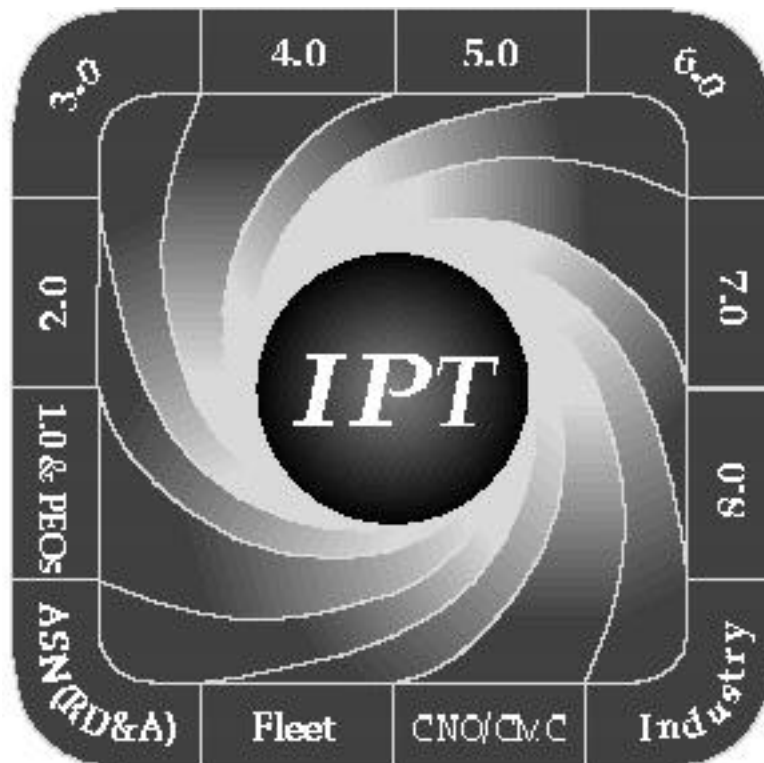


Integrated Program Team Manual Update



**Guidance for
Program Teams and Their Subsets**

December 1996

INTEGRATED PROGRAM TEAM MANUAL UPDATE

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Program Teams and Their Subsets**

DECEMBER 1996

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FROM THE COMMANDER

To the Naval Aviation Systems Team:

We have come a long way since we first embarked on our transition from a program management/functional matrix organization to an Integrated Program Team/Competency Aligned Organization (IPT/CAO). Since 30 June 1994 when the Naval Aviation Systems Team (TEAM) published the first edition of our IPT Manual, we have seen many of our organizational and operational goals come to pass, particularly the formation of multidisciplined, Program Manager-led IPTs to plan and carry out program cost, schedule, and performance objectives that are responsive to our customers.

To date, there are approximately 270 IPTs in existence across the TEAM. The operations of these IPTs have provided us the opportunity to test and analyze our IPT/CAO concepts, and have yielded us many lessons-learned for use in establishing, updating, or reengineering TEAM policy and processes. It has also given us the insights to forge effective relationships between our programs, competencies, area commands and sites. Much of that information provided the basis for the guidance contained in this update of the TEAM IPT Manual.

This IPT Manual Update reflects interviews with our Program Executive Officers and Program Managers, capturing their experience with IPT operations over the last 2 years, as well as policies/guidelines that have emanated from both competency and program members of the TEAM's Organization Transition Team. Among other policy updates, the manual provides information on the use of Team Assignment Agreements and personnel evaluations for workforce members assigned to IPTs, and provides the necessary definitions of Program Manager responsibilities relative to life cycle management to help shape the activities of IPTs. This update also reflects the latest information from the TEAM's Business Operating Guide and Command Structure.

FROM THE COMMANDER (Continued)

As was the goal of the first edition of this manual, this update is intended as an informative, reader-friendly document which provides many of the answers needed to execute IPT operations during the remainder of our IPT/CAO transition and beyond. This manual is intended to be used in conjunction with the TEAM Transition Plan Update published 27 February 1996. Together, these two documents provide the knowledge necessary to understand and implement our IPT/CAO objectives. I encourage each of you to give this plan the widest dissemination. If you have any questions about this TEAM IPT Manual Update, contact Rick Martin, Head of Planning and Management, AIR-1.1 at (703) 604-2338 ext. 8539 (DSN 664) or fax to (703) 604-3066.

A handwritten signature in black ink, appearing to read "John A. Lockard". The signature is written in a cursive, flowing style.

J. A. LOCKARD
Vice Admiral, U.S. Navy

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The appendices listed below follow the text of this manual. Every appendix is numbered independently, as is each respective enclosure or attachment.

APPENDIX A	SECNAVINST 5400.15A; Subject: Department of the Navy Research, Development and Acquisition, and Associated Life Cycle Management Responsibilities
APPENDIX B	Listing of Naval Aviation Systems Team IPTs
APPENDIX C	IPT Charter Format
APPENDIX D	Team Assignment Agreement Form
APPENDIX E	Team Member Performance Evaluation Input Form
APPENDIX F	AIR-7.0 Policy Letter: Implementation of Prototype Administrative Processes
APPENDIX G	Definitions

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SECTION 1.0

INTRODUCTION

1.1 PURPOSE

This manual describes the structure and procedures that are available to Naval Aviation Systems Team (TEAM) Program Managers for their use in forming and operating Integrated Program Teams (IPTs). Although this manual is not prescriptive, it does occasionally refer to TEAM policy statements that are. Those cases are marked “***Policy Note.***” While this manual is focused on IPTs, much of this guidance is also useful in developing teams to support non-TEAM, external customers. This manual is intended as a companion to the TEAM Transition Plan Update published in February 1996, where the TEAM’s Integrated Program Team/Competency Aligned Organization (IPT/CAO) mission, operational concept, and transition milestones are explained in detail.

The use of IPTs to support program activities was one of the major cultural changes undertaken by the TEAM’s commitment to IPT/CAO operations, which began in 1993. This cultural shift was necessary for the successful implementation of product-focused life cycle management, by moving from a functional focus to one based on products managed by Program Manager-led multidisciplined program teams that integrate our eight competencies (Program Management, Contracts, Research and Engineering, Logistics, Test and Evaluation, Industrial, Corporate Operations and Shore Station Management) into program-specific teams. The structuring of our program teams has followed a logical sequence and prioritization that begins with the customer and then the product, the process, the constraints, and the organizational structure. Focusing on the customer, program teams soon recognized that each has many customers, both internal and external. Each program team recognizes its products and employs multiple processes to ensure delivery of those products. The structure of the program team largely depends on its customer, product and process requirements. These and other variables define the constraints imposed on the program team which occasionally require modification of existing processes, development of new processes or further changes to the program team structure.

1.2 BACKGROUND

Integrated Program Teams, or Integrated *Product* Teams (DOD usage; see paragraph 2.1(b) for explanation), are mandated by two recently revised Department of Defense (DOD) directives, DOD Directive 5000.1 and DOD Instruction 5000.2, issued 15 March 1996. The DODI directs “that the Department perform as many acquisition functions as possible... using IPTs. These IPTs shall function in a spirit of teamwork with participants empowered and authorized, to the maximum extent possible, to make commitments for the organization..., working together to build successful programs.” In fact, the new DOD 5000 series directives recognize IPTs as the core of Integrated Product and Process Development (IPPD) implementation, where Program Managers (PMs) and other acquisition managers integrate all essential acquisition activities through the use of multidisciplined teams, from requirements definition through production, fielding/deployment and operational support in order to optimize design, manufacturing, business, and supportability processes. As a result, *overall* program performance can be maximized, rather than the performance of *individual* functional areas.

In further emphasizing the importance of IPPD management techniques and the use of IPTs in the implementation thereof, the implementing Navy instruction for systems acquisition policy, SECNAVINST 5000.2A (currently under revision), directs PMs to ensure design activities implement procedures necessary to concurrently develop products and their associated processes. It states: “Development efforts shall result in an optimal product design and associated manufacturing, test, and support processes that meet the user’s needs.”

The new DOD directives consciously avoid prescriptions for setting up and operating IPTs, recognizing a “no one-size-fits-all” approach. The Honorable Paul Kaminski, Under Secretary of Defense (Acquisition and Technology), emphasizes that “DOD wants to encourage flexibility, innovation, and tailoring in executing the IPT concept; it does not want to mandate organizational structures, procedures, or formats.” However, DOD emphasizes three basic tenets that must be adhered to when structuring IPTs: (1) the PM is in charge of his or her own program; (2) IPTs are responsible to and empowered by the PM, and (3) communication between IPTs, the PM, the PEO and all levels of acquisition is encouraged to exchange information, build trust, and resolve issues, ideally at the lowest possible level.

1.3 PURPOSE OF IPTs

In 1995, during the DOD Conference on “Institutionalizing Integrated Product Teams: DOD’s Commitment to Change,” the Honorable R. Noel Longuemare, Principal Deputy Under Secretary of Defense (Acquisition & Technology), remarked that IPTs were created “to improve program success rates, do the right things on time, and do them right the first time. Also, to move away from hierarchy, improve efficiency and take advantage of all knowledge.”

IPTs are the key device through which TEAM Program Managers carry out the SECNAVINST 5400.15A (included as Appendix A) mandate for PMs to be “responsible for all aspects of life cycle management” for their assigned system(s). The scope of this responsibility clearly includes the programming, budgeting and execution of acquisition and in-service support. The instruction requires Program Executive Officers (PEOs) and Direct Reporting Program Managers (DRPMs) to report directly to the Chief of Naval Operations (CNO) and the Commandant of the Marine Corps (CMC), through the applicable SYSCOM Commander, for matters pertaining to in-service support, while continuing to report directly to the Assistant Secretary of the Navy for Research, Development, and Acquisition (ASN(RD&A)) for acquisition matters.

In that spirit, the TEAM’s operating concept uses program teams to manage assigned programs from concept to disposal. Over each system’s life cycle, the structure, size and skills mix of the program team evolves to best meet customer needs. Program teams are broken down into IPTs, each working within established bounds, using established competency processes, communicating freely with other IPTs, and reporting up through the program structure to the leadership team. Care has been deliberately taken to avoid excessive layering of IPTs. In general, structures rarely exceed three levels below the Program Manager, Air (PMA).

1.4 TEAM IPT DEMOGRAPHY

As of July 1996, the TEAM had approximately 270 IPTs operating under the domain of 45 designated Program Managers assigned to the Naval Air Systems Command (NAVAIR) (AIR-1.0), the three Naval Aviation PEOs, and the PEO for Joint Strike Fighter (JSF).

