DRAFT

JOINT STRIKE FIGHTER (JSF)
SYSTEM TRAINING PLAN (STP)

1 October 2001

EXECUTIVE SUMMARY

The Joint Strike Fighter (JSF) will become the next-generation strike fighter aircraft to assume the roles of the United States Air Force (USAF) F-16 and A-10 aircraft, United States Marine Corps (USMC) AV-8 and F/A-18A/C/D aircraft, and the United Kingdom (UK) Sea Harrier FA2 and Harrier GR7. The JSF will complement the United States Navy (USN) F/A-18E/F aircraft and replace its F/A-18C/D. Information contained in this document is based on projected requirements known at the current time, and will be updated as the JSF data matures during the Weapon Systems Acquisition Process (WSAP). This document may serve as the basis for development of a Memorandum of Agreement (MOA) among the Services with respect to JSF training.

The JSF program is currently in the Program Definition and Risk Reduction phase of the WSAP and is scheduled to enter Milestone II, Engineering and Manufacturing Development, in 2001.

A Training Situation Analysis was conducted, and a Training Situation Document and Manpower Baseline Document were developed. Legacy systems (i.e., F-16, A-10, F/A-18, AV-8, Sea Harrier FA2 and Harrier GR7 aircraft) were reviewed for similarities in training requirements to facilitate the development of pilot and maintainer training requirements that capture and validate the best from each Service-unique training suite and optimize interoperability in the new Joint system training.

Manpower, personnel, and training requirements contained herein are based on legacy systems and modified for considerations of weapon system, training equipment, training technology changes, maintenance occupations study, and training concept changes that include Joint Service modularized training packages, distributed learning, distributed mission training, and just-in-time training. Transition/conversion, continuation and upgrade training will be provided at the applicable Service specific operational training unit. Information on specific training to be developed and conducted will be included as the JSF program matures.

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JOINT STRIKE FIGHTER SYSTEM TRAINING PLAN

1 PURPOSE OF THE SYSTEM TRAINING PLAN.

This Joint Strike Fighter (JSF) System Training Plan (STP) identifies all Services' (i.e., United States Air Force (USAF), United States Navy (USN), United States Marine Corps (USMC), and United Kingdom (UK)) life-cycle Manpower, Personnel, and Training (MPT) requirements for the JSF aircraft. This STP outlines future training requirements and describes the methods and media to be used to train JSF personnel to employ, operate, and maintain the aircraft. All levels of training, from basic qualification to advanced and/or specialized training, are described. This document may serve as the basis for development of a Memorandum of Agreement (MOA) among the Services with respect to JSF.

1.1 Overview of the JSF STP.

Section 1 explains the purpose and overview of the JSF STP. Section 2 describes the membership, roles, and responsibilities of participants from all Services with regard to accomplishing training for the JSF aircraft. Section 3 describes an overview of the JSF program; including the operational, maintenance, support, manpower, personnel, and training concepts. Section 4 describes the JSF Training system; including pilot and maintainer training systems, training courses, manpower throughput and instructor requirements, and site activation requirements. Section 5 describes logistics support including contractor support concepts, and schedules. Section 6 lists the applicable program documentation for the JSF. Section 7 lists the MPT principals for the JSF program. Service manning documents for the JSF program are contained in Appendix A. Student throughputs for JSF pilot and maintainer training are contained in Appendix B. All acronyms used in this document are listed in Appendix C. The definitions contained in Appendix D of this STP were taken from Appendix A of the JSF Joint Model Specification (JMS). These definitions apply in this and other JSF documents and are not to be confused with other definitions of these terms that may be in use by the Services.

2 JSF MANAGEMENT AND ORGANIZATION.

2.1 JSF Integrated Product Teams.

Management of the JSF weapon system is divided into Integrated Product Teams (IPT) consisting of the JSF Program Office (JSFPO), contractors, users, and other Government agencies. There are two primary directorates, Autonomic Logistics (AL) Directorate and the Systems Engineering Directorate divided into their respective IPTs. Figures 1 and 2 show the composition of the AL and Systems Engineering Directorates. Each of the IPTs and sub-IPTs is composed of members from all of the functional disciplines (e.g., logistics, engineering, etc.) required to accomplish their assigned work. For the purposes of this STP, only the MPT IPT is described. For information on other JSF IPTs, contact the JSFPO.

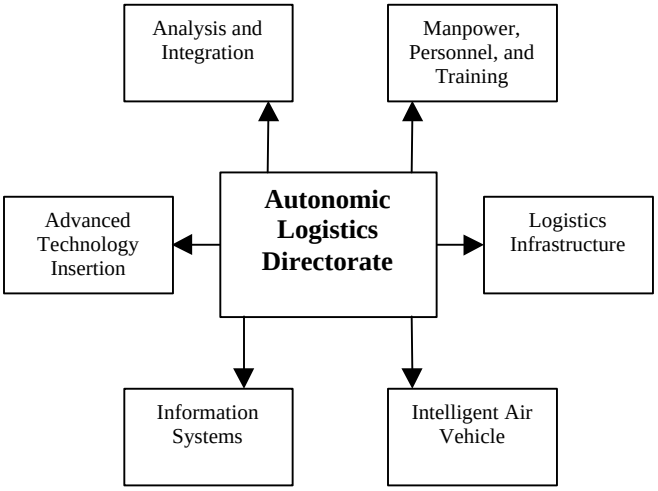

Figure 1. Autonomic Logistics IPTs.

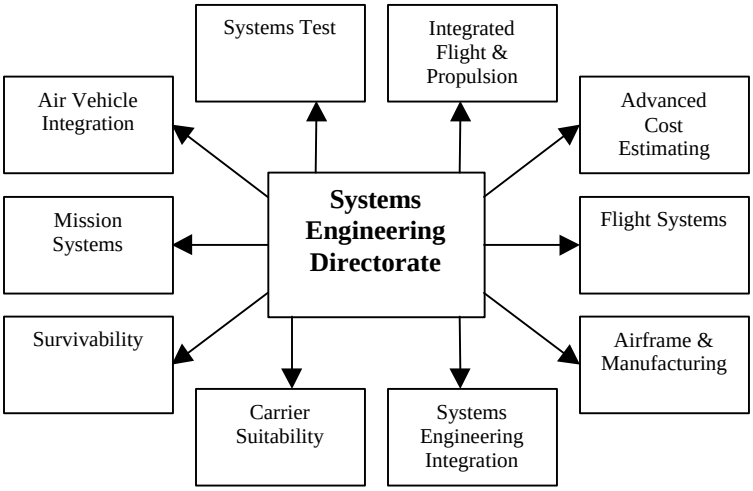

Figure 2. Systems Engineering IPTs.

2.2 JSF MPT Responsibilities.

The IPT process is designed to ensure the continuity of the entire JSF training system and is the medium for the user to make inputs to the training system. All Services are represented in the JSF MPT IPT. The MPT IPT currently includes five sub-IPTs: Training Systems Integration, Instructional Systems Development, Training Devices/Technology, Training Information Systems, and Manpower and Personnel. The MPT sub-IPTs have the responsibility to ensure the development of specific elements of the training system. The MPT IPT is responsible for producing an STP that addresses all facets of the training system to include development, acquisition, modification, test, validation, evaluation, support, and management of the Services' training concepts as outlined in this document. The MPT IPT is designed to allow a

representative cross-section of training experts and JSF weapon system users to meet in a forum and work JSF training issues. Figure 3 shows the composition of the JSF MPT IPT.

