

NOT FOR PUBLICATION UNTIL  
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ARMED SERVICES COMMITTEE

STATEMENT OF  
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DEPUTY CHIEF OF NAVAL OPERATIONS  
FLEET READINESS AND LOGISTICS  
BEFORE THE  
SUBCOMMITTEE ON READINESS AND MANAGEMENT SUPPORT  
OF THE  
SENATE ARMED SERVICES COMMITTEE  
ON  
“ENCROACHMENT” ISSUES HAVING A POTENTIALLY ADVERSE IMPACT ON  
MILITARY READINESS

20 MARCH 2001

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Mr. Chairman and members of the Committee, thank you for the opportunity to speak to you about some of the challenges we face in maintaining the readiness of our naval forces.

## **I. TRAINING RANGE READINESS OVERVIEW**

Our forward-deployed naval forces are strategically positioned in key regions of the world that are vital to our nation's trade, communications, and political interests. Mobile, flexible, and sustainable, these naval forces operate unencumbered by sovereignty issues. It is precisely because of their credible combat capability that we play a key role in maintaining worldwide economic, political and military stability. Our naval forces are lethal war fighting instruments immediately available to our joint-combined warfare commanders when needed because they are trained and ready for combat. Training and readiness form the solid foundation of our credible combat capability, and no amount of technology, hardware, personnel or leadership can achieve this readiness without access to quality training ranges in the United States to prepare our Sailors and Marines for the rigors of combat.

Our ranges, individually and collectively, provide land, sea, and airspace where our Sailors and Marines can train as they will fight and test and evaluate new capabilities for the future. Ranges provide a controlled and safe environment with threat representative targets that enable our forces to conduct realistic combat-like training as they undergo all phases of the graduated buildup needed for combat ready deployment. They also provide instrumentation that captures the performance of our tactics and equipment in order to provide the feedback and assessment

that is essential for constructive criticism of personnel and equipment. Finally, live fire ranges allow our naval forces to conduct a complete assessment of their ability to put weapons on target with the highest degree of precision possible, and under conditions which mimic the stresses of combat to the greatest degree possible.

There is an obvious relationship between training and maximum performance in combat. The trained aircrew requires fewer sorties to accomplish assigned missions, which in turn, results in less risk to personnel and equipment, and less chance of collateral damage to innocent noncombatants or friendly forces. Training ranges are where the learning takes place and where the skills are honed. In simple terms, few, if any, marksmen have ever picked up a rifle and been able to hit the bullseye without extensive and repetitive practice at a rifle range.

From a historical perspective, the relationship between practice and success in combat has repeatedly been shown to exist. During the air war over Vietnam in late 1968, the Navy lost 10 aircraft and shot down only 9 MiGs. They also fired over 50 air-to-air missiles without achieving a single kill. In 1969, the kill ratio increased to 12.5 to one. This dramatic improvement is directly attributable to the introduction of Top Gun graduates to the Fleet. Top Gun trained aircrews, then as today, use a comprehensive and intensive ground and flight syllabus that includes extensive, realistic, combat-like training on basic and instrumented ranges. Our experience from combat missions conducted during Operation Desert Fox and in the Balkans demonstrates a strong statistical correlation between realistic training and combat success. The Strike Fighter Advanced Readiness Program (SFARP), the Navy's graduate level strike fighter school that is scheduled during the early part of each Carrier Battle Group's

training cycle, is having the greatest positive effect on combat success of all strike training done during the training cycle before deployment. Like Top Gun, the single most critical aspect of this training is access to quality airborne instruction on realistic training ranges, where the end-to-end process required to safely and successfully employ live ordnance is exercised.

While our naval forces may have decreased in number, our requirement for ranges has not. Today's higher performance aircraft and ships employ weapons of greater capability, but also of greater complexity and unique delivery tactics. The combination of capability, complexity, and tactics also translates into the need for larger ranges.

When our vital ranges are not available for training because they are encumbered by encroachments, our state of readiness is at risk. This is complicated by the fact that encroachment issues are complex, varied, and involve multiple federal, state, and local agencies, the Congress, non-governmental organizations and the public. In dealing with its effects, we have borne a significant increase in administrative and human costs (time away from home, flight hour costs, travel expenses etc.) to achieve an acceptable level of readiness. In some instances, we have been unable to achieve the desired level. We worry that this trend will continue.

Encroachment negatively affects readiness by reducing the number of available training days; reducing training realism as tactics are modified (altitudes, airspeeds, profiles) to comply with environmental laws; causing a loss of range access altogether (either temporary or permanent); decreasing scheduling flexibility and complexity (when factoring in long lead times to assure

legal compliance); and increasing time away from home during training prior to deployment. Encroachment is often gradual and can go unnoticed, but its impacts cumulatively erode our ability to deploy combat ready Sailors and Marines. Knowledge of these domestic pressures by our allies may influence them to deny use of their ranges by our forces.