There are many factors that drive the size, skills mix, and complexity of program teams and their attendant IPT structures. As shown in Figures 1-1 and 1-2, such structures are reflective of the number and type of acquisition category (ACAT) programs they support, as well as the scope of demand from international programs, the phase of acquisition and/or

in-service support activities, and often the number and types of appropriations and funding sources supporting program/ IPT operations. Recently, examination of the range of support provided by the Contracts, Logistics, and Research and Engineering Competencies and the program offices to execute program objectives, revealed that resources provided to program teams from these competencies can range in size from 35 to over 900 workyears of support), with the TEAM's five largest program teams consuming

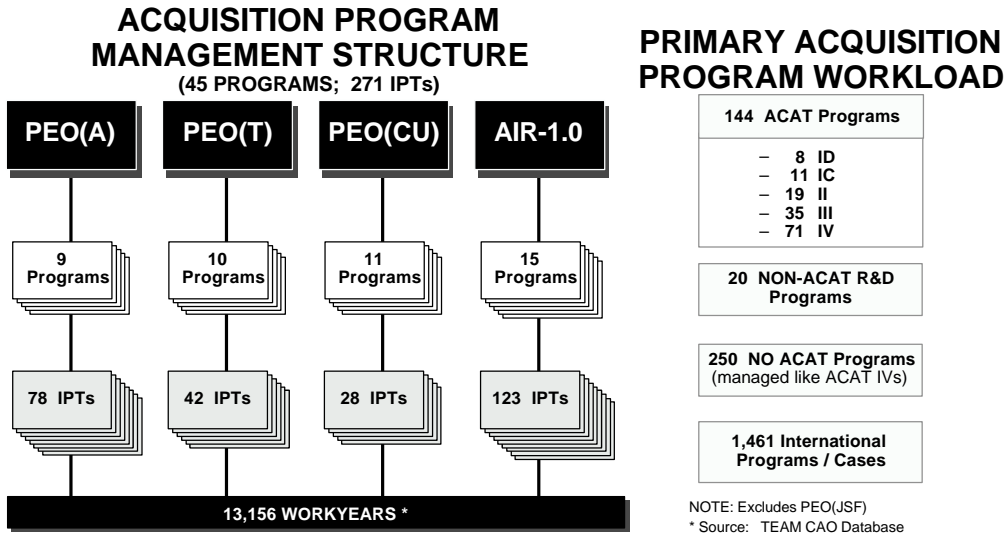


Figure 1-1: Current Naval Aviation Acquisition Program Management Structure and Workload

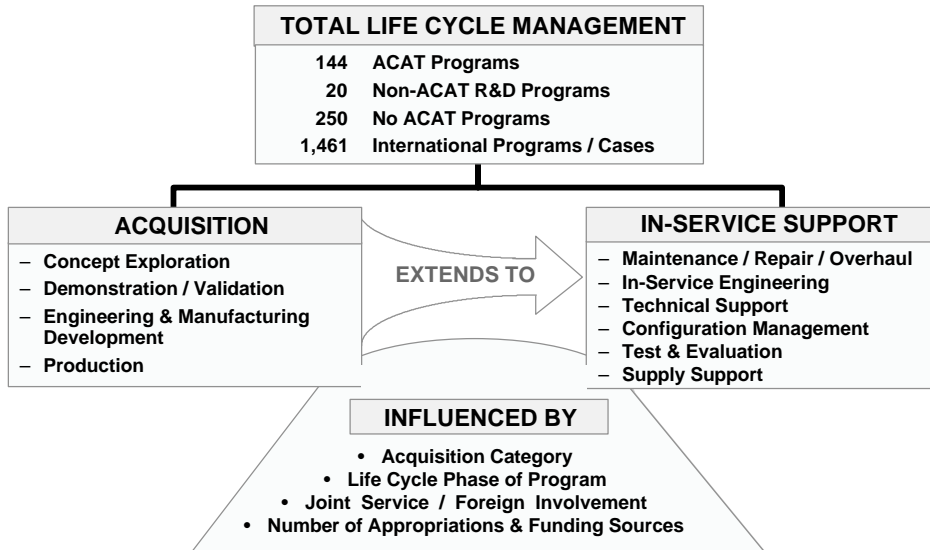


Figure 1-2: Program Metrics Which Drive the Workforce

approximately 40% of the overall program team workyears. Setting industrial base support and test and evaluation aside for the purpose of comparative analysis, workyears per program average approximately 240, with aircraft platform programs averaging slightly higher at 300 workyears. Demographically, a “typical” aircraft platform program is involved in three to four ACAT programs, one major Research and Development (R&D) program, several international program cases, and several non-ACAT projects/tasks, and has both acquisition and in-service support/post-production responsibility for its fielded weapons systems. Similarly, a “typical” missile program manages two to three ACAT programs, a major R&D program, and is influenced by higher numbers of international program requirements than aircraft programs. Aviation support program teams, often referred to as “commodity managers,” manage systems such as support equipment, air combat electronics, air launch and recovery equipment, etc. A “typical” aviation support program team has demands similar to its aircraft/missile program “cousins,” but normally is involved in handling significantly more less-than-major ACAT programs, while the level of appropriations being executed is traditionally less. Still, the sheer number of ACAT and non-ACAT programs within the domain of such program teams often requires a sizable IPT infrastructure to execute cost, schedule, and program requirements. For all programs, the number of government furnished equipment, engineering change proposals, and operational safety improvements, and the number of active inventory configurations of their assigned systems, appears to have a major influence on the size, type, and skills mix of IPT structures.

1.5 ROLE OF THE COMPETENCY ALIGNED ORGANIZATION

The TEAM’s Competency Aligned Organization supports IPTs by supplying skilled people, periodic training, facilities (laboratories, ranges, targets, etc.) and continuously improved processes—that is, the “core processes” of SECNAVINST 5400.15A (integrated logistics support, systems engineering, configuration management, comptroller, legal, contracting, etc.). The CAO also supports the IPTs by operating and sustaining the most efficient infrastructure; establishing consistent policies, technical guidelines, and streamlined processes; and incorporating advanced technology and operating and support lessons into design, maintenance, modernization, and acquisition specifications.

To do this effectively, the eight Competency Leaders and their competency managers must maintain a cognizance of anticipated/

projected requirements and prepare to provide the capability from organic assets, other services or contractor support. Policy for instances where contractor support is deemed necessary is discussed in paragraph 3.1.2. Regardless of source, it is the Competency Leader's responsibility to provide skilled and knowledgeable people, processes and facilities tailored to meet program demands and available to IPTs to successfully execute programs.

Competency Leaders/managers also serve as mentors, providing advice, guidance (as appropriate) and personnel assignments to IPTs, enterprise teams, product support teams, or externally directed teams, as necessary. They are responsible for competency member performance appraisals, and for including in such appraisals feedback from IPT leadership on the performance of their personnel assigned to teams. Revised policy and procedures for the personnel performance appraisal process are discussed in paragraph 3.3.3.

Thorough program planning, appropriate resource allocation and efficient program execution depends on well documented, standard processes which are the responsibility of the competency leadership. It is also the Competency Leader's responsibility to ensure applicable technology and lessons-learned are integrated across all IPTs.

The Competency Leader establishes suitable methods to assess team operations, and to improve processes and training programs to ensure competency members are current and proficient. In conjunction with the PEOs/PMAs, the Competency Leaders ensure resources are allocated across various IPTs based on demand. Independent reviews and special program studies required by senior management or higher authority will normally be accomplished through the respective competencies, using the Assistant PEOs (APEOs) and the particular competency possessing subject matter expertise as the focal point.

Though Competency Leaders are not directly responsible for program success, they are available to the PEOs, PMAs, and IPTs for consultation or conflict resolution. They are required to maintain an understanding of program status and be prepared to respond with additional resources, or more experienced advice or assistance from recognized competency experts or "tiger teams" on an exception basis when requested by the PEO/PMA. Finally, Competency Leaders manage conflicts, costs and demands on the competency.

More information on how the CAO works, the governing principles that cause it and the IPTs to mesh, and explanations of the different kinds of teams and documentation that are the crucial components of IPT/CAO

are contained in the TEAM Transition Plan Update, published in February 1996. Two major topics of the plan, which are crucial to understanding this manual, are:

- The TEAM's business operating structure and the document that defines it, the *Business Operating Guide (BOG)*. The TEAM's business operating structure is based on a systems approach that involves four distinct, but highly interrelated phases: Planning, Budgeting, Allocation and Distribution, and Execution. The BOG describes the operating concepts that will be used to conduct business in the TEAM's IPT/CAO structure. The BOG outlines the business and financial roles and responsibilities of the key players and describes macro processes that integrate the activities of these key players.
- The TEAM's seven core processes and 81 intermediate products, as identified by the TEAM's Essential Capabilities Team. Described in Section 2 of the TEAM Transition Plan Update, these processes/products are key responsibilities of the CAO. Core processes must be defined, documented, and continuously improved through a set procedure, so that IPT members have the latest tools and approaches to use in their work on their respective teams.

1.6 ROLE OF THE AREA/DEPOT COMMANDS/SITES

Effective 1 October 1995, the TEAM established a new command structure to facilitate business operations in the IPT/CAO, as shown in Figure 1-3.

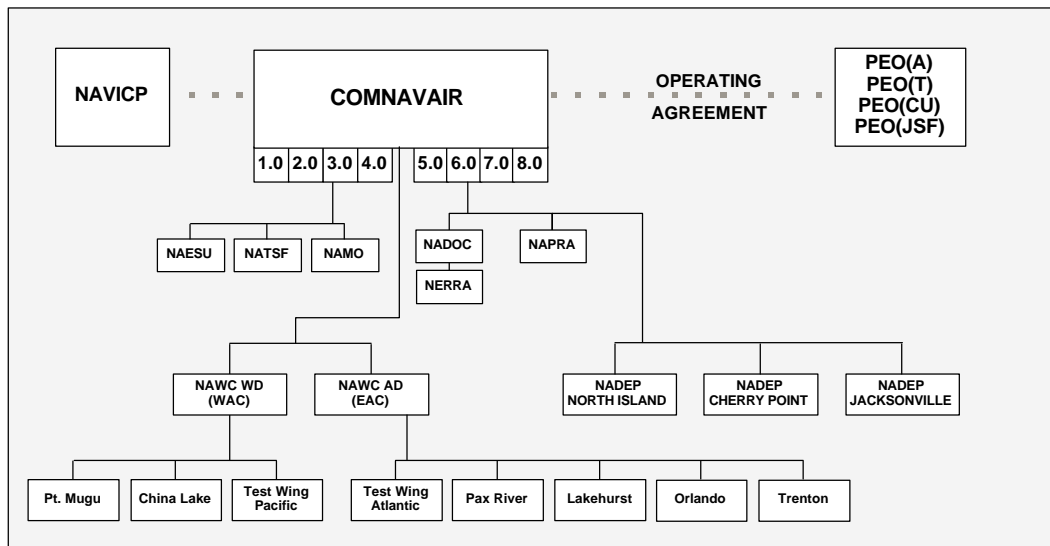


Figure 1-3: New Command Structure

This structure is designed to create the required buyer/seller relationship, as outlined in the Business Operating Guide, establish

accountability for effective business operations, and provide clear fiduciary accountability for effective business operations, while complying with legal constraints and higher authority directives.