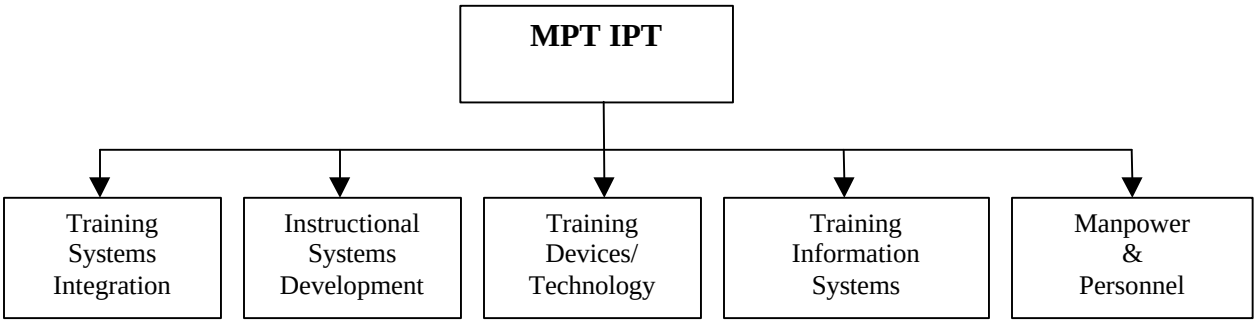

Figure 3. JSF MPT IPT.

2.2.1 JSF Program Office.

JSFPO personnel include the MPT IPT Lead and Deputy and are the Acquisition Program Managers who have overall responsibility for programming, planning, budgeting, and acquisition of JSF training.

2.2.2 Service Training Organizations.

Service organizations are responsible for identifying their respective Service training requirements to the JSFPO. Each organization has personnel responsible for pilot and maintainer training requirements. It is the responsibility of these organizations to interface with other Service organizations to ensure all Services' training requirements are identified.

2.2.3 Other Service Organizations.

Other Service organizations interface with Service training organizations to ensure training requirements are met. These organizations are listed below:

- Air Combat Command (ACC).
- Air Force Research Laboratory (AFRL).
- Aeronautics Systems Command (ASC).
- USAF/XO.
- USAF/IL.
- Air Force Operational Test & Evaluation Center (AFOTEC).
- Air Education & Training Command (AETC).
- Air Force Materiel Command (AFMC).
- Office of the Chief of Naval Operations (OPNAV).
- Naval Air Systems Command (NAVAIRSYSCOM).
- Chief of Naval Education and Training (CNET).
- Naval Air Maintenance Training Group (NAMTRAGRU).
- Naval Air Warfare Center Training Systems Division (NAWCTSD).
- Commander, Naval Air Force, U.S. Atlantic Fleet (COMNAVAIRLANT).
- Commander, Naval Air Force, U.S. Pacific Fleet (COMNAVAIRPAC).

- Chief of Naval Air Training (CNATRA).
- Marine Corps Combat Development Command (MCCDC).
- Commandant of the Marine Corps (CMC).
- Royal Navy (RN) - Commodore Naval Aviation (COMNA).
- Royal Navy School of Education and Training Technology (RNSETT).
- Naval Manning Agency (Directorate of Naval Manning) (DNM).
- Royal Air Force (RAF) - Strike Command (STC).
- RAF - Personnel and Training Command (PTC).
- RAF - Training Development and Support Unit (TDSU).

3 TECHNICAL PROGRAM DATA.

3.1 Nomenclature – Title – Program.

Joint Strike Fighter (JSF) aircraft. The current designated variants of the JSF are:

a. USAF variant - Conventional Takeoff and Landing (CTOL).
b. USN variant – Carrier Variant (CV).
c. USMC variant - Short Takeoff Vertical Landing (STOVL).
d. UK variant – UK STOVL.

3.2 Security.

This document is unclassified. Due to the mission of the program, some training may contain classified data. Trainees must be able to access this data when required to complete a particular training scenario. JSF systems must provide confidentiality (i.e., safeguard classified and sensitive unclassified information), integrity, availability, authenticity, and non-repudiation. The JSF and its associated training systems must provide these security features while allowing both pilots and maintainers with different clearance levels access to data required for training and job performance. JSFPO Security will provide details on security requirements after contract award.

3.3 Weapon System Description.

The JSF will be a single seat, single engine aircraft capable of combat strike and fighter missions. The JSF will be the next generation (family) of advanced, multi-role strike aircraft designed specifically to replace older aircraft currently fielded by the Services. The JSF family of aircraft will be designed with affordability as the cornerstone of the program with strong emphasis on a balanced "best value" approach among its operational capabilities and attributes.

The JSF will be capable of striking and destroying a broad range of targets, day or night, in adverse weather conditions. These targets include: fixed and mobile land targets, enemy surface units at sea, and air threats ashore and at sea including anti-ship and land attack cruise missiles. The characteristics of each Service’s aircraft will be very similar, however they will be Service specific to meet their unique operating requirements.

3.3.1 Functional Description.

The JSF design will integrate the airframe, engine, avionics, and armament to ensure a survivable, lethal, maintainable, and supportable Low Observable (LO) aircraft with increased

reliability. The intent is to combine the best characteristics of legacy aircraft, while meeting or exceeding those characteristics, in a stealthy multi-role strike aircraft. Specific functional description details will be provided during the Engineering and Manufacturing Development (EMD) phase. Details on the following systems will be included:

a. Engine.
b. Airframe.
c. Integrated Avionics Suite.
d. Armament.
e. Fuel.
f. Auxiliary Power Unit.
g. Reconnaissance System.

3.4 Foreign Military Sales.

Sales of JSF aircraft to other governments are yet to be determined and may impact the training system. While the FMS issue remains undefined the training resource requirements for the JSF Program cannot be finalized.

3.5 Developmental Test and Multi-Service Operational Test and Evaluation.

Developmental Testing (DT) and Multi-Service Operational Test and Evaluation (MOT&E) will be conducted during EMD. The JSF Test and Evaluation Master Plan (TEMP) contains DT and MOT&E planning information. DT is required to ensure the JSF weapon system, as designed, achieves the required technical performance parameters as described in the final contract specification. Service personnel will require training to participate in DT. Specific details concerning when, where, and by whom the DT training is to be provided, will be included in this STP when the DT schedule is established.

MOT&E is used to determine operational effectiveness and suitability to execute the JSF Operational Requirements Document (ORD) missions under realistic combat conditions using typical pilots and maintainers. MOT&E will be conducted based on the concepts of operations described in the JSF Operational Employment and Support Concept (OESC). MOT&E is event driven based on the Block acquisition schedule. The MOT&E for each Block will begin when the production representative JSF has demonstrated a stabilized performance in an operational environment for the Block requirements stated in the ORD. Operationally representative training for Service personnel who will be executing the MOT&Es are required beginning not later than six months prior to the beginning of MOT&E for each Block. Specific details concerning when, where, and by whom the MOT&E training is to be provided, will be included in this STP when the Block events driving the MOT&Es are known.

3.5.1 DT and MOT&E Draft Manpower Requirements.

Table 1 identifies the Services' draft DT and MOT&E manpower requirements through fiscal year 11. The Navy and Marine Corps numbers are being worked through their respective service resource sponsors and manpower agencies for authorization and compensation.

Table 1. DT and MOT&E Draft Manpower Requirements.

FISCAL YEAR	08	09	10	11
MOT&E Officer Manpower				
USAF	12	4	2	3
USN	9	4	3	2
USMC	9	4	3	2
UK	TBD	TBD	TBD	TBD
TOTAL	30	12	8	7
CUMULATIVE TOTAL	30	42	50	57
MOT&E Enlisted Manpower				
USAF	73	30	15	15
USN	65	30	15	15
USMC	65	30	15	15
UK	TBD	TBD	TBD	TBD
TOTAL	207	90	45	43
CUMULATIVE TOTAL	207	297	342	385

3.6 New Development Introduction.

The JSF will be introduced as new production aircraft to replace or complement designated aircraft. The Services will employ a phased strategy for the transition of the JSF. Table 2 details the number of JSF aircraft by Service by purpose that will be delivered. The numbers depicted in this table are based on legacy systems and change is expected to occur as the JSF Program matures. This table will be updated as new information becomes available.

Table 2. Aircraft Deliveries.

