, SINCGARS AN/VRC-91D	R68078	\$14,000	345	339	367	329	0
RADIO SET, SINCGARS AN/VRC-92A	R45407	\$21,238	792	870	1,028	1,103	539
RADIO SET, SINCGARS AN/VRC-92D	R45475	\$16,000	480	498	597	547	48
RADIO SET, SINCGARS AN/VRC-119A	R83005	\$10,117	1,404	1,409	1,452	1,315	319
RADIO SET, SINCGARS AN/PRC-119D	R83073	\$14,000	310	301	302	302	0
RADIO SET, SINCGARS AN/PRC-119F(C)	R83141	\$4,346	11,113	11,148	11,279	11,506	9,243
RADIO ACCESS UNIT, AN/TRC-191	R33351	\$1,184,275	71	71	71	71	0,210
RADIO SET, AN/GRC-213	R30895	\$20,000	439	1,019	768	757	1,446
RADIO SET, AN/PRC-104A	R55200	\$12,500	356	491	474	476	528
RADIO SET, AN/PRC-126	R55336	\$1,997	5,278	5,275	5,275	5,275	39,994
RADIO SET, AN/PSC-11	R57810	\$150,000	44	94	95	95	119
RADIO SET, AN/PSC-5	R57606	\$27,000	1,185	1,210	1,198	1,186	2,697
RADIO SET, HF, AN/ARC-220 (V)1	R22436	\$27,779	738	738	738	755	1,040
RADIO SET, HF, AN/GRC-193A	H35404	\$37,000	327	1,015	1,329	1,324	4,077
RADIO SET, HF MANPACK, AN/PRC-150C (COT/NDI)	Z00873	\$29,753	1,472	133	87	90	96
RADIO SYSTEM, EPLRS	P49587	\$29,733	1,472	1,020	1,020	1,020	15,040
		\$276,750	1,021	1,020	205	237	72
RADIO TERMINAL, AN/TRC-190(V)1	L69306						
RADIO TERMINAL, AN/TRC-190(V)3 RADIO TERMINAL, TELEPHONE, AN/VRC-97	L69442 T55957	\$500,805 \$110,000	132	132	146	164	62 247
			1,055	1,055	1,055	,	
RADIO TEST SET, AN/PRM-34()	R93169	\$932	2,309	2,307	2,306	2,306	3,921
RECEIVER TRANSMITTER, SINCGARS RT-1523E(C)/U	R30343	\$8,330	25,199	25,199	25,199	25,199	0
RECEIVER TRANSMITTER, SINCGARS RT-1523(C)/U	R31609	\$9,331	24,121	21,576	21,439	21,428	132
RECEIVER TRANSMITTER, SINCGARS RT-1523C(C)U	R70839	\$8,908	14,268	14,268	14,268	14,268	0
RECEIVER TRANSMITTER, RT-1539(P)A(C)/G	R30434	\$99,212	468	468	468	468	0
BN CMD POST (SWITCHING GROUP), OM XXX	Z00564	\$1,200,000	110	149	148	148	357
ACCESSORY KIT, ELECTRONICS EQUIP, MK-2975	Z00057	\$5,500	545	408	421	429	423
AIR DEFENSE SYS INTEGRATOR, AN/MSQ-214(V)1	Z03104	\$5,000,000	21	24	24	24	14
INTERFACE UNIT COMMUNICATIONS EQUIPMENT, OL: 713(V)1/TYQ CSS VSAT	Z00560	\$75,000	300	406	526	619	932
	1						
INTERROGATOR SET, AN/TYX-1	J99233	\$3,843	490	554	561	567	452
INTERROGATOR SET, AN/TYX-1 JNN CENTRAL OFFICE TELEPHONE, AN/TTC-59	J99233 Z00562	\$3,843 \$4,200,000	490 38	554 47	561 47	567 47	452 117

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с Г		FY 2010	Begin	Begin	Begin	End	End
Nomenclature	Equip	Unit	FY 2010	FY 2011	FY 2012	FY 2012	FY 2012
	No.	Cost	QTY O/H	QTY O/H	QTY O/H	QTY O/H	-
PROCESSOR GROUP SIGNAL DATA, OL-700/TYQ	Z00056	\$900	2,480	2,933	6,073	7,287	3,019
PROCESSOR GROUP SIGNAL DATA, OL-701/TYQ	Z53098	\$3,200	4,328	7,576	9,376	9,445	2,316
SIGNAL GENERATOR, SG-1219/U	S48255	\$39,335	84	102	101	101	211
SOFTACS, TRIBAND TACTICAL TERMINAL	Z12507	\$0	4	4	4	4	8
SPECTRUM ANALYZER, AN/USM-489(V)1	S01416	\$37,378	89	170	169	163	254
TARGET ACQ SUBSYSTEM, AN/TSQ-179(V)2	T37036	\$5,000,000	12	16	18	19	44
TROJAN SPIRIT LITE, AN/TSQ-226(V)2	C43331	\$1,275,000	3	3	3	3	2
TROJAN SPIRIT LITE, AN/TSQ-226(V)3	C43399	\$1,880,000	6	22	26	26	26
ENGINEER & CONSTRUCTION VEHICLES							
CRANE, WHL-MTD, 25-TON, ATEC AT422T	C36586	\$226,341	79	77	68	68	49
TRUCK CONCRETE, MOBILE MIXER 8 CU YD (CCE)	T42725	\$132,518	35	43	43	43	40
COMPACTOR, HIGH SPEED	E61618	\$135,186	103	103	103	103	105
TRACTOR, WHLD EXCAVATOR, SEE	T34437	\$110,000	686	682	722	744	735
TRACTOR, FT, HVY, CAT D8K-8-S	W88699	\$197,322	40	39	40	40	0
TRUCK, FORKLIFT, DED 50K LB, RT, CONT HDLR	T48941	\$159,138	9	9	9	9	56
TRUCK, FORKLIFT, DED 6K LB, RT, AMMO HDLG	T48944	\$72,370	219	231	222	224	73
TRUCK, FORKLIFT, DED 4K LB, ROUGH TERRAIN	T49255	\$47,692	319	322	322	321	165
TRUCK, FORKLIFT, ATLAS	T73347	\$100,199	642	678	704	704	670
TRACTOR FULL-TRACKED HIGH-SPEED, DEUCE	T76541	\$362,687	45	46	50	52	51
TRACTOR, FULL-TRACKED, ARMORED, M9 (ACE)	W76473	\$887,050	92	111	112	116	116
TRACTOR, FT, MED, CAT D7 W/SCARIF WINCH	W76816	\$205,000	471	462	463	464	367
TRACTOR, FT, MED, CAT D7 W/SCARIF RIPPER	W83529	\$245,275	370	361	359	358	294
TRUCK, DUMP, 20-TON, M917	X44403	\$191,616	469	472	472	472	586
GRADER ROAD MOTORIZED, DED HVY	G74783	\$67,724	481	481	489	489	533
GRADER ROAD MOTORIZED, DED SECTIONALIZED	J74886	\$223,471	14	16	16	16	86
EXCAVATOR, HYDRAULIC (HYEX) TYPE I	E27792	\$164,350	76	77	77	79	106
EXCAVATOR, HYDRAULIC (HYEX) TYPE II	E41791	\$435,755	16	16	16	17	10
LOADER SCOOP TYPE, DED W/5 CY GP BUCKET	L76321	\$75,450	102	114	114	114	151
LOADER SCOOP TYPE, DED W/MULTI PURP BUCKET	L76556	\$58,890	358	358	366	366	416
ROUGH TERRAIN CONTAINER HANDLER, RT240	R16611	\$460,077	13	13	13	38	12
SCRAPER ELEVATING, SP NON-SECTIONALIZED	S29971	\$162,596	34	36	37	37	42
SCRAPER ELEVATING, SP SECTIONALIZED	S30039	\$324,218	75	73	73	73	84
SCRAPER EARTH MOVING SP, 14-18 CU YD	S56246	\$120,410	363	380	380	380	398
GENERATOR SETS & POWER PLANTS							
GENERATOR SET, 10KW, PU-753/M	G40744	\$12,102	290	287	352	358	28
GENERATOR SET, 5KW, PU-797 TQG	G42238	\$20,000	738	872	892	909	909
GENERATOR SET, 10KW, PU-798 TQG	G42170	\$13,000	1,361	1,528	1,527	1,522	1,318
GENERATOR SET, 15KW, PU-801/A TQG	G78374	\$25,000	68	102	102	102	143
GENERATOR SET, 15KW, PU-802 TQG	G53778	\$19,080	988	1,375	1,404	1,456	1,454
GENERATOR SET, 30KW, PU-803/B/G	G35851	\$28,521	397	656	666	645	617
GENERATOR SET, 60KW, PU-805 TQG	G78306	\$31,596	206	212	193	178	236
GENERATOR SET, 5KW, MEP-002A	J35813	\$8,332	1,153	372	465	1,010	387
GENERATOR SET, 10KW, MEP-003A	J35825	\$13,635	542	395	409	422	63
GENERATOR SET, 2KW, MEP-501A	G36237	\$6,000	1,792	1,485	1,540	1,554	3,185
GENERATOR SET, 2KW, MEP-531A	G36169	\$6,000	44	50	73	73	378
GENERATOR SET, 5KW, MEP-802A TQG	G11966	\$12,798	1,756	2,120	2,379	2,402	2,530
GENERATOR SET, 10KW, MEP-803A TQG	G74711	\$14,345	1,370	1,646	1,642	1,630	1,629
GENERATOR SET, 60KW, MEP-805A/B TQG	G74575	\$26,705	67	31	36	32	129

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	Equip	FY 2010	Begin	Begin	Begin	End	End		
Nomenclature	No.	Unit	FY 2010 QTY O/H	FY 2011 QTY O/H	FY 2012 QTY O/H	FY 2012 QTY O/H	FY 2012 QTY REQ		
GENERATOR SET, 3KW, MEP-831A TQG	G18358	Cost \$9,922	5,721	6,971	7,393	7,485	7,625		
POWER PLANT, 10KW, AN/MJQ-18	P28015	\$36,050	69	70	7,393	7,483	12		
POWER PLANT, 10KW, AN/MJQ-18 POWER PLANT, 10KW, AN/MJQ-37 TQG	P42262	\$36,558	218	228	211	213	294		
POWER PLANT, 30KW, AN/MJQ-40 TQG	P42126	\$63,941	67	128	129	127	138		
WATER & PETROLEUM EQUIPMENT	E40640	¢10.494	105	222	202	220	202		
FORWARD AREA WATER POINT SUPPLY SYSTEM	F42612	\$19,484	135	222	323	329	323		
TACTICAL WATER PURIFICATION SYSTEM (TWPS)	T14017	\$450,000	84	121	124	125	123		
ROWPU WATER PURIFICATION SYSTEM, 3000 GPH	W47225	\$748,000	62	68	71	71	67		
DISTRIBUTOR WATER TANK, 6K GAL TLR-MTD	D28318	\$30,289	89	89	89	89	230		
WATER QUALITY ANALYSIS SET, PURIFICATION	W47475	\$3,404	114	114	114	114	399		
WATER STORAGE/DISTRIBUTION SET, 40K GPD	W55968	\$121,746	6	6	6	6	52		
WATER STORAGE/DISTRIBUTION SET, 800K GAL	W37311	\$200,508	10	10	10	10	11		
TACTICAL WATER DISTRIB EQ SET, (TWDS RDF)	T09094	\$660,000	13	13	13	13	8		
TRAILER, TANK WATER (CAMEL), 900 GAL	Z36683	\$95,000	0	0	22	70	628		
TRAILER, TANK WATER, 400 GAL, M1112	W98825	\$16,000	3,328	3,332	3,332	3,338	3,029		
TANK & PUMP UNIT, LIQUID DISPENSING TRK-MTD	V12141	\$9,015	972	808	828	912	896		
TANK, LIQUID STORAGE	T32629	\$50,000	84	84	118	204	663		
HEMTT AVIATION REFUELING SYSTEM (HTARS)	R66273	\$24,460	188	188	188	188	670		
HOSELINE OUTFIT FUEL HANDLING, 4 IN DIA HOSE	K54707	\$3,000,000	0	0	1	1	0		
FUEL FARM MOBILE MODULAR	Z28886	\$2,000,000	0	0	2	4	24		
FUEL SYSTEM SUPPLY POINT, PORTABLE 60K GAL	J04717	\$30,213	30	30	30	30	23		
FORWARD AREA REFUELING SYSTEM, AAFARS	F42611	\$321,537	131	111	121	153	112		
MEDICAL EQUIPMENT									
DENTAL EQUIP SET, COMPREHENSIVE DENT FIELD	D43802	\$52,845	35	45	45	45	65		
DEFIBRILLATOR MONITOR RECORDER	D86072	\$31,885	360	365	433	498	336		
MEDICAL EQUIP SET, AIR AMBULANCE	M29213	\$27,922	259	259	259	259	258		
MEDICAL EQUIP SET, CHEM AGENT PATIENT TREAT	M23673	\$27,292	771	859	911	911	870		
MEDICAL EQUIP SET, GROUND AMBULANCE	M26413	\$20,500	1,892	1,979	2,103	2,103	1,832		
MEDICAL EQUIP SET, PATIENT HOLDING FIELD	M29633	\$116,923	133	140	143	143	108		
MEDICAL EQUIP SET, SICK CALL FIELD (2)	M30156	\$15,000	888	888	935	935	915		
MEDICAL EQUIP SET, SPECIAL FORCES, TACTICAL	M29999	\$29,350	222	222	222	222	141		
MEDICAL EQUIP SET, TRAUMA FIELD (2)	M30499	\$45,000	907	940	984	984	913		
SURGICAL INSTRUMENT & SUPPLY SET, INDIVIDUAL	U65480	\$3,000	3,235	3,243	3,585	3,585	5,217		
VENTILATOR, VOLUME, PORTABLE	V99788	\$9,703	247	271	296	313	313		
NBC DEFENSIVE EQUIPMENT		. ,							
CHEMICAL AGENT ALARM, M8A1	A32355	\$8,432	4,928	5,784	4,471	4,352	456		
CHEMICAL AGENT ALARM, M22	A33020	\$10,000	16,052	16,118	18,299	18,715	18,656		
BIOLOGICAL AGENT ALARM, (BIDS) M31E2	Z04905	\$1,118,000	0	0	7	17	0		
CHEMICAL AGENT MONITOR, IMPROVED (ICAM)	C05701	\$7,500	11,922	12,983	13,425	13,525	10,892		
MASK, CHEMICAL BIOLOGICAL, M40	M12418	\$202	314,724	314,114	315,624	312,906	142,669		
MASK, PROTECTIVE, COMBAT VEHICLE, M42	M18526	\$640	31,786	32,815	34,323	36,166	23,014		
MASK, CHEMICAL BIOLOGICAL, JSGPM	Z00036	\$181	0	02,010	0 1,020	00,100	182,192		
MASK, CHEMICAL BIOLOGICAL, JSGPM CBT VEH	Z00030	\$293	0	0	0	0	2,496		
CHEM-BIO PROTECTIVE SHELTER (CBPS)	C07506	\$622,051	1	1	1	1	304		
SIMPLIFIED COLLECTIVE PROTECTION EQUIP, M20			437	-					
	C79000	\$18,391	387	459	590 1,104	721	2,130 1,692		
DECONTAMINATING APPARATUS, M17	D82404	\$23,121		1,070		1,127			
RADIAC SET, AN/VDR-2	R20684	\$1,950	19,627	20,696	20,617	20,527	20,100		
RADIAC SET, AN/PDR-75	R30925	\$2,978	1,816	2,082	2,530	2,909	3,508		

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Nomenclature	Equip No.	FY 2010 Unit	Begin FY 2010	Begin FY 2011	Begin FY 2012	End FY 2012	End FY 2012
	NO.	Cost	QTY O/H	QTY O/H	QTY O/H	QTY O/H	QTY REQ
RADIAC SET, AN/PDR-77	R30993	\$4,312	1,045	1,335	1,419	1,420	1,181
RADIAC SET, AN/UDR-13	R31061	\$631	31,293	32,182	32,454	32,555	30,825
NBC RECONNAISSANCE SYSTEM, M93A1 FOX	R41282	\$2,000,000	4	6	14	14	14
NIGHT-VISION EQUIPMENT							
AVIATION NIGHT-VISION SYSTEM (ANVIS), AN/AVS-6	A06352	\$10,747	4,926	4,948	5,106	5,306	4,841
DRIVER VISION ENHANCER, AN/VAS-5	D41659	\$7,473	963	1,251	1,251	1,251	20,405
LASER IR OBSERVATION SET, AN/GVS-5	L40063	\$4,879	338	2	2	5	137
LASER IR OBSERVATION SET (MELIOS), AN/PVS-6	M74849	\$22,015	1,834	2,155	2,230	2,437	10,639
MONOCULAR NIGHT-VISION DEVICE, AN/PVS-14	M79678	\$3,607	56,154	26,043	26,485	33,502	28,447
NIGHT-VISION SIGHT, AN/PVS-4 W/IMG	N04732	\$8,535	12,113	16,482	18,723	18,786	1,358
NIGHT-VISION GOGGLES, AN/PVS-5	N04456	\$4,300	30,731	29,830	30,393	30,425	6,176
NIGHT-VISION SIGHT, CREW SERV WPN, AN/TVS-5	N04596	\$3,500	7,459	2,272	2,295	3,620	2,314
NIGHT-VISION GOGGLES, AN/PVS-7B	N05482	\$3,578	100,440	166,522	181,611	202,321	202,339
NIGHT-VISION SIGHT, SNIPER, AN/PVS-10	S90433	\$9,546	462	462	827	1,192	504
NIGHT-VISION SIGHT, AN/UAS-11(V)1	N05050	\$68,000	20	224	310	413	453
NIGHT-VISION SIGHT, AN/UAS-12	N04982	\$116,014	543	546	554	554	5
THERMAL WEAPON SIGHT, AN/PAS-13	S90535	\$17,591	10,307	18,325	21,429	24,955	24,497
THERMAL WEAPON SIGHT, AN/PAS-13A	S90603	\$19,306	6,868	18,904	23,504	27,583	27,308
THERMAL WEAPON SIGHT, AN/PAS-13B(V)1	S60356	\$12,512	6,261	8,872	10,326	12,961	8,841
REFLEX SIGHT, COLLIMATOR, M68	S60288	\$400	176,766	177,901	178,263	178,286	114,736
INFRARED ILLUMINATOR, AN/PEQ-2	J03261	\$1,000	34,082	26,663	27,596	29,695	28,498
LASER DESIGNATOR RANGEFINDER, AN/PED-1	R60282	\$300,000	140	268	467	651	652
LONG RNG ADV SCOUT SURVEILL SYS, AN/TAS-8	S02976	\$400,000	442	370	370	397	402
OTHER SUPPORT EQUIPMENT							
BOAT, LANDING CRAFT, INFLATABLE 7 PERSON	B84293	\$10,685	175	250	250	250	363
CAMOUFLAGE NET SYSTEM, AN/USQ-159	C89480	\$1,256	71,274	59,103	59,103	59,103	284,385
CAMOUFLAGE SCREEN SUPPORT SYSTEM	C89070	\$359	146,761	152,480	155,252	156,324	15,314
CAMOUFLAGE SCREEN SYS, W/O SUPPORT SYS	C89145	\$966	133,336	143,239	146,104	147,382	16,210
FIRE FIGHTING EQUIPMENT SET, TRUCK-MTD	H56391	\$151,000	19	19	19	19	35
FOOD SANITATION CENTER	S33399	\$33,865	472	581	621	625	1,090
KITCHEN, CONTAINERIZED, CK	C27633	\$100,532	326	384	394	398	360
KITCHEN, FIELD, MTD ON M103A3 TLR	L28351	\$78,860	1,273	1,293	1,293	1,291	796
KITCHEN, COMPANY LEVEL, FIELD FEEDING	K28601	\$7,511	247	252	332	348	747
RIOT CONTROL AGENT DISPERSER, M33	G22348	\$724	588	588	588	588	3,004
RIOT CONTROL AGENT DISPERSER, SVC KIT, M254	S78839	\$1,498	455	455	458	458	2,583
SHELTER, RIGID WALL, COMMAND POST	R98145	\$140,000	110	1,932	1,800	1,775	1,768
SHELTER, TACTICAL EXPANDABLE TWOSIDE	S01359	\$223,219	5	12	12	12	81
TELESCOPE, STRAIGHT, M145	T60185	\$643	13,245	13,753	14,001	14,095	6,047
TENT, LTWT MAINTENANCE ENCLOSURE (LME)	T49947	\$14,406	1,884	1,926	1,960	1,972	1,372
TENT, FRAME TYPE MAINT MEDIUM LIGHT METAL	V48441	\$13,065	331	351	351	351	287
TACTICAL & SUPPORT VEHICLES	-	÷ -,					_
ARMORED SECURITY VEHICLE (ASV), M1117	A93374	\$809,500	213	277	325	337	192
FIRE SUPPORT VEHICLE, KNIGHT, M707	S50205	\$947,000	56	70	77	79	115
FORWARD REPAIR SYSTEM (FRS)	F64544	\$270,561	367	496	534	565	496
HMMWV TOW CARRIER, M966	T05096	\$49,521	545	574	627	686	679
HMMWV AMBULANCE, 2-LITTER, M996	T38707	\$49,357	24	25	25	25	9
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HMMWV AMBULANCE, 4-LITTER, M997	T38844	\$113,998	1,077	1,068	1,068	1,068	1,725

Nemeneleture	Equip	FY 2010	Begin FY 2010	Begin FY 2011	Begin FY 2012	End FY 2012	End FY 2012			
Nomenclature	No.	Unit Cost	QTY O/H	QTY O/H	QTY 0/H	QTY 0/H	QTY REQ			
HMMWV ARMT CARRIER, ARMD, M1025	T92242	\$74,969	1,399	1,377	1,462	1,468	1,356			
HMMWV ARMT CARRIER, ARMD, M1026 W/W	T92310	\$39,518	806	890	945	979	843			
HMMWV SHELTER CARRIER, M1037	T07543	\$36,932	698	361	215	189	153			
HMMWV CGO/TRP CARRIER, W/W, M1038	T61562	\$36,672	565	299	298	302	380			
HMMWV CGO/TRP CARRIER, W/W, M1038 W/AOA	T11790	\$56,251	10	10	10	10	0			
HMMWV SHELTER CARRIER, HEAVY, M1097	T07679	\$61,665	3,919	3,802	3,866	3,874	3,865			
HMMWV TRUCK, UTILITY, ECV, M1113	T61630	\$61,042	877	826	763	727	4,960			
HMMWV TRUCK, UTILITY, ECV, UP-ARMORED, M1114	T92446	\$146,844	2,500	3,896	4,710	4,796	4,944			
HMMWV ARMT CARRIER, ECV, M1151	T34704	\$75,969	189	117	90	217	226			
HMMWV ARMT CARRIER, ECV, M1151 W/AOA	T92514	\$95,548	30	30	30	30	0			
HMMWV CGO/TRP CARRIER, ECV, M1152A1	Z01013	\$146,000	0	511	723	925	2,352			
HMMWV TRUCK, COMMAND & CONTROL, M1165A1	Z00958	\$107,000	1	393	599	599	599			
LMTV 2.5-TON CARGO TRUCK, M1078	T60081	\$176,428	4,208	4,830	4,784	4,761	8,280			
LMTV 2.5-TON CARGO TRUCK, M1078 W/W	T60149	\$115,639	355	395	417	422	801			
LMTV 2.5-TON CARGO TRUCK, M1079	T93484	\$162,060	175	209	206	206	754			
LMTV 2.5-TON CARGO TRUCK, W/ LAPES/AD, M1081	T41995	\$101,742	21	52	57	57	84			
M35-SERIES 2.5 TON TRUCK, CARGO, M35A2	X40009	\$56,500	3,108	3,071	1,472	1,500	353			
M35-SERIES 2.5 TON TRUCK, CARGO, M35A2 W/W	X40146	\$56,500	1,159	1,152	356	356	128			
MTV 5-TON CARGO TRUCK, M1083	T61908	\$128,076	3,122	3,735	4,027	4,223	6,405			
MTV 5-TON CARGO TRUCK, M1083 W/W	T41135	\$134,047	566	932	1,090	1,173	1,246			
MTV 5-TON CARGO TRUCK, M1084	T41203	\$218,378	420	644	665	825	1,240			
MTV 5-TON CARGO TRUCK, M1084 MTV 5-TON CARGO TRUCK, M1085	T61704	\$218,378	106	178	183	184	1,240			
MTV 5-TON CARGO TRUCK, M1085 W/W	T61772	\$110,922	2	170	8	8	8			
MTV 5 TON CARGO TRUCK, W/W, W/MHE, M1086	T61840	\$209,309	3	0	0	0	0			
MTV 5-TON TRUCK VAN, EXPANSIBLE, M1087	Z94560	\$386,343	17	25	25	25	608			
MTV 5-TON TRACTOR TRUCK, M1088	T61239	\$142,132	1,495	1,608	1,607	1,614	3,448			
MTV 5-TON TRACTOR TRUCK, M1088 W/W	T61207	\$128,767	1,433	1,000	170	1,014	537			
MTV 5-TON WRECKER, M1089	T94709	\$331,680	330	439	485	483	825			
MTV 5-TON DUMP TRUCK, M1099	T64911	\$331,000 \$141,557	60	153	186	187	821			
MTV 5-TON DUMP TRUCK, M1090 W/W	T64979	\$139,015	42	80	94	94	292			
MTV 5-TON CARGO TRUCK, W/ LAPES/AD, M1093	T41036	\$139,013	12	25	94 25	25	39			
	T41030		9	18	18	18	18			
MTV 5-TON DUMP TRUCK, W/ LAPES/AD, M1093 W/W	T65526	\$119,265 \$129,535	10	38	38	38	2			
M809/M939-SERIES 5-TON CARGO TRUCK, M813/M923		\$74,450	4,623	4,615	4,617	4,600	175			
M809/M939-SERIES 5-TON CARGO TRUCK, M813/M925		\$85,946	200	4,013	4,017	4,000	49			
M809/M939-SERIES 5-TON CARGO TROCK, M813/M929 M809/M939-SERIES 5-TON DUMP TRUCK, M817/M929	X43708	\$89,115	1,352	1,258	1,260	1,260	49			
M809/M939-SERIES 5-TON TRUCK VAN, M820/M934	X62237	\$145,700	255	256	259	260	797			
M809/M939-SERIES 5-TON VRECKER, M816/M936	X63299	\$143,700	1,059	1,060	1,076	1,079	133			
HEMTT CARGO TRUCK, W/LT CRANE, M977	T59278	\$251,388	384	396	1,070	1,079	155			
HEMTT CARGO TRUCK, W/LT CRANE, M977 W/W	T39518	\$251,588	392	404	367	374	368			
HEMTT CARGO TRUCK, W/ET CRARE, M977 W/W HEMTT CARGO TRUCK, W/MED CRANE, M985	T39586				332	374	212			
HEMITI CARGO TRUCK, W/MED CRANE, M985 HEMTT CARGO TRUCK, W/MED CRANE, M985 W/W	T39654	\$272,033 \$282,002	502 380	344 510	512	512	511			
HEMITI CARGO TRUCK, W/MED CRANE, M985 W/W HEMTT CARGO TRUCK, GMT, M985E1 W/W	T41721	\$282,002	380	510	512	512	0			
	T96496						-			
HEMTT CARGO TRUCK, W/LHS, M1120		\$226,800	1,349	1,408	2,254	2,720	2,779			
HEMTT CARGO TRUCK, W/LHS, M1120 W/AOA	T82378	\$276,800	0	1 709	1 022	1 029	0			
HEMTT FUEL TANKER, 2500GAL, M978	T87243	\$268,440 \$278,400	1,517	1,798	1,933	1,938	1,934			
HEMTT FUEL TANKER, 2500GAL, M978 W/W	T58161	\$278,409	480	370	394	398	400			
HEMTT COMMON BRIDGE TRANSPORTER, M1977	T91308	\$226,150	508	564	666	780	676			

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Nemenalatura	Equip	FY 2010	Begin	Begin	Begin	End	End			
Nomenclature	No.	Unit Cost	FY 2010 QTY O/H	FY 2011 QTY O/H	FY 2012 QTY O/H	FY 2012 QTY O/H	FY 2012 QTY REQ			
HEMTT TACTICAL FIREFIGHTING TRUCK, M1142	T82180	\$640,131	35	35	35	35	37			
HEMTT WRECKER, M984	T63093	\$379,000	652	635	647	649	847			
TRUCK TRACTOR, 5-TON, M931	X59326	\$86,203	2,598	2,556	2,590	2,590	1,086			
TRUCK TRACTOR, 14-TON LINE HAUL, M915	T61103	\$162,968	2,774	2,802	2,802	2,802	2,307			
TRUCK TRACTOR, 14-TON LET, M916	T91656	\$164,760	1,012	1,054	1,081	1,199	1,640			
TRUCK TRACTOR, 20-TON MET, M920	T61171	\$74,288	267	267	267	267	7			
TRUCK TRACTOR, HETS, M1070	T59048	\$256,704	687	729	729	729	749			
PLS CONTAINER HANDLING UNIT (CHU)	C84862	\$10,564	285	358	358	361	472			
PLS TRANSPORTER, M1074	T41067	\$288,015	426	207	212	223	217			
PLS TRANSPORTER, M1075	T40999	\$276,410	913	1,111	1,172	1,323	1,504			
PLS TRAILER, 16.5 TON, M1076	T93761	\$46,731	2,439	2,618	2,652	2,662	4,307			
PLS DEMOUNTABLE CARGO BED	B83002	\$16,633	8,436	8,845	10,689	11,110	17,902			
TRUCK, CARRYALL, 1/4 TO 1 1/4 TON	X42201	\$28,000	809	809	809	809	4,767			
TRUCK, CARGO, 1/2 TO 1 TON, 4X4	X39893	\$27,242	1,812	1,812	1,812	1,812	7,006			
TRUCK, CARGO, 1/2 TO 3/4 TON, 4X4	X39598	\$18,000	1,012	1,012	1,012	1,012	6,024			
AUTOMOBILE SEDAN, CLASS II COMPACT	R04441	\$9,176	423	423	423	423	8,954			
BUS, MOTOR, 28-44 PASSENGER	C39977	\$62,106	32	32	32	32	1,287			
SEMITRAILER VAN, 6-TON, ELECTR SHOP, M146	S75038	\$6,532	369	384	384	380	572			
SEMITRAILER VAN, 6-TON, ELECTR SHOF, M140 SEMITRAILER VAN, 6-TON REPAIR PARTS, M749/M750		\$32,952	167	159	158	158	126			
SEMITRAILER TANKER, 5000-GAL BULK HAUL, M967	S10059	\$77,550	326	383	383	383	360			
SEMITRAILER TANKER, 5000-GAL BOLK HAOL, M967	S73372	\$77,550	475	475	475	475	306			
SEMITRAILER, 22.5-TON FLATBED, M871	S70027	\$97,413	4/3	4,099	475	4,157	3,621			
SEMITRAILER, 34-TON FLATBED, M871	S70027 S70159	\$20,500	3,124	3,285	3,275	3,275	4,323			
SEMITRAILER, 34-TON FLATBED, M872	S70159	\$43,252	904	914	920	935	1,389			
SEMITRAILER, 70 TON LOWBED, MI070	S70394	\$229,219	646	647	647	647	685			
TRAILER, CARGO, 3/4-TON, M101	W95537		1,136	367		380	652			
TRAILER, CARGO, 3/4-TON, HIGH MOBILITY, M1101	T95992	\$4,474 \$8,954			393 9,114	9,850	17,363			
			5,578	7,944						
TRAILER, CARGO, 5/4-TON, HIGH MOBILITY, M1102	T95924	\$8,954 \$8,524	1,819	2,425	2,756	2,961	4,585			
TRAILER, CARGO, 1.5-TON, M105 TRAILER, CARGO, 2.5 TON LMTV, M1082	W95811 T96564	\$8,524 \$34,569	6,555	6,708	6,732 2,775	6,766	594			
TRAILER, CARGO, 2.5 TON LINTV, M1082		\$62,829	1,643	1,920		3,179	5,318			
	T95555	. ,	730	1,159	1,258	1,379	4,940			
TRAILER, HEMAT, 11-TON, M989A1 REPAIR & TEST EQUIPMENT	T45465	\$34,714	1,576	1,576	1,611	1,613	1,302			
ELECTRONIC SHOP AVIONICS, AN/ASM-146	101007	\$124,000	242	20.4	400	400	1 010			
SHOP EQUIP, CONTACT MAINT ORD/ENG TRK-MTD	H01907 S25681	\$72,357	343 950	394 978	409 1,302	426 1,946	1,012 1,921			
SHOP EQUIPMENT AUTO MAINT & REPAIR										
	T24660	\$120,827	293	568	587	620	660			
TEST KIT MASK PROTECTIVE, M41 TEST SET, DIAGNOSTIC	T62350 D12196	\$7,000 \$0,672	2,825	2,835	2,835	2,835	2,663 382			
		\$9,672	56	56	56	56				
TEST SET, AVIATOR NIGHT VIS IMAG SYS, TS-3895	T53471	\$10,424 \$561,312	314	323	325	325	680 172			
TEST SET, ELECT SYS DIRECT SUPPORT (DESETS) TEST SET, RADIO, AN/GRM-114	T52849	\$561,312 \$11,822	110	154	154 471	154 471	172 506			
	T87468	\$11,822 \$42,847	464	469						
TEST SET, STABILATOR LINE/SAS	T93517	\$42,847	242	248	250	252	161			
TEST SET, TRANSPONDER, AN/APM-421	T49392	\$30,370	28	11 280	12 960	35	154			
TEST SET, ELECT SYS AN/PSM-95	T92889	\$12,990 \$0,044	8,114	11,289	13,869	15,341	14,739			
TEST SET, RADAR TS-4530()/UPM	T99847	\$9,944	337	346	348	352	490			
	E03826	\$256	3,967	3,967	3,967	3,967	8,895			
	W37483	\$1,121	4,659	4,663	4,663	4,663	4,745			
TRACKED & OTHER COMBAT VEHICLES										

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Consondated Major Item Inventory and Requirements								
	Equip	FY 2010	Begin	Begin	Begin	End	End	
Nomenclature	No.	Unit Cost	FY 2010 QTY O/H	FY 2011 QTY O/H	FY 2012 QTY O/H	FY 2012 QTY O/H	FY 2012 QTY REQ	
CARRIER, AMMO TRACKED, M992A2	C10908	\$1,140,667	278	278	278	278	268	
CARRIER 120MM MORTAR, SP ARMORED	C10990	\$318,308	304	304	304	300	115	
CARRIER ARMORED COMMAND POST	C10330	\$374,086	393	389	395	389	326	
ARMORED PERSONNEL CARRIER, FISTV, M113	C11155	\$553,367	140	144	140	150	18	
ARMORED PERSONNEL CARRIER, M113A3	C12133	\$405,815	1,375	1,405	1,391	1,374	972	
CARRIER, CARGO, M548	D11049	\$323,416	226	226	226	226	21	
CARRIER, COMMAND POST, M577A1	D11538	\$345,787	535	545	548	550	242	
ARMORED PERSONNEL CARRIER, M113A1/A2	D11538	\$244,844	647	621	548 626	647	170	
COMBAT VEHICLE, ANTI-TANK, ITV M901A1	E56896	\$393,062	106	106	106	106	170	
			82	82	82	82		
TANK, COMBAT, 105MM, M1 ABRAMS	T13374 T13168	\$1,645,697 \$2,202,420					42 487	
TANK, COMBAT, 120MM, M1A1 ABRAMS		\$2,393,439	735	590	590	677		
BRADLEY FIGHTING VEH, INFANTRY, M2A0	J81750	\$1,061,457	8	8	8	8	8	
BRADLEY FIGHTING VEH, INFANTRY, M2A2	F40375	\$1,093,223	477	459	459	512	474	
BRADLEY FIGHTING VEH, INFANTRY, M2A2 W/ODS	M31793	\$1,311,639	13	31	31	49	78	
BRADLEY FIGHTING VEH, CAVALRY, M3A0	C76335	\$1,056,845	8	8	8	8	8	
BRADLEY FIGHTING VEH, CAVALRY, M3A2	F60530	\$1,093,223	72	72	72	78	232	
BRADLEY FIRE SUPPORT TEAM VEH, M7	F86571	\$903,195	85	81	85	81	81	
STRYKER INFANTRY CARRIER VEHICLE, M1126	J22626	\$2,320,389	128	128	128	128	127	
STRYKER RECONNAISSANCE VEHICLE, M1127	R62673	\$2,320,389	51	51	51	51	51	
STRYKER MOBILE GUN SYSTEM VEHICLE, M1128	M57720	\$2,320,389	9	9	9	9	27	
STRYKER MORTAR CARRIER VEHICLE, M1129	M53369	\$2,320,389	36	36	36	36	36	
STRYKER COMMANDERS VEHICLE, M1130	C41314	\$2,320,389	27	27	27	27	25	
STRYKER FIRE SUPPORT VEHICLE, M1131	F86821	\$2,320,389	13	13	13	13	13	
STRYKER ENGINEER SQUAD VEHICLE, M1132	J97621	\$2,320,389	12	12	12	12	9	
STRYKER MEDICAL EVACUATION VEHICLE, M1133	M30567	\$2,320,389	13	16	16	16	16	
STRYKER ANTITANK GUIDED MISSILE VEH, M1134	A83852	\$2,320,389	9	9	9	9	9	
STRYKER NBC RECONNAISSANCE VEHICLE, M1135	N96543	\$2,320,389	3	3	3	3	3	
RECOVERY VEHICLE, MEDIUM, M88A1	R50681	\$1,210,755	484	439	380	393	313	
UNMANNED AERIAL VEHICLE SYSTEMS								
GROUND CONTROL STATION, (TUAV SHADOW)	Z49008	\$1,146,219	10	10	10	10	0	
TACTICAL UAV SYSTEM, SHADOW	T09343	\$12,000,500	10	18	20	21	26	
VEHICLE, UAV SYSTEM, RAVEN	Z00446	\$168,074	49	19	19	19	1	
WEAPONS								
LAUNCHER, GRENADE, 40MM, M203	L44595	\$593	13,150	13,075	13,116	13,286	7,407	
LAUNCHER, GRENADE, 40MM, M203A2	L69012	\$1,020	7,032	7,202	7,432	9,993	10,160	
LAUNCHER, GRENADE, 40MM, M203A1	L46007	\$593	3,344	4,173	4,458	6,554	6,840	
MACHINE GUN, 5.56MM, M249	M09009	\$2,653	30,116	31,924	32,351	32,334	25,853	
MACHINE GUN, 5.56MM, M249, LIGHT	M39263	\$2,779	5,825	7,271	7,282	7,220	7,220	
MACHINE GUN, GRENADE, 40MM, MK19 MOD III	M92362	\$15,320	8,485	9,352	9,507	9,568	9,923	
MACHINE GUN, 7.62MM, M240B	M92841	\$6,000	9,223	13,027	13,553	13,910	13,448	
MACHINE GUN, 7.62MM, M240C	M92420	\$4,890	1,045	1,045	1,045	1,045	908	
MACHINE GUN, 7.62MM, M240H	M92591	\$7,800	1,416	1,536	1,536	1,536	1,536	
MACHINE GUN, 7.62MM, M60	L92386	\$5,864	2,457	2,350	2,433	2,490	2,546	
MACHINE GUN, CAL .50, M2	L91975	\$8,493	10,379	15,273	15,695	16,162	15,088	
MACHINE GUN RING MOUNT, CAL .50, M36/M66	M74364	\$4,968	5,182	5,182	5,182	5,182	23,283	
MACHINE GUN TRIPOD MOUNT, 7.62MM, M122	M75714	\$619	6,250	5,400	5,727	7,045	4,157	
PISTOL, 9MM AUTOMATIC, M9	P98152	\$497	65,415	66,263	67,140	67,275	61,423	
RIFLE, 5.56MM, M16A2	R95035	\$449	199,710	188,180	210,168	211,748	159,685	

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ
RIFLE, 5.56MM, M16A4	R97175	\$587	17,930	21,940	23,149	23,010	5,524
CARBINE, 5.56MM, M4	R97234	\$587	143,538	175,480	177,900	206,456	134,821
RAIL ADAPTER, WEAPON MOUNTED M4	A20044	\$328	123,868	145,046	145,176	145,217	102,807
RIFLE, 7.62MM, SNIPER M24	R95387	\$5,145	701	937	952	963	3,620
SHOTGUN, 12-GAUGE RIOT TYPE	T39223	\$235	7,921	7,981	8,663	9,401	9,068

NOTE: This table provides the average age of selected major items of equipment. The average age provides a projected average age of the fleet at the start of FY 2009.

Nomenclature	Equip No.	Average Age	Remarks
FIXED WING AIRCRAFT			
AIRPLANE, CARGO, C-12D	A29812	25	
AIRPLANE, CARGO, C-12U	BA108Q	17	
AIRPLANE, CARGO, C-12R	BA1000	12	
AIRPLANE, CARGO, C-23	A29880	13	
AIRPLANE, CARGO, C-26	A46758	11	
AIRPLANE, CARGO, UC-35	Z95382	9	
ROTARY AIRCRAFT			
HELICOPTER, UTILITY UH-60A (BLACKHAWK)	K32293	25	
HELICOPTER, CARGO CH-47D (CHINOOK)	H30517	13	
HELICOPTER, ATTACK AH-64A (APACHE)	H28647	16	
HELICOPTER, OBSERVATION, OH-58D (KIOWA)	A21633	13	
HELICOPTER, UTILITY UH-60L (BLACKHAWK)	H32361	11	
AVIATORS NIGHT VISION IMAGING SYSTEM: AN/AVS-6(V)1	A06352	5	
TRACKED & WHEELED COMBAT SYSTEMS			
HOWITZER, M102, 105MM, LT, TWD	K57392	47	
ARMORED PERSONNEL CARRIER, FM113A1/2	D12087	44	
CARRIER, M106A1, 107MM MORT, 4.2IN	D10741	42	
CARRIER CARGO, FT, 6 TON M548	D11049	39	
HOWITZER, MEDIUM, SP, 155MM M109A5	K57667	35	
CARRIER, SMOKE GENERATOR, FT, ARMD	C12815	36	
ARMORED PERSONNEL CARRIER, FISTV	C12155	37	
RECOVERY VEHICLE, FT, MDM M88A1	R50681	34	
CARRIER, COMMAND POST M577A1	D11538	35	
LAUNCH, M60 TANK CHASSIS	L43664	32	
TANK, COMBAT, 105 MM M1 (ABRAMS)	T13374	24	
CAVALRY FIGHTING VEHICLE M3A0 (BRADLEY)	C76335	24	
INFANTRY FIGHTING VEHICLE M2A0 (BRADLEY)	J81750	24	
CAVALRY FIGHTING VEHICLE M3A2 (BRADLEY)	F60530	13	
TANK, COMBAT, 120MM M1A1 (ABRAMS)	T13168	20	
ARMORED PERSONNEL CARRIER M113A3	C18234	20	
CARRIER, AMMO, TRACKED M992A2	C10908	17	
INFANTRY FIGHTING VEHICLE M2A2 (BRADLEY)	F40375	11	
TRANSPORTATION			
SEMITRAILER LOW BED: 25 TON 4 WHEEL	S70517	47	
SEMITRAILER VAN: SHOP 6 TON 2 WHEEL	S75038	41	
SEMITRAILER LOW BED: WRECKER 12 TON 40 FT	S70243	42	
TRAILER CARGO: 1-1/2 TON 2 WHEEL	W95811	36	
SEMITRAILER VAN: REPAIR PARTS STORAGE 6 TON	S74832	39	
TRAILER CARGO: 3/4 TON 2 WHEEL	W95537	32	
TRUCK TRACTOR: MET 8X6 75000 GVW W/W C/S	T61171	28	
SEMITRAILER LOW BED: 40 TON 6 WHEEL	S70594	20	
SEM-TRAILER FLATBED:BREAKBULK/CONTAINER	S70159	21	

Nomenclature	Equip No.	Average Age	Remarks
TRAILER FLAT BED: 7 1/2 TON 4 WHEEL	T96838	18	
TRUCK, CARGO, TACTICAL, W/W-LT CR, HEMTT	T39518	23	
TRUCK UTILITY: TOW CARRIER ARMD, HMMWV	T05096	22	
TRUCK CARGO: TACTICAL W/LT CRANE, HEMTT	T59278	15	
TRUCK TRACTOR: LINE HAUL C/S 50000 GVWR 6X4, M915	T61103	16	
RAMP LOADING VEHICLE: WHL MTD 16000 LB	R11154	17	
TRUCK AMBULANCE: 2 LITTER ARMD, HMMWV	T38707	20	
TRUCK AMBULANCE: 4 LITTER ARMD, HMMWV	T38844	20	
TRUCK TRACTOR: LET 6X6 66000 GVW W/W C/S	T91656	14	
TRUCK UTILITY: ARMT CARRIER ARMD W/W, HMMWV	T92310	19	
TRUCK UTILITY: CARGO/TROOP CARRIER W/W, HMMWV	T61562	16	
TRUCK UTILITY: ARMT CARRIER ARMD, HMMWV	T92242	18	
TRUCK TANK: FUEL SERVICING 2500 GAL, W/W, HEMTT	T58161	8	
TRUCK UTILITY: CARGO/TROOP CARRIER, HMMWV	T61494	16	
TRUCK UTILITY: S250 SHELTER CARRIER 4X4, HMMWV	T07543	18	
TRUCK CARGO: TACTICAL W/W MED CRANE, HEMTT	T39654	13	
TRUCK, M985, CARGO, W/MED CR, HEMTT	T39586	9	
SEMITRAILER TANK: 5000 GAL FUEL DISPENSING AUTO	S73372	15	
TRUCK TANK: FUEL SERVICING 2500 GALLON, HEMTT	T87243	9	
TRUCK WRECKER: TACTICAL W/W, HEMTT	T63093	13	
SEMITRAILER FLAT BED: BREAKBULK/CONT TRANSPORTER	S70027	19	
SEMITRAILER TANK: 5000 GAL BULK HAUL	S10059	18	
TRUCK CARGO: HEAVY PLS TRANSPORTER W/MHE	T41067	14	
BED CARGO: DEMOUNTABLE PLS 8X20	B83002	13	
TRUCK TRACTOR: HVY EQUIPMENT TRANSPORTER (HET)	T59048	12	
TRUCK DUMP: MTV	T64911	12	
TRAILER FLAT BED: 11 TON 4 WHEEL (HEMAT)	T45465	16	
TRANSPORTER, PALLETIZED LOAD SYSTEM (PLS)	T40999	8	
TRUCK VAN: LMTV	T93484	10	
TRUCK UTILITY, HMMWV M1097	T07679	10	
TRAILER CARGO: HIGH MOBILITY 1-1/4 TON	T95924	6	
TRUCK CARGO: MTV LWB W/W	T61772	9	
TRUCK UTILITY: EXPANDED CAPACITY, HMMWV M1113	T61630	8	
TRAILER: PALLETIZED LOADING 8X20	T93761	5	
TRUCK UTILITY: UP ARMORED, HMMWV M1114	T92446	9	
SEMITRAILER LOW BED: 70 TON HET	S70859	9	
TRAILER CARGO: HIGH MOBILITY 3/4 TON	T95992	6	
TRUCK CARGO: MTV W/W	T41135	7	
TRUCK TRACTOR: MTV	T61239	4	
TRUCK CARGO: MTV LWB	T61704	3	
TRUCK WRECKER: MTV W/W	T94709	9	
TRUCK CARGO: LMTV	T60081	7	
TRUCK: CARGO, HEMTT W/LHS	T96496	12	
TRUCK CARGO: MTV	T61908	7	
TRUCK CARGO: LMTV W/W	T60149	7	

Nomenclature	Equip No.	Average Age	Remarks
TRAILER CARGO: M1082 LMTV W/DROPSIDES	T96564	2	
TRUCK CARGO: MTV W/MHE	T41203	3	
CONTAINER HANDLING: CONTAINER HANDLING UNIT (CHU)	C84862	2	
TRAILER CARGO: MTV W/DROPSIDES M1095	T95555	2	
TRUCK TRACTOR: MTV W/W	T61307	3	
TRUCK UTILITY, HMMWV M1151A1	T34704	1	
TRUCK DUMP 10 TON, MTV	Z00477	1	
COMMAND AND CONTROL			
COMPUTER SYSTEM DIGITAL: AN/TYQ-109(V)1	C27707	5	
ENGINEER			
TRACTOR, FULLTRACKED, LOW SPEED	W76816	30	
LOADER SCOOP TYPE: DED 4X4 ROCK BUCKET (CCE)	L76315	31	
TRACTOR FULL TRCKD: DSL W/BULDOZ W/RIPPER (CCE)	W88699	32	
LOADER SCOOP TYPE: DED 4X4 GP BUCKET (CCE)	L76321	33	
TRUCK CONCRETE: MOBILE MIXER 8 CU YD (CCE)	T42725	29	
BOAT LANDING INFLATABLE: 15 MAN ASSAULT CRAFT	B83856	26	
GRADER ROAD MOTORIZED: DSL DRVN SECTIONALIZED	J74886	26	
TRUCK LIFT FORK: DED 4000 LB ROUGH TERRAIN	T49255	20	
TRUCK LIFT FORK: DED 50000 LB CONT HDLR ROUGH TERRAIN	T48941	25	
LOADER SCOOP TYPE: DSL W/MULTIPURPOSE BUCKET	L76556	31	
FIRE FIGHTING EQUIPMENT SET: TRUCK MTD	H56391	28	
TRACTOR, FULLTRACKED, LOW SPEED, DED, MED	W83529	27	
DISTRIBUTOR WATER TANK TYPE: 6000 GL SEMITRAILER MTD (CCE)	D28318	23	
GRADER ROAD MOTORIZED: DSL DRVN HVY (CCE)	G74783	24	
SCRAPER EARTH MOVING SELF-PROPELLED (CCE)	S56246	24	
TRUCK DUMP: 20 TON DSL DRVN 12 CU YD CAP (CCE)	X44403	15	
BOAT BRIDGE ERECTION: SHALLOW DRAFT	B25476	21	
TRACTOR WHEELED: DSL W/EXCAVATOR & FRNT LOADER	T34437	20	
RAMP BAY BRIDGE FLOATING:	R10527	19	
TRUCK LIFT FORK: DED 6000 LB VARIABLE REACH RT AMMO HDLG	T48944	16	
TRACTOR FULL TRACKED HIGH SPEED: ARMORED COMBAT EARTHMOVER (ACE)	W76473	15	
INTERIOR BAY BRIDGE FLOATING:	K97376	14	
TRANSPORTER COMMON BRIDGE:	T91308	12	
EXCAVATOR: HYDRAULIC (HYEX) TYPE I MULTIPURPOSE CRAWLER MOUNT	E27792	6	
COMPACTOR HIGH SPEED: TAMPING, SP (CCE)	E61618	10	
CRADLE: IMPROVED BOAT (IBC) M14	C33925	8	
PALLET: BRIDGE ADAPTER (BAP)M15	P78313	6	
TRUCK LIFT: FORK VARIABLE REACH ROUGH TERRAIN	T73347	6	
ATEC ALL TERRAIN CRANE 22.5 TON	C36586	8	
BOAT RECONNAISSANCE: PNEUMATIC 3-MAN	B84404	8	
EXCAVATOR: HYDRAULIC (HYEX) TYPE III MULTIPURPOSE	E27860	7	
EXCAVATOR: HYDRAULIC (HYEX) TYPE II MULTIPURPOSE	E41791	7	

Nomenclature	Equip No.	Average Age	Remarks
TRACTOR FULL TRACKED HIGH SPEED (DEUCE)	T76541	7	
ENGINEER MISSION MODULE: M6 DUMP BODY - EMM	D17391	6	
SCRAPER ELEVATING: SELF PROPELLED 9-11 CU YD	S30039	2	
TRUCK: TACTICAL FIREFIGHTING, HEMTT	Z42024	3	
LOGISTICS			
TRAILER TANK: WATER 400 GALLON 1-1/2 TON 2 WHEEL	W98825	27	
GEN ST ENGINE DRIVEN: 10KW DC 28V MULTIFUEL WHL MTD TAC UTILITY	G38140	23	
TANK UNIT LIQUID DISPENSING TRAILER MOUNTING:	V19950	22	
POWER PLANT ELECTRIC: AN/MJQ-15	P28075	23	
POWER PLANT ELEC DED TM: 10KW 60HZ 2EA MTD ON M103A1-AN/MJQ-18	P28015	21	
TANK AND PUMP UNIT LIQUID DISPENSING TRK/MTD	V12141	19	
GEN ST DSL ENG TM: 10KW MTD ON M116 PU-753/M	G40744	19	
POWER PLANT: ELECTRIC TRL/MTD 60KW AN/MJQ-41	P42194	13	
GENERATOR SET: DIESEL TRL/MTD 60KW PU805 CHASSIS	G78306	15	
POWER PLANT ELEC DED TM: 5KW 60HZ AN/MJQ-35	P28083	16	
WATER PURIFICATION: REVERSE OSMOSIS 3000 GPH TLR/MTD	W47225	20	
POWER PLANT: ELECTRIC TRAILER MTD 30KW AN/MJQ-40	P42126	19	
POWER PLANT ELEC DED TM: 5KW AN/MJQ-36	P28151	11	
POWER PLANT: DIESEL TRL/MTD 10KW AN/NJQ-37	P42262	12	
GEN SET: DED SKID MTD 15KW 50/60HZ	G12170	10	
GEN SET: DED SKID MTD 10KW 60HZ	G74711	10	
GEN SET: DED SKID MTD 5KW 60HZ	G11966	10	
GEN SET DED TM: 10KW 400HZMTD ON M116A2 PU-799	G53403	9	
GEN SET: DED SKID MTD 60KW 50/60HZ	G12034	11	
GENERATOR SET DIESEL ENGINE TM: PU-803	G35851	10	
GENERATOR SET DIESEL: 60HZ AC	G36237	10	
GEN SET DED TM: 10KW 60HZ MTD ON M116A2 PU-798	G42170	6	
GEN SET DED TM: 5KW 60HZ MTD ON M116A2 PU-797	G42238	9	
CONTAINERIZED KITCHEN: CK	C27633	6	
GENERATOR SET DIESEL ENGINE TM: PU-802	G53778	8	
GENERATOR SET: DIESEL ENG TRLR -MTD 15KW 60HZ	G78374	4	
FORCE PROTECTION			
SHELTER SYSTEM COLLECTIVE PROTECTION CHEMICAL-BIOLOGICAL: 10-MAN	T00474	29	
SECURITY			
PUMPING ASSY FLAMBL LIQ ENG DRVN	P97051	18	

Service Procurement Program - Reserve (P-1R)

NOTE: This table identifies the dollar value of equipment programmed to be procured with Service procurement funds as identified in the P-1R exhibit of the FY 2010 President's Budget Submission. All values are costs in dollars, and ammunition procurements have been excluded. Deliveries of procured equipment normally take one to two years before they arrive in the inventory; e.g., items procured in FY 2010 would be expected to arrive in RC inventories in FY 2011 or FY 2012.

Nomenclature	FY 2010	FY 2011	FY 2012
AIRCRAFT			
HELICOPTER, LIGHT UTILITY (LUH)	\$186,285,000		
UH-60 BLACKHAWK (MYP)	182,400,000		
SUPPORT EQUIPMENT AND FACILITIES			
COMMON GROUND EQUIPMENT	18,355,000		
OTHER MISSILES			
JAVELIN (AAWS-M) SYSTEM SUMMARY	98,065,000		
HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)	118,627,000		
TRACKED COMBAT VEHICLES			
STRYKER VEHICLE	179,789,000		
IMPROVED RECOVERY VEHICLE (M88A2 HERCULES)	9,608,000		
ARMORED BREACHER VEHICLE	35,860,000		
JOINT ASSAULT BRIDGE	19,800,000		
WEAPONS AND OTHER COMBAT VEHICLES			
HOWITZER, LIGHT, TOWED, 105MM, M119	55,951,000		
M240 MEDIUM MACHINE GUN (7.62MM)	14,498,000		
MACHINE GUN, CAL .50 M2 ROLL	2,256,000		
MK-19 GRENADE MACHINE GUN (40MM)	3,533,000		
MORTAR SYSTEMS	4,690,000		
M4 CARBINE	9,966,000		
HOWITZER LT WT 155MM (TOWED)	45,890,000		
TACTICAL AND SUPPORT VEHICLES			
TACTICAL TRAILERS/DOLLY SETS	27,993,000		
SEMITRAILERS, FLATBED	4,566,000		
HI MOB MULTI-PURP WHLD VEHICLES (HMMWV)	164,460,000		
FAMILY OF MEDIUM TACTICAL VEHICLES (FMTV)	507,867,000		
FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)	304,643,000		
ARMORED SECURITY VEHICLES (ASV)	103,501,000		
MINE PROTECTION VEHICLE FAMILY	52,463,000		
TRUCK, TRACTOR, LINE HAUL, M915/M916	20,456,000		
HVY EXPANDED MOBILE TACTICAL TRUCK EXT SERV P	45,395,000		
COMMUNICATIONS AND ELECTRONICS EQUIPMENT			
WIN-T - GROUND FORCES TACTICAL NETWORK	8,860,000		
NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE)	52,955,000		
SMART-T (SPACE)	3,235,000		
SINCGARS FAMILY	6,812,000		

ARNG Service Procurement Program - Reserve (P-1R)

Nomenclature	FY 2010	FY 2011	FY 2012
RADIO, IMPROVED HF (COTS) FAMILY	3,755,000		
MEDICAL COMM FOR CBT CASUALTY CARE (MC4)	2,681,000		
TSEC - ARMY KEY MGT SYS (AKMS)	9,300,000		
INFORMATION SYSTEM SECURITY PROGRAM-ISSP	452,000		
PROPHET GROUND (MIP)	18,381,000		
DCGS-A (MIP)	17,035,000		
LIGHTWEIGHT COUNTER MORTAR RADAR	16,000		
NIGHT VISION DEVICES	177,057,000		
LONG RANGE ADVANCED SCOUT SURVEILLANCE SYSTEM	75,494,000		
NIGHT VISION, THERMAL WPN SIGHT	90,561,000		
PROFILER	2,094,000		
FORCE XXI BATTLE CMD BRIGADE & BELOW (FBCB2)	81,550,000		
LIGHTWEIGHT LASER DESIGNATOR/RANGEFINDER (LLD	28,216,000		
TACTICAL OPERATIONS CENTERS	26,282,000		
FIRE SUPPORT C2 FAMILY	4,499,000		
AIR & MISSILE DEFENSE PLANNING & CONTROL SYSTEM (AMD PCS)	36,686,000		
KNIGHT FAMILY	40,200,000		
TC AIMS II	5,338,000		
MANEUVER CONTROL SYSTEM (MCS)	16,049,000		
SINGLE ARMY LOGISTICS ENTERPRISE (SALE)	7,317,000		
CSS COMMUNICATIONS	19,127,000		
OTHER SUPPORT EQUIPMENT			
CBRN SOLDIER PROTECTION	21,216,000		
TACTICAL BRIDGING	21,338,000		
TACTICAL BRIDGE, FLOAT-RIBBON	68,928,000		
EXPLOSIVE ORDNANCE DISPOSAL EQPMT (EOD EQPMT)	17,002,000		
SOLDIER ENHANCEMENT	4,071,000		
FIELD FEEDING EQUIPMENT	10,655,000		
CARGO AERIAL DEL & PERSONNEL PARACHUTE SYSTEM	4,555,000		
DISTRIBUTION SYSTEMS, PETROLEUM & WATER	20,910,000		
WATER PURIFICATION SYSTEMS	5,125,000		
COMBAT SUPPORT MEDICAL	2,231,000		
MOBILE MAINTENANCE EQUIPMENT SYSTEMS	62,654,000		
LOADERS	8,420,000		
TRACTOR, FULL TRACKED	6,400,000		
HIGH MOBILITY ENGINEER EXCAVATOR (HMEE) FOS	6,450,000		
GENERATORS AND ASSOCIATED EQUIP	51,179,000		
ROUGH TERRAIN CONTAINER HANDLER (RTCH)	11,394,000		
ALL TERRAIN LIFTING ARMY SYSTEM	16,996,000		
INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)	25,532,000		
TOTAL	\$3,315,925,000		

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

NOTE: This table identifies the dollar value of equipment originally programmed to be procured with the National Guard and Reserve Equipment Appropriation (NGREA). These funds are available for a threeyear period from the year of appropriation. Deliveries of procured equipment normally take one to two years from date of procurement before they arrive in the inventory; e.g., items procured in FY 2009 would be expected to arrive in RC inventories in FY 2010 or FY 2011. All values are costs in dollars.

Nomenclature	FY 2007	FY 2008	FY 2009
FY 2007 TITLE III NGREA EQUIPMENT			
DEPLOYABLE FORCE-ON-FORCE INSTRUMENTED RANGE SYSTEM (DFIRST) - FLEXTRAIN	\$18,000,000		
FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW (FBCB2)	10,500,000		
UH-60 & UH-1 HIGH PERFORMANCE HOIST (LIN H39331)	9,990,000		
COOP HARDWARE UPGRADE	6,000,000		
ARMY BATTLE COMMAND SYSTEM TRAINING SYSTEM	5,225,800		
M916A3 LINE HAUL TRUCK	4,380,000		
VIRTUAL WARRIOR INTERACTIVE (VWI)	4,000,000		
MOVEMENT TRACKING SYSTEM (MTS)	2,976,600		
MODIFICATION KIT: UTILITY HOIST UH-60 (LIN M59733)	2,601,154		
AN/PRC-117F SATCOM RADIOS (LIN Z00876)	2,420,000		
AN/PRC-150C HF RADIOS (LIN Z00873)	2,250,000		
ARNG DATA WAREHOUSE HARDWARE UPGRADE	2,100,000		
INTRUSION DETECTION PREVENTION SYSTEM	1,792,000		
VIRTUAL DOOR GUNNERY TRAINER (VDGT)	850,000		
TOOL SET AVIATION UNIT MAINTENANCE: AIRMOBILE (LIN W60206)	833,358		
TOOL KIT TUBE SWAGING (LIN T57982)	466,688		
TEST SET: AVIATION VIBRATION ANALYZER (LIN T53635)	112,896		
SCALE AIRCRAFT WEIGHING (LIN S41732)	103,055		
TEST SET AIRCRAFT FUEL QUANTITY GAGE (LIN V77715)	84,112		
MAINTENANCE PLATFORM: HYDRAULIC ADJUST B4A (LIN M02504)	14,336		
FY 2007 TITLE IX NGREA EQUIPMENT			
TRANSPORTATION EQUIPMENT	621,251,167		
COMMUNICATION EQUIPMENT	114,254,180		
AVIATION EQUIPMENT	107,133,219		
COMMAND & CONTROL EQUIPMENT	50,442,100		
ENGINEER EQUIPMENT	46,809,970		
LOGISTICS EQUIPMENT	27,894,156		
SECURITY EQUIPMENT	18,421,650		
CIVIL SUPPORT TEAM EQUIPMENT	11,569,959		
MAINTENANCE EQUIPMENT	2,223,600		
FY 2008 TITLE III NGREA EQUIPMENT			
FAMILY OF MEDIUM TACTICAL VEHICLES (FMTV)		\$175,621,551	
HMMWV, UP-ARMORED (M1151A1B1, M1152A1, M1165A1)		72,243,780	
HELICOPTER UTILITY: UH-60A TO UH-60L UPGRADE KIT		71,400,000	

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

Nomenclature	FY 2007	FY 2008	FY 2009
HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMTT)		51,159,375	
SEMITRAILER FLATBED: BREAKBULK/CONTAINER		22,500,000	
TACTICAL QUIET GENERATOR (TQG)		20,388,750	
CH-47F TRANSPORTABLE FLIGHT PROFICIENCY SIMULATOR (TFPS)		17,100,000	
XCTC - FLEXTRAIN		14,625,000	
INTEGRATED HEALTH MANAGEMENT SYSTEM (IHMS)		14,342,000	
SINCGARS RADIOS		14,000,000	
LOADER SKID STEER: TYPE II TRACK HVY DED		11,466,000	
JOINT SVC TRANSPORTABLE DECON SYS-SMALL SCALE (JSTDS-SS)		10,836,000	
LUH-72A MISSION EQUIPMENT PACKAGE		10,500,000	
TANK, WATER CAMEL 800 GAL, 5TON		10,000,000	
PAPRS SUIT W/HYDRATION CAPABILITY		9,901,500	
FIREWALL, ROUTER, FIBER SWITCH, INTRUSION PROTECTION SYS, CABINET, THIN CLIENT, MONITOR, INSTALLATION & SHIPPING		9,900,000	
SEMITRAILER LOW BED: 40 TON 6 WHEEL W/E (HET)		9,700,000	
TUAS SIMULATOR		9,252,000	
LASER MARKSMANSHIP TRAINER (LMTS)		8,370,000	
ARMY BATTLE COMMAND SYSTEM (ABCS) EQUIPMENT		7,955,575	
DRIVERS ENHANCERS: AN/VAS-5		7,663,950	
SIGHT: THERMAL AN/PAS-13		7,036,400	
TRAILER CARGO: LIGHT TACTICAL 3/4 TON		6,722,000	
LOADER SKID STEER: TYPE III TRACK OVER WHEEL LIGHT ABN/AMBL		6,615,000	
RADIO SET: AN/PSC-5		5,400,000	
BCT JOINT NODE NETWORK (JNN), WIN-T INC 1		5,100,000	
WATER PURIFIER: LIGHTWEIGHT		5,011,860	
THERMAL SIGHT, AN/PAS-13B(V)1		5,004,800	
COOP - STORAGE AREA NETWORK		5,000,000	
XTS 5000 RADIOS FOR CST UPGRADES & CERFP SHORTAGES		6,645,000	
EXCAVATOR: HYDRAULIC (HYEX) TYPE I		2,400,000	
VENTILATOR VOLUME PTBL		2,080,000	
TDFM 6148 RADIO		1,525,000	
DEFIBRILLATOR MONITOR RECORDER: 120/230V 50/60HZ		1,398,400	
ILLUMINATOR: INFRARED AN/PEC-15		1,350,000	
CERFP RADIATION DETECTION DEVICE, AN/PDR-77		944,985	
MASK UPGRADE		818,209	
TABLETOP TRAINERS (TGT, TFT, TMT)		800,250	
LASER SHOT		800,000	
GUARDIAN DEFENDER (CST RADIATION DETECTION EQUIP)		650,000	
COMBAT ARMS TRAINING SYSTEM (CATS) FOR ARNG		522,000	
X-RAY APPARATUS: LOW CAPACITY PORT		317,680	
X-RAY: APPARATUS DEN		273,428	
CYBERLUX BRIGHTEYE LIGHT SET		183,330	

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

Nomenclature	FY 2007	FY 2008	FY 2009
LEVEL B SUITS FOR CERFP & CST UPGRADES		83,177	
FY 2008 TITLE IX NGREA EQUIPMENT			
FAMILY OF MEDIUM TACTICAL VEHICLES		123,500,000	
FAMILY OF HEAVY TACTICAL VEHICLES		117,579,000	
HMMWV		49,050,000	
TACTICAL.RADIOS		42,037,000	
AH-64 A-D MODS (INCL. LONG-LEAD ITEMS)		30,750,000	
HORIZONTAL CONSTRUCTION EQUIPMENT		27,855,000	
LIGHT UTILITY HELICOPTER-MISSION EQUIPMENT PACKAGE		26,400,000	
TACTICAL TRAILERS		24,788,000	
JFHQ, C4ISR		24,340,000	
CHEMICAL DECONTAMINATION		17,494,000	
AUTOMATED TEST EQUIPMENT		17,068,000	
FIELD FEEDING SYSTEM		16,875,000	
LIQUID LOGISTICS STORAGE/DISTRO SYSTEMS		16,850,000	
TRAINING DEVICES		16,774,000	
NIGHT VISION		14,044,000	
TACTICAL COMMAND AND CONTROL SYSTEMS (INCL. ABCS)		12,375,000	
AVIATION HEALTH MAINTENANCE SYSTEMS		10,400,000	
DIGITAL ENABLER (INCL. VEHICLE MOVEMENT TRACKING SYSTEMS)		8,400,000	
SMALL ARMS		8,004,000	
MEDICAL SYSTEMS		5,797,000	
MILSATCOM		5,355,000	
GENERATORS		2,968,000	
ROUTE & AREA CLEARANCE (INCL. BOATS)		1,818,000	
AVIONICS		1,505,000	
FY 2009 TITLE III NGREA EQUIPMENT			
FAMILY OF MEDIUM TACTICAL VEHICLES			\$123,281,000
FAMILY OF LIGHT TACTICAL VEHICLES (HMMWV VARIANTS)			102,787,000
TACTICAL RADIOS			69,291,000
BLACKHAWK MODERNIZATION PROGRAM			32,818,000
NIGHT VISION			25,356,000
LIGHT UTILITY- MISSION EQUIPMENT PACKAGE			24,000,000
CHEMICAL DECONTAMINATION			17,817,000
JFHQ AND COMMAND & CONTROL SYSTEMS			17,070,000
AH-64 A TO D UPGRADES			10,000,000
HORIZONTAL CONSTRUCTION EQUIPMENT			8,543,000
MILSATCOM			7,935,000
MAINTENANCE SYSTEMS			6,383,000
DIGITAL ENABLER			6,363,000
SMALL ARMS			5,893,000

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

Nomenclature	FY 2007	FY 2008	FY 2009
TACTICAL TRAILERS			5,517,000
MEDICAL SYSTEMS			3,898,000
RTE & AREA CLEARANCE			3,811,000
LIQUID LOGISTICS STORAGE & DISTRIBUTION SYSTEMS			3,789,000
FORCE PROTECTION			2,365,000
GENERATORS			1,668,000
FY 2009 TITLE IX NGREA EQUIPMENT			
FAMILY OF MEDIUM TACTICAL VEHICLES (FMTV)			123,173,990
ARMY BATTLE COMMAND SYSTEMS (ABCS)			30,000,000
LIGHT UTILITY HELICOPTER MISSION ENHANCEMENT PROGRAM (LU	H MEP)		29,955,039
HEAVY TACTICAL TRAILERS			18,682,650
COMMERICAL OFF-THE-SHELF TACTICAL RADIOS			16,210,000
CBRN SOLDIER PROTECTION (EX: CHEM & BIO PROTECTED SHELTE	R SYSTEM)		12,466,491
THERMAL WEAPONS SIGHTS (TWS)			10,474,926
AVIATION HEALTH INFORMATION MANAGEMENT SYSTEM (AV-HIMS)			10,000,000
CONSTRUCTION EQUIPMENT (EX: LOADERS; SCRAPERS)			7,713,552
DRIVERS VISION ENHANCERS (DVE)			7,573,720
UH-60 EXTENDED RANGE FUEL STORAGE TANKS (ERFST)			7,000,000
FIELD FEEDING EQUIPMENT (EX: CONATINERIZED KITCHENS)			5,040,000
FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)			4,992,060
MAINTENANCE SUPPORT EQUIPMENT (MSE) (EX: ELECTRICAL TEST	SETS)		4,250,000
BLACKHAWK MULTI-YEAR PROGRAM (MYP)			4,022,220
BLACKHAWK MEDICAL EVACUATION (MEDEVAC)			2,200,000
LIQUID LOGISTICS STORAGE AND DISTRIBUTION			2,090,000
SIPRNET LEVEL I ACCESS EQUIPMENT			1,944,530
CBRNE ENHANCED RESPONSE FORCE PACKAGE (CERFP)			1,047,500
LOGISTICS NETWORK COMMUNICATIONS			448,000
CIVIL SUPPORT TEAM (CST) EQUIPMENT			438,000
LOGISTICS AUTOMATION (TC-AIMS)			277,200
TOTAL	\$1,074,699,999	\$1,267,633,000	\$778,584,878

Projected Equipment Transfer/Withdrawal Quantities

NOTE: This table portrays the planned equipment transfers (Active to Reserve), withdrawals (-), and decommissioning (-). Transferred equipment is commonly called "cascaded equipment," or equipment that is provided to the RC once the AC receives more modern equipment. Although this table highlights a three-year period, many Services will not know exact quantities of transfers or withdrawals until year of execution, due to the uncertainty of the procurement/delivery cycle of new equipment.