We believe that environmental regulation has limited, and will increasingly limit our access to training ranges, and this loss of training opportunities will reduce fleet combat readiness proportionately. The Senior Readiness Oversight Council identified nine areas where DoD organizations should focus resources to mitigate the effects of encroachment through sustainable action plans and an active outreach program. The Navy and Marine Corps have adopted this approach, and have completed most elements of a coherent and comprehensive strategy that identifies core ranges and operations areas and initiatives to sustain access to them. The strategy consists of a roadmap that links range requirements and capabilities to readiness; determines readiness impacts and alternatives when a range become unavailable; minimizes encroachment impacts via sustainable action plans; reaches out to neighboring communities; emphasizes opportunities for mitigation to reduce or avoid impacts; and formalizes a Training Range Organizational structure. We believe this coordinated Service-wide approach to sustain our core ranges will guide us in this ever-challenging encroachment environment. The Department of the Navy is committed to and owes our Sailors and Marines nothing less than the finest and most realistic combat like training before sending them in harms' way. We have a strong history of successful environmental stewardship and will continue to be environmentally responsible in all aspects of our mission performance.

## **II. ENCROACHMENT TRENDS**

Our naval forces must meet the mission and readiness mandate established in Title 10 of the US Code that directs us to ...“be organized, trained, and equipped primarily for prompt and sustained combat incident to operations at sea.” Today we strive to meet this mandate in the face of statutory and regulatory restrictions that can have an adverse effect on our ability to operate, test, and train realistically, so that we are ready to carry out any contingency operation that might arise when we deploy. These challenges are further exacerbated by the residential and commercial development that increasingly surrounds our once-isolated installations and ranges. This “encroachment” has made many of our installations the habitat of choice for a number of threatened and endangered species, and at times inhibits our ability to train effectively

### **A. Regulatory Overview**

Since 1970, there has been significant growth in environmental legislation. In the last ten years 32 major pieces of federal environmental legislation have been adopted or amended. This tally does not include environmental regulatory programs mandated by Executive Order. It also does not include state and local environmental laws and regulations.

Further complicating interpretation of this legal regime is the application of the “precautionary approach” for managing protected resources. The precautionary approach assumes that in the absence of scientific information to the contrary, we must assume that the proposed activity will harm the environment. We are then encouraged by regulatory agencies to include mitigation measures that err on the side of conservatism.

Major environmental regulatory programs that have the most potential to affect our maritime readiness are: Marine Mammal Protection Act (MMPA); Endangered Species Act (ESA); Coastal Zone Management Act (CZMA); National Marine Sanctuaries Act; Magnuson-Stevens Act (Essential Fish Habitat); and the Migratory Bird Treaty Act. The reach of these six environmental regulatory programs is broad, affecting activity in both US waters and on the high seas. While some of these laws provide for Presidential Exemption, we have declined to pursue this option to date. Our intent rather, is to comply with the law in a manner consistent with our national security imperatives, and not seek exemption from it.

The Executive Orders on Coral Reefs and Marine Protected areas also have the potential to impact our training activities.

## **B. Encroachment Impacts**

In addition to existing legal requirements, our ability to train is affected by increasing levels of urban development around our once-isolated installation and ranges. Readiness and training areas most vulnerable to encroachment are: live-fire ranges, so are training and testing ranges

where sonar and explosive sound generators are used, and many Navy and Marine Corps bases/stations.

**1. Live-Fire Ranges** - The continued use of live-fire ranges for Navy training and testing activities is currently threatened by regulatory constraints. We are most concerned about three important ranges: San Clemente Island (California), Vieques Island (Puerto Rico), and the Farallon De Medinilla (near Guam). These ranges are the only U.S.-owned locations on the east and west coasts and in the Western Pacific where both Naval Surface Fire Support and air-to-ground training operations can be conducted using live ordnance. Regulatory constraints at these ranges principally concern compliance with the National Environmental Policy Act (NEPA), ESA, and the Migratory Bird Treaty Act.

The range and OPAREA at San Clemente Island accommodate Naval Surface Fire Support, air-to-ground ordnance delivery operations, and special operations. The United States owns the entire island. Its location near San Diego is critical for efficient use of training dollars, and is the only ship-to-shore range left in the eastern Pacific. San Clemente Island is also home to the most endangered bird in the U.S. -- the San Clemente Island Loggerhead Shrike. We are spending \$2.5 million annually for the protection of 42 birds in the wild and 64 birds in a captive breeding population. The population had been as low as 13 birds. The birds' breeding season results in restrictions being placed on shore bombardment exercises, as well as other types of otherwise authorized ordnance delivery between February and June, and during the fire season between June and October.