FISCAL YEAR	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
USAF CTOL																									
Training				1	18	2	22	43	35	45	4	4	26	48	9	7	2								
Test			6	12		2	1	-2	2	2	4	6													
Operations						24	18	25	61	51	90	88	72	48	81	86	88	90	90	90	90	90	22		
Attrition				1	2	2	3	6	12	12	12	12	12	14	20	17	20	20	20	20	20	20	15		
Total	**0**	**0**	**6**	**14**	**20**	**30**	**44**	**72**	**110**	**110**	**110**	**110**	**110**	**110**	**110**	**110**	**110**	**110**	**110**	**110**	**110**	**110**	**37**	**0**	**0**
Cumulative Total			**6**	**20**	**40**	**70**	**114**	**186**	**296**	**406**	**516**	**626**	**736**	**846**	**956**	**1066**	**1176**	**1286**	**1396**	**1506**	**1616**	**1726**	**1763**	**1763**	**1763**
USN CV																									
Training					4	12	11	6	18	1	8														
Test					5	3	0	9	0	4															
Operations						3	17	28	24	36	34	40	41	39	2	0									
Attrition						2	4	5	6	7	6	8	7	9	46	35									
Total					**9**	**20**	**32**	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**48**	**35**									
Cumulative Total					**9**	**29**	**61**	**109**	**157**	**205**	**253**	**301**	**349**	**397**	**445**	**480**									
USMC STOVL																									
Training			4	8	26	1	1	10	6	14	7	0	0	0	0	0	0	0	0	0	0	0	0	0	
Test			3	6	3	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operations					0	24	24		20	40	24	12	40	20	36	32	36	24	24						
Attrition				2	3	7	0	24	10	-18	5	24	-4	16	0	4	0	12	12	33	25	0	0	0	0
Total			**7**	**16**	**32**	**32**	**32**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**33**	**25**	**0**	**0**	**0**	**0**
Cumulative Total			**7**	**23**	**55**	**87**	**119**	**155**	**191**	**227**	**263**	**299**	**335**	**371**	**407**	**443**	**479**	**515**	**551**	**584**	**609**	**609**	**609**	**609**	**609**
UK STOVL																									
Training					4		4	4	2	2															
Test				2																					
Operations					2	8	6	8	10	10	4														
Attrition												8	12	12	12	12	12	12	4						
Total				**2**	**6**	**8**	**10**	**12**	**12**	**12**	**4**	**8**	**12**	**12**	**12**	**12**	**12**	**12**	**4**	**0**	**0**	**0**	**0**	**0**	**0**
Cumulative Total				**2**	**8**	**16**	**26**	**38**	**50**	**62**	**66**	**74**	**86**	**98**	**110**	**122**	**134**	**146**	**150**	**150**	**150**	**150**	**150**	**150**	**150**

3.6.1 Site Activation Task Force/Fleet Introduction Team.

Introduction of the JSF into the Services' operational units will be supported by a Site Activation Task Force (SATAF) at USAF operational sites and by a Fleet Introduction Team (FIT) at USN and USMC operational sites.

3.6.1.1 USAF SATAF.

The USAF SATAF is usually comprised of personnel from the ACC Headquarters (HQ) staff. Table 3 lists the staff offices that provided personnel for the SATAF along with their organizational codes. In overseas locations the Major Command (i.e. Pacific Air Force or U. S. Air Force Europe) counterpart may substitute or augment the team. The ACC point of contact for SATAFs is HQ ACC/XPXB.

Table 3. USAF SATAF Requirements

ORGANIZATIONAL CODE	STAFF OFFICE
HQ ACC/DR-JSF	Weapon System Proponent
HQ ACC/XPXB	Plans and Programs, Basing and Force Structure
HQ ACC/CEPR	Civil Engineering, Facilities Requirements
HQ ACC/SCX	Communications and Information Systems, Resources
HQ ACC/LGX	Logistics, Plans and Programs
HQ ACC/SVX	Services, Combat Support
HQ ACC/XPM	Plans and Programs, Manning
HQ ACC/DPA	Personnel, Assignments
HQ ACC/FMA	Comptroller, Budgeting

3.6.1.2 USN and USMC FIT.

The USN and USMF FIT are usually comprised of personnel assigned to the Navy Type Wing or Marine Aircraft Wing for the location in which squadrons are standing up. Table 4 contains the billet requirements for the USN FIT. Table 5 contains the billet requirements for the USMC FIT.

Table 4. USN FIT Requirements

DESIGNATOR/ GRADE/RATE	BILLET TITLE	BILLETS REQUIRED	TOTAL BILLETS	O/E/C CODE
1312H	AV TAC REDI/FIT PROJ OFF	1	1	O
GM13	EDUCATION SPEC	1	1	CIV
GS12	INVEN MGMNT SPEC	1	1	CIV
GS04	CLERK TYPIST	1	1	CIV
GS04	CLERK TYPIST	1	1	CIV
1312I	AV TAC REDI/ASST PROJ OFF	1	1	O
1312I	TRA PLN AVGND/ISD OFFICER	1	1	O
1312I	FLGTINST PILOT/PILOT TRNG OFF	1	1	O
1312J	TRADEV PC/SIMULATOR OFF	1	1	O

DESIGNATOR/ GRADE/RATE	BILLET TITLE	BILLETS REQUIRED	TOTAL BILLETS	O/E/C CODE
1312J	NATOPS	1	1	O
ADC	POWERPLANT TECHNICIAN	1	1	E
AEC	ELEC/INST TECHNICIAN	1	1	E
AMC	STRUCTURAL MECH TECHNICIAN	1	1	E
ATC	AVIONICS TECHNICIAN	1	1	E
AOC	ORDNANCE TECHNICIAN	1	1	E
AMEC	SAFETY EQUIP TECH	1	1	E
AZC	TECH PUBS/REPORTS	1	1	E

Table 5. USMC FIT

RANK	BILLET TITLE	MOS	BILLETS REQUIRED	TOTAL BILLETS	O/E/C CODE
LTCOL	FIT PROJ OFF	7509/23	1	1	O
MAJ	ASST PROJ OFF / ISD OFFICER	7509/23	1	1	O
MAJ	AVIATION MAINT OFF	6002	1	1	O
CAPT	PILOT TRNG OFF	7509/23	1	1	O
CAPT	TRADEV PC/SIMULATOR OFF	7509/23	1	1	O
CAPT	NATOPS OFF	7509/23	1	1	O
MGYSGT	MAINT CHIEF	6019	1	1	E
MSGT	AVIONICS CHIEF	6391	1	1	E
GYSGT	POWERPLANT MECH	6015/17	1	1	E
GYSGT	AIRFRAMES MECH	6055/57	1	1	E
GYSGT	ORDNANCE TECHNICIAN	6531	1	1	E
SSGT	ELEC/INST TECHNICIAN	6335/37	1	1	E
SSGT	ACFT SAFETY EQUIP MECH	6085/87	1	1	E
SSGT	TECH PUBS/REPORTS		1	1	E
GM13	EDUCATION SPEC		1	1	CIV
GS12	INVEN MGMNT SPEC		1	1	CIV
GS04	CLERK TYPIST		1	1	CIV

3.7 Aircraft and/or Equipment/System/Subsystem Replaced.

The JSF will replace or complement current Service strike fighter aircraft and fulfill the stated needs of the following legacy aircraft:

a. The USAF will utilize the JSF to assume the current F-16 Falcon and the A-10 Warthog role as the low end of the high-low fighter force mix strategy.
b. The USN will utilize the JSF as a stealthy, multi-role strike fighter to complement the F/A-18E/F Super Hornet and replace the F/A-18C/D Hornet.

c. The USMC will utilize the JSF as a stealthy, multi-role, STOVL Strike Fighter role to replace the AV-8B Harrier and the F/A-18A/C/D Hornet.
d. The UK will utilize the JSF to assume the role currently performed by the Sea Harrier FA2 and Harrier GR7 as a stealthy, multi-role aircraft.