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty
AIRPLANE, CARGO TRANSPORT, C-23B	A29880		+2	
AIRPLANE, CARGO TRANSPORT, C-12F	A30062		+6	
RADAR SET, AN/TPQ-37(V)1	A41666		+5	
BRIDGE HEAVY DRY, SUPT (HDSB) 40M MLC96	B26007		+1	
PLS DEMOUNTABLE CARGO BED	B83002		+325	
BOAT, LANDING CRAFT, INFLATABLE 7 PERSON	B84293		+4	
CONTROL RECEIVER TRANSMITTER, C-11561(C)/U	C05541		+515	
CHEMICAL AGENT MONITOR, IMPROVED (ICAM)	C05701		+10	
ARMORED PERSONNEL CARRIER, M113A3	C18234		+1	
COMPUTER SYSTEM, AN/UYQ-90(V)2	C18278		+91	+798
COMPUTER SET, AN/UYK-128	C18378		+2,286	+8
COMPUTER SET, OL-582/TYQ	C18446		+193	+6
COMPUTER SET, OL-584/TYQ	C18582		+204	
COMPUTER SET, OL-604/TYQ	C18684		+94	
COMPUTER SET, OL-591/TYQ	C18718		+83	
CENTRAL OFFICE TELEPHONE, AN/TTC-58	C20549			+2
COMPUTER SYSTEM, AN/TYQ-105(V)1	C27503		+1,354	+51
KITCHEN, CONTAINERIZED, CK	C27633		+15	
COMPUTER SYSTEM, AN/TYQ-109(V)1	C27707		+14	
COMPUTER SYSTEM, AN/TYQ-109(V)2	C27775		+47	
COMPUTER SET, OL-590/TYQ (SAMS 1 CONFIG)	C28078		+236	
COMMAND SYSTEM, TACTICAL, AN/TSQ-221	C61597		+5	
COMPUTER SYSTEM, AN/UYQ-90(V)3	C78851		+16	
SIMPLIFIED COLLECTIVE PROTECTION EQUIP, M20	C79000		+2	
DENTAL EQUIP SET, COMPREHENSIVE DENT FIELD	D43802		+5	
DECONTAMINATING APPARATUS, M17	D82404		+355	+24
FORWARD AREA WATER POINT SUPPLY SYSTEM	F42612		+92	+53
FIRE UNIT VEHICLE MTD, AVENGER	F57713		+2	
BRADLEY FIRE SUPPORT TEAM VEH, M7	F86571		+17	
GENERATOR SET, 30KW, PU-803/B/G	G35851		+54	
GENERATOR SET, 2KW, MEP-531A	G36169		+5	
GENERATOR SET, 10KW, PU-798 TQG	G42170		+4	
GENERATOR SET, 5KW, PU-797 TQG	G42238		+2	

ARNG Projected Equipment Transfer/Withdrawal Quantities

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty
GENERATOR SET, 15KW, PU-802 TQG	G53778		+1	
GENERATOR SET, 60KW, MEP-805A/B TQG	G74575		+6	
GENERATOR SET, 10KW, MEP-803A TQG	G74711		+9	
GRADER ROAD MOTORIZED, DED HVY	G74783		+1	
GENERATOR SET, 60KW, PU-805 TQG	G78306		+13	
GENERATOR SET, 15KW, PU-801/A TQG	G78374		+12	
HELICOPTER, CARGO CH-47D (CHINOOK)	H30517		+12	
HELICOPTER, LIGHT UTILITY, UH-72A	H31329		+4	
HELICOPTER, UTILITY, UH-60L (BLACK HAWK)	H32361		+75	
HOIST, HIGH PERFORMANCE	H39331		+7	
HELICOPTER, ATTACK AH-64D (APACHE)	H48918			+19
HIGH MOBILITY ARTILLERY ROCKET SYS (HIMARS)	H53326		+7	
HOWITZER, LIGHT TOWED, 105MM, M119	H57505		+2	
INFRARED ILLUMINATOR, AN/PEQ-2	J03261		+36	
FUEL SYSTEM SUPPLY POINT, PORTABLE 60K GAL	J04717		+8	
KITCHEN, COMPANY LEVEL, FIELD FEEDING	K28601		+72	+76
LAUNCHER, GRENADE, 40MM, M203A1	L46007		+472	
LAUNCHER, HVY DRY SUPPORT BRIDGE	L67660		+3	
LAUNCHER, GRENADE, 40MM, M203A2	L69012		+48	+51
LOADER SCOOP TYPE, DED W/5 CY GP BUCKET	L76321		+12	
LOADER SCOOP TYPE, DED W/MULTI PURP BUCKET	L76556		+14	
MACHINE GUN, CAL .50, M2	L91975		+458	
MACHINE GUN, 5.56MM, M249	M09009		+10	+109
MASK, CHEMICAL BIOLOGICAL, M40	M12418		+101	+31
MASK, PROTECTIVE, COMBAT VEHICLE, M42	M18526		+16	
MEDICAL EQUIP SET, CHEM AGENT PATIENT TREAT	M23673		+80	
MEDICAL EQUIP SET, SICK CALL FIELD (2)	M30156		+25	
MEDICAL EQUIP SET, TRAUMA FIELD (2)	M30499		+1	
STRYKER MEDICAL EVACUATION VEHICLE, M1133	M30567			+1
BRADLEY FIGHTING VEH, INFANTRY, M2A2 W/ODS	M31793			+21
MACHINE GUN, 5.56MM, M249, LIGHT	M39263		+1	
LASER IR OBSERVATION SET (MELIOS), AN/PVS-6	M74849		+7	
MACHINE GUN TRIPOD MOUNT, 7.62MM, M122	M75714		+13	
MONOCULAR NIGHT-VISION DEVICE, AN/PVS-14	M79678		+136	
MACHINE GUN, GRENADE, 40MM, MK19 MOD III	M92362		+222	+27
MACHINE GUN, 7.62MM, M240B	M92841		+47	
NIGHT-VISION GOGGLES, AN/PVS-5	N04456		+4	
NIGHT-VISION SIGHT, CREW SERV WPN, AN/TVS-5	N04596		+173	+32
NIGHT-VISION SIGHT, AN/PVS-4 W/IMG	N04732		+13	

ARNG Projected Equipment Transfer/Withdrawal Quantities

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty
NIGHT-VISION SIGHT, AN/UAS-11(V)1	N05050		+87	
NIGHT-VISION GOGGLES, AN/PVS-7B	N05482		+12,075	
NAVIGATION SET, SATELLITE SIGNALS AN/PSN-13	N96248		+9,927	
POWER PLANT, 30KW, AN/MJQ-40 TQG	P42126		+37	
PISTOL, 9MM AUTOMATIC, M9	P98152		+297	+8
RAMP BAY BRIDGE FLOATING	R10527		+14	
RADAR SET, AN/TPQ-36(V)8	R14284		+6	
RADIAC SET, AN/VDR-2	R20684		+15	
RADIO SET, HF, AN/ARC-220 (V)1	R22436			
RADIAC SET, AN/PDR-75	R30925		+5	
RADIAC SET, AN/UDR-13	R31061			+18
NBC RECONNAISSANCE SYSTEM, M93A1 FOX	R41282		+5	
RADIO SET, SINCGARS AN/VRC-89F(C)	R44999		+8	
RADIO SET, AN/PSC-5	R57606		+177	
RADIO SET, AN/PSC-11	R57810		+48	+5
LASER DESIGNATOR RANGEFINDER, AN/PED-1	R60282		+125	
RADIO SET, SINCGARS AN/VRC-90A	R67908		+10	
RADIO SET, SINCGARS AN/VRC-90D	R67976		+5	
RADIO SET, SINCGARS AN/VRC-91A	R68010		+28	
RADIO SET, SINCGARS AN/VRC 91F(C)	R68146		+2	
SHELTER, TACTICAL EXPANDABLE TWOSIDE	S01359		+7	
SPECTRUM ANALYZER, AN/USM-489(V)1	S01416		+123	+2
SHOP EQUIP, CONTACT MAINT ORD/ENG TRK-MTD	S25681		+20	+1
FOOD SANITATION CENTER	S33399		+126	+31
SIGNAL GENERATOR, SG-1219/U	S48255		+20	+3
SCRAPER EARTH MOVING SP, 14-18 CU YD	S56246		+17	
REFLEX SIGHT, COLLIMATOR, M68	S60288		+154	
THERMAL WEAPON SIGHT, AN/PAS-13B(V)1	S60356		+153	
SEMITRAILER, 34-TON FLATBED, M872	S70159		+160	+5
SEMITRAILER VAN, 6-TON REPAIR PARTS, M749/M750	S74832			+1
SEMITRAILER VAN, 6-TON, ELECTR SHOP, M146	S75038		+8	
SATELLITE COMM TERMINAL, AN/TSC-85A	S78466		+2	
THERMAL WEAPON SIGHT, AN/PAS-13	S90535		+3,256	+1,059
THERMAL WEAPON SIGHT, AN/PAS-13A	S90603		+5,322	+617
HMMWV TOW CARRIER, M966	T05096		+86	
HMMWV SHELTER CARRIER, M1037	T07543		+3	
TACTICAL UAV SYSTEM, SHADOW	T09343		+1	+4
TANK, COMBAT, 105MM, M1 ABRAMS	T13374		+6	
SHOP EQUIPMENT AUTO MAINT & REPAIR	T24660		+33	+2

ARNG Projected Equipment Transfer/Withdrawal Quantities

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty
TARGET ACQ SYS, TOW IMPROVED ITAS M41	T24690			+1
TRACTOR, WHLD EXCAVATOR, SEE	T34437		+7	
HMMWV ARMT CARRIER, ECV, M1151	T34704		+114	
TARGET ACQ SUBSYSTEM, AN/TSQ-179(V)2	T37036		+6	
SHOTGUN, 12-GAUGE RIOT TYPE	T39223		+24	
HEMTT CARGO TRUCK, W/LT CRANE, M977 W/W	T39518		+1	
HEMTT CARGO TRUCK, W/MED CRANE, M985 W/W	T39654		+11	
PLS TRANSPORTER, M1075	T40999		+72	
MTV 5-TON CARGO TRUCK, W/ LAPES/AD,M1093 W/W	T41104		+9	
MTV 5-TON CARGO TRUCK, M1083 W/W	T41135		+86	
MTV 5-TON CARGO TRUCK, M1084	T41203		+97	
LMTV 2.5-TON CARGO TRUCK, W/ LAPES/AD, M1081	T41995		+36	
TRAILER, HEMAT, 11-TON, M989A1	T45465		+3	
TRUCK, FORKLIFT, DED 50K LB, RT, CONT HDLR	T48941		+2	
TRUCK, FORKLIFT, DED 6K LB, RT, AMMO HDLG	T48944		+1	
TEST SET, TRANSPONDER, AN/APM-421	T49392		+6	
TEST SET, ELECT SYS DIRECT SUPPORT (DESETS)	T52849		+10	
TEST SET, AVIATOR NIGHT VIS IMAG SYS, TS-3895	T53471		+10	+2
RADIO TERMINAL, TELEPHONE, AN/VRC-97	T55957		+8	
TOOL KIT TUBE SWAGING, SET B	T57982		+1	
HEMTT FUEL TANKER, 2500GAL, M978 W/W	T58161		+1	
HEMTT CARGO TRUCK, W/LT CRANE, M977	T59278		+2	
LMTV 2.5-TON CARGO TRUCK, M1078	T60081		+540	
LMTV 2.5-TON CARGO TRUCK, M1078 W/W	T60149		+57	+1
MTV 5-TON TRACTOR TRUCK, M1088	T61239		+194	
MTV 5-TON TRACTOR TRUCK, M1088 W/W	T61307		+2	
HMMWV CGO/TRP CARRIER, M998	T61494		+1	
HMMWV TRUCK, UTILITY, ECV, M1113	T61630		+6	
MTV 5-TON CARGO TRUCK, M1085	T61704		+16	
MTV 5-TON CARGO TRUCK, M1083	T61908		+279	
TEST KIT MASK PROTECTIVE, M41	T62350		+12	+12
TRUCK, FORKLIFT, ATLAS	T73347		+19	
TRACTOR FULL-TRACKED HIGH-SPEED, DEUCE	T76541		+9	+4
SATELLITE COMM TERMINAL, AN/TSC-154	T81733		+5	
HEMTT FUEL TANKER, 2500GAL, M978	T87243		+165	
TEST SET, RADIO, AN/GRM-114	T87468		+9	+2
TRUCK TRACTOR, 14-TON LET, M916	T91656		+53	
HMMWV ARMT CARRIER, ARMD, M1025	T92242		+19	
HMMWV ARMT CARRIER, ARMD, M1026 W/W	T92310		+1	

ARNG Projected Equipment Transfer/Withdrawal Quantities

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty
HMMWV TRUCK, UTILITY, ECV, UP-ARMORED, M1114	T92446		+1,369	
TEST SET, ELECT SYS AN/PSM-95	T92889		+1,980	+134
LMTV 2.5-TON CARGO TRUCK, M1079	T93484		+73	
PLS TRAILER, 16.5 TON, M1076	T93761		+283	+224
MTV 5-TON WRECKER, M1089	T94709		+118	
TRAILER, CARGO, 5-TON MTV, M1095	T95555		+463	
TRAILER, CARGO, 5/4-TON, HIGH MOBILITY, M1102	T95924		+746	
TRAILER, CARGO, 3/4-TON, HIGH MOBILITY, M1101	T95992		+3,070	+17
HEMTT CARGO TRUCK, W/LHS, M1120	T96496		+199	
TRAILER, CARGO, 2.5 TON LMTV, M1082	T96564		+412	
TEST SET, RADAR TS-4530()/UPM	T99847		+6	
SURGICAL INSTRUMENT & SUPPLY SET, INDIVIDUAL	U65480		+22	
TANK & PUMP UNIT, LIQUID DISPENSING TRK-MTD	V12141			+12
TEST FACILITIES KIT, MK-994/AR	V61444		+11	
TEST SET, TRANSPONDER, AN/APM-305	V99436		+6	
VENTILATOR, VOLUME, PORTABLE	V99788		+6	+3
TOOL KIT ELECTRIC EQUIPMENT, TK-101/GSQ	W37483		+247	+8
TRACTOR, FULL-TRACKED, ARMORED, M9 (ACE)	W76473		+6	+2
TRAILER, CARGO, 3/4-TON, M101	W95537		+18	
TRAILER, CARGO, 1.5-TON, M105	W95811		+3	
TRAILER, TANK WATER, 400 GAL, M1112	W98825		+6	
TRUCK, CARGO, 1/2 TO 3/4 TON, 4X2	X39598		+5	
M35-SERIES 2.5 TON TRUCK, CARGO, M35A2	X40009			+12
M809/M939-SERIES 5-TON CARGO TRUCK, M813/M923	X40794		+1	
M809/M939-SERIES 5-TON DUMP TRUCK, M817/M929	X43708			+2
COMPUTER SYSTEM, AN/PYQ-10(C)	Z00384		+10,380	+44
VEHICLE, UAV SYSTEM, RAVEN	Z00446		+16	
INTERFACE UNIT COMM EQUIP, OL-713(V)1/TYQ CSS VSAT	Z00560		+112	+5
JNN CENTRAL OFFICE TELEPHONE, AN/TTC-59	Z00562		+3	
HELICOPTER, ARMED RECONNAISSANCE (ARH)	Z00691			
HMMWV CGO/TRP CARRIER, ECV, M1152A1	Z01013		+125	
MTV 5-TON TRUCK VAN, EXPANSIBLE, M1087	Z94560		+13	
HEMTT WRECKER, M984	T63093		+39	
MTV 5-TON DUMP TRUCK, M1090	T64911		+67	
MTV 5-TON DUMP TRUCK, M1090 W/W	T64979		+5	
TOOL SET, AVIATION FOOT LOCKER SPT PM ACFT	T65997		+52	
MASK, CHEMICAL BIOLOGICAL, JSGPM	Z00036		+291	
SHELTER, RIGID WALL, COMMAND POST	R98145		+24	

FY 2006 Planned vs Actual Procurements and Transfers

NOTE: This table compares what the Service planned to procure and transfer to the RC in FY 2006 with actual procurements and transfers. FY 2006 is selected as these are the most recent funds to expire. Since the procurement cycle is normally one to two years from funding to delivery, this table identifies only what has been delivered through the end of FY 2008. Procurement and NGREA columns reflect cost values in dollars.

Nomenclature	Equip No.	FY 2 Trans (# of it	sfers	FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)		
		Plan	Actual	Plan	Actual	Plan	Actual	
FY 2006 PLANNED TRANSFERS & V	VITHDRAW	<u>ALS</u>						
ROTARY WING AIRCRAFT								
HELICOPTER, OBS, OH-58D	A21633	+2	+6					
HELICOPTER, UTILITY, UH-60L/Q	H32361	+1	0					
UH-60A EXTERNAL STORES SUBS	E21985	+49	0					
HELICOPTER, UTILITY, UH-60A/HH	K32293	+4	0					
HELICOPTER, ATTACK, AH-64A/D	H28647	+5	0					
MISSILES								
FIRE UNIT VEH-MTD, AVENGER	F57713	+56	0					
MULTIPLE LAUNCH ROCKET SYS	L44894	+1	0					
COMMUNICATIONS EQUIPMENT								
RADIO, AN/VRC-92A, SINCGARS	R45407	+5	0					
RADIO, AN/VRC-90A, SINCGARS	R67908	+1	0					
RADIO, AN/VRC-91A, SINCGARS	R68010	+4	0					
RADIO, AN/PRC-112	R82903	+136	+324					
CHEMICAL DEFENSIVE EQUIPME	NT							
ALARM,CHEMICAL AGENT, M8A1	A32355	+427	0					
ALARM CHEM DET M22	A33020	+890	+1,503					
MASK, CHEM-BIO, M40	M12418	+8,518	0					
MASK, PROTECTIVE, M42	M18526	+2	0					
CONSTRUCTION EQUIPMENT								
CRANE,WHL-MTD, 20-TON	F39378	+1	0					
CRANE-SHOVEL, CRAWLER MTD	F40474	+2	0					
GRADER, ROAD, MOTORIZED	J74852	+1	0					
TRACTOR, WHLD EXCAVATOR	T34437	+2	0					
TRACTOR, FT, HIGH SPEED, M9	W76473	+1	0					
TRACTOR, FT, LOW SPEED	W76816	+1	0					
TRACTOR, FT, LOW SPEED, DED	W83529	+2	+14					
ELECTRICAL GENERATION								
GENERATOR SET, SKID-MTD, 3KW	G54041	+3	0					
OTHER PROCUREMENT								
NIGHT VISION GOGGLES, AVS-6	A06352	+169	0					
MONOCULAR, NIGHT VIS, PVS-14	M79678	+4,912	0					
NIGHT VISION GOGGLES, PVS-5	N04456	+2,188	0					
NIGHT VISION SIGHT, TVS-5	N04596	+2,229	0					

Nomenclature	Equip No.	FY 2 Trans (# of i	sfers	Procu	2006 irements (\$s)	NG	2006 REA Ss)
		Plan	Actual	Plan	Actual	Plan	Actual
NIGHT VISION DEVICE, PVS-4 WMG	N04732	+2,255	0				
NIGHT VISION GOGGLES, PVS-7B	N05482	+18,873	0				
MELIOS PVS-6 LASER OBS	M74849	+733	+221				
NIGHT VISION SIGHT, UAS-11(V)1	N05050	+34	0				
NAVIGATION SYSTEM, PSN-11	N95862	+7,523	0				
POSITION AZIMUTH DETECT SYS	P21220	+1	0				
ROWPU SYSTEM, 3000 GPH	W47225	+3	0				
TACTICAL VEHICLES							
TRUCK, TOW, M966, HMMWV	T05096	+41	0				
TRUCK, ARM, M1025, HMMWV	T92242	+40	0				
TRUCK, TOW, M1036, HMMWV	T92310	+1	0				
TRUCK, M1114, HMMWV	T92446	+779	0				
TRUCK, UTILITY, M1097, HMMWV	T07679	+609	+549				
TRUCK, UTILITY, M998, HMMWV	T61494	+13	0				
TRUCK, UTILITY, M1038, HMMWV	T61562	+2	0				
TRUCK, CARGO, M985, HEMMT	T39586	+25	0				
TRUCK, TANKER, FUEL, HEMMT	T87243	+40	0				
TRUCK, WRECKER, M948E1 HEMMT	T63093	+46	0				
TRUCK, CARGO, LMTV, M1078	T60081	+59	0				
TRUCK, CARGO, LMTV, M1079	T93484	+19	0				
TRUCK, CARGO, MTV, M1084	T41203	+39	+71				
TRUCK, CARGO, MTV, M1083	T41135	+56	0				
TRUCK, TRACTOR, MTV, M1088	T61239	+153	0				
TRUCK, CARGO, MTV, M1085	T61704	+31	+4				
TRUCK, CARGO, MTV, M1083	T61908	+227	+365				
TRUCK, WRECKER, MTV, M1089	T94709	+40	+18				
TRUCK, TACTICAL FIREFIGHTING	H56391	+15	0				
SEMITRAILER, 22-1/2T, M871	S70027	+542	+135				
SEMITRAILER, 34T, TRANSPORTER	S70159	+458	0				
SEMITRAILER, 70-TON, M1000	S70859	+8	0				
SEMITRAILER, 5000 GAL POL	S73372	+1	+1				
TRAILER, HEMAT, M989A1, MLRS	T45465	+122	0				
TRAILER, PLS, M1076	T93761	+96	+168				
TRANSPORTER, PLS, M1075	T40999	+53	+35				
TRANSPORTER, PLS, M1074	T41067	+6	0				
TRUCK, TRACTOR, HETS, M1070	T59048	+116	0				
TRUCK, TRACTOR, M915	T61103	+105	0				
TRUCK, FORKLIFT, ATLAS	T73347	+3	0				
TRUCK, DUMP, 20-TON, M917	X44403	+7	0				

Nomenclature	Equip No.	FY 2 Trans (# of it	sfers	FY 20 Procurer (\$s)	nents	NG	2006 REA §s)
		Plan	Actual	Plan	Actual	Plan	Actual
TRACKED & WHEELED COMBAT	SYSTEMS						
HOWITZER, SP, 155MM, M109A6	H57642	+1	0				
LAUNCHER, M60 TANK CHASSIS	L43664	+2	0				
WEAPONS							
MACHINE GUN,7.62MM 240B	M92841	+1,036	+693				
RIFLE,5.56 MM M16A2	R95035	+26	0				
FY 2006 P-1R EQUIPMENT							
AIRCRAFT							
CH-47 CARGO HELICOPTER MO	DS			\$0	\$54,400,000		
UTILITY/CARGO AIRPLANE MOD	S			\$11,355,000	11,173,000		
AIRBORNE AVIONICS				9,953,000	9,953,000		
GATM ROLLUP				4,800,000	4,800,000		
AIR TRAFFIC CONTROL				0	21,666,000		
MISSILES							
JAVELIN (AAWS-M) SYSTEM SU	MMARY			15,178,000	0		
MLRS MODS				0	3,655,000		
HIMARS MODIFICATIONS				0	1,444,000		
SPARES AND REPAIR PARTS				0	1,455,000		
TRACKED COMBAT VEHICLES							
STRYKER				562,487,000	562,487,000		
WEAPONS AND OTHER COMBAT	VEHICLES	S					
M107, CAL. 50, SNIPER RIFLE				3,338,000	0		
5.56 CARBINE M4				241,000	0		
HOWITZER LT WT 155MM (T)				29,927,000	29,927,000		
MK-19 GRENADE MACHINE GUN	MODS			0	218,000		
M249 SAW MACHINE GUN MOD	S			0	4,737,000		
TACTICAL AND SUPPORT VEHICL	ES						
TACTICAL TRAILERS/DOLLY SE				5,512,000	0		
SEMITRAILERS, FLATBED				5,181,000	5,181,000		
SEMITRAILERS, TANKERS				1,397,000	1,397,000		
HI MOB MULTI-PURP WHLD VEH	I (HMMW\	/)		28,458,000	28,458,000		
FAMILY OF MEDIUM TACTICAL				259,785,000	258,985,000		
FIRE TRUCKS & ASSOCIATED F			P	4,728,000	4,728,000		
FAMILY OF HEAVY TACTICAL VE				75,537,000	0		
TRUCK, TRACTOR, LINE HAUL, I		,		15,763,000	0		
HEMTT EXTENDED SERVICE PR				16,180,000	16,180,000		
COMMUNICATIONS AND ELECTRO		UIPMENT		, ,	,		
SAT TERM, EMUT (SPACE)				0	200,000		
NAVSTAR GLOBAL POSITIONING	G SYSTEM			220,000	220,000		

Nomenclature	Equip No.	FY 2 Trans (# of it	sfers	FY 200 Procurem (\$s)	nents	FY 2 NGR (\$۱	EA
		Plan	Actual	Plan	Actual	Plan	Actual
SMART-T (SPACE)				0	170,000		
GLOBAL BRDCST SVC - GBS				0	10,000		
SINCGARS FAMILY				0	10,298,000		
BRIDGE TO FUTURE NETWORK	S			0	4,626,000		
COMMS-ELEC EQUIP FIELDING				0	9,103,000		
RADIO, IMPROVED HF (COTS) F	AMILY			0	15,950,000		
MEDICAL COMM FOR CBT CASI	JALTY CA	RE (MC4)		0	1,170,000		
DCGS-A (MIP)				0	4,805,000		
CI HUMINT INFO MANAGE SYS	(CHIMS) (1	ΓIARA)		730,000	720,000		
LONG RANGE ADVANCED SCO	UT SURVE	ILLANCE	SYSTEM	1,367,000	0		
FIRE SUPPORT C2 FAMILY				0	1,398,000		
JOINT NETWORK MANAGEMEN	TSYSTEM	(JNMS)		0	455,000		
MANEUVER CONTROL SYSTEM	I (MCS)			552,000	552,000		
OTHER SUPPORT EQUIPMENT							
SMOKE & OBSCURANT FAMILY	: SOF (NO	N AAO ITE	M)	0	1,685,000		
TACTICAL BRIDGING				22,931,000	0		
TACTICAL BRIDGE, FLOAT-RIBE	BON			280,000	280,000		
HEATERS AND ECU'S				914,000	914,000		
FIELD FEEDING EQUIPMENT				6,997,000	9,835,000		
ITEMS LESS THAN \$5.0M (ENG	SPT)			49,000	5,000		
DISTRIBUTION SYSTEMS, PETR	ROLEUM &	WATER		2,790,000	0		
WATER PURIFICATION SYSTEM	1S			2,786,000	0		
SHOP EQ CONTACT MAINTENA	NCE TRK	MTD (MYF	P)	3,240,000	0		
WELDING SHOP, TRAILER MTD				252,000	0		
MISSION MODULES - ENGINEER	RING			600,000	0		
GENERATORS AND ASSOCIATE	ED EQUIP			30,901,000	0		
INTEGRATED FAMILY OF TEST	EQUIPME	NT (IFTE)		20,267,000	20,267,000		
MODIFICATION OF IN-SVC EQU				0	19,000		
FY 2006 NGREA EQUIPMENT (TITLE		-					
TRAINING							
LASER MARKSMANSHIP TRAIN	ER (LMTS))				\$1,350,000	\$1,350,000
DEPLOYABLE FORCE-ON-FORC		JMENTED	RANGE SY	STEM (DFIRST) - I	FLEXTRAIN	4,950,000	4,950,000
MOBILE CONDUCT-OF-FIRE TR				. ,		1,760,000	1,760,000
MOBILE CONDUCT-OF-FIRE TR		,				810,000	810,000
FATS IV - M4 ENGAGEMENT SK	``	,				2,061,800	2,061,800
FATS IV DIGITIZATION						2,000,000	2,000,000
FATS IV - M19 ENGAGEMENT SI	L KILLS TRA	INER				160,800	160,800
FATS IV - M240 ENGAGEMENT S						88,400	88,400
FATS IV - M2 ENGAGEMENT SK						74,600	74,600

Nomenclature	Equip No.	Tran	2006 sfers items)	FY 2 Procure (\$	ements	NGI	2006 REA s)
		Plan	Actual	Plan	Actual	Plan	Actual
FATS IV - M249 ENGAGEMENT S	KILLS TR	AINER				44,400	44,400
SOLDIER EQUIPMENT							
AN/PVS-14 NIGHT VISION GOGO	BLES					16,282,500	16,282,500
M4 CARBINE						1,814,400	1,814,400
INDIVIDUAL CHEMICAL AGENT I	MONITOR					360,000	360,000
INTEROPERABILITY							
MOVEMENT TRACKING SYSTEM	I (MTS)					113,553,600	113,277,850
SINCGARS RADIOS						15,408,900	15,408,900
JOINT NETWORK NODE (JNN)						193,700,000	171,075,662
JNN (WIN-T DIGITAL TRAINER)						0	7,156,888
TACTICAL QUIET GENERATOR ((TQG)					4,368,000	4,220,640
AVIATION MOBILITY & SPECIAL E		т					
HOIST HIGH PERFORMANCE						5,900,000	5,900,000
UH-60 BLACKHAWK REMOVE AN	ND REPLA	CE TASK	TRAINER	2		2,583,000	2,583,000
CH-47 MAINTENANCE TRAINER						1,700,000	1,700,000
AUTOMATIC FLIGHT FOLLOWIN	G SYSTE	M MCENT	IRE AIR B	ASE		0	1,000,000
MOBILITY							
MTV & LMTV TRUCKS: M1078, M	1083, M10	088, M108	39			315,008,804	296,302,234
HEAVY EXPANDED MOBILITY TA	ACTICAL T	TRUCK (H	IEMTT) TA	NKER, M978		27,950,000	53,668,300
HIGH MOBILITY MULTIPURPOSE		D VEHIC	LE (HMM)	VV) SHELTER, M1	097/M1192	3,940,000	3,940,000
M915A3 TRACTOR						7,680,000	16,558,830
M872 TRAILER FOR M915 TRAC	TOR					6,045,000	6,045,000
TOTAL				\$1,144,696,000	\$1,103,526,000	\$729,594,204	\$730,594,204

Major Item of Equipment Substitution List

NOTE: This table identifies equipment authorized by the Service to be used as a substitute for a primary item of equipment. The table also identifies whether or not the item is able to be deployed in wartime. This data meets the Title 10 requirement to identify equipment that is not the most desired item of equipment.

Required Item	Regd Item	Substitute Item	Substitute	FY 2010	Deployable	
Nomenclature	Equip No.	Nomenclature	Item Equip No.	Qty	Yes	No
ROTARY WING AIRCRAFT						
HELICOPTER, OH-58C	H31110	HELICOPTER, OH-58A	K31042	91	Х	
HELICOPTER, UTILITY, UH-60L	H32361	HELICOPTER, UTILITY, UH-60A	K32293	314	Х	
COMMUNICATIONS/ELECTRON	ICS EQUIPM	ENT				
COMPUTER SYSTEM, AN/TYQ- 109(V)2	C27775	COMPUTER SYSTEM, AN/TYQ- 109(V)1	C27707	1,271	Х	
CENTRAL COMMUNICATIONS, AN/TSQ-190(V)3	C89935	TROJAN SPIRIT LITE, AN/TSQ- 226(V)3	C43399	20	Х	
CENTRAL COMMUNICATIONS, AN/TSQ-190(V)3	C89935	CENTRAL COMMUNICATIONS, AN/TSQ-190(V)1	C90003	1	Х	
RADIO, AN/VRC-89F(C)	R44999	RADIO, AN/VRC-89A	R44863	871	Х	
RADIO, AN/VRC-89F(C)	R44999	RADIO, AN/VRC-89D	R44931	205	Х	
RADIO, AN/VRC-92F(C)	R45543	RADIO, AN/VRC-92A	R45407	1,031	Х	
RADIO, AN/VRC-92F(C)	R45543	RADIO, AN/VRC-92D	R45475	599	Х	
RADIO, AN/VRC-87F(C)	R67296	RADIO, AN/VRC-87A	R67160	155	Х	
RADIO, AN/VRC-88F(C)	R67330	RADIO, AN/VRC-88A	R67194	470	Х	
RADIO, AN/VRC-87F(C)	R67296	RADIO, AN/VRC-87D	R67228	94	Х	
RADIO, AN/VRC-88F(C)	R67330	RADIO, AN/VRC-88D	R67262	107	Х	
RADIO, AN/VRC-90F(C)	R68044	RADIO, AN/VRC-90A	R67908	6,616	Х	
RADIO, AN/VRC-90F(C)	R68044	RADIO, AN/VRC-90D	R67976	1,611	Х	
RADIO, AN/VRC 91F(C)	R68146	RADIO, AN/VRC-91A	R68010	3,137	Х	
RADIO, AN/VRC 91F(C)	R68146	RADIO, AN/VRC-91D	R68078	455	Х	
RADIO, AN/PRC-119F(C)	R83141	RADIO, AN/PRC-119A	R83005	651	Х	
RADIO, AN/PRC-119F(C)	R83141	RADIO, AN/PRC-119D	R83073	100	Х	
TEST SET, AN/PSM-95	T92889	TEST SET, AN/PSM-80(V)2	T77499	13	Х	
TEST SET, AN/APM-305	V99436	TEST SET, AN/APM-123	V99347	2	Х	
TEST SET, AN/APM-305	V99436	TEST SET, AN/APM-239A	V99416	3	Х	
CHEMICAL DEFENSIVE EQUIPM	IENT					
CHEM AGENT ALARM, M22	A33020	CHEM AGENT ALARM, M8A1	A32355	6,375	Х	
DECON APPARATUS, M17	D82404	DECON APPARATUS, M12A1	F81880	37	Х	
RADIAC SET, AN/UDR-13	R31061	RADIACMETER, IM-93/UD	Q20935	5,957	Х	
CONSTRUCTION EQUIPMENT						
EXCAVATOR, HYEX TYPE I	E27792	EXCAVATOR, HYEX TYPE III	E27860	3	Х	
LOADER SCOOP TYPE, DED W/5 CY GP BUCKET	L76321	LOADER SCOOP TYPE, DED W/4- 1/2 CY ROCK BUCKET (CCE)	L76315	9	Х	
FORKLIFT, ATLAS	T73347	FORKLIFT, RT, AMMO HDLG	T48944	129	Х	
FORKLIFT, ATLAS	T73347	FORKLIFT, ROUGH TERRAIN	T49119	37	Х	
ELECTRICAL GENERATION						

Required Item	Regd Item	Substitute Item	Substitute	FY 2010	Deploy	yable?
Nomenclature	Equip No.	Nomenclature	Item Equip No.	Qty	Yes	No
GEN SET, 5KW, PU-797 TQG	G42238	GEN SET, 5KW, PU-751/M	G37273	102	Х	
GEN SET, 10KW, PU-798 TQG	G42170	GEN SET, 10KW, PU-753/M	G40744	205	Х	
GEN SET, 15KW, PU-802 TQG	G53778	GEN SET, 15KW, PU-405	J35492	246	Х	
GEN SET, 15KW, PU-802 TQG	G53778	GEN SET, 30KW, PU-406	J36383	98	Х	
GEN SET, 60KW, PU-805 TQG	G78306	GEN SET, 60KW, PU-650	J35629	64	Х	
GEN SET, 3KW, MEP-831A TQG	G18358	GEN SET, 5KW, MEP-002A	J35813	963	Х	
GEN SET, 5KW, MEP-802A TQG	G11966	GEN SET, 5KW, MEP-002A	J35813	317	Х	
GEN SET, 10KW, MEP-803A TQG	G74711	GEN SET, 10KW, MEP-003A	J35825	345	Х	
GEN SET, 30KW, PU-803/B/G TQG	G35851	GEN SET, 30KW, PU-406	J36383	138	х	
POWER PLANT, AN/MJQ-40 TQG	P42126	POWER PLANT, AN/MJQ-10	P27819	9	Х	
POWER PLANT, AN/MJQ-37 TQG	P42262	POWER PLANT, AN/MJQ-18	P28015	25	Х	
OTHER PROCUREMENT						
KITCHEN, CONTAINERIZED, CK	C27633	KITCHEN FIELD, TRLR MTD	L28351	97		Х
NIGHT-VISION SIGHT, AN/TVS-5	N04596	NIGHT VISION SIGHT, AN/PVS-4	N04732	3,846	Х	
NIGHT-VISION SIGHT, AN/TVS-5	N04596	HEAVY WEAPON THERMAL SIGHT (HWTS) AN/PAS-13(V)3	S90603	673	Х	
NIGHT-VISION GOGGLES, AN/PVS-7B	N05482	MONOCULAR NIGHT VISION DEVICE, AN/PVS-14	M79678	48,546	Х	
NAV SET, AN/PSN-13	N96248	NAV SET, AN/PSN-11(V)1	N95862	9,436	Х	
THERMAL WEAPON SIGHT, AN/PAS-13B(V)1	S60356	NIGHT VISION SIGHT, AN/PVS-4	N04732	2,163	Х	
THERMAL WEAPON SIGHT, AN/PAS-13	S90535	NIGHT VISION SIGHT, AN/TVS-5	N04596	215	Х	
TACTICAL VEHICLES						
HMMWV, M998	T61494	HMMWV, M1097-SERIES	T07679	3,167		Х
HMMWV, M998	T61494	HMMWV, XM1165	T38873	8	Х	
HMMWV, M998	T61494	HMMWV, XM1165A1	T56383	83	Х	
HMMWV, M998	T61494	HMMWV, M1038 W/W	T61562	556	Х	
HMMWV, M1113	T61630	HMMWV, M1097-SERIES	T07679	121		Х
HMMWV, M1114	T92446	HMMWV, M1151A1	T34704	699	Х	
HMMWV, M1114	T92446	HMMWV, M1025	T92242	960	Х	
HEMTT, M985 W/W	T39654	HEMTT, M985-SERIES WO/W	T39586	160	Х	
HEMTT, M977 W/W	T39518	HEMTT, M985-SERIES WO/W	T39586	79	Х	
HEMTT, M977 W/W	T39518	HEMTT, M977 WO/W	T59278	62	Х	
HEMTT FUEL TANKER, M978	T87243	TANK & PUMP UNIT, TRK-MTD	V12141	124	Х	
LMTV CARGO, M1078	T60081	M809/M939-SERIES 5-TON CARGO TRUCK, M813/M925	X40931	228		Х
LMTV CARGO, M1078 W/W	T60149	M809/M939-SERIES 5-TON CARGO TRUCK, M813/M925	X40931	31		Х
MTV CARGO, M1083 W/W	T41135	M809/M939-SERIES 5-TON CARGO TRUCK, M813/M925	X40931	268		Х
MTV CARGO, M1083	T61908	M809/M939-SERIES 5-TON CARGO TRUCK, M813/M925	X40931	347		Х

ARNG Major Item of Equipment Substitution List

Required Item	Regd Item	Substitute Item	Substitute	FY 2010	Deploy	/able?
Nomenclature	Equip No.	Nomenclature	Item Equip No.	Qty	Yes	No
MTV CARGO, M1093 W/W	T41104	M809/M939-SERIES 5-TON CARGO TRUCK, M813/M925	X40931	5		Х
MTV CARGO, M1085	T61704	TRUCK CARGO, 5-T XLWB	X41105	20		Х
MTV CARGO, M1085	T61704	TRUCK CARGO, 5-T XLWB W/W	X41242	4		Х
MTV WRECKER, M1089	T94709	HEMTT WRECKER, M984	T63093	54	Х	
MTV DUMP TRUCK, M1090 W/W	T64979	TRUCK DUMP, 5-TON W/W	X43845	13		Х
MTV DUMP TRUCK, M1090	T64911	TRUCK DUMP, 5-TON W/W	X43845	22		Х
TRAILER, 3/4-TON, M1101	T95992	TRAILER, 3/4-TON, M101	W95537	2,735		Х
TRAILER, 5/4-TON, M1102	T95924	TRAILER, 3/4-TON, M101	W95537	10		Х
TRAILER, LMTV M1082	T96564	TRAILER, 1.5-TON, M105	W95811	159		Х
TRAILER, MTV M1095	T95555	TRAILER, 1.5-TON, M105	W95811	105		Х
TRAILER, MTV M1095	T95555	TRAILER, FB, 5-TON, M1061A1	T96883	50	Х	
TRACKED & WHEELED COMBA	T SYSTEMS					
CARRIER ARMD COMND POST	C11158	CARRIER, COM POST, M577A1	D11538	124		Х
BRADLEY, M7	F86571	APC, FISTV, M113	C12155	27	Х	
HOWITZER, 105MM, M119	H57505	HOWITZER, 105MM, M102	K57392	62	Х	
WEAPONS						
CARBINE, 5.56MM, M4	R97234	RIFLE, 5.56MM, M16A2	R95035	4,797	Х	
CARBINE, 5.56MM, M4	R97234	RIFLE, 5.56MM M16A4	R97175	3,090	Х	
MACHINE GUN, CAL .50, M2	L91975	MACHINE GUN, CAL .50, HEAVY FIXED TURRET TYPE, M2	L91701	133	Х	
MACHINE GUN, 5.56MM, M249	M09009	MACHINE GUN, 7.62MM, M240B	M92841	650	Х	
MACHINE GUN, 5.56MM, M249 LT	M39263	MACHINE GUN, 5.56MM, M249	M09009	3,110	Х	

III. United States Army Reserve Overview

Today, Army Reserve Soldiers provide unrelenting support to the Global War on Terror as we shift from Strategic Reserve to Operation Force. This fundamental change requires the Army to dramatically increase historically low levels of modern equipment available to the Army Reserve. Based on the shift to Operational Reserve,

Top Army Reserve Equipping Challenges

- Sustainment
- Limited Resources
- Equipment Modernization

the Army is ensuring the Army Reserve formations are receiving the Army's most modern equipment systems, as we train for our deployments. This fundamental shift presents us with challenges in equipping and sustaining the force: These challenges are:

- Sustainment
- Limited resources
- Equipment modernization.

As the first Title 10 responder to support civil authorities during a domestic emergency, the Army Reserve positioned equipment in 1,200 communities throughout our great nation. The key to being prepared for these contingencies is fully equipping Army Reserve units. The Army Reserve is comprised of units of federal Citizen-Soldiers spread across the United States. These Soldiers bring critical civilian skills to augment the Army, or as directed, to support other governmental civil agencies.

Current operations, as well as training and preparation required to conduct these operations, have placed a great demand on the limited equipment on-hand in the Army Reserve. Due to this equipment shortfall, we meet our current tasks through a combination of theater provided equipment, cross-leveling, and new Army procurements. This strategy equips deploying forces. However, our next deploying forces and training bases have been left with minimal Modular Force Equipment. The shortage of equipment on-hand, combined with significant in-lieu-of (ILO) substitute items found in the Army Reserve's inventory, diminishes our units' ability to train in support of the modular Army and meet the "surge" requirements of the ARFORGEN Model. Critical factors in maintaining the readiness of our equipment to support pre-mobilization training and deployment are the national level sustainment programs, such as Recapitalization and Depot Maintenance.

It is imperative the Army Reserve receive critical modernization equipment. This includes LMTVs, MTVs, battle command and control systems, logistics automation, and other technology enablers for the modular support force. This modernized equipment ensures mission capability, interoperability, and reduced risk to our Soldiers. Equipment compatibility is necessary for the Army Reserve pre and post mobilization training. The National Guard and Reserve Equipment Appropriations (NGREA) have been vital in the effort to improve Army Reserve equipping. Although the Army Reserve received \$182.9M in NGREA supplemental funding for fiscal year 2008, a shortfall of more than \$6.85B remains.

A. Current Status of the Army Reserve

1. General Overview

The Army Force Generation (ARFORGEN) Model is the central process by which the Army will meet the demands of a future dominated by persistent conflict. Rather than respond to events, the Army plans to shape events by managing the supply of ground forces to the Combatant Commanders (COCOM) and creating a process by which the Army can seamlessly produce and deploy trained and ready forces to sustain the demands of the COCOMs almost indefinitely, while retaining the ability to fully mobilize for a general war.

The impact on the Army Reserve is to place our Soldiers and units on a five year cycle, starting in Year One (Reset), when units and Soldiers reset themselves, their careers and their families, progressing through increasingly more difficult individual and collective training objectives in Year Two and Three (Train/Ready 1 and 2), validating their readiness to mobilize in Year 4 (Train/Ready 3) and mobilizing and deploying in Year 5 (Available). Upon completion of Year 5, units and Soldiers will return to Year One and begin the process again. Essentially, 15–20 percent of the Army Reserve, other than some types of headquarters and Generating Force organizations, will be aligned to each phase of this process. As envisioned in Army Initiative Number Four "Operationalize the RC," the forces in Year Four and Five would be an "Operational Reserve," with Year Five forces committed to deploy and Year Four forces able to "surge" quickly in an emergency. Year One through Year Three would represent a "Strategic Reserve" that would require more time to get ready for deployment, while serving as a hedge against unforeseen events.

Army Reserve units are now expected to mobilize with 100 percent of their equipment available for deployment and to be ready to deploy within days of mobilization. This requires that Army Reserve units receive the resources needed to attain the training and readiness objectives of the ARFORGEN Model through intensive, realistic pre-mobilization training and to "surge" to meet unanticipated demands without damaging the ability of the units in the following phases of the ARFORGEN Model to continue to meet their objectives.

2. Status of Equipment

a. Equipment On-Hand (EOH)

The Army Reserve has about 73 percent of its required equipment on-hand. Some critical items remain at less than 50 percent fill. Shortfalls are detailed within the tables attached to this report. We need 100 percent of our required equipment to fully implement and sustain the ARFORGEN Model. The current equipment situation poses risk for both the ability to surge Year Four as an "Operational Reserve" for a foreign or domestic emergency and the ability to prepare Year One through Year Three to replace deployed forces or serve as a "strategic reserve."

Tables of Organization and Equipment (TOE) have not been completely updated to reflect Modular Force items. Modernized Basis of Issue Plans have not been fully applied, resulting in Army Reserve full equipment requirements being understated. An example is the continued authorization and requirement for rebuilt, thirty year old M35A2/3 light-medium tactical trucks instead of the modern Light-Medium Tactical Vehicle of the Family of Medium Tactical Vehicles (FMTV). While authorized substitutes enhance the overall equipment posture of the Army Reserve, these items have limitations on their employment and training usefulness. For example, equipment like the M35A3 2 1/2 ton truck is prohibited from deploying in support of ongoing contingencies. Their characteristics do not adequately replicate driving conditions for vehicles operating in theater. Twenty year old equipment such as M998 HMMWVs, M915 five-ton line-haul tractors, 4,000 lbs. and 10,000 lbs. Rough Terrain Forklifts (RTFL), and 50,000 lbs. Rough Terrain Container Handlers make up a significant part of our fleet. Such items may be satisfactory for administrative and training support, or even on occasion, DSCA or HLD missions. However, this equipment is more expensive to maintain, less capable than its Modular Force replacements, and less safe to operate.

What Modular Force equipment the Army Reserve does have must be used more intensively to meet pre-mobilization training objectives. Even equipment that isn't deployed is seeing utilization rates and service life expenditure higher than expected at the time of its design and procurement. The result is that what Modular Force equipment we do have is aging more quickly than programmed and will require overhaul and recapitalization earlier than projected to sustain its useful service live. Compounding this is the demand for Pre-deployment Training Sets; Army Reserve equipment is transferred to mobilization sites for training of the next deploying units while Army Reserve units in the early phases of ARFORGEN are left without required equipment.

Projecting equipment on-hand into the future is difficult. We expect to reach 85 percent fill of all requirements by the end of FY 2015. This projection is based on the programmed procurement for FYs 2010–2015; funding from the FY 2007, FY 2008, and FY 2009 Base Budget; the FY 2007 and FY 2008 Supplemental; and the expected force structure for FY 2015. This projection assumes there is no diversion of funds or equipment to higher priorities. Approximately 10 percent of Army Reserve equipment is not currently acceptable for theater use. The Army is committed to 100 percent fill of combat support and combat service support units regardless of component by the end of FY 2019. This objective, however, does not necessarily include only Modular Force items nor does it address the needs of the Generating Force in training, sustaining, and deploying the Army.

b. Average Age of Major Items of Equipment

Major items of equipment continue to plague the Army Reserve as they near or pass their economic useful life. A few examples include the current light and light-medium tactical truck fleets, materiel handling equipment, and engineer equipment. Aging equipment causes operational and sustainment costs to increase while equipment serviceability rates decrease, thereby having a negative impact on unit readiness. Such equipment also poses safety issues even when used only for training. The equipment inventory being used in support of OIF is aging more quickly than originally thought due to high use and a harsh operational environment. Army Materiel Command (AMC) estimates that 1 year in theater equates to 4-5 years of AC peacetime usage.

c. Compatibility of Current Equipment with Active Component

DA has been supportive of our deploying unit requirements, yet future deploying units undergoing Modular Force transformation lag behind. Some systems are being fielded at a "good

enough" level versus the required types and quantities, i.e., Movement Tracking System (MTS). A problem with this plan is that it impacts training. Not enough installation kits are available to equip all vehicles to allow for interchanging of the limited hardware between vehicles. Added funding would be used to support Life Cycle Replacements and transformation shortfalls along with New Equipment Training and MTS vehicle installation kits.

d. Maintenance Issues

i. Field Level Maintenance

The Army Reserve has met or exceeded the Army standard of 90 percent Fully Mission Capable status for its reportable equipment during FY 2008. Only 10 percent of the Army Reserve's equipment requiring maintenance, however, is reportable. The result is that under conditions of constrained resources, maintenance and services on non-reportable equipment is postponed. Also, the standard for Fully Mission Capable does not address peacetime safety requirements such as wipers and mirrors. Because the majority of Army Reserve training occurs away from a unit's home station, the lack of such safety features limits their ability to convoy equipment to a training site.

The facilities the Army Reserve uses are aging, some are unable to support Modular Force equipment, too small, and/or located in the wrong place to logistically support an Army Reserve transforming through Base Realignment and Closing, Army Reserve Command and Control Transformation, Grow the Army–Army Reserve Rebalancing, Total Army Analysis 10-15, and Modular Force conversions. The need to move equipment to regional training centers to execute individual and collective pre-mobilization training under the ARFORGEN Model and the geographic realignment of units leaves our current pattern of logistics facilities challenged to support the shifting densities of equipment.

Army Reserve Full Time Support and facilities were designed to support a "strategic" Reserve resourced at 75 percent of its requirements. When the Army Reserve reaches the goal established by the Army for FY 2019, there will be insufficient manpower and facilities to sustain the Army Reserve to meets its objectives as an "operational" Reserve within the ARFORGEN Model.

ii. National Level Maintenance

National level maintenance and sustainment programs are a critical part of our readiness. Because we need to retain significant quantities of older generation equipment, a means of extending the service life, reducing the operating, costs and improving safe operation of this equipment is required.

Recapitalization is the complete overhaul of equipment to a "0 hour/mile" or "like new" condition and sometimes includes configuration changes or technology insertions. Most recapitalization programs do not apply to the Army Reserve because the program is focused on combat equipment. One essential program, however, is the HMMWV M998 to M1097R1 recapitalization, where older M998s are rebuilt into M1097R1 models, which are able to carry both their payload and "add-on" armor without a reduction in performance and reliability. Currently, we project that M1097R1 models will make up 60 percent of our HMMWV fleet by FY 2016. Unfortunately, even in FY 2016, 40 percent of this fleet will be thirty year old M998 models, unable to carry both armor and payload as well as non-deployable.

Depot maintenance programs repair and return Army Reserve equipment to an "overhaul" standard. Sometimes this includes technology insertions when original replacement parts are no longer available. As an example, when certain of our cranes were overhauled, the original mechanical control panel was unavailable and had to be replaced with a digital control panel. These programs repair damaged and failed components and help extend the service life, reduce sustainment costs, and improve safe operation of our aging equipment that has not or cannot be replaced.

iii. Sustainment Initiatives

The following initiatives are examples of how the Army Reserve has partnered with industry to design and implement total rebuild and refurbishment programs.

There are three models of <u>4,000 lbs. Rough Terrain Forklifts</u>, the oldest of which was manufactured between 1981 and 1983 and already exceeds its expected 15-year economic useful life. The other models were manufactured between 1995 and 1996. Our requirement is for 581 forklifts. A shortfall of about 82 forklifts is projected through FY 2010. Between FY 2002–2007, we rebuilt a total of 397 of the older models. We expect to complete this program by FY 2012.

There are 423 <u>10,000 lbs. Rough Terrain Forklifts</u> on-hand in the Army Reserve. This forklift was manufactured and fielded from 1979 to 1985 and is past its expected 15-year life span. The All Terrain Lifter Army System (ATLAS) replaces this forklift. We require 972 ATLAS forklifts and 452 are on hand. All of the older 10,000 lbs. forklifts will be retained to meet requirements. We rebuilt the fleet between FY 2004– 2009.

We are authorized 2,299 <u>M915 Tractors</u> and will have 1,838 on-hand in FY 2010. These trucks are over 30 years old. The M915A1 truck, in its current configuration, does not meet the

requirements for modularity and deployment. Rebuilt M915 tractors are fitted with "glider" kits by Freightliner and by Army Reserve maintenance units and facilities. The overhauled tractors receive technical insertions that upgrade their capabilities, while their service life is extended, life cycle costs reduced, and safe operation ensured. The "new" tractor is designated the M915A4. We rebuilt 336 through the end of FY 2006 of which 184 were retained in theater. The rest of the M915 fleet is programmed for overhaul by FY 2013.



4,000 lbs. Truck, Forklift



10,000 lbs. Truck, Forklift



M915A4 Glider Truck Tractor

e. Modernization Programs and Shortfalls

Listed below are the some of the Army Reserve's top modernization shortages. These systems all have unfunded requirements that are not currently projected to be filled through Army procurement for modularity, NGREA, or Congressional additions.

The <u>Family of Medium Tactical Vehicles (FMTV)</u> is built around a common chassis and drive train, featuring over 80 percent commonality of parts and components between models and weight classes. The FMTV is a key logistics enabler and reduces the Army's logistical footprint by providing commonality of parts and components, reduced maintenance downtime, and lower operating and support costs than older trucks. It replaces maintenance-intensive trucks currently in the medium tactical vehicle fleet. Typical missions include line haul, local haul, unit mobility, unit re-supply, and other

missions in the combat, combat support (CS), and combat service support (CSS) roles. The FMTV consists of a common truck chassis that is used for several vehicle configurations in two payload classes. The Army Reserve has a projected unfunded requirement of 13,521 FMTVs. The FMTV is one of the Army Reserve's highest equipment priorities.

The <u>M26 JSTDS-SS</u> is a light-weight transportable multi-purpose decontamination system designed as a replacement for the M12 and M17 Decontamination Systems fielded since the 1970s. JSTDS-SS is a heated pressure washer that can be mounted on a HMMWV or trailer. It provides the Army Reserve with the capability of operational and thorough decontamination of G, V, and H chemical agents from fixed sites, ports of entry, airfields, logistic support bases, key command and control centers, and ships. The system can be employed independently, or in conjunction with conventional decontamination elements operating in tactical and peacetime environments. Currently, the Army Reserve has received no JSTDS-SS systems while requiring 842 systems for high priority CCMRF operations.

The Joint Cargo Aircraft (JCA) C-27J is a mid-range, multifunctional and interoperable aircraft, able to perform logistical re-supply, MEDEVAC, troop movement, airdrop operations, humanitarian assistance and homeland security missions in support of HLS for the U.S. Army and U.S. Air Force. The aircraft will play a key role in providing responsive aerial sustainment and critical re-supply support for the maneuver force to maintain operational momentum.

f. Overall Equipment Readiness

The Army Reserve is currently meeting the demands of mobilizing forces for rotation to Iraq and Afghanistan. The reason for this success has been the availability of equipment in theater, which has allowed us to meet "next deployer" validation and pre-mobilization training and readiness demands by continually shifting equipment between requirements. This success has been at the cost of accelerating the expenditure of programmed service life, delayed maintenance and



Joint Service Transportable Decontamination System-Small Scale (JSTDS-SS)



Joint Cargo Aircraft (C-27J)



Family of Medium Tactical Vehicles (FMTV)

services, and in the costs of transporting equipment around the country to meet transitory priorities.

The other cost is in the ability to meet a second major contingency, foreign or domestic. Currently, we could meet such a contingency by stripping our non-mobilized units. These units, however, would be unable to execute even the basic levels of individual and collective training and would require significant time to equip and train should they be called upon.

Even at 85 percent fill in FY 2016, we would be challenged to meet two simultaneous or near simultaneous major contingencies and sustain the rotational readiness of the ARFORGEN Model. We would be unable to rotate replacement units to a contingency for at least a year while we equip and train the follow-on forces.

The National Guard and Reserve Equipment Appropriation (NGREA) has been vital in the effort to improve Army Reserve readiness. Over the past five years, NGREA has addressed some critical shortfalls. During that time, the Army Reserve has received an average of \$72M annually to procure additional end items the Army has been unable to furnish through the normal budget process.

The following equipment was purchased with NGREA funds during FY 2008 for delivery in future fiscal years:

- Light Medium Tactical Vehicle Trailers—72 each
- Medium Tactical Vehicle Trailers—5 each
- 15 kW power units—22 each
- M4 Carbine Rifles—765 each
- Thermal Weapon Sights—356 each
- Chemical Agent Detection Systems—156 each
- M2 Machine Guns—80 each
- MK-19 Grenade Launchers—105 each
- Multi-band Super High Frequency Terminals (PHOENIX)—14 each
- Dump Trucks (M917A2)—12 each.

B. Other Equipment Issues

1. Equipment Readiness—Reset

The Reset of Army Reserve equipment at installations upon redeployment from theater is progressing well. The Army Reserve has coordinated with the Army and the Army Materiel Command (AMC) for funding and execution of maintenance and services on redeployed equipment. Sufficient funding has been provided and equipment is being Reset by the Installation

Directorates of Logistics within the timelines set by Reset policy and the ARFORGEN Model. Equipment is being returned to 10/20 standards and distributed by the Army Reserve as it becomes available to meet priorities, such as "next deployers."

The Army Reserve continues to have a concern with the automatic induction of Army Reserve equipment in theater into national level sustainment programs by the Army Materiel Command. This equipment is being transferred from Army Reserve property books to an AC stock record account. Once the equipment finishes overhaul, it is released by the Department of the Army for redistribution to the Army based on the Army Priority List. The Army is committed to replacing inducted items within 365 days, but the use of the supply system as the mode of replacement does not ensure this will happen. Redeploying units requisition replacement equipment with their peacetime priority, which under the Army Resourcing Priority List (ARPL) is below the priority set for all AC requirements.

2. NGREA—Anticipated Modernization Procurement

Major systems projected for receipt by the Army Reserve in FY 2009 and beyond as a result of Army P-1R, NGREA, or modification/rebuild programs include:

- M4 Carbine Rifles
- Force XXI Battlefield Command Brigade and Below (FBCB2)
- Tactical Trailers
- Night Vision Devices
- HEMTT Load Handling Systems
- Line Haul Trucks
- Medical Communications for Combat Casualty Care (MC4)
- Light Medium Tactical Vehicles
- HMMWVs
- HEMTT Recapitalization
- SINCGARS
- Generators and Associated Equipment
- Rough Terrain Container Handlers
- Container Handling Units
- Palletized Load Systems

• Defense Advanced Global Positioning Receivers.

C. Changes Since Last NGRER

The Army Reserve used NGREA funds to purchase three medical evacuation (MEDEVAC) helicopters: UH-60 A to L Recapitalization. This completes unit set fielding of two fully modernized Army Reserve Air Ambulance Companies. Model A-L Recapitalization is the DA-approved modernization path for legacy MEDEVAC helicopters.

The Army Reserve has positioned minimum essential equipment for training at the units' home stations and the remaining equipment is divided among the centralized managed individual and collective training sites. The premise behind this strategy is to maximize the use of the limited modernized equipment to provide trained and ready troops.

D. Future Years Program (FY 2010–FY 2012)

1. FY 2012 Equipment Requirements

Previously identified modernization shortfalls continue through FY 2012.

2. Anticipated New Equipment Procurements

Table 3 reflects the service-planned procurements from P-1R data.

3. Anticipated Transfer from AC to RC

Table 5 reflects data regarding equipment transfers from AC to the RC.

4. Anticipated Withdrawals from RC Inventory

Table 5 reflects Army Reserve projected equipment transfer and withdrawal quantities.

5. Equipment Shortages and Modernization Shortfalls at the End of FY 2012

The Army Reserve is projected to have continued shortfalls for the equipment listed below:

- Tactical Wheeled Vehicles—Family of Medium Tactical Vehicles (FMTV), Light Medium Tactical Vehicles (LMTV)
- Joint Cargo Aircraft (JCA): C-27J
- Movement Tracking System (MTS)
- Joint Service Transportable Decontamination System-Small Scale (JSTDS-SS)
- Joint Network Node.

E. Summary

The Army Reserve has made significant contributions to ongoing military operations, but equipment shortages, if not addressed, may hamper future preparedness for missions, both foreign and domestic. To provide deployable units, we have transferred large quantities of equipment to deploying units, an approach that has resulted in growing shortages in non-deployed units. We have about half of the

modern equipment we need to deploy to a domestic or foreign contingency outside the Middle East. These shortages could adversely affect the units' ability to provide support to civil authorities in the event of natural disasters.

We are now an operational, rather than a strategic, reserve, mobilizing and deploying Soldiers to provide needed forces for operations in Iraq, Afghanistan, and elsewhere. We must be equipped to leverage the full potential of all our Soldiers, not just those likely to deploy first. Iraq and Afghanistan has proven that the Army Reserve is a partner with the AC in a "total force" and the tools need to be available to deploy quickly without depleting capabilities critical to pre-mobilization training.