Transition to IPT/CAO altered the underlying administrative and operational philosophies of the previous command structure. One goal of this transition is to make geography transparent to the overall organization. Collaborative relationships between the various competencies and IPTs located within and external to an area command are key to ensuring efficient business operation. The primary factors in IPT/CAO products, processes and resources (i.e., personnel, facilities, and equipment) must be viewed from two distinct, yet complementary perspectives: the *operational* element and the *business/administrative* element, as defined below:

- (1) The *operational* element of the IPT/CAO is the major focus of the competency and team leaders. The competency structure is responsible for providing effective processes and resources (personnel, facilities, and equipment) that are used by teams to deliver quality products and services to its customers. The competencies enable optimum use of TEAM talent and resources through the proper allocation of competency resources across the entire organization.
- (2) The *business/administrative* element of the IPT/CAO is the major focus of the Area/Depot Commanders, since business elements will continue to be defined by geographic location. Area/depot command business element responsibilities include the performance of fiduciary functions, and the creation of an environment which ensures the operations of the area/depot command and the TEAM are cost-efficient.

The specific functions of the Area Commanders and Depot Commanders are documented by tailored charters which were signed out by COMNAVAIR in February 1996. These charters provide detailed responsibility matrices which define the collaborative relationships between the Program Managers/IPT Leaders, the competencies, and the Area Commanders. Paramount requirements of the PMA/IPT leaders include forecasting demand, development of Team Work Plans (TWPs) and funding documents, and executing program requirements. Area Commanders and Depot Commanding Officers are responsible for development of business environments supportive of the needs of program teams, and performing the various financial/fiduciary functions to execute the work performed by the competencies with their business element.

To facilitate coordination and communication between the work being performed at the Area Command and the program customers, internal TEAM (IPT) and external non-TEAM (EDT) inclusive, Project Coordinators (PCs) serve as focal points for team work being performed at the sites. The roles of these PCs vary, depending on the tasks and functions required by the program customer. Task/function examples are provided below.

- Accept funding for the Area Command and ensure distribution according to the agreed-upon project plans/teamwork plans;
- Provide an internal communication link across the Area Command for the program;
- Serve as a member of the Program Manager's Executive Leadership Team as the Area Command representative, if required or desired by the PMA;
- Provide business planning inputs for the Area Commander;
- If designated by the Program Manager, provide overall leadership and management of the program within the Area Command.

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SECTION **2.0**

INTEGRATED PROGRAM TEAMS

2.1 DEFINITIONS

Program teams are formed to manage specific products under the leadership of established Program Managers, Air (PMAs). PMAs are often responsible for more than one hardware and/or software product, and each will have multiple processes and data products. Program teams are structured accordingly to meet program demands and satisfy cost, schedule, and performance objectives. The success of the program team's efforts are judged by the quality and timeliness of their products, as determined by their customer(s).

There are a variety of accepted definitions throughout industry and government associated with Integrated Program Teams. To assist in understanding IPT operations described in Section 3.0, the TEAM defines these terms as follows:

- a. Program Team:** A group of individuals from the Naval Aviation Systems Team assigned to work either full- or part-time on a program or programs led by a designated Program Manager (i.e., PMA). A Program Manager will always have a single program team, though this team may be comprised of a number of sub-elements known as Integrated Program Teams.

The top-level IPT within a program team is called the “**Leadership Team,**” which is chaired by the PMA. In addition to the PMA, the Leadership Team will include members from appropriate competency areas, i.e., the Business Financial Manager (BFM), the Assistant Program Manager for Systems Engineering APM(SE) (Class Desk), the Assistant Program Manager for Logistics (APML), the Procurement Contracting Officer (PCO), the leaders of the level 2 IPTs, etc., depending on the needs of the particular program. The Leadership Team is the PMA's “board of directors.” However, the individuals on the Leadership Team are far more than simply advisors. Invariably, they play key roles in the activities of IPTs. For example, the Leadership Team is responsible to the Program Manager for the quality of the work within and among all IPTs. More specifically, the APM(SE) is responsible to the Program Manager for

the quality of engineering work, including system level tradeoffs. Similarly, the APML, PCO and test and evaluation (T&E) coordinators have similar responsibilities for their competency areas.

- b. Integrated Program Team (IPT):** A subset or subsets of a program team. It is typically comprised of individuals from multiple competencies and is led by a team leader. An IPT for a major system may have sub-levels of IPTs beneath it. The IPT for a major system is at “Level 1.” “Level 2” IPTs are usually created to work on a major subsystem or product, such as a radar or the electronic warfare suite. Subsequent levels of IPTs (no greater than Level 4) may be created to do very narrow, carefully limited tasks (such as “integration and test”). For a complete listing of the TEAM’s IPTs, see Appendix B.

Policy Note:

To avoid confusion, all NAVAIR teams will use the designation “program team” or “Integrated Program Team.” It is permissible to refer to the level of an Integrated Program Team, e.g., “Level 2 IPT.”

- c. Process IPTs:** As discussed earlier, IPTs constitute the structure beneath a program team, and are usually created to work on a major subsystem or product or carry out a well-defined task. They may, however, also be created to help apply competency process policy across other IPTs, or to make sure that components or items that cross product lines are treated with some degree of uniformity.

A cautionary note: This does not mean a shadow CAO structure may be set up within the program office. IPTs chartered to work on process matters must confine their activities to applying CAO process policy and not creating different versions of it.

IPTs are staffed with personnel empowered to execute their expertise on behalf of their competency and share responsibility for program success. The APM(SE) will be responsible for coordinating program engineering activity, but is neither solely responsible for engineering nor absolved from responsibility for success in logistics, testing, contracts, etc. Similarly, the APML shares responsibility for more than logistics. The IPT concept drives decisions down, rewards teams as opposed to individual effort, reduces the amount of oversight (and changes the character of that oversight), increases the percentage of resources applied to managing programs, increases training, and eliminates layers of management.

2.2 FULL LIFE CYCLE MANAGEMENT

2.2.1 NAVY POLICY

SECNAVINST 5400.15A, included as Appendix A in this document, directs that PEOs and DRPMS are responsible for all aspects of life cycle management for their assigned programs, and will report directly to the CNO and CMC, through the applicable SYSCOM Commander, for matters pertaining to in-service support. Additionally, PEOs and DRPMS will continue to report directly to the Navy Acquisition Executive (NAE) for all matters pertaining to acquisition. Figure 2-1 illustrates the relationship of the PEOs/PMA to ASN(RD&A) and to the CNO/CMC.

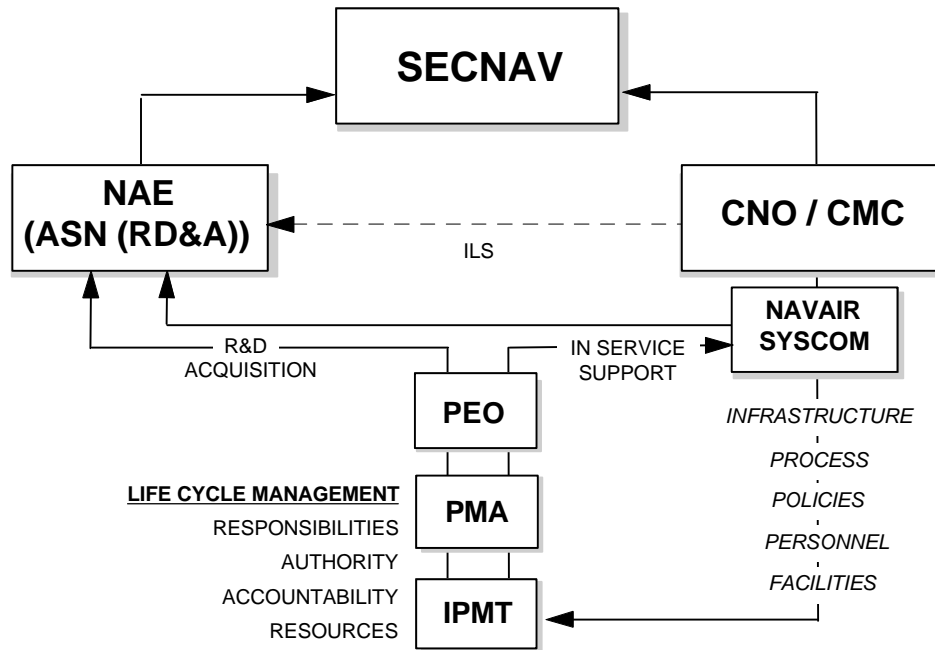


Figure 2-1: SECNAVINST 5400.15A

As defined, Program Managers are vested with the authority, accountability, and resources necessary to manage all aspects of their programs from initiation to disposal. The PMAs, supported by IPTs, are responsible for:

- Responding to the needs of customers.
- Formulating and defending program plans and budgets for the development, production, Fleet introduction, and in-service support of their weapon system.
- Developing and implementing acquisition and in-service support plans to include the rapid and consistent insertion of advanced technology across the weapon system.

- d. Incorporating availability, reliability, and supportability requirements into initial designs, acquisition strategies, and procurement documentation in accordance with DOD 5000 Series guidance.
- e. Obtaining approval for, and consistently implementing, technical requirement changes across the weapon system in accordance with DOD 5000 Series guidance.
- f. Managing the configuration of the weapon system.

2.2.2 IMPLEMENTATION OF LIFE CYCLE PROGRAM MANAGEMENT WITHIN THE NAVAL AVIATION SYSTEMS TEAM ENVIRONMENT

The Program Manager, Air is designated and chartered as the single central executive responsible for managing the program from initiation to disposal and accomplishing objectives set forth by higher authority for the program. The PMA has broad directive authority within the scope of the program to plan, direct, control, and use resources not only for approved programs, but also for related in-house and contractor efforts. This includes establishing IPTs that utilize resources, tools, processes, and facilities provided by the various Naval Air Systems Command (NAVAIR) competencies within the overall framework outlined in the TEAM's Transition Plan, IPT Manual, and the individual Program Operating Guides (POGs).