3.8 Autonomic Logistics Concept.

AL is a proactive, global system that identifies and communicates aircraft status, maintenance, supply, and training actions to support and enhance the JSF mission. The JSF AL System will provide continuous and effective logistics support that is fully functional and capable of sustaining flight operations for EMD, throughout the acquisition cycle, and including unit deployment. The JSF will be capable of deploying to any area of operations, worldwide, with a logistics tail comprised of the weapons it will deliver, the fuel needed to fly, minimal Support Equipment (SE), Training Equipment and materiel, and the trained personnel needed to generate initial surge operations. Information technology and integrated logistics concepts, coupled with high reliability and a robust Prognostics and Health Management (PHM) system, facilitate a condition-based support and maintenance scheme that can take advantage of cost efficiencies not available to previous weapon systems. Open architectures are being incorporated as part of the basic design to provide the capability to continuously capitalize on emergent technologies that increase readiness through enhanced reliability. For more detailed information refer to the Autonomic Logistics Planning Document (ALPD).

3.9 Weapon Systems Operational Concepts.

JSF units will be tasked to perform multiple missions for the Services in future wartime scenarios, anywhere in the world, at short notice. In order to meet these taskings, the JSF operational concept requires all weather mission capability, high sortie rates, high mission reliability, rapid turnaround, rapid repair, high unit autonomy, and minimal airlift support. JSF units will operate from a variety of basing sites. These units will normally operate from main operating bases and aircraft carriers similar to legacy aircraft, but in addition, will be able to perform missions from small, isolated, and austere sites. These austere sites can range from pre-provisioned and staffed sites to bare base sites with little or no local support. Specific details concerning JSF mission scenarios are classified. JSF operational concepts are provided in the following paragraphs.

3.9.1 USAF Operational Concept.

The CTOL JSF must be fully capable of supporting the Expeditionary Air Force (EAF) concept while integrating and operating with joint and combined forces present in theater. JSF will access global communications to send and receive weather, command, control, intelligence, surveillance, and reconnaissance information as part of the Command Control Communications Computers Intelligence Surveillance and Reconnaissance (C4ISR) architecture. JSF will receive surveillance and reconnaissance support from airborne and space borne assets, other ground stations, and follow-on systems. The CTOL JSF missions will be:

a. Attack Operations/Air Interdiction (AI).
b. Offensive Counter Air (OCA) (airfield attack).
c. Close Air Support (CAS).
d. Strategic Attack (SA).

e. Suppression of Enemy Air Defenses (SEAD).
f. Defensive Counter Air (DCA).

3.9.2 USN Operational Concept.

The CV JSF will support expeditionary roles that emphasize forward presence and rapid response Strike Warfare (STW), Surface Warfare (SUW), and Air Defense. The CV JSF will normally operate from aircraft carriers as part of the Carrier Air Wing (CVW). Sustained air operations will generally be planned around a 12-hour flight schedule; however, CVWs are capable of surge operations around the clock for limited periods. CV JSFs must be fully interoperable with joint and combined forces. Primary missions include:

a. AI.
b. OCA.
c. CAS.
d. DCA.
e. SEAD.

3.9.3 USMC Operational Concept.

Marine aviation is an integral part of the Marine Air-Ground Task Force (MAGTF) and is capable of expeditionary shore basing or deployment at sea. Employment of the USMC STOVL JSF will be tailored to the size of the MAGTF that it is supporting, and the nature of the missions. USMC STOVL JSFs must be fully interoperable with joint and combined forces present or arriving in the operating area. The JSF will access the global grid to send and receive weather, command, control, intelligence, surveillance, and reconnaissance information and will work as part of the C4ISR. JSF will receive surveillance and reconnaissance support from airborne and space borne assets, other ground stations, and follow-on systems. The forward deployed and expeditionary nature of Marine Forces requires that its Tactical Aircraft (TACAIR) assets be capable of independent decisive action across the range of assigned missions within all functions of Marine Aviation. Missions include:

a. AI.
b. CAS.
c. AR.
d. Anti-Aircraft Warfare (AAW).
e. SEAD.
f. Aerial Reconnaissance (RECCE).
g. Tactical Air Controller (Airborne) (TAC (A)).
h. FAC (A).
i. Assault Support escort.
j. Support of Tactical Recovery of Aircraft and Personnel (TRAP)/CSAR.
k. Strike Coordination and Reconnaissance (SCAR) with inherent Electronic Protection (EP), Electronic Attack (EA), and Electronic Warfare Support (ES).

3.9.4 UK Operational Concept.

The principal missions of the UK STOVL will be day and night adverse weather, anti-air attack, and reconnaissance operations from Main Operating Bases (MOB), other airfields, austere bases,

and UK Legacy Aircraft Carrier (CVS) and Future UK Carrier (CVF) carriers. Sorties may be pre-planned or alert status and comprise pair or package formations. Warlike operations will not normally be conducted as singletons and may range from self-escort autonomous operations to those requiring detailed integration and data linking to other C4ISR entities including air and surface units. Through commonality with the USMC, the UK seeks to maximize the potential for combined operations. Missions include:

a. AI.
b. CAS.
c. SEAD.
d. DCA/OCA.
e. Anti-Surface Warfare (ASUW).
f. CSAR.

3.10 Maintenance Concepts.

An optimal mix of scheduled and unscheduled maintenance must be sought. Commercial support resources should be used where they are available, cost effective, and can readily meet the users' requirements.

The JSFPO maintenance concept is on-condition maintenance enabled by highly reliable aircraft with intent to minimize scheduled maintenance. This is enhanced by PHM which is being developed and incorporated by the contractors. Graceful degradation along with redundancy and reconfiguration is recognized as part of the mission reliability of the aircraft and is being incorporated through function swapping with the on-board mission systems. When compared to legacy systems, the JSF design will reduce the total amount of required maintenance. Where it can be shown to be economically feasible, Intermediate Level (I-Level) maintenance requirements will be removed. This maintenance concept is best characterized as 2 Level Plus. That is, Organizational Level (O-Level) and Depot Level (D-Level) maintenance with only minimal I-Level maintenance.

It is the vision of the JSFPO, as articulated in the JSF ORD, that the process of fault reporting, maintenance preparation, and aircraft data recovery will be automated. If the on-board processors detect and identify a fault, the aircraft will be capable of downloading that maintenance data at the most suitable point in the mission profile. Once the information is received, the appropriate individual in the squadron's maintenance organization will decide whether to repair or defer the problem. This decision will be based on whether the time, maintenance resources including spares, equipment, and personnel are available and whether the repair is essential to the next mission. Once the directive to repair has been given, the technicians will be assigned to the job based on their experience and training. When assigned, the technicians may wish to run through a maintenance practice session prior to obtaining the tools, electronic publications, and spares. Technicians will be prepared to carry out confirmatory diagnostics from the externally accessible maintenance panel. From there on the process will be automatic, with the functional checks ending in the aircraft confirming that it is serviceable and ready to go and the technician signing off the discrepancy using electronic signatures. Specific differences in maintenance practices among Services for the JSF are yet undefined and will be included as information becomes available.

3.11 Support Concepts.

The JSF support concept will provide the required war fighting and peacetime capability with the lowest cost of ownership. All JSF variants will be able to deploy rapidly, sustain high mission reliability, and maintain a high Sortie Generation Rate (SGR). The JSF support concept defines a support infrastructure capable of generating the full range of surge and sustained combat SGR required by each Service while minimizing the size of the initial footprint and follow-on sustaining support. Design with emphasis on understanding the physics of failure and PHM is the key to improving mission effectiveness and maintenance planning. These support and maintenance concepts exploit the reliability, maintainability, supportability, and deployability characteristics found in the air vehicle design to maximize support system commonality and interoperability.

The JSF support concept design is founded upon the basic premise that the operational elements will continue to be the CVW operating from aircraft carriers and the Aviation Combat Element (ACE) operating within the MAGTF from amphibious platforms and expeditionary airfields (i.e., austere/forward operating locations), and USAF wings/squadrons operating from established airfields, ranging from a bare base to MOBs. Peacetime to wartime LO reconfiguration requirements should not impact deployment efforts. Finally, the JSF support concept should provide for a cost-effective total life-cycle logistics support.

There will be no separate Government Support Date. The aircraft system will be in place at the beginning of the production phase of the program. All formal training will be provided to the individuals who require it, consistent with the JSF training system from the start.