The Army faces several challenges in equipping its units: shortfalls, compatibility, modernization, and funding. The Army Reserve recognizes these challenges and is pursuing new strategies to mobilize, train, and equip our force. The benefits of these new training and equipping strategies to the Army are significant, by providing fully trained and equipped units and Soldiers while reducing the need to cross-level Soldiers and equipment upon receipt of mobilization orders. These strategies also position the Army Reserve for a successful transformation to the Modular Force Army.

The Army Reserve benefits from NGREA and Congressional additions that are key to our modernization efforts. While these funds are helpful, more needs to be done to improve procurement levels for equipping the Army so that Army Reserve requirements can be met. The pressure on procurement accounts to fully fund ongoing operations and modularity conversions prevents the modernization of our CS and CSS forces. The Army Reserve continues to do its part in OCO and remains a key provider of land forces to the Combatant Commanders. Through NGREA, our equipping posture has improved in key areas, alleviating equipment shortages for the Army Reserve. The Army Reserve has visibility of all NGREA procurements. However, we do not have complete visibility when equipment funding is decremented in the base budget. The P-1R is a subset of the Procurement Programs (P-1) and reflects the Army's budget estimate, not actual budget funding. Therefore, decrements and diversions from projected funding are common to fund other higher priority equipment systems. However, HQDA is conducting an Enterprise Work Group to improve visibility and increase transparency with regard to Army Reserve procurement funding and to improve HQDA's ability to track delivery of equipment.

The era of persistent conflict has increased the need for responsiveness across the full spectrum of operations. To achieve these goals, CS and CSS forces resident in the Army Reserve must be modernized and recapitalized on a synchronized and complementary timeline with the combat forces. Significant reductions in the logistics footprint will not be attained unless key logistics enablers such as FMTVs, HMMWVs, MHE, and communications systems are procured in sufficient quantities to support the requirements. The Army Reserve is an accessible and integral full partner of the Army. It is in America's interest to provide Army Reserve Soldiers the best and most modern equipment.

Future State: A Transformed Army Reserve



Skilled Soldiers and modern equipment—trained and ready—to go anywhere!

Consolidated Major Item Inventory and Requirements

NOTE: This table provides a comprehensive list of selected major items of equipment. It provides the quantity onhand (QTY O/H) projected to be in the inventory at the beginning/end of the selected fiscal year (FY). It also provides the quantity required (QTY REQ) needed to meet the full wartime requirements of the Reserve component. In accordance with Title 10, the QTY REQ number provides the recommendations as to the quantity and type of equipment which should be in the inventory of each Reserve component. Unit cost values are in dollars.

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H		End FY 2012 QTY REQ
ROTARY WING AIRCRAFT							
HELICOPTER, ATTACK AH-64D (APACHE)	H48918	\$25,128,800	28	28	31	48	48
HELICOPTER, CARGO CH-47D (CHINOOK)	H30517	\$5,000,000	36	36	36	36	36
HELICOPTER, UTILITY UH-60L/Q (BLACK HAWK)	H32361	\$4,855,000	3	0	0	0	0
FIXED WING AIRCRAFT							
AIRPLANE, CARGO, TRANSPORT, C-12R	A30062	\$3,068,422	4	4	4	4	12
AIRPLANE, CARGO, TRANSPORT, UC-35	Z95382	\$3,922,313	9	9	9	9	28
BRIDGE & VESSEL EQUIPMENT							
LOGISTIC SUPPORT VESSEL	V00426	\$26,748,800	3	3	3	3	3
LANDING CRAFT MECHANIZED, LCM-8	L36739	\$174,650	15	15	15	15	11
LANDING CRAFT UTILITY, LCU-2000	L36989	\$5,000,000	7	7	7	7	12
TUG, LARGE COASTAL & INLAND WATERWAY	T68330	\$12,500,000	3	3	3	3	3
INTERIOR BAY BRIDGE, FLOATING	K97376	\$62,910	248	248	263	278	242
RAMP BAY, FLOATING BRIDGE	R10527	\$70,575	97	103	109	115	98
RAMP LOADING VEHICLE	R11154	\$7,229	165	165	165	165	112
TRANSPORTER, FLOATING BRIDGE	X23277	\$102,218	10	10	10	10	4
BRIDGE ERECTION SET, FIXED BRIDGE, 97CLE53	C22126	\$488,354	8	7	7	7	6
BRIDGE, FIXED HIGHWAY, MILB11844	C23017	\$303,673	1	1	1	1	2
BRIDGE ERECTION SET, FIXED BRIDGE, 97CLE52	C22811	\$964,515	14	8	10	10	10
CHEMICAL DEFENSIVE EQUIPMENT							
CHEMICAL AGENT ALARM, M8A1	A32355	\$8,432	871	995	240	281	185
CHEMICAL AGENT MONITOR, IMPROVED (ICAM)	C05701	\$7,500	4,625	5,501	5,607	5,789	5,900
COLLECTIVE PROTECTION EQUIPMENT, NBC, M20	C79000	\$18,391	179	193	263	333	1,024
DECONTAMINATING APPARATUS, M17	D82404	\$23,121	834	843	845	883	890
DECONTAMINATING APPARATUS, M12	F81880	\$30,968	82	86	92	92	92
MASK, PROTECTIVE, COMBAT VEHICLE, M42	M18526	\$640	1,870	3,034	3,339	3,593	3,710
MASK, CHEMICAL-BIOLOGICAL, M40	M12418	\$202	150,723	148,993	148,019	151,348	62,883
MASK, CBR PROTECTIVE FIELD, M17A1	M11895	\$93	143	1,971	3,226	3,235	3,232
RADIAC SET, AN/PDR-75	R30925	\$2,978	986	1,203	1,258	1,306	1,940
RADIAC SET, AN/UDR-13	R31061	\$631	10,251	10,286	10,218	10,239	10,310
RADIACMETER, IM-93A/UD	Q20935	\$73	2,686	2,101	2,354	2,333	309
SMOKE GENERATOR, M157	G51840	\$26,622	24	24	24	24	0
SMOKE GENERATOR, M56	G58151	\$145,000	144	144	144	144	0
SMOKE GENERATOR, M58	G87229	\$410,000	21	21	21	21	0
MOUNTING KIT, SMOKE GENERATOR, M284	M17931	\$3,183	24	24	24	24	25
COMMUNICATIONS EQUIPMENT							
CENTRAL OFFICE COMM, AN/TTC-39A(V)1	C41311	\$2,801,000	1	0	1	1	1

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ		
DATA TRANSFER DEVICE, AN/CYZ-10	D78555	\$1,899	1,322	84	140	196	395		
RADAR SIGNAL DETECTION SET, AN/APR-39A(V)1	D03159	\$49,272	108	148	148	148	160		
RADIO SET, AN/GRC-106	Q32756	\$18,602	77	81	84	84	31		
RADIO SET, AN/GRC-193A	H35404	\$37,000	304	309	306	306	1,052		
RADIO SET, AN/GRC-213	R30895	\$20,000	209	218	228	228	1,173		
RADIO SET, AN/PRC-104A	R55200	\$12,500	117	169	160	160	440		
RADIO SET, SINCGARS AN/VRC-90A	R67908	\$13,178	1,712	1,585	1,853	1,958	1,958		
RADIO SET, SINCGARS AN/VRC-91A	R68010	\$23,249	367	7	7	7	7		
RADIO SET, SINCGARS AN/VRC-92A	R45407	\$21,238	191	189	237	267	, 140		
RADIO SET, SINCGARS AN/VRC-119A	R83005	\$10,117	549	250	279	287	20		
RADIO SET, SINCGARS AN/VRC-119A	R67160	\$12,109	133	161	2/9	200	20		
RADIO SET, SINCGARS AN/VRC-88A	R67194	\$12,109	773	752	760	760	112		
RADIO SET, SINCGARS AN/VRC-89A	R44863	\$12,519	255	253	263	263	112		
RADIO SET, SINCGARS AN/VRC-89A RADIO TERMINAL SET, AN/TRC-170 (V)2									
, ()	R92967	\$2,000,000	11	11	11	11	0		
RADIO TERMINAL SET, AN/TRC-170 (V)3	R93035	\$1,000,000	14	14	14	18	20		
SPEECH SECURITY EQUIPMENT, TSEC/KY-57	S01373	\$1,930	309	229	251	251	225		
SPEECH SECURITY EQUIPMENT, TSEC/KY-58	S01441	\$3,063	283	51	51	51	48		
TELEPHONE, DIGITAL NON-SECURE, TA-1035/U	T45408	\$2,459	2,097	2,098	2,098	2,098	0		
RADIO TERMINAL, TELEPHONE, AN/VRC-97	T55957	\$110,000	494	496	496	496	121		
FACSIMILE, LIGHTWEIGHT DIGITAL, AN/UXC-7	L67964	\$21,972	644	655	655	655	121		
ELECTRONIC TRANSFER KEYING DEVICE, KYK-13	E98103	\$235	2,489	2,512	2,516	2,516	125		
DIGITAL DATA GENERATOR, SG-1139/G	D37041	\$5,100	74	74	74	74	51		
NET CONTROL DEVICE, KYX-15/TSEC	N02758	\$2,300	999	1,013	1,013	1,013	79		
SPECTRUM ANALYZER, AN/USM-489(V)1	S01416	\$37,378	7	15	17	17	40		
CONSTRUCTION EQUIPMENT									
ASPHALT MIXING PLANT	M57048	\$1,254,600	4	4	4	6	7		
COMPACTOR, HIGH SPEED, SELF-PROPELLED, CCE	E61618	\$135,186	48	48	48	48	50		
CRANE, 20-TON, WHL-MTD	F39378	\$162,393	5	5	3	3	22		
CRANE, 7.5-TON, WHL-MTD	C36151	\$58,481	49	48	47	47	20		
CRANE, 25-TON, WHL-MTD, ATEC AT422T	C36586	\$226,341	115	115	117	117	85		
CRANE, WHL-MTD, ROUGH TERRAIN (RTCC)	C39398	\$450,194	77	74	74	74	45		
CRANE-SHOVEL, CRAWLER MOUNTED, 50-TON	F40474	\$270,000	3	3	3	3	0		
CRANE, 25-TON, TRK-MTD, CCE	F43429	\$160,953	17	17	17	17	6		
CRUSHING, SCREENING, & WASHING PLANT, 150 TPH	F49673	\$1,543,579	4	4	4	4	0		
ROAD GRADER, MOTORIZED, CCE	G74783	\$67,724	209	209	209	209	120		
ROAD GRADER, MOTORIZED	J74920	\$62,181	1	1	1	1	0		
SCOOP LOADER, CCE	L76321	\$75,450	43	57	64	64	64		
SCOOP LOADER, 950BNS	L76556	\$58,890	135	135	135	135	33		
SCRAPER EARTH MOVING SP, 14-18 CU YD	S56246	\$120,410	200	201	201	201	200		
SPREADER LIFT FRT CON	U12203	\$4,490	88	88	88	88	6		
TRACTOR, WHLD EXCAVATOR, SEE	T34437	\$110,000	293	294	305	346	344		
ELECTRICAL GENERATION									
GENERATOR SET, TRAILER MOUNTED, PU-798	G42170	\$13,000	265	449	457	457	414		

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ
GENERATOR SET, TRAILER MOUNTED, PU-406	J36383	\$20,810	34	7	32	31	28
GENERATOR SET, MEP-002A	J35813	\$8,332	191	76	95	308	193
GENERATOR SET, MEP-003A	J35825	\$13,635	178	13	35	36	101
GENERATOR SET, MEP-805A	G74575	\$26,705	102	113	126	126	109
GENERATOR SET, MEP-806A	G12034	\$25,073	67	68	69	69	44
GENERATOR SET, MEP-802A	G11966	\$12,798	1,403	1,511	1,644	2,047	2,342
GENERATOR SET, MEP-803A	G74711	\$14,345	590	735	707	709	812
GENERATOR SET, MEP-804A	G12170	\$16,160	154	223	217	217	187
GENERATOR SET, MEP-009A	J40158	\$49,440	7	7	7	7	0
GENERATOR SET, MEP-016A	J45699	\$4,491	141	164	284	286	1,930
GENERATOR SET, TRAILER MOUNTED, PU-803	G35851	\$28,521	106	119	147	142	131
GENERATOR SET, TRAILER MOUNTED, PU-802	G53778	\$19,080	255	310	329	336	503
GENERATOR SET, TRAILER MOUNTED, PU-805	G78306	\$31,596	46	41	39	39	36
POWER PLANT, AN/MJQ-36	P28151	\$33,627	6	6	6	6	1
POWER PLANT, AN/MJQ-35	P28083	\$11,000	14	35	332	564	35
POWER PLANT, AN/MJQ-10	P27819	\$45,447	17	16	25	27	27
POWER PLANT, AN/MJQ-40	P42126	\$63,941	24	25	17	15	10
POWER PLANT, AN/MJQ-41	P42194	\$70,891	5	7	7	7	7
POWER PLANT, AN/NJQ-37	P42262	\$36,558	56	61	61	61	18
POWER SUPPLY, PP-6224/U	P40750	\$1,491	1,392	1,424	1,423	1,423	4,555
MEDICAL EQUIPMENT						,	,
ANESTHESIA APPARATUS	A62773	\$19,679	22	22	28	28	22
COMBAT AUTOMATED SERVICE SUPPORT-MEDICAL (CASS-M) COMPUTER SYSTEM	C18514	\$5,000	0	22	12	16	16
DEFIBRILLATOR MONITOR RECORDER	D86072	\$31,885	131	263	735	763	327
MEDICAL EQUIPMENT SET, FIELD SICK CALL	M30156	\$15,000	61	122	125	125	120
MEDICAL EQUIPMENT SET, FIELD TRAUMA	M30499	\$45,000	78	112	115	115	109
MEDICAL MATERIEL SET, CENTRAL MATERIAL SERVICE, DEPMEDS	M08417	\$736,613	41	42	40	40	58
MEDICAL MATERIEL SET, INTERMEDIATE CARE WARD, DEPMEDS	M08599	\$188,217	40	40	40	40	195
MEDICAL MATERIEL SET, OPERATING ROOM, DEPMEDS	M72936	\$485,839	39	41	41	41	58
MEDICAL MATERIEL SET, POST-OP/ICU WARD, DEPMEDS	M09576	\$331,047	46	46	46	46	74
MEDICAL MATERIEL SET, X-RAY, DEPMEDS	M72300	\$281,240	3	3	3	3	21
MEDICAL MATERIEL SET, X-RAY RADIOGRAPHIC, DEPMEDS	M86675	\$203,223	3	4	4	4	16
OPERATING AND TREATMENT UNIT, FIELD DENTAL	P19377	\$15,874	266	252	162	162	162
OSCILLOSCPE, AN/USM-488	P30693	\$2,084	251	252	252	252	158
TENT, MEDICAL, EXTENDABLE, MODULAR (TEMPER)	T47745	\$36,429	105	105	105	105	381
TENT, SURGICAL, EXTENDABLE, MODULAR (TEMPER)	T47813	\$26,578	91	97	106	106	115
HMMWV AMBULANCE, 2-LITTER, M996	T38707	\$49,357	6	6	6	6	4
HMMWV AMBULANCE, 4-LITTER, M997	T38844	\$113,998	206	206	206	206	276
MISSILES							
JAVELIN ANTI-TANK MISSILE CONTROL LAUNCH UNIT	C60750	\$126,824	16	16	16	23	44

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	-	End FY 2012 QTY REQ
OTHER PROCUREMENT							
LASER IR OBSERVATION SET, AN/GVS-5	L40063	\$4,879	24	0	0	0	0
LASER IR OBSERVATION SET (MELIOS), AN/PVS-6	M74849	\$22,015	13	141	189	244	1,458
NIGHT-VISION SIGHT, AN/UAS-12	N04982	\$116,014	20	20	20	20	2
NIGHT-VISION SIGHT, AN/PVS-4 W/IMG	N04732	\$8,535	2,684	3,610	3,737	3,769	716
NIGHT-VISION GOGGLES, AN/PVS-7B	N05482	\$3,578	38,983	62,680	69,974	76,854	76,779
NIGHT-VISION GOGGLES, AN/PVS-5	N04456	\$4,300	7,134	7,229	7,249	7,586	2,275
NIGHT-VISION SIGHT-TRACKER, IR, AN/TAS-5	N23721	\$23,099	0	0	0	0	1
VIEWER INFRARED, AN/PAS-7	Y03104	\$16,779	27	27	27	27	0
NAVIGATION SYSTEM, PSN-11	N95862	\$2,134	1,858	1,120	1,126	1,710	1,252
BATH UNIT, PORTABLE, SH-63LP	B43663	\$8,186	13	13	13	13	6
BATTLE COMMAND SUSTAINMENT SPT SYS (BCS3)	C56827	\$56,688	0	4	9	9	14
CLEANER, STEAM PRESSURE JET, TRL-MTD	C32887	\$18,528	508	508	508	508	22
REFRIGERATED CONTAINER ASSEMBLY	C84541	\$58,326	189	216	309	363	448
FLOODLIGHT SET, TRAILER MOUNTED	F79334	\$4,489	183	183	183	183	1,120
FOOD SANITATION CENTER	S33399	\$33,865	322	423	448	457	647
LAUNDRY UNIT, TRAILER MOUNTED	L48315	\$54,944	46	46	46	46	24
MINE DETECTING SET MINE, AN/PSS-11	G02341	\$2,944	888	848	1,462	1,825	1,066
REFRIGERATION UNIT, 10000 BTU	R61428	\$10,700	300	300	300	300	300
PRINTING PLANT, TRANSPORTABLE	P61665	\$283,221	4	4	4	4	2
PROCESSING MACHINE RAD FILM TABLE TOP	P98514	\$12,089	0	0	0	0	8
SHELTER, TACTICAL EXPANDABLE	S01359	\$223,219	74	74	74	74	156
PETROLEUM EQUIPMENT							
FUEL SYSTEM SUPPLY POINT	J04717	\$30,213	237	237	243	243	155
FORWARD AREA REFUELING EQUIPMENT (FARE)	H94824	\$9,093	89	93	96	96	80
LABORATORY, PETROLEUM SEMITRAILER MOUNTED	L33800	\$650,000	11	11	11	11	14
PUMPING ASSEMBLY, FLAMMABLE LIQUID, 350-GPM	P97119	\$26,244	139	139	139	139	64
TANK ASSEMBLY, 20000-GAL POL	T12620	\$6,065	161	168	168	168	328
TANK ASSEMBLY, 10000-GAL POL	V12552	\$6,990	215	213	213	213	72
TERMINAL, TACTICAL PETROLEUM, MARINE	T56041	\$1,400,873	0	0	0	0	12
TESTING KIT, AVIATION FUEL CONTAMINATION	T05741	\$4,565	190	190	190	190	286
FILTER-SEPARATOR LIQUID FUEL, DL13217E9320	H52087	\$4,041	740	740	740	740	374
REPAIR EQUIPMENT							
ELECTRONIC SHOP, AN/ASM-189	H01855	\$121,000	64	59	37	37	50
ELECTRONIC SHOP, AN/ASM-146	H01907	\$124,000	63	86	108	108	176
ELECTRONIC SHOP, AN/ASM-147	H01912	\$82,000	27	20	26	26	29
INSTUMENT REPAIR SHOP, M185A3	K90188	\$94,021	2	2	2	2	0
SHOP EQUIPMENT, AUTO MAINTENANCE & REPAIR	T24660	\$120,827	29	35	41	46	34
SHOP EQUIPMENT, AUTO MAINTENANCE & REPAIR	T25756	\$46,988	6	6		6	2
SHOP EQUIPMENT, AUTO MAINTENANCE & REPAIR	T25619	\$58,235	27	27	27	27	29
TEST SET, RADIO, AN/GRM-114	T87468	\$11,822	83	85		85	26
TEST SET, ELECT SYS DIRECT SUPPORT (DESETS)	T52849	\$561,312	13	13		13	0
TOOL OUTFIT, HYDRAULIC SYSTEM TEST & REPAIR	T30377	\$83,000	38			38	205

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ
WELDING SHOP, TRAILER MOUNTED	W48391	\$43,250	175	150	151	158	82
WELDING SHOP, TRAILER MOUNTED	Y48323	\$9,603	48	109	112	112	110
TACTICAL VEHICLES							
HMMWV CGO/TRP CARRIER, M998	T61494	\$36,076	11,082	11,939	12,183	12,204	13,098
HMMWV ARMT CARRIER, ARMD, M1025	T92242	\$74,969	465	1,082	1,264	1,404	2,058
HMMWV SHELTER CARRIER, M1037	T07543	\$36,932	103	3	16	15	8
HMMWV CGO/TRP CARRIER, W/W, M1038	T61562	\$36,672	372	414	417	417	421
HMMWV SHELTER CARRIER, HEAVY, M1097	T07679	\$61,665	1,528	825	560	540	513
LMTV 2.5-TON CARGO TRUCK, M1078	T60081	\$176,428	1,705	1,785	1,799	1,797	3,118
LMTV 2.5-TON CARGO TRUCK, M1078 W/W	T60149	\$115,639	318	340	332	336	546
LMTV 2.5-TON CARGO TRUCK, W/ LAPES/AD, M1081	T41995	\$101,742	0	3	3	3	12
LMTV 2.5-TON CARGO TRUCK, M1079	T93484	\$162,060	23	46	46	46	272
MTV 5-TON CARGO TRUCK, M1083	T61908	\$128,076	803	1,011	1,251	1,472	2,869
MTV 5-TON CARGO TRUCK, M1085	T61704	\$118,791	6	3	17	59	59
MTV 5-TON DUMP TRUCK, M1090	T64911	\$141,557	73	91	91	91	647
MTV 5-TON TRACTOR TRUCK, M1088	T61239	\$142,132	200	214	212	215	1,209
MTV 5-TON WRECKER, M1089	T94709	\$331,680	82	125	144	144	290
HEMTT CARGO TRUCK, W/MED CRANE, M985	T39586	\$272,033	53	48	118	118	118
HEMTT CARGO TRUCK, W/LT CRANE, M977	T59278	\$251,388	45	17	12	12	12
HEMTT CARGO TRUCK, W/LT CRANE, M977 W/W	T39518	\$260,574	22	56	64	64	64
HEMTT WRECKER, M984	T63093	\$379,000	225	202	207	207	347
HEMTT FUEL TANKER, 2500GAL, M978	T87243	\$268,440	179	181	185	189	229
HEMTT FUEL TANKER, 2500GAL, M978 W/W	T58161	\$278,409	44	35	37	37	45
HEMTT COMMON BRIDGE TRANSPORTER, M1977	T91308	\$226,150	397	397	453	507	448
TRUCK, YARD TRACTOR, M878	T60353	\$96,051	122	139	154	221	272
TRUCK TRACTOR, 14-TON LINE HAUL, M915	T61103	\$162,968	1,951	2,019	2,082	2,287	2,299
TRUCK TRACTOR, 14-TON LET, M916	T91656	\$164,760	544	544	604	670	884
TRUCK TRACTOR, 20-TON MET, M920	T61171	\$74,288	279	279	279	279	51
TRUCK TRACTOR, HETS, M1070	T59048	\$256,704	409	436	447	508	488
PLS TRANSPORTER, M1074	T41067	\$288,015	13	0	0	0	0
PLS TRANSPORTER, M1075	T40999	\$276,410	827	828	1,136	1,235	1,596
PLS DEMOUNTABLE CARGO BED	B83002	\$16,633	3,499	3,949	5,411	5,411	10,979
PLS TRAILER, 16.5 TON, M1076	T93761	\$46,731	1,622	1,622	1,747	1,765	2,361
TRUCK, FORKLIFT, ROUGH TERRAIN, M-10A	T49119	\$75,923	255	249	228	226	81
TRUCK, FORKLIFT, ROUGH TERRAIN, DV43	T48941	\$159,138	80	82	82	90	40
TRUCK, FORKLIFT, ATLAS	T73347	\$100,199	604	625	632	664	533
TRUCK, FORKLIFT, ROUGH TERRAIN	T48944	\$72,370	265	268	268	258	206
TRUCK, FORKLIFT, ROUGH TERRAIN	T49255	\$47,692	503	514	518	520	516
TRUCK, TACTICAL FIRE FIGHTING	H56391	\$151,000	23	22	22	22	2
SEMITRAILER VAN, 6-TON REPAIR PARTS, M749/M750	S74832	\$32,952	49	49	46	46	24
SEMITRAILER, 34-TON FLATBED, M872	S70159	\$43,252	1,825	1,827	1,827	1,836	1,579
SEMITRAILER, FUEL TANK, M131A5C	S72983	\$15,064	1	6	6	6	6
SEMITRAILER, 22.5-TON FLATBED, M871	S70027	\$26,500	1,153	1,154	1,181	1,184	866

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Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ
SEMITRAILER TANKER, 5000-GAL BULK HAUL, M967	S10059	\$77,550	1,163	1,159	1,159	1,159	1,080
SEMITRAILER, FUEL TANK, M1062	S73119	\$27,774	287	360	360	360	480
SEMITRAILER TANKER, 5000-GAL POL, M969	S73372	\$97,413	366	293	298	298	315
SEMITRAILER VAN, ELECTRONIC, M373A2	S74353	\$24,125	10	10	14	14	0
SEMITRAILER VAN, SUPPLY, M129A1C	S75175	\$84,466	210	218	266	266	15
TRAILER, BOLSTER, 4 TON, M796	W94536	\$9,618	452	452	452	452	214
TRAILER, CARGO, 3/4-TON, M101	W95537	\$4,474	944	302	315	321	501
TRAILER, HEMAT, 11-TON, M989A1	T45465	\$34,714	69	78	99	105	108
TRACKED & WHEELED COMBAT SYSTEMS							
RECOVERY VEHICLE, MEDIUM, FT, M88A1	R50681	\$1,210,755	21	22	25	25	58
TRACTOR, FULL TRACKED, CAT D7F DV29	W76816	\$205,000	270	257	262	274	241
TRACTOR, FULL TRACKED, CAT D7F DV29	W83529	\$245,275	235	237	237	237	150
WATER EQUIPMENT							
DISTRIBUTOR WATER TANK, 6K GAL TLR-MTD	D28318	\$30,289	62	62	62	62	138
HYPOCHLORINATION UNIT, WATER PURIFICATION	K60988	\$14,342	54	54	54	54	36
FORWARD AREA WATER POINT SUPPLY SYSTEM	F42612	\$19,484	52	57	85	91	84
TACTICAL WATER DISTRIB EQ SET, (TWDS RDF)	T09094	\$660,000	21	21	21	21	6
TANK, ASSEMBLY, WATER, 3000-GAL	T19033	\$2,377	135	114	96	96	0
TANK, FABRIC COLLAPSIBLE, WATER, 3000-GAL	V15018	\$1,762	4	4	4	4	42
TANK, LIQUID DISPENSING UNIT, TRL-MTD	V19950	\$2,000	457	448	446	446	736
WATER STORAGE/DISTRIBUTION SET, 800K-GAL	W37311	\$200,508	12	12	12	12	0
ROWPU WATER PURIFICATION SYSTEM, 3000-GPH	W47225	\$748,000	54	56	56	56	20
PUMPING ASSEMBLY, WATER DISTRIBUTION, 600GPM	P97369	\$27,426	139	139	139	139	108
WEAPONS							
MACHINE GUN, 5.56MM, M249	M09009	\$2,653	11,758	11,932	12,482	12,479	10,656
MACHINE GUN, 7.62MM, M240B	M92841	\$6,000	881	5,375	6,180	6,403	6,413
MACHINE GUN, GRENADE, 40MM, MK19 MOD III	M92362	\$15,320	1,953	2,521	2,657	2,749	2,825
RIFLE, 5.56MM, M16A2	R95035	\$449	114,351	108,516	116,103	118,580	104,094
RIFLE, 5.56MM, M16A4	R97175	\$587	3,688	3,801	4,095	4,213	3,558
CARBINE, 5.56MM, M4	R97234	\$587	16,690	23,131	23,183	27,104	19,081

NOTE: This table provides the average age of selected major items of equipment. The average age provides a projected average age of the fleet at the start of FY 2009.

Nomenclature	Equip No.	Average Age	Remarks
ROTARY WING AIRCRAFT			
HELICOPTER, ATTACK AH-64D (APACHE)	H48918	20	
HELICOPTER, CARGO CH-47D (CHINOOK)	H30517	18	
HELICOPTER, UTILITY UH-60L/Q (BLACK HAWK)	H32361	12	
FIXED WING AIRCRAFT	1102001		
AIRPLANE, CARGO, TRANSPORT, C-12R	A30062	12	
AIRPLANE, CARGO, TRANSPORT, UC-35	Z95382	9	
BRIDGE & VESSEL EQUIPMENT		-	
RAMP LOADING VEHICLE	R11154	18	
CONSTRUCTION EQUIPMENT			
ASPHALT MIXING PLANT	M57048	13	
CRANE, WHEEL MOUNTED, HYDRAULIC, 25 TON, ALL TERRAIN, AT422T	C36586	9	
CRANE, WHEEL MOUNTED, HYDRAULIC, ROUGH TERRAIN (RTCC)	C39398	19	
CRANE, TRUCK MOUNTED, HYDRAULIC, 25-TON, CCE	F43429	31	
SCOOP LOADER, CCE	L76321	33	
SCOOP LOADER, 950BNS	L76556	31	
SCRAPER, EARTH MOVING, SELF-PROPELLED, CCE	S56246	23	
ELECTRICAL GENERATION			
GENERATOR SET, TRAILER MOUNTED, PU-406	J36383	33	
GENERATOR SET, TRAILER MOUNTED, PU-802	G53778	12	
MEDICAL EQUIPMENT			
TRUCK, AMBULANCE, M996 (HMMWV)	T38707	23	
TRUCK, AMBULANCE, M997 (HMMWV)	T38844	20	
OTHER PROCUREMENT			
LAUNDRY UNIT, TRAILER MOUNTED	L48315	28	
REPAIR EQUIPMENT			
ELECTRONIC SHOP, AN/ASM-189	H01855	28	
INSTUMENT REPAIR SHOP, M185A3	K90188	42	
TACTICAL VEHICLES			
TRUCK, UTILITY, M998 (HMMWV)	T61494	16	
TRUCK, UTILITY, M1025 (HMMWV)	T92242	19	
TRUCK, UTILITY, M1037 (HMMWV)	T07543	18	
TRUCK, UTILITY, M1038 (HMMWV)	T61562	19	
TRUCK, UTILITY, M1097 (HMMWV)	T07679	9	
TRUCK, CARGO, LMTV, M1078	T60081	10	
TRUCK, CARGO, LMTV, M1078, WITH WINCH	T60149	10	
TRUCK, CARGO, LMTV, M1081	T41995	7	
TRUCK, VAN, LMTV, M1079	T93484	7	
TRUCK, CARGO, MTV, M1083	T61908	4	
TRUCK, CARGO, MTV, M1085	T61704	6	
TRUCK DUMP, MTV, M1090	T64911	9	
TRUCK, TRACTOR, MTV, M1088	T61239	9	
TRUCK, WRECKER, MTV, M1089	T94709	8	

USAR Average Age of Equipment

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Nomenclature	Equip No.	Average Age	Remarks
TRUCK, CARGO, W/MED CRANE, M985 (HEMTT)	T39586	20	
TRUCK, CARGO, 10 TON, W/LT CRANE (HEMTT)	T59278	20	
TRUCK, CARGO, W/LT CRANE (HEMTT)	T39518	20	
TRUCK, WRECKER, M948E1 (HEMTT)	T63093	8	
TRUCK, TANKER, FUEL, 2500G (HEMTT)	T87243	19	
TRUCK, TANKER, FUEL, 2500G (HEMTT)	T58161	18	
TRUCK, COMMON BRIDGE TRANSPORTER (CBT),	T91308		
M1977		12	
TRUCK, TRACTOR, M878	T60353	21	
TRUCK, TRACTOR, LINE HAUL, M915	T61103	26	
TRUCK, TRACTOR, LIGHT EQUIP TRANSPORTER, M916	T91656	15	
TRUCK, TRACTOR, MEDIUM EQUIP TRANSPORTER, M920	T61171	28	
TRUCK, TRACTOR, HEAVY EQUIP TRANSPORTER, M1070	T59048	14	
TRANSPORTER, PALLETIZED LOAD SYSTEM (PLS), M1074	T41067	14	
TRANSPORTER, PALLETIZED LOAD SYSTEM (PLS), M1075	T40999	12	
CARGO BED, DEMOUNTABLE, PLS, M1077A1	B83002	14	
TRAILER, PALLETIZED LOAD SYSTEM (PLS), M1076	T93761	13	
TRUCK, FORKLIFT, ROUGH TERRAIN, M-10A	T49119	25	
TRUCK, FORKLIFT, ROUGH TERRAIN, DV43	T48941	25	
TRUCK, FORKLIFT, ALL TERRAIN LIFTER, ARMY SYSTEM (ATLAS)	T73347	7	
TRUCK, FORKLIFT, ROUGH TERRAIN	T48944	17	
TRUCK, FORKLIFT, ROUGH TERRAIN	T49255	24	
TRUCK, TACTICAL FIRE FIGHTING	H56391	18	
SEMITRAILER VAN, REPAIR PARTS STORAGE	S74832	35	
SEMITRAILER, BREAKBULK/CONTAINER TRANSPORTER	S70159	25	
SEMITRAILER, FUEL TANK, M131A5C	S72983	41	
SEMITRAILER, BREAKBULK/CONTAINER TRANSPORTER, M871	S70027	15	
SEMITRAILER, FUEL TANK, M967	S10059	25	
SEMITRAILER, FUEL TANK, M1062	S73119	17	
SEMITRAILER, FUEL TANK, M969	S73372	23	
SEMITRAILER VAN, ELECTRONIC, M373A2	S74353	22	
SEMITRAILER VAN, SUPPLY, M129A1C	S75175	27	
TRAILER, BOLSTER, GENERAL PURPOSE, 4 TON, M796	W94536	31	
TRAILER, CARGO, 3/4 TON, M101	W95537	35	
TRAILER, FLAT BED, HEMAT, M989	T45465	15	
TRACKED & WHEELED COMBAT SYSTEMS			
RECOVERY VEHICLE, MEDIUM, FULL-TRACKED, M88A1	R50681	35	
WATER EQUIPMENT			
DISTRIBUTOR, WATER TANK TYPE, 6000 GL	D28318	24	

Service Procurement Program - Reserve (P-1R)

NOTE: This table identifies the dollar value of equipment programmed to be procured with Service procurement funds as identified in the P-1R exhibit of the FY 2010 President's Budget Submission. All values are costs in dollars, and ammunition procurements have been excluded. Deliveries of procured equipment normally take one to two years before they arrive in the inventory; e.g., items procured in FY 2010 would be expected to arrive in RC inventories in FY 2011 or FY 2012.

Nomenclature	FY 2010	FY 2011	FY 2012
OTHER MISSILES			
JAVELIN (AAWS-M) SYSTEM SUMMARY	\$1,923,000		
TRACKED COMBAT VEHICLES			
STRYKER VEHICLE	78,551,000		
IMPROVED RECOVERY VEHICLE (M88A2 HERCULES)	13,200,000		
JOINT ASSAULT BRIDGE	35,661,000		
WEAPONS AND OTHER COMBAT VEHICLES			
M240 MEDIUM MACHINE GUN (7.62MM)	11,673,000		
MACHINE GUN, CAL .50 M2 ROLL	4,626,000		
MK-19 GRENADE MACHINE GUN (40MM)	3,024,000		
M4 CARBINE	10,534,000		
TACTICAL AND SUPPORT VEHICLES			
TACTICAL TRAILERS/DOLLY SETS	13,811,000		
SEMITRAILERS, FLATBED	2,791,000		
SEMITRAILERS, TANKERS	1,018,000		
HI MOB MULTI-PURP WHLD VEH (HMMWV)	116,663,000		
FAMILY OF MEDIUM TACTICAL VEHICLES (FMTV)	363,193,000		
FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)	286,427,000		
ARMORED SECURITY VEHICLES (ASV)	18,585,000		
MINE PROTECTION VEHICLE FAMILY	122,300,000		
TRUCK, TRACTOR, LINE HAUL, M915/M916	22,221,000		
HVY EXPANDED MOBILE TACTICAL TRUCK EXT SERV P	22,697,000		
COMMUNICATIONS AND ELECTRONICS EQUIPMENT			
WIN-T - GROUND FORCES TACTICAL NETWORK	44,881,000		
NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE)	10,469,000		
SMART-T (SPACE)	112,000		
MEDICAL COMM FOR CBT CASUALTY CARE (MC4)	4,991,000		
TSEC - ARMY KEY MGT SYS (AKMS)	3,158,000		
INFORMATION SYSTEM SECURITY PROGRAM-ISSP	569,000		
PROPHET GROUND (MIP)	18,040,000		
NIGHT VISION DEVICES	31,606,000		
NIGHT VISION, THERMAL WPN SIGHT	9,093,000		
FORCE XXI BATTLE CMD BRIGADE & BELOW (FBCB2)	6,180,000		

USAR Service Procurement Program - Reserve (P-1R)

Nomenclature	FY 2010	FY 2011	FY 2012
TACTICAL OPERATIONS CENTERS	3,652,000		
AIR & MISSILE DEFENSE PLANNING & CONTROL SYSTEM (AMD PCS)	2,314,000		
TC AIMS II	1,851,000		
MANEUVER CONTROL SYSTEM (MCS)	1,025,000		
SINGLE ARMY LOGISTICS ENTERPRISE (SALE)	2,662,000		
CSS COMMUNICATIONS	7,331,000		
OTHER SUPPORT EQUIPMENT			
CBRN SOLDIER PROTECTION	80,198,000		
TACTICAL BRIDGING	14,225,000		
TACTICAL BRIDGE, FLOAT-RIBBON	29,619,000		
GRND STANDOFF MINE DETECTION SYSTEM (GSTAMIDS)	32,323,000		
FIELD FEEDING EQUIPMENT	16,357,000		
CARGO AERIAL DEL & PERSONNEL PARACHUTE SYSTEM	4,221,000		
DISTRIBUTION SYSTEMS, PETROLEUM & WATER	16,577,000		
WATER PURIFICATION SYSTEMS	1,993,000		
COMBAT SUPPORT MEDICAL	12,747,000		
MOBILE MAINTENANCE EQUIPMENT SYSTEMS	27,279,000		
LOADERS	2,840,000		
TRACTOR, FULL TRACKED	10,865,000		
HIGH MOBILITY ENGINEER EXCAVATOR (HMEE) FOS	1,868,000		
GENERATORS AND ASSOCIATED EQUIPMENT	45,717,000		
ROUGH TERRAIN CONTAINER HANDLER (RTCH)	8,492,000		
ALL TERRAIN LIFTING ARMY SYSTEM	9,250,000		
CALIBRATION SETS EQUIPMENT	1,340,000		
INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)	4,085,000		
TOTAL	\$1,596,828,000		

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

NOTE: This table identifies the dollar value of equipment originally programmed to be procured with the National Guard and Reserve Equipment Appropriation (NGREA). These funds are available for a threeyear period from the year of appropriation. Deliveries of procured equipment normally take one to two years from date of procurement before they arrive in the inventory; e.g., items procured in FY 2009 would be expected to arrive in RC inventories in FY 2010 or FY 2011. All values are costs in dollars.

Nomenclature	FY 2007	FY 2008	FY 2009
MULTI-BAND SUPER HIGH FREQUENCY TERMINAL	\$25,564,553		
TRUCK UTILITY: ECV, ARMAMENT CARRIER W/IAP	16,822,485		
HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMTT) LHS	9,884,384	\$8,358,260	
TRUCK, TRACTOR LINE HAUL, M916A3	8,861,066		\$7,976,000
MAINTENANCE SPT DEVICE/INTERNAL COMBUSTION ENGINE	5,948,566	4,933,642	
TRUCK, TRACTOR LINE HAUL, M915A3	5,830,846		
THERMAL WEAPON SIGHT, AN/PAS-13(V)3 HVY	2,629,342		
FAMILY OF MEDIUM TACTICAL VEHICLES (FMTV)	2,479,677	20,208,000	
THERMAL WEAPON SIGHT, AN/PAS-13(V)2 MED	2,172,086		
MACHINE GUN 40MM: MK19 & EQUIPMENT	1,951,738		
COMPUTER SYS DIG, AN/UYQ-90(V)2 MTS	1,854,475		
COMMUNICATION, COMMAND CONTROL COMPUTERS & INTEL	1,800,000		
MACHINE GUN, .50 CAL, M2 HB FL GD/VEH	1,349,965		
NIGHT VISION GOGGLES	1,176,196		
CONTAINER HANDLING UNIT (CHU)	694,365		
M4 CARBINE RIFLE, 5.56MM	620,301		
HMMWV, M1165 & LIGHT TACTICAL TRAILERS, M1102	160,774		
BRIDGE ADAPTOR PALLET	59,180		
C-12 (TF ODIN REPLACEMENT AIRCRAFT)		27,000,000	
JOINT NETWORK NODE (JNN)		20,000,000	
HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE (HMMWV)		13,125,000	39,404,250
HH-60A-L RECAP PROGRAM		12,000,000	
UH-60M/HH-60M DIFFERENTIAL UPGRADE TO THE ORF		10,200,000	
TRUCK, TANK FUEL, M978 (HEMTT)		9,326,275	
JOINT SMALL TRANSPORTABLE DECONT SYSTEM (JSTDS-SS)		9,252,000	8,599,000
HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMTT)		9,021,437	22,500,000
ROUGH TERRAIN CONTAINER HANDLER, 53K		6,252,610	
FORCE XXI BATTLE COMMAND BDE & BELOW (FBCB2) (BLUE FO	RCE TRACKER)	4,979,520	
COMMON BRIDGE TRANSPORTER		4,644,833	
TRUCK, DUMP 18.5T, M917A2		4,441,435	
SIMPLE KEY LOADER (SKL) AN/PYQ-10(V)		2,952,250	
TACTICAL ELECTRICAL POWER (3KW-60KW) TQG		2,531,172	
POWER DISTRIBUTION ILLUMINATION SYS ELECTRIC (PDISE)		2,400,000	
FAMILY OF LOUDSPEAKERS MANPACK & VEHICULAR		2,100,000	
FMTV CARGO TRAILER (M1095)		1,950,000	
AIR TRAFFIC CONTROL SIMULATOR		1,499,187	

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

Nomenclature	FY 2007	FY 2008	FY 2009
MEDICAL COMMUNCIATIONS FOR COMBAT CASUALTY CARE (MO	1,200,000		
SHELTER TACTICAL EXPANDABLE		977,605	
ALARM, CHEMICAL AGENT, AUTOMATIC, M22		800,000	
HIGH FREQUENCY RADIO		762,585	
SHELTER TACTICAL EXPANDABLE		615,873	
JOINT CHEMICAL AGENT AUTOMATIC		415,121	
TOOLKIT, SMALL ARMS REPAIRMAN		308,175	
NAVIGATION SET SATELLITE SYSTEMS, AN/PSN-13A		294,132	
ENHANCED CONTAINER HANDLING UNIT, TOTAL PACKAGE FIEL	DING	186,643	
LINE HAUL TRUCK, TOTAL PACKAGE FIELDING		173,124	1,624,000
UNFUNDED		15,120	
INTELLIGENCE/ELECTRONIC WARFARE EQUIPMENT			28,035,000
RADIO AN/PSC-5D			6,565,000
PSYCHOLOGICAL OPERATIONS EQUIPMENT			5,502,500
LIGHT TACTICAL TRAILER, 3/4 TON			3,645,000
TRAILER, PALLETIZED LOAD SYSTEM			2,080,000
TRUCK AMBULANCE: 4 LITTER ARMD 4X4 (HMMWV)			980,000
LINE HAUL LIGHT EQUIPMENT TRANSPORTER			429,510
TOTAL	\$89,860,000	\$182,924,000	\$127,340,260

Projected Equipment Transfer/Withdrawal Quantities

NOTE: This table portrays the planned equipment transfers (Active to Reserve), withdrawals (-), and decommissioning (-). Transferred equipment is commonly called "cascaded equipment," or equipment that is provided to the RC once the AC receives more modern equipment. Although this table highlights a three-year period, many Services will not know exact quantities of transfers or withdrawals until year of execution, due to the uncertainty of the procurement/delivery cycle of new equipment.

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty
COMPUTER SET: DIGITAL OL 583/TYQ	C18514		+7	
NET CONTROL DEVICE NCD: KYX-15/TSEC	N02758		+1	
ELEC TRANSFER KEYING DEVICE ETKD: KYK-13/TSEC	E98103		+7	
MASK CHEMICAL BIOLOGICAL: COMBAT VEHICLE M42	M18526		+1,156	+155
RADIO SET: AN/PRC-119A	R83005		+12	
SPEECH SECURITY EQUIPMENT: TSEC/KY-57	S01373		+38	+14
TRUCK DUMP: MTV W/E	T64911		+35	
DECONTAMINATING APPARATUS POWER DRIVEN SKID-MTD	F81880		+1	
RADIO SET: AN/PRC-104A	R55200		+74	+78
MACHINE GUN: 7.62MM M240B	M92841		+1,049	
BED CARGO: DEMOUNTABLE PLS 8X20	B83002		+230	
COLLECTIVE PROTECTION EQUIPMENT: NBC SIMPLIFIED M20	C79000		+26	
DETECTION SET RADAR SIGNAL: AN/APR-39A(V)1	D03159		+29	
DATA TRANSFER DEVICE: AN/CYZ-10	D78555		+4	
DECONTAMINATING APPARATUS: PWR DRVN LT WT	D82404		+2	
DEFIBRILLATOR MONITOR RECORDER: 120/230V 50/60HZ	D86072		+107	
FORWARD AREA WATER POINT SUPPLY SYSTEM: (FAW SS)	F42612		+5	+5
FLOODLIGHT SET TRAILER-MTD: 3 FLOODLIGHTS 1000 WATT	F79334		+1	
GENERATOR SET DIESEL ENGINE TM: PU-803	G35851		+6	
GEN SET DED TM: 10KW 60HZ MTD ONM116A2 PU-798	G42170		+86	+13
GEN SET: DED SKID MTD 10KW 60HZ	G74711		+2	
HF RADIO SET: AN/GRC 193A	H35404		+4	
HELICOPTER: ATTACK AH-64D	H48918			+21
MEDICAL MATERIEL SET CENTRAL MATERIEL SERVICE:	M08417		+1	
MACHINE GUN 5.56 MILLIMETER: M249	M09009		+12	
MEDICAL EQUIPMENT SET SICK CALL FIELD:	M30156		+62	
MEDICAL EQUIPMENT SET TRAUMA FIELD (2):	M30499		+25	
MEDICAL MATERIEL SET OPERATING ROOM:	M72936		+2	
MINI EYESAFE LASER INFRARED OBS SET (MELIOS): AN/PVS 6	M74849		+104	
MMS X-RAY RADIOGRAPHIC:	M86675		+1	
MACHINE GUN GRENADE 40MM: MK19 MOD III	M92362		+271	
NIGHT VISION GOGGLE: AN/PVS-7B	N05482		+15,957	
POWER PLANT ELEC DED TM: 5KW 60HZ AN/MJQ-35	P28083		+21	
OSCILLOSCOPE DC-100MHZ: AN/USM-488	P30693		+1	
POWER SUPPLY: PP-6224/U	P40750		+4	

USAR Projected Equipment Transfer/Withdrawal Quantities

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty
POWER PLANT: ELECTRIC TRL/MTD 60KW 50/60HZ AN/MJQ 41	P42194		+1	
POWER PLANT: DIESEL TRL/MTD 10KW60HZ AN/NJQ-37	P42262		+2	
RADIO SET: AN/GRC-213	R30895			+226
RADIAC SET: AN/PDR-75	R30925		+5	
RADIAC SET: AN/UDR-13	R31061		+3	+2
RADIO SET: AN/VRC-89A	R44863			+1
RADIO SET: AN/VRC-88A	R67194			+14
RADIO SET: AN/VRC-90A	R67908		+60	+2
SPECTRUM ANALYZER: AN/USM-489(V)1	S01416		+8	
SANITATION CENTER: FOOD	S33399		+41	
SCRAPER EARTH MOVING, SP: 14-18 CU YD (CCE)	S56246		+1	
SHOP EQUIPMENT AUTOMOTIVE MAINT/REPAIR: FM BASIC	T24660		+2	
TRUCK CARGO: HEAVY PLS TRANSPORTER 15-16.5 TON	T40999		+90	
TRUCK LIFT FORK: DSL DRVN 4000 LB CAP ROUGH TERRAIN	T49255		+11	
TERMINAL RADIO TELEPHONE MOBILE SUBSCRIBER: AN/VRC-97	T55957		+2	
TRUCK CARGO: 4X4 LMTV W/E	T60081		+70	
TRUCK CARGO: 4X4 LMTV W/E W/W	T60149		+4	
TRUCK TRACTOR: YD 46000 GVW 4X2	T60353		+4	+9
TRUCK TRACTOR: MTV W/E	T61239		+87	
TRUCK CARGO: MTV W/E	T61908		+36	+8
TEST SET RADIO: AN/GRM-114	T87468		+2	
TRUCK VAN: LMTV W/E	T93484		+40	
TRAILER: PALLETIZED LOADING 8X20	T93761		+100	
TRUCK WRECKER: MTV W/E W/W	T94709		+53	
TRACTOR FT LOW SPD: W/BULDOZ W/SCARIF RIPPER	W83529		+2	
GEN SET: DED SKID MTD 5KW 60HZ	G11966		+148	+1

FY 2006 Planned vs Actual Procurements and Transfers

NOTE: This table compares what the Service planned to procure and transfer to the RC in FY 2006 with actual procurements and transfers. FY 2006 is selected as these are the most recent funds to expire. Since the procurement cycle is normally one to two years from funding to delivery, this table identifies only what has been delivered through the end of FY 2008. Procurement and NGREA columns reflect cost values in dollars.

Nomenclature	Equip No.	FY 2006 Transfers (# of items)		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
FY 2006 PLANNED TRANSFERS & WITHD	RAWALS						
ROTARY WING AIRCRAFT							
HELICOPTER, ATTACK, AH-64A	H28647	+11	0				
HELICOPTER, UTILITY, UH-60L/Q	H32361	+1	0				
BRIDGE & VESSEL EQUIPMENT							
LOGISTIC SUPPORT VESSEL	V00426	+2	0				
INTERIOR BAY BRIDGE, FLOATING	K97376	+41	0				
RAMP BAY, FLOATING BRIDGE	R10527	+16	0				
RAMP LOADING VEHICLE	R11154	+1	0				
BRIDGE, FIXED MEDIUM GIRDER, 100FT	C22811	+2	0				
CHEMICAL DEFENSIVE EQUIPMENT							
ALARM, CHEMICAL AGENT, M8A1	A32355	+16	0				
MONITOR, CHEMICAL AGENT	C05701	+8	0				
COLLECTIVE PROTECTION EQUIP, M20	C79000	+42	0				
DECONTAMINATING APP, LTWT	D82404	+71	0				
MASK, PROTECTIVE, M42	M18526	+4	0				
MASK, CHEM-BIO, M40	M12418	+4,307	0				
RADIAC SET, AN/PDR-75	R30925	+48	0				
RADIAC SET, AN/UDR-13	R31061	+344	0				
RADIACMETER, IM-93A/UD	Q20935	+5	0				
SMOKE GENERATOR, M56	G58151	+48	0				
COMMUNICATIONS EQUIPMENT							
DATA TRANSFER DEVICE, AN/CYZ-10	D78555	+295	0				
DIGITAL FAX SET, AN/UXC-10	Z26923	+12	0				
RADIO, AN/GRC-193A	H35404	+127	+219				
RADIO, AN/GRC-213	R30895	+39	+113				
RADIO, AN/PRC-104A	R55200	+139	0				
RADIO, AN/VRC-90A, SINCGARS	R67908	+6	0				
RADIO, AN/VRC-91A, SINCGARS	R68010	+19	0				
RADIO, AN/VRC-92A, SINCGARS	R45407	+16	0				
RADIO, AN/VRC-87A, SINCGARS	R67160	+1	0				
RADIO, AN/VRC-88A, SINCGARS	R67194	+35	0				
RADIO, AN/VRC-89A, SINCGARS	R44863	+113	0				
SPEECH SECURITY EQ, TSEC/KY-57	S01373	+1	0				
TERMINAL, AN/VRC-97	T55957	+98	0				

Nomenclature	Equip No.	No. (# of items)		Procu	2006 rements \$s)	FY 2006 NGREA (\$s)		
		Plan	Actual	Plan	Actual	Plan	Actual	
FACSIMILE, AN/UXC-7	L67964	+530	0					
ELECTRONIC TRANSFER KEYING DEVICE, KYK-13/TSEC	E98103	+65	0					
DIGITAL DATA GENERATOR, SG-1139/G	D37041	+7	0					
NET CONTROL DEVICE, KYX-15/TSEC	N02758	+3	0					
SPECTRUM ANALYZER, USM-489(V)1	S01416	+6	0					
CONSTRUCTION EQUIPMENT								
CRANE, 25 TON, ALL TERRAIN, AT422T	C36586	+2	0					
CRANE-SHOVEL, CRAWL-MTD, 50 TON	F40474	+3	0					
ROLLER, PNEUMATIC, SP, CCE	S11793	+5	0					
SCRAPER, EARTH MOVING, SP, CCE	S56246	+1	0					
TRACTOR, EXCAVATOR	T34437	+29	0					
ELECTRICAL GENERATION								
GENERATOR SET, TLR MTD, PU-798	G42170	+69	0					
GENERATOR SET, MEP-002A	J35813	+69	0					
GENERATOR SET, MEP-003A	J35825	+1	0					
GENERATOR SET, MEP-805A	G74575	+25	0					
GENERATOR SET, MEP-802A	G11966	+344	0					
GENERATOR SET, MEP-803A	G74711	+29	0					
GENERATOR SET, MEP-804A	G12170	+25	0					
GENERATOR SET, MEP-016A	J45699	+2	0					
GENERATOR SET, TLR MTD, PU-803	G35851	+1	0					
GENERATOR SET, TLR MTD, PU-802	G53778	+35	0					
GENERATOR SET, TLR MTD, PU-805	G78306	+1	0					
POWER PLANT, AN/MJQ-35	P28083	+1	0					
POWER PLANT, AN/MJQ-41	P42194	+2	0					
POWER PLANT, AN/NJQ-37	P42262	+3	0					
POWER SUPPLY, PP-6224/U	P40750	+5	0					
MEDICAL EQUIPMENT								
COMBAT AUTOMATED SERVICE SUPPORT-MEDICAL (CASS-M) COMPUTER SYSTEM	C18514	+8	0					
DEFIBRILLATOR MONITOR RECORDER	D86072	+4	0					
OPERATING & TREATMENT UNIT, DENTAL	P19377	+6	0					
OSCILLOSCPE, AN/USM-488	P30693	+1	0					
TRUCK, AMBULANCE, M996, HMMWV	T38707	+3	0					
OTHER PROCUREMENT								
MELIOS PVS-6 EYE SAFE LASER OBS	M74849	+20	0					
NIGHT SIGHT, TOW II ANTI-TANK SYSTEM, AN/VAS UAS-12	N04982	+5	0					

Nomenclature	Equip No.	Tran	2006 sfers items)	Procu	2006 rements \$s)	NG	2006 REA Ss)
		Plan	Actual	Plan	Actual	Plan	Actual
NIGHT VISION SIGHT, AN/UAS-11(V)1	N05050	+3	0				
NIGHT VISION DEVICE, AN/PVS-4 WMG	N04732	+391	0				
NIGHT VISION GOGGLES, AN/PVS-7B	N05482	+1,041	0				
NIGHT VISION GOGGLES, AN/PVS-5	N04456	+907	0				
NIGHT VISION SIGHT-TRACKER, INFRARED, AN/TAS-5 (DRAGON)	N23721	+2	0				
VIEWER INFRARED, AN/PAS-7	Y03104	+7	0				
NAVIGATION SYSTEM, PSN-11	N95862	+2,154	0				
CLEANER, STEAM PRESS JET, TLR-MTD	C32887	+37	0				
CONTAINER ASSEMBLY, REFRIG	C84541	+67	0				
FOOD SANITATION CENTER	S33399	+141	0				
MINE DETECTING SET MINE, AN/PSS-11	G02341	+15	0				
PRINTING PLANT, SPECIAL WARFARE	P61665	+2	0				
SHELTER, TACTICAL EXPANDABLE	S01359	+1	0				
PETROLEUM EQUIPMENT							
FUEL SYSTEM SUPPLY POINT	J04717	+1	0				
FORWARD AREA REFUELING EQ	H94824	+2	0				
LABORATORY, PETROLEUM STLR-MTD	L33800	+1	0				
PUMP, CENTRIFUGE, 125 GPM	P92030	+8	0				
TANK ASSEMBLY, FABRIC, 10000 GAL PETROLEUM	V12552	+1	0				
TESTING KIT, AVIATION FUEL	T05741	+11	0				
REPAIR EQUIPMENT							
SHOP EQUIPMENT, AUTO MAINT	T25756	+2	0				
TEST SET, RADIO, AN/GRM-114	T87468	+6	0				
WELDING SHOP, TLR-MTD	W48391	+19	+10				
TACTICAL VEHICLES							
TRUCK, UTILITY, M998, HMMWV	T61494	+219	0				
TRUCK, UTILITY, M1037, HMMWV	T07543	+1	0				
TRUCK, UTILITY, M1038, HMMWV	T61562	+14	0				
TRUCK, UTILITY, M1097, HMMWV	T07679	+240	+2,866				
TRUCK, CARGO, LMTV, M1078	T60081	+39	+113				
TRUCK, CARGO, LMTV, M1078, W/W	T60149	+28	+29				
TRUCK, CARGO, LMTV, M1081	T41995	+16	0				
TRUCK, VAN, LMTV, M1079	T93484	+13	+6				
TRUCK, CARGO, MTV, M1083	T61908	+46	+67				
TRUCK, CARGO, MTV, M1085	T61704	+2	+97				
TRUCK DUMP, MTV, M1090	T64911	+21	0				
TRUCK, TRACTOR, MTV, M1088	T61239	+70	0				
TRUCK, WRECKER, MTV, M1089	T94709	+22	+35				

Nomenclature	Equip No.	Tran	2006 sfers items)	FY 2 Procure (\$	ements	NG	2006 REA Ss)
		Plan	Actual	Plan	Actual	Plan	Actual
TRUCK, WRECKER, M948E1, HEMTT	T63093	+6	0				
TRUCK, TANKER, FUEL, HEMTT	T87243	+10	0				
TRUCK, TANKER, FUEL, HEMTT	T58161	+2	0				
TRUCK, TRACTOR, M878	T60353	+3	0				
TRUCK, TRACTOR, LINE HAUL, M915	T61103	+56	+236				
TRUCK, TRACTOR, LET, M916	T91656	+2	0				
TRUCK, TRACTOR, HET, M911	T61035	+6	0				
TRANSPORTER, PLS, M1075	T40999	+26	+90				
CARGO BED, PLS, M1077A1	B83002	+29	0				
TRAILER, PLS, M1076	T93761	+79	+291				
TRUCK, FORKLIFT, ATLAS	T73347	+4	+68				
TRUCK, FORKLIFT, ROUGH TERRAIN	T48944	+1	0				
TRUCK, FORKLIFT, ROUGH TERRAIN	T49255	+2	0				
SEMITRAILER VAN, REPAIR PARTS STORAGE	S74832	+9	0				
SEMITRAILER, FUEL TANK, M131A5C	S72983	+18	0				
SEMITRAILER, M871	S70027	+50	+160				
SEMITRAILER, FUEL TANK, M967	S10059	+148	0				
SEMITRAILER, FUEL TANK, M969	S73372	+2	+60				
TRAILER, CARGO, 3/4 TON, M101	W95537	+7	0				
TRAILER, FLAT BED, HEMAT, M989	T45465	+3	0				
TRACKED & WHEELED COMBAT SYST	EMS						
RECOVERY VEHICLE, FT, M88A1	R50681	+2	0				
WATER EQUIPMENT							
DISTRIBUTOR, WATER TANK, 6000 GL	D28318	+1	0				
TANK, FABRIC, WATER, 3000 GAL	T19033	+3	0				
TANK, LIQUID DISPENSING, TLR-MTD	V19950	+24	0				
WEAPONS							
MACHINE GUN, 5.56MM, M249	M09009	+173	0				
MACHINE GUN, 7.62MM, M240B	M92841	+265	0				
MACHINE GUN, GRENADE, MK19	M92362	+193	0				
RIFLE, 5.56MM, M16A2	R95035	+174	0				
RIFLE, 5.56MM, M16A4	R97175	+5	0				
CARBINE, 5.56MM, M4	R97234	+1,334	0				
FY 2006 P-1R EQUIPMENT							
MODIFICATION OF AIRCRAFT							
CH-47 CARGO HELICOPTER MODS				0	98,600,000		
UTILITY/CARGO AIRPLANE MODS				\$2,220,000	2,220,000		
GATM ROLLUP				1,939,000	1,939,000		

Nomenclature	Equip No.	Tran	2006 Isfers items)	FY 2 Procure (\$ئ	ements	FY 2 NGF (\$1	EA
		Plan	Actual	Plan	Actual	Plan	Actual
WEAPONS AND OTHER COMBAT VEHI	CLES						
5.56 CARBINE M4				2,974,000	0		
TACTICAL AND SUPPORT VEHICLES							
HI MOB MULTI-PURP WHLD VEH, HM	MWV			13,832,000	180,886,000		
FAMILY OF MEDIUM TACTICAL VEH (FMTV)			48,000	44,298,000		
FIRE TRUCKS & ASSOCIATED FIREFI	GHTING E	EQUIP		2,293,000	2,202,000		
FAMILY OF HEAVY TACTICAL VEHICL	ES (FHT)	/)		2,772,000	48,000,000		
COMMUNICATIONS AND ELECTRONIC	S EQUIPN	IENT					
NAVSTAR GLOBAL POSITIONING SYS	STEM (SP	ACE)		44,000	14,559,000		
MEDICAL COMM FOR CBT CASUALT	CARE (N	/IC4)		2,037,000	30,110,000		
BRIDGE TO FUTURE NETWORKS				0	200,319,000		
COMMS-ELEC EQUIP FIELDING				0	1,035,000		
AIR & MSL DEF PLANNING & CONTRO	DL SYS (A	MD)		0	100,000,000		
JOINT NETWORK MANAGEMENT SYS	STEM (JN	MS)		0	442,000		
OTHER SUPPORT EQUIPMENT							
TACTICAL BRIDGING				3,680,000	0		
TACTICAL BRIDGE, FLOAT-RIBBON				4,846,000	4,767,000		
LAUNDRIES, SHOWERS AND LATRIN	ES			666,000	639,000		
ITEMS LESS THAN \$5.0M (ENG SPT)				18,000	18,000		
COMBAT SUPPORT MEDICAL				14,000	0		
ALL TERRAIN LIFTING ARMY SYSTEM	1			361,000	0		
HANDHELD STANDOFF MINEFIELD D	ETECTIO	N SYS-H	ST	0	14,384,000		
LOADERS				0	3,442,000		
CONST EQUIP ESP				0	19,189,000		
FY 2006 NGREA EQUIPMENT (TITLE III &	<u>X)</u>						
FAMILY OF MEDIUM TACTICAL VEHICL	ES (MTV)					\$14,430,430	25,403,137
M4 CARBINE RIFLE, 5.56MM						212,295	1,012,576
MULTI-BAND SUPER HIGH FREQUENC	TERMIN	AL				8,800,000	7,870,427
DEFENSE ADVANCED GLOBAL POSITIO	NING SY	STEM (G	PS) RECE	IVER		337,200	337,200
M1075 TRUCK CARGO						25,870,000	26,303,940
BASE BAND NODE						14,397,000	0
M872A3 SEMITRAILER, FLATBED						10,098,000	10,058,285
ROUGH TERRIAN CARGO HANDLER						8,000,000	9,995,200
M915A3 TRACTOR						7,787,687	9,631,144
ALL TERRAIN LIFTER ARMY SYSTEM						6,720,000	6,668,441
M917A2 DUMP TRUCK						5,163,500	5,138,499
AIR TRAFFIC NAVIGATION, INTEGRATIO	ON COOR	DINATIO	N SYSTEM	Λ		5,000,000	7,168,542
M916A3 TRACTOR						4,600,000	6,282,954
CONTAINER HANDLING UNIT						3,953,088	3,840,000

Table 6

USAR

Nomenclature	Equip No.	FY 2006 Transfers (# of items)		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
HEMTT BASED WATER TENDER						3,825,000	0
TACTICAL AIRSPACE INFORMATION SY	STEM					2,350,000	0
M1076 PALLETIZED LOAD SYSTEM TRA	ILER					2,200,464	2,162,118
M1095/M1082 TRAILER CARGO, FMTV						1,557,225	1,557,225
GENERATOR POWER UNIT 15KW						1,357,227	1,836,914
ALARM, CHEMICAL AGENT, AUTOMATIC	C, M22					950,000	950,000
IMPROVED CHEMICAL AGENT MONITO	R					675,000	770,167
MAINTENENACE SUPPORT DEVICE/ICE						543,000	2,100,000
5KW GENERATOR SKID-MTD						213,200	207,147
3KW GENERATOR SKID-MTD						184,000	184,750
COUNTER INTEL/HUMAN INTEL MANAG	EMENT S	SYSTEM -	CHIMS			132,694	0
POWER UNIT, PU-801A 15 KW						115,680	118,334
COUNTER INTEL/HUMAN INTEL AUTOM	ATED TO	OL SET				100,000	0
INDIVIDUAL TACTICAL REPORTING TOO	DL - AN/P	YQ-8(V)				24,310	0
TOTAL				\$37,744,000	\$767,049,000	\$129,597,000	\$129,597,000

Major Item of Equipment Substitution List

NOTE: This table identifies equipment authorized by the Service to be used as a substitute for a primary item of equipment. The table also identifies whether or not the item is able to be deployed in wartime. This data meets the Title 10 requirement to identify equipment that is not the most desired item of equipment.