The beaches at the Vieques Inner Range are used by nesting sea turtles. Navy's practice has been to relocate turtle eggs during amphibious landings and other military exercises on the Inner Range. In 1991, Navy built a sea turtle hatchery on Vieques to incubate relocated eggs. As a result, over 17,000 hawksbill and leatherback sea turtle eggs have been successfully hatched and introduced into the environment. During formal consultations under Section 7 of the ESA, we agreed to institute precautionary conservation measures not previously employed. In response, the USFWS issued the favorable Biological Opinion we needed to conduct pre-deployment battle group certification exercises in conformance with the requirements of the ESA. These precautionary measures included: (1) limited night-time use of inert ordnance on the range to 60 minutes total or only ten percent of total Naval Surface Fire Support (NSFS) firing and 30 percent of total bombing allowed during night-time; (2) forbade use of illumination rounds after 11:00 p.m. with a 60-minute maximum total time of illumination per night (including Naval and aircraft dropped flares, artillery and mortars over both water and land); (3) required constant aerial surveillance of the range and surrounding waters by certified biologists during the day; and (4) halted the entire training exercise for a Carrier Battle Group in the event of observing a single sea turtle either on the range or within 1,000 yards of shore. The total cost for compliance with these requirements during Composite Training Unit Exercises, Joint Task Force Exercises, and Supporting Arms Coordination Exercises was approximately \$300,000 per exercise. This was in spite of the fact that our aggressive conservation program led directly to increases in the turtle population on Navy beaches at Vieques while we conducted continuous training operations from 1942 onward in the absence of these precautionary measures. In fact, the sea turtle population inhabiting Navy beaches has grown at a faster rate than sea turtle populations inhabiting public beaches on Puerto Rico.

The Farallon de Medinilla (FDM) Target Range, located near Guam, is leased from the Government of the Commonwealth of the Marianas, and is the only US-controlled live-fire range in the western Pacific. It supports, on average, two to three unit level training evolutions and one large-scale exercise per year for the air wing of our Yokosuka, Japan based forward-deployed naval forces. FDM is the only target range for supporting large-scale exercises such as the Strike Fighter Advanced Readiness Program. Normally conducted at the Fallon, Nevada Strike Fighter Training Complex (Naval Air Station, Fallon), FDM facilitates this mandatory training without the necessity for squadrons to depart the Western Pacific Theater.

These SEVENTH Fleet forces must be maintained at the highest readiness levels, and without access to live-fire training, the air wing would degrade to “unready” within six months

The FDM range is home to several species of migratory seabirds and two endangered species. Continued use of the island by these birds, and supporting population survey data, indicates that our training activities have not had a significant effect on the birds. Nevertheless, a complaint was filed in DC District Court in December 2000 to stop our use of FDM as a bombing range. The lawsuit asserts that the provisions of the 1918 Migratory Bird Treaty Act apply to military operations. Plaintiffs have indicated that should they win this lawsuit, they will attempt to enjoin other DOD live-fire areas where migratory birds are present.

Our use of military ranges over the years has resulted in the presence of unexploded ordnance (UXO). In the past, we addressed UXO on active/inactive ranges by performing surface sweeps (pickup of UXO on surface), posting warnings, and fencing, if necessary. There is increasing

pressure to regulate UXO on ranges more stringently than in the past. We are committed to ensuring that active range operations do not present a threat to human health or the environment off-range and see no compelling reason to regulate munitions when used on range for their intended purpose.

Regional air quality requirements have threatened to encroach upon our research, development, test, and evaluation ranges. For example, in the Los Angeles-Long Beach, California, area, federal and state regulators proposed moving the commercial shipping channel farther offshore to reduce emissions from commercial shipping activity. This proposed offshore route would have routed commercial traffic (approximately 5,000 commercial ships per year or one every three hours) through the middle of the Sea Range operated by the Naval Air Warfare Center, Weapons Division Point Mugu (California), severely restricting use. The Sea Range is a principal test and evaluation facility for airborne and naval surface weapons systems and is one of the most extensively instrumented large-scale sea ranges in the world. The Fleet uses this range for weapons firing exercises, including air-to-air, air-to-surface, and subsurface weapons, as well as bombs, mines, and guns.