3.11.1 USAF Support Concept.

The USAF JSF support concept is leveraged on the key improvements of significantly reduced logistics footprint, PHM, and improved LO supportability. The aviation Unit Type Code (UTC) is the basic sortie generation element intended to provide surge and sustained sortie generation capability under assumptions about resupply, required mission capable rates, and other factors. The aviation UTC contains the people, equipment, spares, and aircraft necessary to support a specific capability available to the theater Commander-In-Chief (CINC). The structure and function of the UTC will remain the baseline for the JSF support concept within the USAF infrastructure. This aviation unit must have repair capabilities necessary to establish and sustain SGRs balanced with ease of deployability.

Airlift is the primary means of deployment, and therefore dictates a strong emphasis on minimizing the logistics support footprint. Reductions in JSF logistics footprint must not create increases in other USAF deployment areas (i.e., prepositioned assets). This concept should allow deployment of optimized subgroups of the aviation UTC, including EAF to meet the needs of the operational commander. Deployment response time is based on the squadron Designed Operational Capabilities statement and the tasking of the theater CINC, and can demand strategic deployment within 24 hours from tasking.

JSF should redefine the traditional levels of maintenance to provide capabilities that make fiscal and fighting sense. Sustainment of the USAF JSF within theater depends on a logistics pipeline

with the optimal mix of velocity and volume to enable Agile Logistics initiatives such as just-in-time replenishment of spares, munitions, and other consumables.

3.11.2 USN Support Concept.

USN carrier aviation's forward-deployed presence requires a capability to support flight operations for 90 continuous days. Accordingly, some degree of repair capability beyond O-Level maintenance is anticipated; however, it is expected that improvements in Reliability and Maintainability (R&M) characteristics of the JSF will minimize requirements for I-Level infrastructure. Squadron O-Level maintenance personnel will launch and recover, service, troubleshoot, remove and replace components, perform corrosion control actions, and load stores on the CV JSF on the flight deck or hangar bays. Maintenance and logistics support for embarked CV JSF will be driven largely by flight operation deck cycle time. Aircraft turn-around, to include fueling/servicing, removing and replacing components, loading mission information, and ordnance loading, must be made under strict time constraints of cyclic operations. Any maintenance action that is part of the routine tasks of troubleshooting and repair needs to be accomplished within the predefined turn-around time.

The SGR is paramount to combat mission execution and immediate availability of all resources to accomplish a quick turn-around is needed to sustain SGR. Prior to JSF deployment, technical data, mission equipment, squadron-owned SE, ancillary equipment, tools, and administrative equipment/material will be packaged in a configuration that allows transport to and load aboard Aircraft Carrier Nuclear (CVN) class carriers. Rolling stock and selected SE, spares, consumables, Petroleum, Oil And Lubricants (POL), and munitions are pre-positioned on the ship. Replenishment of supplies will be predominately accomplished by ship-to-ship underway replenishment. Some Carrier On-board Delivery (COD) and Vertical On-board Delivery (VOD) of supplies will be provided. The COD/VOD have range and payload restrictions that impact the accessibility of services to the aircraft carrier.

3.11.3 USMC Support Concept.

The centerpiece of the USMC’s preparation for the future is an approach to expeditionary, littoral, and amphibious warfare known as Operational Maneuver From the Sea (OMFTS). The JSF STOVL variant must be capable of operating from aircraft carriers, amphibious ships, MOBs, and austere bases ashore, and of performing a variety of missions as an integral part of a naval expeditionary force, such as those described in the JSF Operational Employment and Support Concept (OESC) and STOVL Concept of Employment (COE). Operational aircraft squadrons, Marine Aviation Logistics Squadrons (MALS), and the Marine Wing Support Squadrons (MWSS) are the principal contributors to JSF sortie generation. The Marine Aviation Logistics Support Program (MALSP) is a set of standardized, logistics support packages containing the trained personnel, spare/repair parts, mobile facilities, and SE to sustain expeditionary Marine aviation.

Airlift is critical to the initial deployment of the ACE and a reduced logistics footprint is required. Maritime Pre-Positioning Ships (MPS) and Aviation Logistics Support Ships (‘TAVB’ Class) provide sustainment. JSF will also operate and be supported from 'L' class ships as part of an Amphibious Ready Group (ARG) and from CVNs as part of a CVW. The MALSP provides the baseline for the JSF supportability approach. JSF leveraging technologies, with improved

reliability and maintainability, must minimize logistics footprint while attaining the required SGR. Improved JSF system capabilities must be compatible with the logistics support capability of the MWSS and translate into a reduced requirement for each of the MALSP building blocks with a corresponding decrease in Life-Cycle Cost (LCC).

3.11.4 UK Support Concept.

The UK requirement is to support an effective offensive air capability, operating from the carrier, shore bases, and deployed in support of expeditionary operations from the MOBs or the carrier. To provide the maximum flexibility, JSF will maintain high mission reliability and SGR while striving to minimize the deployed logistics footprint. The UK requires the ability to provide an organic support capability for an extended period of continuous operations irrespective of the theater of operations and will therefore, seek to maximize squadron organic capability.

The need to deploy rapidly from and between a multiplicity of operating bases, ashore and afloat, demands that required support be modular. Intrinsic to reducing logistics support is the need to minimize dependence on I-Level facilities, to redefine the traditional approach to O-Level maintenance, and to provide emphasis on improved maintenance planning to increase operational availability. Mission reliability and maintenance activity versus LCC analysis trade-off should make fiscal and operational sense. The UK seeks to maintain maximum commonality with the USMC STOVL variant, minimizing UK specific deviations, wherever practical.

3.12 Manpower Concept.

For the purpose of this document JSF manpower consists of officer and enlisted personnel from active duty and reserve operational and training units. Officer manpower consists of flying and ground officers and enlisted manpower consists of direct and indirect maintenance personnel.

At this point in the JSF acquisition (i.e., approaching Milestone II) process, manpower requirements in the JSF Manpower Estimate Report (MER) and this iteration of the STP are based on the Services' existing maintenance skills (i.e., Air Force Specialty Codes (AFSC), USN ratings and Navy Enlisted Classification (NEC) codes, and USMC Military Occupational Specialty (MOS) codes). The skills are distributed in the Services' traditional maintenance organizational structure (e.g., shops, works centers, etc.). Based on the analysis used to estimate JSF manpower requirements, all maintenance tasks to be performed on JSF are expected to be within the capabilities of existing skill levels and occupational specialties. USN and USMC manpower requirements documents are contained in Appendix A of this document.

A traditional approach was taken to determine the number of flying officers and ground officers in the Services' squadrons. The crew ratio was used to determine the number of flying officers. Ground officer requirements are based on legacy squadron infrastructures and Service policy.

A traditional approach was taken to estimate the number of indirect enlisted manpower requirements for the Services. This involved using approved formulas, algorithms, standards and policy to determine the requirements. A unique and innovative approach was taken to estimate the direct manpower requirements. This approach involved the use of the USAF Logistics Composite Model (LCOM) as the common modeling tool for all Services. An LCOM model reflecting defined operational concepts and tempos (0-7 (Initial Surge), 8-30 (Sustained Surge)

and 31-180 (Wartime Sustained) day scenarios) was developed for each Service. These models were then populated with generic JSF predicted R&M data, crew sizes, repair data and task and skills analysis data provided by the JSFPO R&M IPT. The results of these simulation runs were the basis for the direct manpower requirements contained in this document.

As systems mature and R&M data is refined it is expected that all variants will meet, or be very close to, the objective numbers of the JSF ORD.

The improved R&M characteristics of the JSF aircraft, the introduction of an integrated AL system, and the scope of the onboard PHM systems have the potential to reduce the Services JSF manpower requirements. These reductions will be quantified as the JSF system design matures during the EMD phase of the acquisition process.

As with the majority of acquisition programs, during the years when the Services are transitioning to the JSF aircraft, Service manpower requirements are expected to increase slightly. This increase is a result of the temporary condition where both the predecessor aircraft and the JSF aircraft are in-service simultaneously. This scenario creates an increased training requirement that will temporarily increase the manpower requirements of training activities. When predecessor aircraft are phased out, the temporary manpower increase will be eliminated.