As a full life cycle program manager, the PMA must conduct system life cycle analyses that integrate critical factors such as, but not limited to: cost, schedule, performance, long-term logistics support, and the industrial base. These analyses must be continually iterated and improved as the system progresses through its life cycle, so the PMA has an informed basis to make smart business decisions that ultimately benefit the Fleet user, and to assure safety, readiness, and continual reductions in the cost of operations. In the sustainment phase of a program, the PMA controls all aspects of logistics derived through the logistics support analysis and the attendant maintenance planning process, and ensures that such aspects are properly resourced, managed, and executed in response to Fleet needs.

Currently, a portion of the total resources which impact the cost of operations of the PMA (e.g., Operations & Maintenance, Navy (O&M,N) and Military Personnel, Navy (MPN)) are allocated to program teams by competencies. The PMA is expected to manage these allocated resources to benefit the program and is ideally situated and chartered to minimize these costs through appropriate modernizations and innovative maintenance planning and support concepts. During the remaining

IPT/CAO transition phase leading to full operational standup in October 1997, the TEAM's Product-Focused Life Cycle Management Strategy Quality Management Board will continue its efforts to examine competency processes and resource control policies, with the objective of facilitating full PMA life cycle program management operations.

2.2.3 SPECIFIC PMA INTERFACE AND OPERATING RELATIONSHIPS

The PMA will:

- a. Maintain active liaison with the PEOs, cognizant Requirements Officers within the Office of the Chief of Naval Operations (OPNAV) and the Commandant of the Marine Corps, Type Commanders (TYCOMs), Fleet Commanders-in-Chief (CINCs), Joint Chiefs of Staff, and the Assistant Secretary of the Navy (Research, Development and Acquisition), as appropriate, in keeping with SECNAVINST 5400.15A. One form this liaison will take is the participation of PMA representatives in TYCOM operational advisory groups, in keeping with COMNAVAIRLANT/COMNAVAIRPACINST 3025.1.
- b. Coordinate appropriate interface segments of the program with other PMAs and SYSCOMs to ensure a totally coordinated effort and overall systems integration. Coordinate requirements, technical design, and budgetary issues with the OPNAV/HQMC staff. Coordinate training and deployed system performance with the designated unified and specified commanders and their component commanders, as appropriate.
- c. Predict the weapon system availability, life cycle cost, and cost of operations during the acquisition process, and measure achieved performance of readiness, life cycle cost and cost of operations during the operations and in-service phase.
- d. Take action during the design, acquisition and in-service phases to reduce cost of operations to include reduction of cycle times; reduction of pipeline, support equipment and inventory costs; and reduction of manpower expenses at all levels of maintenance.
- e. Evaluate the material condition of assigned weapon systems to achieve their inherent reliability. This includes the application of tools such as reliability-centered maintenance and integrated maintenance concepts.
- f. Consider system investment and improvement actions that will improve achieved material condition and overall cost of operations.
- g. Maintain a continuing review of acquisition logistics and in-service support provided by the program IPTs and other participating organizations to ensure support is compatible with approved

program and operational objectives. This includes performing safety, investment, and performance enhancements for configuration management, integrated logistics and engineering support, maintenance planning, and operational and maintenance support for assigned systems/equipment.

- h. Assess periodically the readiness performance, materiel condition, and cost of ownership of an assigned system's equipment. When issues are identified, initiate corrective actions within the scope of resources available to the program.
- i. Inform the appropriate management officials, via the chain of command, if failures occur which affect system capabilities, components, or related equipment.
- j. Serve as the TEAM's primary point of contact with higher authority and Fleet users in matters related to her/his weapon system(s).
- k. Represent the U.S. Navy in coordinating with other U.S. armed services and civilian agencies, and foreign governments, including those allied by treaty with the U.S. Government (North Atlantic Treaty Organization, and other organizations) on matters associated with the program.
- l. Respond to international program requirements.
- m. Establish appropriate requirements for, and monitor the acquisition of, special or additional facilities necessary to support test, evaluation, installation, operation, and maintenance of assigned systems within the program's purview. Ensure that facilities planning factor criteria are developed with Naval Facilities Engineering Command Headquarters.
- n. Continually review operational requirements, inventory objectives, and the status of advanced technology opportunities for the program.
- o. Ensure all test and evaluation master plans are prepared and executed.
- p. Direct development and procurement of test and support equipment; technical documentation; and training equipment and devices, as required, through contractors and appropriate U.S. Navy logistics support activities.

2.2.4 ACQUISITION COORDINATING TEAMS

As discussed in the update to SECNAVINST 5000.2A (currently in draft as 5000.2B), Acquisition Coordinating Teams (ACTs) are teams of stakeholders from the acquisition, requirements generation, test and evaluation, and planning, programming and budgeting communities who represent the principal advisors to the Milestone Decision Authority (MDA) for the program. The ACT resolves issues at the earliest time and

lowest level so as to facilitate the milestone review process. ACT members are empowered and authorized by their respective parent organizations to make commitments for the organization they represent, and are responsible for keeping their principals apprised of the program status. The ACTs participate early and continuously with the program manager to develop and implement the acquisition strategy and streamline the acquisition process. The ACT *does not* replace the program manager's functional IPTs, or abrogate the responsibilities of the PMA and his program team.

Acquisition Coordinating Teams are required to be established for all programs listed below which have not yet passed Milestone III:

- All Acquisition Category (ACAT) I and ACAT II programs;
- Acquisition Information System (AIS) IC programs (those programs managed by Navy) and AIS II programs;
- Each ACAT III program for which ASN(RD&A) retains decision authority;
- Each AIS level III program for which the Naval Information Systems Management Center (NISMC) retains decision authority.

ACTs are also encouraged for ACAT and AIS III and IV programs for which decision authority is delegated to a PEO/DRPM/SYSCOM Commander, but will be established at the discretion of the MDA.

2.3 IPT FOR FLEET SUPPORT

Programs which have responsibility for in-service systems should consider the establishment of a Fleet Support Team (FST) as part of their overall IPT infrastructure. When deemed appropriate, this team provides those services previously provided by the Cognizant Field Activity (CFA). The FST is intended to ensure in-service safety and readiness of assigned systems while reducing the operating and support cost to the Navy. In addition to members of the 3.0 (Logistics) and 4.0 (Research and Engineering) Competencies, 6.0 (Industrial) and the Naval Inventory Control Point (NAVICP) personnel should be represented on the FST. The Program Management Competency (1.0) should also be represented when in-service trainers and support equipment are involved. Ultimately, it is the PMA's prerogative to structure the program team to meet programmatic objectives and customer requirements.

Existing in-service support teams (ISSTs) should be restructured to address these responsibilities and membership, and retitled the Fleet Support Team. Standardization of this title will facilitate communications

with the Fleet and simplify the update of current instructions (i.e., OPNAVINST 4790) which refer to the roles of the CFA.

2.4 AVIATION INDUSTRIAL CAPABILITY SUPPORT FOR IPTs

The Industrial Competency (6.0) encompasses the people, skills, facilities and equipment required to plan and execute the industrial operations associated with aviation depot maintenance, manufacturing and prototyping products/services required by the TEAM's customers. Most IPTs will require an interface with Industrial Competency personnel throughout the entire life cycle of their weapon system. Industrial Product Coordination (AIR-6.0D1), working in collaboration with the APML, typically provides industrial requirements coordination to the Level 2 and 3 IPTs. This group is organized by PEO and provides industrial requirements coordination by weapon system, independent of whether the depot maintenance support is determined to be organic or commercial. As an IPT member, team input regarding platform-related source selections, industrial capability assessments, depot source of repair analysis, depot interservice requirements and depot level maintenance reviews of logistic support analysis are coordinated by this individual. For those matters dealing with platforms requiring depot maintenance, field repair, or concurrent installation of modifications, the Production Manager (AIR-6.1) at the site, has visibility regarding cost, schedule, quality and budgeting for anticipated workload of inducted products.

2.5 OTHER TEAM ACTIVITIES

The predominant demands on the TEAM are Fleet requirements which will be satisfied through IPTs, through Product Support Teams (PSTs) (which do direct work but cannot be easily allocated to a specific program) and Enterprise Teams (ETs). There are also externally directed efforts supporting non-Naval Aviation customers, including other services, most of which occur at TEAM sites away from headquarters. In such instances, Externally Directed Teams (EDTs) may be formed to satisfy these demands. Project Coordinators (PCs) resident at the Area Commands serve as focal points to the external customer for work done by the TEAM in support of non-naval aviation customers. In some instances, the PCs perform program management functions when required to execute cost, schedule, and performance duties involved in producing/acquiring a product for the external customer. Though these teams are not PMA-led, they may adopt the same general structure, characteristics and operating concepts as IPTs. More information on the different teams and how they contribute to the workings of the IPT/CAO

is in the February 1996 TEAM Transition Plan Update. Appendix G of this manual provides further definitions on relevant terms and references.

2.6 IPT STRUCTURES

2.6.1 TEAM EXPERIENCE TO DATE

Our experience to date in implementing IPTs has been very positive. IPT structures have been formed to support our PMAs, IPT training has been instituted, and IPT memberships are continually being refined to address programmatic requirements. A variety of structural models has been employed by the PMAs, but in each case, there is only one overall team per program. This is straightforward for a single platform or product program team. It is more complicated for multi-platform program teams (F/A-18, Air-to-Air Missiles, Aviation Training Systems) or commodity program teams (EW Systems, Common Avionics). The Program Manager is responsible for ensuring each team is designed to fit the task at hand. The TEAM uses program teams to manage assigned programs from concept to disposal, and over that life cycle the structure, size and skills mix of the program team evolves to best meet customer needs.

Though the structures vary to suit the task, all IPTs are customer oriented, product-focused, multidisciplinary groups sharing common goals. The members are individually empowered to make decisions within well-defined bounds, as is the IPT collectively. The IPT and its members are mutually and individually responsible to the PMA for execution of the program within allocated resources and to the competency leadership for adherence to approved policy and processes. This is a significant point. The responsibility for successful program execution and authority to make trade-off decisions rests within the IPT, not the competency leadership or local command/site leadership. Competency leadership involvement is oriented to process development and improvement, assignment of personnel to teams (via the Team Assignment Agreement process discussed in paragraph 3.1.2), professional training and coaching of personnel assigned to IPTs, and monitoring methods to assess process responsiveness and effectiveness, personnel performance and facility capabilities. The IPT structure is product-focused, not competency- or site-specific, so organizational or geographic location of the individual IPT members becomes less important. The IPT concept leads to program-optimized decisions in a timely manner, with concurrent involvement of all affected disciplines.