To avoid losing the capabilities of this valuable resource, Navy initiated a multi-year scientific effort that concluded that the offshore route did not significantly reduce emissions in the onshore areas of concern, and identified other reduction strategies, such as slowing commercial vessels in the existing channel, that provided better solutions for improving air quality. While the regulatory decision making process is still ongoing, we are optimistic that a final resolution can be reached.

## **2. Testing and Training Operations Using Sonar and Explosive Sound Devices - A**

study by the Naval Studies Board of the National Research Council (1997) estimated that in 1997 there were nearly 200 diesel-electric submarines owned by the navies of potentially unfriendly countries, with more on order. Hostile diesel-electric submarines operating in the littoral zones possess tactical characteristics that are extremely difficult to counter -- stealth and lethality. The shallow sea-bed in the littorals can interfere with many available antisubmarine detection methods.

The serious safety and mission threat posed by the presence of quiet, hostile submarines makes it essential for us to conduct antisubmarine warfare (ASW) training operations. This training requires the activation of sonars that are under increasing scrutiny. The current MMPA definition of what constitutes a “take” allows interest groups to assert that nearly any response by a marine mammal is evidence of harassment, thus triggering regulatory oversight. Assessing the effects of active sonar operations during ASW training is difficult because existing technology and science is limited. Therefore, we have invested \$18 million in marine mammal research that will ultimately benefit the entire nation. Until we have the results of this research, we will be forced to use analytical data very conservatively when assessing the potential impacts of our actions on the environment.

Despite our conservative approach in assessing marine mammal impacts, developing mitigation that satisfies regulators as well as environmental activists has become increasingly challenging with significant impacts on maritime sustainability. While the environmental

rewards are unclear, the readiness impacts are real. For example, we are often advised that visual monitoring is essential when acoustic operations are conducted. Because visual monitoring is not possible at night, continuation of such training is threatened.

The use of explosives in test or training activities is considered by regulators to imply, almost always, that an animal could be injured or killed. For example, during the Littoral Warfare Advanced Development 00-2 Sea Test (May 2000), sponsored by the Office of Naval Research, NOAA Fisheries denied us use of SUS (Signals, Underwater Sound) charges containing about two pounds net explosive weight. SUS charges, an important element to the planned test program, are routinely employed in collecting environmental data, and release relatively negligible sound in the water. Upon the direction of the regulators, concerns about the mere presence of whales during this test resulted in cancellation of all our active acoustic transmissions, including use of sonar. Based on this experience, in addition to other discussions and correspondence with regulators, we anticipate that weapons systems that employ larger net weight explosives will face challenges in use during training operations.

Moreover, the possibility exists that all of our at-sea testing, training, and exercises that use active acoustic devices (e.g., standard ship sonars), ordnance, or any other device or practice that could “affect” protected species, will be required to obtain incidental take statements under the ESA, and/or Incidental Harassment Authorizations/Letters of Authorizations (IHA/LOA) under MMPA. Obtaining these authorizations is a lengthy process, requiring substantial investment in supporting data collection, and is good for a limited time only (one to five years for an IHA and LOA, respectively). In addition, a rigorous public process is involved under the MMPA. Costs

for routine training are likely to increase dramatically due to mitigation requirements, such as continuous aerial surveys, additional spotters, and delay. None of these practices allow us to train as we fight. Night-time training and training in high sea states will decrease because of limited visual capability for spotting marine mammals. All of these could result in significant degradation in readiness.

Obtaining authorizations is costly, both in terms of time and money, with a consequent impact on readiness. For example, the \$350 million Surveillance Towed Array Sensor System (SURTASS) Low Frequency Active (LFA) Sonar Operations (SURTASS LFA) sonar, an anti-submarine sensor system, already in use by Russia and France, has not been deployed despite the positive results of a two-year Navy-funded research project demonstrating the environmental compliance of the system. There have been at least four lawsuits challenging the conduct of marine mammal research with SURTASS LFA sonar in the Hawaiian Islands. To date, we have expended over \$10 million in the collection of data and the preparation of a worldwide Environmental Impact Statement (EIS). We have engaged reputable marine mammal scientists nominated by the Natural Resources Defense Council to act as independent advisors and have included substantial mitigation in the deployment plan. Deployment of the system is still uncertain because of the likelihood of lawsuits, the non-concurrence of the California Coastal Commission, and NOAA Fisheries' unwillingness to provide a "take" permit for a large area of the eastern Pacific until California Coastal Commission concurrence is obtained.

### **3. Basing and Installations**

**Endangered Species** – Under ESA, federal agencies are directed to use their authority to assist in recovering species in the course of carrying out their actions. Moreover, critical habitat may be designated on our land even if we have in place conservation programs with a proven track record of success, evidenced by the number of threatened and endangered species recovering on our lands. Because the ESA process does not recognize our extremely successful efforts to protect listed species, our ability to manage and use our ranges while effectively protecting natural resources is limited.