3.12.1 Manpower Phase-in.

Figures 4 and 5 depict total JSF operational manpower for each Service and the expected changes through Fiscal Year (FY) 30 as each JSF operational squadron stands up. Figures 6 and 7 depict total JSF training squadron stand-up for each Service through FY30. Cumulative manpower totals based on the number of squadrons, aircraft per squadron, per Service from delivery of the first aircraft in FY08 to steady state are contained in Appendix A. As the JSF program matures this section will be updated.

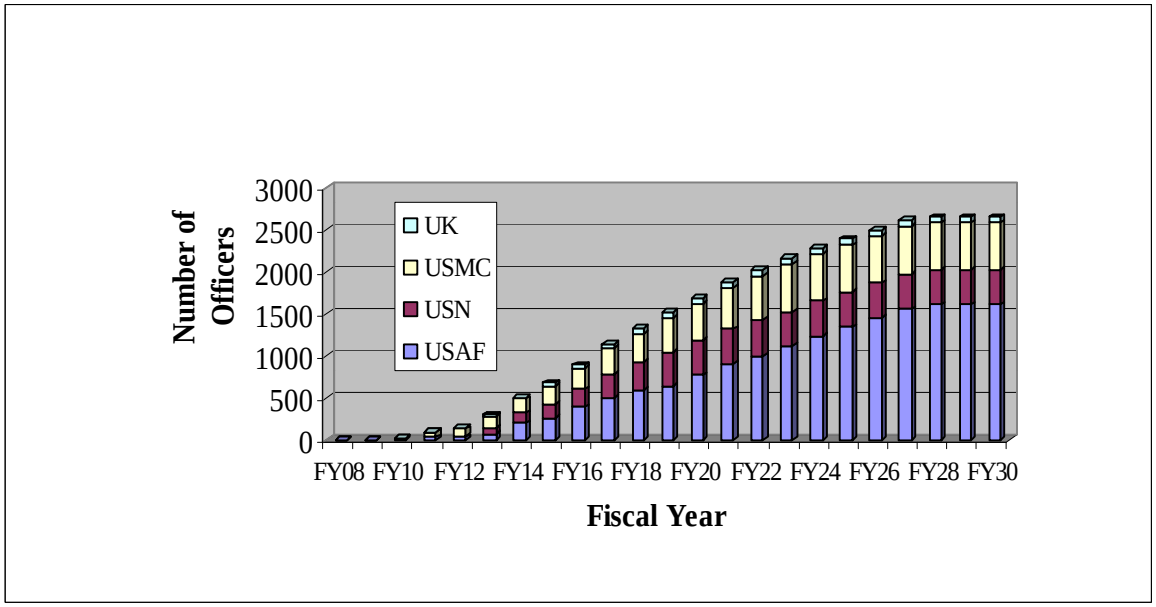

Figure 4. Operational Squadrons Officer Manpower.

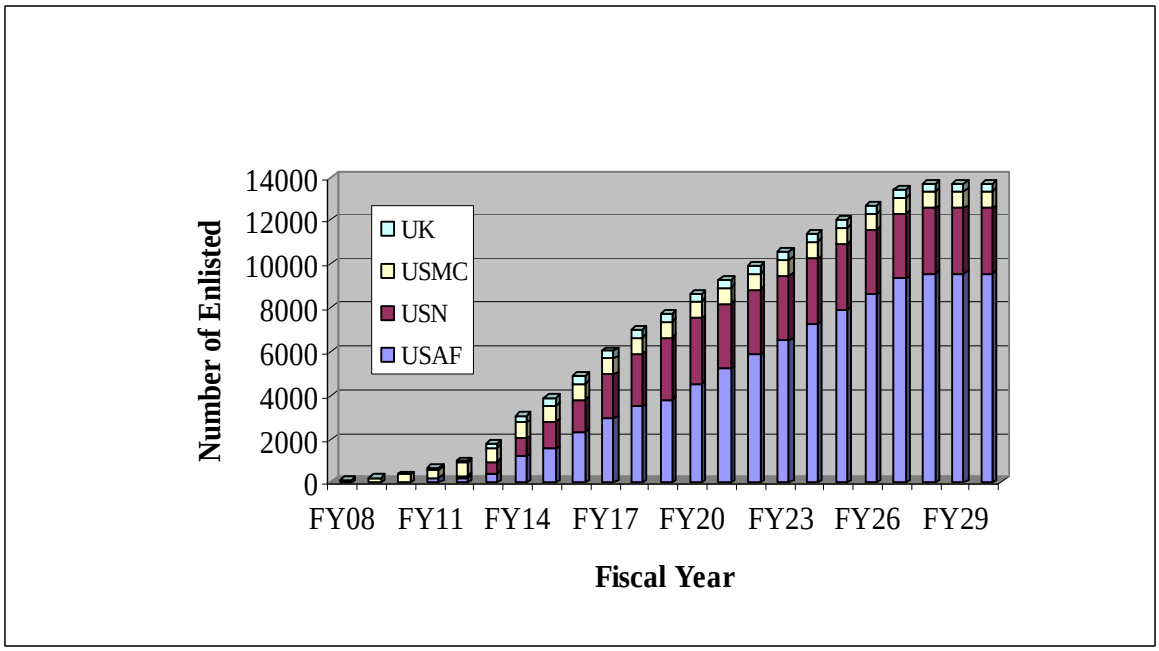

Figure 5. Operational Squadrons Enlisted Manpower.

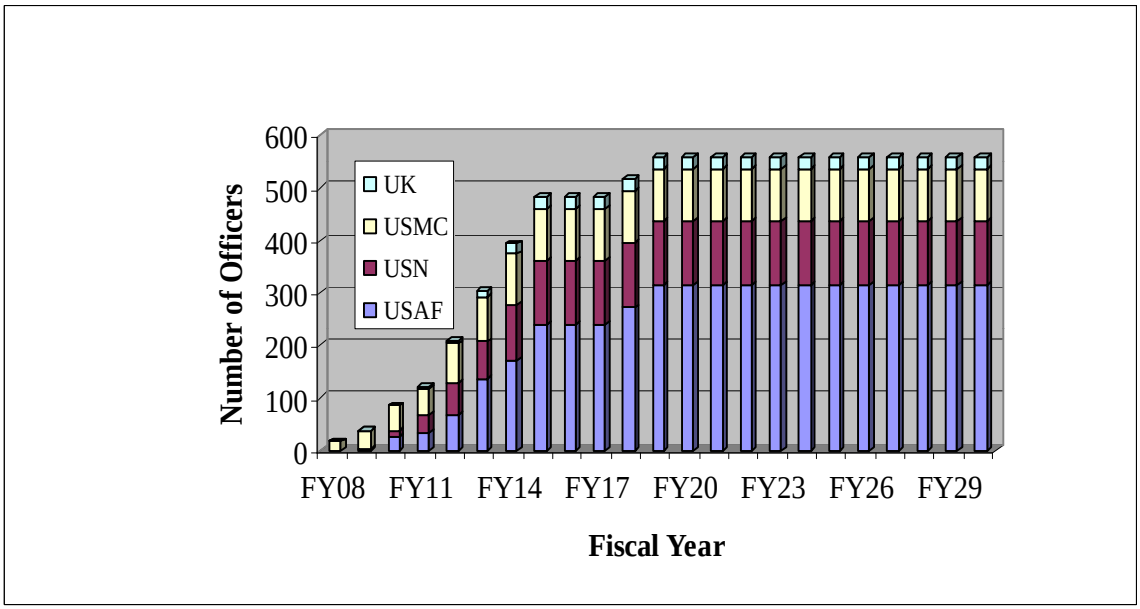

Figure 6. Training Squadrons Officer Manpower.