2.6.2 LESSONS-LEARNED FROM HIGH PERFORMANCE IPTs

Our experience to date with the IPT concept suggests a few common characteristics of successful IPTs. Each team should have clearly defined roles and responsibilities, product interfaces, decision authority and resources with which to execute its task. Each team should establish metrics appropriate to the task and measure progress accordingly. A process for conflict resolution should be established at the start of the effort, and contentious issues raised and addressed early. Members should respect the views and contributions of others, and accomplish their objectives through continuous team building. Team members should be well-trained technical experts empowered to represent their respective competencies. Using their expertise, members should recognize that they are collectively and individually accountable for their products (as opposed to simply expending effort or enforcing compliance with processes or standards). Internal and external reporting relationships and processes should be established to keep all involved stakeholders and customers informed of status, progress, and issues.

Key to achieving high performance IPT operations is thorough program planning, proper allocation of resources, availability of efficient processes, and most of all, training of the team members. These are the mutual responsibilities of the PMAs and the competency leadership.

2.7 TEAM LEADERSHIP AND TEAM MEMBER RESPONSIBILITIES

The PMA is the overall program team leader. His/her planning-horizon responsibilities extend beyond that individual's tenure as PMA and forms the basis for competency planning and life cycle management within his/her IPTs. While paragraph 2.2 discusses the PMA's life cycle management responsibilities, the following paragraphs discuss the team leadership responsibilities of the PMA and IPT leaders, as well as the responsibilities of IPT members.

2.7.1 PROGRAM TEAM LEADER RESPONSIBILITIES

Paragraph 2.2 above defines the mission, functions, and responsibilities of the PMA in executing life cycle management for his or her program. In addition to these programmatic responsibilities, the PMA, as the leader of the program team, is responsible for:

- a. preparation and maintenance of team charters and Program Operating Guides

- b. providing his/her team with broad program guidance and delegation of product decision-making authority and limitations of program authority to each IPT
- c. providing allocated budget
- d. maintaining a program environment that rewards team success
- e. appointing IPT leaders
- f. providing program orientation for personnel assigned to the program team
- g. keeping the PEO and TEAM leadership informed

2.7.2 TOP-LEVEL IPT MEMBERSHIP RESPONSIBILITIES

The top-level IPT, as members of the PMA's leadership team, will assist the PMA in:

- a. ensuring consistent application of program requirements across the IPTs
- b. providing coordination of personnel resources and consistent application of standard functional processes across the IPTs
- c. performing requirements analyses and allocations in accordance with the systems engineering process
- d. partitioning the weapons system into the optimum groupings for IPTs
- e. defining the performance, interface and associated environmental requirements for each IPT
- f. integration of program products
- g. ensuring interfaces are maintained between IPT products and standard functional processes
- h. managing change processing across IPTs
- i. identifying and facilitating resolution of disputes among IPTs
- j. maintaining Fleet liaison and effectively listening to customers to better understand their needs.

2.7.3 IPT LEADER RESPONSIBILITIES

Each IPT must have a designated leader. Team leadership may come from any competency, not just the Program Management Competency (1.0), and may rotate over the life cycle of the program depending on the primary focus of the program at a given time. The team leader is responsible for:

- a. the day-to-day performance of the IPT, and providing inputs to the Competency Leaders for assigned team members' annual performance appraisals

- b. ensuring that decision making within the team is not dominated by one competency
- c. speaking for the team, communicating program requirements to the membership and resource requirements to the PMA and competency leadership.

Team leaders should have a broad knowledge of the product and cross-functional interdependence, and possess the interpersonal skills to foster teamwork and motivate the team to success. In most cases, the team leader is not the supervisor of the team members. The team leader guides, coaches and encourages the team's progress, and will provide an input to the members' competency manager regarding the participant's performance. He or she will also cooperate with competency managers, and release team members for professional training when appropriate. Ideally, professional training needs will have been negotiated and agreed upon as part of the Team Assignment Agreement process, discussed in greater detail in paragraph 3.2.4. Ultimately, the team leader's main focus remains on product and program success.

2.7.4 TEAM MEMBER RESPONSIBILITIES

Team members will be drawn from all competencies that affect the cost, schedule, and performance of the program. Team leaders of lower-level IPTs should be members of the next higher level IPT. Depending on the relative impact of a competency, team membership may be either full-time or part-time. Team members are trained and assigned to teams by their competency to execute standard processes and exercise technical and/or business judgment within established policies in support of the assigned program. Team members are responsible to their competency leadership for the integrity, quality and objectivity of their work and for compliance with established policies, processes and best practices. The team members are responsible to the team leadership for:

- a. taking ownership of the IPT's charter, goals, and objectives
- b. supporting product cost, performance, schedule, and quality objectives
- c. providing and meeting commitments
- d. maintaining communication with their respective competency managers.

2.8 EMPOWERMENT

Empowerment is essential to efficient and productive operation of our program teams, and is an overarching feature of the IPT/CAO operating concept adopted by the TEAM. It permits PMAs to focus on long-range

issues, increases the management and leadership experience of our people, and increases the TEAM's productivity. Empowerment of the IPTs requires positive action by both the PMA and the competency leadership.

The competency leadership must train their people with the skills necessary to effectively operate within the bounds of their Team Assignment Agreement (discussed in paragraphs 3.1.2 and 3.2.4). They must instill in them the expectation that, while on an IPT, they will provide the Program Manager with their best professional efforts, skillfully employing their functional expertise, common processes and experience to ensure program success and customer satisfaction. The competency leadership must also ensure that the IPT member understands the practical limits of his or her knowledge and authority, keeps his or her PMA and competency manager informed, and accesses the extended resources of the competency when those limits are surpassed. Such considerations should be factored in when personnel are being considered for assignments requiring collocation, as discussed in paragraph 2.9.

The PMA must work with his or her Leadership Team to understand their strengths and, through team-building, forge a bond of trust and confidence between the IPTs and the PMA. The PMA must provide effective leadership, program direction and management guidance sufficient to permit the IPTs to efficiently translate guidance into executable program plans. The PMA must also delegate program decision authority to the IPTs in consonance with his/her direction and guidance, and allow them to manage the program as directed. These authorities must be clearly transmitted in the POG (discussed further in paragraph 3.2.1).

2.9 COLLOCATION

Collocation means physically locating certain key members of a program team into an office, either with, or in close proximity to the Program Manager. IPT members should be collocated to the maximum extent practical to facilitate the most effective communication within a team. However, there will be practical limits to collocation such as available space, scope and breadth of team membership, duration of the task, security, facility access, and availability of communications tools. For example, limitations may apply to IPT members from other sites, for short-term IPTs, or when a single competency representative must serve more than one IPT. When collocation is not possible, frequent (daily) communication must be established between the members through

meetings and electronic means. See paragraphs 3.2.4 and 3.3.3 for further discussion regarding administrative procedures applicable to collocation of team members.

For PEO and AIR-1.0 programs, the Assistant Program Manager for Systems Engineering and the Assistant Program Manager for Logistics and their immediate staffs, if assigned, should be collocated with the PMA or PEO, as agreed upon by the Competency Leader. Depending on specific program requirements and risks, other key IPT members (for example, IPT leaders for avionics, propulsion, etc.) may be collocated with the PMA during periods of significant development affecting their portions of the program.

Because of the highly specialized nature of the work, and to improve synergy and professional development in Counsel (7.7) and the Contracts Competency (2.0), these IPT members, as a general rule, will not be collocated, but will be located together near the respective PEOs. Similarly, each IPT should be located together, but not necessarily in close proximity to the PMA. Because of the virtual nature of IPT support (that is, membership shifting as needs change), and the higher part-time content at that level, IPTs should be located with ready access to shared assets such as facilities and technical experts. Locating common product IPTs for different programs together will foster program-focused interaction within each team as well as facilitate sharing lessons-learned across programs and improve the professional growth and technical expertise of the personnel involved.

SECTION **3.0**

HOW IPTs OPERATE

3.1 FORMING IPTs

The program team is a Program Manager’s total team in terms of human resources. New program teams are initiated when directed by the appropriate PEO and/or COMNAVAIR. In terms of personnel resources, the requisite “buy-in” by the Competency Leaders will be an important part of the decision to initiate a new program team. This section addresses how a Program Manager and staff go about formulating the hierarchy of IPTs, which are sub-sets of the program team.

Figure 3-1 illustrates the typical steps associated with forming IPTs. Step 1 is particularly important in that it includes the creation of IPT charters.

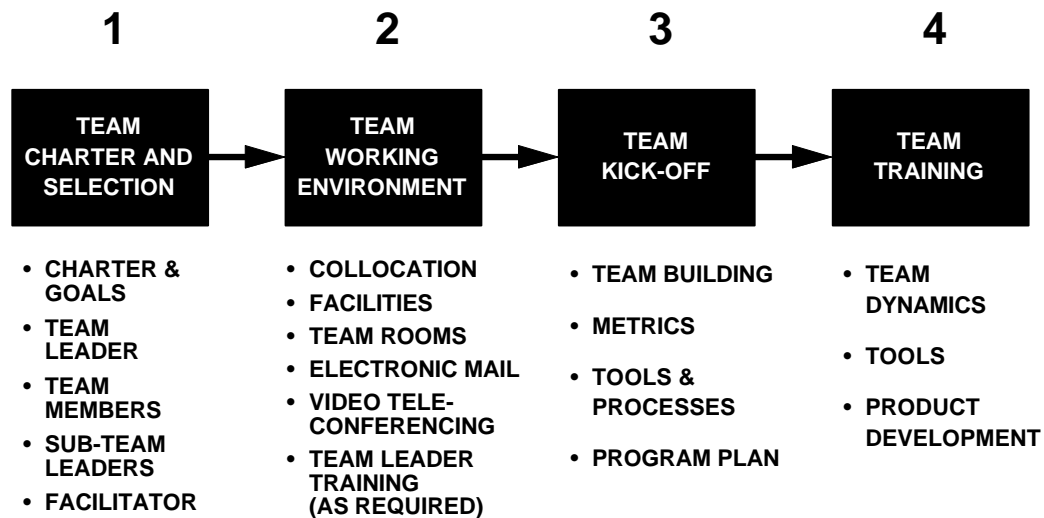


Figure 3-1: Steps In Forming IPTs

The charters lay out the boundaries of IPT authority, and other Program Manager expectations. Membership should be geared to that portion of the life cycle of immediate concern to the IPT’s charter, but should also draw from the Navy Depots as appropriate to engage this requisite expertise early in the program.