The 1999 designation of critical habitat for the Western Snowy Plover on the training beaches at Naval Amphibious Base (NAB) Coronado, California is having a significant impact on training. Marines use these beaches for landings and SEALs use them for warfare training. This area was designated as critical habitat in part because of the increasing numbers of Snowy Plover nest identified during the breeding season. The bird population increased despite annual training because of our conservation program, which includes marking off new nesting areas. During nesting season, from mid-March to mid-October each year, training space is reduced by about 40 percent. As the growth in nesting pairs continues under our conservation program, the amount of beach available for training will be correspondingly and continuously reduced. At the rate these birds are proliferating some training operations on the beach may have to be cancelled to avoid violating ESA requirements.

**Air Pollution** - The Clean Air Act (CAA) General Conformity rule has had moderate impacts on Navy training and readiness. The conformity rule applies to areas that have not or only recently attained the National Ambient Air Quality Standards (NAAQS). This rule requires that the Navy

analyze air emissions for any proposed new or significant change in operations at a facility located in one of these areas. If emissions would exceed specified thresholds, the increase must be offset by emission reductions elsewhere or included into the State emissions budget. The federal CAA prohibits proposed actions if the increase cannot be offset. To ensure emissions do not exceed the specific thresholds, mitigation is often imposed that may limit training locations, frequency, or methods.

Aircraft emissions have posed the biggest conformity problems. The type and tempo of aircraft operations have not been impacted to date, but significant funding and manpower has been required in many instances to demonstrate conformity. Compliance with the Conformity Rule often requires that state or local regulatory agencies work with the military to obtain an emission budget or offsets from other emitters. Conformity requirements have the potential to limit our basing options as competition for air emissions budgets and offsets increases. The conformity rule could prevent completion of training or test events originally planned.

Conformity was a challenge when the F/A –18E/F Super Hornet was introduced into the fleet at Naval Air Station (NAS) Lemoore, California in 1998. The aircraft would not be allowed to operate at Lemoore without an offset of over three hundred tons of nitrogen oxide emissions. We were finally able to obtain the necessary offsets from the Federal Aviation Administration. The necessary offsets existed only due to the closure of the former Castle Air Force Base within the same air district. Conformity was also a challenge in the realignment of F/A-18C/D fighter aircraft from NAS Cecil Field, Florida to NAS Oceana, Virginia in 1998. The Commonwealth of Virginia provided an increase in the emission budget for NAS Oceana to allow the F/A-



18C/Ds to relocate. The ability to home base aircraft at desired locations is highly dependent upon other federal and state agencies.

**Noise** - Airborne noise from the operation of weapons systems is one of the most noticeable consequences of military readiness. Noise is a multi-dimensional issue that includes impacts related to pitch, frequency of occurrence, steady state vs impulse, time of day, weather, terrain, and weapon system employment (e.g., high altitude flight versus low altitude). The public's perception of noise can influence how we use our training areas. No longer is noise just an issue in urban areas such as Virginia Beach, Virginia; it is equally at issue on relatively isolated ranges on the West Coast, such as at Naval Air Station, Fallon, Nevada. Noise has long been an issue at military installations and has more recently become significant for planning military training routes (low level) and test and training flights.

Future aircraft such as the Joint Strike Fighter (JSF) employ new engine technology, advanced design, and flight controls such as thrust vectoring, all of which can affect the noise characteristics of the aircraft. With these innovations, initial noise data indicates that these aircraft may be slightly noisier than the legacy aircraft they are replacing. The advent of new weapons, tactics, and training requirements, coupled with increased urban development and efforts to protect the environment and natural resources, have contributed to the rise in opposition to military training at ranges throughout the United States.

Base Realignment and Closure (BRAC) actions have resulted in closure of major installations, narrowing our options for training in support of tactical aircraft operations. New training

requirements that include high-altitude bombing and stand-off weapons have become significant challenges for the future. As a result of BRAC 95, Navy relocated F/A-18C/D squadrons from NAS Cecil Field, Florida to NAS Oceana, Virginia, requiring the squadrons to shift training to ranges in North Carolina and areas around Oceana with an attendant rise in noise complaints.

The rise in noise complaints in urban areas, as well as an increase in concerns voiced about aircraft noise in rural areas and parks from hikers and others engaged in outdoor activities, is restricting the areas where we can base and train. For example, a proposal to expand the use of an air-to-ground target at an existing Army range at Fort Hunter-Liggett met significant resistance from local groups, despite the fact that the range is in a sparsely populated area of California. Noise impacts to surrounding natural and recreation areas have been cited as the critical issue.