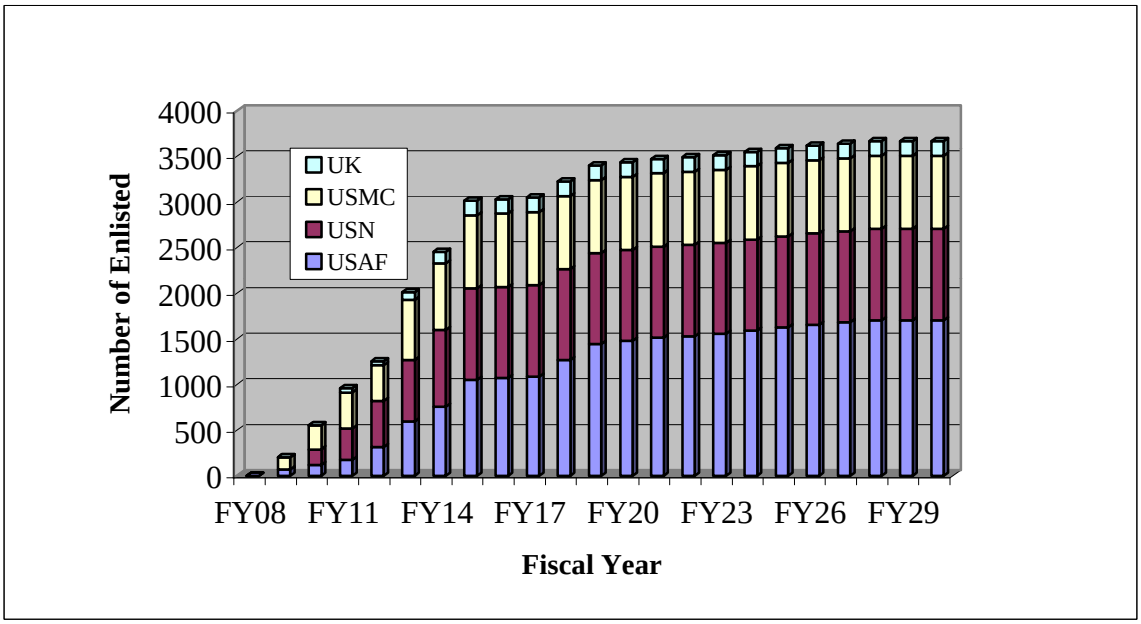

Figure 7. Training Squadrons Enlisted Manpower.

3.12.2 Pilot Manpower Planning Factors.

USAF, USN, USMC, and UK pilot manpower requirements were developed based on the number of aircraft assigned to each unit and the applicable crew ratio for each Service. Table 6 provides a summary of pilot requirements for each type of unit receiving the JSF.

Table 6. Pilot Requirements.

SERVICE	POSITION (TYPE UNIT)	NUMBER OF AIRCRAFT	CREW RATIO	TOTAL PILOTS
USAF	Pilot (FTU[1])	24	Note 1	28
	Pilot (Operational Squadron)	24[2],	1.4	34
	Pilot (Operational Squadron)	18[2]	1.4	25
	Pilot (Operational Squadron)	15[2]	1.4	21
USN	Pilot (VFA FRS)	30	Note 1	62
	Pilot (VFA)	12	1.6	19
USMC	Pilot (VMAT FRS[2])	37[2]	Note 1	59
	Pilot (VMA)	20[2]	1.6	32
	Pilot (VMFAT FRS[2])	40	Note 1	50
	Pilot (VMFA)	12	1.6	19
UK	Pilot (Operational Squadron)	12	1.5	18
	Pilot (Training Squadron)	16	1.5	24

1. Instructor Pilot requirements are based on student throughput requirements (provided in Appendix B) and not on crew ratio.
2. The number of aircraft reflects squadron composition from original ironflow numbers provided in April 2001. However, all USMC FRS manpower and training throughput numbers were calculated using 38 aircraft squadron composition.

- VFA Fighter/Attack
- VMFA Marine Fighter Attack Squadron
- VMFAT Marine Fighter Attack Training Squadron

3.12.3 Maintainer Manpower Planning Factors.

The manpower requirements contained in this document are based on the Services' existing maintenance skills (i.e., AFSCs, USN ratings, MOS codes, and UK trades). The skills are distributed in the Services' traditional maintenance organizational structure (e.g., shops, works centers, etc.). Tables 7 and 8 reflect the maintenance manpower objectives and thresholds contained in the JSF ORD. The number of work shifts are based on the policy of the Services and the manpower availability factors are those stated in Tables 9, 10, 11, and 12.

Table 7. Direct Maintenance Man-hours (DMMH) Per Flight Hour.

DMMH PER FLIGHT HOUR		
VARIANT	**THRESHOLD**	**OBJECTIVE**
CTOL	9.0	4.0
CV	9.0	5.5
STOVL	9.0	5.5

Table 8. Direct Maintenance Manpower Spaces Per Aircraft.

DIRECT MAINTENANCE MANPOWER SPACES PER AIRCRAFT AT JSF ORD SGR		
VARIANT	**THRESHOLD**	**OBJECTIVE**
ALL	12	8

Table 9. USAF Manpower Availability Factors.

OPERATIONAL PERIOD	**PEACETIME**	**SUSTAINED SURGE**	**INITIAL SURGE**
Working Week	5 Days	6 Days	6 Days
Computation of Assigned Hours	8 Hours per Day	10 Hours per Day	12 Hours per Day
	40 Hour Week	60 Hour Week	72 Hour Week
Monthly Assigned Man-Hours	167.0	261.0	313.0
Non-available	(3.8)	(14.0)	(4.0)
Total Direct Hours per Month	163.2	247.0	309.0

Table 10. USN Manpower Availability Factors.

OPERATIONAL PERIOD	AT SEA	ASHORE
Working Week	7 Days	5 Days
Computation of Assigned Hours	11.57 Hours per Day	8 Hours per Day
	81 Hour Week	40 Hour Week
Indirect Time	(14.0)	(6.62)
Total Direct Hours per Week	67.0	33.38

Table 11. USMC Manpower Availability Factors.

OPERATIONAL PERIOD	EXPEDITIONARY	ASHORE
Working Week	7 Days	5 Days
Computation of Assigned Hours	12 Hours per Day	8 Hours per Day
	84 Hour Week	40 Hour Week
Total Direct Hours per Week	84.0	40

Table 12. UK Manpower Availability Factors.

OPERATIONAL PERIOD	AT SEA	ASHORE
Working Week	7 Days	5 Days
Computation of Assigned Hours	11.57 Hours per Day	8 Hours per Day
	81 Hour Week	40 Hour Week
Indirect Time	(14.0)	(6.62)
Total Direct Hours per Week	67.0	33.38

3.12.4 Enlisted Maintainer Instructor Manpower Requirements.

JSF enlisted instructor requirements for maintainers are expected to be slightly lower than overall legacy requirements. Details will be provided as the JSF program matures. The instructor manpower requirements will be based on throughput, course length, and instructional hours. Notional instructor throughputs are included with the individual skill throughputs in Appendix B of this document.

3.13 Personnel Concept.

The personnel requirements for the JSF will represent those most closely matching legacy requirements. Table 13 shows occupational specialties, (i.e., AFSCs (F-16 legacy codes were used for USAF), USN ratings, MOS codes (AV-8B legacy codes were used for USMC), and UK trades) by applicable work centers. UK Services are currently reviewing the number of trades and using multi-skilling concepts to utilize manpower more efficiently. Final details will be provided when implementation decisions regarding multi-skilling concepts have been made.

Table 13. JSF Maintainer Specialties.

WORK CENTER	AFSC	RATING	MOS	TRADE[(2)]*
Fuels	2A6X4[(1)]	AD	6217	Mechanical
Propulsion	2A6X1A[(1)]	AD	6217	Mechanical
Airframes/ Structures	2A7X3[(1)]	AM	6257	Mechanical
Hydraulic/ Pneudraulics	2A6X5[(1)]	AM	6257	Mechanical
Avionics	2A2X0 2A3X2A	AT	6312	Radio
Electrical	2A6X6	AE	6332	Electrical
Environmental	2A6X6	AME	6287	Mechanical
Egress	2A6X3[(1)]	AME	6287	Mechanical
Ordnance/ Armament	2W1X1[(1)]	AO	6531	Mechanical
Survival Equipment/ Aircrew Life Support	2A7X4[(1)] 1T1X1[(1)]	PR	6425	Survival Equipment Support
Line/ Crew Chief	2A3X3			

1. These are backshop (i.e., I-Level) skills, however they are expected to perform some O-Level maintenance on the JSF and therefore will require training on JSF systems. The UK RN employs two different levels of maintenance technician, Artificer (skilled) & Mechanic (semi-skilled), in three trades (i.e., career field) to perform maintenance on FA-2 aircraft systems. The UK RAF employs five aircraft maintenance trades (i.e., Airframe, Propulsion, Electrical, Avionics, and Weapons) and two support trades. The UK MOD is currently reviewing aircraft trade structures (RN, RAF, Army). This may result in aircraft trade rationalization between the RN and RAF, but has not as yet been decided.