3.1.1 TYPES OF TEAMS NEEDED

The Program Manager should engage his top advisors to determine the best hierarchy of IPTs to suit program needs. Which stage of its overall life cycle (development, production, post-production, etc.) the program is in is an important factor. Lessons-learned from other programs as well as other available information and advice from the Program Management Competency (1.0) should be obtained. Once the overall pattern of IPTs emerges, the Program Manager and/or his/her representatives are ready to interact with the Competency Leaders to populate the teams.

3.1.2 IDENTIFYING TEAM MEMBERS

Most if not all members will be obtained by interacting with the appropriate competency managers (normally Level 2, 3, or 4 managers), using the Team Work Plan (TWP) and Team Assignment Agreement (TAA) processes described later in this section. The PMA should use the TWP to describe the tasks and products to be provided by the IPT members so that competency managers can make appropriate recommendations to the PMA. During such interaction, candidates for higher-level teams should be addressed first. This is accomplished to afford the PMA the experience and advice of these individuals to define the tasks and products of the IPT to help staff lower-level teams. Competency managers will make every effort to provide the PMAs with the “right person, at the right place, at the right time.” *This is the essence of IPT management and our success depends on it.* In those cases where adequate staffing is not readily available, the responsibility for corrective action rests with the competency managers. This means carefully weighing available resources throughout the entire seamless organization, or initiating action for contractor support if necessary.

In the event that contractor support is considered necessary, it will normally be provided by the competency. If the Program Manager and the competency manager mutually determine that the competency is unable to meet a particular demand, the option is available for the program office to provide its own contractor support. However, first consideration should always be given to the competency to provide the support. If it is deemed necessary for the program office to provide the required contractor support, the program office and the competency must work together to insure that all contractor personnel adhere to established processes. It is important that the competency and the program office collaborate fully to insure a successful program. The competency also needs to maintain an awareness of the extent to which the customer has a demand which it cannot meet and the approach used as an alternative.

3.1.3 SELECTION OF IPT LEADERS

Each IPT must have a leader. Team leadership may come from any competency and may change over the life cycle of the program, depending on the primary focus of the program at a given time. The team leader guides the day-to-day performance of the team; provides evaluations and administrative coordination with the competency on team members; responds to higher-level teams and competency managers on behalf of the team; and ensures the operations of the team conform to policy and general guidelines in manuals such as this.

IPT leaders should have a broad technical knowledge of the product and understand how the different elements of the TEAM, industry, the Fleet, and other Navy components contribute to its successful acquisition and life cycle management. The team leader must also possess the ability to apply the unique interpersonal and planning acumen, acquired through prior experience and/or through leadership training, necessary to guide a highly skilled, diverse IPT.

IPT leaders are normally designated by the next higher level IPT or the program team. This authority may be delegated to the IPT so it may select its own leader. In selecting IPT leaders, there are two extremes related to the way leaders can delegate authority to other team members. One is where the leader maintains total responsibility and authority and uses the team members as resources to execute his or her plans. The second is where the leader delegates virtually all the authority to the team members and views his or her role as simply a reporter back to higher management. TEAM experience has shown that neither of these extremes have produced the best results in the past. The best results have come from teams where the leader reflects the following characteristics:

- a. is an effective communicator
- b. is the catalyst for all team performance
- c. inspires a vision of what could be
- d. encourages innovation
- e. has a broad knowledge of the product or service
- f. accepts responsibility for team decisions
- g. is a consensus builder

A product's position in its life cycle, as well as the more prominent competencies involved with the product at the time, should also be considered when selecting IPT leaders. This approach fosters transfer of team leadership, thereby increasing opportunities for personal growth, when appropriate.

3.1.4 INTEGRATION AMONG IPTs

Figure 3-2 illustrates a notional IPT structure for a development program. The first level is comprised of the PMA and the leadership team. They represent the integrated weapon system/product, which in this case is a new aircraft. An important point to grasp is that the leadership team typically includes the business manager (BFM),

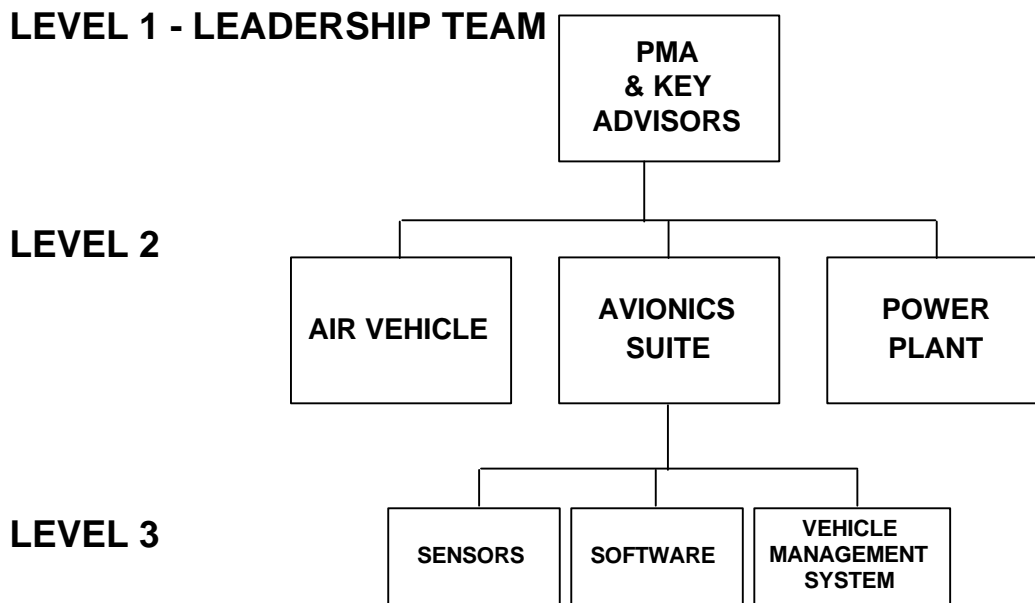


Figure 3-2: IPT Structure for a Development Program

contracts manager (PCO), technical director (the APM(SE)), etc., *and the leaders* of the level 2 teams. In other words, in our example the leader of the Air Vehicle team at level 2 also serves on the leadership team. This makeup is flexible, and considers both program type and stage in the acquisition cycle. Ultimately, it is the PMA who determines the members of his leadership team.

The process of creating levels continues for as long as is beneficial. As mentioned in Section 1.0, paragraph 1.3, program teams rarely should exceed three levels below the PMA, avoiding excessive IPT layering. At each level, IPTs must have a clear statement of objectives, budget, schedule, program plans, metrics, etc. And to reemphasize a key point, a team leader on a lower-level IPT is always at least a member (sometimes the leader) of the similar team on the next higher level.

3.2 IPT DOCUMENTATION

The following paragraphs provide guidelines necessary to develop the Program Operating Guide and related IPT documentation, such as IPT charters and Team Assignment Agreements. These documents help to clarify the mission, function, and authority of the IPTs, as well as the membership of such IPTs, in helping the PMA to execute cost, schedule, and performance objectives set for the program by higher authority.

3.2.1 PROGRAM OPERATING GUIDES

Program Operating Guides are the responsibility of the PMA. Their guides, in a top-level way, present the *why, what, when, who* and *how* for individual programs, including any unique contract or program requirements. The POG is developed to:

- describe their processes for starting and operating IPTs;
- enumerate the IPTs they elect to create and where the teams fit into the program team structure;
- address how the program team and its IPTs interact with the competencies, customers, and higher echelons in Navy and DOD; and
- outline the program team's vision in terms of an operating philosophy and goals and objectives for the next several years.

When completed, and approved by the cognizant PEO, the POG is the authoritative document on how a program office conducts its business. This section describes the kinds of information a POG should address. As mentioned earlier, the aim here is to discuss the substance of a POG and not prescribe a particular form, organization or process. POGs should be reviewed at least annually, and updated when significant programmatic changes dictate.

3.2.2 IPT CHARTER

When a PMA decides a new IPT is needed, one of the first steps in creating an IPT is to charter it. A sample IPT Charter format is shown in Appendix C. The purpose of the charter is to:

- convey the expectations of the program team;
- clearly state the scope of the new IPT's authority;
- specifically state—and in some measure, empirically—how success of the IPT will be evaluated;
- identify customers; and
- state the amount and types of funds available to the IPT, and the kinds of expertise the team must have.

3.2.3 TEAM WORK PLANS

The IPT Charter drives the Team Work Plan process for the program. The **Team Work Plan (TWP)** is the funding and execution document for an IPT. It ties money to specific tasks. Where the IPT Charter is a broad commission, the Team Work Plan lists hard products and/or services. The Team Work Plan is the means through which a program manager, using a task breakdown structure, secures an audit trail from the major system to the smallest product or service, and back up again.

The Program Management Competency (1.0), and specifically PMA250, is developing the TWP as an automated tool to be used by the PMA and the competencies to document all planned work to be undertaken in support of the program team. At the time this IPT Manual Update went to press, eight Program Offices were testing the prototype TWP/TBS construct. The TEAM was also examining several software applications from PMA250 and other sources to determine the best option to satisfy the TWP requirements.

The TWP is intended to be the primary management tool used to organize, control and maintain accountability for technical work being performed on teams. The TWP will document a program team's resource requirements (e.g., personnel, depot/special facilities, test assets, etc.) and the level of commitment of each competency to supply those resources, as well as the level of funding to be provided by the PMA for direct funded resources. It will state the work to be done for funding assigned, replacing the AIRTASK and Work Unit Assignments (WUAs) which are used today. The TWP will contain detailed task descriptions in a "Task Breakdown Structure" for a three year period. The Task Breakdown Structure (TBS) is a variation on the Work Breakdown Structure (WBS) (refer to MIL-STD-881B, entitled "Work Breakdown Structures for Defense Materiel Items"). The TBS is task-specific and more flexible than the WBS; it may be oriented to use any combination of product, site, function or appropriation, depending on the management needs of the team. The end product of the TBS will be the TWP, which will include all of the TBS tasks, task descriptions, and associated funding.

The evolution of TWP began in 1994 when a Process Action Team (PAT) identified the need to better manage the AIRTASK/WUA process. A new business process was derived from the need to link IPT requirements to CAO. In November 1994, PMA250 was directed to develop a common TBS and software application for the TWP. The initial software application and data base have been completed. Limited demonstration commenced in early November 1995 in selected PMAs and Enterprise Teams. A "test, analyze, and fix" phase is underway, and the

software will be available for use TEAM-wide by October 1997. Concurrent systems upgrades will be implemented based on user feedback so that a team-wide evaluation can begin.