As we regroup to mitigate the potential result of decreased operations at Vieques, other critical training ranges such as Pinecastle (Ocala National Forest, Florida) and the Eastern North Carolina ranges on Pamlico Sound have come under serious scrutiny, despite the fact that both are located in sparsely populated areas. At the live-fire Pinecastle range, local groups have asked that we cease bombing operations. The existing operating permit issued by the US Forest Service expires in July 2001 and we are presently conducting an Environmental Impact Statement to address our future range requirements. Proposed military operating areas over Cape Lookout and Cape Hatteras National Seashores at altitudes of 3,000 ft have raised National Park Service concerns regarding aircraft overflights enroute to the bombing ranges in Pamlico Sound.

The National Park Service's focus is on how aircraft overflights will affect park soundscapes in the context of protecting natural quiet.

Complaints from local citizens at Vieques about noise from Carrier Battle Group training (air-surface-underwater), as well as other issues, has led to a decision to forego the use of Vieques for a significant training event for a Carrier Battle Group earlier this month.

We are supporting a joint plan that calls for the development of a unified DOD noise program to address the wide range of noise issues facing the services.

**Airspace** - As airspace needs change with the evolution of new weapons systems and tactics, the drastic increase in civilian aviation traffic, compounded by urban sprawl, remains a continued threat to the retention of current airspace assets and the expansion of those assets.

Scheduling/using agencies of Special Use Airspace delegated to Navy by the Federal Aviation Administration continually evaluate this resource to assure that it is properly sized, both vertically and laterally, to support the mission for which it was designed. Navy currently has three proposals at FAA headquarters for approval and a small number of proposals in the early stage of development. Preliminary discussions suggest that these proposals, if properly documented, have an excellent chance for approval. To facilitate continued interagency cooperation, we continue to expend a considerable amount of time in cultivating relationships with senior FAA officials in Washington Headquarters and the Regional Offices.

### **III. ONGOING ACTIONS**

**A. Maritime Sustainability Actions** - As the DOD Executive Agent for maritime sustainability, Navy is basing its actions on a four-pillar strategy. The four pillars are: sound legal position; knowledge superiority; policy and procedures; and education and engagement.

We and the other Services must operate from a sound legal position -- we must comply with the law. We should be the experts in the subject area in order to ensure that well-informed decisions are made as to the “how, when, and where” during the planning of training and testing. DOD needs policies and procedures that provide consistency in environmental documentation and ensures that decisions are based on the best available science. Lastly, DOD not only must engage the public and regulators to ensure that they are provided with knowledge necessary to understand DOD’s different roles in National Security, but also its role in promoting global stability and democratic ideals. In addition, DOD must educate its officers and service personnel on all issues associated with maritime operations at sea and the marine environment to ensure environmental stewardship across the Department.

The development of the four-pillar strategy began with an effort to assess the effects of sound on marine mammals. This effort was initiated almost one year ago to address the ambiguity of the definition of “harassment” in the MMPA. It has expanded from a one-issue initiative into a four-pillar strategy. The overall goal of the maritime sustainability initiative is to achieve sustainable readiness in congruence with the statutory and regulatory framework mentioned earlier in my

testimony. This strategy also provides for a proactive engagement policy with the regulators, the general public, environmental groups, Congress, and service personnel.

Following are additional examples of actions we are conducting, categorized under each of the four-pillars of our maritime sustainability strategy.

## **1. Sound Legal Position**

**Preparation of Range EISs** - In 1996, we initiated preparation of EISs to cover range activities. Range EISs have been prepared and Records of Decision issued for range activities at the Pacific Missile Range Facility (Hawaii), Naval Air Station Fallon (Nevada), and Naval Air Station Patuxent River (Maryland). We also completed an Environmental Review for the Atlantic Undersea Test and Evaluation Center (Bahamas). EISs are ongoing for range activities at Naval Air Weapons Station China Lake (California), Naval Air Warfare Center Weapons Division Point Mugu Sea Range (California), San Clemente Island Ranges and Operating Areas, the East Coast Shallow Water Training Range, and the Pinecastle Bombing Range (Florida). We completed an EIS for operations at the Vieques Inner Range in 1980, and more recently completed an Environmental Assessment that evaluates the impacts associated with the more limited use anticipated as result of the agreement reached between the President and Governor of Puerto Rico.