Required Item	Regd Item	Substitute Item	Substitute	FY 2010	Deployable	
Nomenclature	Equip No.	Nomenclature	Item Equip No.	Qty	Yes	No
TRUCK, TRACTOR 5 TON MTV	T61239	TRUCK, TRACTOR 5 TON M54A2	X40831	1		Х
TRUCK, CARGO, 2.5 TON LMTV	T60081	TRUCK, 2.5 TON M35A2	X40009	334		Х
TRUCK, CARGO, W/W 2.5 TON LMTV	T60149	TRUCK, 2.5 TON W/W M35A2	X40146	132		Х
TRUCK, CARGO, 2.5 TON LMTV	T60081	TRUCK, M36A2	X40283	2		Х
TRUCK, CARGO, W/W 2.5 TON LMTV	T60149	TRUCK, W/W M36A2	X40420	3		Х
TRUCK, VAN, 2.5 TON LMTV	T93484	TRUCK, VAN 2.5 TON M109A3	X62340	16		Х
TRUCK, VAN, 2.5 TON LMTV	T93484	TRUCK, VAN 2.5 TON M109A2	X62340	12		Х
TRUCK, VAN, 2.5 TON LMTV	T93484	TRUCK, VAN 2.5 TON M185A3	K90189	4		Х
TRUCK, CARGO, 2.5 TON LMTV	T60081	TRUCK, 2.5 TON, M35A1	X40009	1		Х
TRUCK, VAN, 2.5 TON LMTV	T93484	TRUCK, VAN, 2.5 TON M109	X62340	8		Х
RADIO, AN/VRC-90F	R68044	RADIO, AN/PRC-25	Q38299	39		Х
TRUCK, CARGO, 2.5 TON LMTV	T60081	TRUCK, 2.5 TON, M35A2C	X40077	43		Х
TRUCK, CARGO, W/W 2.5 TON LMTV	T60149	TRUCK, 2.5 TON W/W M35A2C	X40214	6		х
RADIO, AN/VRC-90F	R68044	RADIO, AN/PRC-77	Q38299	110		Х
TRUCK, HMMWV, CARGO	T61494	TRUCK, M1028	T59414	37		Х
TRUCK, HMMWV, CARGO	T61494	TRUCK, M1028A1	T59550	1		Х
TRUCK, CARGO 5 TON MTV	T61908	TRUCK, 5 TON, M813	X40831	2		Х
TRUCK, CARGO 5 TON W/W MTV	T41135	TRUCK, 5 TON W/W M813	X40968	4		Х
TRUCK, CARGO 5 TON MTV	T61908	TRUCK, 5 TON M813A1	X40794	15		Х
TRUCK, CARGO 5 TON W/W MTV	T41135	TRUCK, 5 TON W/W M813A1	X40931	39		Х
TRUCK, TRACTOR 5 TON MTV	T61908	TRUCK, TRACTOR, 5 TON M818	X59326	7		Х
TRUCK, TRACTOR 5 TON W/W MTV	T61239	TRUCK, TRACTOR, 5 TON W/W M818	X59463	12		Х
TRUCK, VAN, 5 TON, MTV	Z94560	TRUCK, VAN, M820	X62237	2		Х
TRUCK, WRECKER 5 TON MTV	T94709	TRUCK, 5 TON M816	X63299	4		Х
NIGHT VISION GOGGLES, AN/PVS-14	M79678	NIGHT VISION GOGGLES, PVS-5	N04456	564		Х
TRUCK, TRACTOR, M916	T91656	TRUCK, TRACTOR, M920	T61171	273	Х	L
TRUCK, HMMWV UTILITY	T61494	TRUCK, CUCV, M1009	T05028	1,322		Х
TRUCK, HMMWV, CARGO	T61494	TRUCK, CUCV, M1008A1	T59346	209		Х
TRUCK, HMMWV, CARGO	T61494	TRUCK, CUCV, M1008	T59482	790		Х
NIGHT VISION GOGGLES, AN/PVS-14	M79678	NIGHT VISION GOGGLES, PVS-5C	N04456	6,526	Х	
NIGHT VISION GOGGLES, AN/PVS-14	M79678	NIGHT VISION GOGGLES, PVS-5B	N04456	264		Х
RADIO AN/VRC-92F	R45543	RADIO AN/VRC-92A	R45407	474	Х	

Table 7

USAR Major Item of Equipment Substitution List

Required Item	Regd Item	Substitute Item	Substitute	FY 2010	Deploy	able?
Nomenclature	Equip No.	Nomenclature	Item Equip No.	Qty	Yes	No
RADIO AN/VRC-91F	R68146	RADIO AN/VRC-91A	R68010	764	Х	
RADIO, AN/VRC-89F	R44999	RADIO, AN/VRC-89A	R44863	1,105	Х	
RADIO, AN/VRC-87F	R67296	RADIO, AN/VRC-87A	R67160	211	Х	
RADIO, AN/VRC-88F	R67330	RADIO, AN/VRC-88A	R67194	1,807	Х	
RADIO, AN/VRC-119F	R83141	RADIO, AN/VRC-119A	R83005	1,166	Х	
RADIO, AN/PRC-90F	R68044	RADIO, AN/PRC-90A	R67908	4,070	Х	
TRUCK, VAN, 2.5 TON LMTV	T93484	TRUCK, VAN M109A4	X62340	158		Х
TRUCK, CARGO, 2.5 TON LMTV	T60081	TRUCK, 2.5 TON M36A3	X40283	8		Х
TRUCK, CARGO, 2.5 TON LMTV	T60081	TRUCK, 2.5 TON, M35A3	X40009	961		Х
TRUCK, CARGO, W/W 2.5 TON LMTV	T60149	TRUCK, 2.5 TON, W/W M36A3	X40420	22		Х
TRUCK, CARGO, W/W 2.5 TON LMTV	T60149	TRUCK, 2.5 TON, W/W M35A3C	X40214	36		Х
TRUCK, CARGO, 2.5 TON LMTV	T60081	TRUCK, 2.5 TON, M35A3C	X40077	66		Х
TRUCK, CARGO, W/W 2.5 TON LMTV	T60149	TRUCK, 2.5 TON, W/W M35A3	X40146	367		Х

Chapter 3 United States Marine Corps Reserve

I. Marine Corps Overview

The Marine Corps continues in its role as the Nation's premier expeditionary force, always ready to respond with little warning to fight and win our Nation's battles. Crisis response and combat effectiveness are the enduring hallmarks the Marine Corps has earned throughout its history. At the very center of these, "we believe the individual Marine is the most formidable weapon on today's battlefield and will remain so tomorrow."¹ As we look to the future, the Marine Corps "must be a two fisted fighter—able to destroy enemy formations with our scalable air-ground-logistics teams in major contingencies, but equally able to employ our hard earned irregular warfare skills honed over decades of conflict."² The Marine Corps Reserve (MCR) is integral to the Total Force Marine Corps in its role of preparing and providing units and individuals to augment and reinforce Marine Corps Active component (AC) forces for employment across the spectrum of conflict.

A. Marine Corps Planning Guidance

Marine Corps planning guidance follows from the goals of national planning and is captured in these enduring national interests:³

- Defend the homeland from attack
- Prevent the emergence of a hostile regional power
- Ensure the stability of the global system
- Ensure key allies' survival and active cooperation
- Prevent or respond to major disasters and disturbances.

As the Marine Corps prepares for the future, "we must continue to adapt to the ever-changing character and conduct of warfare, while remaining cognizant of its fundamentally unchanging nature. What Congress described [in the National Security Act of 1947, and as amended in 1952 by Title 10, U.S. Code] as 'fleet marine forces of combined arms, together with supporting air components'—known today as MAGTFs [Marine Air-Ground Task Forces]—provide the primary means through which we engage with partners, assist victims, or strike with determination against our foes. Our future remains true to the idea that a Corps of Marines—who are well-trained, equipped, and educated in the art and science of war—can leverage the great advantages of seapower through rapid and decisive action in and around the littorals."⁴

¹ General James T. Conway, Foreword for *Marine Corps Vision & Strategy 2025*.

² Ibid.

 $[\]frac{3}{4}$ Ibid, at 11.

⁴ Ibid, at 11.

In concert with these enduring national interests, the Marine Corps, Navy, and Coast Guard recently identified six Maritime Strategic Imperatives that are captured in *A Cooperative Strategy for 21st Century Seapower*. This cooperative strategy delineates the future contributions of our maritime Services as⁵

- limiting regional conflict with forward deployed, decisive maritime power,
- deterring major power wars,
- winning our Nation's wars,
- contributing to homeland defense in depth,
- fostering and sustaining cooperative relationships with more international partners, and
- preventing or containing local disruptions before they impact the global system.

These strategic precepts form the foundation on which the Marine Corps must meet the threats and challenges in an evolving global security environment.

B. Marine Corps Equipping Policy

The Marine Corps develops an Approved Acquisition Objective (AAO) for each new item of equipment by using an integrated system of dynamic processes that capitalizes on recent operational experiences to meet the emerging needs of Marine forces and the combatant commanders. These AAOs include equipment modernization plans and address all initial issue quantities and planned sustainment requirements for both the AC and Reserve component (RC). The Marine Corps uses three types of funding to procure equipment:

- Procurement Marine Corps (PMC)
- Aircraft Procurement Navy (APN)
- National Guard and Reserve Equipment Appropriation (NGREA).

The PMC appropriation is the Marine Corps' primary source of Total Force ground equipment funding, and APN is the primary source of Total Force aviation equipment funding. NGREA funding, not part of the Marine Corps formal budgeting process, has been used historically to fund emerging ground and aviation reserve equipment requirements as well as the most critical reserve equipment deficiencies.

The current Marine Corps equipping policy is a direct result of lessons learned since September 2001. To ensure adequate equipment support to current operations in Iraq and Afghanistan, while maintaining a viable cost-effective strategy for force rotations, the Commandant directed that equipment required for operations in both Iraq and Afghanistan remain in theater as long as it is required and can be maintained. This policy has permitted the

⁵ Ibid, at 11.

Marine Corps to focus on identifying, obtaining, and delivering the best equipment possible to forces in the combat theater, while substantially reducing equipment rotation costs. This policy has also permitted the Marine Corps to focus on obtaining the equipment required to generate future rotations, especially training deficiencies.

C. Plan to Fill Mobilization Shortages in the RC

The warfighting equipment requirement for Marine Corps units is set forth in the Table of Organization and Equipment (TO&E). When not activated, reserve units maintain a portion of the full TO&E; this is called the unit's Training Allowance (T/A). The T/As represent the equipment levels needed for reserve units to achieve a fully trained status in a pre-activation environment. Unit commanders determine their T/A based on pre-activation training requirements and the time available for training, as well as other considerations, such as Reserve Training Center facility capacity and the number of maintainers at each unit and unit location. Maintaining only a T/A when not activated requires enterprise-level support to ensure that the TO&E–T/A Delta is sourced in the event of unit activation. In-theater assets and pre-positioned equipment can be used to satisfy the TO&E–T/A Delta for activated units. This is fundamentally the same practice used to source Marine Corps AC unit equipment shortfalls.

To meet the demands operations have placed on unit equipment, the MCR has relied heavily on Supplemental and NGREA appropriations. Marine Forces Reserve (MARFORRES) has identified critical T/A deficiencies to reset the reserve force in the supplemental process. Working within the Marine Corps' Strategic Ground Equipment Working Group and with Marine Corps Systems Command (MARCORSYSCOM) in the Total Force procurement process, the MCR uses NGREA funding to fill critical unit equipment deficiencies and emerging reserve equipment needs. Supplemental appropriations and NGREA have helped the RC to meet force generation requirements and to reset and modernize the Force, as directed by the Commandant of the Marine Corps.

The FY 2008 Supplemental appropriations provided ample funding towards unfunded equipment deficiencies across the Marine Corps. MARFORRES will benefit from this funding along with the AC as acquisition objectives are met. Working with MARCORSYSCOM, MARFORRES will also continue to use NGREA to procure those critical principal end items still needed to fill T/A shortfalls not covered by the supplementals.

D. Initiatives Affecting RC Equipment

There are many Marine Corps initiatives affecting equipment, including several major aviation force structure initiatives. Although there are challenges in obtaining the ground equipment required for reserve unit force generation, there are currently no ground force structure actions that are scheduled to take effect between FY 2009 and FY 2011 other than Base Realignment and Closure (BRAC) relocations.

As previously reported, the 4th Marine Aircraft Wing (MAW) is participating in the Total Force Marine Aviation Plan (AvPlan). The AvPlan is a consolidated action plan that provides a graphic overview of Marine Aviation total force organization, aviation readiness, and planned organizational, aircraft, and equipment transitions over the next ten years. The AvPlan is revised annually to update Marine Aviation policy and program changes. During FY 2009, the Marine Air Group (MAG)-46 Headquarters and HMLA-775 (UH/AH-1) helicopter squadron are scheduled to be deactivated. Also, during FY 2009, Marine Air Control Group-48 is scheduled to establish site support structure at Marine Corps Air Station (MCAS) Miramar. During FY 2011, VMU-4 (an RC unmanned aerial vehicle [UAV] squadron) is scheduled to be established at a location to be determined.

The continued rotations of MCR units, competition for pre-deployment training resources, and MCR unit activation timeline constraints have led unit commanders to seek alternate training methods. The Marine Corps Program Manager for Training Systems (PM TRASYS) is the Marine Corps' independent program manager assigned the responsibility of improving the warfighting effectiveness of the MAGTF by providing training support services in the form of development, delivery, and life-cycle sustainment of cost-effective training systems and devices. To assist unit commanders in training their units during the past several years, the following training systems have been procured by PM TRASYS and fielded to MARFORRES:

- Indoor Simulated Marksmanship Trainer–Enhanced (ISMT-E/XP)
- Medium Tactical Vehicle Replacement–Operator Driving Simulator (MTVR-ODS)
- Virtual Combat Convoy Trainer–Marine (VCCT-M)
- Reconfigurable Vehicle Simulator–Marine (RVS)
- Combat Vehicle Training System (CVTS)
- CVTS-Advance Gunnery Training System–LAV/M1A1/AAV
- Tactical Decision Simulation and Combat Decision Ranges
- Assault Amphibious Vehicle (AAV) Turret Trainer
- Learning Resource Center (LRC)/Deployable Learning Resource Center (DLRC)
- Deployable Virtual Training Environment–Reserves (DVTE-R).

E. Marine Corps Plan to Achieve Full Compatibility between AC and RC

The Marine Corps' equipping policy is to horizontally field or integrate new weapon systems and equipment to ensure compatibility and the highest degree of interoperability between the AC and RC. This policy was further reinforced in the Commandant of the Marine Corps' *Vision and Strategy 2025*, which identifies that a "ready and sustainable Reserve" is required to produce sufficient numbers of "common/interchangeable Total Force modules" to increase the number of MAGTFs that the Marine Corps can generate that are fully-capable across the range of military operations to meet combatant commander requirements. This horizontal fielding policy results in common/interchangeable force modules wherever they come from, the AC or RC. Accomplishing this requires continued Total Force emphasis on modernization and equipment upgrades to ensure the MCR retains its warfighting capabilities as part of the Total Force Marine Corps and provides the Commandant of the Marine Corps and National Command Authority with increased flexibility in meeting current and emerging requirements.

II. Marine Corps Reserve Overview

A. Current Status of the Marine Corps Reserve

1. General Overview

The Selected Marine Corps Reserve (SMCR) is authorized to be a force of 39,600 individuals in entry-level programs, in the Active Reserve Program, in Individual Mobilization Augmentee (IMA) billets, and in units spread across 183 sites in 48 states, the District of Columbia, and

Puerto Rico. MARFORRES is comprised of SMCR units that are built to be common/interchangeable modules with AC units belonging to the elements of the MAGTF, which are the Command Element, Ground Combat Element, Aviation Combat Element, and Logistics Combat Element. During FY 2010, approximately 6,000 SMCR unit Marines and Sailors are scheduled to be activated and deployed as a part of

Top USMCR Equipping Challenges

- Outfitting deploying Marines with the most recently fielded individual combat clothing and protective equipment provided to U. S. Forces in each theater.
- Providing RC units with the "right amount" of equipment to effectively train their Marines in a pre-activation environment.

Marine Corps force generation requirements, and an additional 1,000 Individual Ready Reserve Marines will serve as individual augments on Marine Corps and other Joint staffs.

As of the end of FY 2008, over 30,000 reserve Marines have been mobilized in support of OEF and OIF. These Marines have come from all ranks and military specialties and have provided invaluable services to these operations.

The Marine Corps has used rotational models (e.g., Unit Deployment Program [UDP]) for several decades. Like the Navy, the size of the Marine Corps AC has long been determined by "rotational base" requirements, and not by "warfighting" requirements. However, the size of the RC has been determined by the "surge" contribution required in support of "warfighting." In recent years, however, the RC has been included in the Marine Corps' rotational base. To meet deployment-to-dwell ratio goals and force generation requirements, the Marine Corps developed the Marine Forces Reserve Force Generation Model. This model is a planning tool for the Marine Corps to source RC forces and for SMCR unit commanders to: plan and meet personnel, materiel, and training readiness milestones; coordinate pre-activation training and other activities; and to allow individual Marines and Sailors and their families and employers to better manage their expectations with regard to preparing for activation and deployment.

2. Status of Equipment

Ongoing support of current operations and an increasing number of overseas training exercises in support of combatant commander Theater Security Cooperation activities have taken an increasing toll on Total Force Marine Corps equipment and resources. Due to the increased reliance on our RC for rotations and exercises, it is imperative to continue the policy of horizontal fielding of equipment across the Total Force. Both the RC and the AC face two primary equipping challenges:

- Outfitting deploying Marines with the most recently fielded individual combat clothing and protective equipment provided to U. S. Forces in each theater
- Providing RC units with the "right amount" of equipment to effectively train their Marines in a pre-activation environment.

Marines deploying as part of a reserve unit are provided the latest generation of individual combat clothing and protective equipment, which is the same equipment that is issued to the AC units. Training simulators save valuable time and resources while preparing our Marines and Sailors to perform at higher levels in an adaptive and realistic training environment. With the NGREA funds provided by Congress, MARFORRES has directly increased unit readiness by procuring training simulators such as the Virtual Combat Convoy Trainer and the Deployable Virtual Training Environment. MARFORRES has also reduced critical equipment shortfalls by purchasing such items as Brite Star FLIR and Tactical Remote Sensor Suites, and by upgrading equipment such as the KC-130T multi-mode communication systems and the Multi-band Man Pack (Rover III) real-time-video link system. MARFORRES maintains the capability to operate and train with the same equipment being employed in theater.

a. Equipment On-hand

Marine Corps Reserve unit T/As are reviewed annually and assigned to units at Reserve Training Centers (RTCs) based on the quantity and type of equipment needed to meet pre-activation training requirements. *Table 1* provides specific information on MCR on-hand equipment inventories. In some instances, the In-Stores equipment reflects materiel that is not fully mission capable due to lack of depot level maintenance funding. In-Stores assets are available to any unit, active or reserve, placing a valid requisition.

b. Average Age of Major Items of Equipment

Table 2 provides the average age of selected major equipment items.

c. Current Active-Reserve Equipment Compatibility

Although current overall AC and RC equipment compatibility is satisfactory, complete compatibility is difficult to achieve for several reasons:

- Continuing high equipment demand for force generation training support
- Attrition of equipment through wear, damage, and destruction
- Procurement over the past several years of small quantities of new non-Program-of-Record equipment through the Urgent Universal Needs Statement process to meet specific OIF and OEF mission needs
- Application of funds against ever-evolving higher priority requirements.

The positive impact of NGREA in improving AC and RC compatibility cannot be overstated, as outlined later in this report.

d. Maintenance Issues

Equipment maintenance remains one of the top priorities for Marine Forces Reserve. Sufficient funding must be programmed to sustain the materiel readiness and capability of legacy systems and new acquisitions. These systems are currently maintained at a requisite level of readiness due to the hard work of skilled Marines and the assistance of Congress in providing resources for maintenance and spare parts. The following programs and initiatives help maintain and improve the materiel readiness of the systems in the RC:

- The Marine Corps Depot Maintenance Program, which enhances equipment readiness for both the AC and RC. Marine Forces Reserve continues to be proactive in articulating their depot maintenance requirements through the annual Marine Corps Depot Maintenance Process.
- Maintenance Initiatives: Marine Forces Reserve continues to exercise better business
 practices through competitive outsourcing of maintenance requirements. Marine Forces
 Reserve has implemented a mobile preventive maintenance (PM) capability designed to
 prolong the service life of our equipment. This program, which is supported by Marine
 Corps Logistics Command (MCLC), targets engineer and motor transport equipment.
 Additionally, Marine Forces Reserve has contracted mobile Corrosion Prevention and
 Control teams to repair equipment and apply anti-corrosion treatments.

e. Modernization Programs

The Marine Corps continues to establish modernization programs that keep pace with the ever changing character of the current/particular operation. MCR has utilized various funding sources to help in execution of the programs and to continue to fill equipment shortfalls.

- <u>Individual and Organizational Equipment</u>: During August 2008, MCLC awarded a contract for a consolidated storage program (CSP) of individual and organizational equipment. This program will manage the issue, recovery, and sustainment of individual combat clothing and equipment; chemical, biological, radiological, nuclear, and high-yield explosive (CBRN) equipment; special training allowance equipment; and soft-wall shelters and their camouflage netting. The centralized management of this program by MCLC will eliminate the requirement for Marine Forces Reserve units to maintain individual and organizational equipment.
- <u>Training and Simulators</u>: The Marine Corps Reserve continues to strive to incorporate the latest technological innovations to create cost-effective training and education opportunities for Reserve Marines to increase their ability to perform to the same level as their AC counterparts. Fielding modern, state-of-the-art training systems is part of this effort. Through the use of NGREA, the Marine Corps is procuring the MTVR-Operator Driving Simulator, Virtual Combat Convoy Trainer-Marine, and Deployable Virtual Training Environment (DVTE) simulation trainers.

f. Overall Equipment Readiness

The overall equipment readiness of SMCR units remains above required levels.

The SMCR unit wartime equipment requirement (TO&E) consists of the pre-activation T/A and the T/E–T/A Delta to be provided from a variety of sources, including MCLC.

B. Changes Since Last NGRER

NGREA continues to provide extremely beneficial procurement funding. In FY 2007, the Marine Corps Reserve received \$35M in NGREA funding, \$45M in FY 2008, and \$37M in FY 2009. Using FY 2008 NGREA funding, the Marine Corps Reserve will procure training simulators, aircraft modernization equipment, a targeting identification device, and unmanned ground sensor suites.

C. Future Years Program (FY 2010–FY 2012)

1. FY 2012 Equipment Requirements

The Marine Corps Reserve has numerous unfunded equipment priorities that affect MAGTF. Fielding of new or upgraded ground equipment and aviation modernization remain the top priorities. The Commander, Marine Forces Reserve equipment modernization requirements continue to be (in the following order): C2 systems, training systems and devices, including innovations leading to cost avoidance to fund additional training, and other warfighting equipment. Additional funding for modernization and equipment shortages is envisioned to be necessary into the future to maintain mission-capable status and to ensure the RC is a force multiplier upon activation. Current RC training equipment deficiencies are listed in *Table 1*.

2. Anticipated New Equipment Procurements

a. MV-22 Osprey

The MV-22 is a tilt-rotor, Vertical/Short Takeoff and Landing (V/STOL), multipurpose aircraft developed to replace the current fleet of CH-46E and CH-53D helicopters. This aircraft has the capability to participate in amphibious and land assault operations, provide medium cargo lift, and perform aircraft and personnel recovery. The MV-22 is capable of carrying 24 combat-equipped Marines or a 10,000 pound internal load and has a 2,100 nautical mile range with a single aerial refueling. Under the current Marine Corps Aviation Plan, the RC will transition to the MV-22 from FY 2016 through FY 2018. Accelerating the RC transition to the MV-22 is a goal for MARFORRES.

b. Expeditionary Fighting Vehicle (EFV)

The EFV is an armored, tracked, armed, amphibious vehicle that can transport personnel. The EFV will join the MV-22 and Landing Craft, Air Cushion (LCAC) as an integral component of the amphibious triad required to execute Expeditionary Maneuver Warfare. The EFV will allow naval expeditionary forces to maneuver ashore in a single, seamless stroke giving both sea and land forces sufficient space for maneuver, surprise, and protection. The EFV's unique combination of speed; mobility; firepower; armor; and nuclear, biological and chemical protection, will allow U.S. Forces to avoid enemy strengths while exploiting its weaknesses. The EFV remains the Marine Corps' number one ground acquisition program.

c. High Mobility Artillery Rocket System (HIMARS)

HIMARS is a KC-130 transportable, wheeled, indirect fire system capable of delivering all rockets and missiles in the current and future Multiple Launch Rocket System Family of Munitions (MFOM) (MFOM HIMARS extends the range of available fire support from 30 km to 60+ km). Initial operational capability was achieved during FY 2007 with the fielding of the first battery to an RC unit that subsequently mobilized and deployed in support of OIF. Full operational capability is scheduled to be achieved in FY 2010 with the fielding of one AC battalion and one RC battalion.

d. Lightweight 155mm Howitzer (M777)

The M777 is the world's first 155mm towed howitzer with a "fly weight" of less than 9,800 pounds. It has digital fire control and offers greater mobility and improved reaction times compared to the M198 Howitzer it is replacing. The M777 will meet increased operational thresholds in range, lethality, survivability, mobility, and sustainability required to support maneuver warfare. The Marine Corps is currently in the middle of transitioning both the AC and RC to the lightweight howitzer.

3. Anticipated Transfers from AC to RC

No major equipment transfers from AC to RC are anticipated for FY 2010-FY 2012.

4. Anticipated Withdrawals from RC Inventory

Table 5 lists major items of equipment to be withdrawn from the RC inventory during FYs 2010–2012.

5. Equipment Shortages and Modernization Shortfalls at the End of FY 2012

Initial issue equipment, including lightweight helmets, small arms protective insert (SAPI) plates, outer tactical vests (OTVs), and other personal protective gear remain the RC's top priority and are critical to the protection and combat effectiveness of RC personnel. The total deficiency for these personal protection items exceeds \$30M; however, the procurement of these items must compete for Operations and Maintenance dollars, since these items may not be purchased with Procurement appropriation funds (e.g., PMC and NGREA). Other critical RC shortfalls include C2 and tactical communications systems, with shortages in Enhanced Position Location Reporting System (EPLRS) radios and multi-band communications systems. Night vision equipment is another RC shortage.

D. Summary

Over the last three years, the Marine Corps and its Reserve have improved Total Force integration and expeditionary capability. While future improvements are required, the Marine Corps Reserve remains ready, willing, and able to answer the Nation's call to duty as demonstrated by the ongoing mobilization and integration of the RC into the AC throughout operations since 2001. Our highest priority is taking care of our greatest asset—the outstanding young men and women who serve in a Marine Corps uniform. It is critical they continue to receive the equipment and support necessary to complete their missions. The Marine Corps Reserve is an integral part of the Marine Corps Total Force, and the Marine Corps will continue to balance available resources to best support its mission. With the continuing support of

Congress, the Administration, and our AC, the Marine Corps Reserve will continue to meet the high expectations of the American public.

Consolidated Major Item Inventory and Requirements

NOTE: This table provides a comprehensive list of selected major items of equipment. It provides the quantity on-hand (QTY O/H) projected to be in the inventory at the beginning/end of the selected fiscal year (FY). It also provides the quantity required (QTY REQ) needed to meet the full wartime requirements of the Reserve component. In accordance with Title 10, the QTY REQ number provides the recommendations as to the quantity and type of equipment which should be in the inventory of each Reserve component. Unit cost values are in dollars.

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	-	-		End FY 2012 QTY REQ
AIRCRAFT							
HELICOPTER, UTILITY, UH-1N	UH-1N	\$7,061,681	9	9	9	9	9
HELICOPTER, CARGO, CH-46E	CH-46E	\$14,983,188	26	26	26	26	26
HELICOPTER, CARGO, CH-53E	CH-53E	\$37,658,528	6	6	6	6	6
AIRCRAFT, ATTACK, AH-1W	AH-1W	\$18,935,714	18	18	18	18	18
AIRCRAFT, FIGHTER/ATTACK, F/A-18A	F/A-18A	\$52,436,016	1	1	1	1	0
AIRCRAFT, FIGHTER/ATTACK, F/A-18A++	F/A- 18A++	\$54,436,016	14	14	14	14	12
AIRCRAFT, FIGHTER, F-5F	F-5F	\$14,830,970	1	1	1	1	1
AIRCRAFT, FIGHTER, F-5N	F-5N	\$702,466	11	11	11	11	11
AIRCRAFT, REFUELING/CARGO, KC-130T	KC-130T	\$45,480,270	28	28	28	28	28
AIRCRAFT, UTILITY/CARGO, UC-12B	UC-12B	\$4,856,577	2	2	2	2	2
AIRCRAFT, UTILITY/CARGO, UC-35C/D	UC-35	\$8,179,661	5	5	5	5	5
COMMUNICATIONS, OTHER							
THEATER BATTLE MGMT CORE SYS, AN/TYY-2	A0013	\$277,468	1	1	1	1	1
COMM DATA LINK SYSTEM, TYQ-101A	A0021	\$324,501	1	1	1	1	1
COMM PLATFORM, AIR DEFENSE (ADCP)	A0025	\$907,000	3	3	3	3	3
RADIO SET, AN/MRC-148	A0067	\$53,234	176	176	176	176	176
RADIO SET, TACTICAL LONG HAUL DIGITAL LINK-11, AN/GRC-256	A0068	\$20,000	1	1	1	1	1
RADIO SET, VEHICLE, AN/VRC-110 50W	A0097	\$14,600	480	480	480	480	480
RADIO SET, AN/PRC-153 (IISR)	A0118	\$3,535	3,340	3,340	3,340	3,340	3,340
MULTIBAND FREQUENCY, VEHICLE MOUNTED, RADIO SYSTEM AN/VRC-103 (V)2	A0126	\$39,000	558	558	558	558	558
COMBAT OPERATIONS CENTER, SET III	A0254	\$1,139,685	3	3	3	3	5
COMBAT OPERATIONS CENTER, SET IV	A0255	\$790,502	20	20	20	20	20
RADIO SET, VRC-104 (V) 5 - (HFR)	A0266	\$30,000	75	75	75	75	75
RADIO SET, VEHICLE, AN/VRC-110 20W	A0273	\$14,400	320	320	320	320	320
DIGITAL TECHNICAL CONTROL (DTC), FACILITY, AN/TSQ-227	A0499	\$1,213,000	4	4	4	6	6
LIGHTWEIGHT MULTIBAND SATELLITE TERMINAL (LMST) HUB AN/USC-65 (V)1	A0806	\$1,500,000	1	1	1	1	1
JOINT TACTICAL DIGITAL LINK-16, AN/YRC-107	A0882	\$683,000	4	4	4	4	4
EPLRS NETWORK MANAGER, AN/TSQ-158A	A1225	\$5,889	9	9	9	9	22
RADAR SET, FIRE FINDER, AN/TPQ-36/46	A1440	\$7,500,000	2	3	3	3	3
RADAR SET, LW3D, AN/TPS-59(V)3	A1503	\$13,217,555	2	2	2	2	2
RADIO TERMINAL SET, AN/MRC-142A	A1955	\$289,603	36	36	36	36	61

Consolidated Major Item Inventory and Requirements

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H		Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ
RADIO SET, AN/MRC-145A	A1957	\$43,986	238	238	238	238	315
RADIO SET, AN/PRC-150	A2042	\$42,689	782	782	782	782	782
RADIO SET, AN/PRC-148	A2043	\$2,250	1,272	1,272	1,272	1,272	1,272
RADIO SET, AN/PRC-148(M)	A2044	\$7,150	3,838	3,838	3,838	3,838	3,838
RADIO SET, FALCON II, AN/PRC-117F	A2068	\$19,247	328	328	328	328	328
RADIO SET, AN/VRC-89D	A2075	\$27,450	46	46	46	46	46
RADIO SET, AN/VRC-90D	A2076	\$12,000	38	38	38	38	38
RADIO SET, AN/VRC-91D	A2077	\$12,000	14	14	14	14	14
RADIO SET, AN/VRC-92D	A2078	\$14,000	36	36	36	36	36
RADIO SET, AN/PRC-119F	A2079	\$4,346	29	29	29	29	29
RADIO SET, EPLRS, AN/VSQ-2C	A2152	\$41,336	569	569	569	569	569
RADIO TERMINAL SET, AN/TRC-170	A2179	\$1,000,000	24	24	24	24	24
TACTICAL AIR OPS MODULE, AN/TYQ-23	A2525	\$1,500,000	6	6	6	6	6
DATA DISTRIBUTION SYS, AN/TSQ-228 (V)3	A2533	\$132,000	34	34	34	34	34
TACTICAL DATA NETWORK, AN/TSQ-222	A2535	\$650,000	4	4	4	6	6
DATA DISTRIBUTION SYSTEM (DDS), TACTICAL SERVER, TSQ-228(V)1	A2538	\$82,000	45	45	45	64	64
TARGET LOCATOR, DESIGNATOR & HAND OFF SYSTEM (TLDHS), AN/PSQ-19A	A2560	\$27,000	206	206	206	206	206
UAV SYSTEM, DRAGON EYE	A3252	\$100,000	30	21	0	0	71
COMM INTERFACE SYSTEM, AN/MRQ-12(V)3	A3270	\$100,000	11	11	11	11	11
ENGINEER SUPPORT EQUIPMENT							
AIR CONDITIONER, 60HZ, 9K BTU	B0001	\$4,694	46	46	46	46	46
AIR CONDITIONER, 60HZ, 36K BTU	B0014	\$9,950	492	492	492	492	492
BOAT, BRIDGE ERECTION, USCSBMK2	B0114	\$154,530	20	20	20	20	20
BRIDGE, MEDIUM GIRDER (MGB), DRY GAP	B0152	\$964,515	6	6	6	6	6
BRIDGE, FLOATING RIBBON, 70-TON	B0155	\$3,568,000	6	6	6	6	6
MINE DETECTING SET, AN/PSS-14	B0476	\$19,300	120	120	120	120	120
EXCAVATOR, ARMORED COMBAT, M9 ACE	B0589	\$887,050	7	7	21	21	20
FUEL DISPENSING SYS, AIRFIELD, M1966	B0675	\$331,061	3	3	3	3	3
FUEL SYSTEM, AMPHIBIOUS ASSAULT, M69HC	B0685	\$1,238,679	3	3	3	3	3
GENERATOR, 3KW, 60HZ, MEP-016B/MEP-831A	B0730	\$9,922	128	128	128	329	329
GENERATOR, 10KW, 60HZ, MEP-003A/803A	B0891	\$14,345	138	138	138	312	312
GENERATOR, 30KW, 60HZ, MEP-005A/805A/B	B0953	\$26,705	96	96	96	234	234
GENERATOR SET, 60KW, 60HZ, MEP- 006A/806B	B1021	\$25,073	81	81	81	155	155
TRACTOR, FT, MED, CAT D7G	B2462	\$70,002	51	51	51	51	58
TRACTOR, WHLD, MP (TRAM)-644E	B2567	\$52,990	68	68	68	68	105
TACTICAL WATER PURIFICATION SYS (TWPS)	B2605	\$350,000	0	0	0	0	33
SUPPLY ITEMS							
AUTOMATIC OPENING DEVICE, MILITARY FREE FALL - 1 PIN 1500 FT	C0001	\$3,068	208	208	208	208	208

Consolidated Major Item Inventory and Requirements

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	-			End FY 2012 QTY REQ
OXYGEN MASK	C2278	\$1,948	208	208	208	208	208
NBC RECONNAISSANCE SYSTEM (FOX) M93	C2282	\$15,400	24	24	24	24	24
RE-BREATHER UNIT, OXYGEN, PORTABLE - PHAOS, OXCON	C2288	\$21,294	43	43	43	43	43
PARACHUTE, PERSONNEL, MC-5	C5649	\$15,043	266	266	266	266	266
MOTOR TRANSPORT							
TRUCK, ARMORED DUMP, 7 TON, AMK 29	D0007	\$220,000	0	0	0	0	64
FRONT POWER UNIT, LOG VEH SYS, MK48	D0209	\$189,000	128	128	128	128	160
SEMITRAILER, 40-TON LOW-BED, M870	D0235	\$61,710	48	48	48	63	65
TRAILER, MK38	D0861	\$54,000	36	36	36	36	36
MTVR, MK37 (MK27 WITH CRANE)	D1063	\$550,000	36	36	36	36	36
TRUCK, AIRCRAFT CRASH/STRUCTURE FIREFIGHTING, A/S32P-19A	D1064	\$162,561	9	9	9	9	24
TRUCK, WRECKER, MTVR, MK-36	D1213	\$531,720	47	47	47	47	51
WEAPONS SYSTEMS							
TOW IMPROVED TARGET ACQ SYS, M41A	E0055	\$1,010,000	25	91	99	99	99
BRIDGE, SCISSOR FOR AVLB	E0149	\$304,952	3	3	3	3	4
BRIDGE LAUNCHER, M60A1	E0150	\$527,126	4	4	4	4	4
COMMAND LAUNCH UNIT, JAVELIN M98A1	E0207	\$126,824	72	72	72	72	72
HOWITZER, MEDIUM, TOWED 155MM, M198	E0665	\$1,032,337	66	66	66	66	48
HOWITZER, LIGHT WEIGHT, TOWED, M777	E0671	\$1,600,000	48	48	48	48	48
ASSAULT AMPHIBIOUS VEHICLE (AAV), COMMAND/COMMUNICATIONS, AAVC7A1	E0796	\$1,600,000	5	5	5	5	5
AAV, PERSONNEL, AAVP7A1	E0846	\$2,000,000	42	42	42	42	42
AAV, RECOVERY, AAVR7A1	E0856	\$2,000,000	6	6	6	6	6
ROCKET LAUNCHER, 83MM, MK153	E0915	\$25,000	270	270	270	270	270
TOW LAUNCHER, M220E4	E0935	\$133,000	24	24	24	24	24
LIGHT ARMORED VEHICLE (LAV), ANTI-TANK, LAV-AT	E0942	\$2,041,350	24	24	24	24	24
LAV, COMMAND/CONTROL, LAV-C2	E0946	\$2,865,070	12	12	12	12	12
LAV, 25MM, LAV-25	E0947	\$2,740,680	88	88	88	88	88
LAV, LOGISTICS, LAV-L	E0948	\$1,692,730	22	22	22	22	22
LAV, MORTAR, LAV-M	E0949	\$2,314,200	12	12	12	12	12
LAV, MAINT/RECOVERY, LAV-R	E0950	\$1,701,600	8	8	8	8	8
MACHINE GUN, .50 CAL, BROWNING M2	E0980	\$12,005	564	564	564	564	0
MACHINE GUN, 7.62MM, M240B	E0989	\$7,096	1,253	1,253	1,253	1,253	0
MACHINE GUN, 40MM, MK-19 W/BKT	E0994	\$17,741	528	528	528	528	0
MORTAR, 81MM, M252	E1095	\$20,298	84	84	84	84	0
RECOVERY VEHICLE, HEAVY, M88A2	E1378	\$2,000,000	6	6	6	6	6
HIGH MOB ARTILLERY ROCKET SYS (HIMARS)	E1500	\$2,748,846	6	6	6	6	6
TANK, COMBAT, 120MM GUN, M1A1	E1888	\$2,800,000	48	48	48	48	48

USMCR Average Age of Equipment

Nomenclature	Equip No.	Average Age	Remarks
HELICOPTER, UTILITY, UH-1N	UH-1N	25	
HELICOPTER, ATTACK, AH-1W	AH-1W	13	
HELICOPTER, CARGO, CH-53E	CH-53E	11	
HELICOPTER,CARGO, CH-46E	CH-46E	39	
AIRCRAFT, REFUELING/CARGO, KC-130T	KC-130T	17	
AIRCRAFT, FIGHTER/ATTACK, F/A-18A	F/A-18A	23	
AIRCRAFT, FIGHTER/ATTACK, F/A-18A++	F/A-18A++	22	
AIRCRAFT, FIGHTER, F-5F	F-5F	30	
AIRCRAFT, FIGHTER, F-5N	F-5N	29	Replaced the F-5E, 11 received with approx 2500 fligh hours per frame.
AIRCRAFT, UTILITY/CARGO, UC-12B	UC-12B	26	UC-12 RA contract awarded to Hawker Beechcraft. Approximately 2 years to field replacement aircraft.
AIRCRAFT, UTILITY/CARGO, UC-35C	UC-35C	9	
AIRCRAFT, UTILITY/CARGO, UC-35D	UC-35D	6	
RADIO TERMINAL SET, AN/TRC-170	A2179	16	SLEP currently ongoing, to be completed during FY 2011.
LIGHT ARMORED VEHICLE, 25MM, LAV-25	E0947	25	Based on a SLEP and other upgrade projects, the service life for the LAV-25 is through 2025.
FRONT POWER UNIT, LOGISTICS VEHICLE SYSTEM, MK48 MOD 0	D0209	23	Being replaced with LVSR (IOC 2009/FOC 2011).
ASSAULT AMPHIBIOUS VEHICLE, PERSONNEL, AAVP7A1	E0846	28	Being replaced with the AAAV (IOC 2010/FOC 2020); Last Service Life Extention Program (SLEP) occurred between 1982-1986. New PIPs being evaluated due to EFV (Formally AAAV) slippage for FY 2007-2010.
TANK, COMBAT, 120MM GUN, M1A1	E1888	17	All M1A1 Tanks have been upgraded to heavy armor tanks as of March 2008.
HOWITZER, MEDIUM, TOWED 155MM, M198	E0665	26	Being replaced with the Lightweight 155MM Howitzer (LW155) (IOC 2005/FOC 2008).

Service Procurement Program - Reserve (P-1R)

NOTE: This table identifies the dollar value of equipment programmed to be procured with Service procurement funds as identified in the P-1R exhibit of the FY 2010 President's Budget Submission. All values are costs in dollars, and ammunition procurements have been excluded. Deliveries of procured equipment normally take one to two years before they arrive in the inventory; e.g., items procured in FY 2010 would be expected to arrive in RC inventories in FY 2011 or FY 2012.

Nomenclature	FY 2010	FY 2011	FY 2012
WEAPONS AND COMBAT VEHICLES			
AAV7A1 PIP	\$62,000		
LAV PIP	6,172,000		
HIGH MOBILITY ARTILLERY ROCKET SYSTEM	1,714,000		
COMMUNICATIONS & ELECTRONICS EQUIPMENT			
FIRE SUPPORT SYSTEM	588,000		
ENGINEER AND OTHER EQUIPMENT			
ENVIRONMENTAL CONTROL EQUIPMENT ASSORTED	4,353,000		
BULK LIQUID EQUIPMENT	1,768,000		
TACTICAL FUEL SYSTEMS	5,258,000		
AMPHIBIOUS SUPPORT EQUIPMENT	5,980,000		
MATERIAL HANDLING EQUIPMENT	7,306,000		
CONTAINER FAMILY	565,000		
FAMILY OF CONSTRUCTION EQUIPMENT	7,040,000		
TOTAL	\$40,806,000		

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

NOTE: This table identifies the dollar value of equipment originally programmed to be procured with the National Guard and Reserve Equipment Appropriation (NGREA). These funds are available for a threeyear period from the year of appropriation. Deliveries of procured equipment normally take one to two years from date of procurement before they arrive in the inventory; e.g., items procured in FY 2009 would be expected to arrive in RC inventories in FY 2010 or FY 2011. All values are costs in dollars.

Nomenclature	FY 2007	FY 2008	FY 2009	
UC-12 AIRCRAFT	\$8,000,000	\$9,100,000		
LITENING II TARGETING POD	7,200,000			
VIRTUAL COMBAT CONVOY TRAINER	4,900,000			
MEDIUM TACTICAL VEHICLE REPLACEMENT - TRAINING SYS	3,950,000			
LOGISTICS SUPPORT WIDE AREA NETWORK (LSWAN) PKG	3,465,000			
INDIRECT FIRE - FORWARD AIR CONTROL TRAINER (I-FACT)	1,875,000			
KC-130T AN/ARC-210 SATCOM RADIO	1,715,000			
COMMUNICATIONS PACKAGE	1,436,050			
DEPLOYABLE VIRTUAL TRAINING ENVIRONMENT (DVTE)	1,170,000	4,995,000		
SENSOR MOBILE MONITORING SYSTEMS (2ND GEN)	900,000			
DEFENSE ADVANCED GPS RECEIVER (DAGR)	280,950			
F/A-18 LITENING II TARGETING POD MODIFICATION KITS	108,000			
PRO RATA SHARE OF REDUCTION UNDER P.L. 109-298, SEC 81	(141,000)			
F/A 18+ LITENING II TARGETING POD		14,700,000		
MEDIUM TACTICAL VEHICLE REPLACEMENT - OPERATOR DRIVING SIMULATOR (MTVR-ODS)		4,445,000		
BRITE STAR FORWARD LOOKING INFRA-RED (FLIR)		3,600,000		
TACTICAL REMOTE SENSOR SUITE (TRSS)		2,911,000		
VIRTUAL COMBAT CONVOY TRAINER - RECONFIGURABLE VEHICLE SIMULATOR (VCCT-RVS)		2,750,000		
KC-130T AN/ARC-210 1556 TO 1794 UPGRADE		1,437,000		
HMMWV EGRESS ASSISTANCE TRAINER (HEAT)		500,000		
MULTI-BAND MAN PACK (ROVER III)		258,000		
LOGISTICAL VEHICLE REPLACEMENT SYSTEM-CARGO			\$17,467,718	
LIGHT ARMORED VEHICLE 25 A2 VARIANT (LAV-25A2)			16,463,000	
BRITE STAR FORWARD LOOKING INFRA-RED (FLIR)			7,200,000	
TACTICAL REMOTE SENSOR SUITE (TTSS)			5,764,000	
TACTICAL LAPTOP COMPUTER PACKAGE			4,713,000	
UC-35D AIRCRAFT SURVIVABILITY UPGRADES			3,000,000	
SUPPORTING ARMS UPGRADE TO DIGITAL TRNG ENVIRONMENT	Г		2,882,000	
TACTICAL REMOTE SENSOR SYSTEM UPGRADES			2,723,400	
COMMERCIAL SATELLITE COMMUNICATION SET			514,500	
DATA PROCESSING MODULE			328,000	
DIGITAL TERRAIN ANALYSIS MAPPING SYSTEM-LITE			315,000	
MARINE CORPS TACTICAL WELDING SHOP			210,000	
EMBARKATION MATERIALS			200,000	
ALTERNATIVE/RENEWABLE ENERGY PRODUCTION EQUIPMENT			200,000	

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

Nomenclature	FY 2007	FY 2008	FY 2009
ADVANCED IMAGERY MODULE			137,000
TACTICAL HANDHELD COMMUNICATION SET			132,000
HANDHELD SATELLITE COMMUNICATION SET			96,600
MEDIA EXPLOITATION SET-LITE			75,000
TOTAL	\$34,859,000	\$44,696,000	\$62,421,218

Projected Equipment Transfer/Withdrawal Quantities

NOTE: This table portrays the planned equipment transfers (Active to Reserve), withdrawals (-), and decommissioning (-). Transferred equipment is commonly called "cascaded equipment," or equipment that is provided to the RC once the AC receives more modern equipment. Although this table highlights a three-year period, many Services will not know exact quantities of transfers or withdrawals until year of execution, due to the uncertainty of the procurement/delivery cycle of new equipment.

				I	
Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty	Remarks
DIGITAL TECHNICAL CONTROL (DTC), FACILITY, AN/TSQ-227	A0499			+2	
TACTICAL DATA NETWORK, AN/TSQ-222	A2535			+2	
DATA DISTRIBUTION SYSTEM (DDS), TACTICAL SERVER, TSQ-228(V)1	A2538			+19	
UAV SYSTEM, DRAGON EYE	A3252	-9	-21		
EXCAVATOR, ARMORED COMBAT, M9 ACE	B0589		+14		
GENERATOR, 3KW, 60HZ, MEP-016B/MEP-831A	B0730			+201	
GENERATOR, 10KW, 60HZ, MEP-003A/803A	B0891			+174	
GENERATOR, 30KW, 60HZ, MEP-005A/805A/B	B0953			+138	
GENERATOR SET, 60KW, 60HZ, MEP-006A/806B	B1021			+74	
SEMITRAILER, 40-TON LOW-BED, M870	D0235			+15	
TOW IMPROVED TARGET ACQ SYS, M41A	E0055	+66	+8		
TOW LAUNCHER, M220E4	E0935	-62			

FY 2006 Planned vs Actual Procurements and Transfers

NOTE: This table compares what the Service planned to procure and transfer to the RC in FY 2006 with actual procurements and transfers. FY 2006 is selected as these are the most recent funds to expire. Since the procurement cycle is normally one to two years from funding to delivery, this table identifies only what has been delivered through the end of FY 2008. Procurement and NGREA columns reflect cost values in dollars.

Nomenclature	Equip No.	FY 2006 Transfers (# of items)		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
FY 2006 PLANNED TRANSFERS & WITHDRAWA	<u>LS</u>						
AIRCRAFT, FIGHTER, F-5E	F-5E	-4	-4				
AIRCRAFT, FIGHTER, F-5N	F-5N	+4	+4				
TY 2006 P-1R EQUIPMENT							
WEAPONS AND COMBAT VEHICLES							
AAV7A1 PIP				\$769,000	\$8,000		
LAV PIP				11,792,000	13,118,000		
M1A1 FIREPOWER ENHANCEMENTS				14,151,000	13,073,000		
155MM LIGHTWEIGHT TOWED HOWITZER				33,887,000	0		
HIGH MOBILITY ARTILLERY ROCKET SYSTE	M			138,724,000	0		
MODIFICATION KITS				3,361,000	3,185,000		
WEAPONS ENHANCEMENT PROGRAM				616,000	89,000		
COMMUNICATIONS AND ELECTRONICS EQU	PMENT						
REPAIR AND TEST EQUIPMENT					1,763,000		
MODIFICATION KITS				261,000	247,000		
ITEMS UNDER \$5 MILLION (COMM & ELEC)				686,000	650,000		
AIR OPERATIONS C2 SYSTEMS				494,000	467,000		
NIGHT VISION EQUIPMENT				14,807,000	378,000		
COMMAND POST SYSTEMS				1,199,000	1,136,000		
COMM SWITCHING & CONTROL SYSTEMS				168,000	830,000		
TACTICAL VEHICLES							
5/4T TRUCK HMMWV (MYP)					4,463,000		
OTHER SUPPORT - ITEMS LESS THAN \$5 M	ILLION			178,000	168,000		
ENGINEER AND OTHER EQUIPMENT							
ENVIRONMENTAL CONTROL EQUIP ASSOR	Т			1,370,000	0		
BULK LIQUID EQUIPMENT				12,515,000	2,291,000		
TACTICAL FUEL SYSTEMS				766,000	725,000		
POWER EQUIPMENT ASSORTED				1,676,000	1,244,000		
AMPHIBIOUS SUPPORT EQUIPMENT				117,000	111,000		
MATERIAL HANDLING EQUIPMENT				5,274,000	6,066,000		
TRAINING DEVICES				4,861,000	2,641,000		
CONTAINER FAMILY				551,000	586,000		
FAMILY OF CONSTRUCTION EQUIPMENT				3,651,000	2,592,000		
OTHER SUPPORT - ITEMS LESS THAN \$5 M	ILLION			111,000	106,000		

Table 6

USMCR

Nomenclature	Equip No.	FY 2006 Transfers (# of items)		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
FY 2006 NGREA EQUIPMENT							
VIRTUAL COMBAT CONVOY TRAINER						\$6,533,332	\$6,533,332
INTEGRATED INTRA-SQUAD RADIO (IISR)						2,592,500	2,592,500
ALTERNATE POWER SUPPLY (DIVISION)						1,130,000	1,130,000
COUNTERINTELLIGENCE HUMINT EQUIPME	INT SUI	TE (CII	HEP)			160,000	0
MEDIUM TACTICAL VEHICLE REPLACEMEN	T - TRAI	NING	SYS			398,000	398,000
AN/PRC-148 HANDHELD RADIO						1,042,500	1,042,500
6TH COMMUNICATION BATTALION PACKAGE						668,000	668,000
MARINE EXPEDITIONARY POWER DISTRIBUTION S		YSTEN	Л			1,000,000	1,000,000
DEFENSE ADVANCED GPS RECEIVER (DAG	iR)					219,141	219,141
M4 CARBINE						150,075	150,075
COMBAT VEHICLE TRAINING SIMULATOR						3,980,000	3,980,000
MARINE LOGISTICS COMMAND COMM PAC	MARINE LOGISTICS COMMAND COMM PACKAGE					3,702,000	3,702,000
TACTICAL DATA NETWORK TRAINING SOLUTIONS PAG			AGE			3,300,000	3,460,000
GROUND LASER TARGET DESIGNATOR						2,856,000	2,856,000
ENVIRONMENTAL CONTROL UNIT						1,104,000	1,104,000
ALTERNATE POWER SUPPLY (FORCE)						592,000	592,000
IN-TRANSIT VISIBILITY MANAGEMENT PACK	AGE					170,000	170,000
TOTAL				\$251,985,000	\$55,937,000	\$29,597,548	\$29,597,548

USMCR Major Item of Equipment Substitution List

NOTE: This table identifies equipment authorized by the Service to be used as a substitute for a primary item of equipment. The table also identifies whether or not the item is able to be deployed in wartime. This data meets the Title 10 requirement to identify equipment that is not the most desired item of equipment.

Required Item	Reqd Item	Substitute Item	Substitute Item	FY 2010	Deployable?		
Nomenclature	Equip No.	Nomenclature	Equip No.	Qty	Yes	No	

Service Does Not Use Substitution To Satisfy Major Item Equipment Requirements

Table 7

Chapter 4 United States Navy Reserve

I. Navy Overview

A. Navy Planning Guidance

America remains a nation at war, and our Navy and Marine Corps are committed to achieving victory in Iraq, Afghanistan, and wherever terrorist enemies may be found. Given this focus, we must examine the full range of implications of today's war and understand the operational reliance placed upon our Reserve component (RC). Today's Navy Reserve is a full partner in naval planning operations, yet it faces several significant equipment and funding challenges. While we have taken a simultaneous operational and strategic posture, we have retained the vestiges of legacy strategic assets that now need vital recapitalization to sustain our current role.

Our Nation's maritime strategy reaffirms the use of seapower to influence actions and activities at sea and ashore, and adds to the core applications of naval warfare. We believe that preventing wars is as important as winning wars and have identified "A Cooperative Strategy for 21st Century Seapower" that requires our Navy to be forward, present, and engaged as the foundation for peaceful relations around the globe. Where tensions are high or where there is a need to demonstrate a commitment to security, we will aggregate forces to limit conflict or deter major war. As part of the Total Force, the Navy Reserve is a daily part of this effort, and our veteran capability and capacity are relied upon to support and achieve this strategy.

Our maritime forces will also be positioned and tailored to support humanitarian operations, counter-piracy efforts, and the training of partner nations. These new core capabilities move us to adopt persistent global presence as a key tenet of our strategy. The increasing desire for sustainable forward presence is one of the driving factors in decisions on fleet size and fleet composition.

The value of presence and engagement cannot be overstated. The world is a far more connected and interdependent globe today than it was in years past. Nations have moved away from the idea that they must have economic self-sufficiency and have largely recognized the value of trade.

Goods are globally sourced, and nations are dependent on suppliers for the necessities of life from every continent: energy resources from Africa and South America as well as from the Middle East; raw materials from South America, Africa, and Australia; finished products from China; and food stuffs from North America. Of this world trade, 90 percent of it is transported by sea.

With today's global economy, maritime security has a major claim on our attention. Minor shocks and interruptions to the flow of trade at sea can have dramatic, instantaneous effects that reverberate worldwide. Safeguarding this source of food, energy, and goods is critical to the world's economy. Global conditions and trends have driven us to put a higher premium on maritime security around the globe and the need to increase our worldwide presence. We cannot maintain global maritime security by ourselves, and need to form maritime partnerships.

We are advocating more cooperation among nations that share a common stake in international commerce, safety, security, and freedom of the seas. Maritime partnerships and cooperation will

promote global maritime security. However, even if we achieve great success in establishing partnerships, we will need to increase our presence to develop and maintain those partnerships.

In the Chief of Naval Operations (CNO) Guidance for 2007–2008, "Executing our Maritime Strategy," dated October 25, 2007, the CNO's vision for implementing our Maritime Strategy is:

The United States Navy will remain the preeminent maritime power, providing our country a global naval expeditionary force committed to global security and prosperity. We will defend our homeland and our Nation's vital interests around the world. We will prevent war, dominate any threat, and decisively defeat any adversary. The Navy will remain a powerful component of Joint warfare by exploiting cutting edge technology and cooperating closely with the other Services, the interagency community, allies, and international partners. We will remain a superbly trained and led team of diverse Sailors and civilians, who are grounded in our warrior ethos, core values, and commitment to mission readiness and accomplishment.

Additionally, the CNO's guiding principles include the following:

We balance our efforts. We will be both effective and efficient in building, sustaining and employing the force, informed by rigorous measures and a clear understanding of the return on investment. Our success in defending our Nation requires balance across the capabilities, capacity, readiness and people that combine to make the Navy a relevant force. We will maintain a long view with regard to balancing these priorities and respecting the imperatives of today while building a foundation for tomorrow.

We are fiscally responsible. We will determine the right type and levels of output required of our Navy, and align our resources and processes to deliver that output at the best cost.

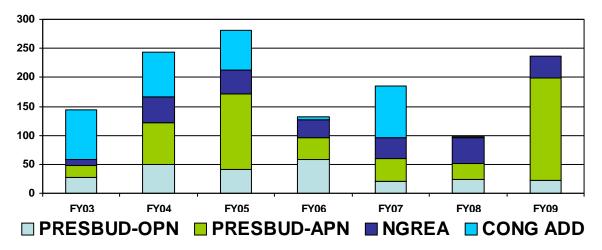
B. Navy Equipping Policy

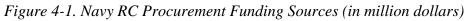
Navy policy for procurement and distribution of equipment to Navy Reserve Forces (Office of the CNO [OPNAV] Instruction 4423.3 Equipping Reserve Forces) states that RC units will be equipped to accomplish all assigned missions and will have an equipment and distribution program that is balanced, responsive to mission requirements, and sustainable. The priority for distribution of new and combat-serviceable equipment, with associated support test equipment, is to units scheduled to deploy first. The same methodology for prioritizing equipment distribution for Active component (AC) units determines equipment priorities for RC units with the same mobilization mission or deployment requirements.

The Navy has established a seamless and fully integrated Total Force. The RC is a force multiplier to the Total Force that can be used periodically and predictably, providing operational support when and where it is needed at a cost savings to the Navy. Within the Fleet Readiness Enterprise, each Navy Warfare Enterprise (Air, Surface, Subsurface, Expeditionary, and Networks) identifies RC requirements for new equipment as part of the Navy's resource-allocation process. This equipment is used to generate and sustain fleet readiness during at-home training and forward-based operations and is ready to surge forward as combat replacement or capacity in response to a Request for Forces (RFF) to be sourced by the Navy. Navy Reserve expeditionary forces have been heavily mobilized to the extent that authorized equipment has greatly deteriorated and is now in urgent need of modernization and replacement. Similarly, our aviation squadrons have transferred a significant number of aircraft to the AC as replacement

aircraft for those whose accelerated fatigue has created a substantial shortfall in AC inventory. These aircraft and equipment are now in critical need of recapitalization, all within a challenging budgetary environment.

The Department of the Navy (DoN) funds RC equipment through the President's Budget (PRESBUD) request (consisting of the Aircraft Procurement, Navy [APN] and Other Procurement, Navy [OPN] accounts), Congressionally-added funding (CONG ADD), and National Guard and Reserve Equipment Appropriation (NGREA) funding. Figure 4-1 provides an overview of funding provided to Navy RC from all three sources from FY 2003 through FY 2009.





C. Plan to Fill Mobilization Shortages in the RC

Major operation plans (OPLANs) and contingency plans require RC units to deploy as integrated parts of the Navy warfighting plan. Navy Component Commanders (NCCs) identify equipment requirements during the resource-allocation process, which the CNO then prioritizes.

RC activities maintain equipment as either training or mobilization assets. Mobilization assets are stored at major embarkation locations in the United States as War Reserve Materiel Stock (WRMS) or pre-positioned overseas/afloat. WRMS and pre-positioned equipment are distributed to both AC and RC according to operational requirements.

D. Initiatives Affecting RC Equipment

The Navy has several ongoing initiatives to modernize, improve, or change the operational capabilities of the RC. These initiatives include:

• Replacement of the aging DC-9 and C-9B aircraft with the C-40A is a critical RC capability enhancement. The goal of the C-9 aircraft replacement program, initiated in 1997, is to replace the original 27 aging DC-9 and C-9B transport aircraft with C-40A aircraft. To date, 9 C-40A aircraft have been procured, and 8 more have been identified and required by the FY 2008 Navy Aviation Plan 2030. Procurement has been accomplished through a combination of NGREA, Congressional adds, and Navy PRESBUD funding as displayed in Table 4-1.

FY	Quantity	Funding source
1997	2	NGREA
1998	1	NGREA
1999	1	NGREA
2000	1	PRESBUD
2001	1	Congressional add
2003	1	Congressional add
2004	1	PRESBUD
2005	1	PRESBUD
2009	2	PRESBUD

Table 4-1. RC C-40A Funding

- Replacement of the EA-6B Prowler aircraft with the EA-18G Growler is required to continue RC Fleet Electronic Attack (EA) capability. Currently, only one RC squadron has sustained both air wing readiness and expeditionary EA capacity, and its aircraft will be retired in 2012.
- The Maritime Patrol and Reconnaissance P-3 aircraft continue to be impacted by advancing structural fatigue limitations. Over the last 5 years, 35 RC P-3C aircraft have been transferred to the AC inventory as replacements from disestablished RC squadrons; we now have 2 squadrons of RC aircraft remaining that must be recapitalized with the P-8A aircraft to meet minimum wartime-readiness capability provided by veteran antisubmarine-warfare (ASW) expertise.
- Replacement of the aging and maintenance-intensive C-130T aircraft with the KC-130J is a critical RC capability enhancement. C-130 aircraft are a critical part of the Navy Unique Fleet Essential Airlift (NUFEA) mission; they serve as a connector between strategic airlift points and the Carrier Onboard Delivery and Vertical Onboard Delivery to the fleet, and specialize in oversized cargo with tanking capability.
- Equipping 44 F-5N aircraft with radar for adversary support. Evolving threats and DoN counterair tactics require radar-equipped F-5s to provide the required level of support to train deploying forces, directly threatening the assumption fleet aviators can generate the combatant-command (COCOM)-directed effects their hardware is theoretically capable of performing. EA is an inexpensive, highly portable technology capable of disrupting possible COCOM-directed counterair effects in potential future conflicts.
- Forty-four F-5 aircraft were purchased from Switzerland over the past several years for use by Navy and Marine Corps RC squadrons as adversary aircraft. These aircraft are performing a vital combat-training mission using veteran combat-skilled aviators to train our replacement aircrews and our deploying carrier air wings. Their upkeep and modernization are of critical importance. These F-5s are a major RC force multiplier.
- Modernization and recapitalization of Naval Construction Force (NCF) unit equipment Table of Allowances (TOAs). Navy Expeditionary Combat Command (NECC)

completed a thorough review of the NCF plan to modernize and recapitalize the NCF TOAs. The types of equipment reviewed include tactical vehicles, construction and maintenance equipment, and expeditionary camp material. The CNO has supported the recapitalization and modernization of NCF equipment through inflation-adjusted program funding across the Future Years Defense Plan (FYDP), as well as through supplemental funding. NGREA funds have reinforced the NCF equipment program by filling critical equipment gaps and accelerating outfitting of RC units. RC equipment is used to train Seabees at Readiness Support Sites and protect Seabees in operational environments.

- Modernization and replacement of the Navy Expeditionary Logistics Support Group (NAVELSG) equipment TOA is necessary to improve current readiness and to ensure successful and safe cargo-handling operations. NAVELSG equipment (civil engineering support equipment [CESE], material-handling equipment [MHE], and communications gear) held by units and in WRMS is serviceable, but requires modernization. Since FY 2004, more than \$16 million in NGREA funding has been provided to NAVELSG to upgrade RC TOAs.
- Over the last 5 years, 28 Reserve F/A-18 A/B aircraft have been transferred to the AC from disestablished RC squadrons to reduce the ongoing strike-fighter inventory shortfall. We now have two squadrons remaining with a total of 24 Hornets that provide the most advanced adversary program within the Navy and also use veteran combat-skilled aviators to train our replacement aircrews and deploying carrier air wings. These squadrons need recapitalization with the F/A-18 E/F aircraft to sustain world-class adversary presentation.
- Completion of a mission revision of the command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) equipment; boats; and CESE requirements of the Maritime Expeditionary Security Force (MESF) and Explosive Ordnance Disposal (EOD) RC unit TOAs in 2008 by NECC. This revision will ensure a better equipment mix for these fully-integrated support units.

E. Plan to Achieve Full Compatibility between AC and RC

The Navy is a seamless and fully-integrated Total Force. As such, it plans and programs all equipment inventories to provide the most capable systems to meet mission requirements and minimize the effects of equipment shortfalls and incompatibility throughout the mission spectrum of the Fleet. The Navy must have interoperability between all elements of the Total Force to ensure a war winning team. AC and RC equipment acquisition, upgrade programs, and equipment redistribution from the AC to the RC have virtually eliminated capability and compatibility gaps between RC, AC, and Joint forces.

Now, we are at a pivotal moment, having leaned our RC force structure to the appropriate capability and capacity required to sustain the operational reserve. We measure the value and the return on investment that our people and equipment deliver to the Total Force on a daily basis. Critical recapitalization is now needed, and budgetary dynamics make us ever reliant on a combination of the Service priority and the direct appropriation for recapitalizing these aging and depreciated assets.

II. Navy Reserve Overview

A. Current Status of the Navy Reserve

1. General Overview

Navy Reserve units are equipped to accomplish all assigned missions and have an equipment and distribution program that is balanced, responsive to mission requirements, and sustainable. The AC determines equipment requirements and ensures RC equipment compatibility.

The Navy Reserve consists of operational hardware units providing personnel and equipment, and strategic augmentation units, which provide personnel only. Equipment availability affects unit training, readiness, and the ability to perform assigned missions. Systems Commands (i.e., Naval Supply Systems Command, Naval

Top Navy Reserve Equipping Challenges

- Aircraft procurement (C-40A, E/A-18G, P-8, KC-130J, and F/A-18E/F)
- Civil engineering, material handling, and communications equipment for GWOT-related units

Facilities Engineering Command, Naval Air Systems Command, and Naval Sea Systems Command) act as project managers to establish equipment allowances for designated RC hardware units to support operational requirements.