Additional information can be found in NAVAIR Memo 13000 Ser AIR-540/211, dated 19 August 1994, which contained the Draft NAVAIRINST 13000.13, Integrated Planning and Implementation of Program and Project Work.

3.2.4 TEAM ASSIGNMENT AGREEMENTS

Charters are important because they will be used by the program team to prepare TWPs that will act as demand orders on the competencies to supply the workyear expertise listed in the charter. As illustrated in Figure 3-3, the PMAs utilize the TWP process to forecast program demand and articulate workload requirements in consonance with projected program budgets. The TWP will provide summary level information used to prepare Team Assignment Agreements (TAA) for each resource assigned to the IPTs. A sample TAA is shown in Appendix D.

The TAA must also show how much of the person's time will be dedicated to the IPT that the Agreement concerns, and whether the person will be "collocated" with the team leader. "**Collocated**" means physically located with, or in close proximity to, the team leader, as agreed upon by the Competency Leader. This is an important distinction, particularly at TEAM Washington, because a person who is collocated with the team leader *and* is **full-time** with one program (i.e., the TAA commits 70% or more of the person's time to one program office) is subject to the administrative processes described in the AIR-7.3.1 Memo of 16 October 1995, Subject: Implementation of Prototype Administrative Processes, provided herein as Appendix F. This memo describes how the key administrative or supervisory duties of leave, travel, work schedule, timecard, and training approval will be handled for a person who is collocated and full-time at headquarters. The memo defines the roles of the competency manager and the team leader in these matters. Policies and procedures for personnel evaluations for TEAM personnel are addressed separately in paragraph 3.3.3.

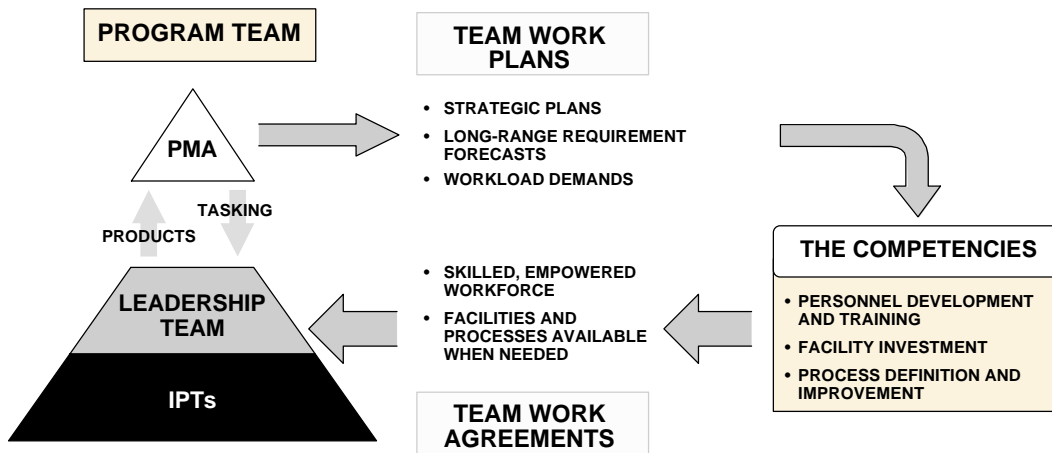


Figure 3-3: PMA Demand Drives Competency Supply

Policy Note:

The TEAM goal is for IPT members to be full-time and collocated to when practical. Fractionally distributing a member across two or more program teams should be exceptional; however, this may be required in cases where the PMA either does not need or cannot afford a full-time person. Also, when a member’s team assignment(s) is reviewed annually, every effort shall be made to keep a member with his or her present program team and IPTs, for the sake of continuity. This, of course, assumes that his/her performance is acceptable to the IPT leader(s) and program team, and a continuing requirement for the team member’s expertise exists.

3.3 OPERATING AN IPT

3.3.1 IPT ADMINISTRATION

When an IPT member is collocated and full-time, that person—as discussed in paragraphs 2.9 and 3.2.4—is subject to the administrative procedures described in NAVAIR memo of 16 October 1995 (included as Appendix F). If none or only one of these conditions is met, the member will be responsible to his/her competency manager on all administrative and supervisory matters. This does not relieve the IPT member nor the competency manager of the responsibility to work with the IPT leader on administrative matters of importance to the member’s participation on the team. These clearly include leave, training, work schedule, and travel.

The IPT/competency arrangement depends on the ability and willingness of the IPT member, IPT leader and competency manager to share scheduling information and to quickly resolve conflicts. It is assumed that impasses will be rare and that all conflicts will be resolved

at the lowest possible level. However, if such an instance occurs, the problem will be documented by a memo and elevated up the program team/competency chain of command.

Policy Note:

Conflicts will be settled at the lowest level possible. Teams will pursue every avenue “horizontally” across the organization before going “vertically” up the chain of command.

3.3.2 CONFLICT RESOLUTION

This same process will be used for any intractable disagreement between the competency manager and the IPT leader. For example, disagreements may arise regarding a candidate team member’s qualifications and/or the competency’s approach to satisfying the IPT’s resource requirements. These issues should be addressed at the lowest level at which resolution can be reasonably expected. For example, in the event a Level 3 IPT staffing disagreement cannot be resolved, the Program Manager should seek recourse with the Level 2 competency manager (Department Head or Assistant Department Head at the site) and the APEO first, and then, if necessary, with the PEO and the Competency Leader. The use of a memo formally documenting the problem for resolution by higher management in the program and competency chain is a last resort. See paragraph 3.7.2 for more information on resolving conflict.

3.3.3 PERSONNEL EVALUATIONS

Evaluations of military and civilian IPT team members will preponderantly stress team tasks and responsibilities. A sample team evaluation form is included as Appendix E.

Policy Note:

- a. **U.S. Navy Personnel (OPNAVINST 1610.10 applies):** Regular fitness reports (officers and chief petty officers) and enlisted evaluations for Competency personnel assigned to IPTs will be signed by their Competency reporting senior. Personnel Additional Duty (ADDU) from a Competency to an IPT will also receive a Concurrent Report from the PMA which, when the conditions prescribed in OPNAVINST 1610.10 are met, may be forwarded as a Concurrent/Regular report by the regular reporting senior. Concurrent reports and IPT/PMA written inputs to regular fitness reports are due to the Competency reporting senior no later than the twentieth day of the last month of a reporting period or 15 days prior to transfer.

NOTE: An ADDU relationship may be established by either Activity Manning Document designation or competent written orders or directives. However, an ADDU relationship may not be established between NAVAIRHQ Competency personnel and an AIR-1.0 PMA since both are part of the same command. OPNAV 1610.10, paragraph E-2 refers.

- b. **U.S. Marine Corps Personnel (MCO P1610.7 applies):** The first officer in the Competency chain of command is assigned as the reporting senior for Competency USMC officer and enlisted personnel assigned to IPTs. Written IPT/PMA inputs are due to the reporting senior no later than the twentieth day of the last month of a reporting period or 15 days prior to transfer.

- c. **U.S. Air Force, U.S. Army and U.S. Coast Guard Personnel:** Fitness reports for USAF, USN and USCG Competency personnel will be signed by their Competency reporting senior as assigned by the parent service's regulations/policy. Written IPT/PMA inputs are due to the reporting senior no later than the twentieth day of the last month of a reporting period or 15 days prior to transfer.

Policy Note:

In accordance with NAVAIRINST 12340.4, competency supervisors are responsible for performance evaluations of their personnel, and for including in such appraisals feedback from the IPT leader(s) and/or PMAs regarding the performance of personnel assigned to teams.

3.4 IPTs CONDUCTING BUSINESS

3.4.1 COMMUNICATIONS

Most everyone in our business recognizes the importance of clear, two-way communication. That importance is maintained, if not increased, when operating within the concept of IPTs. Collocation will have a very positive benefit on our IPTs, and their ability to communicate efficiently. On the other hand, many IPT members, though part of our seamless organization, will be geographically separated. This presents challenges to the Program Manager and his/her IPT leaders. Fortunately our progress in electronic communications helps make this situation more manageable. Extended use of E-mail, video teleconferencing and networked databases are just a few of today's capabilities that must be exploited. Looking to the future, paperless or near-paperless offices are now within our grasp and can increase the efficiency of our

communications even further. This is an area of continuing interest within the ongoing Acquisition Reform movement.

As our Information Management efforts evolve, IPTs must have access to, and build applications from, warehouses of corporate information. IPTs must use their access to, and presence on, the world-wide web to conduct working sessions and share information. IPTs must also routinely use networked work station voice and video. These capabilities are being developed as part of the TEAM's overall approach to Information Management.

Continuous, free-flowing and interactive communications among individual IPT members and between other IPTs is crucial. Figure 3-4 is a notional example of how IPT communication links work. Some of the key relationships follow.

INTEGRATED PROGRAM TEAM COMMUNICATION LINKS THE IPT (GENERIC PROGRAM)

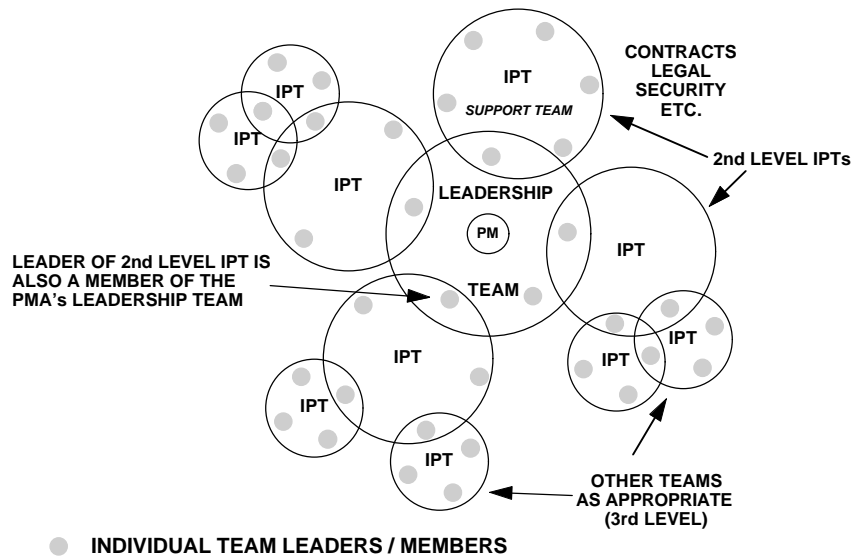


Figure 3-4: IPT Communication Links

- a. The PMA is the nucleus or hub of all IPT activity. This doesn't mean he or she controls each and every detail. It simply reinforces the notion that he or she is ultimately responsible for program success and is the focal point and main spokesperson, both internal and external, for the entire program.
- b. Communications reflect a far more lateral or even cyclical orientation, as opposed to strictly vertical.
- c. The PMA is surrounded by a leadership team of top advisors, which constitutes a program's first-level IPT.