**Legislative Action** – Last year, NOAA Fisheries, FWS and the Marine Mammal Commission were engaged in a process to develop a comprehensive legislative proposal to reauthorize and

amend the MMPA. We worked within that process in partnership with these agencies to reach consensus on an amendment to the definition of “harassment” that would provide more certainty to the regulated public while ensuring that actions harmful to marine mammals would be addressed. The comprehensive legislative proposal was submitted to, and approved by, OMB and subsequently transmitted to the House and the Senate.

## **2. Knowledge Superiority**

**Digital Environmental Information Management System (EIMS)** – We are developing a Geographic Information System-based EIMS to enhance the access to environmental data and information on the marine environment. Its goal is to support operational planners in determining time and locations for exercises to avoid environmental impacts. EIMS is in the initial phase of system prototype development. It will be demonstrated and validated for a Joint Task Force Exercise in the Virginia Capes and Cherry Points OPAREAs.

**RDT&E Actions** – Our current research seeks to increase the level of knowledge of marine mammal population densities, distribution, and hearing. The Living Marine Resources Information System Phase I is being evaluated for use as a basis for archiving these distribution data for use by operational planners. The first objective is to cover high priority areas (East and West Coast operating areas and training ranges), with worldwide operational coverage as the ultimate goal.

Understanding the effects of our operations on marine mammals and sea turtles is critical to our proactive approach for interacting with marine mammals (e.g., how do sonars and explosions affect them and how can scientifically-defensible effects/thresholds be defined). The Office of Naval Research has developed a 5-Year Science & Technology objective to ensure that research will provide vitally needed answers to determine if the budget should be increased to accelerate data output.

**Coral Reefs** – We are the DOD Executive Agent on the Coral Reef Task Force and have led the development of DOD’s Coral Reef Protection Implementation Plan. This document creates awareness of the need for coral reef protection and outlines procedures for the military to follow to ensure safe and environmentally responsible operations in and around coral reefs. In addition, we created artificial reefs off Oahu, Hawaii to increase the size of Hawaii’s reef habitat in support of our obligations under the Executive Order.

### **3. Policy and Procedures**

**Navy At-Sea Policy** - We developed an At Sea Policy to promote consistent application of legal requirements Navy-wide. The Under Secretary of the Navy signed the policy on 28 December 2000.

**Enhanced Readiness Teams** – Both CINCPACFLT and CINCLANTFLT have established Enhanced Readiness Teams at Fleet Headquarters and within each of their respective regions. These teams bring together operations, facilities, legal, public affairs, real estate, and

environmental staffs to address encroachment issues across the broad spectrum of affected areas. Enhanced Readiness Team efforts include active engagement with regulators and other non-DOD agencies to ensure readiness is maintained through long-term access and use of Fleet facilities, training ranges, and OPAREAs.

**Standard Operating Procedures/Acquisition Policy** – We are moving forward to: (1) develop standard operating procedures for ship operators and operational planners; and (2) develop guidance for acquisition managers to assess and mitigate potential impacts on marine mammals/endangered species. Efforts are underway to achieve both these goals.

**Environmental Analysis Methodologies** – We are seeking to maintain consistent approaches in preparing environmental analyses of marine mammal/endangered species effects in all of our NEPA and EO 12114 documents. We are developing scientifically defensible methodologies for assessing the effect of specific incoherent (impulsive) and tonal-acoustic sources on marine mammals and incorporating them into a single guidance document or methodology “cookbook.” The initial focus of this effort is on the effects of explosives in deep and shallow water and in the surf zone. Methodology development will transition into “clear zone” charts for various sizes of ordnance. Future efforts will focus on: (1) short duration coherent pings by operating system/frequency (low, medium, high) and (2) continuous sound by operating system/frequency (low, medium, high).



**Compliance and Mitigation** - We have contracted with the Center for Naval Analysis to determine the effect of compliance with regulator-recommended mitigation procedures on our resources (time and cost) and operations (training benefits).

#### **4. Education and Engagement**

**Navy/NOAA Fisheries Environmental Coordinating Group** – We worked with NOAA to establish a forum for coordinating and discussing mutual issues. The major focus of the group is to establish processes and procedures between the two organizations to ensure consistent regulatory interpretation and application by NOAA Fisheries regional centers to our environmental documentation.

**Navy/NOAA Fisheries Liaison Office** - As a direct result of the above Environmental Coordinating Group, we established a liaison office at NOAA-Fisheries headquarters. The mission of the office is to provide a permanent position to actively engage in current and emerging policy issues affecting Navy and NOAA-Fisheries.

**National Marine Sanctuaries Advisory Liaison** – One of our representatives currently serves on the advisory committee for the Channel Islands National Marine Sanctuary (CINMS) and is providing input to the regulatory process involving the expansion of CINMS, which encompasses part of the Point Mugu Sea Range.