Navy Reserve major hardware units consist of 12 Mobile Construction Battalions; 11 Cargo Handling Battalions; 2 Maritime Expeditionary Security Groups with 10 Security Squadrons; 2 EOD Operational Support Units (OSUs); 2 EOD Mobile Units; 9 Oliver Hazard Perry class frigates (FFGs); and 169 aircraft. All RC ships, MESF, NCF, NAVELSG, and EOD units are under the operational control of U.S. Fleet Forces Command or Pacific Fleet. RC aircraft squadrons are under the operational control of Commander, Naval Air Forces. The RC possesses 100 percent of the Navy's organic medium airlift, 75 percent of the adversary training capability, 20 percent of the rotary-wing capability, and 9 percent of the carrier air wing capability.

a. Fleet Air Logistics

The RC provides 100 percent of the Navy's organic intra-theater, medium-airlift capability for COCOMs worldwide, and airlift support to all military departments within the continental United States. The Fleet Logistics Support Wing consists of 15 squadrons operating C-40, C-9, C-20, C-37, and C-130 aircraft. The C-9 aircraft average over 32 years in age and require substantial avionics



upgrades and engine replacement to meet globally-mandated noise-abatement and navigation requirements. Significant airlift recapitalization was initiated in FY 1997 when \$120M of NGREA funding was provided for procurement of the first 2 C-40A aircraft to begin the replacement of the aging C-9 fleet. Seven more C-40As were procured between FY 1998 and FY 2005 utilizing funding through NGREA, Congressional adds, and the PRESBUD. To date, 9 C-40As have been accepted and are being operated by VR-59 (Naval Air Station [NAS] Joint Reserve Base, Fort Worth, TX); VR-58 (NAS Jacksonville, FL); and VR-57 (NAS North Island, CA).

The C-130Ts are operating at a 5-plane shortfall per CNO's NavPlan 2030 redline requirement. The current fleet is Communications Navigation Surveillance/Air Traffic Management (CNS/ATM) compliant through FY 2014. The Navy has established a prioritized list of requirements to maintain the C-130T fleet. A C-130T modernization effort, known as Avionics Modernization Program (AMP), was cancelled due to excessive cost and upgrade timeline. Presently, KC-130Js have



twice the ready-for-tasking days as the C-130Ts and are the best investment option.

b. Tactical Aviation

The RC Tactical Support Wing (TSW) provides a strategic reserve for the Navy's 10 Carrier Air Wings (CVW). Additionally, TSW squadrons provide adversary training, counter-narcotics, and homeland defense (HLD) operations. The TSW is comprised of 6 squadrons: 1 E/A-6B, 2 F/A-18A+, 2 F-5E/F/N, and 1 E-2C.



The E/A-6B squadron, VAQ-209, completed a 75-day deployment to Bagram, Afghanistan in February 2008, flying more than 840 combat hours. The E/A-6B is currently planned to be removed from the Navy's inventory in FY 2012. The Navy is attempting to recapitalize the RC E/A-6B Prowlers with 7 E/A-18G aircraft. The transition is needed to mitigate the Airborne Electronic Attack (AEA) capacity and capability gap in FY 2012. VAQ-209 is scheduled to fly the E/A-6B until FY 2012

with no replacement aircraft slated. The Navy, Air Force, and Congress have stated in Congressional testimony that an unfunded AEA joint requirement capability and capacity gap will occur in FY 2012 and continue in the future. Without the RC E/A-18G transition, the Navy will lose critical operational and strategic reserve AEA capability and capacity. These aircraft will ensure COCOM requirements are supported with the ability to maintain the composition of Navy CVW with a transformational capability for Suppression of Enemy Air Defenses (SEAD), integrated air/ground attack, and Global War on Terror (GWOT) operations.

The TSW F/A-18 and F-5 aircraft provide 75 percent of the Navy's adversary mission capability. The Navy is seeking to recapitalize the RC legacy F/A-18A+ squadrons with an F/A-18E squadron and a Joint Strike Fighter (JSF) squadron. F/A-18Es and JSF will provide sustainable platforms to meet the Navy's vision of future warfare capabilities as discussed in the Sea Power 21 guiding



principles. These baseline strike fighter squadrons will support SEASTRIKE interoperability, the Navy's power projection pillar of operations discussed in Sea Power 21, to achieve the COCOM objective to reduce the overall baseline strike-fighter shortfall. Over the last five years as RC squadrons were disestablished, 28 RC F/A-18 A/B aircraft have been transferred to the AC to reduce this shortfall. This places a significant dependence on the remaining RC F/A-18A+ aircraft, which comprise 26 percent of the Navy's adversary capability and 51 percent of the radar-capable adversary capability. The F/A-18E will provide a sustainable platform enabling the full spectrum of capabilities, including adversary, in the near and long term. The Adversary Operations Advisory Group has identified a shortfall in adversary presentations that could be mitigated by a

West Coast RC adversary squadron. This capability would have immediate impact to Fleet readiness and training through increased combat-veteran, adversary sortie-generation.

Carrier Airborne Early Warning Squadron (VAW)-77's E-2C aircraft provide 180 days (100 percent) of the Joint Chiefs of Staff requirement for Navy VAW counter-narcotics support to Southern Command (SOUTHCOM) and 30 days of HLD support to Northern Command, while participating regularly in Fleet exercises.

c. Maritime Patrol and Reconnaissance Aircraft (MPRA)

The RC currently provides approximately 10 percent of the Navy's maritime patrol aircraft providing anti-submarine warfare, counter-narcotics operations, and Fleet exercise support. The RC has 2 P-3C squadrons, each composed of 6 aircraft. In 2006, 2 RC MPRA squadrons began reporting directly to AC Patrol and Reconnaissance Wings under the guidance of Commander Patrol and Reconnaissance Group. RC squadrons support the CNO's Fleet Response Plan (FRP) by continuously providing 6 combat-ready aircrews for worldwide



surge. RC crews train to the same standards as AC aircrews and operate front-line mission aircraft. Due to the accelerating fatigue of the P-3C aircraft, 35 RC P-3C aircraft have been transferred to the AC inventory as replacements from disestablished RC squadrons. The MPRA community has also pioneered the Consolidated Maintenance Organization (CMO) concept, where all aircraft are pooled and maintained by a combined AC and RC maintenance team assigned to the parent wing. In FY 2008, while working under the CMO concept, AC aircrews flew 80 percent of the total hours accumulated on the 12 remaining RC P-3C aircraft. Twelve AC squadrons are programmed to transition to the P-8A aircraft. RC combat aircrews will continue to train and execute front-line missions, ensuring the MPRA community's ability to satisfy COCOM requirements while the AC fleet transitions to the P-8As.

d. Carrier and Expeditionary Strike Group Rotary Aviation



The RC currently provides 3 helicopter squadrons to the Navy's rotary-wing fleet. All 3 squadrons are fully integrated into AC wings. The RC also provides personnel and equipment (8 MH-53E helicopters) in support of 2 composite AC/RC Airborne Mine Countermeasures (AMCM) squadrons, HM-14 (NAS Norfolk, VA), and HM-15 (NAS Corpus Christi, TX). RC rotary-wing assets provide the Navy's only dedicated Naval Special Warfare support squadron, 12 percent of the Navy's total helicopter inventory, and 37 percent of its AMCM assets. The squadrons perform a variety of critical missions including search and rescue, logistics support, anti-submarine warfare, AMCM, and counter-narcotics operations. The

RC helicopter inventory consists of the HH-60H, SH-60B, MH-60S, and MH-53E aircraft. The RC helicopter footprint in Iraq has been continuous since 2003. Personnel from HSC-84 (NAS Norfolk, VA) and HSC-85 (NAS North Island, CA) have been partially mobilized and deployed in support of OIF, supporting special operations ground force missions in urban and rural areas, psychological operations, and medical and casualty evacuations. In addition to OIF, HSC-85 provides continuous support to the Southern California Offshore Range (SCORE) and also provides the Navy's only

firefighting capability to the California Department of Forestry. HSL-60 (NAS Mayport, FL) is tasked with counter-narcotics operations, deploying for six-months per year with Joint Interagency Task Force organizations in the SOUTHCOM Area of Responsibility (AOR).

e. Maritime Expeditionary Security Force (MESF)

The MESF organization consists of 2 group commands (AC commander with RC augmentation), 10 squadron commands (1 AC, 4 RC, and 5 blended commands), and smaller unit structures. The division commands are specialized in 1 of 3 functional areas: boats, security, or command and control (C2). Likewise, the subordinate detachments are similarly specialized into boat detachments, security detachments, and communications or sensor detachments.



The mission of MESF is to provide highly trained, scalable, and sustainable security teams capable of defending mission critical assets in the near-coast environment. Expeditionary security units provide worldwide maritime and inshore surveillance, security and anti-terrorism force protection, ground defense, afloat defense, airfield/aircraft security, and a wide range of secondary tasks from detention operations to law enforcement.

AC and RC MESF units are hardware equipped for their additional mission as Crisis Response-Immediate (CR-I) units. They are operationally assigned to the cognizant numbered Fleet Commander, but as CR-I units, they are available for homeland security tasking as required. All MESF units require individual combat equipment and weapons for all assigned personnel, and sufficient CESE for the overland tactical movement of their assigned TOA and personnel. The boat divisions currently operate the 25' and 34' inshore patrol craft. The security divisions perform landward, mobile over road, and embarked vessel security. The communications detachments are equipped with the Mobile Ashore Support Terminal. Sensor detachments are equipped with the Radar Sonar Surveillance Center.

f. Explosive Ordnance Disposal



The Navy Reserve EOD force consists of two EOD Operational Support Units (EODOSU) located in the fleet concentration areas of San Diego (EODOSU SEVEN) and Norfolk (EODOSU TEN). As a part of future EOD force structure changes, EODOSU SEVEN will become a part of EOD Expeditionary Support Unit ONE (EODESU ONE).

RC EODOSUs are fully integrated with their AC counterparts.

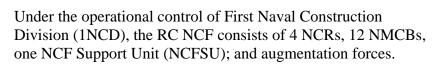
EODOSUs provide direct, periodic, and predictable operational support through the utilization of RC EOD officers and technicians, RC Navy divers, and a host of critical support ratings. Each OSU has a staffing structure of approximately 25 AC and RC officers, and 130 AC and RC enlisted Sailors.

The current plan for RC EOD is the transformation of seven EOD Ordnance Clearance Platoons to four EOD companies (matching AC Mobile Units). To achieve the transformation, an EOD school

pipeline for the RC has been established to create a RC EOD force with the full EOD mission capability rather than just anti-terrorism force protection and AC EOD support.

g. Naval Construction Force

With the addition of an AC Naval Construction Regiment (NCR) and Naval Mobile Construction Battalion (NMCB) in FY 2008, the Navy Reserve now provides 54 percent of the Navy's combat construction capability in support of Unified Commands and NCC requirements compared to 66 percent in FY 2007. The AC and RC are a fully integrated force, with all units having the same operational chain of command, mission, readiness standards, and equipment. OPLAN support is provided by a mix of AC and RC units with ready equipment sets in theater.







To improve the balance between early and late flowing units to support existing OPLANs, 2 RC Construction Battalion Maintenance Units (CBMUs) were converted to AC in 2006. This allows rapid deployment to support Marine Corps headquarters base camps, eliminating 17 smaller, specialized AC Construction Battalion units, and support Navy Expeditionary Medical units (formerly Fleet Hospitals). This conversion provides greater capability to respond to chemical, biological, nuclear, radiological, and explosive incidents within the United States.

The RC NCF has equipment shortfalls in its deployment TOA sets held in WRMS. Equipment shortfalls include tactical vehicles, CESE, and communications gear. Funds provided from FY 2004 through 2008 NGREA to procure two mobile firearms training simulators, High Mobility Multipurpose Wheeled Vehicles (HMMWVs), and Medium Tactical Vehicle Replacements (MTVRs) have increased RC readiness. These investments have enhanced RC NCF's exceptional ability to rapidly mobilize, quickly refresh its military skills during postmobilization training, and then deploy into a hostile theater at the same readiness levels as its AC counterparts.

h. Navy Expeditionary Logistics Support Group



NAVELSG RC units constitute more than 90 percent of the Navy's cargo handling support capabilities. NAVELSG units provide a wide range of logistics capabilities, including ship loading and discharge, operating air cargo and freight forwarding terminals, warehouse operations, and mobile mail centers. Cargo handlers maintain their skills during peacetime by carrying out ship offloads and backloads for the Naval Expeditionary Medical Support Command, the Maritime Prepositioning Ships, and by providing operational support to Naval logistics commanders in European, Pacific, and Central Command AORs. They have been fully integrated with the AC since the beginning of FY 2005 when the Navy's AC cargo handling battalion transferred operational and administrative control to NAVELSG.



In support of OEF and OIF, NAVELSG provided 385 personnel for Forward Logistics Site support to offload Maritime pre-positioned and contracted ships. NAVELSG's most recent operational commitment has been its involvement in joint operations with the Army and Marine Corps in support of the OIF and OEF.

Additionally, NAVELSG provides mobilization, training, equipping, and administrative support to provisional Customs Inspection Battalions (445 RC

personnel per unit). Six Customs Battalions have been deployed to OIF. This mission is scheduled to continue into OIF deployment cycles 8–10.

NAVELSG equipment (CESE, MHE, and communications gear) in units and WRMS is serviceable, but requires modernization. For example, HMMWVs have been added to the NAVELSG TOA; however, NAVELSG must borrow Army and Marine Corps HMMWVs, because it lacks sufficient inventory assets. Historically, NGREA has been a large portion of the funds used to upgrade RC TOAs. However, less than 20 percent of the NAVELSG TOA requirements are funded, and additional funding will be needed to significantly reduce TOA shortfalls. These TOA shortfalls affect the ability of NAVELSG to support OPLANs that require the majority of the force to deploy and conduct simultaneous cargo-handling missions.

i. Maritime Civil Affairs Group (MCAG)

The MCAG and its associated squadrons with their teams were established as part of the CNO's GWOT initiative to assess, plan, and execute civil affairs (CA) operations in the maritime environment (including littorals and rivers) using an effects-based planning methodology. These operations support the NCC in engaging the civil component to enhance the effectiveness of planned or ongoing operations. These operations will also assist in integrating the NCC or Joint Forces Maritime Component Command (JFMCC) actions into the COCOM's overarching CA program.

The MCAG RC, eventually expected to number 15 teams, is currently funded for the purchase of only 4 TOAs. As this constitutes only approximately one-fourth of the expected teams, a serious shortfall exists in the RC capability.

j. Combat Camera (COMCAM)

RC COMCAM organizations consist of force packages and combat documentation teams that deploy in support of Navy, joint task force (JTF), COCOM, Chairman of the Joint Chiefs of Staff, and OSD objectives with specialized imaging capabilities for the attainment of national objectives. RC COMCAM forces provide specialized imaging acquisition and transmission capabilities to document force deployments and activities before, during, and after military engagements. They also provide a directed imagery capability in support of operational and planning requirements during wartime operations, worldwide crises, contingencies, and exercises.

k. Navy Expeditionary Intelligence Command (NEIC)

The NEIC provides expeditionary warfighters with timely relevant intelligence to deny the enemy sanctuary, freedom of movement, and use of waterborne lines of communication while supported forces find, fix, and destroy the enemy and enemy assets within the operational environment. NEIC is staffed by 309 personnel, 246 AC and 63 RC.

NEIC is organized, manned, trained, and equipped to provide tailored all-source intelligence information to commanders, mission planners, and deployed units assigned to meet the threat posed by a potential adversary. NEIC personnel understand the operational requirements of, and are fully integrated into, their assigned operational units.

I. Surface Warfare

The Surface Warfare Enterprise (SWE) is supported by more than 2,000 Surface Navy reservist billets across 102 RC units. These SWE RC units support 8 major mission areas within Surface and Amphibious Warfare including: Naval Beach Group, Assault Craft Units, BEACHMASTERs, Amphibious Seabees, Tactical Group/Squadron Expeditionary Strike



Group Amphibious Air Control, Commander Amphibious Squadron Staff, Commander Navy Surface Force Pacific and Atlantic Type Commanders, Afloat Culture Workshop Detachments, and 9 Navy Reserve Force (NRF) Oliver Hazard Perry class FFGs.

NRF FFGs regularly deploy to support the Navy's operational requirements, participating in fleet deployments, operations, and exercises. Examples include: counter-narco-terrorism deployments to Fourth Fleet AOR, independent maritime interdiction deployments in support of Global Fleet Station off West Africa and Southeast Asia, Standing Naval Forces Atlantic, and exercises. Despite their age, these FFGs are significant Navy assets as well as primary training platforms for Surface Navy reservists.

In 2007, the SWE established Class Squadrons (CLASSRONs) to provide warship readiness support to Commander Naval Surface Force. Beginning in FY 2009, the Navy FFGs will begin decommissioning. Leveraging the SWE Total Force, the RC manning from the NRF FFG program will be realigned to support newly established CLASSRONs. FY 2009 will see the formal establishment of 8 CLASSRON Ship Support Units (SSUs) aligning approximately 25 reservists to each CLASSRON (a total of more than 200 reservists) to provide RC waterfront warfare readiness assessments, assists, and support to every ship class. These highly skilled RC Sailors with Mine Countermeasures (MCM), Mine Hunter Coastal (MHC), and Mine Warfare (MIW) experience will continue to support the Navy's mission in newly established MCM CLASSRON SSUs and ultimately Littoral Combat Ship (LCS) CLASSRON SSUs.

2. Status of Equipment

a. Equipment On-hand

Table 1 provides RC major equipment requirements and on-hand inventories to meet assigned missions.

b. Average Age of Major Items of Equipment

The RC possesses equipment requiring replacement and modernization. *Table 2* provides the average age of major equipment. Of particular concern are the C-9Bs (34 years old), P-3Cs (23 years old), and EA-6Bs (22 years old). Additionally, significant amounts of the MESF, NCF, NAVELSG, and EOD TOA equipment, CESE, and MHE are over-aged and fully depreciated.

c. Compatibility of Current Equipment with the AC

Navy procurement and upgrade programs, as well as Congressional funding additions, have improved RC equipment capability and compatibility.

For the NCF, MESF, NAVELSG, and EOD units, sustainability and interoperability remain challenging issues. Beginning in FY 2003, significant funding increases from Congressional adds and NGREA have aided these enterprises in reducing these shortfalls. The new MCAG also faces the challenge of ensuring AC and RC sustainability and interoperability since its current TOA allows for the outfitting of only four RC teams.

d. Maintenance Issues

RC equipment maintenance is a top priority. Without properly maintained equipment, RC hardware units are unable to train and deploy mission ready reservists in support of the Navy's Total Force. Accordingly, sufficient funds are programmed to sustain the material readiness and capability of RC unit equipment. As a result of this emphasis on ready assets, RC equipment readiness remains above minimum CNO-directed levels. This level of readiness has proven to be acceptable as the Navy Reserve has been ready and fully integrated into the Navy's worldwide missions; however, the accelerated service-life expenditure of these assets incurred by OIF and OEF require increasing amounts of Operation and Maintenance (O&M) accounts. Substantial cost avoidance in these accounts is available through modernized replacement assets.

e. Modernization Programs and Shortfalls

The Navy has an extensive list of unfunded equipment replacement and modernization requirements. Each year, the CNO develops an Unfunded Programs List and forwards it to Congress for resourcing consideration.

B. Changes Since Last NGRER

In September 2008, the first Full Time Support (FTS) Flag Officer assumed command of NECC, an AC echelon III command. As NECC has 17,000 Navy Reservists and \$3.1B worth of RC TOA equipment, the experience that this brings to the command results in increased effective and efficient use of their talents in support of the Navy's Total Force missions.

NECC has completed a mission and resourcing validation. This validation has resulted in the identification of mismatches between current TOA and mission requirements. As such, equipment needs will be greater than in previous years as realignment of TOA-to-mission requirements are accomplished within the various NECC units.

C. Future Years Program (FY 2010–FY 2012)

1. FY 2012 Equipment Requirements

Table 1 provides projected FY 2010–FY 2012 major equipment inventories and requirements.

2. Anticipated New Equipment Procurements

Major equipment anticipated to be procured for the RC are three C-40A aircraft. Significant funding is being provided to MESF, NCF, and NAVELSG to procure ground equipment. *Tables 3* and 4 reflect these anticipated new equipment procurements.

3. Anticipated Transfers from AC to RC

Table 5 provides anticipated major equipment transfers between the AC and RC.

4. Anticipated Withdrawals from RC

Table 5 also provides major RC equipment to be decommissioned.

5. Remaining Equipment Shortages and Modernization Shortfalls at the End of FY 2012

Tables 1 and 8 provide RC equipment inventories, shortfalls, and modernization requirements.

D. Summary

The Navy is a flexible, engaged, and ready-to-deploy Total Force. The RC, as a force multiplier, provides the Navy with an increased ability to integrate the use of maneuver and engagement in all environments to create the effect necessary to achieve mission objectives. The RC enables the Navy to project and sustain a logistically-ready joint force through the deliberate sharing of national resources to



effectively support operations, extend operational reach, and provide the joint force commander the freedom of action necessary to meet mission objectives.

Navy REservists stand ready to answer the periodic and predictable call to provide operational support to the Fleet and Combatant Commanders in support of our global maritime mission.

Consolidated Major Item Inventory and Requirements

NOTE: This table provides a comprehensive list of selected major items of equipment. It provides the quantity onhand (QTY O/H) projected to be in the inventory at the beginning/end of the selected fiscal year (FY). It also provides the quantity required (QTY REQ) needed to meet the full wartime requirements of the Reserve component. In accordance with Title 10, the QTY REQ number provides the recommendations as to the quantity and type of equipment which should be in the inventory of each Reserve component. Unit cost values are in dollars.

Nomenclature	Equip No.	FY 2010 Unit Cost		Begin FY 2011 QTY O/H		End FY 2012 QTY O/H	End FY 2012 QTY REQ
AIRCRAFT							
AIRCRAFT, TRANSPORT, C-9B (SKYTRAIN)	C-9B	\$10,924,425	15	15	15	15	15
AIRCRAFT, TRANSPORT, C-40A (BOEING 737-700)	C-40A	\$81,700,000	9	9	11	11	17
AIRCRAFT, TRANSPORT, C-130T (HERCULES)	C-130T	\$28,343,475	19	19	19	19	19
AIRCRAFT, TRANSPORT, KC-130J (HERCULES)	KC-130J	\$84,000,000	0	0	2	2	6
AIRCRAFT, TRANSPORT, C-20A (GULFSTREAM)	C-20A	\$18,630,000	1	1	1	1	1
AIRCRAFT, TRANSPORT, C-20D (GULFSTREAM)	C-20D	\$21,874,725	2	2	2	2	2
AIRCRAFT, TRANSPORT, C-20G (GULFSTREAM)	C-20G	\$32,446,215	4	4	4	4	4
AIRCRAFT, TRANSPORT, C-37A (GULFSTREAM)	C-37A	\$48,317,940	1	1	1	1	1
AIRCRAFT, TRANSPORT, C-37B (GULFSTREAM)	C-37B	\$64,000,000	3	3	3	3	4
AIRCRAFT, TRANSPORT, UC-12B (KING AIR)	UC-12B	\$2,530,575	5	5	5	5	5
AIRCRAFT, PATROL, P-3C (ORION)	P-3C	\$74,471,355	12	12	12	12	12
AIRCRAFT, EARLY WARNING, E-2C (HAWKEYE)	E-2C	\$96,509,610	6	6	6	6	6
AIRCRAFT, ELECTRONIC ATTACK, EA-6B (PROWLER)	EA-6B	\$87,419,205	4	4	4	0	0
AIRCRAFT, FIGHTER/ATTACK, F/A-18A+ (HORNET)	F/A-18A+	\$54,074,610	12	12	12	12	12
AIRCRAFT, FIGHTER/ATTACK, F/A-18C (HORNET)	F/A-18C	\$55,212,075	12	12	12	12	12
AIRCRAFT, FIGHTER/ATTACK, F/A-18E (HORNET)	F/A-18E	\$57,017,736	0	0	6	12	12
AIRCRAFT, ELECTRONIC ATTACK, EA-18G (GROWLER)	E/A-18G	\$71,400,000	0	0	0	0	5
AIRCRAFT, FIGHTER, F-5F (FREEDOM FIGHTER)	F-5F	\$15,231,060	2	2	2	2	2
AIRCRAFT, FIGHTER, F-5N (FREEDOM FIGHTER)	F-5N	\$740,025	30	30	30	30	30
HELICOPTER, COMBAT, MH-60S (SEAHAWK)	MH-60S	\$20,621,340	8	8	8	8	8
HELICOPTER, COMBAT SAR, HH-60H (SEAHAWK)	HH-60H	\$15,564,330	10	10	10	10	10
HELICOPTER, MINEWAR, MH-53E (SEA DRAGON)	MH-53E	\$22,518,495	8	8	8	8	8
HELICOPTER, ASW, FRIGATE, SH-60B (SEAHAWK)	SH-60B	\$19,190,970	6	6	6	6	6
SHIPS							
FRIGATE, GUIDED MISSILE (PERRY CLASS) FLIGHT III	FFG	\$353,149,245	9	9	9	7	7
NAVAL BEACH GROUP							
MPF UTILITY BOAT	MPF-UB	\$1,000,000	4	7	10	10	10
LANDING CRAFT UTILITY, LCU 1600	LCU 1600	\$17,350,000	1	0	0	0	0
LANDING CRAFT MECHANIZED, LCM-8	LCM-8	\$1,100,000	10	4	0	0	0

Table 1

USNR Consolidated Major Item Inventory and Requirements

Nomenclature	Equip No.	FY 2010 Unit Cost		Begin FY 2011 QTY O/H	-	-	End FY 2012 QTY REQ
MARITIME EXPEDITIONARY SECURITY FORCE (FORMERLY NAVAL COASTAL WARFARE)							
MIUW SURVEILLANCE SYSTEM	RSSC/MSP	\$6,106,500	4	4	4	4	4
BOAT, INSHORE	IBU	\$5,899,500	16	16	16	16	16
MOBILE ASHORE SUPPORT TERMINAL	MAST	\$4,140,000	8	8	8	8	8
RESERVE NAVAL CONSTRUCTION FORCES							
NAVAL CONSTRUCTION REGIMENT TOA	NCR	\$3,161,017	4	4	4	4	4
NAVAL CONSTRUCTION FORCE SPT UNIT TOA	NCFSU	\$91,861,873	1	1	1	1	1
NAVAL MOBILE CONSTRUCTION BATTALION TOA	NMCB	\$47,159,931	12	12	12	12	12
NAVAL EXPLOSIVE ORDNANCE DISPOSAL FORCES							
NAVY RESERVE FORCE EOD OPERATIONAL SUPPORT UNIT TOA	EODOSU	\$49,547,794	2	2	2	2	2
NAVY EXPEDITIONARY LOGISTICS SUPPORT GROUP							
NAVELSF TOA EQUIPMENT	NAVELSG	\$18,461,320	1	1	1	1	1

USNR Average Age of Equipment

NOTE: This table provides the average age of selected major items of equipment. The average age provides a projected average age of the fleet at the start of FY 2009. Average Equip Nomenclature Remarks No. Age AIRCRAFT C-9B AIRCRAFT, TRANSPORT, C-9B (SKYTRAIN) 34 AIRCRAFT, TRANSPORT, C-40A (BOEING 737-700) C-40A 7 AIRCRAFT, TRANSPORT, C-130T (HERCULES) C-130T 16 AIRCRAFT, TRANSPORT, C-20A (GULFSTREAM) C-20A 27 At current usage rate aircraft may expire in 2012. AIRCRAFT, TRANSPORT, C-20D (GULFSTREAM) C-20D 24 AIRCRAFT, TRANSPORT, C-20G (GULFSTREAM) C-20G 15 AIRCRAFT, TRANSPORT, C-37A (GULFSTREAM) C-37A 9 AIRCRAFT, TRANSPORT, C-37B (GULFSTREAM) C-37B 4 UC-12B AIRCRAFT, TRANSPORT, UC-12B (KINGAIR) 29 Average age of 12 remaining aircraft within TYCOM. 35 aircraft have transferred to AC inventory as a result of AIRCRAFT, PATROL, P-3C (ORION) P-3C 26 RC squadron disestablishment and to provide fatigue life mitigation. E-2C AIRCRAFT, EARLY WARNING, E-2C (HAWKEYE) 17 AIRCRAFT, ELECTRONIC ATTACK, EA-6B Aircraft will be phased out of CNAFR inventory in FY EA-6B 22 (PROWLER) 2012. 28 aircraft have transferred to AC inventory as a result AIRCRAFT, FIGHTER/ATTACK, F/A-18A+ (HORNET) of RC squadron disestablishment and as mitigation to F/A-18A+ 22 AC fatigue life inventory shortfall. AIRCRAFT, FIGHTER/ATTACK, F/A-18C (HORNET) F/A-18C 16 AIRCRAFT, FIGHTER, F-5 (FREEDOM FIGHTER) F-5E/F/N 31 MH-60S 6 HELICOPTER, COMBAT, MH-60S (SEAHAWK) HELICOPTER, COMBAT SAR, HH-60H (SEAHAWK) HH-60H 16 HELICOPTER, MINEWAR, MH-53E (SEA DRAGON) MH-53E 18 HELICOPTER, ASW, FRIGATE, SH-60B (SEAHAWK) SH-60B 23 SHIPS FRIGATE, GUIDED MISSILE FFG 26 (PERRY CLASS) FLIGHT III MPF UTILITY BOAT (MPF-UB) MPF-UB 1 LANDING CRAFT UTILITY 1600 LCU 1600 21 LANDING CRAFT MECHANIZED LCM-8 21

USNR Service Procurement Program - Reserve (P-1R)

NOTE: This table identifies the dollar value of equipment programmed to be procured with Service procurement funds as identified in the P-1R exhibit of the FY 2010 President's Budget Submission. All values are costs in dollars, and ammunition procurements have been excluded. Deliveries of procured equipment normally take one to two years before they arrive in the inventory; e.g., items procured in FY 2010 would be expected to arrive in RC inventories in FY 2011 or FY 2012.

Nomenclature	FY 2010	FY 2011	FY 2012
AIRLIFT AIRCRAFT			
C-40A	\$74,381,000		
MODIFICATION OF AIRCRAFT			
H-53 SERIES	7,335,000		
CARGO/TRANSPORT A/C SERIES	19,429,000		
SHIPS SUPPORT EQUIPMENT			
STANDARD BOATS	1,062,000		
CIVIL ENGINEERING SUPPORT EQUIPMENT			
PASSENGER CARRYING VEHICLES	567,000		
CONSTRUCTION & MAINTENANCE EQUIPMENT	220,000		
TACTICAL VEHICLES	11,280,000		
ITEMS UNDER \$5 MILLION	1,441,000		
SUPPLY SUPPORT EQUIPMENT			
MATERIALS HANDLING EQUIPMENT	1,148,000		
PERSONNEL & COMMAND SUPPORT EQUIPMENT			
C4ISR EQUIPMENT	2,509,000		
PHYSICAL SECURITY EQUIPMENT	4,108,000		
TOTAL	\$123,480,000		

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

NOTE: This table identifies the dollar value of equipment originally programmed to be procured with the National Guard and Reserve Equipment Appropriation (NGREA). These funds are available for a threeyear period from the year of appropriation. Deliveries of procured equipment normally take one to two years from date of procurement before they arrive in the inventory; e.g., items procured in FY 2009 would be expected to arrive in RC inventories in FY 2010 or FY 2011. All values are costs in dollars.

Nomenclature	FY 2007	FY 2008	FY 2009	Remarks
FY 2007 TITLE III NGREA EQUIPMENT				
C-130/C-9 UPGRADES	\$11,118,000			
NAVAL CONSTRUCTION FORCE EQUIPMENT	12,258,000			Note 1
MARITIME EXPEDITIONARY SECURITY FORCE (MESF) (FORMERLY NAVAL COASTAL WARFARE) EQUIPMENT	5,945,000			Note 1
NAVY EXPEDITIONARY LOGISTICS SUPPORT FORCE (NAVELSF) TOA EQUIPMENT	3,223,000			Note 1
NAVAL EXPLOSIVE ORDNANCE DISPOSAL (EOD) FORCE VEHICLES, C4ISR COMM GEAR, & EQ KITS	2,315,000			
FY 2008 TITLE III NGREA EQUIPMENT				
CONSTRUCTION EQUIPMENT FOR RSS		\$10,000,000		
C-40A WINGLET (SETS)		7,500,000		
TACTICAL VEHICLES FOR SEABEE UNITS AND RESERVE SUPPORT SITES (RSS)		6,000,000		
WEIGHT HANDLING EQUIPMENT (CRANES)		4,000,000		
TWIN GENERAL LUFFING (TGL) SERIES HAGGLUND CRANES FOR CARGO HANDLING BATTALIONS		3,800,000		
ITEMS UNDER \$5M - KITS		3,675,000		
MARITIME PREPOSITIONING FORCE UTILITY BOATS		3,484,000		
INFORMATION SYSTEMS SECURITY PROGRAM (IDENTITY ACCESS DEVICE - REMOTE ACCESS)		1,498,500		
TACTICAL VEHICLES FOR EOD OPERATIONAL SUPPORT UNITS (EODSUS)		1,062,000		
TRUCKS - TRAILERS		1,012,000		
C-40 OXYGEN WALK AROUND BOTTLES		1,000,000		
CONSTRUCTION EQUIPMENT FOR EOD UNITS		440,000		
ROUGH TERRAIN FORKLIFTS FOR EODSU SEVEN AND MESF UNITS		426,000		
LIGHT SERVICE SUPPORT VEHICLES (LSSVs) FOR MESF UNITS		300,000		
STANDARD BOAT FOR EODSU SEVEN		140,000		
ITEMS UNDER \$5M - TRUCKS FOR EOD UNITS		128,000		
FLOODLIGHT SETS FOR MESF UNITS		110,000		
15-PASSENGER VANS FOR MESF UNITS		76,000		
4X2 VANS		44,000		
FY 2009 TITLE III NGREA EQUIPMENT				
MARITIME EXPEDITIONARY SECURITY FORCE (MESF)	EQUIPMENT			
MESF PERSONNEL GEAR ISSUE			\$4,613,000	
MESF C41 GEAR			2,551,000	

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

Nomenclature	FY 2007	FY 2008	FY 2009	Remarks
MESF NON-LETHAL WEAPONS			502,000	
EXPLOSIVE ORDNANCE DISPOSAL (EOD) EQUIPMENT				
EOD ITEMS UNDER \$5M - KITS			6,316,000	
NAVAL CONSTRUCTION FORCE (NCF) EQUIPMENT				
CESE CONSTRUCTION EQUIPMENT			3,055,000	
TACTICAL VEHICLES			1,403,000	
MATERIAL HANDLING EQUIPMENT			792,000	
ITEMS UNDER \$5M - NCW EQUIPMENT			321,000	
NAVY EXPEDITIONARY LOGISTICS SUPPORT GROUP (I	NAVELSG) EQ	UIPMENT		
ITEMS UNDER \$5M - NAVELSG EQUIPMENT			2,200,000	
120K FUEL SYSTEM SUPPLY POINT			1,634,000	
NAVELSG C41 (KIT)			1,446,000	
MATERIAL HANDLING EQUIPMENT			1,026,000	
TACTICAL VEHICLES			340,000	
CESE CONSTRUCTION EQUIPMENT			215,000	
OTHER EQUIPMENT				
F-5 OPERATIONAL FLIGHT TRAINER (OFT)			6,000,000	
MPF UTILITY BOATS			3,000,000	
RIGID HULL INFLATABLE BOAT (RHIB)			1,500,000	
FFG SHAFT SPARES			300,000	
FALL SAFE HANGAR FALL RESTRAINT SYSTEM			175,000	
FY 2009 TITLE IX NGREA EQUIPMENT				
C-130T ELECTRONIC PROP CONTROL SYSTEM (EPCS)			6,952,000	
NCF TOA EQUIPMENT			6,640,000	
NCF TACTICAL VEHICLES AND SUPPORT EQUIPMENT			5,477,000	
F5 WING AND F5 COMPONENT UPGRADE			2,500,000	
NCF COLLATERAL FOR FACILITIES			1,135,000	
NAVELSG TOA EQUIPMENT			978,000	
C-130T CABIN ALTITUDE WARNING INDICATORS			608,000	
RHIB FOR EOD UNIT			440,000	
C-9B FULL FACE OXYGEN MASKS			270,000	
	34,859,000	44,695,500	62,389,000	

Projected Equipment Transfer/Withdrawal Quantities

NOTE: This table portrays the planned equipment transfers (Active to Reserve), withdrawals (-), and decommissioning (-). Transferred equipment is commonly called "cascaded equipment," or equipment that is provided to the RC once the AC receives more modern equipment. Although this table highlights a three-year period, many Services will not know exact quantities of transfers or withdrawals until year of execution, due to the uncertainty of the procurement/delivery cycle of new equipment.

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty	Remarks
FRIGATE, GUIDED MISSILE (PERRY CLASS) FLIGHT III	FFG			-2	Fleet begins decommissioning FFGs.
LANDING CRAFT UTILITY, LCU 1600	LCU 1600	-1			One LCU located at ACU2 is being transferred from Reserve (NOSC Baltimore) to Active .
LANDING CRAFT MECHANIZED	LCM-8	-6	-4		Being replaced by MPF-UB

FY 2006 Planned vs Actual Procurements and Transfers

NOTE: This table compares what the Service planned to procure and transfer to the RC in FY 2006 with actual procurements and transfers. FY 2006 is selected as these are the most recent funds to expire. Since the procurement cycle is normally one to two years from funding to delivery, this table identifies only what has been delivered through the end of FY 2008. Procurement and NGREA columns reflect cost values in dollars.

Nomenclature	Equip No.	FY 2006 Transfers (# of items)		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
FY 2006 PLANNED TRANSFERS & WITHDRAW	<u>ALS</u>						
AIRCRAFT, TRANSPORT, DC-9	DC-9	-1	-1				
AIRCRAFT, PATROL, P-3C	P-3C	-3	-13				
AIRCRAFT, FIGHTER/ATTACK, F/A-18B	F/A-18B	-2	-2				
HELICOPTER, COMBAT SAR, UH-3H	UH-3H	-4	-4				
AIRCRAFT, TRANSPORT, C-37A	C-37A	-1	0				
NCW MIUW SURVEILLANCE SYSTEM	RSSC/M SP	-2	-2				
NCW MOBILE ASHORE SUPPORT TERMINAL	MAST	-2	-2				
NCF CONSTRUCTION BATTALION MAINTENANCE UNIT TOA	CBMU	-2	-2				
TY 2006 P-1R EQUIPMENT							
AIRCRAFT PROCUREMENT							
C-40A				\$10,312,000	\$14,321,000		
MODIFICATION OF AIRCRAFT							
ADVERSARY				5,013,000	3,876,000		
H-46 SERIES				251,000	247,000		
H-53 SERIES				6,936,000	6,843,000		
C-130 SERIES				20,153,000	19,883,000		
CARGO/TRANSPORT A/C SERIES				15,114,000	14,911,000		
SHIPS SUPPORT EQUIPMENT							
DIVING AND SALVAGE EQUIPMENT				98,000	97,000		
STANDARD BOATS				3,933,000	12,639,000		
CIVIL ENGINEERING SUPPORT EQUIPMENT							
CONSTRUCTION & MAINTENANCE EQUIPM	IENT			169,000	166,000		
FIRE FIGHTING EQUIPMENT				412,000	407,000		
TACTICAL VEHICLES				10,341,000	10,203,000		
CIVIL ENGINEERING SUPPORT - ITEMS UNDER \$5 MILLION				1,109,000	1,094,000		
MATERIALS HANDLING EQUIPMENT				1,331,000	1,313,000		
PERSONNEL AND COMMAND SUPPORT EQU	JIPMENT						
C4ISR EQUIPMENT				26,319,000	32,418,000		

Table 6

USNR

FY 2006 Planned vs Actual Procurements and Transfers

Nomenclature	Equip No.	FY 2006 Transfers (# of items)		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
FY 2006 NGREA EQUIPMENT							
C-130 ELECTRONIC PROPELLER CONTROL	SYSTEM	/ (EPC	S)			\$1,157,000	\$0
C-130 AVIONICS UPGRADES							\$1,157,000
MH-60S ARMED HELO KITS						9,000,000	1,500,000
MH-60S SUPPLEMENTAL AVIATION SUPPL	Y SUPPO	RT (SA	SS) KITS	6			5,600,000
NAVAL CONSTRUCTION FORCE - TACTICA	L VEHICL	.ES & 0	CIVIL ENG	GINEERING SUF	PPORT EQ	11,612,000	11,612,000
NAVAL COASTAL WARFARE EQUIPMENT						5,412,000	5,753,000
NAVY EXPEDITIONARY LOGISTICS SUPPO	RT FORC	E (NA)	/ELSF) T	OA EQUIPMEN	Г	2,322,000	3,975,000
EXPLOSIVE ORDNANCE DISPOSAL RIGID H	HULL INFL	ATAB	LE BOAT			94,000	0
TOTAL				\$101,491,000	\$118,418,000	\$29,597,000	\$29,597,000

USNR Major Item of Equipment Substitution List

NOTE: This table identifies equipment authorized by the Service to be used as a substitute for a primary item of equipment. The table also identifies whether or not the item is able to be deployed in wartime. This data meets the Title 10 requirement to identify equipment that is not the most desired item of equipment.

Required Item R	Reqd Item	Substitute Item	Substitute Item	FY 2010	Deployable?	
Nomenclature	Equip No.	Nomenclature	Equip No.	Qty	Yes	No

Service Does Not Use Substitution To Satisfy Major Item Equipment Requirements

Chapter 5 United States Air Reserve Components

I. United States Air Force Overview

A. Air Force Planning Guidance

The United States Air Force is committed to its role in the joint mission to fly, fight, and win in air, space, and cyberspace. The challenges that face our nation differ significantly today from a decade ago. The sustained presence of our forces in global engagements and the fundamental change in the nature of conflict demand a newly energized approach to defense.

The Air Force Strategic Plan, released on October 30, 2008, identifies goals and priorities that will shape Air Force-wide actions over the next three to five years: reinvigorating the nuclear enterprise; supporting today's joint and coalition fight; developing and caring for our Airmen; strengthening the acquisition enterprise; and modernizing organizations, training, and equipment. The Air Force's priorities reflect the understanding that all Airmen must be trained and equipped to provide our Joint Force with Global Vigilance, Global Reach, and Global Power.

The Air Force (AF) must ensure national trust and confidence in our ability to organize, train, and equip forces across the spectrum of peacetime and wartime missions. To the greatest extent possible, the Air Force is modernizing its systems and organizations in ways that yield efficiencies while increasing force-wide combat capability and operational effectiveness. The Regular Air Force (RegAF), Air National Guard (ANG), and Air Force Reserve (AFR) operate as a Total Force, and together share the responsibilities of the Air Force mission.

B. Air Force Equipping Policy

The Air Force is committed to providing our Airmen, the Joint Force, the United States, and our international partners with the right equipment at the right time. Though issues of force structure, resources, and funding have long been the subject of debate among DoD senior leaders and lawmakers, today, these issues are framed by an unprecedented push to improve the way the military utilizes and equips its Reserve components. In November 2008, the Secretary of Defense endorsed a sweeping set of initiatives, as recommended by the Commission on the National Guard and Reserves, to remove "all vestiges of cultural prejudices" that impede unity of effort within the services. Supporting this effort, DoD Directive 1200.17 establishes an overarching set of principles to promote and support the management of the Reserve components as an operational force.

The Air Force continues to take a leading edge approach to DoD policies, and, for years, has shown that a Total Force business concept yields capabilities and efficiencies unattainable by traditional, rigid organizational divisions. The Air Force's Total Force Integration concept currently drives 135 leadership-approved initiatives, bringing new/emerging missions to the ANG and AFR, and forming Total Force unit-to-unit associations. The air reserve components (ARC) are performing vital missions at home, as well as their traditional and non-traditional missions abroad—and are doing so on today's most relevant, in-demand equipment.

The ARC, including both new/emerging missions and associated units, can be equipped in several ways:

- The AF plans, programs, and budgets for the procurement, transfer, and modernization of ARC weapons systems through the AF Corporate Structure.
- Congress authorizes and appropriates funding for the AF to fulfill specific ARC requirements.
- Congress authorizes additional procurement funding through the National Guard and Reserve Equipment Appropriation (NGREA).
- Congress adds additional funding to the AF procurement account specifically for RC equipment.

The Air Force will excel as stewards of all assigned resources in service to the American people as we modernize our air and space organizations, training, and equipment. Plans to stand-up a nuclear-focused Global Strike Command, as well as the creation of a cyberspace numbered Air Force, will ensure the force is able to meet today's most challenging issues while looking ahead to the uncertainties of tomorrow. As the Air Force continues its 19th year of persistent conflict, we face a decline in our fleet's readiness, reliability, and availability and the costs to maintain the fleet are rising. As we drive into the future, the Air Force remains committed to equipping the Total Force with war-winning capabilities, on time and on cost, to provide full spectrum capabilities in support of the joint warfighter, and will continue to seek Total Force solutions to today's modernization issues.

C. Plan to Fill Modernization Shortages in the RC

Maximizing to the fullest extent the capabilities of its Total Force, the Air Force will continue to actively engage the ANG and AFR in all prioritized mission areas and examine areas for potential Total Force Integration opportunities. The Air Force is committed to ensuring that the Reserve components are fully organized, trained, and equipped.

On 23 November 2008, Secretary of Defense (SECDEF) Gates endorsed 95 recommendations set forth by the Commission on the National Guard and Reserves, to develop a Total Force policy that recognizes the "cultural divide" between Active and Reserve components. The Air Force supports the effort to amend the modernization shortages in its Reserve components, and has championed several of the priorities endorsed by the SECDEF, including:

- Providing Reserve components with a lead role in homeland and civil support operations
- Adequately budgeting for the operational portion of the Reserve components
- Improving DoD and service-wide education about the capabilities, unique processes, and cultures of the Reserve components, as well as the importance of Total Force Integration
- Providing the Reserve components with equal training opportunities, both in the classroom and in respective career fields
- Ensuring the equipment used by the Guard and Reserves phases out the "hand-medowns" of the Cold War Era in exchange for today's most relevant systems.

D. Initiatives Affecting RC Equipment

The AF has committed to modernizing the ARC to ensure that the ARC remains a relevant and capable part of the Total Force. There are a number of modifications and modernization efforts underway to resolve reliability, maintainability, and capability issues for the ARC. The following are some of the AF modernization initiatives that affect the ARC.

1. C-5 Galaxy

a. Avionics Modernization Program (AMP)

The AMP is Phase I of a two-part modification effort to update the C-5 aircraft. The AMP replaces unreliable and unsupportable engine, flight instrument, and flight system components. It also installs Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM), and SECDEF-directed navigation and safety modifications for the Terrain Awareness and Warning System (TAWS) and Traffic Alert and Collision Avoidance System (TCAS).

b. Reliability Enhancement Re-engineering Program (RERP)

The RERP is Phase II of the C-5 modernization effort and is designed to improve C-5 reliability, maintainability, and availability while increasing wartime mission capability rates to at least 75 percent. RERP replaces the TF-39 power plant with the General Electric F138-GE-100. The proposed new engine meets Stage III noise and emissions standards while improving payload capability and time-to-climb criteria needed to meet airspace requirements. Reliability enhancements include upgrades or replacement of auxiliary power units (APUs); and upgrades to the electrical, hydraulic, fuel, fire suppression, pressurization, air conditioning, landing gear, and airframe systems.

2. F-16 Fighting Falcon

a. Falcon STAR and CCIP

The purpose of the Falcon Structural Augmentation Roadmap (STAR) program is to replace or rework known life-limited structural parts to preclude the onset of widespread fatigue damage, maintain safety of flight, enhance aircraft availability, and extend the life of affected components up to 8,000 Actual Flying Hours (AFH).

b. ARC-210 Radio

The addition of limited numbers of ARC-210 radios to the ANG F-16 fleet directly addresses the in-theater requirement for improved secure line-of-sight communications and emerging requirements for image transfer and beyond line-of-sight connectivity.

c. Commercial Fire Control Computer (CFCC)

The CFCC is critical to all future upgrades in the Block 30 series F-16. This computer update allows for the employment of the Small Diameter Bomb, the Joint Helmet-Mounted Cueing System (JHMCS), and Mode V advanced combat identification features.

3. A-10 Thunderbolt II

a. Precision Engagement

The Precision Engagement (PE) program, which completes the last installations in FY 2011, is the number one priority for the A-10 community and will transform the A-10 cockpit and capability. The A-10 remains a legacy weapon system, yet is expected to execute critical wartime taskings such as airborne forward air controller, close air support, combat search and rescue, and air interdiction. The aircraft computer, cockpit displays, and weapons delivery capabilities are outdated and contribute to high pilot workload. The PE program delivers a new avionics suite, a data link and precision weapons capability that will keep the aircraft viable and increase its lethality and survivability.

b. Replacement Wings

Of the AF's 356 A-10 aircraft, 242 have wings that are thin-skinned and require extensive wing refurbishment or replacement to prevent aircraft grounding beginning in FY 2011. The A-10 Replacement Wing program is fully funded and on track. This program will replace all thin-skinned wings on active, guard, and reserve A-10s.

c. A-10 Missile Approach Warning System

The A-10 flies many of its missions at altitudes where it is particularly vulnerable to shoulderlaunched, infrared (IR) surface-to-air missiles (SAM). The aircraft needs a missile warning system that notifies the pilot when a SAM is launched and automatically dispenses countermeasures. The AN/AAR-47 is a passive, missile-approach warning system that when installed on the A-10 consists of four IR sensor assemblies, a central processing unit and a control indicator. The AAR-47 is capable of detecting missile launches from 360 degrees around the aircraft.

4. F-15 Eagle

a. APG-63(V)3 Active Electronically Scanned Array (AESA) Radar

The APG-63(V)3 AESA radar will replace the current APG-63(V)0 mechanically scanned radar with a stationary panel covered with a modular array of transmitter-receiver modules. AESA provides significant increases in precision to detect, track, and eliminate multiple threats faster and with greater efficiency. Additionally, AESA eliminates the hydraulic and electrical systems associated with mechanically operated radars resulting in dramatically improved reliability and maintainability. In FY 2006, Congress appropriated \$52.2 million to procure six AESA systems for the ANG. In FY 2007, Congress appropriated \$72 million for procurement of eight AESA radars for the ANG F-15C fleet. The current APG-63(V)0 radar is logistically unsupportable due to parts obsolescence and needs a reliability and maintainability upgrade. The ANG requires a minimum of 48 AESA systems to maintain a constant HLD presence throughout the United States.

b. F-15 Very High Speed Integrated Circuitry Central Computer (VHSIC CC) Plus: VCC+

Current F-15 A-D VHSIC CC has reached its maximum processing throughput. Increased processing and memory growth are needed to support future Combat Air Forces (CAF) Operational Flight Program (OFP) requirements. VCC+ is required by CAF F-15 A-D OFP Suite 6. If not funded, ANG F-15A-Ds will not be able to field Suite 6. As a result, Mode S Interrogation, Combat Identification improvements, future hardware improvements, and weapon system modernization will not be attainable.

5. KC-135 Stratotanker

a. Communication Navigation Surveillance/Air Traffic Management (CNS/ATM) Modification

This program will provide an upgraded avionics suite that meets the requirements for aircraft interoperability within the future aerospace environment. The avionics suite will be improved in four major functional areas: communications, navigation, safety and surveillance, and flight deck control. The program includes controller-pilot data link communication, direct voice communication with air traffic control, required navigation performance, and automatic dependent surveillance.

6. C-130 Hercules

a. Phase I—Avionics Modernization Program (AMP)

This program will produce a baseline avionics configuration across the current C-130 fleet. Air Mobility Command (AMC), in coordination with Air Combat Command (ACC), the ARC, and AF Special Operations Command (SOCOM), is undertaking the C-130 AMP to consolidate E, H1, H2, and H3 aircraft into one configuration. The goal is to consolidate existing and projected aircraft modification programs to upgrade and standardize the aging C-130 fleet.

7. RC-26B Aircraft

a. SOCOM Modification Block 25

The RC-26B was tasked in December 2006 to support OIF, and GWOT-funded modifications were made to five of the 11 ANG RC-26Bs to be deployed. The aging WESCAM 14QS electrooptical sensor was replaced with the next generation MX 15 forward-looking infrared (FLIR) and video system. The new system has full motion video and line of sight (LOS) downlink. The modification also added voice satellite communication, signal intelligence capability, aircraft defensive systems, and low-cost cockpit modifications to make the aircraft Night Vision Imaging System (NVIS) -compatible. The current OIF deployment is slated for one year, but AF SOCOM may extend the support requirement indefinitely. The ANG is also initiating an effort to acquire ACC sponsorship for the program.

b. Katrina Modification Block 20

The other 6 RC-26Bs are being upgraded with NGREA Katrina funds. The WESCAM 14QS on these 6 aircraft will be replaced by the SAFIRE HD FLIR system. Several significant software upgrades will allow quicker high quality processing of video imagery. The modification also includes the Dragoon LOS downlink system which has nearly twice the range capability as other currently fielded LOS systems. The aircraft camera pod will be removed, increasing endurance. Both the wet and digital film capability will be lost due to lack of vendors and excessive repair costs.

8. HC-130 Aircraft

a. Rescue System Upgrades

A low-cost NVIS-compatible lighting system modification for the AF combat rescue fleet is in the contract phase. A personnel locator system will be installed on aircraft from the 210th Rescue

Squadron, Kulis, AK; the 129th Rescue Wing, Moffet, CA; and the 106th Rescue Wing, Gabreski Field, NY. This system will give rescuers bearing, range, and authentication information on downed aircrew equipped with the PRC-112 survival radio.

9. MQ-1 Predator

a. MQ-1/MQ-9 Integrated Predator/Reaper Operation Center (POC/ROC)

The Operation Center incorporates communication intensive operations equipment in an open architecture design to smoothly integrate current and emerging needs for controlling warfighting and homeland defense missions.

b. Sense and Avoid Capability Kit

Kit procurement and integration on 16 aircraft will permit operation of MQ-1 Predator within CONUS airspace in support of local authorities for disaster response, homeland security operations, and continuation training; it will also reduce potential of mid-air collisions.

c. Advanced Cockpit

The Advanced Cockpit focuses on human factors to provide intuitive, pilot-like controls, and advanced visualization for Predator crews. Utilizing synthetic vision, mission crews gain enhanced situational awareness with wrap-around field and a total air and ground picture. The advanced cockpit will use an open architecture to allow full integration of aircraft, sensor, and weapons control, and allows for new requirements from emerging missions.

d. Desktop Training System

The Desktop Training System provides a PC-based, low-cost training device to allow formal and informal procedural training capability and review for aircrews to maintain proficiency.

10. F-22 Raptor

a. Lot 7-9 Multi-Year Procurement (MYP)

The F-22 Lot 7-9 MYP contract was signed July 31, 2007 and funds the procurement of 60 F-22s. The 20 F-22s in Lot 9 will be delivered to the Hawaii ANG in FY 2011 and the first quarter of FY 2012.

b. F-22 Common Configuration

This program includes numerous hardware modifications to reduce the current F-22 fleet of six different configurations to three configurations. This will increase efficiencies in Research, Development, Test, and Evaluation (RDT&E) and sustainment, and increase combat capability of the fleet.

c. F-22 Modernization Plan

This program includes Increments 2, 3.1, and 3.2. Each increment involves RDT&E and eventual installation of hardware and software that increases F-22 capabilities. Some capabilities include 4th Gen AESA radar, Small Diameter Bomb integration, AIM-120D and AIM-9X integration,

Automatic Ground Collision Avoidance System (Auto GCAS), and the Multifunction Advanced Data Link (MADL).

d. Reliability and Maintainability Maturation Program (RAMMP)

This program modifies hardware on existing F-22s to increase the fleet's reliability and maintainability. It is the only program that helps the F-22 attain its Operational Requirements Document (ORD) requirement of 3.0 hours Mean Time Between Maintenance (MTBM) by 100,000 fleet hours. This program includes 67 active projects.

e. F-119 Engine Modifications

This program modifies F-22 PW F-119 engines to improve safety, reliability, maintainability, sustainability, and mission performance.

11. JSTARS Aircraft

a. Re-engineering

This modification upgrades the Joint Surveillance Target Attack Radar System (JSTARS) fleet of 17 operational aircraft, one test aircraft, and one in-flight trainer aircraft with a new Propulsion Pod System (PPS) to meet current ORD requirements. The re-engining program includes the purchase and installation of new engines, thrust reversers, nacelles, pylons, fan, exhaust duct, and all associated components and initial spares along with the upgrade of training devices. The program will dramatically improve the capabilities of the aircraft with respect to thrust; thereby improving time to climb, time on station, service ceiling while on station, and fuel efficiency, and will allow JSTARS to comply with International Civil Aviation Organization (ICAO) noise and emissions requirements.

12. Distributed Common Ground System (DCGS)—AN/GSQ-272 SENTINEL

a. ARC Units—Distributed Ground Stations (DGS)

There are ARC units in nine states (AL, AR, CA, IN, KS, MA, NV, TX, and VA) conducting SENTINEL operations, and units in four other states (GA, HI, OH, and UT) providing support to SENTINEL operations. Two new standalone ANG sites in Indiana and Massachusetts were established in FY 2008, as well as ANG and AFR classic associate units at Beale AFB, CA and an ANG classic associate at Langley AFB, VA.

b. Weapon System Modernization

AF is continuing efforts to provide modernization to the ARC's DCGS. These efforts include upgrading the Nevada DGS site to 10.2 baseline and potentially building an unclassified Homeland Defense/Defense Support network for civil authorities.

13. Air and Space Operations Center Weapon System (AOC-WS)

a. AOC-WS Integration Development

The AOC-WS provides the Joint/Combined Force Air Component Commander (J/CFACC) the capability to exercise operational-level command and control (C2) of air and space operations worldwide. The AOC-WS Integration Development is an ongoing project to develop AOC

infrastructure and integrate C2 and Intelligence, Surveillance, and Reconnaissance (ISR) capabilities through software and hardware improvements to the AOC-WS baseline. This project will help ensure the AOC-WS remains a viable weapon system to meet the warfighter needs. Planned improvements will continue to enhance the AOC C2 of ISR in terms of interoperability and net-centricity, thus improving the C2 of air and space assets while reducing F2T2EA ("kill chain"). The RC AOC augmentation forces will require improved training capabilities and reachback/distributed operations connectivity as the AOC-WS modernizes to ensure they can maintain currency in AOC systems and processes, as well as provide support to the AOC units they augment.

14. B-52 Stratofortress

a. B-52 Combat Network Communications Technology (CONECT)

The CONECT program is intended to significantly upgrade the B-52 communications capabilities and crew information management. CONECT provides new infrastructure to the aircraft to incorporate integrated communications capability, in-flight conventional weapons retargeting, aircraft and weapon mission retasking, improved operator interface design, and an enhanced situational awareness environment to support conventional weapon delivery functions in a more efficient, versatile, and timely manner. When CONECT is complete, the B-52 will have the capability of communicating via multiple, simultaneous Beyond Line of Sight (BLOS) data links.

E. Plan to Achieve Full Compatibility between AC and RC

The Air Force will continue to set a positive example of increased integration among Active and Reserve components. As our momentum drives us towards increased capabilities and operational effectiveness, we will ensure that our activities and functions align with the guidance of the SECDEF, Chairman of the Joint Chiefs of Staff, and the needs of the Combatant Commanders.

As a Total Force team, the Regular Air Force, Air National Guard, and Air Force Reserve provide precise and reliable Global Vigilance, Reach, and Power for the nation. Our core values of integrity first, service before self, and excellence in all we do are the standards by which every Airman—Regular, Guard, or Reserve—will be held accountable, at all times.

II. Air National Guard Overview

A. Current Status of Air National Guard

1. General Overview and Assessment

The Air National Guard (ANG) has a rich history of defending and protecting America's interests at home and abroad. The ANG has been the AF's primary operational reserve for twenty plus

years, and at war since 1990 along with our active duty brethren. Comprising one-third of the combat capability of the AF, the ANG flew over 45,000 hours supporting combat operations in Operation Noble Eagle, OEF, and OIF during FY 2008. Additionally, ANG forces supported state governors and civil authorities during rescue and recovery operations after Hurricanes Katrina and Rita ravaged the Gulf Coast; firefighting efforts in several

Top ANG Equipping Challenges

- Precision Strike (Advanced Targeting Pod Modifications, Helmet Mounted Cueing Systems, Avionics upgrades)
- Survivability (C-5 Defensive Systems, LAIRCM, A-10 Missile Warning)
- Data-Links/Situational Awareness improvements

states threatened by wildfires; and security operations for large scale events like the Super Bowl and both Republican and Democratic Conventions. The operations tempo for the ANG has been high and prolonged. Recapitalization of our aircraft, like the active duty, is needed. We have been extremely successful at modernizing our legacy aircraft and providing upgraded "tools of the trade" for our Airmen through a capabilities-based requirements and acquisition program. This program has kept us relevant in homeland defense as well as combat operations.

The ANG's modernization program is founded on capability requirements validated by the Air Force and Combatant Commanders. Critical capabilities are developed and vetted in an open and rigorous forum of warfighters, experts in their respective weapons systems, at an annual Weapons and Tactics Conference (WEPTAC) and approved by the Director, ANG. The statements of needed capabilities are translated into specific programs that are commercial or government-off-the-shelf, and require only non-developmental integration into a weapons system. The process includes command and control, intelligence, surveillance, and reconnaissance systems as well as weapons delivery, airlift, and tanker platforms. These capabilities and associated programs are bound in a completely documented and updated annual *Weapons Systems Requirements Modernization Book*. This process documented an \$8.368 billion shortfall for modernization and recapitalization of the ANG.

When the Congress gave the National Guard \$900 million for replacing, repairing, and upgrading equipment after Hurricanes Katrina and Rita, the ANG's share was \$200 million. We empaneled an Expeditionary Combat Support team to define requirements and assess the areas of greatest need. The items not funded became part of the National Guard's Essential Ten capabilities. The Expeditionary Combat Support team's existence was extended and is the venue for updating the Essential Ten capabilities, and defining capabilities needed by the ANG for supporting state governors and civil authorities—essentially a WEPTAC for homeland operations.

a. General Assessment

Despite continuing fiscal restraints imposed by combat and other operations worldwide, and despite the need to balance recapitalization and modernization, the ANG was successful in acquiring capabilities with allocated funding that kept it relevant and ready. Continued emphasis from Congress on ensuring equitable funding for the ANG's fleet of legacy platforms is vital to this effort. Additionally, targeted funding from Congress for the ANG was instrumental in enabling key modifications over the past year, including defensive systems and completion of upgrades to precision targeting pods. These targeted funds allowed the ANG to invest in increasing our capabilities for responding to domestic emergencies and requests for support from civil authorities, e.g. medical, rescue, communications, and vehicle equipment.

For FY 2009–2010 the ANG anticipates continued restraints on funding levels, forcing hard decisions and continued vigilance to get maximum capabilities from existing funding. Specifically, we will continue to invest in targeting pod upgrades to meet current Central Command (CENTCOM) requirements, new NP-2000 propellers for the ANG-unique LC-130s (addressing emerging challenges found during the recent deployment to Antarctica), and installation of self-protection LAIRCM systems on the C-130s. In general, the ANG will seek improved solutions for data link and gateway capabilities, data transfer improvements, better sensors and cueing capability, self-protection suites, and more robust simulation capability to include distributed operations. In addition, the FY 2010 and beyond investments will include the National Guard Bureau (NGB)-led Essential Ten domestic response needs to ensure domestic security requirements are met.

- 2. Status of Equipment
- a. Equipment On-hand
- i. Fighter/Attack/Bomber Aircraft
- a) F-16 A/B/C/D Fighter Aircraft

The ANG has over one third of all of Combat Air Force (CAF) F-16 aircraft arrayed in 19 squadrons.

Block 25/30/32: The majority of ANG F-16 aircraft are within the Block 25/30/32 Mission Design Series (MDS). These aircraft are capable of employing both LITENING AT and SNIPER XR Advanced Targeting Pods (ATP) along with a wide variety of laser guided and inertiallyaided munitions (IAMS). The Block 25/30/32 is equipped with the Enhanced Position Location Radio System/Situation Awareness Data Link (EPLRS/SADL) that allows pilots to "see" other airborne platforms and link directly into the Army and Marine Corps tactical net. The ANG will continue to field Advanced Identification Friend or Foe (AIFF) kits and ARC-210 radios in FY 2009, and a new Commercial Fire Control Computer (CFCC) and Helmet Mounted Cueing System (HMCS) in future years.

Block 42: The Block 42 aircraft are capable of employing the LITENING AT and SNIPER XR along with a wide variety of laser guided and inertially-aided munitions (IAMS). ANG Block 42s are in the process of completing the Common Configuration Implementation Program (CCIP) modification bringing together LINK 16 data link, JHMCS, and other advanced capabilities. To meet Operational Requirements Document requirements, the Block 42 requires



F-16 A/B/C/D Fighter Aircraft

15 additional F-100-PW-229 engines to increase combat capability and performance.

Block 52: The ANG Block 52 fleet completed CCIP modernization in FY 2006, including the APX-113 Advanced Identification Friend or Foe System. ANG Block 52s are fully mission-capable with the HARM Targeting System (HTS), LITENING AT, and SNIPER XR.

b) MQ-9 REAPER

The MQ-9 REAPER is an unmanned strike asset assigned to attack squadrons, and has a secondary reconnaissance mission similar to the PREDATOR. The ANG is establishing a MQ-9 unit in New York that is slated to be operational by FY 2010.

c) A-10 Attack Aircraft

The venerable A-10 is noted for its performance in the close air support (CAS) mission. Other mission areas include combat search and rescue (CSAR) and forward air controller-airborne (FAC-A). The five ANG

squadrons account for 33 percent of combat-coded A-10s in the CAF. The A-10 is undergoing the Precision Engagement program, which will modernize the cockpit, provide a data link, improve LITENING AT and SNIPER XR targeting pod integration, and add a "smart" weapons capability. The aircraft is now equipped with a SATCOM radio. Future improvements to the A-10 include a low cost HMCS, updated Lightweight Airborne Recovery System (LARS) for CSAR missions, and improved SAM threat detection and countermeasures.

d) F-15 C/D Air Superiority Aircraft

ANG F-15s are tasked to defend the air sovereignty of the continental United States (CONUS) and support worldwide operations of Aerospace Expeditionary Forces (AEF). Current modernization efforts include Active Electronically Scanned Array (AESA) radar and Joint Helmet Mounted Cueing System (JHMCS). Retirement of ANG F-15 A/Bs and transfer of F-15 C/Ds from the AC is ongoing.

ii. Air Refueling Aircraft

a) KC-135 Air Refueling Tanker Aircraft

The ANG's 22 squadrons represent 43 percent of the total force's aerial refueling aircraft. The desired end-state of the ANG KC-135 force structure is a common fleet of KC-135Rs, Communications, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) -compliant aircraft. Upgrades on the priority list are tactical data links, infrared (IR) countermeasures, and night vision goggle (NVG) -compatible lighting.