- d. The leader of a lower-level IPT is invariably a member of the next higher-level IPT
- e. Team leaders are the principal conduits of information to higher-level teams, though not to the exclusion of team member initiative and creativity.
- f. Team members must remain flexible and ready to interact frequently with other teams.

3.4.2 CUSTOMER CONSIDERATIONS

A chief consideration in IPT operation must be the customer(s). Customers include the Navy acquisition chain of command, Type Commanders, the OPNAV and HQMC Requirements Officer, other services, and the Congress. To ensure effective communications, a TYCOM representative and the OPNAV/HQMC Requirements Officer (sponsor) should have a formalized, advisory relationship to the Program Manager. However structured or operated, the IPT must guarantee these customers a meaningful role in program decisions. Level 2 or lower IPTs should have Fleet and other service representation, as appropriate. See paragraph 2.2.4 for further discussions on the use of Acquisition Coordinating Teams (ACTs).

3.4.3 MANAGING ASSIGNED WORK

The program team and its subset of IPTs are responsible for the success of a program. The way assigned work is managed is a key factor in achieving that success. IPTs manage cost, schedule and technical performance for their assigned products and/or services. In doing so they strive for what is best overall for the IPT's customers, as opposed to what may be best for individual functional areas. The TEAM forges strong partnerships, based on trust, among the IPTs and the competencies to make this work.

In planning and managing schedules, IPTs strike the right balance between optimism and achievability. The importance of monitoring and maintaining schedules will always be stressed. However, this will be done primarily by focusing on events. Event-driven planning is the process of identifying the activities that must be achieved to execute the program. Each event is defined by a set of accomplishment criteria. Nearly all activities should be event-driven, as opposed to time- or date-driven. Date- or time-driven planning differs from event-driven planning in that it over-emphasizes schedule and requires that plans adjust to meet the schedule. This often results in delaying work without proper regard for the increased risk. Whenever possible, event-based, computer-networked schedules should be available and used by all appropriate

team members. Where contractually appropriate, Cost Schedule Control Systems (CSCS) schedule information will be used as a primary earned value management tool, and reported in accordance with current policies. Earned value management should also be used to monitor work done in-house at TEAM sites in support of the program.

Work associated with technical performance is invariably dominated by managing requirement/design tradeoffs and overall risk. Sensible requirements/design tradeoffs, while always an ongoing process, usually need to be accomplished as early as possible to preclude adverse program impact. OPNAV/HQMC Requirements Officers and Fleet representatives are key to this process, and must be included on appropriate IPTs to ensure success.

Managing technical risk is a concept that takes many forms in its implementation. Fundamentally, it is accomplished by identifying risks to the product or process as early as possible, and implementing effective abatement measures that either (a) eliminate the risk; (b) introduce control measures to satisfactorily bound the adverse implications; or (c) capture sufficient resources to execute parallel fall-back plans. IPTs are responsible for accomplishing these tasks, and may do so using the risk management techniques that best suit their circumstances. However, most good risk management programs have the following characteristics:

- a. The process is well planned and documented.
- b. The process is proactive, meaning the teams constantly look ahead to find and deal with their problems.
- c. Initial assessments are periodically revisited to validate earlier conclusions.
- d. There are well-defined evaluation criteria to help distinguish success from failure.
- e. Ongoing results are documented and made available to all appropriate team members.

3.5 IPT FINANCES

3.5.1 BUDGETING AND EXECUTING WORK

At least for the foreseeable future, there will be no change in the way we execute financial plans for acquiring hardware and related services from our contractors. Regulations and policy associated with contracts management will remain in effect, including changes implemented in the Federal Acquisition Streamlining Act (FASA). There could also be additional changes as Acquisition Reform continues to unfold.

Planning and executing organic funding support will be a primary responsibility of Program Manager-designated IPT leaders. As we face the likely prospect of further declining budgets, it is more important than ever that our organic support budgets are fully understood and totally consistent with Fleet needs and priorities. Developing zero-based budgets using a product-based work-breakdown structure (WBS) format is recommended. Relying on historic rules of thumb (10% of procurement budget for example) is discouraged. Using a WBS format offers the advantages of a more disciplined process where omissions and duplications are less likely, and the overall investment strategy is more sharply focused towards Fleet needs. The WBS format can be tailored to an individual program's organization of IPTs. It need not be identical to the contract WBS, though similarities should be apparent.

As we progress with our transition, Program Managers are being given much greater responsibility for planning and executing their O&M,N funds. While this will lead to better program-focus of these resources, certain challenges and pitfalls must be understood and overcome. Our system of O&M,N budgets is very fluid because of the one-year nature of these appropriations. The execution year is invariably replete with short-fused reviews and adjustments to contend with leading and lagging obligations throughout the Navy. Program Managers, their IPT leaders and the supporting staff of business/financial professionals must be prepared to deal with what will most likely be increased workload. PEO staffs, particularly the APEO(L), are available to address these areas, including providing briefings and training to IPTs as desired. Relying on the WBS-oriented budget can help in this regard. In the past, the lines between APN, WPN, R&D and O&M,N funding used for program-specific logistics support (e.g., WSS, etc.) have been difficult to understand. The WBS budget structure will be key to ensuring the right mix of R&D, procurement and O&M,N dollars are invested, and eliminating wasteful overlap or costly omissions.

Although we continue to use our system of AIRTASKS and associated funding documents to initiate our in-house program-related support, we are moving toward more streamlined procedures. By October 1997, the new procedures will revolve around a product-based TBS-oriented Team Work Plan (TWP), which will reflect most if not all the needs of respective IPTs. This plan, when approved by the individual Program Managers and cognizant comptrollers, will be the vehicle which triggers funding and initiates program work throughout our seamless organization. These emerging, more streamlined procedures are being prototyped by several Program Teams. See paragraph 3.2.3 for further information regarding TWPs.

3.5.2 FUNDING IPT MEMBERS

During FY97, the way we budget and fund our program personnel costs will not change. That is, headquarters personnel will continue to be covered through institutional O&M,N funding, and field activity personnel assigned to IPTs through our system of AIRTASKS until replaced by Team Work Plan. In later years the situation is less clear, and is the subject of a corporate study on resource allocation.

3.6 INTERACTING WITH CONTRACTORS

The concept of Integrated Product and Program Teams is also resident within private industry. Most if not all of the aerospace contractors we deal with are organized around the principles of self-governing teams. While it is not essential that our IPTs for a particular program directly mirror those of its principal contractor(s), some care should be taken to ensure they are not so very different that conducting business becomes a problem. Our IPTs must work in harmony with those within industry, where the real products for the Fleet normally originate. In fact, our objectives are best served through participation in joint government/industry IPTs with a shared destiny where both parties are equally dependent for the success of the program.

While teamwork and striving for win-win outcomes between government and industry is imperative, it is important to maintain the distinction between our government responsibilities and those of industry. Our IPT members will always accomplish the customary government work, such as writing Program Initiation Documents (PIDs), conducting source selections, etc. Where we have entered into a contract with industry, our participation in IPTs as a resource, and not as oversight, is equally as important as the industry counterpart's responsibility to maintain cost, schedule, and technical performance. While customer/product focus of such IPTs is essential, this should not be allowed to undermine sound contracting procedures.

3.7 RESOLVING IPT PROBLEMS

A key strength of IPTs is their ability to effectively resolve technical and programmatic problems in a timely way. IPT leaders, empowered by the Program Manager and competency manager(s), use their experience and judgment in guiding their multidisciplinary teams. They approach each and every problem with a keen sense of what is most important to their product and customer. Details of this process, which may vary somewhat from program to program, are spelled out in individual Program Operating Guides. However, there are many areas common

across programs in this regard, the most important of which are addressed below.

3.7.1 ROUTINE CONSENSUS BUILDING

Depending on the life cycle of a program and the specific IPT structure employed, “routine” matters may differ substantially between programs. What we are addressing here are those matters where a particular IPT, through its make-up and overall experience level, is well-suited to deal with the question(s) at hand.

In these cases the IPT leaders encourage team members to bring all relevant facts to the table. Open, two-way communication ensues, throughout which the team leaders are particularly conscientious in drawing out all relevant facts and opinions. Using the ultimate criteria of what is best for the product and customer, the IPT leader guides the team towards a consensus which all members can support. The judgment of the team leader is critical in this process in a number of ways. First, he/she ensures all team members, not just the more vocal ones, have the opportunity to participate and express their opinions. Second, the team leader takes note of whether the decision reached represents a strong consensus or a weak one. In the case of the latter, the situation must be understood by appropriate, more senior members of the IPT, so that if factors change, earlier decisions can be revisited if necessary. And third, the team leader is particularly sensitive to the minority opinions. The process should in no way be viewed simply as one of “majority rules.” Minority opinions are adequately explored and considered, for experience has shown us that they are sometimes the best.

3.7.2 RESOLVING CONFLICT

There will be times, however infrequent, when IPT leaders are unable to forge a consensus within the team on a particular matter. An example might be where several team members, backed by technical competency leadership, feel strongly that a technical compromise under consideration is unacceptable for reasons of long-term product integrity. These cases will be particularly challenging to the team leader and will require all his/her experience, maturity and judgment. Handled correctly, the conflict can actually be a positive reinforcement of the process and enhance the sense of “team.” Handled incorrectly, though, the conflict can become a divisive factor and damage the team’s ability to interact effectively.

The key to resolving conflict is the general acceptance by all team members that their overarching objective is to do what’s best for their

product and customer. With this common understanding, the issue at hand becomes more manageable, in that it is more clearly a matter of “means” rather than “motivation.” Equally important is the way IPT leaders deal with the conflict. It is rarely, if ever, appropriate for an IPT leader to make a unilateral decision in the absence of a team consensus. Briefing the issue to higher authority for guidance is normally best in this situation.

More specific details of the resolution process will be laid out in individual Program Operating Guides. In all cases, though, the PMA should take an active role in the process. By interacting closely with his/her top advisors and the appropriate competency managers, ideally the PMA will orchestrate a satisfactory solution. In cases where that is not possible, the PMA will raise the issue to the appropriate PEO or AIR-1.0 for assistance and guidance. The PEO staffs, particularly the APEOs, are well suited to assist in these matters. If requested, they will coordinate with the PMA and competency managers to help frame the issue for the PEO. In all but the most unusual of circumstances, the PEO and COMNAVAIR will be the final decision authorities.