**Public Affairs Outreach** – We are developing a pro-active outreach effort with four goals: informing, responding, clarifying, and coordinating. To meet the goal to “inform,” we are currently developing informational tools highlighting the importance of sustained readiness and how we address environmental considerations. In order to improve our timeliness and accuracy in responding media inquiries, the group has proposed developing a response action plan. Ensuring that we convey a consistent message at all levels in all places by clarifying the message and coordinating responses is the culmination of the program. Planned action in this area includes developing complete press kits (web site, video, Public Affairs Office brochure and media-training kits for our personnel).

**Training Videos** - We developed three marine mammal training videos to educate and sensitize our personnel on their environmental protection responsibilities while at sea. Two videos focus on Right Whale identification and critical habitat areas encountered during normal operations on the East Coast of the U.S. They address procedures to avoid endangering the Right Whale including: early warning system, watchstanding, lookout training, ship maneuvering, and avoidance distances for underwater explosives or exercise ordnance.

**Senior Operator/Regulator Dialogue** - Last September, Navy hosted a full-day meeting to address the challenge of protecting both national security and environmental values. The dialogue included senior representatives from the federal regulatory community (FWS, NOAA Fisheries, EPA, Council on Environmental Quality, and senior defense leaders (Commander, Second Fleet; Commander, Third Fleet; Assistant Secretary of the Navy (Installations and Environment); General Counsel of the Navy; Deputy Chief of Naval Operations (Fleet Readiness

and Logistics). All participants agreed with the position that there needs to be the appropriate balance between the two national imperatives of national defense/national security and protection of the environment. Nevertheless, the responsibility is on the Navy to comply with the laws.

## **B. Actions in Other Encroachment Areas**

**1. Noise** - Through recommendations approved by the DOD Senior Readiness Oversight Council (SROC), we are working with other Service components to establish a DOD noise program to address on-going noise issues, including noise impacts, and its effects on the local population, wildlife, and structures. Through the Range Air Installation Compatible Use Zones (RAICUZ) and Joint Land Use Study programs, we are proactively working with local and state officials to mitigate a variety of encroachment issues, including urban growth and noise, through effective planning.

In 1998, we established RAICUZ program to develop range encroachment plans, identify long-term range requirements, and to coordinate with local, state, and other federal government agencies to address range encroachment and maintain the basic or core training range capacity needed to support operational readiness. Studies have either been completed or are in progress for ranges at Fallon, Nevada; El Centro, California; Dare County, North Carolina; Pinecastle, Florida; and Vieques, Puerto Rico.

## IV. SOLUTIONS

Our ability to meet our Title 10 obligation to maintain ready maritime forces is increasingly challenged by legal requirements. We believe that some of these laws and regulations are ambiguous and inflexible, and were drafted without due consideration for national defense missions. Compliance, therefore, becomes increasingly difficult as we struggle to define and interpret the standards with which we must comply.

We are not seeking an outright exemption from existing laws. We are proud of our record of stewardship and intend to continue to comply with the law. Rather, we will work with the Administration and the Congress to address steps to reduce uncertainty and increase flexibility in the law to balance the needs of the environment with national security. We have worked closely with other federal agencies in an attempt to achieve full mission readiness and fulfill our environmental stewardship responsibilities.

- Partnership with NOAA Fisheries, FWS, and the Marine Mammal Commission to draft a legislative proposal to reauthorize the MMPA, including an amendment to the definition of “harassment.” This reauthorization proposal was jointly submitted to the last session of Congress.

The amended definition of “harassment” would accomplish three goals. First, it reiterates the protection against acts that injure or have the significant potential to injure marine mammals in the wild; second, it establishes a clear, unambiguous legal standard, founded

upon scientific assessment, to regulate acts that disrupt natural behavior patterns to the point where such patterns are abandoned or significantly altered, and third, it provides a statutory basis to regulate acts directed toward specific marine mammals in the wild, when such acts are likely to disturb by disrupting behavior, including migration, surfacing, nursing, breeding, feeding, or sheltering.

- Partnership with FWS to ensure that Integrated Natural Resources Management Plans (INRMPs), prepared under the Sikes Act will effectively manage the long term conservation of endangered species and thereby obviate the need to designate critical habitat.

Finally, we must train out of our deepest obligation to the American people who provide their sons, daughters, brothers, sisters, husbands, and wives to defend the nation. We must also train in harmony with the environment where possible. We must determine an appropriate balance between environmental protection and mission readiness. We look forward to working with the Administration, the Congress and other federal agencies to achieve our dual goals of national defense and environmental protection.