A/OA-10 Attack Aircraft



F-15 A/B/C/D Air Superiority Aircraft



KC-135 Air Refueling Tanker Aircraft

iii. Airlift Aircraft

a) C-5A Strategic Airlift Aircraft

The ANG operates a fleet of 31 C-5A aircraft. The 105th Airlift Wing (Stewart ANGB, NY) flies 13 C-5As; the 164th (Memphis, TN) and the 167th (Martinsburg) each possess 9 aircraft. Major modification programs for all C-5As are the Avionics Modernization Program (AMP), which will significantly improve the C-5A reliability, maintainability, availability, and addition of aircraft defensive systems (ADS). Due to lack of ADS, C-5As are not permitted to enter high threat areas.

b) C-17 Strategic Airlift Aircraft

The C-17 strategic airlift aircraft delivers cargo and troops in normal and airdrop operations originating from the CONUS direct to forward locations. The 172nd Airlift Wing in Jackson, MS is the only ANG unit equipped with C-17s. The 154th Airlift Wing at Hickam AFB, HI and the 176th Airlift Wing at Elmendorf, AK are ANG associate C-17 units. LAIRCM, defensive armor, and infrared defensive system testers remain priority upgrades for ANG C-17s.



C-5A Strategic Airlift Aircraft



C-17 Strategic Airlift Aircraft

c) C-130E/H/J Theater Airlift Aircraft

The ANG's 18 C-130E/H units comprise 45 percent of the C-130 tactical airlift capability of the Mobility Air Forces (MAF). The ANG is working with Congress and AMC to obtain upgrades such as the Low Power Color Radar (APN-241) and LAIRCM. The ANG engages fully with the C-130 AMP program to replace the center wing boxes.

d) C-130J

The C-130J is the latest generation C-130 incorporating a redesigned, twocrew member flight deck, upgraded engines, and integrated digital avionics subsystem. Organized into three wings, the ANG operates the largest number of the C-130J tactical airlift aircraft. There are 24 C-130Js in the ANG. Current modification efforts include crashworthy seats for loadmasters and

new windows with wider fields of view in the doors to improve visibility for scanners to detect threats to the aircraft. Both modifications will be backwards compatible with the E/H fleets.

iv. Command and Control (C2)

a) Modular Control System (MCS)

MCS is a ground-based tactical C2 system that controls aircraft and air defense weapons. Since the ANG has the mission of defending the airspace over the United States, ANG units assigned to control active air sovereignty intercepts will use the MCS. The Air Force plans to modernize the MCS with the Battle Control System–Mobile (BCS-M).

b) Air Support Operations Center/Tactical Air Control Party (ASOC/TACP)

ASOCs and TACPs deploy in direct support of Army combat units. ASOCs provide a senior Air Force liaison to several levels of Army units. TACPs provide terminal control of close air



C-130J

support. The ANG fields fifteen units that support ASOC and TACP operations. ASOCs use a variety of communications equipment to provide connectivity throughout the theater while the TACPs rely mainly on the MRC-144 radio.

c) Air and Space Operations Center (AOC)

The AOC, also known as the AN/USQ-163 FALCONER, is the Air Force weapon system for planning, executing, and assessing all aerospace operations. The ANG has three AOC augmentation units that are being equipped with non-deployable AOC training suites that allow them to maintain their mission ready status. Currently, these units or

packages of personnel will deploy forward to support the engaged AOC. The ANG is pursuing a change to the concept of operations to allow these units to support an AOC in the forward area through "reach-back."

v. Intelligence, Surveillance, and Reconnaissance (ISR)

a) MQ-1 PREDATOR Unmanned Aerial System/Vehicle (UAS/UAV)

The MQ-1 PREDATOR is a key ISR asset capable of armed reconnaissance with its two AGM-114 HELLFIRE missiles. PREDATOR can send imagery to tactical users on the ground via data link, thereby

enhancing situational awareness. MQ-1 reach-back capable units are the 119 RW North Dakota, 147 RW Texas, 163 RW California, 214 RG Arizona, and the associate 232 OS in Nevada. The Formal Training Unit (FTU) in California received its first aircraft the summer of CY 2008. Ground control stations (GCS) are used to pilot the MQ-1 and control its sensors. PREDATOR's sensors could support homeland defense, disaster response, and support to civil authorities.

b) E-8C Joint Surveillance Target Attack System (JSTARS)

The JSTARS is a modified Boeing 707-300 aircraft equipped with a synthetic aperture radar. JSTARS supports the warfighter by locating, classifying, and tracking ground targets and data linking the imagery and tracks to ground forces. The platform is a key joint force ISR and C2 enabler in Iraq and Afghanistan. Replacement of the engines has begun with developmental testing underway. Replacement of prime mission

processing capability to address diminishing manufacturer support is now funded. Correcting these most critical sustainment issues on JSTARS ensures availability well beyond 2020.

c) F-16 Theater Airborne Reconnaissance System (TARS)

TARS pods continue to support close air support (CAS), counter-improvised explosive

device (IED) operations, bomb damage assessment (BDA), special operations activities, and pre-strike reconnaissance needs. The ANG participated in defining support requirements and established the schoolhouse to train Reserve and ANG F-16 Block 25, 30, and 32 aircrews; maintenance personnel; and imagery analysts for AEF deployments. The data link and new ground station (Mission Verification Equipment) have been in theater for eighteen months. The ANG transferred program management responsibility to the



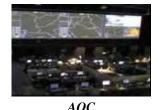


F-16 Theater Airborne **Reconnaissance** System (TARS)



MQ-1 PREDATOR UAS/UAV





active duty Air Force. TARS is not funded in the FY 2010 POM and will be phased out in favor of other reconnaissance solutions.

d) C-130 SENIOR SCOUT

SENIOR SCOUT (SS) provides full spectrum, near-real-time signals intelligence (SIGINT). The system consists of a roll-on/roll-off shelter containing state-of-the-art collection, processing, and communications equipment loaded into a modified C-130E/H. The system is operated by the 169th Intelligence Squadron, Utah ANG. Upgrades in FY 2008 incorporate expanded SATCOM data links, enhanced collection

subsystems, replacement receivers, and distributed processing to support precise targeting. Development of mission crew trainer has begun as well. Lack of a dedicated C-130 carrier unit severely limits training opportunities for aircrew qualification and participation in exercises.

e) C-130 SCATHE VIEW

SCATHE VIEW (SV) provides electro-optical (EO)/IR full motion video (FMV) and laser target illumination directly to warfighters or civil support teams. The system is a quick reaction, palletized, rollon/roll-off sensor and exploitation capability carried on specially configured C-130H2 aircraft of the 152nd Airlift Wing, Nevada

ANG. As such, it is able to operate in airspace and weather that restricts UAV flights. Upgrades in FY 2008 incorporate the Tactical Common Data Link with simultaneous LOS/BLOS FMV downlink and upgraded PSC-5D radios. The AF will divest the SV program in the FY 2009 budget, replacing it with Shadow Harvest. A joint capability technology demonstration (JCTD) of Shadow Harvest will be conducted in FY 2009.

f) Air Force Distributed Common Ground System (AF DCGS)

AF DCGS (SENTINEL) is the Air Force weapon system tasked with processing, exploitation, and dissemination of actionable ISR data collected by U-2, MQ-1, MQ-9, and RQ-4 aircraft and other platforms. The weapon system fuses imagery, cryptologic, and measurement and signatures intelligence data into decision-quality products for Combatant Commanders. Currently, there are six ANG stand-alone SENTINEL sites in Alabama, Arkansas, Indiana, Kansas, Massachusetts, and Nevada. Two ANG Classic Associate SENTINEL units are collocated and supporting AD SENTINEL sites in California and Virginia. In addition, the ANG has a stand alone Cryptologic

Support Site (CSS) in Utah linked to the SENTINEL enterprise, and two Classic Associate CSS units collocated with AD units in Georgia and Hawaii. Finally, the ANG supports DCGS FTU training in Texas with a Classic Associate unit.



Air Force Distributed **Common Ground System** (AF DCGS)



C-130 SCATHE VIEW





vi. Information Operations (Network Warfare, Electronic Warfare, and Influence Operations)

a) EC-130J Electronic Warfare Aircraft

This psychological operations dissemination aircraft operated by the 193rd Special Operations Wing, PA has completed its conversion from the EC-130E to the EC-130J aircraft. The unit operates three EC-130Js hard-wired with permanent "Commando Solo" packages, and four "Super J" aircraft for airlift.

b) Network Warfare Operations (NWO)

The 262nd Information Warfare Aggressor Squadron, (WA ANG) and 177th Information Aggressor Squadron (KS ANG) provide red teaming and multidisciplinary vulnerability assessments (MDVAs) for information operations and network warfare. The 175th Information Operations Squadron (MD ANG) provides the National Security Agency signals intelligence support to Information Operations (IO) and defensive IO. The 102nd Information

Warfare Squadron (RI ANG) supports the Joint Task Force-Global Network Operations (JTF-GNO) and Defense Information Systems Agency (DISA) Field Security Operations (FSO) with the network defense capabilities. The 101st Information Warfare Flight (UT ANG) plans, coordinates, monitors, and assesses full-spectrum, integrated IO and related activities to achieve objectives assigned by commanders. Additionally, ANG IO initiatives in Delaware (Det 1, HQ DE ANG), Texas (Det 1, HQ TX ANG), and Vermont (VT ANG IO) provide the Air Force with network warfare capabilities; tactics; IO techniques, procedures, test and evaluation; and education and training, respectively in cyberspace.

vii. Space

The ANG has eight units directly supporting Air Force Space Command (AFSPC) with three more units on the way. The 137th Space Warning Squadron (SWS), Greeley, CO, provides immediate, worldwide missile warning and space launch detection. The 148th Space Operations Squadron (SOPS), Vandenberg AFB, CA, operates the MILSTAR Operations Center

and controls six MILSTAR secure communications satellites. The 153rd Command and Control Squadron (CACS), F.E. Warren AFB, WY, is a Mobile Consolidated Command Center (MCCC) providing a mobile and survivable command and control capability with associated intelligence, surveillance, and reconnaissance capabilities. The 213th SWS, Clear AFS, AK, provides tactical warning and attack assessments of ballistic missile attacks against North America and space surveillance capabilities using phased-array radars. The 114th Range Operations Squadron (ROPS), Patrick AFB, FL, provides launch support to the Eastern Launch Range. The 119th CACS, Knoxville, TN, provides support to the U.S. Strategic Command's Space Operations Center. The 222nd CACS, Rome Research Site, NY, augments and supplements the current National Reconnaissance Operations Center. The 216th Operations Support Squadron (OSS), Vandenberg AFB, CA, plans, integrates, executes, and assesses space operations of designated forces in support of Combatant Commanders and global space operations. Future missions include the 127th CACS (KS), 212th CACS (ID), and 219th Security Forces Squadron (ND).



EC-130J Electronic Warfare Aircraft



Network Warfare Operations



MILSTAR Satellite

viii. Special Airlift Mission Aircraft

a) LC-130 Polar Airlift Aircraft

The LC-130 an aircraft equipped with skis and is operated by the 109th Airlift Wing, Schenectady, NY. They operate nine LC-130s on behalf of the National Science Foundation to support airlift operations in the Arctic and Antarctic as well as other cold weather

areas where other airlift aircraft cannot operate. Current modernization efforts include evaluation of a new, eight-bladed propeller to improve takeoff performance, acquisition of radar that can identify crevasses which will improved safety margins when operating in polar regions, and development of a new JATO rocket motor.

b) C-38A Special Airlift Aircraft

The 201st Airlift Squadron (DC ANG, Andrews AFB, MD) has two C-38A (Gulfstream G100) business jets used for supporting distinguished visitors. These aircraft will soon reach the end of their programmed life and becoming unsupportable. The unit requires four

C-37Bs (Gulfstream V) to continue the operational support airlift mission in the future. Four aircraft will ensure consistent support and minimize the impact of unplanned maintenance.

c) C-40C Special Airlift Aircraft

The ANG operates 3 C-40C Boeing 737-700 Business Jets that provide a long-range worldwide 40 to 60-passenger capability to senior DoD officials, members of Congress, and the Executive Branch. To ensure safe and effective flight operations, one additional C-40C aircraft, with a self-protection suite, is required.

d) C-21 Special Airlift Aircraft

The ANG operates the C-21 aircraft from various locations. These aircraft transport high-level DoD personnel to various CONUS locations. Avionics upgrades are required to ensure operations in the face of changing regulations for domestic and worldwide travel. The C-21 was recently used in hurricane relief efforts.

e) RC-26B Counter-Drug Aircraft

The role of these eleven aircraft is expanding from counter-drug operations to meet ISR requirements CONUS and OCONUS as demonstrated by a deployment to Southwest Asia and operations during Hurricane Katrina. SOCOM funded modification of six aircraft to a Block 25 standard with classified communications and sensors. The ANG operates the remaining five aircraft in a Block 20 configuration that includes an improved sensor ball mounted internally along with updated data links.



LC-130 Polar Airlift Aircraft



C-38A Special Airlift Aircraft



C-40C Special Airlift Aircraft



C-21 Special Airlift Aircraft



RC-26B Counter Drug Aircraft

ix. Combat Rescue Aircraft

a) HH-60G Combat Rescue Helicopter

The ANG operates 18 HH-60Gs in three units. Ongoing programs include AN/ARS-6v12 to improve situational awareness and communication with isolated personnel, Multi-function Color Displays (MFCDs) with additional processing and display capability, Situational Awareness Data Link (SADL), aircraft defensive armament upgrade, and tactical threat receiver to give critical in-flight threat information.

b) HC/MC-130 Combat Rescue Aircraft

The ANG continues to install LAIRCM on HC/MC-130 aircraft. However, additional funding is required to outfit the fleet. Ongoing programs include AN/ARS-6 v12 survivor locator radio, sensor upgrades, and data link capability. Additionally, the Universal Aerial Refueling Receptacle Slipway (UARRSI) remains unfunded.

x. Other Aircraft Systems

a) Modular Airborne Fire Fighting System (MAFFS)

The ANG is an active participant in the U.S. Departments of Agriculture and Interior firefighting efforts, and operates MAFFS, a roll-on/roll-off platform that carries 3,000 gallons of fire retardant. The ANG is aiding the U.S. Forest Service in procuring a second-generation system dubbed "MAFFS II." This "state-of-the-art" system will provide increased capability for fighting fires while retaining the C-130's primary airlift mission. Eight MAFFS II units will be purchased. Deployment of MAFFS II was delayed by engineering certification requirements, but should be available by mid-FY 2009.

b) AN/MPN-26 Mobile Approach Control System (MACS)

Ten ANG units operate sixty-three percent of the Air Force's capability for air traffic control and radar approach control in the form of AN/MPN-14K and AN/TPN-19 equipment. MACS is an Air Force effort to replace the logistically unsupportable AN/MPN-14K and AN/TPN-19 with a new solid-state digital airport surveillance radar and precision approach radar.

b. Average Age of Major Items of Equipment (MIE)

See Table 2 for the average age of selected major items of equipment. Overall, the average age of aircraft MIE within the ANG is 24 years.

c. Compatibility of Current Equipment with AC

Compatibility problems exist between ANG and AC equipment in the following areas.

i. F-15A/B

The APG-63 V (0) mechanically scanned radar suffers from low reliability, maintainability,



HH-60G Combat Rescue Helicopter



HC/MC-130 Combat Rescue Aircraft



Modular Airborne Fire Fighting System (MAFFS)

availability, and performance. The ALR-56A Radar Warning Receiver (RWR) is inferior to current technology.

ii. C-5A

The C-5A does not have defensive systems, severely limiting their mission capability. AMP avionics modifications are funded for the ANG aircraft in the FY 2008 POM. Structural modifications are required for the ANG C-5A fleet to avoid flight restrictions and grounding.

iii. C-130E/H

The 54H60 propeller and propeller valve housing on the C-130E/H models are becoming less reliable and more costly to maintain. Additionally, they do not provide the all-around improved performance found in newer commercial models. Consequently, thrust is deficient and prohibits crews from taking full advantage of cargo carrying capacity at high-density altitudes as well as affecting maneuvering capability in a high threat environment.

d. Maintenance Issues

i. C-5A

Redressing structural deficiencies, cracks in the contour box beam fitting (CBBF) and fuselage crown skin (CS), will cost over \$500M for ANG and AFR aircraft.

ii. JSTARS

JSTARS is experiencing extreme costs for repairing the TF-33 engines. Parts for the engine are out of production, requiring repair techniques that degrade performance. Re-engining JSTARS will reduce costs and improve supportability and operational performance.

iii. MPN-14K Radar Approach System

The MPN-14K radars are well beyond their planned service life. This 1950s vintage radar system is well beyond life expectancy. During the 1980s, some upgrades were made, but a lack of spare parts plagues this failing and unsupportable system.

e. Modernization Programs and Shortfalls

i. Advanced Targeting Pods (ATP)

The F-16/A-10 requires additional ATPs and fourth generation upgrades to existing pods to employ precision guided weapons to fulfill the full range of taskings required by the Combatant Commander. The pod must possess fourth generation FLIR and CCD, laser spot search/track (LSS/LST), the capability for targeting J-Series weapons, and the ability to transmit video downlink.

ii. F-16 Commercial Fire Control Computer (CFCC)

The F-16 requires the CFCC to greatly improve processing power and reliability of the aircraft fire control system, and allow HMCS integration. The CFCC is key to all future flight program upgrades.

iii. C-5 Crown Skin and Contour Box Beam Fitting Replacement

Modification is necessary to replace the aft crown skins as well as right and left contour box beam

fittings, which were damaged by cracking due to the stress and corrosion. This modification affects A and C model C-5s.

iv. C-5 Defensive Systems

Defensive systems provide the C-5 with AAR-47 (V2+) Missile Warning System (MWS) and ALE-47 Countermeasures Dispensing System (CMDS) to detect and counter Infrared (IR) Man-Portable Air Defense Systems (MANPADS).

v. LAIRCM for C-130, C-5, C-17

LAIRCM automatically detects, provides warning, and counters IR missiles using laser-based technology. It fully protects a wide range of mobility aircraft. ANG MC/HC-130s need additional LAIRCM equipment. ANG C 130Js are expected to install LAIRCM in a future Block upgrade.



LAIRCM for C-130, C-5, C-17

vi. RC-26 Avionics Upgrade

Upgrades are needed for the RC-26 avionics suite to address changes in requirements for communications and navigation equipment necessary to operate in both international and U.S. airspace.

vii. C-130 AN/APN 241 Radars

The APN-59 radar installed on C-130 aircraft suffers from deteriorating reliability, maintainability, and availability. The AN/APN-241 low power color radar (LPCR) provides enhanced capability for all-weather, precision airdrop, and detection of wind shear.

viii. C-40C Self Protection Suite

The suite integrates and installs an aircraft self-protection system on the C-40C.

ix. A-10 ARC-210

The ARC-210 provides improved radio communications to include SATCOM capability.

x. HH-60 Color Displays/SADL

Smart Color Multi-function Display–Color display will show FLIR, moving map, streaming video, and imagery. The additional on-board processing power will enable future modifications such as Situational Awareness Data Link, LARS V12, and IBR threat data.

xi. Helmet-Mounted Cueing Systems (HMCS)

The A-10, F-15, and F-16 need a HMCS to improve the employment of air-to-air and air-toground weapons. A HMCS fuses sensor data, displays, and employment cue information onto a display slaved to the orientation of the pilot's helmet.

xii. Tactical Data Links (KC-135, HH-60, HC/MC-130)

Tactical data links are needed to connect to the tactical nets of air and ground forces, improve target identification, reduce fratricide, and ensure situation awareness in a joint operational environment.

xiii. F-15 Embedded GPS/INS (EGI)

EGI provides global positioning accuracy for the F-15 fleet. Congress mandated this modification.

xiv. Engines

JSTARS, A-10, and F-16 need engines upgraded or replaced to reduce the cost of repairing legacy engines, reduce fuel consumption, boost performance and thrust, and improve the operational capabilities of the platform. New engines will improve combat readiness, aircrew safety, and reduce the risks to aircrew in combat operations.

xv. F-15 AESA

The active, electronically scanned array (AESA) radar can detect, track, and perform communications and jamming functions in multiple directions simultaneously. AESA radar for ANG F-15s is critical against asymmetric threats and cruise missiles. The current APG-63 is becoming increasingly expensive and difficult to maintain and upgrade.

xvi. F-15 Advanced Radar Warning Receiver (RWR)

Since fielding in the late 1970s, the F-15 C/D RWR has had significantly degraded performance against present and future radar systems, obsolescence, and diminished manufacturing sources. Without an advanced RWR, the F-15 C/D is at risk to current and future threat systems proliferating through projected deployment areas.

f. Overall Equipment Readiness

i. Aircraft

The lack of precision engagement capability, need for re-engining several platforms, and installation of improved defensive systems drive modernization of legacy aircraft to be our number one priority. Ensuring these capabilities support requirements of the Combatant Commanders is critical to maintaining ANG systems as relevant to the fight in multiple theaters of operations.

ii. Other Equipment

Mission equipment for the CONUS air defense system will become unsupportable by FY 2009. Additionally, ANG air traffic control and approach control equipment and facilities are generations behind the AC, causing logistics support to be time consuming and overly expensive.

g. Other Equipment Specific Issues

i. New Missions

a) Fighters

F-15 pilot training for ANG and AC pilots is conducted at the 173rd FW, Kingsley Field, OR. F-16 pilot training for allied air forces is conducted at the 162nd FW, Tucson IAP AZ and also F-16 Block 60 training of UAE pilots. The ANG operates F-16 FTUs at 149th FW Kelly Field, TX and 178th FW Springfield, OH.

b) Space

The ANG established a detachment in Arizona to conduct an emerging mission for AFSPC. The unit will support joint warfighting capabilities by using high altitude balloons to provide a radiorelay capability that will enhance critical battlefield communications. This high altitude operations capability was scheduled to transition to AF Cyber Command on 1 October 2008, but is now on hold pending resolution of the organization of Cyber Command.

c) Command and Control, and Intelligence, Surveillance, and Reconnaissance (C2ISR)

Growth of AOCs, PREDATOR operations, TACPs, and AF DCGS to answer dynamic threats in today's threat environment will require aggressive resourcing to ensure the ANG is postured correctly to enable partnership with the AC.

d) Information Operations (IO)

Eight states are in the process of standing up or have IO active units. Because of the breadth and depth of this unique and dynamic mission area, ANG units activated to support IO requirements will require extensive, state-of-the-art computer, networking, and telecommunications systems and equipment as well as associated training.

e) Homeland Defense

Although primarily manned by the ARNG, Weapons of Mass Destruction (WMD) Civil Support Teams (CST) are augmented by ANG personnel as part of the Homeland Defense mission. Fiftyfive WMD CSTs are authorized by Congress in 31 states. Each team consists of 22 highly skilled, full-time members of the Army and ANG to deploy rapidly to assist a local incident commander in determining the nature and extent of an attack or incident and provide expert technical advice on WMD response operations.

f) Training

The Florida ANG established an Associate Unit at Tyndall AFB, FL, to provide flight instructors for Air Education and Training Command's F-15C/D FTU, designated Detachment 1, Southeast Air Defense Sector.

g) STAMP/STRAPP

The Kansas ANG will establish Standard Air Munitions Packages (STAMP)/Standard Tanks, Racks, Adapters, and Pylons Packages (STRAPP) at McConnell AFB, KS, transferring them from Medina Annex, Lackland AFB, TX. This mission provides the Air Force Material Command a new beddown site for air transportable munitions support packages. The mission objective: to provide rapid global response package to theater Combatant Commanders with preferred precision guided munitions and weapons release equipment to meet worldwide contingencies. This new emerging mission will stand up by FY 2010.

ii. Electronic Warfare (EW)

Electronic warfare includes activities in integrated EW systems, improved RWRs, improved electronic attack pods, sustainment of proven equipment, and infrared countermeasures (IRCM).



ALQ-213 CMS

Integrated EW Systems include the ALQ-213 Countermeasures

Management systems (CMS) installed on both the F-16 and A-10 aircraft and used to manage the aircraft's entire EW suite. This approach reduces pilot workload while increasing aircraft survivability. The next spiral upgrade includes an advanced processor unit that facilitates more robust management of all EW assets as well as enabling future upgrades such as digital RWRs and advanced electronic attack pods (ALQ-131/ALQ-184).

<u>Improved RWRs.</u> The ANG is pursuing a dual track approach to field RWRs with digital receivers and other enhancements. The first track is full partnership with AF development programs funded under specific plans for an MDS. The second track upgrades existing RWRs through technical insertions of both hardware and software from fifth generation equipment.

<u>Electronic Attack Pod (EAP).</u> The ANG is collaborating with AFMC on a technical insertion from fifth generation equipment. This modified EAP will be tested by AATC in 2009.

<u>Sustainment of Proven Electronic Warfare Equipment.</u> Aircraft survivability depends a great deal on AF-managed EW equipment including, electronic attack systems, ALQ-213, ALR-69, ALR-56C/M, and AAR-47. The ANG is leading the way with modernization efforts that include processor upgrades, replacement of unsupportable parts, and continued software upgrades.

<u>IRCM Systems.</u> IRCM has an increased priority for both combat and mobility forces. Efforts to equip the Combat Air Forces include a missile-warning system such as the ANG-lead initiative to install the AAR-47 on the A-10. F-15s will receive an IRCM that uses special materials. Efforts for equipping mobility aircraft include AAR-47 MWS and laser-based IRCM systems.

iii. Distributed Mission Operations and Simulation

The ANG's Distributed Warfare Detachment, at the 132 FW, hosts the Distributed Training Operation Center (DTOC). The DTOC's one-of-akind capabilities and mission have grown dramatically to keep pace with the scope of Distributed Mission Operations (DMO) in the Air Force. As the Guard's DMO lynchpin, the DTOC provides the operational environment for a virtual battlespace linking a wide array of high fidelity flight and mission crew simulators. The DTOC is responsible for all network management, event control, scenario development, scheduling, and realistic threat insertion. In addition, the DTOC



Distributed Mission Operations

manages the distributed network called ARCNet. The Mission Training Engineering Center (MTEC), collocated with the AF Research Laboratory (AFRL), Mesa, AZ, coordinates technology programs with AFRL, and is the engineering focal point for the ARC to exploit and transition leading edge technology. The ANG spearheaded a number of advanced technology programs. The F-16 Block 30 Full Combat Mission Trainer (FCMT) program will replace several older training systems with Regional Mission Training Centers followed by limited unitlevel deployment. The Boom Operator Simulation System (BOSS) a high fidelity, low cost, squadron-level KC-135 simulator completes development in early FY 2009. Equipped with unique digital high definition stereo 3D graphics, the BOSS will be deployed to all tanker units over the next few years. The RC-26B schoolhouse in WV will receive a state-of-the art trainer supporting both mission sensor operator and flight crew training requirements. The ANG developed the Multi-Mission Crew Resource Management Trainer (CRMT) microsim to take advantage of economies of scale, shared technology solutions, and parallel spiral improvements. Development began in the Fall 2008 to support all ANG C-130 and KC-135 flying units. Finally, the Guard will construct an Advanced Technology Demonstrator HH-60G prototype to meet a critical need for AF rescue aircrews. ANG ranges and Combat Readiness Training Centers (CRTCs) are being networked with the DTOC also.

B. Changes Since Last NGRER

Although the underlying equipping philosophy of the ANG has not changed, significant mission and programmatic changes are underway since the last report. To support a Total Force approach in modernizing the CAF, the ANG has an ongoing, aggressive effort to equip ANG F-16s with LITENING AT and SNIPER XR Advanced Targeting Pods (ATP). The ANG requirement of 194 pods is 99 percent complete and the LITENING Gen 4 requirement of 69 pods is 46 percent complete. Ninety-seven LITENING AT pods have been upgraded with Video Data Link (VDL) and fifteen SNIPER XRs were modified with VDL as well, leaving twelve unmodified. The F-16 FCMT program was initiated by Congressional action with an appropriation of \$4.9M in 2005.

The ANG continues to expand its role in Space and Information Operations Warfare as evidenced by ANG working with the Air Force to integrate and stand up PREDATOR units within the FYDP with potential for more outside the FYDP.

C. Future Years Programs (FY 2010–FY 2012)

1. FY 2012 Equipment Requirements

The ANG fleet expects continued modernization in FY 2009 and beyond. Refer to details in each

previous individual section for modernization. Enhancements include digital video recorders, the Joint Helmet Mounted Cueing System (JHMCS), ALR-69A/AT3 (Advanced Tactical Targeting Technology), and advanced Distributed Mission Training (DMT) simulators, engines, data links, APN-241 radar, LAIRCM, and structural modifications. All will remain issues as aircraft fly well beyond their designed life.

2. Anticipated New Equipment Procurements

Funding for procurement of major items of ANG combat and direct combat support equipment is programmed by the AC, as required, to meet planned total force employment plans. The Congress, in its annual budget appropriation, may also direct additional ANG equipment procurements through NGREA. The ANG has 128 LITENING AT and 27 SNIPER XR targeting pods in service, and additional funds are needed to continue to upgrade and modernize these ATPs for the F-16/A-10. In concert with the AC, modernization of ATPs to "4th generation" capabilities will begin with a 69 pod 4th generation requirement. Additional unfunded modernization programs include the CFCC, Advanced IFF, improved engines, and HMCS.

3. Anticipated Transfers from Active Component to Reserve Component

The F-15C/D transfers will continue from the AC to the ANG combat-coded squadrons until FY 2013. Additional KC-135R models will be transferred to replace older D/E aircraft. C-5As from the AC were transferred to the 164th Airlift Wing, Memphis, TN and the 167th Airlift Wing, Martinsburg, WV.

4. Anticipated Withdrawals from RC Inventory

As newer C-130Js are acquired, older C-130E/Hs will be retired. Older KC-135D/E models are being retired as newer KC-135Rs are transferred from the active component. Numerous F-16C aircraft are scheduled for retirement.

5. Remaining Equipment Shortages and Modernization Shortfalls at the End of FY 2011

The most significant challenge to ANG readiness is keeping equipment modernized and relevant to future combat. The ANG has the oldest aircraft in the AF inventory. Modernization of the fleet to attain capabilities equivalent to newer platforms, and meet the war-fighting combatant commanders' tasking is critical to a robust and lethal Air Force.

- Fielding the A-10 Precision Engagement (PE) capabilities will cause a split configuration for the ANG's 92-aircraft fleet. To offset this disparity and using NGREA, the second increment of ANG A-10s installed a "smart" multi-function color display, which provides many of the capabilities resident in PE.
- A Helmet Mounted Cueing System (HMCS) is needed for F-16 and A-10 aircraft to increase combat effectiveness and reduce fratricide in both air-to-air and air-to-ground roles.
- An F-15 Digital Video Recorder is required to capture training mission data.
- To support communications, navigation, and surveillance/air traffic management (CNS/ATM) requirements and integration of NVGs, C-130s need a fully re-designed avionics package and a NVIS-compatible cockpit.

- The CRTCs and ranges must be equipped with Link 16 and EPLRS capable data links to provide relevant training networks.
- The TF-33 engines on JSTARS aircraft are subject to increased repair costs, diminished performance, and attendant operating restrictions that impact the aircrafts effectiveness.
- Four C-37B (Gulfstream 550) aircraft are required at the 201st AS Andrews AFB, MD to replace the aging C-38A fleet. These aircraft support Congressional, Executive Branch, DoD, AF, and ANG travel worldwide.
- Due to the age of the AN/MPN-14K radar, availability of spare parts continue to be limited to support maintenance of the equipment. Efforts to implement a replacement program have not been successful.

6. Other Comments

NGREA funds play a major role in the equipment modernization program for the ANG. A relatively small amount of NGREA funds provide the catalyst for significant enhancements in combat capability. Innovative equipment modernization and associated business practices utilizing NGREA seed low cost, high pay-off programs that not only benefit the ANG, but the Total Force. Discretionary NGREA is needed to continue modernization and provide the equipment our citizen soldiers need as they defend this nation domestically and overseas. With it, we are able to quickly field the 80 percent solution at 20 percent of the cost.

D. Summary

NGREA funding is vital to ANG modernization efforts. With the need to fully fund ongoing operations and continued pressure on defense budgets, obtaining adequate funding for procuring equipment and modernization efforts is a challenge. Without adequate funding from NGREA or other sources, the ANG will be unable to modernize legacy platforms and equipment and will no longer remain an essential partner in the Total Force.

The ANG will continue to adapt to meet the needs of the combatant commanders' and AEF requirements for combat and combat support forces. The ANG is fully engaged at all levels in Afghanistan, Iraq, and for Homeland Defense. We will respond to any short notice tasking with fully combat-ready professionals equipped with aging, but capable, weapon systems.

Consolidated Major Item Inventory and Requirements

NOTE: This table provides a comprehensive list of selected major items of equipment. It provides the quantity on-hand (QTY O/H) projected to be in the inventory at the beginning/end of the selected fiscal year (FY). It also provides the quantity required (QTY REQ) needed to meet the full wartime requirements of the Reserve component. In accordance with Title 10, the QTY REQ number provides the recommendations as to the quantity and type of equipment which should be in the inventory of each Reserve component. Unit cost values are in dollars.

Nomenclature Equip No.		FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ
AIR REFUELING							
AIR REFUELING, KC-135R	KC-135R	\$57,700,000	146	151	152	152	152
AIR REFUELING, KC-135T	KC-135T	\$54,000,000	24	24	24	24	24
AIRLIFT							
AIRLIFT, C-130E	C-130E	\$29,200,000	12	3	0	0	0
AIRLIFT, C-130H	C-130H	\$29,200,000	119	122	128	128	128
AIRLIFT, C-130J	C-130J	\$64,000,000	25	23	19	19	19
AIRLIFT, C-17A	C-17A	\$219,200,000	8	8	8	8	8
AIRLIFT, C-5A	C-5A	\$119,300,000	30	30	30	30	30
AIRLIFT, LC-130H ¹	LC-130H	\$71,000,000	10	10	10	10	10
AIRLIFT, WC-130H	WC-130H	\$29,200,000	4	6	7	7	7
ELECTRONIC WARFARE							
EW, E-8C	E-8C/AOT	\$251,500,000	14	14	14	14	14
EW, EC-130J	EC-130J	\$90,000,000	3	3	3	3	3
EW, RC-26B	RC-26B	\$1,500,000	11	11	11	11	11
FIGHTER							
FIGHTER, A/OA-10A	A-10A/C	\$10,700,000	78	96	96	96	96
FIGHTER, F-15A	F-15A	\$31,000,000	92	89	95	95	95
FIGHTER, F-15C	F-15C	\$31,000,000	103	92	92	95	95
FIGHTER, F-15D	F-15D	\$31,000,000	17	16	16	16	16
FIGHTER, F-16C	F-16C	\$19,500,000	340	294	267	256	256
FIGHTER, F-16D	F-16D	\$19,500,000	28	24	25	25	25
FIGHTER, F-22A	F-22A	\$185,000,000	0	2	18	18	18
OPERATIONAL SUPPORT							
OP SUPPORT, C-21A	C-21A	\$3,100,000	18	18	18	18	18
OP SUPPORT, C-32B	C-32B	\$91,000,000	2	2	2	2	2
OP SUPPORT, C-38A	C-38A	\$12,000,000	2	2	2	2	2
OP SUPPORT, C-40C	C-40C	\$70,000,000	3	3	3	3	3
RESCUE							
RESCUE, HC-130N/P	HC-130N/P	\$19,100,000	7	7	7	7	7
RESCUE, HH-60G	HH-60G	\$17,600,000	15	15	15	15	15
RESCUE, MC-130P	MC-130P	\$75,000,000	4	4	4	4	4
MISCELLANEOUS EQUIPMEN	т						
MQ-1B	MQ-1B	\$4,500,000	32	32	32	32	32
FIRE FIGHT/CRASH VEH	P-19	\$353,000	170	170	170	170	170
HMMWV, ARMORED	M1145	\$153,030	66	66	66	66	66
EMEDS	EMEDS	\$3,500,000	17	17	17	17	17
25K LOADERS	25K LDR	\$412,500	40	40	40	40	40

ANG Average Age of Equipment

NOTE: This table provides the average age of selected major items of equipment. The average age provides a projected average age of the fleet at the start of FY 2009.

Nomenclature	Equip No.	Average Age	Remarks
AIR REFUELING			
AIR REFUELING, KC-135R	KC-135R	47	
AIR REFUELING, KC-135T	KC-135T	49	
AIRLIFT			
AIRLIFT, C-130E	C-130E	45	
AIRLIFT, C-130H	C-130H	20	
AIRLIFT, C-130J	C-130J	7	
AIRLIFT, C-17A	C-17A	5	
AIRLIFT, C-5A	C-5A	40	
AIRLIFT, LC-130H	LC-130H	17	
ELECTRONIC WARFARE			
EW, E-8C	E-8C	8	
EW, EC-130J	EC-130J	8	
EW, RC-26B	RC-26B	16	
FIGHTER			
FIGHTER, A/OA-10A	A/OA-10A	28	
FIGHTER, F-15A	F-15A	30	
FIGHTER, F-15C	F-15C	27	
FIGHTER, F-15D	F-15D	28	
FIGHTER, F-16C	F-16C	21	
FIGHTER, F-16D	F-16D	19	
OPERATIONAL SUPPORT			
OP SUPPORT, C-21A	C-21A	21	
OP SUPPORT, C-32B	C-32B	5	
OP SUPPORT, C-38A	C-38A	11	
OP SUPPORT, C-40C	C-40C	5	
RESCUE			
RESCUE, HC-130N	HC-130N	15	
RESCUE, HC-130P	HC-130P	42	
RESCUE, HH-60G	HH-60G	18	
RESCUE, MC-130P	MC-130P	42	

ANG Service Procurement Program - Reserve (P-1R)

NOTE: This table identifies the dollar value of equipment programmed to be procured with Service procurement funds as identified in the P-1R exhibit of the FY 2010 President's Budget Submission. All values are costs in dollars, and ammunition procurements have been excluded. Deliveries of procured equipment normally take one to two years before they arrive in the inventory; e.g., items procured in FY 2010 would be expected to arrive in RC inventories in FY 2011 or FY 2012.

Nomenclature	FY 2010	FY 2011	FY 2012
MODIFICATION OF INSERVICE AIRCRAFT			
A-10	\$67,441,000		
F-16	68,666,000		
C-5	26,767,000		
C-17A	13,993,000		
C-130	60,230,000		
C130J MODS	2,291,000		
C-135	64,729,000		
E-8	167,500,000		
H-60	1,458,000		
MODIFICATION OF INSERVICE AIRCRAFT			
AIRCRAFT REPLACEMENT SUPPORT EQUIPMENT	12,735,000		
VEHICULAR EQUIPMENT			
PASSENGER CARRYING VEHICLES	952,000		
SECURITY AND TACTICAL VEHICLES	1,509,000		
FIRE FIGHTING/CRASH RESCUE VEHICLES	5,959,000		
RUNWAY SNOW REMOVAL & CLEANING EQUIPMENT	15,155,000		
ITEMS LESS THAN \$5 MILLION - VEHICLES	15,981,000		
ELECTRONICS & TELECOMMUNICATIONS EQUIPMENT			
INTELLIGENCE COMM EQUIPMENT	6,190,000		
AIR TRAFFIC CONTROL & LANDING SYSTEM	9,732,000		
THEATER AIR CONTROL SYS IMPROVEMENTS	6,294,000		
WEATHER OBSERVATION FORECAST	1,200,000		
AF GLOBAL COMMAND & CONTROL SYSTEM	1,842,000		
THEATER BATTLE MGT C2 SYSTEM	200,000		
AIR & SPACE OPERATIONS CTR-WPN SYSTEM	2,540,000		
BASE INFO INFRASTRUCTURE	93,000,000		
TACTICAL C-E EQUIPMENT	19,430,000		
BASE COMMUNICATIONS INFRASTRUCTURE	33,814,000		
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT			
MECHANIZED MATERIAL HANDLING EQUIPMENT	788,000		
BASE PROCURED EQUIPMENT	1,214,000		
ITEMS LESS THAN \$5 MILLION - BASE SUPPORT	5,100,000		
TOTAL	\$706,710,000		

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

NOTE: This table identifies the dollar value of equipment originally programmed to be procured with the National Guard and Reserve Equipment Appropriation (NGREA). These funds are available for a three-year period from the year of appropriation. Deliveries of procured equipment normally take one to two years from date of procurement before they arrive in the inventory; e.g., items procured in FY 2009 would be expected to arrive in RC inventories in FY 2010 or FY 2011. All values are costs in dollars.

Nomenclature	FY 2007	FY 2008	FY 2009
FY 2007 TITLE III NGREA EQUIPMENT			
PRECISION STRIKE			
F-16/A-10 HELMET MOUNTED CUEING SYSTEM	\$3,900,000		
F-16/A-10 TARGETING POD ENHANCEMENTS	5,000,000		
F-16 AVIONICS ENHANCEMENT	1,000,000		
A-10/F-16 ALL WEATHER PRECISION STRIKE CAPABILITY	2,000,000		
DATA LINK/COMBAT ID			
A-10/KC-135 BLOS RADIOS	8,000,000		
RC-26 MSO STATION UPGRADES	825,000		
A-10/HH-60/HC-130 SITUATIONAL AWARENESS DATALINK	4,750,000		
A-10/HH-60/HC-130 LARS V-12	2,200,000		
JSTARS GLOBAL CNS/ATM	1,000,000		
ENHANCED SURVIVABILITY			
A-10/F-16 DEFENSIVE SYSTEMS UPGRADE	500,000		
ALE-47 OPERATIONAL TESTER	1,500,000		
C-130 CHAFF/FLARE DISPENSER SWITCHES	1,500,000		
C-130 LAIRCM	750,000		
C-5 DEFENSIVE SYSTEMS	5,000,000		
HH-60/A-10 DISPLAYS	1,750,000		
KC-135 SITUATIONAL COCKPIT DISPLAYS	600,000		
C-130 ACTIVE NOISE REDUCTION	500,000		
F-16/A-10 ALQ-213 APU CONTINUATION AND FLARE	750,000		
SECURITY FORCES OPERATIONAL EQUIPMENT	2,000,000		
PJ/ST/CRO HIGH ALTITUDE EQUIPMENT	1,220,000		
HH-60 WEAPONS MODERNIZATION AND CSAR BOARD	2,250,000		
PROPULSION MODERNIZATION			
C-130/F-16 PROPULSION SYSTEM UPGRADES	2,500,000		
SIMULATION SYSTEMS	,		
MWS BENCH TESTER	600,000		
MANPAD SIMULATOR	680,000		
C-130/F-16/A-10/HH-60 VECTS	1,250,000		
BOSS BOOM OPERATOR TRAINER	800,000		
MULTI-MISSION CREW TRAINER	500,000		
F-16/A-10/PREDATOR DMO/DTS ENHANCEMENTS	1,000,000		
24-HOUR OPERATIONS	.,		
C-130 APN 241	3,660,000		
KC-135 NVG COMPATIBLE LIGHTING	500,000		
MOBILE APPROACH CONTROL SYSTEM (MCAS)	2,000,000		
MC-130 FLIR	1.600.000		
COMMAND AND CONTROL	1,000,000		
TERMINAL ATTACK CONTROLLER (TAC) KIT	2,086,000		
I-FACT DISTRIBUTED MISSION OPERATIONS	666,000		
AOC DMO CAPABILITY	200,000		

Nomenclature	FY 2007	FY 2008	FY 2009
ACS AIR SURVEILLANCE AND AIR CONTROL (ASAC)	500,000		
INTELLIGENCE, SURVEILLANCE, RECON (ISR)			
PREDATOR OPERATIONS EQUIP MODERNIZATION & INTEGRATION	3,000,000		
DCGS COLLATERAL ENCLAVE & COMM SUPPORT MODERNIZATION	3,411,000		
SENIOR SCOUT SITUATIONAL AWARENESS KIT	1,750,000		
INFORMATION OPERATIONS (IO)			
NETWORK WARFARE TEST & TRAINING RANGE	594,000		
NETWORK WARFARE LEARNING MANAGEMENT SYSTEM	407,000		
FY 2008 TITLE III NGREA EQUIPMENT			
MEDICAL			
EXPEDITIONARY MEDICAL SUPPORT (EMEDS)		\$7,600,000	
EXPEDITIONARY DEPLOYMENT O2 CONC SYS (EDOCS)		1,800,000	
MATERIALS HANDLING AND STORAGE EQUIPMENT		600,000	
COMMUNICATIONS			
DEPLOYABLE WIRELESS CAPABILITY		4,000,000	
C2/TACP SADL KITS		444,000	
LOGISTICS			
COMBAT READINESS TRAINING CENTER EQUIPMENT		2,000,000	
HLS/HLD MISSION ESSENTIAL EQUIPMENT		1,000,000	
TRANSPORTATION			
HMMWV XM1145		9,156,000	
ENGINEER			
P-19, P-22, P-23 FIREFIGHTING VEHICLES		5,800,000	
HAZARDOUS MATERIAL EQUIPMENT		1,500,000	
FIRE FIGHTERS SELF CONTAINED BREATHING APPARATUS		2,000,000	
EXPLOSIVE ORDNANCE DISPOSAL (EOD) IED EQUIPMENT		2,000,000	
CIVIL SUPPORT TEAMS (FORCE PROTECTION)		_,,	
PJ/STS MEDICAL TREATMENT EQUIPMENT		2,500,000	
MAINTENANCE		2,000,000	
RADIO FREQUENCY IDENTIFICATION		400,000	
SECURITY		100,000	
SECURITY FORCES NIGHT VISION AN/PVS-14		5,000,000	
SECURITY FORCES BODY ARMOR ENSEMBLE		2,400,000	
SECURITY FORCES WEAPONS & TRAINING UPGRADES		2,600,000	
AVIATION		2,000,000	
F-15 VERY HIGH SPEED INTEGRATED CIRCUITRY CENTRAL COMPUT	FR	3,000,000	
F-16 ADVANCED INTERROGATOR FRIEND/FOE		4,800,000	
HC-130 TACTICAL DATA LINK		1,200,000	
PJ SITUATIONAL AWARENESS SUITE		1,600,000	
HC/MC-130 ENHANCED AIRBORNE MISSION COMMANDER		1,200,000	
C-130 COCKPIT DISPLAY UNITS		3,300,000	
C-21 REDUCED VERTICAL SEPARATION MINIMUM		3,200,000	
C-130 APN-241 RADAR		1,000,000	
C-130 PROPULSION IMPROVEMENTS		1,500,000	
C-130 RADARS		1,000,000	
MODULAR AIRBORNE FIRE FIGHTING SYSTEMS VHF/FM RADIO PRECISION STRIKE		2,000,000	
F-15/F-16/A-10 HELMET MOUNTED CUEING SYSTEM		7,000,000	

Nomenclature	FY 2007	FY 2008	FY 2009
F-16 AVIONICS UPGRADES & ADVANCED MISSION EXTENDERS		6,200,000	
F-16/A-10 ADVANCED TARGETING POD/THUNDER POD		10,500,000	
F-16/A-10 TARGETING POD VIDEO DOWNLINK		2,000,000	
F-16/A-10 TARGETING POD MODIFICATIONS		3,000,000	
DATA LINK/COMBAT IDENTIFICATION			
F-16/A-10 BEYOND LINE-OF-SITE RADIOS		3,900,000	
C-130/KC-135 TACTICAL DATA LINK		5,500,000	
KC-135 COCKPIT DISPLAY UNIT		1,500,000	
24 HOUR OPERATIONS			
JSTARS 8.33 RADIOS		2,200,000	
F-15/F-16 DIGITAL VIDEO RECORDER		1,000,000	
C2/TACP UP-ARMORED HMMWV		414,000	
ENHANCED SURVIVABILITY			
C-5A DEFENSIVE SYSTEMS		3,900,000	
PJ/ST SPECIAL TACTICS SUITE		1,700,000	
C-130/C-5/C-17 ENHANCED LOOKOUT CAPABILITY		2,600,000	
HH-60,HC/MC-130,A-10 LIGHTWEIGHT AIRBORNE RADIO SYSTEM (L/			
	4K3)	2,750,000	
HH-60 DEFENSIVE ARMAMENT UPGRADE		1,000,000	
KC-135/C-5/C-130 COUNTERMEASURES		500,000	
C-130 CRASHWORTHY LOADMASTER SEATS		3,000,000	
F-16 PROPULSION SYSTEM UPGRADES		5,100,000	
SIMULATION SYSTEMS			
F-16 FULL COMBAT MISSION TRAINER		250,000	
A-10 FULL MISSION TRAINER		400,000	
KC-135 BOOM OPERATOR SIMULATOR		800,000	
INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE (ISR)			
PREDATOR OPERATIONS EQUIP MODERNIZATION & INTEGRATION		3,000,000	
DCGS COLLATERAL ENCLAVE & COMM SUPPORT MODERNIZATION		3,072,000	
SENIOR SCOUT SITUATIONAL AWARENESS		3,100,000	
EY 2009 TITLE III NGREA EQUIPMENT			
MEDICAL			
EXPEDITIONARY MEDICAL SUPPORT (EMEDS+25)			1,700,00
EXPEDITIONARY MEDICAL SUPPORT PEDIATRIC PACKAGES			1,116,00
ADVANCED ELECTRONIC SUPPORT EQUIPMENT			670,00
COMMUNICATIONS			
WIRELESS LAN ENHANCEMENTS			1,080,00
JOINT INCIDENT SITE COMMUNICATIONS			1,125,00
ASA COMMAND POST CONSOLES			1,150,00
LOGISTICS			
RECONNAISSANCE, SURVEILLANCE, AND TARGETING FOR EXPEDI	TIONARY MEDICA	L SUPPORT	415,00
RECONNAISSANCE, SURVEILLANCE, AND TARGETING FOR FATALIT	Y SEARCH & REC	COVERY TEAM	36,00
SPEK KITCHEN COMPONENT PARTS, PHASE IV			1,700,00
VEHICLES			231,00
TRANSPORTATION			,00
P-22 PUMPERS FIREFIGHTING VEHICLES			1,284,00
P-26 WATER TENDERS FIREFIGHTING VEHICLES			1,276,000
P-19 & P-23 FIREFIGHTING VEHICLES			751,000

Nomenclature	FY 2007	FY 2008	FY 2009
ENGINEER			
NIGHT VISION GOGGLES FOR FIREFIGHTERS			1,004,000
REVERSE OSMOSIS WATER PURIFICATION UNIT			940,000
COMMUNICATIONS SETS (4F9ER)			548,000
EXPLOSIVE ORDNANCE DISPOSAL IED EQUIPMENT			773,000
CIVIL SUPPORT TEAMS (FORCE PROTECTION)			
POWERED AIR PURIFYING RESPIRATORS (PAPR)			660,000
HAZARDOUS MATERIAL EQUIPMENT FOR FIREFIGHTERS			592,000
MOBILE EMERGENCY OPERATIONS CENTER TRAILERS W/C2 (IOC)			1,168,00
FATALITY SEARCH & RECOVERY TEAM EQUIPMENT			660,00
MAINTENANCE			
TC MAX TOOL CONTROL SYSTEM			1,700,00
SENSITOR EXTIRMA FUEL LEAK DETECTOR			468,00
HYDROMITE STRUT SERVICING EQUIP.			708,00
C-130/F-16 INFRARED RECEIVER TESTER			225,00
MUNITIONS STORAGE AREA DOCUMENTATION			50,00
SECURITY			
SECURITY FORCES EQUIPMENT & TRAINING UPGRADES			1,248,00
BODY ARMOR			1,440,00
NIGHT VISION GOGGLES			1,000,00
WEAPONS UPGRADES			2,850,00
AVIATION			
F-16 ADVANCED INTERROGATOR, FRIEND/FOE (AIFF)			320,00
HH-60/PJ/ST DATA LINK			1,000,00
C-130/KC-135/F-15/HH-60 DATA LINK			4,000,00
HC/MC-130 ENHANCED AIR MOBILITY COMMAND			1,250,00
PRECISION STRIKE			
F-15/F-16/A-10/HH-60 HMCS			9,000,00
F-15/F-16 AVIONICS ENHANCEMENTS			3,500,00
F-16/A-10 ADVANCED TARGETING POD			1,000,00
F-16/A-10 ADVANCED TARGETING POD MODIFICATIONS			10,000,00
DATA LINK/COMBAT IDENTIFICATION			
F-16/A-10/HC-130 BEYOND LINE OF SIGHT RADIOS			3,000,00
C-130/KC-135 BEYOND LINE OF SIGHT RADIOS			2,100,00
RC-26 AVIONICS MODIFICATION			500,00
A-10/HH-60/HC-130 LOW ALTITUDE RADAR SYSTEM			1,000,00
24-HOUR OPERATIONS			
JSTARS 8.33 RADIOS			2,200,00
F-15/F-16 DIGITAL VIDEO RECORDER			500,00
C-130 JOINT PRECISION AIRDROP SYSTEM			600,00
C-21 AVIONICS UPGRADES			1,000,00
C-40 AVIONICS ENHANCEMENTS			900,00
ENHANCED SURVIVABILITY			
C-130/C-17/C-5A DEFENSIVE SYSTEMS			5,600,00
PJ/ST SPECIAL TACTICS SUITE			1,500,00
C-17/C-130/C-5 ENHANCED LOOKOUT CAPABILITY			500,00
HH-60 DEFENSIVE ARMAMENT UPGRADE			2,252,00
KC-135/C-5/C-130 COUNTER MEASURES			1,000,00

Nomenclature	FY 2007	FY 2008	FY 2009
C-130 CHAFF/FLARE DISPENSERS			1,500,000
A-10/F-16 DEFENSIVE SYSTEMS UPGRADES			3,500,000
PROPULSION MODERNIZATION			
C-130 PROPULSION SYSTEM UPGRADE			3,500,000
F-16/A-10 PROPULSION SYSTEM UPGRADE			5,100,000
SIMULATION SYSTEMS			
KC-135 BOOM OPERATOR SIMULATOR			1,500,000
HH-60 PAVE HAWK AIRCREW REHEARSAL AND OPERATIONS SIMUL	ATOR (PHAROS)		2,000,000
UNMANNED AIRCRAFT SYSTEM DESKTOP SIMULATOR			300,000
INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE (ISR)			
SENIOR SCOUT PL-2 SECURITY ACCREDITATION			150,000
DISTRIBUTED COMMON GROUND			5,850,000
P.L. 110-329, SECTION 8101 REDUCTION			(310,000)
FY 2009 TITLE IX OVERSEAS EQUIPMENT			
F-16/A-10/HH-60 HELMET MOUNTED CUEING SYSTEM			10,000,000
F-16/A-10 TARGETING POD MODIFICATIONS			10,000,000
HC/MC-130 ENHANCED SITUATIONAL AWARENESS SUITE			9,000,000
SENIOR SCOUT ENHANCEMENTS			6,000,000
HH-60 DEFENSIVE ARMAMENT/CABIN AND SA UPGRADE			5,000,000
LARGE AIRCRAFT DEFENSIVE SYSTEMS			4,000,000
A-10 SECURE LINE-OF-SITE/BEYOND LINE-OF-SITE RADIOS			3,000,000
A-10 DEFENSIVE SYSTEMS UPGRADE			3,000,000
TOTAL	\$74,699,000	\$148,986,000	\$154,380,000

Projected Equipment Transfer/Withdrawal Quantities

NOTE: This table portrays the planned equipment transfers (Active to Reserve), withdrawals (-), and decommissioning (-). Transferred equipment is commonly called "cascaded equipment," or equipment that is provided to the RC once the AC receives more modern equipment. Although this table highlights a three-year period, many Services will not know exact quantities of transfers or withdrawals until year of execution, due to the uncertainty of the procurement/delivery cycle of new equipment.

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty	Remarks
AIR REFUELING					
AIR REFUELING, KC-135R	KC-135R	+5	+1		
AIRLIFT					
AIRLIFT, C-130E	C-130E	-9	-3		
AIRLIFT, C-130H	C-130H	+3	+6		
AIRLIFT, C-130J	C-130J	-2	-3		
AIRLIFT, WC-130H	WC-130H	+2	+1		
FIGHTER					
FIGHTER, A/OA-10A	A/OA-10A	+18			
FIGHTER, F-15A	F-15A	-3	+6		
FIGHTER, F-15C	F-15C	-11		+3	
FIGHTER, F-15D	F-15D	-1			
FIGHTER, F-16C	F-16C	-46	-27	-11	
FIGHTER, F-16D	F-16D	-4	+1		

FY 2006 Planned vs Actual Procurements and Transfers

NOTE: This table compares what the Service planned to procure and transfer to the RC in FY 2006 with actual procurements and transfers. FY 2006 is selected as these are the most recent funds to expire. Since the procurement cycle is normally one to two years from funding to delivery, this table identifies only what has been delivered through the end of FY 2008. Procurement and NGREA columns reflect cost values in dollars.

Nomenclature	Equip No.	· · · · · · · · · · · · · · · · · · ·		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
FY 2006 PLANNED TRANSFERS & WITHD	RAWALS						
AIR REFUELING, KC-135D/E	KC- 135D/E	-8	-34				
AIR REFUELING, KC-135R	KC-135R	+8	+8				
AIRLIFT, C-130E	C-130E	-13	-7				
AIRLIFT, C-130H	C-130H	-8	-10				
AIRLIFT, C-130J	C-130J	+3	+2				
EL WARFARE, EC-130J	EC-130J	-1	0				
FIGHTER, F-15A	F-015A	-21	-24				
FIGHTER, F-15B	F-015B	-2	-5				
FIGHTER, F-15C	F-015C	+23	+22				
FY 2006 P-1R EQUIPMENT	1						
MODIFICATION OF AIRCRAFT							
A-10				\$14,278,000	\$19,945,000		
F-15				2,300,000	3,854,000		
F-16				112,600,000	120,022,000		
C-5				10,700,000	10,659,000		
C-17A				7,000,000	6,708,000		
C-130				40,277,000	40,912,000		
C130J MODS				2,000,000	1,997,000		
C-135				37,500,000	38,124,000		
E-8				15,506,000	34,594,000		
H-60				11,100,000	13,081,000		
AIRCRAFT SUPPORT EQUIPMENT & FA	CILITIES						
COMMON SUPPORT EQUIPMENT				26,498,000	26,345,000		
OTHER PRODUCTION CHARGES				1,403,000	13,260,000		
VEHICULAR EQUIPMENT							
PASSENGER CARRYING VEHICLES				2,661,000	0		
MEDIUM TACTICAL VEHICLE				1,458,000	0		
HIGH MOBILITY VEHICLE (MYP)				760,000	1,091,000		
HMMWV, ARMORED				326,000	327,000		
RUNWAY SNOW REMOVAL & CLEANII	NG			7,026,000	7,019,000		
BASE MAINTENANCE SUPPORT - ITEN		HAN \$	5M	556,000	551,000		
ELECTRONICS & TELECOMMUNICATIO				,	. ,		
TRAFFIC CONTROL/LANDING				8,100,000	0		
NATIONAL AIRSPACE SYSTEM				8,132,000	8,825,000		
THEATER AIR CONTROL SYS IMPROV	/EMENT			18,129,000	25,966,000		
WEATHER OBSERVATION FORECAST				3,914,000	3,840,000		
AF GLOBAL COMMAND & CONTROL S				525,000	515,000		
COMBAT TRAINING RANGES	-			1,700,000	1,696,000		
GCSS-AF FOS				2,018,000	0		
THEATER BATTLE MGT C2 SYSTEM				0	606,000		

FY 2006 Planned vs Actual Procurements and Transfers

Nomenclature	FY 2006 Equip Transfers No. (# of items)		FY 2 Procure (\$	ements	FY 2006 NGREA (\$s)		
		Plan	Actual	Plan	Actual	Plan	Actual
BASE INFO INFRASTRUCTURE				8,676,000	8,544,000		
NAVSTAR GPS SPACE				1,900,000	1,902,000		
TACTICAL C-E EQUIPMENT				44,000,000	45,046,000		
BASE COMM INFRASTRUCTURE				30,469,000	25,379,000		
OTHER BASE MAINTENANCE & SUPPOR	RT EQUIP						
NIGHT VISION GOGGLES				406,000	469,000		
MECHANIZED MATERIAL HANDLING E	QUIPMEN	Т		921,000	1,295,000		
BASE SUPPORT EQ - ITEMS LESS THA	N \$5M			4,825,000	3,323,000		
FY 2006 TITLE III NGREA EQUIPMENT							
PRECISION STRIKE							
F-16/A-10 HELMET MOUNTED CUEING	SYSTEM	INTEG	RATION			3,000,000	3,000,000
F-16/A-10 TARGETING POD ENHANCE	MENTS					500,000	500,000
F-16 AVIONICS ENHANCEMENT		1				800,000	800,000
DATA LINK/COMBAT ID							
A-10/KC-135 BEYOND LINE OF SIGHT (BLOS) RA	DIOS				4,750,000	4,750,000
A-10/HH-60/HC-130 SITUATIONAL AWA	RENESS [DATAL	INK			2,740,000	2,740,000
C-130/KC-135 COCKPIT DISPLAYS						1,907,000	1,907,000
KC-135 ANTENNAS						1,000,000	1,000,000
TACTICAL AIR CONTROL PARTY (TAC-	P) TERMI	NAL AT	TACK CO	ONTROLLER KIT	-	500,000	500,000
ENHANCED SURVIVABILITY	-						
A-10/F-16 DEFENSIVE SYSTEMS UPGR	ADE					2,050,000	2,050,000
A-10/HH-60/HC-130 SURVIVAL RADIOS						292,000	292,000
C-130 CHAFF/FLARE DISPENSER SWIT	CHES					495,000	495,000
HH-60/A-10 DISPLAYS						2,500,000	2,500,000
HH-60 GUNNER SEATS						1,260,000	1,260,000
JSTARS TRAFFIC ALERT AND COLLIS	ON AVOID	ANCE	SYSTEM	(TCAS)		1,180,000	1,180,000
PARARESCUE (PJ) / SPECIAL TACTICS	6 (ST) / CO	MBAT	RESCUE	OFFICER (CRC) OXYGEN SYS	320,000	320,000
PROPULSION MODERNIZATION							
F-15 220E ENGINE KIT						300,000	300,000
SIMULATION SYSTEMS							
F-16 MISSION TRAINING SYSTEM						1,000,000	1,000,000
24-HOUR OPERATIONS							
C-130/KC-135 AUTOMATED AIRCREW	EQUIPMEN		S			1,424,000	1,424,000
TRAINING							
C-130 VIRTUAL ELECTRONIC COMBAT	TRAINING	G SYST	TEM (VEC	CTS)		2,260,000	2,260,000
VULNERABILITY ASSESSMENT AGGRE	SSOR OF	PERAT	IONS			850,000	850,000
DIGITAL NETWORK TARGET RANGE						470,000	470,000
FY 2006 TITLE IX NGREA EQUIPMENT							
RESCUE AND SECURITY POLICE EQUIP	MENT						
DURABLE INFLATABLE BOAT PACKAG	ES					505,875	505,875
RESCUE EQUIPMENT PACKAGES						239,040	239,040
UNIT AUTONOMOUS OPERATIONS KIT						166,800	166,800
SECURITY FORCES DEPLOYED EQUIF	MENT PA	CKAGI	ES			736,400	736,400
SPECIALIZED CSAR RUCKS						25,000	25,000
BASE SHELTERS						500,000	500,000
IRIDIUM PHONES						87,720	87,720

FY 2006 Planned vs Actual Procurements and Transfers

Nomenclature	Equip No.	Equip Transfers Procur		2006 ements Ss)	FY 2006 NGREA (\$s)		
		Plan	Actual	Plan	Actual	Plan	Actual
SHORING KITS						224,000	224,000
GROUND CONTROL FLYAWAY SYSTE	MS					60,000	60,000
PRC-117 RADIOS						1,935,856	1,935,856
RESCUE DEPLOYED EQUIPMENT PAC	KAGES					14,900,000	14,900,000
AIRFIELD LIGHTING KITS						35,000	35,000
SURVEYORS EQUIPMENT (LANDING S	ITES)					105,000	105,000
PROWLER VEHICLES FOR OPERATION	٧S					75,000	75,000
FIELD RADIO & TELEPHONE EQUIPME	NT PACK	AGES				2,241,039	2,241,039
AEROMEDICAL EQUIPMENT							
EXPEDITIONARY MEDICAL SUPPORT I	KIT					2,000,000	2,000,000
SPEAR MEDICAL KITS						700,000	700,000
INMARSAT RADIOS						4,110,000	4,110,000
800 MHZ RADIOS						2,000,000	2,000,000
C2 NETWORK NODES						548,000	548,000
HIGH MOBILITY MULTI-PURPOSE WHE	ELED VE	HICLES	G (HMMW	V)		1,000,000	1,000,000
LIGHT MEDIUM TACTICAL VEHICLES (I	_MTV)					4,400,000	4,400,000
AIR CONDITIONING UNITS (REMOTE C	PERATIO	NS)				400,000	400,000
PORTABLE SECURE FM RADIOS (REM	OTE OPE	RATIO	NS)			312,000	312,000
EMERGENCY MOBILE MEDICAL TREAT	IMENT FA	CILITY	·			8,000,000	8,000,000
EXCAVATORS						3,463,800	3,463,800
CRAWLER TRACTORS						2,589,600	2,589,600
LOADERS						4,726,500	4,726,500
GRADERS						2,543,436	2,543,436
CRANES						2,340,000	2,340,000
DUMP TRUCKS						4,350,000	4,350,000
REO/RTS SUPPORT FACILITY (MOBILE)					10,000,000	10,000,000
P-19 FIREFIGHTING VEHICLES & ENHA	NCEMEN	TS				6,345,000	6,345,000
P-10 FIREFIGHTING VEHICLES						224,000	224,000
P-18 FIREFIGHTING VEHICLES						289,000	289,000
RED HORSE GENERATORS & SUPPOR		MENT				5,000,000	5,000,000
LOGISTICS AND SERVICES SUPPORT							
VEHICLE SUPPORT - UTILITY TRUCKS						1,100,000	1,100,000
150-PERSON BASIC EXPEDITIONARY	AIRFIELD	RESOL	JRCES (E	BEAR) KITS		11,300,000	11,300,000
550-PERSON BEAR KITS						23,000,000	23,000,000
RADIOS/SATELLITE PHONE						100,000	100,000
SINGLE PALLET EXPEDITIONARY KITC	HENS (SF	PEK)				5,000,000	5,000,000
COMMAND AND CONTROL							
NATIONWIDE NETWORK MODERNIZAT	TION					32,550,000	32,550,000
ROVER DATA LINK TRANSMITTERS						3,500,000	3,500,000
MRC-144 MOBILE RADIOS						321,200	321,200
AIRCRAFT EQUIPMENT							
C-130 SCATHE VIEW ISR PLATFORM IN	MPROVEN	IENTS				8,900,000	8,900,000
RC-26 AIRCRAFT EQUIPMENT						17,800,000	17,800,000
C-130 APN-241 RADAR						800,000	800,000
TARGETING POD						1,400,000	1,400,000

FY 2006 Planned vs Actual Procurements and Transfers

Nomenclature	Equip No.	FY 2006 Transfers (# of items)		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
HH-60 COLOR DISPLAYS						2,000,000	2,000,000
LIGHTWEIGHT AIRBORNE RADIO SYSTEM (LARS) UPGRADES					2,500,000	2,500,000	
FUNCTIONAL AREA SUPPORT							
NIGHT VISION GOGGLES						2,200,000	2,200,000
SAFETY EQUIPMENT - ALL TERRAIN UTILITY VEHICLES						200,000	200,000
TOTAL				\$427,664,000	\$465,895,000	\$229,447,266	\$229,447,266

ANG Major Item of Equipment Substitution List

NOTE: This table identifies equipment authorized by the Service to be used as a substitute for a primary item of equipment. The table also identifies whether or not the item is able to be deployed in wartime. This data meets the Title 10 requirement to identify equipment that is not the most desired item of equipment.

Required Item Nomenclature	Reqd Item Equip No.	Substitute Item	Substitute Item	FY 2010 Qty	Deployable?	
		Nomenclature	Equip No.		Yes	No

Service Does Not Use Substitution To Satisfy Major Item Equipment Requirements

III. Air Force Reserve Overview

A. Current Status of the Air Force Reserve

1. General Overview

"The mission of the United States Air Force is to *fly*, *fight*, and *win* ... in air, space, and cyberspace." The Air Force Reserve (AFR) shares that mission; it also shares in the top priorities of the Air Force, among which is modernizing our air and space inventories, organizations, and

training. The AFR has a long history of operational engagement and is increasingly relied upon to support the requirements of the Air Force and combatant commanders. Air Force Reserve Command (AFRC) is responsible for organizing, training, and equipping AFR forces.

The primary equipment requirements for the AFR are defined by whether a flying squadron is unit equipped (UE) and possesses assigned aircraft or is an associate unit that shares AC aircraft.

The AFR has 33 flying wings with 29 UE squadrons and 44 associate units.

Top AFR Equipping Challenges

- **Defensive Systems:** Large Aircraft Infrared Countermeasures (LAIRCM), Airlift Defensive Systems (ADS), and A-10 Missile Warning System: equip aircraft lacking adequate infrared (IR) missile protection for combat operations
- Data Link and Secure Communications: Data Link Network supporting image/video, threat updates and secure line of sight/beyond line of sight communications for combat missions
- **C-5 Maintenance:** failing major fuselage structures and funding for depot maintenance

There are also eight associate units in the AFR operating space mission partnerships including: satellite command and control; missile warning; Joint Space Operations Center (JSpOC); warfare center research, development, and testing; space aggressor; and the National Security Space Institute. Additionally, AFR has more than 620 mission support units equipped and trained to provide a wide range of services including medical and aeromedical evacuation, aerial support, civil engineering, security forces, intelligence, communications, mobility support, logistics, and transportation operations.

AFR has 345 primary aircraft assigned to UE squadrons including the F-16C/D, A-10, B-52H, C-5A/B, C-9C, C-40C, C-17A, C-130E, MC-130E, C-130H, C-130J, WC-130J, HC-130N/P, KC-135R/T, and HH-60G. These units, aircraft, crews, and support personnel stand ready for assignment to the Air Combat Command (ACC), Air Education and Training Command (AETC), Air Mobility Command (AMC), AF Space Command (AFSPC), National Reconnaissance Office (NRO), and AF Special Operations Command (AFSOC), as well as combatant commands.

2. Status of Equipment

a. Equipment On-hand

i. Fighter Aircraft

a) F-16C Block 30 "Fighting Falcon"

The F-16 is a highly maneuverable multi-role fighter with capabilities for offensive and defensive counterair, air interdiction, suppression of enemy air defenses, close air support, nontraditional intelligence surveillance and reconnaissance

(NTISR), and forward air control–airborne (FAC-A) missions. AFR has 48 Block 30 F-16C/D primary aircraft assigned between Joint Reserve Base, Ft. Worth, TX, and Homestead AFB, FL. AFR F-16s employ Enhanced Position Location Reporting System (EPLRS)/Situation Awareness Data Link (SADL), Theater Air Reconnaissance System (TARS) pods, and LITENING AT Advanced Targeting Pods (ATP) with video downlink (VDL) capabilities. Recent AFR F-16 modifications improved the capability to employ the latest generation of precision guided air-to-ground and air-to-air weapons and installed ARC-210 secure line of sight (SLOS) radios.

b) A-10 "Thunderbolt II"

The A-10 is specifically designed for close air support and forward air control (FAC) missions. The AFR has 42 A-10 primary aircraft assigned between Whiteman AFB, MO and Barksdale AFB, LA. AFR A-10s were upgraded with EPLRS/SADL radios and a Smart Multi-function Color Display (SMFCD) to an A-10+ configuration. These modifications provide digital connectivity with air and ground forces, increased

LITENING ATP capability, and added a pilot programmable moving map display. Additionally, all AFR A-10s were upgraded with an ARC-210 Beyond Line of Sight (BLOS) radio capability to meet combatant commander requirements, providing the first ever capability in AF fighter aircraft. This BLOS capability in the A-10 was first deployed in early 2008 to Afghanistan in support of OEF in AFR A-10+ configured aircraft. Further modifications of AFR A-10+ aircraft are now planned in the first quarter of FY 2010 as part of the ACC-funded Precision Engagement (PE) upgrade for all A-10 aircraft to the A-10C configuration. PE adds Joint Direct Attack Munition (JDAM) capability to the A-10. AFR will also install the AAR-47 Missile Warning System in AFR A-10s during the PE upgrade installation to provide an integrated and automatic missile warning and threat response to defeat infrared (IR) missile threats.



F-16 "Fighting Falcon"



A-10 "Thunderbolt II"

ii. Bomber Aircraft

a) B-52H "Stratofortress"

The B-52H performs strategic attack, air interdiction, offensive counter-air, air-to-surface, suppression of enemy air defenses, mine-laying, joint maritime operations, and close air support missions. Eight B-52H primary aircraft assigned to the AFR 917th Wing at Barksdale AFB, Louisiana employ laser guided bombs, conventional air launched cruise missiles, precision Global Positioning Systems (GPS) guided JDAMs, Wind Corrected Munitions Dispensers (WCMDs), the Joint Air-to-Surface Stand-off Missiles



B-52H "Stratofortress"

(JASSMs), and unguided gravity conventional munitions. AFR B-52Hs LITENING ATP capability allow crews to self-designate targets, visually clear a target area in support of other conventional munitions, improve accuracy by updating target coordinates for JDAM and WCMD, and collect target bomb damage assessment (BDA).

The AFR B-52 fleet, with an average fleet age of 48 years, is undergoing an Avionics Modernization Improvement (AMI) modification. Scheduled for completion in late FY 2009, AMI will resolve inertial navigation system (INS) sustainment issues and integrate the alternative mission equipment (AME) package to allow full capabilities for control of the LITENING ATP.

Near-term AFR B-52 fleet enhancements still under consideration, but lacking full funding and system development maturity, are electronic warfare (both defensive and offensive capabilities to support standoff and penetration missions), bomb bay smart weapons carriage capabilities, and an interim enhanced data link. The B-52 has no data-link capability, limiting real-time targeting/ close air support employment. Combat Network Communications Technology (CONECT) is a major onboard/offboard communications two-phased upgrade program for the B-52 to provide an integrated BLOS communications capability, near real-time situational awareness, and onboard client server architecture to support in-flight retargeting/retasking and Active Electronically Scanned Array (AESA) radar upgrades.

Future modifications through the CONECT program will provide some data-link capability, but are planned too far in the future to affect combat efforts within the next ten years and do not include a tactical data link. Installing EPLRS/SADL radios on the B-52 in conjunction with AMI is a potential interim solution to provide tactical data-link capability without delay to CONECT.

iii. Airlift Aircraft

a) C-5 "Galaxy," Inter-theater Airlift

The C-5, with its tremendous payload capability, provides inter-theater airlift in support of U.S. national defense. AFR has 38 long-range C-5A/B primary aircraft assigned between Westover Air Reserve Base (ARB), MA; Lackland AFB, TX; and Wright-Patterson AFB, OH. Lackland is the home of the C-5 Formal Training Unit (FTU) and conducts all C-5 initial and upgrade training. The C-5 weapon system currently faces avionics obsolescence and Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) compliance challenges. It also historically has low mission-capable and logistic-reliability rates.

The Avionics Modernization Program (AMP) addresses CNS/ATM compliance issues and many avionics obsolescence concerns. AMP is complete for AFR C-5Bs and ongoing for C-5A models with completion expected in FY 2016. The Reliability Enhancement and Re-engining Program (RERP), scheduled for C-5B models only, replaces engines



C-5 "Galaxy," Inter-Theater Airlift (w/HH-60G)

with commercially proven, more powerful engines, addresses high-failure system components, and changes the aircraft designation to the C-5M. RERP production starts in mid-FY 2009 with completion in late FY 2016.

The C-5A Airlift Defensive System (ADS) Program, largely funded with the National Guard Reserve Equipment Appropriation (NGREA), provides an initial capability to defeat IR surface-to-air missile systems and begins installs in FY 2009 with completion of funded aircraft expected in FY 2013. LAIRCM is a critical follow-on defensive system enhancement that is currently only funded for AC C-5s.

Structural issues within the C-5 fleet are a significant concern; aircraft crown skins and contour boxes are developing corrosion cracks and, if not addressed, will result in a significant reduction in aircraft availability beginning in FY 2013.

b) C-130 "Hercules," Intra-theater Airlift

The 92 C-130H/J primary aircraft assigned to AFR provide intra-theater airlift support from Dobbins ARB, GA; Peterson AFB, CO; Maxwell AFB, AL; Youngstown ARS, OH; Pittsburg IAP, PA; Niagara Falls IAP, NY; and Minneapolis-St. Paul ARS, MN. AFR C-130s also provide 25 percent of our nation's aerial firefighting capability and 100 percent of aerial spray requirements.

A major long-term modernization program, the Avionics Modernization Program (AMP), plans

to convert the entire C-130H fleet to a standard avionics configuration to include a "glass" cockpit, updated CNS/ATM system, APN-241 radar, and Night Vision Imaging System (NVIS) -compatible lighting throughout the aircraft. Other critical equipment updates and enhancements needed for C-130H/J variants include LAIRCM, NVIScompatible windscreens, a data link providing command and control and improved situational awareness, and finally, an improved rear-aspect threat-scanning capability. These critical modifications will improve aircraft and crew survivability in threat environments.



C-130 "Hercules," Intra-theater Airlift

c) C-17A "Globemaster III," Inter and Intra-theater Airlift

The C-17 is the nation's core military airlifter. Eight March ARB, CA C-17 primary aircraft assigned provide a wide-body heavy-lift aircraft capability that spans inter-continental ranges and can operate into austere tactical airfields. Long-term modernization initiatives include the integration of advanced aircraft defensive systems, updates to Global Air Traffic Management (GATM) systems, LAIRCM, and Joint Precision Airdrop Systems (JPADS).

d) C-9C Global VIP Airlift

AFR operates three C-9C primary aircraft assigned VIP airlift missions at Scott AFB, IL to provide reliable worldwide airlift of high-ranking U.S. and foreign dignitaries. As an aging aircraft, it is suffering several supportability and CNS/ATM issues. C-9C aircraft are scheduled to retire in FY 2011.

e) C-40C Global VIP Airlift

AFR operates three primary aircraft assigned C-40C at Scott AFB, IL. The C-40C provides safe, comfortable, and reliable transportation for U.S. leaders to locations around the world. The C-40C's primary customers include members of the Cabinet and Congress. The aircraft also perform other operational support missions. C-40Cs are scheduled to receive LAIRCM in FY 2009.



C-17A "Globemaster III," Inter and Intra-theater Airlift



C-9C VIP Airlift



C-40C VIP Airlift

iv. Special Mission Aircraft

a) WC-130J "Hurricane Hunter"

AFR conducts 100 percent of the AF weather reconnaissance mission using 10 primary aircraft assigned WC-130J (Hurricane Hunter) aircraft located at Keesler AFB, MS. These aircraft are specially equipped to penetrate hurricanes and typhoons to collect and transmit

real-time storm data for the National Hurricane Center (NHC). This national asset with a crew of meteorologists and other weather specialists has proven critical in forecasting the movement of dangerous storms. The WC-130J requires a civilian SATCOM capability to support Federal Aviation Administration (FAA) communications while flying in a mission environment.

b) MC-130E "Combat Talon I"

AFR has eight primary aircraft assigned MC-130E aircraft located at Eglin AFB, FL providing 10 percent of the AF special operations capability. These uniquely equipped aircraft conduct low-level, deep-penetration missions at night and in adverse weather inserting personnel and supplies into hostile and non-permissive environments. Additionally, these aircraft conduct aerial refueling of special operations helicopters.

An upgrade of MC-130E radar altimeter capability, FY 2008 GWOT funded, is required to ensure greater flight safety with installations beginning late FY 2009. Lead command has indicated probable retirement, possibly as early as FY 2013.

c) HC-130N/P "King"

AFR has five HC-130N/P primary aircraft assigned at Patrick AFB, FL. The HC-130N/P supports the Combat Search and Rescue (CSAR) mission in conjunction with aerial refueling of CSAR helicopters. Due to the versatility of the HC-130N/P, national rescue authorities task the HC-130N/P to perform military operations other than war including civil search and rescue, emergency aeromedical evacuation, disaster relief, international aid, counter-



WC-130J "Hurricane Hunter"



MC-130E "Combat Talon I"



HC-130 "Hercules"(w/HH-60)

drug activities, and National Aeronautics and Space Administration (NASA) space shuttle astronaut rescue and recovery support.

The entire HC-130 fleet is pending replacement through the HC/MC tanker recapitalization program, but will remain as a "mixed fleet" with newer HC-130Js until FY 2021. Just completed modifications include LAIRCM and AAQ-36 Forward Looking Infrared (FLIR) sensors. Additional modifications under consideration are SADL and over-the-horizon communication

systems. An interim data-link installation is planned for mid-FY 2009 followed by a more robust and permanent data link planned for mid-FY 2010 pending full funding.

d) HH-60G "Pave Hawk"

The AFR has 15 HH-60G primary assigned helicopter aircraft between Patrick AFB, FL and Davis-Monthan AFB, AZ that conduct CSAR for recovery of downed aircrew and other distressed personnel from hostile environments. Other HH-60G support missions include civil search and rescue, emergency aeromedical evacuation, disaster relief, international aid, counter drug activities, and NASA space shuttle support.



HH-60G "Pave Hawk"

Major modifications include FLIR, Improved Aircraft

Ballistic Armor, SADL, Multi-function Color Display (MFCD), Improved Altitude Hold Hover Stabilization (IAHHS), and a Lightweight Airborne Recovery System Radio (LARS V12).

The AFRC is scheduled to begin replacing aging HH-60Gs sometime after FY 2020. Cancellation of the AF \$15B combat, search, and rescue helicopter replacement program (CSAR-X) will have a major impact for the AFR as an estimated 58 percent of the entire Pave Hawk fleet of 101 helicopters will exceed service life of 7,000 hours by FY 2015.

v. Aerial Refueling Aircraft

a) KC-135 "Stratotanker"

AFR KC-135R/T Stratotankers conduct global aerial refueling operations for U.S. and allied aircraft and can carry a maximum of 200,000 pounds of fuel for use and transfer to receivers in flight. The KC-135 can also airlift cargo and personnel, as well as conduct aeromedical evacuation. AFR has 64 KC-135R/T primary aircraft assigned to Andrews AFB, MD; Grissom ARB, IN; March ARB, CA; Seymour-



KC-135 "Stratotanker" (w/C-17)

Johnson AFB, NC; and Tinker AFB, OK. AFR squadrons equipped with KC-135 aircraft provide 13 percent of the AC KC-135 aerial refueling capability.

The KC-135 average age is over 40 years and will require several upgrades to remain viable and effective until replaced by the future KC-X tanker. Installing LAIRCM on the KC-135 will reduce the risk of losing an aircraft to an IR-guided missile during takeoff, landing, or low-level aerial refueling operations. In addition, Night Vision Compatible Lighting (internal and external) and data-link communications will keep the KC-135 viable and directly support receiver aircraft in a combat environment.

vi. Trainers

a) C-130 H2 and H3 Weapon Systems Trainers (WSTs)

AFR uses C-130H WSTs to train Active, Guard, and Reserve C-130H pilots, flight engineers, and navigators. The C-130H WSTs simulate all cockpit instruments, including ground-mapping radar and air defensive systems, and support night vision goggle (NVG), tactical, low level, and airdrop training. Stand-alone navigation trainers supplement each C-130H WST to provide C-130H navigators quality training in overwater flight procedures and airborne radar approaches.



C-130 H2 and H3 WSTs

b) C-5 Weapon Systems Trainers

AFR has three C-5 WSTs. The C-5 WST at Westover ARB, MA, has the unique capability to train crews in both air refueling and conventional air-land mission procedures. The other two C-5 WSTs, located at Lackland AFB, TX, have state-of-the-art hydraulic-motion bases, a large wrap-around out-the-window visual system, and comply with FAA level C+ Standards. Lackland C-5 WSTs support the training of the pilot, copilot, and flight engineer positions for mission qualification, upgrade, and continuation training. In addition, all C-5 WSTs provide maintenance personnel Maintenance Engine Run training.

c) A-10 Full Mission Trainer (FMT)

AFR A-10 FMTs currently operate in a networked/Distributed Mission Operations (DMO) and Live-Virtual-Constructive (LVC) training environment. AFR A-10 FMTs support critical-tomission training capabilities and normal, emergency, instrument, weapons, and tactics procedures. AFR A-10 FMT support of DMO training adds a tremendous new warfighting capability allowing for geographically separated players to including other A-10 FMTs and ground based Joint Terminal Attack Controllers (JTAC) to participate in realistic training scenarios.

AFR has three A-10 FMTs: one at Whiteman AFB, MO and two at Barksdale AFB, LA. In FY 2008, ACC funded and replaced the Barksdale A-10 FMT 360-degree visual systems with newer, more reliable and capable digital projectors. ACC plans to replace the Whiteman FMT with two PE-modified A-10 FMTs in December 2009 and March 2010, respectively. Concurrent modifications between aircraft and A-10 FMTs lag by about two years due to past inadequate funding for the number of engineers required for the increasing software development workload. Current coordinated planning of aircraft operational flight program (OFP) software and FMT software will shorten the concurrency lag to only one year.

d) F-16 Multi-Task Trainer (MTT)

The five AFR F-16 MTTs support mission training capabilities and normal, emergency, instrument, weapons, and tactics procedures as well as systems training for F-16 Block 30 qualified AFR, ANG, and ACC pilots. Once facility construction is complete, AFR will have two operational F-16 MTTs located at Homestead ARB, FL, and two at NAS JRB Fort Worth, TX.

Multi-terabyte hard drive systems currently installed now allow the F-16 MTTs to use the same mapping databases as the A-10 FMTs.

AFR F-16 MTTs can connect to ARCNet allowing them to participate in networked training on a very limited basis. The F-16 MTTs will not have full DMO network capability until \$6M procurement funding is available to purchase 360-degree visual systems. The F-16 MTTs are currently upgraded to Software Core Upgrade (SCU) 6 and provide Tactical/Theater Airborne Reconnaissance System (TARS) training. AFR requirements specify upgrade of these devices to full tactical mission capability and to enable DMO distributed training over the next several years but no procurement funds are expected from ACC or NGREA.

vii. Guardian Angel Weapons System (GAWS)

Guardian Angel (GA) is an AF CSAR weapon system consisting of combat rescue officers; pararescuemen; support equipment; and Survival, Evasion, Resistance, and Escape (SERE) specialists dedicated to prepare, report, locate, support, recover, and reintegrate isolated personnel. Three AFR GA Squadrons assigned to the 920th Rescue Wing support both the HH-60 and HC-130 rescue platforms and occasionally operate independently during selective ground operations.

AFR is accomplishing GA modernization through two increments funded by the lead command, ACC. Increment One is focused on sustaining and modernizing existing capabilities and equipment. Increment Two is focused on developing a fully-integrated family of systems interoperable with CSAR-X and HC-130 recap programs.

b. Average Age of Current Equipment

See *Table 2* for the average age of selected major items of equipment as of the beginning of FY 2009.

i. Compatibility of Current Equipment with AC

AFR equipment requires compatibility with the AC to support applicable AF missions with the exception of "unique" missions performed by AFR, e.g., weather, spray, firefighting. Congressional funding enables the AFR to keep its mission equipment compatible with the AC.

c. Maintenance Issues

i. C-5A/B Maintenance Issues

C-5A aircraft crown skins and contour boxes are developing corrosion cracks, and, when found, lead to flight restrictions and potential aircraft grounding. Crown skin and contour box repair costs are approximately \$12.2M per aircraft. If not corrected, significant restrictions and aircraft groundings will occur between FY 2013–FY 2015 and negatively affect aircraft availability. Also, C-5B horizontal tie boxes are developing corrosion cracks and, when found, require severe flight restrictions.

ii. A-10 Maintenance Issues

The Air Force is experiencing wing structural issues in the A-10 fleet. Both thin-skin (early production) and thick-skin (later production) wings are exhibiting cracks in critical structures. All 53 AFR A-10s will receive an initial inspection due to wing Time-Compliance Technical Orders (TCTOs). AFR anticipates approximately 75 percent of the fleet will have some re-occurring inspection at field level to monitor wing crack progression. The expectation is 10 percent or less of the inspected AFR A-10 fleet will have damage exceeding the TCTO limits requiring grounding and depot-only repairs. Beginning in FY 2010, the Air Force will begin complete wing replacements for thin-skin wings on the A-10. The majority of AFR A-10s are thin-skin wing aircraft. ACC is considering wing replacement for the entire A-10 fleet to include thick-skin wing A-10s.

iii. Weapon Systems Sustainment (WSS)/Depot Purchased Equipment Maintenance (DPEM)

The Air Force has accepted increased risk on funding for weapon system sustainment. AFR has seen a corresponding trend with increased requirements and costs. Starting in FY 2008, AFR has experienced a decrease in baseline funding for weapon system sustainment and an increased reliance on supplemental funding and command reprioritization of enacted funding. AFR DPEM for FY 2010 is funded at 70 percent of the requirement, causing aircraft Program Depot Maintenance (PDM) deferrals starting in FY 2010. Three KC-135 PDMs, three C-5A PDMs, and two C-5B PDMs are projected for deferral in FY 2010 due to underfunded DPEM. KC-135 and C-5 aircraft availability are adversely affected without fully funding WSS/DPEM, resulting in a reduction of aircraft availability with loss of global strategic aerial refueling and airlift capability.

iv. Cost per Flying Hour (CPFH)

CPFH funds are used to cover the costs directly associated with operating aircraft. This includes parts, fuels, and other flying consumable items. Due to the timeline for budget development and volatility in costs (especially fuel), the programmed funds are less than the current flying hour rate requirement. For FY 2010, AFR is \$13M underfunded for CPFH.

d. Modernization Programs and Shortfalls

Congress initiated NGREA funding in December 1981 to address RC readiness issues. Public laws and legislative language established this equipment appropriation to reduce RC shortfalls in readiness, combat capability, and modernization.

In general, there are several areas that will need attention to ensure modernization of AFR aircraft. The information demands of modern warfare require a fully-integrated data-link network. A robust persistent airborne gateway system and SLOS and BLOS voice and data communications support that integrated data-link requirement. The current urban battlefield demands low collateral damage and drives a requirement for spiral procurement of advanced sensors to include LITENING G4 (fourth generation) ATP for the A-10, F-16, and B-52 and Helmet Mounted Cueing System (HMCS) technology for the A-10 and F-16. AFR aircraft require self protection suites that are effective against modern anti-aircraft missile systems. Simulators and other training devices must keep current with aircraft systems and provide high fidelity for realistic mission training. Linking simulators in diverse locations provides realistic

training opportunities and helps overcome issues created by operations tempo and resource limitations.

The following are the AFR shortfalls categorized by major weapon systems as identified through the AFRC corporate process in the development of the FY 2010 Combined Unfunded Requirements List (CURL).

i. Fighter Aircraft

a) F-16

A HMCS would allow pilots to rapidly target sensors and advanced weapons and stay aware of critical developments in flight. A HMCS would also allow the F-16 to take full advantage of the AIM-9X off-bore sight capability. The LITENING G4 ATP spiral upgrade will provide advanced sensors in conjunction with the HMCS that will significantly improve target location and identification, weapons employment, and battle damage assessment.

b) A-10

AFR A-10s have several modernization shortfalls. Funding for conversion of AFR A-10+ aircraft to A-10C configuration in FY 2010 is critical to meeting combatant commander requirements. Installing an AAR-47 IR missile warning system will significantly improve situational awareness and survivability by automatically detecting the launch of SAMs. Another significant modernization requirement is a HMCS in conjunction with the LITENING G4 ATP spiral upgrade that would increase pilot situational awareness, allow rapid targeting of sensors and advanced weapons, and help pilots stay aware of critical developments in flight. Finally, the present tactical employment of the A-10 requires operations at airfield elevations and environments where the engines are thrust deficient. This results in reduced weapons and fuel loads. Engine improvements would regain designed combat payload and range capabilities.

ii. Bomber Aircraft—B-52H

The B-52H has an immediate requirement for tactical data-link capability to provide near real time situational awareness updates of friendly positions and enemy air/ground threats. The battlespace can change significantly during the long duration of B-52H missions and a data-link system would provide critical target updates during flight While the CONECT program goes a long way to providing a data-link solution for the B-52, EPLRS/SADL is lacking in the CONECT program to provide critical real-time friendly positions during close air support missions. The LITENING G4 ATP spiral upgrade will improve the B-52 capability for target location and identification, weapons employment, and battle damage assessment.

iii. Airlift/Special Missions Aircraft

a) HH-60G and HC-130—Combat Search and Rescue (CSAR)

Military contingency operations require CSAR support. The 920th Rescue Wing HH-60G helicopters and HC-130 aircraft are Low-Density/High-Demand assets in constant demand by multiple agencies supporting ongoing operational and contingency missions. To remain viable,

the HH-60 requires modifications and upgrades to support the warfighter. Additional Congressional funding in FY 2008 put the HH-60 modernization program back on track for the short term.

For the long term, an Air Force program is in the process of replacing the aging HH-60 helicopter fleet as part of the CSAR-X program. Due to contract issues, the CSAR-X program continues to experience delays, and the AFR may fly this legacy aircraft well beyond FY 2020, creating long-term sustainment issues. The AF expects to replace HC-130 tankers, starting in FY 2011, as many of these airframes have over 44 years of service. To maintain the capability to meet combatant commander tasking and peacetime training, the AFR requires replacement of both the HH-60 and HC-130 aircraft on a one for one basis.

b) C-130

Future upgrades include the continued modernization of the C-130 with the Yoke-mounted Countermeasures Dispenser Switch, APN-241 navigation and ground mapping radar (funding completed with FY 2009 NGREA), LAIRCM, aircraft armor for crew protection, C-130 computerized takeoff and landing data, and a data link to improve aircrew protection and weapon system reliability. A replacement Modular Aerial Spray System (MASS) is needed for C-130s at Youngstown ARS, OH, to satisfy Environmental Protection Agency (EPA) requirements for the spray mission.

c) C-5

Currently the C-5A does not have an ADS to allow the aircraft to fly in hostile areas. Modifying the C-5A with an ADS consisting of the AAR-47 Missile Warning System and ALE-47 Countermeasures Dispenser System will increase aircrew and aircraft protection, support the Air Mobility Master Plan, and reduce the operations tempo on current AC ADS-equipped aircraft. An ADS funding shortfall of \$10.3M remains for six AFR C-5A aircraft. LAIRCM for AFR C-5 aircraft is currently not funded. Reduced aircraft availability is projected for the C-5 fleet due to major maintenance issues (structural cracks) and reduced WSS/DPEM funding.

iv. Support Equipment and Vehicles

Historically, the Air Force has only funded support equipment at 47 percent of the requirement. AFR has a current shortfall of approximately \$16M for support equipment sustainment across all functional areas within the command. Assets required for procurement include such items as maintenance stands, avionics test stations, tow bars, radios, and night vision goggles.

The Air Force has decentralized all vehicle purchasing decisions to the Major Commands (MAJCOMs). Beginning in FY 2003, funds originally held by Air Force for vehicle purchases were distributed to the MAJCOMs. AFR's share was approximately 3.4 percent in FY 2007. For FY 2010, AFR is underfunded by \$10M. At this rate, the AFR recapitalization period for vehicles is approximately 20 years.

e. Overall Equipment Readiness

Presently, AFR weapons systems maintain equipment readiness on par with the AC except where limited by modernization restrictions or WSS/DPEM funding. AFR achieves readiness through constant close coordination with the lead commands to assure inclusion of AFR assets and mission capabilities in current requirements and funding.

B. Changes Since Last NGRER

The AFR has made great progress in bringing current technology capabilities to major weapons systems in the AFR inventory and deploying those assets to AORs in support of combatant commander requirements.

AFR A-10 completed installation of SMFCD, EPLRS/SADL radios, and ARC-210 SLOS/BLOS radios. These new capabilities were employed in Afghanistan in support of OEF with great success, especially due to the flexible and effective moving map feature of the SMFCD.

All AFR F-16s now have digital video recorders and ARC-210 SLOS radios providing excellent and reliable post mission debriefing and secure communication capability. These new capabilities were employed in Iraq in support of OIF where the ARC-210 radio is especially useful in a communication-intensive environment. FY 2009 NGREA completes funding for the Commercial Fire Control Computer (CFCC) required to support future software upgrades paving the way for integration of the HMCS, and also for the ARC-210 BLOS radio providing a jam resistant secure SATCOM capability for the F-16.

LITENING ATP flown on the A-10, F-16, and B-52 are now equipped with 25 Watt Video Data Link (VDL) transmitters increasing range in support of ground troops using Remote Optical Video Enhanced Receiver (ROVER) terminals. This capability supports current analog and newer digital video data links. This capability is especially important in Iraq where the communication intensive environment has a huge impact on communication range and quality.

Eleven C-5 armor kits were procured and installed providing aircrew protection using FY 2007 NGREA funding. This completes funding and installation of all armor kits for the AFR C-5 fleet.

The AFR has made great progress in replacing 62 aging and increasingly unsustainable APN-59 radars in the C-130 fleet with APN-241 digital color weather radars. FY 2008 NGREA funded eight C-130 APN-241 digital color weather radars last year, and FY 2009 NGREA funds the remaining nine APN-241 radars required to complete installation in all AFR C-130 aircraft.

C. Future Years Program (FY 2010–FY 2012)

1. FY 2012 Equipment Requirements

The following are the top 20 unfunded items on the AFR Modernization List validated by the AFR Requirements Review Council (RRC) on October 28, 2008. The AFR continues to pursue AF and OSD support to provide funding necessary to meet these unfunded equipment requirements.

1. C-5A ADS

- 2. C-130 LAIRCM
- 3. A-10/F-16 HMCS
- 4. A-10 MWS
- 5. C-5 Structural Issues
- 6. HC/MC-130 Comm Data Link
- 7. A-10/F-16/B-52 LITENING ATP Spiral Upgrades
- 8. C-5 LAIRCM
- 9. C-130 Aircraft Armor
- 10. F-16 Imagery and Data Transfer
- 11. A-10 Simultaneous SLOS/BLOS
- 12. C-130 Loadmaster Seat
- 13. HC/MC-130 Loadmaster Seat
- 14. HH-60 Comm Data Link
- 15. C-130 Computerized TOLD
- 16. F-16 Radar Improvements/Upgrades/Sustainment
- 17. C-130 MASS replacement
- 18. C-40 Aircraft
- 19. C-130 NVIS Compatible Lighting
- 20. F-16 MTT/DMO/Visual/Contract Support

2. Anticipated New Equipment Procurements

The AFRC RRC selected the following critical and executable equipment procurement efforts as providing the best value in capability using FY 2009 NGREA:

- 1. C-5A ADS
- 2. C-130 APN-241 RADAR
- 3. C-130 SAFIRE Look Out Capability
- 4. F-16 CFCC
- 5. A-10/F-16 HMCS
- 6. A-10 MWS
- 7. LITENING ATP Spiral Upgrades
- 8. F-16 BLOS
- 9. F-16 Imagery and Data Transfer.

3. Anticipated Transfers and Withdrawals AC to RC (DoDD 1225.6)

None.

4. Anticipated Withdrawals from RC Inventory

All three AFR C-9 aircraft are scheduled to retire in FY 2011. The C-40 replacements for the C-9s also represent another high cost item.

5. Equipment Shortages and Modernization Shortfalls at the End of FY 2012

The AFR annually publishes a CURL as a formal document that is the culmination of a formal AFRC requirements process that begins at the squadron level and ends at the command level with the

AFRC RRC ranking and approving unfunded requirements from the AFR Mobility Air Forces (MAF) and Combat Air Forces (CAF). Available funding only covers a small percentage of equipment requirements for the AFR.

Unfunded requirements for AFR equipment in the FY 2009 CURL total \$794M. Anticipated unfunded priority-ranked requirements include high-cost items such as the MAF LAIRCM, with procurement costs of \$93M for FY 2009 and \$535M over the FYDP for MAF LAIRCM alone.

D. Summary

AFR Selected Reserve units are fully capable of meeting required contingency response times. This impressive capability is the RC model of integration. Modernization is key to not only maintaining this effective force, but also improving the capability of the warfighter.

Over the last year, the AFR has greatly increased capability to the warfighter through modernization; adding SLOS/BLOS and data-link communications, advanced digital/analog secure video data link to ground forces, and improved weapons employment in the F-16, A-10A+ and B-52 AFR CAF. On the AFR MAF side, the AFR has significantly enhanced combat defensive capabilities in both strategic and tactical airlift, to include CSAR platforms, with C-5 armor kits, C-130/HC-130 LAIRCM, and improved all-weather situational awareness C-130 APN-241 radar.

Over the next year, the AFR will complete SLOS/BLOS on all AFR fighters, provide initial tactical data link for AFR CSAR assets, introduce fourth generation LITENING ATP sensors and capabilities on AFR A-10A+/F-16/B-52 platforms, continue to advance airlift defense capability with C-130 SAFIRE tactical lookout, and start installation of C-5 ADS.

AFR is committed to modernization efforts that meet the Total Force capability needs of the Air Force and the combatant commanders. For those modernization needs that remain unfunded, the AFR internal requirements review process prioritizes and validates vital unfunded warfighter requirements for NGREA and supplemental funding consideration.

NOTE: This table provides a comprehensive list of selected major items of equipment. It provides the quantity on-hand (QTY O/H) projected to be in the inventory at the beginning/end of the selected fiscal year (FY). It also provides the quantity required (QTY REQ) needed to meet the full wartime requirements of the Reserve component. In accordance with Title 10, the QTY REQ number provides the recommendations as to the quantity and type of equipment which should be in the inventory of each Reserve component. Unit cost values are in dollars.

Nomenclature	Equip No.	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	End FY 2012 QTY O/H	End FY 2012 QTY REQ
AIR REFUELING							
AIR REFUELING, KC-135R/T	KC-135R/T	\$49,500,000	64	64	64	64	64
AIR SUPPORT							
SPECIAL OPS, MC-130E	MC-130E	\$90,000,000	12	12	12	12	12
WEATHER, WC-130J	WC-130J	\$90,200,000	10	10	10	10	10
AIRLIFT							
AIRLIFT, C-130H	C-130H	\$37,400,000	84	84	84	84	84
AIRLIFT, C-130J	C-130J	\$66,200,000	8	8	8	8	8
AIRLIFT, C-17A	C-17A	\$273,300,000	8	8	8	8	8
AIRLIFT, C-5A	C-5A	\$193,800,000	24	24	24	24	24
AIRLIFT, C-5B	C-5B	\$222,300,000	14	14	14	14	14
AIRLIFT, C-9C	C-9C	\$25,800,000	3	0	0	0	0
AIRLIFT, C-40C	C-40C	\$78,000,000	3	4	4	4	4
BOMBERS							
BOMBER, B-52H	B-52H	\$66,800,000	8	16	16	16	16
FIGHTERS							
FIGHTER, A-10A	A-010A	\$16,400,000	42	42	42	42	42
FIGHTER, F-16C	F-16C	\$20,300,000	45	45	45	45	45
FIGHTER, F-16D	F-16D	\$20,300,000	3	3	3	3	3
RESCUE							
RESCUE, HC-130N	HC-130N	\$54,000,000	1	1	1	1	1
RESCUE, HC-130P	HC-130P	\$54,000,000	4	4	4	4	4
RESCUE, HH-60G	HH-60G	\$19,600,000	13	13	13	13	13

AFR Average Age of Equipment

NOTE: This table provides the average age of selected major items of equipment. The average age provides a projected average age of the fleet at the start of FY 2009.

Nomenclature	Equip No.	Average Age	Remarks
AIR REFUELING			
AIR REFUELING, KC-135R	KC-135R	49	
AIR SUPPORT			
SPECIAL OPS, MC-130E	MC-130E	45	
WEATHER, WC-130J	WC-130J	12	
AIRLIFT			
AIRLIFT, C-130H	C-130H	22	
AIRLIFT, C-130J	C-130J	5	
AIRLIFT, C-17A	C-17A	4	
AIRLIFT, C-5A	C-5A	40	
AIRLIFT, C-5B	C-5B	23	
AIRLIFT, C-9C	C-9C	36	
AIRLIFT, C-40C	C-40C	2	
BOMBERS			
BOMBER, B-52H	B-52H	48	
FIGHTERS			
FIGHTER, A-10A	A-10A	30	
FIGHTER, F-16C	F-16C	23	
FIGHTER, F-16D	F-16D	23	
RESCUE			
RESCUE, HC-130N	HC-130N	40	
RESCUE, HC-130P	HC-130P	45	
RESCUE, HH-60G	HH-60G	19	

AFR Service Procurement Program - Reserve (P-1R)

NOTE: This table identifies the dollar value of equipment programmed to be procured with Service procurement funds as identified in the P-1R exhibit of the FY 2010 President's Budget Submission. All values are costs in dollars, and ammunition procurements have been excluded. Deliveries of procured equipment normally take one to two years before they arrive in the inventory; e.g., items procured in FY 2010 would be expected to arrive in RC inventories in FY 2011 or FY 2012.

Nomenclature	FY 2010	FY 2011	FY 2012
MODIFICATION OF INSERVICE AIRCRAFT			
B-52	\$6,953,000		
A-10	65,373,000		
F-16	6,933,000		
C-5	13,478,000		
C-17A	13,829,000		
C-130	37,232,000		
C130J MODS	1,697,000		
C-135	32,505,000		
H-60	1,440,000		
VEHICULAR EQUIPMENT			
PASSENGER CARRYING VEHICLES	1,062,000		
MEDIUM TACTICAL VEHICLE	2,932,000		
SECURITY AND TACTICAL VEHICLES	723,000		
FIRE FIGHTING/CRASH RESCUE VEHICLES	1,989,000		
RUNWAY SNOW REMOVAL & CLEANING EQUIPMENT	5,024,000		
ITEMS LESS THAN \$5 MILLION - VEHICLES	5,908,000		
ELECTRONICS & TELECOMMUNICATIONS EQUIPMENT			
NATIONAL AIRSPACE SYSTEM	1,920,000		
AF GLOBAL COMMAND & CONTROL SYSTEM	628,000		
MOBILITY COMMAND & CONTROL	1,040,000		
THEATER BATTLE MGT C2 SYSTEM	200,000		
AIR & SPACE OPERATIONS CTR-WPN SYSTEM	3,810,000		
TACTICAL C-E EQUIPMENT	10,533,000		
BASE COMMUNICATIONS INFRASTRUCTURE	333,000		
OTHER BASE MAINTENANCE & SUPPORT EQUIPMENT			
NIGHT VISION GOGGLES	226,000		
TOTAL	\$215,768,000		

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National Guard and Reserve Equipment Appropriation (NGREA) Procurements

NOTE: This table identifies the dollar value of equipment originally programmed to be procured with the National Guard and Reserve Equipment Appropriation (NGREA). These funds are available for a three-year period from the year of appropriation. Deliveries of procured equipment normally take one to two years from date of procurement before they arrive in the inventory; e.g., items procured in FY 2009 would be expected to arrive in RC inventories in FY 2010 or FY 2011. All values are costs in dollars.

Nomenclature	FY 2007	FY 2008	FY 2009
C-5A AIRLIFT DEFENSIVE SYSTEMS (ADS)	\$9,200,000	\$1,300,000	\$5,200,000
C-130 APN-241 RADAR	6,848,000	7,000,000	5,840,000
F-16 SECURE LINE OF SIGHT (SLOS)/BEYOND LINE OF SIGHT (BLOS) CAPABILITY (ARC-210 RADIO)	5,794,105		5,410,000
A-10 SLOS/BLOS CAPABILITY (ARC-210 RADIO)	4,827,736		
LITENING TARGETING POD SPIRAL UPGRADE	3,848,669	5,835,000	
C-5 ARMOR	2,486,893		
C-130 YOKE-MOUNTED CHAFFE/FLARE DISPENSER SWITCH	1,100,000		
A10+ INERTIAL AIDED MUNITIONS (IAMS) INTEGRATION	753,597		
C-130 SLOS/BLOS CAPABILITY (ARC-210 RADIO)		10,000,000	
C-130 SAFIRE LOOK OUT CAPABILITY		7,000,000	9,200,000
F-16 UPGRADED COMMERCIAL FIRE CONTROL COMPUTER (CFCC)		3,960,000	1,860,000
C/HC/MC-130 CRASHWORTHY LOADMASTER SEATS		5,000,000	
C-130 NVIS WINDSCREEN		1,400,000	
SECURITY FORCE NIGHT VISION DEVICES/LASER SIGHTS		1,100,000	
COMBAT TRACK II SYSTEMS		1,100,000	
SPACE ELECTRONIC WARFARE TRAINER		1,000,000	
LITENING ATP			11,700,000
A-10 MISSILE WARNING SYSTEM			5,730,000
HC-130 SLOS/BLOS COMM/DATALINK			5,400,000
A-10/F-16 HELMET MOUNTED INTEGRATED TARGETING (HMIT)			4,000,000
ATP PROCUREMENT & SPIRAL UPGRADES			3,049,000
HELMET MOUNTED CUEING SYSTEM; NRE & LRIP			3,000,000
F-16 IMAGERY & DATA TRANSFER/CURSOR ON TARGET			2,000,000
TOTAL	\$34,859,000	\$44,695,000	\$62,389,000

AFR Projected Equipment Transfer/Withdrawal Quantities

NOTE: This table portrays the planned equipment transfers (Active to Reserve), withdrawals (-), and decommissioning (-). Transferred equipment is commonly called "cascaded equipment," or equipment that is provided to the RC once the AC receives more modern equipment. Although this table highlights a three-year period, many Services will not know exact quantities of transfers or withdrawals until year of execution, due to the uncertainty of the procurement/delivery cycle of new equipment.

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty	Remarks
AIRLIFT, C-9C	C-9C	-3			Aircraft retirement
BOMBER, B-52H	B-52H	+8			

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FY 2006 Planned vs Actual Procurements and Transfers

NOTE: This table compares what the Service planned to procure and transfer to the RC in FY 2006 with actual procurements and transfers. FY 2006 is selected as these are the most recent funds to expire. Since the procurement cycle is normally one to two years from funding to delivery, this table identifies only what has been delivered through the end of FY 2008. Procurement and NGREA columns reflect cost values in dollars.

Nomenclature	No. (# of iter		nsfers	FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
			Actual	Plan	Actual	Plan	Actual
FY 2006 PLANNED TRANSFERS & WITHDR	AWALS						
AIRLIFT, C-141C	C-141C	-8	-8				
THEATER AIRLIFT, C-130E	C-130E	-1	0				
AIRLIFT, C-130H	C-130H	-2	-1				
AIRLIFT, C-5A	C-5A	+5	+5				
FY 2006 P-1R EQUIPMENT							
MODIFICATION OF AIRCRAFT							
B-52				\$14,500,000	\$14,519,000		
A-10				7,700,000	10,800,000		
F-16				17,200,000	17,983,000		
C-5				25,400,000	25,361,000		
C-130				24,400,000	24,691,000		
C-130J MODS				1,000,000	998,000		
C-135				12,900,000	13,113,000		
H-60				6,700,000	7,921,000		
AIRCRAFT SUPPORT EQUIPMENT & FAG	CILITIES						
COMMON SUPPORT EQUIPMENT				24,262,000	24,147,000		
VEHICULAR EQUIPMENT							
PASSENGER CARRYING VEHICLES				281,000	0		
MEDIUM TACTICAL VEHICLE				265,000	0		
HIGH MOBILITY VEHICLE (MYP)				138,000	198,000		
HMMWV, ARMORED				82,000	82,000		
RUNWAY SNOW REMOVAL & CLEANIN	IG			399,000	391,000		
ELECTRONICS & TELECOMMUNICATION	NS EQUIPM	IENT					
NATIONAL AIRSPACE SYSTEM				142,000	178,000		
WEATHER OBSERVATION FORECAST				2,722,000	2,665,000		
AF GLOBAL COMMAND & CONTROL S	YS			525,000	515,000		
COMBAT TRAINING RANGES				700,000	701,000		
GCSS-AF FOS				340,000	0		
THEATER BATTLE MGT C2 SYSTEM				625,000	606,000		
BASE INFO INFRASTRUCTURE				21,171,000	20,847,000		
NAVSTAR GPS SPACE				1,680,000	1,678,000		
CCTV/AUDIOVISUAL EQUIPMENT				500,000	501,000		
OTHER BASE MAINTENANCE & SUPPOR		ENT					
NIGHT VISION GOGGLES				185,000	219,000		

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FY 2006 Planned vs Actual Procurements and Transfers

Nomenclature	Equip No.	Tra	2006 nsfers items)	FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual
MECHANIZED MATERIAL HANDLING EQUIPMENT				63,000	98,000		
BASE SUPPORT EQUIPMENT - ITEMS UNDER \$5M				599,000	400,000		
FY 2006 NGREA EQUIPMENT							
A-10 MULTI-FUNCTION COLOR DISPLAY						\$3,210,000	\$4,540,000
JOINT HELMET MOUNTED CUEING SYSTEM						1,300,000	1,300,000
A-10 LITENING PODS						9,688,000	10,316,556
C-130 APN-241 RADAR						4,750,000	8,341,241
END TO END TESTER FOR AAR-47 MIS	SILE DETE	CTION	SYSTEM			1,000,000	144,682
B-52 MULTI-FUNCTION COLOR DISPLA	Y					1,500,000	0
PARARESCUE JUMPER (PJ) NIGHT VIS	SION GOGO	BLES				2,100,000	2,326,594
HH-60 MULTI-FUNCTION COLOR DISPL	AY					3,000,000	0
C-130 YOKE MOUNTED CHAFFE/FLAR	E DISPENS	ER SW	ІТСН			1,800,000	1,820,105
NIGHT VISION DEVICES/LASER SIGHT	S					330,000	0
A-10/OA-10 SADL / EPLRS						919,000	807,822
TOTAL				\$164,479,000	\$168,612,000	\$29,597,000	\$29,597,000

AFR Major Item of Equipment Substitution List

NOTE: This table identifies equipment authorized by the Service to be used as a substitute for a primary item of equipment. The table also identifies whether or not the item is able to be deployed in wartime. This data meets the Title 10 requirement to identify equipment that is not the most desired item of equipment.

Required Item	Reqd Item	Substitute Item	Substitute Item	FY 2010	Deployable?	
Nomenclature	Equip No.	Nomenclature	Equip No.	Qty	Yes	No

Service Does Not Use Substitution To Satisfy Major Item Equipment Requirements

Chapter 6 United States Coast Guard Reserve

I. Coast Guard Overview

Since its establishment as a maritime law enforcement agency in 1790, the United States Coast Guard (USCG) has continuously served as America's Maritime Guardian. The present-day Coast Guard and Coast Guard Reserve (USCGR) uniquely support a broad spectrum of humanitarian, law enforcement, regulatory, diplomatic, and military missions. The USCGR significantly enhances the Coast Guard's ability to respond to "all threats, all hazards" by ensuring an operational reserve force. The USCGR has focused its competencies on mission readiness for (1) maritime homeland security, (2) domestic and expeditionary support to national defense, and (3) response to domestic disasters, both natural and manmade. America's Coast Guard is a unique instrument of national security and a key component of this Nation's emergency response force.

A. Coast Guard Planning Guidance

1. Coast Guard Defense Responsibilities

The references in the United States Code (U.S.C.) that best describe the Coast Guard authorities lie primarily in Titles 10, 14, and 33. The following references specifically address Coast Guard defense responsibilities:

- 10 U.S.C. 101(a)(4). "The term 'armed forces' means the Army, Navy, Air Force, Marine Corps, and Coast Guard."
- 14 U.S.C. 1. Establishment of Coast Guard. "The Coast Guard as established January 28, 1915, shall be a military service and a branch of the armed forces of the United States at all times."
- 14 U.S.C. 2. Primary duties. "The Coast Guard...shall maintain a state of readiness to function as a specialized service in the Navy in time of war..."
- 14 U.S.C. 3. Relationship to Navy Department. "Upon the declaration of war if Congress so directs in the declaration or when the President directs, the Coast Guard shall operate as a service in the Navy, and shall so continue until the President, by Executive order, transfers the Coast Guard back to the Department of Homeland Security."
- 14 U.S.C. 145. Navy Department. "When the Coast Guard is operating in the Department of Homeland Security, the Secretary shall provide for such peacetime training and planning of reserve strength and facilities as is necessary to insure an organized, manned, and equipped Coast Guard when it is required for wartime operation in the Navy."

2. Unified Maritime Strategy

The May 20, 2008 Memorandum of Agreement (MOA) between the Department of Defense (DoD) and the Department of Homeland Security (DHS) on the "Use of U.S. Coast Guard Capabilities and Resources in Support of the National Military Strategy" identifies certain National Defense capabilities of the U.S. Coast Guard and improves the process by which the

U.S. Coast Guard serves as a force provider for DoD missions. This MOA replaces the October 3, 1995 agreement between the DoD and the Department of Transportation on the "Use of U.S. Coast Guard Capabilities and Resources in Support of the National Military Strategy."

As part of the U.S. Armed Forces, the Coast Guard supports the National Security Strategy and related defense strategies. The Coast Guard complements the capabilities of the U.S. Navy as an essential component of the National Fleet, and operates alongside the U.S. Marine Corps, as it has done throughout the past two centuries. In this capacity, the Coast Guard provides unique, non-redundant support to the military combatant commanders, including maritime interception, military environmental response, port security, peacetime military engagement, and coastal sea control.

The Coast Guard's contributions to the combatant commanders include cutters, aircraft, patrol boats, Maritime Safety and Security Teams (MSSTs), Law Enforcement Detachments (LEDETs), Port Security Units (PSUs), and other specialized capabilities. These assets deliver essential maritime surveillance, security, and response capabilities, particularly where hostile intent is not immediately discernable or is intermingled with civil maritime operations.

The Coast Guard's 2007 defense activities illustrate the various contributions it makes to the six key military capabilities highlighted in the maritime strategy:

- Forward Presence: Coast Guard cutters and other forces provided specialized and important theater security cooperation operations supporting national security and defense strategies.
- Deterrence: The Coast Guard's principal contributions are close to home in deterring transnational, unconventional threats, principally drug smuggling, that test our national sovereignty and border integrity, as well as weaken regional political stability and order at sea.
- Sea Control: In 2007, the Coast Guard continued to support National interests in the Arabian Gulf, working alongside U.S. Navy and allied naval units.
- Power Projection: In support of the Global War on Terrorism, the Coast Guard protected and escorted Navy high-value units, including Military Sealift Command ship arrivals and departures at U.S. seaports of embarkation/debarkation, moving over 6 million square feet of military cargo.
- Maritime Security: The President's Maritime Operational Threat Response (MOTR) Plan provides for the coordinated U.S. Government response to threats against the U.S. and its interests in the maritime domain by establishing roles and responsibilities enabling rapid and decisive response. The Coast Guard fulfills DHS' role as one of the lead MOTR agencies in the maritime domain.
- Humanitarian Assistance/Disaster Relief (HA/DR): With long-standing domestic authority and experience in organizing and responding to maritime and civil disasters, the Coast Guard brings highly-practiced skills to the expanded core naval service mission of HA/DR.

The Coast Guard deploys assets to support DoD operations and theater security cooperation requirements. With more than 40 of the world's 70 naval forces structured and focused on performing coast guard type functions, combatant commanders continue to seek Coast Guard capabilities to support their theater security cooperation initiatives that are intended to improve governance and security. Working with combatant commanders, the Coast Guard allocates forces to the highest priority requests.

3. National Fleet Policy Statement

The 3 March 2006 National Fleet Policy Statement by the Chief of Naval Operations and the Commandant of the Coast Guard synchronizes research and development, planning, fiscal stewardship, procurement, development of doctrine, training, and operations. To implement the National Fleet, the Coast Guard and Navy work together to plan, acquire, and maintain forces that mutually support and complement each Service's roles and missions. While charged with different aspects of national security, the Coast Guard and Navy cooperate and integrate capabilities to ensure the highest level of maritime capabilities and readiness during surge or high-tempo operations. The National Fleet is:

- Comprised of ships, boats, aircraft, and shore command and control nodes that are affordable, adaptable, interoperable, and possess complementary capabilities;
- Designed, wherever possible, around common equipment and systems, and includes coordinated operational planning, training, and logistics; and
- Capable of supporting the broad spectrum of national security requirements, from power projection to security and defense of the homeland.

4. Integration of an Operational Coast Guard Reserve

Coast Guard reservists are required to stay operationally ready for three core strategic functions: maritime homeland security, domestic and expeditionary support to national defense, and domestic disaster response and recovery. The Coast Guard utilizes augmentation along with training to maintaining an operational reserve force. Today, more than a decade after the Coast Guard embraced integration, about 80 percent of the Selected Reserve (SELRES) force is directly assigned to Active component (AC) units. The rest are assigned to the Coast Guard's 8 PSUs or to DoD units and staffs.

Since September 11, 2001, 6,800 Coast Guard reservists have been recalled under Title 10 of the U.S.C.—more than 80 percent of the USCGR 8,100 SELRES force—with reservists serving at home providing maritime homeland security and overseas supporting the combatant commanders. The majority of those recalled served domestically safeguarding ports and waterways along 95,000 miles of U.S. coastline or enforcing security zones in strategic ports on the Atlantic, Pacific, and Gulf Coast.

About 600 SELRES members remain mobilized under 10 U.S.C. 12301(d) and 12302, at the end of FY 2008, and are actively engaged in expeditionary and domestic missions in support of OIF and OEF. Most of them are providing security for CONUS military outload operations.

A smaller, though significant, number have served overseas as members of PSUs and Maritime Expeditionary Security Squadrons (MSRONs) operating in Iraq, Kuwait, and Bahrain, and as individuals supporting Coast Guard units in the Iraq theater.

During FY 2008, the Coast Guard deployed reservists to Joint Task Force (JTF) Guantanamo. Since 2002, the Coast Guard has supported the JTF's mission to provide safe and humane care and custody of detained enemy combatants. Coast Guard assets including PSUs, MSSTs, and other elements have supported primarily waterside anti-terrorism and force protection (AT/FP) security at Naval Station Guantanamo Bay, Cuba. Currently 75 USCGR personnel serve in this capacity, with personnel rotations every 6 to 9 months.

For the Coast Guard, operating in a "joint" arena often includes working with multiple federal and state agencies in response to natural disasters. As water levels were rising in several Midwestern states earlier this year, the Coast Guard deployed 18 Disaster Area Response Teams (DARTs) as part of a Federal Emergency Management Agency (FEMA) coordinated response. Each DART consisted of three flat-bottom boats and seven Coast Guard crews. These crews of active and reserve personnel were part of a multi-agency effort that also included the Army Corps of Engineers, General Services Administration, Defense Logistics Agency, Small Business Association, National Guard, Environmental Protection Agency, Department of Health and Human Services, Department of Energy, and Department of Labor.

Similarly, the USCGR responded to Hurricanes Gustav, Hanna, and Ike by providing over 4,000 man-days of support under the Coast Guard's unique Title 14 authority.

B. Coast Guard Equipping Policy

Equipment for domestic operations is provided from within the DHS budget.

Equipment for mobilization under 14 U.S.C. 712 or for surge operations is provided by AC units from existing unit inventories, from supporting units, or through present day procurement policies using the DHS budget.

Additionally, all Coast Guard RC equipment is owned and managed by the Coast Guard AC.

DoD provides selected equipment for the Coast Guard to perform defense operations in support of the combatant commanders. This includes weapons and communications systems that are interoperable with the U.S. Navy and allied forces, and other special purpose equipment needed for the Coast Guard to meet DoD requirements. Units affected include the National Security Cutter (NSC), 378-foot high endurance cutters, 270-foot and 210-foot medium endurance cutters, 110-foot patrol boats, PSUs, and the Engineering Logistics Center's Mobile Support Unit (MSU).

Personal Protective Equipment (PPE) for all Coast Guard personnel is acquired from unit operations and maintenance budgets.

C. Plan to Fill Mobilization Shortages in the RC

The Coast Guard continually reviews the optimal structure and size of the SELRES to ensure it aligns with the ongoing modernization efforts and is in keeping with the intent of the RC as described in 10 U.S.C. 10102.

D. Initiatives Affecting RC Equipment

Consistent with AC-RC integration, approximately 80 percent of the SELRES use unit-level equipment acquired and supported by ongoing operations funding mechanisms. The remaining SELRES are assigned to deployable PSUs, MSRONs, and Maritime Expeditionary Security Groups (MESGs). The following initiative was pursued in recent years:

• The Deployment Operations Group (DOG) was commissioned in 2007 as the first step of Coast Guard Modernization. The mission of the DOG is to provide organized, equipped, and trained adaptive force packages to Coast Guard, DHS, DoD, and interagency operational and tactical commanders. The DOG includes the National Strike Force, Tactical Law Enforcement Teams, PSUs, MSSTs, and the Maritime Security Response Team. As configured, the DOG includes 12 percent of all USCGR personnel. The DOG maximizes and sustains superior mission execution by ensuring interoperability and standardization.

E. Plan to Achieve Full Compatibility between AC and RC

Full compatibility between Coast Guard AC and RC began in the mid-1990s and provides for a fully integrated operational reserve force that serves as a force multiplier for the AC in all missions. SELRES training and mission execution are performed side-by-side with AC personnel. PSUs and Maritime Expeditionary Security Commands, which are mostly reserve-staffed, are specifically organized for OCONUS military operations.

In 2009, the Coast Guard will take the next step in enhancing mission execution—the stand-up of Force Readiness Command (FORCECOM). FORCECOM will be responsible for the readiness of the Coast Guard workforce in all aspects.

II. Coast Guard Reserve Overview

A. Current Status of the Coast Guard Reserve

1. General Overview

a. Funding

The USCG Reserve Training (RT) Appropriation for FY 2009 provides \$130.6M for necessary USCGR expenses as authorized by law: operations and maintenance of the reserve program, personnel and training costs, equipment, and services.

b. Personnel

The USCGR provides critical skills and experience that are vital to the Coast Guard's ability to lead, manage, and coordinate the national response to acts of terrorism, disasters, or other emergencies in the maritime region. Accordingly, the core strategic purpose of the USCGR is to maintain the competencies to perform three prioritized functions: (1) maritime homeland security, (2) domestic and expeditionary support to national defense, and (3) response to and recovery of domestic disasters, natural or manmade.

Foremost, the USCGR must be ready for call-up at any time to provide surge capacity during such contingencies. Training, including normal drill periods and two-weeks annual active duty, focuses on building and honing the skills and knowledge required for these mobilization duties. Secondly, by virtue of full integration into shore-based units, reservists are available as an augmentation force for the continuum of traditional Coast Guard missions. Their employment in day-to-day operations is structured to complement mobilization readiness requirements.

The Coast Guard Selected Reserve is staffed at 8,100 personnel, which is about 20 percent of the uniformed Coast Guard strength.

Reserve staffing for DoD contingency operations is shown in Table 6-1.

	Officers		Enli	sted
Unit type (number of units)	Active	SELRES	Active	SELRES
Port Security Unit (8)	8	96	40	1,024
Maritime Expeditionary Security Squadron (6)	0	54	0	60
Maritime Expeditionary Security Group (2)	2	4	0	8
Joint Reserve Unit (4)	0	43	0	18
Deployable Operations Group	59	6	21	3
Grand total	69	203	61	1,113

Table 6-1. FY 2009 DoD Contingency Reserve Staffing

2. Status of Equipment

a. Equipment On-hand

Table 1 identifies the major equipment inventory for FY 2010–2012. All equipment is procured and accounted for by the AC.

b. Average Age of Major Items of Equipment

As specified in *Table 2*, the average age of SELRES equipment is 10 years or less, and is not a factor affecting equipment readiness.

c. Compatibility of Current Equipment with AC

The Transportable Port Security Boats (TPSBs) are operated only by the PSUs due to their unique mission; however, the communications and navigation packages are those found in the AC.

d. Maintenance Issues

None. Units maintain an adequate preventative maintenance schedule.

e. Modernization Programs and Shortfalls

Currently, there are no modernization shortfalls for equipment needed by the RC. The Coast Guard modernizes its equipment to maintain compatibility with DoD and Coast Guard AC counterparts.

f. Overall Equipment Readiness

Overall equipment readiness is good and does not impact mission requirements.

g. Summary/Conclusion

Although there are no major equipment status issues to date that would prevent training and utilization of the reserve force, a more in-depth review and analysis is planned during the next calendar year.

B. Changes Since Last NGRER

None.

C. Future Years Program (FY 2010–FY 2012)

1. FY 2012 Equipment Requirements

Combatant commander contingency plans validate requirements for deployable Coast Guard units. The Coast Guard has one MSU with two detachments (MSU1 and MSU2) augmented by RC personnel. The MSU is currently a deployable unit within the Engineering Logistics Command.

2. Anticipated New Equipment Procurements

Equipment is currently adequate to support reserve training pending completion of the planned review.

3. Anticipated Transfers from AC to RC

None.

4. Anticipated Withdrawals from RC Inventory

None.

5. Remaining Equipment Shortages and Modernization Shortfalls at the End of FY 2012

a. Funding

The USCG RT budget has increased at a rate similar to the AC budget and appears to be adequate to meet current level of services through FY 2012.

b. Personnel

Currently, the Coast Guard is in the process of:

- Continuing development by the chartered Manpower Requirements Determination (MRD) Enterprise Development Team of a systematic approach to measuring workload consumption (to include AC and RC human capital) that will ultimately provide senior leadership with a staffing logic that supports clear staffing standards.
- Based on the outcome of the MRD and desired rating pyramid structure, developing a Coast Guard policy statement that provides a methodology for determining the resources (AC, RC, civilian, auxiliary, and contractor) required to respond to contingencies.
- Examining the Coast Guard Reserve organizational structure to ensure optimal administration, recruiting, instruction, development and training of the RC force. Reserve Force Readiness System (RFRS) is a systems approach to the policies, processes, resources, and programs necessary to maintain an operational Reserve Force that is continuously prepared for "all threats, all hazards." Through direct control, cross-mission synchronization, and advocacy the system will deliver dynamic interrelated elements for the RC.
- Establishing a new enlisted rating involving Law Enforcement and Security duties. This new rating, called Maritime Law Enforcement Specialist (ME), enhances our capabilities as America's Maritime Guardian and further supports our goal of making our force structure more responsive to mission execution across all aspects of Maritime Safety, Security and Stewardship. Concurrently with the establishment of the new ME rating, the Reservespecific Port Security Specialist (PS) rating will be integrated into the new ME rating. This integration will provide an active duty counterpart for the legacy Reserve-only rating.

c. Equipment

Overall equipment readiness is good based on known requirements and current data.

Although there are no major equipment status issues to date that would prevent training and utilization of the reserve force, a more in-depth review and analysis is planned during the next calendar year. The challenge is separating out RC equipment from overall equipment.

D. Summary

The USCGR is on the leading edge of Coast Guard organizational design. As the Coast Guard is called upon to leverage traditional competencies and multi-mission assets in support of contingency operations, it will continue to develop and maintain an operationally ready reserve.

1. Funding

The Coast Guard continues to receive sufficient budgetary appropriations to support reserve training and readiness through DHS.

2. Personnel

During FY 2008, the Coast Guard further refined its RC core strategic functions. RC training focuses on building and honing the skills and knowledge required for these mobilization duties. The Commandant's Reserve Policy Statement clearly describes the organization's approach to laying the foundation for the USCGR and ensures organizational alignment for the future.

3. Equipment

Available equipment is currently adequate to support reserve training. Planning for additional military equipment for use in combat zones is ongoing. Recapitalization of PSU equipment that is being maintained beyond the end of its planned life cycle, most notably unit vehicles, continues.

The Joint Strategic Capabilities Plan and combatant commander operation plans call for the Coast Guard to support the operation of two complete patrol boat squadrons. The Coast Guard currently maintains only one MSU, which is capable of supporting only one patrol boat squadron. The Coast Guard continues to evaluate the requirement to increase MSU capability in the future.

Consolidated Major Item Inventory and Requirements

NOTE: This table provides a comprehensive list of selected major items of equipment. It provides the quantity on-hand (QTY O/H) projected to be in the inventory at the beginning/end of the selected fiscal year (FY). It also provides the quantity required (QTY REQ) needed to meet the full wartime requirements of the Reserve component. In accordance with Title 10, the QTY REQ number provides the recommendations as to the quantity and type of equipment which should be in the inventory of each Reserve component. Unit cost values are in dollars.

Nomenclature	FY 2010 Unit Cost	Begin FY 2010 QTY O/H	Begin FY 2011 QTY O/H	Begin FY 2012 QTY O/H	-	End FY 2012 QTY REQ
PORT SECURITY UNITS						
25' TRANSPORTABLE PORT SECURITY BOAT (6 per unit)	\$220,000	54	54	54	54	54
175HP OUTBOARD MOTOR (2 per boat and 6 total spares)	\$10,000	162	162	162	162	162
VEHICLE, F350 PICKUP (2 per unit)	\$45,000	16	16	16	16	16
VEHICLE, F350 12-PASSENGER VAN (1 per unit)	\$50,000	7	8	8	8	8
VEHICLE, F550 STAKEBED (1 per unit)	\$50,000	8	8	8	8	8
PRC-117F RADIO, TRI-BAND (1 per boat and 2 spares at each unit)	\$45,000	64	64	64	64	64
PRC-117F RADIO, TRI-BAND, BASE (2 per unit)	\$45,000	18	18	18	18	18
PSU EQUIPMENT PACKAGE	\$2,000,000	8	8	8	8	8
MOBILE SUPPORT UNITS						
TRAILER, CONNEX BOX	\$30,000	18	23	23	23	23
TRUCK, PICK-UP	\$45,000	3	2	2	2	2
TRUCK, STAKEBED	\$50,000	6	4	4	4	4
TRUCK, TRACTOR TRAILER	\$105,000	2	2	2	2	2
FORKLIFT, 10,000 LB	\$30,000	2	2	2	2	2
FORKLIFT, 6,000 LB	\$20,000	1	1	1	1	1
GENERATOR, MICROSILENT 10KW	\$23,000	4	4	4	4	4
KITCHEN, PORTABLE	\$50,000	2	2	2	2	2
WELDING/CUTTING SHOPS, PORTABLE	\$30,000	2	2	2	2	2
A/C - H/P (AIR ROVER UNITS) W/25KW GENERATORS	\$40,000	2	2	2	2	2
WELDER, GAS POWERED	\$3,000	1	1	1	1	1

USCGR Average Age of Equipment

NOTE: This table provides the average age of selected major items of equipment. The average age provides a projected average age of the fleet at the start of FY 2009.

	1	
Nomenclature	Average Age	Remarks
PORT SECURITY UNITS		
25' TRANSPORTABLE PORT SECURITY BOAT (TPSB)	5	
175HP OUTBOARD MOTOR	5	
VEHICLE, F350 PICKUP	9	
VEHICLE, F350 12-PASSENGER VAN	9	
VEHICLE, F550 STAKEBED	10	
PRC-117F RADIO, TRI-BAND	4	

USCGR Service Procurement Program - Reserve (P-1R)

NOTE: This table identifies the dollar value of equipment programmed to be procured with Service procurement funds as identified in the P-1R exhibit of the FY 2010 President's Budget Submission. All values are costs in dollars, and ammunition procurements have been excluded. Deliveries of procured equipment normally take one to two years before they arrive in the inventory; e.g., items procured in FY 2010 would be expected to arrive in RC inventories in FY 2011 or FY 2012.

Table 3 not applicable for USCGR

National Guard and Reserve Equipment Appropriation (NGREA) Procurements

NOTE: This table identifies the dollar value of equipment originally programmed to be procured with the National Guard and Reserve Equipment Appropriation (NGREA). These funds are available for a threeyear period from the year of appropriation. Deliveries of procured equipment normally take one to two years from date of procurement before they arrive in the inventory; e.g., items procured in FY 2009 would be expected to arrive in RC inventories in FY 2010 or FY 2011. All values are costs in dollars.

Nomenclature	FY 2007	FY 2008	FY 2009	Remarks

Table 4 not applicable for USCGR

Projected Equipment Transfer/Withdrawal Quantities

NOTE: This table portrays the planned equipment transfers (Active to Reserve), withdrawals (-), and decommissioning (-). Transferred equipment is commonly called "cascaded equipment," or equipment that is provided to the RC once the AC receives more modern equipment. Although this table highlights a three-year period, many Services will not know exact quantities of transfers or withdrawals until year of execution, due to the uncertainty of the procurement/delivery cycle of new equipment.

Nomenclature	Equip No.	FY 2010 Qty	FY 2011 Qty	FY 2012 Qty	Remarks

Service has no planned transfers or withdrawals for the years FY 2010 thru FY 2012

FY 2006 Planned vs Actual Procurements and Transfers

NOTE: This table compares what the Service planned to procure and transfer to the RC in FY 2006 with actual procurements and transfers. FY 2006 is selected as these are the most recent funds to expire. Since the procurement cycle is normally one to two years from funding to delivery, this table identifies only what has been delivered through the end of FY 2008. Procurement and NGREA columns reflect cost values in dollars.

Nomenclature	Equip No.	FY 2006 Transfers (# of items)		FY 2006 Procurements (\$s)		FY 2006 NGREA (\$s)	
		Plan	Actual	Plan	Actual	Plan	Actual

USCGR had no planned or actual transfers or procurements of major equipment during FY 2006

USCGR Major Item of Equipment Substitution List

NOTE: This table identifies equipment authorized by the Service to be used as a substitute for a primary item of equipment. The table also identifies whether or not the item is able to be deployed in wartime. This data meets the Title 10 requirement to identify equipment that is not the most desired item of equipment.

	Reqd Item	Substitute Item Nomenclature	Substitute Item Equip No.	FY 2010 Qty	Deployable?	
	Equip No.				Yes	No

Service Does Not Use Substitution To Satisfy Major Item Equipment Requirements

Table 7

Appendix A Report Requirements, Terminology, and Definitions

I. Report Requirements

A. Overview of Statutory Requirement

The DoD Authorization Act of 1982 (Public Law 97-86) established the requirement for DoD to provide an annual report to the Congress, by February 15th of each year, on the status of National Guard and Reserve equipment; hereafter referred to as the NGRER. The Goldwater-Nichols DoD Reorganization Act of 1986 amended Title 10 of the U.S. Code placing the reporting requirement under Section 115(b). The Congress in Public Law 103-337 transferred reporting requirements to a new Subtitle E, Reserve Components, Part I, Chapter 1013, which was re-designated Section 10541. In compliance with the FY 1993 National Defense Authorization Act (NDAA), Section 1134, Title XI, the NGRER was expanded to include a description of the current status of equipment incompatibility between the AC and RC, the effect of that level of incompatibility, and the plan to achieve full compatibility. Finally, the FY 2008 NDAA, Sections 351(a), 351(c)(1), and 1826 added additional National Guard (NG) equipment reporting requirements to the NGRER. Sections 351(a) and 351(c)(1) added the requirement for an assessment of the extent to which the National Guard possesses the equipment required to support operations in an emergency or major disaster. Section 1826 required a statement of the accuracy of past NG equipment inventory projections, and a certification from the Chief of the National Guard Bureau setting forth the inventory of equipment items that were due to be procured in the preceding fiscal year, but were not received.

This report is prepared by the Office of the Assistant Secretary of Defense for Reserve Affairs with the assistance of the Department of the Army, the Department of the Navy, the Department of the Air Force, and the Department of Homeland Security (U.S. Coast Guard).

B. Current Law

The section below is an excerpt from Section 10541, Title 10, United States Code. Changes required by the FY 2008 NDAA are highlighted.

National Guard and Reserve Component Equipment: Annual Report to Congress

(a) The Secretary of Defense shall submit to the Congress each year, not later than February 15, a written report concerning the equipment of the National Guard and the reserve components of the armed forces for each of the three succeeding fiscal years.

(b) Each report under this section shall include the following:

(1) Recommendations as to the type and quantity of each major item of equipment which should be in the inventory of the Selected Reserve of the Ready Reserve of each reserve component of the armed forces.

(2) A statement of the quantity and average age of each type of major item of equipment which is expected to be physically available in the inventory of the Selected Reserve of the Ready Reserve of each reserve component as of the beginning of each fiscal year covered by the report.

(3) A statement of the quantity and cost of each type of major item of equipment which is expected to be procured for the Selective Reserve of the Ready Reserve of each reserve component from commercial sources or to be transferred to each such Selected Reserve from the active-duty components of the armed forces.

(4) A statement of the quantity of each type of major item of equipment which is expected to be retired, decommissioned, transferred, or otherwise removed from the physical inventory of the Selected Reserve of the Ready Reserve of each reserve component and the plans for replacement of that equipment.

(5) A listing of each major item of equipment required by the Selected Reserve of the Ready Reserve of each reserve component indicating -

(A) the full war-time requirement of that component for that item, shown in accordance with deployment schedules and requirements over successive 30-day periods following mobilization;

(B) the number of each such item in the inventory of the component;

(*C*) a separate listing of each such item in the inventory that is a deployable item and is not the most desired item;

(D) the number of each such item projected to be in the inventory at the end of the third succeeding fiscal year; and

(E) the number of non-deployable items in the inventory as a substitute for a required major item of equipment.

(6) A narrative explanation of the plan of the Secretary concerned to provide equipment needed to fill the war-time requirement for each major item of equipment to all units of the Selected Reserve, including an explanation of the plan to equip units of the Selected Reserve that are short of major items of equipment at the outset of war.

(7) For each item of major equipment reported under paragraph (3) in a report for one of the three previous years under this section as an item expected to be procured for the Selected Reserve or to be transferred to the Selected Reserve, the quantity of such equipment actually procured for or transferred to the Selected Reserve.

(8) A statement of the current status of the compatibility of equipment between the Army reserve components and active forces of the Army, the effect of that level of incompatibility on combat effectiveness, and a plan to achieve full equipment compatibility.

(9) (Added by FY 2008 NDAA, Sections 351(a) and 351(c)(1)) An assessment of the extent to which the National Guard possesses the equipment required to perform the responsibilities of the National Guard pursuant to sections 331, 332, 333, 12304(b) and 12406 of this title in response to an emergency or major disaster (as such terms are defined in section 102 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C 5122)). Such assessment shall –

(A) identify any shortfall in equipment provided to the National Guard by the Department of Defense throughout the United States and the territories and possessions of the United States that is likely to affect the ability of the National Guard to perform such responsibilities;

(B) evaluate the effect of any shortfall on the capacity of the National Guard to perform such responsibilities in response to an emergency or major disaster that occurs in the United States or a territory or possession of the United States; and

(C) identify the requirements and investment strategies for equipment provided to the National Guard by the Department of Defense that are necessary to plan for a reduction or elimination of any such shortfall.

(c) Each report under this section shall be expressed in the same format and with the same level of detail as the information presented in the annual Future Years Defense Program Procurement Annex prepared by the Department of Defense.

(d) (Added by FY 2008 NDAA, Section 1826) Each report under this section concerning equipment of the National Guard shall also include the following:

(1) A statement of the accuracy of the projections required by subsection (b)(5)(D) contained in earlier reports under this section, and an explanation, if the projection was not met, of why the projection was not met.

(2) A certification from the Chief of the National Guard Bureau setting forth an inventory for the preceding fiscal year of each item of equipment –

(A) for which funds were appropriated;

(B) which was due to be procured for the National Guard during that fiscal year; and

(C) which has not been received by a National Guard unit as of the close of that fiscal year.

II. Report Objective

Based upon the law, the Office of the Assistant Secretary of Defense for Reserve Affairs (Materiel & Facilities), with concurrence from all Services, has identified the following objectives:

- Provide the Services' plan to equip their Reserve forces in a time of constrained DoD budgets.
- Concentrate on FY 2010 to 2012 RC requirements, procurements and changes.
- Provide an overview of current RC equipment from three perspectives:
 - current status of equipment on-hand.
 - future year equipment procurements for FY 2010–FY 2012
 - remaining shortfall for FY 2013 and beyond.
- Focus primarily on major items of equipment.

III. Report Contents

A. Overview (Chapter 1)

Chapter 1 presents a composite DoD perspective on National Guard and Reserve equipment and serves as the executive summary of the report.

B. Service Narratives and Data Tables (Chapters 2–6)

Chapters 2 through 6 present the status of each Service and their respective RC in terms of RC equipping policies and methodologies. Each chapter contains a Service and RC overview, and includes a discussion of current equipment status, future equipment procurements, and remaining shortfalls and unfunded requirements. Each chapter includes a review of the current status of equipment compatibility and interoperability between the AC and the RC of each Service, the effect of that level of compatibility/interoperability, and a plan to achieve full compatibility/interoperability.

RC data tables for each Service contain specific information on major items of equipment selected for review in this report and are placed at the end of each RC narrative section. The NGRER articulates data in eight tables (*Tables 1-8*) for each RC. In a situation where data tables are not applicable to a particular RC, a blank page has been inserted to note that table data is not applicable. The "Data Table Explanation" at the end of this section defines the data contained in *Tables 1-8*.

IV. Terminology and Definitions

<u>Major Items of Equipment</u> include aircraft, tanks, ships, trucks, engineer equipment and major items of support equipment. These items normally will include large dollar value requirements, critical RC shortages, Service and NGREA procured items, and any RC specific item which the Chief of the specific RC wishes to highlight.

<u>Required Quantity</u> is the total number of an item required to be on-hand or available to RC units to go to war and accomplish their mission(s). This includes requirements for war reserve and other stocks. The simplified term "requirement," as used in this report, is synonymous with "full wartime requirement," and satisfies the requirement in Title 10 to provide a "recommendation" as to the type and quantity of equipment needed in RC inventories.

<u>On-Hand Quantity</u> is the equipment physically on-hand in RC or AC units or in war reserve and other stocks specifically designed for wartime use by the RC or AC.

<u>Deployable Item</u> is an item which, considering its suitability, operability, compatibility and supportability, will provide an expected degree of mission success sufficient to warrant its wartime operational employment.

<u>Compatibility/Interoperability</u> denotes the capability of two items of equipment to operate together in the same environment without interfering with one another and without degrading function or unit capability.

<u>Substitute Item</u> is not the most desired item but based upon its capability can be employed in wartime in lieu of a combat essential required item of equipment. It may not function at the same level of capability as the item in the AC for which it is the substitute.

<u>Equipment Shortage (Shortfall)</u> is the difference between the quantity required and the quantity on-hand, excluding substitute items and excess quantities beyond the required quantity.

<u>Modernization Shortfall</u> is the difference between the required quantity of the most modern item and the on-hand quantity of that item. Modernization shortfalls are not necessarily equipment shortages as most Services substitute older versions of an item for the most modern item. Therefore, modernization shortfalls are shortages of the most modern item only, and can have a significant effect upon compatibility and interoperability.

V. Data Tables

A. Table Contents

A separate set of Data Tables (*Tables 1-8*) is provided in Chapters 2 through 6 for each RC. These tables contain the required information relative to major items of equipment identified in the report. The following list identifies the separate data tables that are included in the report for each RC.

- Table 1: Consolidated Major Item Inventory and Requirements (This is an all-inclusive table while other tables are subsets of *Table 1*.)
- Table 2: Average Age of Equipment
- Table 3: Service Procurement Program Reserve (P-1R)
- Table 4: National Guard and Reserve Equipment Appropriation (NGREA) Procurements
- Table 5: Projected Equipment Transfer/Withdrawal Quantities
- Table 6: FY 2006 Planned vs Actual Procurements and Transfers
- Table 7: Major Item of Equipment Substitution List
- Table 8: Significant Major Item Shortages

B. Table Explanations

The following paragraphs provide an explanation of the data table columns and data criteria by Table.

Table 1: Consolidated Major Item Inventory and Requirements. This table provides a comprehensive list of selected major items of equipment the RC chooses to highlight, by providing key administrative data, on-hand inventories and wartime requirements.

<u>RC</u> is the specific Reserve or National Guard entity, i.e., ARNG, USAR, USMCR, ANG, AFR, USNR or USCGR.

Nomenclature is the description or common name of the item of equipment.

<u>Equipment Number</u> is the individual Service equipment identification code: Line Item Number (LIN) for the Army; Table of Authorized Materiel Control Number (TAMCN) for the Marine Corps; Equipment Cost Code (ECC) for Navy engineering items; and National Stock Number (NSN) for the Air Force.

<u>Cost</u> is the FY 2010 procurement cost per unit. If an item is no longer being procured, the inflation adjusted cost from the last procurement is shown. If an item is programmed for initial procurement beyond FY 2010, the data table depicts the projected unit cost at the time of procurement.

<u>Quantity On-hand (QTY O/H)</u> is the actual/projected item count for a particular item of equipment at a specified time.

<u>Quantity Required (QTY REQ)</u> is the authorized wartime requirement for a given item of equipment.

Table 2: Average Age of Equipment. This table is a subset of *Table 1* and highlights the average age of selected items of equipment.

<u>Average Age</u> is the calculated age of a given item of equipment. Since equipment is normally procured over several years, this figure provides an average age of the fleet at the start of FY 2009.

Table 3: Service Procurement Program - Reserve (P-1R). This table highlights items of equipment, which the Service intends to procure for their RC. The source of this data is the P-1R exhibit to the President's Budget.

Table 4: National Guard and Reserve Equipment Appropriation (NGREA) Procurements. This table highlights the items, which the RC plan on procuring with miscellaneous NGREA funds. Since these funds are available for three years, this table highlights those items in the current procurement cycle.

Table 5: Projected Equipment Transfer/Withdrawal Quantities. This table portrays the planned equipment transfers (AC to RC), withdrawals, and decommissioning. Transfers are commonly called "cascaded" equipment or equipment that is provided to the RC once the AC receives more modern equipment items. Although this table highlights a three-year period, many Services do not know exact quantities of transfers or withdrawals until year of execution due to the uncertainty of the procurement/delivery cycle of new equipment.

Table 6: FY 2006 Planned vs Actual Procurements and Transfers. This table compares what the Service planned to procure and transfer to the RC in FY 2006 with actual procurements and transfers. Since the procurement cycle is normally one to two years from funding to delivery, this table identifies only what has been delivered through the end of FY 2008.

<u>Planned Quantity</u> is the item quantity the Service programmed to deliver to the RC as part of the budgeting process.

<u>Actual Quantity</u> is the item quantity the Service actually delivered or has in the procurement cycle to deliver to the RC.

Table 7: Major Item of Equipment Substitution List. A list of equipment authorized by the Service to be used as a substitute for a primary item of equipment. This table also identifies whether this substitute item is suitable for deployment in time of war.

<u>Nomenclature (Required Item/Substitute Item)</u>, see *Table 1* description for nomenclature. <u>Equipment Number (Required Item/Substitute Item)</u>, see *Table 1* description for equipment number.

Table 8: Significant Major Item Shortages. The top ten items of equipment and modernization/upgrades, which are not funded in the FY 2010–2014 FYDP, are listed in this table in priority order. If additional funds were to become available, the RC would apply those funds to the highest priority item on this list.

Appendix B National Guard Readiness for Emergencies and Major Disasters

I. FY 2008 National Defense Authorization Act Changes to Equipment Reports

The FY 2008 National Defense Authorization Act (NDAA), Sections 351(a), 351(c)(1), and 1826, added new reporting requirements for the status of National Guard (NG) equipment. This appendix provides the National Guard Bureau (NGB) response to each of the requirements of the NDAA.

A. 2008 NDAA, Sections 351(a) and 351(c)(1), "Reports on National Guard Readiness for Emergencies and Major Disasters," requires an assessment of the extent to which the National Guard possesses the equipment required to support operations in an emergency or major disaster.

1. Overview

The equipment used by the NG "to perform its responsibilities in an emergency or major disaster" come from two broad sources: equipment provided by the Army and Air Force that can be used for both combat and homeland operations, i.e., "dual-use;" and specialized government off-the-shelf (GOTS) or commercial off-the-shelf (COTS) equipment acquired through a variety of DoD sources and contracts to meet unique tasks, conditions, or standards for operating in the homeland. The latter are planned for and integrated by the NGB Joint Staff, but purchased by the Army National Guard (ARNG) and Air National Guard (ANG).

It is DoD and NGB policy that, to the extent practicable, emergency or major disaster functions will be performed using "dual-use" equipment. It is also NGB policy to generate emergency or major disaster response forces, wherever possible, using existing manpower and resources from Army or Air Guard units; either as individuals or in task-organized forces built from two or more existing units, such as the Chemical, Biological, Radiological, Nuclear, and High-yield Explosive (CBRNE) Emergency Response Force Packages (CERFPs). Response forces are equipped first with "dual-use" equipment, and then augmented, as necessary, with specialized equipment obtained through GOTS/COTS contracts. Dedicated Weapons of Mass Destruction–Civil Support Team (WMD-CST) units are the notable exception to this unit approach being equipped primarily with specialized equipment.

The National Guard WMD-CSTs were established in 1999, with the initial ten CSTs certified to Congress in August 2001. There are currently 57 such teams, missioned to respond at the direction of the Governor, to known or suspected WMD events or natural disasters, where significant risk to lives or property exists. The CSTs have deployed in response to dozens of known or suspected CBRNE incidents or natural disasters, including 9-11 deployments to both the World Trade Centers and the Pennsylvania crash site, the Challenger disaster, Hurricane Katrina, and many more in the 9 years they have been operational. CSTs performed 70 response and 211 standby missions in FY 2008. Standby missions include operations to clear venues for CBRNE including site characterization and screening for CBRNE materials in support of the incident command or lead agency. CSTs are in continuous use to ensure safety of Americans at major events throughout the country, and stand ready to deploy within 90 minutes of notification.

The CERFP units were established by Congress in 2006, and have been deployed at the request of various federal agencies, in stand-by status for various national events, including, most recently, the 2009 Presidential inauguration. Although CST and CERFP units have their required equipment, some of the CERFP units must use substitute items, especially for the vehicle requirements, to move personnel and equipment for training and deployments. Additionally, Congressional budget cuts in the last two years have adversely impacted CST and CERFP programs and further continued budget cuts will create significant capability and readiness shortfalls for CSTs and CERFPs.

The NGB is committed to the fundamental principle that every state and territory must possess ten core capabilities to respond to emergencies and major disasters in the United States. These capabilities are categorized as the NG "Essential 10," and address a Joint Force Headquarters (JFHQ) for command and control; a civil support team for chemical, biological, and radiological detection; engineering assets; communications; ground transportation; aviation; medical capability; security forces; logistics; and maintenance capability.

The following assessment is organized into three categories: ARNG equipment, ANG equipment, and Joint NG specialized equipment.

2. Army National Guard Equipment

a. ARNG Equipment Shortfalls

Today the ARNG is better in every measureable way. We are better organized. We have modular units—modern units that match the Army. Today, the ARNG is over 100 percent of its authorized strength. We are better equipped today than we were three years ago. We are committed to deploying our Citizen-Soldiers with the best equipment and training possible. The U.S. Army's similar assurance and ongoing Congressional interest in the welfare of our people will ensure the success of the ARNG.

Our Citizen-Soldiers consistently proved themselves capable of operating across a wide spectrum of missions in countries such as Iraq, Afghanistan, Belgium, Bosnia, Djibouti, Egypt, Germany, Honduras, Kosovo, Kuwait, and the Philippines. With thousands of Citizen-Soldiers "on the ground" in foreign lands, we are equally busy at home. ARNG units fought wildfires in California, aided hurricane victims on the Gulf Coast, and assisted in numerous environmental cleanup activities around the country. *Figure B-1* identifies the state of the ARNG since 9/11. On 16 January of 2009, we had 48,077 Guardsman participating in missions around the globe. The ARNG is a good value for the nation.

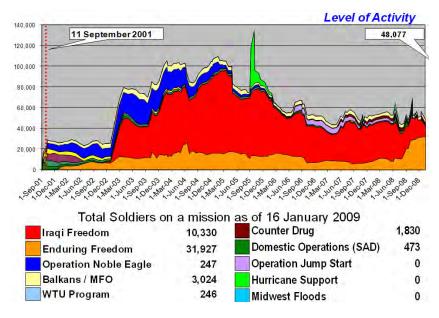


Figure B-1. State of ARNG Since 9/11

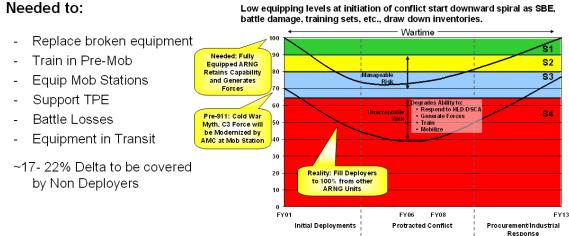
The ARNG leverages Modified Table of Organization and Equipment (MTOE) equipment for its Homeland Defense (HLD)/Defense Support of Civil Authorities (DSCA) missions. To assess the HLD/DSCA mission, we identified specific Line Item Numbers (LINs) of equipment that are Critical Dual Use (CDU). These items are essential for both domestic and warfighting missions and are assigned to the "Essential 10" capability groups. As of August 2008, the ARNG had 65 percent of our MTOE requirements for CDU items on-hand and available to the Governors for domestic missions. An additional 16 percent of the ARNG's equipment was deployed in support of federal missions at that time.

To calculate ARNG equipment on-hand (EOH), we rely on the Army's MTOE, which is the authorization document that prescribes equipment necessary for a unit to achieve its mission. Table of Distribution and Allowances (TDA) equipment is also critical, but not currently included. Thus, anything assigned to the JFHQ is excluded. When we calculate CDU EOH of MTOEs, if we exclude soldier items such as weapons, masks, and sights, the percentage of EOH for the core equipment, such as trucks, bulldozers, and power generation equipment required to provide the essential 10 capabilities drops to 56 percent (see Figure B-2).

It takes more than 100% of a unit's requirement to mobilize it

Additional Equipment Needed to:

Equipping Cycle in a Protracted War



- Supply does not keep up with demand so you must cross level internally
 - Starting at 100% every 2 units deployed breaks 1
 - Starting at 70% every unit deployed breaks 8

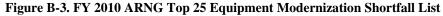
Figure B-2. RC Equipping for Deployment

One hundred percent equipment is essential since the Army's equipping strategy is for all units to have 100 percent modern equipment on a modular MTOE. It takes more than 100 percent of a unit's equipment requirements to mobilize that unit. Any time equipment is in maintenance, in use for training at pre-mobilization or at mobilization stations, or is left behind in theatre, the percentage of ARNG equipment available to support domestic missions drops. Cross leveling also takes equipment out of the available pool during the packing and transit phases. Approximately 17 to 22 percent of all ARNG equipment is not available. While cross leveling has allowed the ARNG to meet its immediate commitments, constant cross leveling has been both a financial and a manpower challenge. It is particularly challenging in the logistics arena for full time support to inventory, package, and ship cross-leveled equipment.

To support the mission the ARNG has cross-leveled heavily, relied extensively on Emergency Management Assistance Compact (EMAC) agreements, and reprioritized distribution. As an example, all 54 states and territories contributed manpower or equipment to the ARNG during Hurricane Katrina. Most recently, a number of states participated in EMAC agreements with and provided available HMMWVs for the State of Kentucky during the January 2009 ice storms.

Over the past several years, the Army G-8 has made significant improvements in its investment in ARNG equipment and many critical systems are now funded. However, we still need assistance in funding of the systems identified below. Figure B-3 exhibits the FY 2010 ARNG Top 25 Equipment Modernization Shortfall List.





b. Effects of ARNG Shortfalls

Of the systems on the FY 2010 ARNG Shortfall List, over half are critical to support of the ARNG's HLD/DSCA missions. Impacts of current shortages are especially pronounced in the communications, command and control, transportation (light and medium trucks), and aviation "Essential 10" capabilities. Regardless of the domestic event, these capabilities must be available for every HLD/DSCA mission.

While we received much equipment last year, the need for 100 percent equipping of the ARNG remains a requirement in order to respond to unpredictable disasters. Even response to predictable events, such as hurricane support, has resulted in the ARNG supporting hurricane states at the expense of other states.

The ARNG is prepared to respond to predictive emergencies or major disasters with current equipping levels by mitigating risk through established EMAC agreements and other means. However, responding to unpredictable and catastrophic events could present a challenge until the ARNG is fully equipped.

c. ARNG Requirements and Strategies

The Army's equipping strategy supports modularity and the RC as an operational force. Succeeding with this strategy requires all components to have standardized MTOEs and the same modern equipment. We continue to transform and modernize into an operational force at an unprecedented rate. This significant progress could not have been achieved without the support of Congress, the Army, and OSD. Current equipment procurement averages approximately \$5B per year—a 400 percent increase from 2001 levels. This funding is being used to procure new equipment and to modernize equipment currently on-hand which will have utility for both domestic and warfighting missions. The Army objective is to ultimately resource the ARNG to 100 percent of its MTOE requirement for the Brigade Combat Teams (BCTs) by FY 2015 and the remainder of the force by FY 2019.

Continued focus on equipping priorities such as aircraft, small arms, night vision, and battle command systems has resulted in substantial improvements in these areas over the past year. Specific accomplishments include: the cascading of UH-60 airframes to bring utility helicopter strength to 100 percent, delivery of significant quantities of M-4 carbines and PVS-14 Night Vision Goggles (NVG), and the fielding of WIN–T systems to 5 brigade or echelons above brigade headquarters. The Army also fielded 17 sets of Army Battle Command Systems (ABCS) to ARNG brigades.

Growth in EOH percentages will be slow through FY 2011, even with this increased investment in ARNG resources. As we continue to transform, our requirements will increase, although documentation for these requirements may lag by as much as three years. In addition, much of the new equipment will replace older, obsolete equipment and will not result in an EOH increase. Examples include the replacement of M35 trucks with Light and Medium Tactical Vehicles, AN/PVS-5 NVG with the newer AN/PVS-14 NVG, and M16 rifles with M4 rifles.

We continue to work with the Army to prioritize Army procurements, but also use the National Guard and Reserve Equipment Appropriation (NGREA) to fine tune our capabilities largely by prioritizing procurement of critical dual use equipment. Since FY 2006, we have received over \$3.1B in NGREA funding. This much needed funding has been used to procure CDU items to support our "Essential 10" capabilities, which will ensure that the nation's Governors are well equipped to handle future domestic operations.

3. Air National Guard Equipment

The majority of ANG equipment assets may be classified as "dual use." Recent data indicate the ANG is approximately 16 percent short of filling its equipment requirements, as calculated from items in-use/on-hand (84 percent) versus items authorized (100 percent) (see Table B-1).

12 January 2009							
CABABILITY	AUTHQTY	INUSE QTY	FILL RATE	AUTH COST	INUSE COST	NEEDED QTY	NEEDED COST
AVIATION	91,148	81,957	90%	\$274,193,776	\$220,175,636	9,191	\$54,018,140
COMMAND AND CONTROL	25,772	24,205	94%	\$685,274,186	\$672,598,449	1,567	\$12,675,737
COMMUNICATIONS	8,728	5,960	<mark>68%</mark>	\$51,832,884	\$37,676,760	2,768	\$14,156,124
ENGINEERS	44,214	39,071	88%	\$227,358,935	\$173,724,012	5,143	\$53,634,923
LOGISTICS	130,700	100,255	77%	\$95,640,500	\$79,464,378	30,445	\$16,176,122
MAINTENANCE	136,285	129,600	95%	\$2,533,604,492	\$2,107,834,054	6,685	\$425,770,438
MEDICAL	3,419	2,655	78%	\$2,546,187	\$2,059,787	764	\$486,400
SECURITY	64,384	55,393	86%	\$106,325,905	\$82,713,338	8,991	\$23,612,567
TOTAL SE	368,365	309,496	84%	\$3,976,776,865	\$3,376,246,414	65,554	\$600,530,451
VEHICLES	13,602	13,090	96%	\$643,955,373	\$668,336,863	512	\$24,239,461
TOTAL SE & VEHICLES	381,967	322,586	<mark>84</mark> %	\$4,620,732,238	\$4,044,583,277	66,066	\$624,769,912

Table B-1. ANG Equipment

a. ANG Equipment Shortfalls

The ANG's Tables of Allowances (TA) are the authorization documents that prescribe equipment necessary for a unit to perform its mission. The ANG leverages the TA for both vehicles and aircraft support equipment for its responsibilities for both federal and state missions. The nondeployed ANG units receive the lowest priority for redressing shortfalls in equipment readiness. Although the equipment readiness level is at 84 percent or less of authorized equipment, the challenge is to obtain the assets that are critical for the warfighter and military first responder for homeland operations. The ANG 84 percent equipment availability rate is comparable to the overall Air Force availability rate.

Approximately 98 percent of the assets the ANG possesses are considered "dual-use" (federal and state missions). All assets are reviewed annually in order to revise the list to account for modernized equipment and updated authorization documents. The ANG has aligned all dual-use equipment and vehicles into the "Essential 10" categories.

The ANG currently has 84 percent of its authorized equipment on-hand. The equipment available to the Governors is highly dependent on whether their forces are deployed for federal missions. Currently, approximately 2 percent of ANG equipment is deployed in support of federal missions.

The overall ANG logistics status is fair at 77 percent. However, the limited availability, domestically, of Personal Protective Equipment (PPE) is driving the metric down. The Air Force is in the process of procuring much of these items to fill Air Force/ANG worldwide requirements, as well as pre-position these items at locations in the area of responsibility (AOR) for deploying personnel.

The overall ANG vehicle status is good, at 96 percent. The ANG actually has 13,090 vehicles and another 1,027 that are leased, for a total of 14,117 vehicles, 515 more than authorized. No ANG vehicles are deployed in support of a federal mission. However, 34 percent, or 4,822, of ANG vehicles have reached or exceed their life expectancy; such as 371 aircraft maintenance, refueler, and firefighting vehicles with a cost of \$96,065,491 and 681 civil-engineering and snow-removal vehicles removal at a cost of \$88,303,565. Such legacy vehicles are expensive to maintain and prone to mechanical failure. With only 7 percent of the total requirements funded, the fleet's

average age of 24 years is growing older and more broken, causing the ANG to be 93 percent behind modernization requirements. In FY 2009, the ANG is funded at less than 5 percent of modernization requirements, resulting in 3,445 vehicles that have met their life expectancy, to not be replaced in this buy year. To comply with the Presidential directive to reduce energy cost by 30 percent, the ANG is adding low speed vehicles to the inventory. Additionally, the ANG has a plan to procure vehicles that use alternative fuels. Approximately \$20M has been cut from the ANG's transportation budget, which would have been used for the replacement of obsolete vehicles.

The overall communication status is fair at 68 percent, but many systems are in immediate need of modernization or acquisition. Competing priorities have relegated these important communications systems to lower status, potentially impacting support to state and federal command authorities/centers.

Data switches deployed across the ANG are 6+ years old and are unable to support near and long range information technology initiatives, and increased failures are starting to occur. Switches need to be replaced with approved Internet Protocol version 6 (IPv6) compatible equipment, because the Air Force has mandated implementation of IPv6 capability by 2012. The ANG used approximately \$1M in FY 2008 to maintain this old equipment, creating a shortfall of \$25M.

Mass Notification Systems at ANG wings and large Geographically Separated Units (GSUs) are non-existent. Mass Notification Systems that can project clear articulate voice and data via a public address system for mass information sharing and emergency notification are needed at a current cost of \$13.4M. Over 125 ANG wings and GSUs lack the capability, resulting in the inability to provide mass notification to personnel on changing conditions, threats, etc...during domestic operations, contingencies, and air base defense operations.

Joint Incident Site Communications Capability (JISCC) used for incident site command and control is deployed in 19 of 23 authorized ANG units, creating a shortfall of 4 JISCC equipment packages at \$4M. During emergencies, these equipment packages provide incident site command and control in support of USNORTHCOM, HLD, FEMA, state, and local first responders.

ANG Wing Operation Center command consoles supporting critical USNORTHCOM Air Sovereignty Alert (ASA) missions, either do not exist at the wings or are antiquated, and will not interface with modern systems or existing equipment. To mitigate the impact to ASA missions, 15 command consoles, valued at \$3.4M, are needed.

b. Effects of ANG Shortfalls

Shortfalls in equipment delay the ANG response to disasters and terrorist incidents in the homeland. To fulfill a requirement for an on-going homeland operation, equipment may need to be brought into an affected area from further away. Improved availability of equipment strengthens readiness for both overseas and homeland missions, and improves the capability to train on mission essential equipment.

c. ANG Requirements and Acquisition Strategies

See Chapter 5, paragraphs C(1-6).

4. Specialized Equipment

a. Specialized Equipment Shortfalls

The WMD-CST continues to have a limiting factor of non-redundant commercial chemical, biological, radiological, nuclear (CBRN) equipment for monitoring and detection down-range and analysis. Some critical COTS equipment is fielded to the CSTs on a single piece basis. This creates a potential single point of failure for a CST mission. Failure of any of these equipment items would result in a lessening of the team's capability until replacements could be obtained or "floats" could be repositioned.

The CBRNE Emergency Response Force Packages (CERFPs) still have a potential limiting factor in the dual-use Small Portable Expeditionary Aeromedical Rapid Response (SPEARR) gear associated with the medical element. The Air Force allowance standards in the Defense Medical Logistics Supply System (DMLLS) are regularly adjusted to changes in quality controls, safety recalls, obsolescence, or lack of continued manufacturer support. While the SPEARR mission has not changed, the teams must continually assess changing equipment allowances to identify and mitigate potential impact on operations. NGB is procuring current allowance standards.

For CERFPs, additional interoperable, handheld radios were funded in the FY 2007 Emergency Supplemental and the FY 2008 NGREA, and have been requisitioned.

The JISCC systems, which provide the NG with deployable, interoperable communications and information sharing during emergency or major disaster within the domestic environment, are operating under three limiting factors. The first is the need for secure communications, and the second is the need for Joint Task Force (JTF) state expansion modules. The third limiting factor concerns 14 legacy JISCC systems requiring upgrades to bring them up to the JISCC Block 2 standards for the system. The FY 2007 NGREA funded upgrades for secure communications and expansion modules for 10 JISCC packages. This leaves 44 states without these capabilities and the issues of configuration and interoperability when managing a multi-state response.

b. Effects of Shortfalls of Specialized Equipment

The CST and SPEARR issues are limiting factors, with no specific effects unless a failure occurs.

Because the 17 CERFPs lack interoperable, handheld communications organic to their equipment complement, they will remain dependent on external sources for communications with other responders until procurement referenced above is completed.

The JISCC issues are also limiting factors, not specific shortfalls. However, the limiting factors are significant. The need for secure communications and JTF-state expansion modules was identified during responses to Hurricanes Katrina and Rita in 2005. Lack of secure communications in 44 states has delayed coordination on sensitive issues, such as law enforcement and security for critical infrastructure, as well as integration with Title 10 forces. The JTF-state expansion module increases the staff supported from 15 to 80 users; a significant limitation in some scenarios. Meanwhile, units using the older JISCC systems do not have all the capabilities inherent in the Block 2 systems, putting some states and territories at a disadvantage.

Other limiting factors accrue to configuration and training management for a small resource base with multiple configurations. They also preclude full NG compliance with USNORTHCOM Communications Extension Standards Guidance and Telecommunications Rules of Engagement, dated July 27, 2006.

c. Requirements and Acquisition Strategies for Specialized Equipment

Specialized GOTS/COTS equipment for emergencies or response to a major disaster is funded using a combination of ARNG, ANG, Army, and Air Force appropriations, DoD-wide appropriations, e.g., the Chemical and Biological Defense Program (CBDP) funds as well as ANG and ARNG NGREA. The NGB continues to work with DoD to pursue modernization for equipment used by CSTs as technology evolves. The CBDP has programmed increases starting in FY 2010 for research, development, test, and evaluation (RDT&E); procurement; and life-cycle management for CST equipment, although significant unfunded requirements remain. One objective for this CBDP program will be to mitigate or eliminate the single failure points in CBDP equipment mentioned above.

NGB has purchased equipment according to the new SPEARR allowance standards for the 17 CERFPs; delivery, and fielding is projected to occur by December 2008. The NGB will continue to monitor allowance standards and purchase against changes as funding is available.

The NGB is executing the FY 2007 NGREA funds for the 10 JISCC secure communications and JTF-state expansion modules. The remaining 44 sets are on the NGB unfunded priority list.

B. FY 2008 NDAA, Section 1826 Language

Fiscal Year (FY) 2008 National Defense Authorization Act (NDAA), Section 1826, "Additional Reporting Requirements Relating to National Guard Equipment," added the requirements for a statement of the accuracy of past NG equipment inventory projections and a certification from the Chief of the National Guard Bureau setting forth the inventory of equipment items that were due to be procured for the National Guard in the preceding fiscal year, but were not received.

1. Chief, National Guard Bureau (CNGB) Statement

At the present time, NGB is unable to completely satisfy either of the reporting requirements prescribed in Section 1826 of the FY 2008 NDAA due to a general lack of transparency within portions of the Army and Air Force equipment procurement and distribution processes. While both Services have made improvements to these processes and their supporting automation systems in recent years, we still cannot reliably tie a piece of delivered equipment back to its funding source. Because of the multi-year nature of the procurement process, this precludes me from determining how much of the funding provided by Congress for National Guard equipment has been executed and how much is still to be executed. Ultimately, this makes it impossible to precisely determine if these funds are resulting in timely equipment deliveries to National Guard units.

In order to provide the level of transparency and accountability, the CNGB needs to certify future NDAA, Section 1826 reports, Army and Air Force procurement processes must be modified to allow the NGB staff to track funds and equipment from appropriations, through

execution, to equipment delivery. Only then can we monitor the execution status of individual funding sources and provide the level of detail called for in the NDAA. The Office of the Secretary of Defense and the Services are developing process and automation system solutions that will provide this level of transparency and accountability. However, even if these solutions are implemented immediately, it will still take two years or more to gain complete accountability due to the large quantity of funding and equipment currently in the procurement and distribution pipeline. This being the case, the Services would still need to conduct an extensive audit to determine if past deliveries, and those planned for FY 2009 and FY 2010, are commensurate with funding provided in past fiscal years.

2. Army National Guard

As for the Army National Guard (ARNG), we were unable to satisfy the specific reporting requirements of Section 1826 due to our general inability to tie delivered equipment all the way back to its funding source. The Army Staff manages requirements and funding by component, but visibility of the component-split is lost when funds are sent to the Program Executive Offices (PEOs) for execution. This precluded us from assessing the execution status of any funding source for any previous FY, except for certain low-density systems. This meant that in most cases, we were unable to explicitly determine the extent to which these funding sources had been executed as of September 30, 2008 and how much was still to be executed.

Shortcomings in accountability and transparency not withstanding, HQDA has begun to deliver large quantities of modern equipment to ARNG units. We know that, in some cases, production problems have resulted in significant delays in distribution (e.g., M119A2 Howitzer), and that in others DA diverted ARNG equipment or funding to support operational needs (e.g., WIN-T and HMMWVs). But we also know that the Army used funds intended for the Active Component to equip next-deploying ARNG units (e.g., small arms and night vision devices). However, due to transparency problems within the Army's procurement process, it is impossible for us to account for all discrepancies over this period or to accurately reconcile equipment deliveries with past funding.

3. Air National Guard

The manner in which the ANG identifies funding requirements for future years and asset procurement by funding source will significantly change by FY 2011 or FY 2012. The Expeditionary Combat Support System (ECSS) is projected to make it possible to provide a statement of accuracy of the projections required by subsection (b) (5) (D) in earlier reports under this section. ECSS is not designed as a funding or resource system; however, because it is in the development phase, we in the ANG have some input into the capabilities of the design. The input from the ANG may require modifications to the original plan for ECSS. ECSS is designed to improve warfighter capability by transforming Air Force logistics business processes and leveraging ongoing initiatives and capabilities that information technology can deliver. ECSS is projected to integrate the ANG logistics process also; thus, the ANG plans to submit a request to have ECSS take appropriated funding intended to procure equipment and correlate directly to individual equipment items. Once funding is appropriated, ECSS should be aligned against the most critical equipment requirements throughout the year of execution in a database system which updates daily, upon receipt of procured items and/or upon new equipment requirement entries by ANG personnel. With the new requirement in place to provide this statement of accuracy for future

years, we will endeavor to generate periodic reports from our systems which will assist in tracking individual items through the procurement process.

ECSS is the Air Force's system that will provide the required solution for the ANG; however, ECSS will not be fully operational until calendar year 2012. Thus, under the current ANG system, the manner in which the ANG increases capability through Service procurement funding makes it difficult, if not impossible, to provide a certified inventory in that case. As a consequence, it's not feasible to certify an inventory precisely in the manner prescribed by the new law in Section 10541(d)(2), Title 10, United States Code.

For FY 2009–2010, the ANG will re-prioritize equipment throughout each year of execution, using our current tracking processes, to discern which equipment was "due to be procured" during FY 2008. Utilizing our current legacy database systems to provide this data, we would have required a "snapshot" at the beginning of FY 2008 which identified the total funded requisitions for the upcoming fiscal year. As an example, we have a current snapshot of remaining FY 2009 requisitions, indicating 12,000 items are currently funded for FY 2009. A cursory review of the status of these requisitions at the end of FY 2008 will provide us the data for next year's National Guard and Reserve Equipment Report (NGRER).

4. Conclusion

In recent years, the Services have improved their processes and automation systems to facilitate the procurement and distribution of equipment, and to some extent, the tracking of these resources through the process. However, it is still not possible for us to verify that all funding intended for the National Guard is resulting in the delivery of equipment to our units. The key to full transparency and accountability is to ensure the Services track equipment deliveries by component, unit, funding source, and procurement unit cost; that they do so from appropriation through delivery; and that they make this data readily available to all stakeholders. The Services are currently working with OSD to accomplish these goals in the near term.

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Aaronym	Nomenclature
Acronym	
AAO	Approved Acquisition Objective (Marine Corps)
AAO	Army Acquisition Objective (Army)
AATC	Air National Guard/Air Force Reserve Test Center
AAV	Assault Amphibious Vehicle
ABCS	Army Battle Command System
AC	Active Component
ACC	Air Combat Command
ACP	Army Campaign Plan
AD	Active Duty
ADS	Airlift Defensive Systems
AEA	Airborne Electronic Attack
AEERC	Army Enterprise Equipping and Reuse Conference
AEF	Aerospace Expeditionary Force
AESA	Active Electronically Scanned Array
AETC	Air Education and Training Command
AF	Air Force
AFB	Air Force Base
AFH	Actual Flying Hours
AFMC	Air Force Materiel Command
AFR	Air Force Reserve
AFRC	Air Force Reserve Command
AFRL	Air Force Research Laboratory
AFS	Air Force Station
AFSOC	Air Force Special Operations Command
AFSPC	Air Force Space Command
AGM	Air-to-ground Missile
AH	Attack Helicopter
AIFF	Advanced Identification Friend or Foe
AIM	Air-to-air Missile
AMC	Air Mobility Command
AMCM	Airborne Mine Countermeasures
AME	Alternate Mission Equipment
AMI	Avionics Midlife Improvement
AMP	Avionics Modernization Program
ANG	Air National Guard
ANGB	Air National Guard Base
AOC	Air and Space Operations Center
AOR	Area of Responsibility
APC	Armored Personnel Carrier
APN	Aircraft Procurement Navy
APU	Auxiliary Power Unit
AR	United States Army Reserve
ARB	Air Reserve Base
ARC	Air Reserve Component
ARFORGEN	Army Force Generation
ARH	Armed Reconnaissance Helicopter
ARI	Automatic Reset Induction
ARNG	Army National Guard
ARPL	Army Resourcing Priorities List
ARS	Air Refueling Squadron
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A	N
Acronym	Nomenclature
AS	Airlift Squadron
ASC	Army Sustainment Command
ASOC	Air Support Operations Center
ASV	Armored Security Vehicle
ASW	Antisubmarine warfare
AT/FP	Anti-terrorism and Force Protection
AT3	Advanced Tactical Targeting Technology
ATLAS	All-terrain Lifter Army System
ATM	Air Traffic Management
ATP	Advanced Targeting Pod
AVCRAD	Aviation Classification Repair Activity Depots
BCS	Battle Control System
BCS3	Battle Command Sustainment Support System
BCS-M	Battle Control System–Mobile
BCT	Brigade Combat Team
BDA	Bomb Damage Assessment
BFV	Bradley Fighting Vehicle
BFVS	Bradley Fighting Vehicle System
BLOS	Beyond Line-of-sight
BOG	Boots on the Ground
BOS	Budget Operating System
BOSS	Boom Operator Simulation System
BRAC	Base Realignment and Closure
DRAC	Base Realignment and Closure
C2	Command and Control
C2 C2ISR	Command and Control, and Intelligence, Surveillance, and Reconnaissance
C2ISK	Command, Control, Communications, Computers,
C4ISR	Intelligence, Surveillance and Reconnaissance
CA	Civil Affairs
CAARNG	California Army National Guard
CAB	Combat Aviation Brigade
CACS	Command and Control Squadron
CAF	Combat Air Force
CAMEL	Unit Water Pod System
CAS	Close Air Support
CBBF	Contour Box Beam Fitting
CBMU	Construction Battalion Maintenance Unit
CBPSS	Chemical Biological Protective Shelter System
CBRN	Chemical, Biological, Radiological, and Nuclear
CBRNE	Chemical, Biological, Radiological, Nuclear, and High-yield Explosive
CCIP	Common Configuration Improvement Program
CCMRF	CBRNE Consequence Management Response Force
CDU	Critical Dual Use
CENTCOM	United States Central Command
CESE	Civil Engineering Support Equipment
CFACC	Combined Force Air Component Commander
CFCC	Commercial Fire Control Computer
СН	Cargo Helicopter
CHARCS	Counterintelligence/Human Intelligence Automated Reporting and Collection System

Acronym	Nomenclature
CHU	Container Handling Unit
CLASSRON	Class Squadrons
CMDS	Countermeasures Dispensing System
СМО	Consolidated Maintenance Organization
CMS	Countermeasures Management System
CNGB	Chief, National Guard Bureau
CNO	Chief of Naval Operations
CNS	Communication, Navigation, and Surveillance
COCOM	Combatant Command
COMCAM	Combat Camera
CONECT	Combat Network Communications Technology
CONUS	Continental United States
COTS	Commercial Off-the-shelf
CPFH	Cost Per Flying Hour
CR-I	Crisis Response-Immediate
CRMT	Crew Resource Management Trainer
CRPL	CBRNE Response Posture Level
CRTC	Combat Readiness Training Center
CS	Combat Support
CS	Crown Skin
CSAR	Combat Search and Rescue
CSMS	Combined Support Maintenance Shop
CSP	Consolidated Storage Program
CSS	Combat Service Support
CSS	Cryptologic Support Site
CST	Civil Support Team
CURL	Combined Unfunded Requirements List
CVTS	Combat Vehicle Training System
CVW	Carrier Air Wing
CY	Calender Year
DA	Department of the Army
DAGR	Defense Advanced Global Positioning System Receiver
DART	Disaster Area Response Team
DCGS	Distributed Common Ground System
DET	Displaced Equipment Training
DGS	Distributed Ground Station
DHS	Department of Homeland Security
DISA	Defense Information Systems Agency
DLRC	Deployable Learning Resource Center
DMO	Distributed Mission Operations
DMT	Distributed Mission Training
DoD	Department of Defense
DoDD	Department of Defense Directive
DOG	Deployment Operations Group
DoN	Department of the Navy
DPEM	Depot Purchased Equipment Maintenance
DRRS	Defense Readiness Reporting System
DSCA	Defense Support to Civil Authorities

Acronym	Nomenclature
DTOC	Distributed Training Operations Center
DVTE	Deployable Virtual Training Environment
EA	Electronic Attack
EAP	Electronic Attack Pod
ECS	Equipment Concentration Site
EFV	Expeditionary Fighting Vehicle
EGI	Embedded Global Positioning System/Internal Navigation System
EMAC	Emergency Management Assistance Compact
EO	Electro-optical
EOD	Explosive Ordnance Disposal
EODOSU	Explosive Ordnance Disposal Operational Support Unit
EOH	Equipment On-hand
EPA	Environmental Protection Agency
EPCS	Electronic Propeller Control System
EPLRS	Enhanced Position Location Reporting System
ESU	Expeditionary Support Unit
EW	Electronic Warfare
EXORD	Execute Order
F2T2EA	Find, Fix, Track, Target, Engage, and Assess
FAA	Federal Aviation Administration
FAC	Forward Air Control
FAC-A	Forward Air Control-Airborne
FBCB2	Force XXXI Battle Command, Brigade and Below
FCMT	Full Combat Mission Trainer
FEMA	Federal Emergency Management Agency
FFG	Guided Missile Frigate
FLIR	Forward-looking Infrared
FMS	Field Maintenance Shop
FMT	Full Mission Trainer
FMTV	Family of Medium Tactical Vehicles
FMV	Full Motion Video
FOC	Full Operational Capability
FORCECOM	USCG Force Readiness Command
FRP	Fleet Response Plan
FSO	Field Security Operations
FTS	Full-time Support
FTU	Formal Training Unit
FW	Fighter Wing
FY	Fiscal Year
FYDP	Future Years Defense Plan
G3	Deputy Chief of Staff for Operations and Plans
G4	Fourth Generation
G8	Deputy Chief of Staff for Programs
GA	Guardian Angel
GATM	Global Air Traffic Management
GAWS	Guardian Angel Weapons System
UAND	Suardian Angel Weapons System

Acronym	Nomenclature
GCAS	Ground Collision Avoidance System
GCS	Ground Control Station
GCSS	Global Combat Support System
GNO	Global Network Operations
GPH	Gallons of Water Per Hour
GPS	Global Positioning System
GSORTS	Global Status of Resources and Training System
GWOT	Global War on Terrorism
HA/DR	Humanitarian Assistance/Disaster Relief
HARM	High-speed Anti-radiation Missile
HD	High Definition
HEMTT	Heavy Expanded Mobility Tactical Truck
HET	Heavy Equipment Transport
HF	High Frequency
HH	Hospital Helicopter
HIMARS	High Mobility Artillery Rocket System
HLD	Homeland Defense
HLS	Homeland Security
HMCS	Helmet Mounted Cueing System
HMEE	High Mobility Engineer Excavator
HMLA	Marine Light Attack Helicopter Squadron
HMMWV	High Mobility Multipurpose Wheeled Vehicle
HQ	Headquarters
HQDA	Headquarters, Department of the Army
HS	Helicopter Submarine
HSC	Helicopter Sea Combat
HTS	High-speed Antiradiation Missile (HARM) Targeting System
HTV	Heavy Tactical Vehicles
HUMINT	Human Intelligence
IAHHS	Improved Altitude Hold and Hover Stabilization
IAMS	Inertially-aided Munitions
IAP	International Airport
IBR	Intelligence Broadcast Receiver
ICAM	Improved Chemical Agent Monitor
ICAO	International Civil Aviation Organization
IED	Improvised Explosive Device
IEW	Intelligence and Electronic Warfare
I-FACT	Indirect Fire—Forward Air Control Trainer
IFF	Identification, Friend or Foe
IISR	Integrated Intra-squad Radio
ILO	In-lieu-of
IMA	Individual Mobilization Augmentee
INMARSAT	International Maritime Satellite
INS	Inertial Navigation System
IO	Information Operations
IR	Infrared
IRCM	Infrared Countermeasures

Acronym	Nomenclature
ISMT	Indoor Simulated Marksmanship Trainer
ISR	Intelligence, Surveillance, and Reconnaissance
ITAS	Improved Target Acquisition System
	improvod raiget requisition system
J/CFACC	Joint/Combined Force Air Component Commander
JASSM	Joint Air-to-surface Stand-off Missile
JATO	Jet Assisted Takeoff
JCA	Joint Cargo Aircraft
JCS	Joint Chiefs of Staff
JCTD	Joint Capability Technology Demonstration
JDAM	Joint Direct Attack Munitions
JFHQ	Joint Force Headquarters
JFMCC	Joint Force Maritime Component Commander
JHMCS	Joint Helmet-mounted Cueing System
JNN	Joint Network Node
JPADS	Joint Precision Airdrop System
JRB	Joint Reserve Base
JSF	Joint Strike Fighter
JSpOC	Joint Space Operations Center
JSTARS	Joint Surveillance Target Attack Radar System
JSTDS	Joint Services Transportable Decontamination System
JTAC	Joint Terminal Attack Controller
JTF	Joint Task Force
kW	Kilowatt
LAIRCM	Large Aircraft Infrared Countermeasures
LAN	Local Area Network
LAN LARS	Local Area Network Lightweight Airborne Recovery System
LAN LARS LAV	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle
LAN LARS LAV Ib	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound
LAN LARS LAV Ib LCAC	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion
LAN LARS LAV lb LCAC LCS	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship
LAN LARS LAV Ib LCAC LCS LEDET	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment
LAN LARS LAV Ib LCAC LCS LEDET LHS	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number
LAN LARS LAV lb LCAC LCS LEDET LHS LIN LMTV	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle
LAN LARS LAV lb LCAC LCS LEDET LHS LIN LMTV LOG	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN LMTV LOG LOS	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN LMTV LOG LOS LPCR	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight Low Power, Color Radar
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN LMTV LOG LOS LPCR LRAS	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight Low Power, Color Radar Long Range Advanced Scout Surveillance System
LAN LARS LAV lb LCAC LCS LEDET LHS LIN LMTV LOG LOS LPCR LRAS LRC	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight Low Power, Color Radar Long Range Advanced Scout Surveillance System Learning Resource Center
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN LMTV LOG LOS LPCR LRAS LRC LSS	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight Low Power, Color Radar Long Range Advanced Scout Surveillance System Learning Resource Center Laser Spot Search
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN LMTV LOG LOS LPCR LRAS LRC LSS LST	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight Low Power, Color Radar Long Range Advanced Scout Surveillance System Learning Resource Center Laser Spot Search Laser Spot Track
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN LMTV LOG LOS LPCR LRAS LRC LSS LST LSWAN	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight Low Power, Color Radar Long Range Advanced Scout Surveillance System Learning Resource Center Laser Spot Search Laser Spot Track Logistics Support Wide Area Network
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN LMTV LOG LOS LPCR LRAS LRC LSS LST LSWAN LTV	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight Low Power, Color Radar Long Range Advanced Scout Surveillance System Learning Resource Center Laser Spot Search Laser Spot Track Logistics Support Wide Area Network Light Tactical Vehicles
LAN LARS LAV Ib LCAC LCS LEDET LHS LIN LMTV LOG LOS LPCR LRAS LRC LSS LST LSWAN	Local Area Network Lightweight Airborne Recovery System Light Armored Vehicle Pound Landing Craft, Air Cushion Littoral Combat Ship Law Enforcement Detachment Load Handling System Line Item Number Light Medium Tactical Vehicle Logistics Line of Sight Low Power, Color Radar Long Range Advanced Scout Surveillance System Learning Resource Center Laser Spot Search Laser Spot Track Logistics Support Wide Area Network

Acronym	Nomenclature
MACS	Marine Air Control Squadron
MADL	Multifunction Advanced Data Link
MAF	Mobility Air Forces
MAFFS	Modular Airborne Firefighting System
MAG	Marine Aircraft Group
MAGTF	Marine Air-Ground Task Force
MAJCOM	Major Command
MANPADS	Man-portable Air Defense Systems
MARCORSYSCOM	Marine Corps Systems Command
MARFORRES	Marine Forces Reserve
MASS	Modular Aerial Spray System
MATES	Maneuver Area Training Equipment Site
MAW	Marine Aircraft Wing
MC	Marine Corps
MC4	Medical Communications for Combat Casualty Care
MCAG	Maritime Civil Affairs Group
MCAS	Marine Corps Air Station
MCCC	Mobile Consolidated Command Center
MCLC	Marine Corps Logistics Command
MCM	Mine Countermeasures
MCS	Maneuver Control System (Army)
MCS	Modular Control System (Air Force)
MDS	Mission Design Series
MDVA	Multi-disciplinary Vulnerability Assessments
ME	Maritime Law Enforcement Specialist rating
MEB	Maneuver Enhancement Brigade
MEDEVAC	Medical Evacuation
MEEL	Mission Essential Equipment List
MESF	Maritime Expeditionary Security Force
MESG	Maritime Expeditionary Security Group
MET	Mission Essential Task List
MFCD	Multi-function Color Display
MFOM	Multiple Launch Rocket System Family of Munitions
MHC	Mine Hunter Coastal
MHE	Materiel Handling Equipment
MIE	Major Items of Equipment
MILCON	Military Construction
MILSTAR	Military Strategic and Tactical Relay
MIW	Mine Warfare
MOA	Memorandum of Agreement
MOS	Military Occupational Specialty
MOTR	Maritime Operational Threat Response
MPRA	Maritime Patrol Reconnaissance Aviation
MRAP	Mine Resistant Ambush Protected
MRD	Manpower Requirements Determination
MSRON	Maritime Expeditionary Security Squadron
MSST	Maritime Safety and Security Team
MSU	Mobile Support Unit
MTBM	Mean Time Between Maintenance

Acronym	Nomenclature
MTEC	Mission Training Engineering Center
MTOE	Modified Table of Organization and Equipment
MTS	Movement Tracking System
MTT	Multi-task Trainer
MTV	Medium Tactical Vehicle
MTVR	Medium Tactical Vehicle Replacement
MTVR-ODS	MTV Replacement-Operator Driving Simulator
MWS	Missle Warning System
MYP	Multi-year Procurement
NAS	Naval Air Station
NASA	National Aeronautics and Space Administration
NAVELSG	Naval Expeditionary Logistics Support Group
NBC	Nuclear, Biological, and Chemical
NCC	Navy Component Commander
NCD	Naval Construction Division
NCF	Naval Construction Force
NCFSU	Naval Construction Force Support Unit
NCR	Naval Construction Regiment
NCW	Naval Coastal Warfare
NDAA	National Defense Authorization Act
NECC	Navy Expeditionary Combat Command
NEIC	Navy Expeditionary Intelligence Command
NET	New Equipment Training
NG	National Guard
NGB	National Guard Bureau
NGPA	National Guard Personnel, Army
NGREA	National Guard and Reserve Equipment Appropriation
NGRER	National Guard and Reserve Equipment Report
NHC	National Hurricane Center
NMCB	Naval Mobile Construction Battalion
NMS	National Military Strategy
NORTHCOM	United States Northern Command
NRF	Navy Reserve Force
NRO	National Reconnaissance Office
NSC	National Security Cutter
NTISR	Nontraditional Intelligence, Surveillance, and Reconnaissance
NUFEA	Navy Unique Fleet Essential Airlift
NVG	Night Vision Goggles
NVIS	Night Vision Imaging System
NW	Network Warfare
NWO	Network Warfare Operations
O&M	Operation and Maintenance
000	Overseas Contingency Operations
OCONUS	Outside the Continenantal United States
ODS	Operation Desert Storm
ODS	Operator Driving Simulator
OEF	Operation Enduring Freedom
	- r

Acronym	Nomenclature
OFP	Operational Flight Program
OH	On-hand
OIF	Operation Iraqi Freedom
ONE	Operation Noble Eagle
OPA	Other Procurement, Army
OPLAN	Operation Plan
OPN	Other Procurement, Navy
OPNAV	Chief of Naval Operations
ORD	Operational Requirement Document
OS	Operations Squadron
OSD	Office of the Secretary of Defense
OSS	Operations Support Squadron
OSU	Operational Support Unit
OTV	Outer Tactical Vest
PC	Personal Computer
PDM	Program Depot Maintenance
PDTE	Pre-deployment Training Equipment
PE	Precision Engagement
PLS	Palletized Load System
PM	Program Manager
PMC	Procurement Marine Corps
POC	Predator Operation Center
POL	Petroleum, Oils, and Lubricants
POM	Program Objective Memorandum
PPBES	Planning, Programming, Budgeting, and Execution System
PPE	Personal Protective Equipment
PPS	Propulsion Pod System
PRESBUD	President's Budget
PRIDE	Planning Resource for Infrastructure Development and Evaluation
PS	Port Security Specialist rating
PSU	Port Security Unit
PUC	Procurement Unit Cost
PW	Pratt & Whitney
RAMMP	Reliability and Maintainability Maturation Program
RC	Reserve Component
RDT&E	Research, Development, Test, and Evaluation
REF	Rapid Equipping Force
RERP	Reliability Enhancement and Re-engining Program
RFF	Request for Forces
RFI	Rapid Fielding Initiative
RFRS	Reserve Force Readiness System
RG	Reconnaissance Group
ROC	Reaper Operation Center
ROPS	Range Operations Squadron
ROVER	Remote Observation Video Enhanced Receiver
ROWPU	Reverse Osmosis Water Purification Unit
RRC	Requirements Review Council

Acronym	Nomenclature
RSG	Regional Support Group
RSMS	Readiness Sustainment Maintenance Site
RT	Reserve Training
RTC	Reserve Training Center
RTFL	Rough Terrain Forklift
RVS	Reconfigurable Vehicle Simulator
RW	Reconnaissance Wing
RWR	Radar Warning Receiver
SAD	State Active Duty
SADL	Situation Awareness Data Link
SAFIRE	Surface-to-air Fire
SAM	Surface-to-air Missile
SAPI	Small Arms Protective Insert
SATCOM	Satellite Communications
SAW	Squad Automatic Weapon
SCORE	Southern California Offshore Range
SCU	Software Core Upgrade
SEAD	Suppression of Enemy Air Defenses
SECDEF	Secretary of Defense
SELRES	Selected Reserve
SEMF	Surface Equipment Maintenance Facility
SERE	Survival, Evasion, Resistance, and Escape
SICPS	Standardized Integrated Command Post Systems
SIGINT	Signals Intelligence
SINCGARS	Single-channel Ground and Airborne Radio System
SLOS	Secure Line-of-sight
SMCR	Selected Marine Corps Reserve
SMFCD	Smart Multi-function Color Display
SOCOM	Special Operations Command
SOPS	Space Operations Squadron
SOUTHCOM	Southern Command
SPIRIT	Special Purpose Intelligence Remote Integrated Terminal
SPP	State Partnership for Peace
SS	Senior Scout
SSU	Ship Support Units
STAMP	Standard Air Munitions Package
STAR	Structural Augmentation Roadmap
STRAPP	Standard Tanks, Racks, Adaptors, and Pylons Packages
SV	Scathe View
SWE	Surface Warfare Enterprise
SWS	Space Warning Squadron
T/A	Training Allowance
ТАСР	Tactical Air Control Party
TAG	The Adjutant General
TARS	Theater Air Reconnaissance System
TAWS	Terrain Awareness and Warning System
TC-AIMS	Transportation Coordinators Automated Information Management System

Acronym	Nomenclature
TCAS	Traffic Alert and Collision Avoidance System
ТСТО	Time-Compliance Technical Order
TDA	Table of Distribution and Allowances
TO&E	Table of Organization and Equipment
ТОА	Table of Allowance
TOCS	Tactical Operation Combat System
TOE	Table of Organization and Equipment
TOLD	Take-off and Landing Data
TPE	Theater Provided Equipment
TPSB	Transportable Port Security Boat
TQG	Tactical Quiet Generator
TRADOC	U.S. Army Training and Doctrine Command
TRASYS	Training Systems
TRP	Тгоор
TSW	Tactical Support Wing
TWPS	Tactical Water Purification System
TWS	Thermal Weapon Sight
TWV	Tactical Wheeled Vehicle
U.S.C.	United States Code
UARRSI	Universal Aerial Refueling Receptacle Slipway
UAS	Unmanned Aerial System
UAV	Unmanned Aerial Vehicle
UDP	Unit Deployment Program
UE	Unit Equipped
UFR	Unfunded Equipment Requirement
UH	Utility Helicopter
USAR	United States Army Reserve
USCG	United States Coast Guard
USCGR	United States Coast Guard Reserve
USMC	United States Marine Corps
USMCR	United States Marine Corps Reserve
USNORTHCOM	United States Northern Command
UTES	Unit Training Equipment Site
V/STOL	Vertical/Short Takeoff and Landing
VAQ	Navy Tactical Electronics Warfare Squadron
VAW	Navy Carrier Airborne Early Warning Squadron
VCC	VHSIC Central Computer
VCC+	VCC Plus
VCCT	Virtual Combat Convoy Trainer
VCCT-M	Virtual Combat Convoy Trainer-Marine
VDL	Video Downlink
VHF	Very High Frequency
VHSIC	Very High Speed Integrated Circuitry
VHSIC CC	Very High Speed Integrated Circuitry Central Computer
VIP	Very Important Person
VMU	Marine Unmanned Aerial Vehicle Squadron
VSAT	Very Small Aperture Satellite Terminal

Acronym	Nomenclature
WCMD	Wind Corrected Munitions Dispenser
WEPTAC	Weapons and Tactics Conference
WIN	Warfighter Information Network
WMD	Weapons of Mass Destruction
WRMS	War Reserve Materiel Stock
WS	Weapon System
WSEP	Weapon System Evaluation Program
WSS	Weapon Systems Sustainment
WST	Weapon Systems Trainer

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