WORK CENTER	AFSC	RATING	MOS	TRADE(2)*
AD	Aviation Machinist's Mate '			
AE	Aviation Electrician's Mate			
AM	Aviation Structural Mechanic			
AME	Aviation Structural Mechanic (Safety Equipment)			
AO	Aviation Ordnanceman			
AT	Aviation Electronics Technician			

3.13.1 UK Multi-Skilling Studies.

The UK RAF Logistics Trade Review proposed a revision to the employment and training strategies for the logistics trades. The SAC (technician) scheme is now being implemented. Further developments in the area of multi-skilling are now being progressed. Furthermore, a UK Defense Training Review is underway and a Defense School for Aeronautical Engineering is being established at RAF Cosford; this school will train all RN, Army and RAF aeronautical engineering personnel. Studies are also ongoing to converge engineering policy and regulations and this is likely to lead to the convergence of trade structures across the UK engineering trade. Tri-Service convergence is seen as the key to achieving greater efficiency and operational effectiveness across the aeronautical engineering arena. Details of the development of these initiatives will be provided once endorsed.

3.14 Training Concept.

The JSF training system includes: distributed training, distributed mission training, embedded training, and training management for pilots and maintainers across the JSF training continuum. The training system provides training support for the complete training continuum from initial through skill sustainment.

Training data resources will reside on the Joint Distributed Information System (JDIS) and will be capable of being accessed via any JDIS interface. JDIS is an integrated weapon system management tool that is deployable, and capable of operating with fixed-site or remote hosts over a variety of communications media. A function of the JDIS is to provide the means of distributing training throughout the JSF community.

The training system will be designed to achieve the highest degree of personnel combat readiness consistent with flight safety and resource availability. The JSF training system is being designed in parallel with the air vehicle and will provide JSF operations, maintenance, and support personnel training.

The JSF is 80 percent common across the variants. Table 14 reflects the commonality among JSF subsystems. Figures 8 and 9 reflect the commonality in training system instructional objects.

Table 14. JSF Subsystems Commonality.

WORK UNIT CODE	DESCRIPTION	CTOL	CV	STOVL
11	Airframe	X	X	X
12	Crew Station	X	X	X
13	Landing Gear Systems	X		
13	Landing Gear Systems		X	
13	Landing Gear Systems			X
14	Flight Control System	X		
14	Flight Control System		X	
14	Flight Control System			X
24	Auxiliary Power System	X	X	X
26	***Lift Devices***			X
27	Turbofan Engine	X	X	X
29	Power Plant Installation	X	X	X
41	Environmental Control Systems	X	X	X
42	Electrical Power System	X	X	X
44	Lighting System	X	X	X
45	Hydraulic/Pneumatic Systems	X	X	X
46	Fuel Distribution Subsystem	X		
46	Fuel Distribution Subsystem/Fuel Probe		X	X
47	On Board Oxygen Generating System	X	X	X
48	Environmental Protection System	X	X	X
49	Miscellaneous Emergency System	X	X	X
56	Flight Reference Systems	X	X	X
57	Integrated Guidance/Flight Control Systems	X	X	X
75	Weapons Delivery System	X	X	X
84	Avionics Systems	X	X	X
91	Emergency Equipment	X	X	X
96	Personal/Miscellaneous Equipment	X	X	X
97	Explosive Devices	X	X	X

WORK UNIT CODE	DESCRIPTION	CTOL	CV	STOVL
98	Low Observable (LO) Maintenance	X	X	X

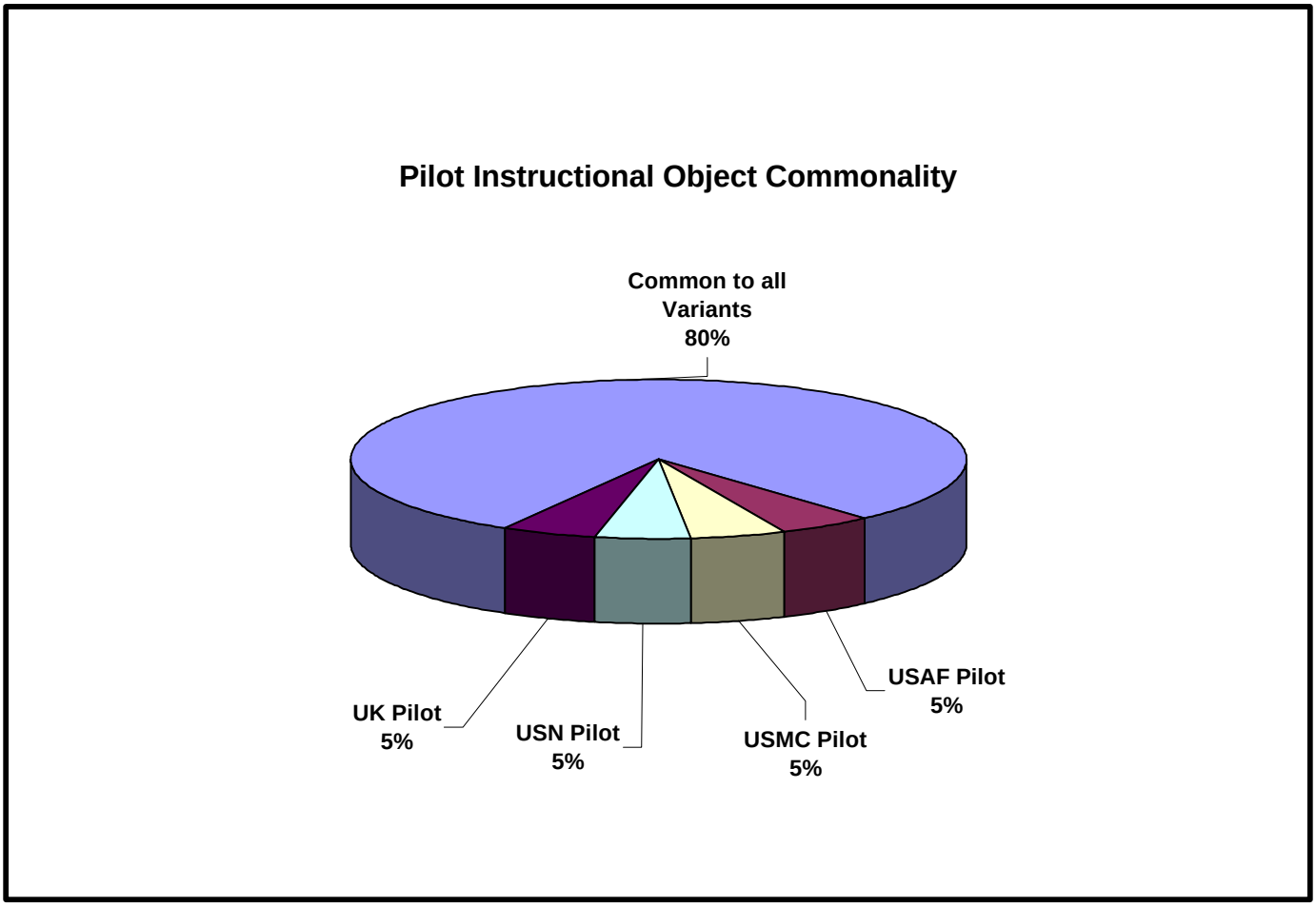

Figure 8. Commonality of Pilot Training System.

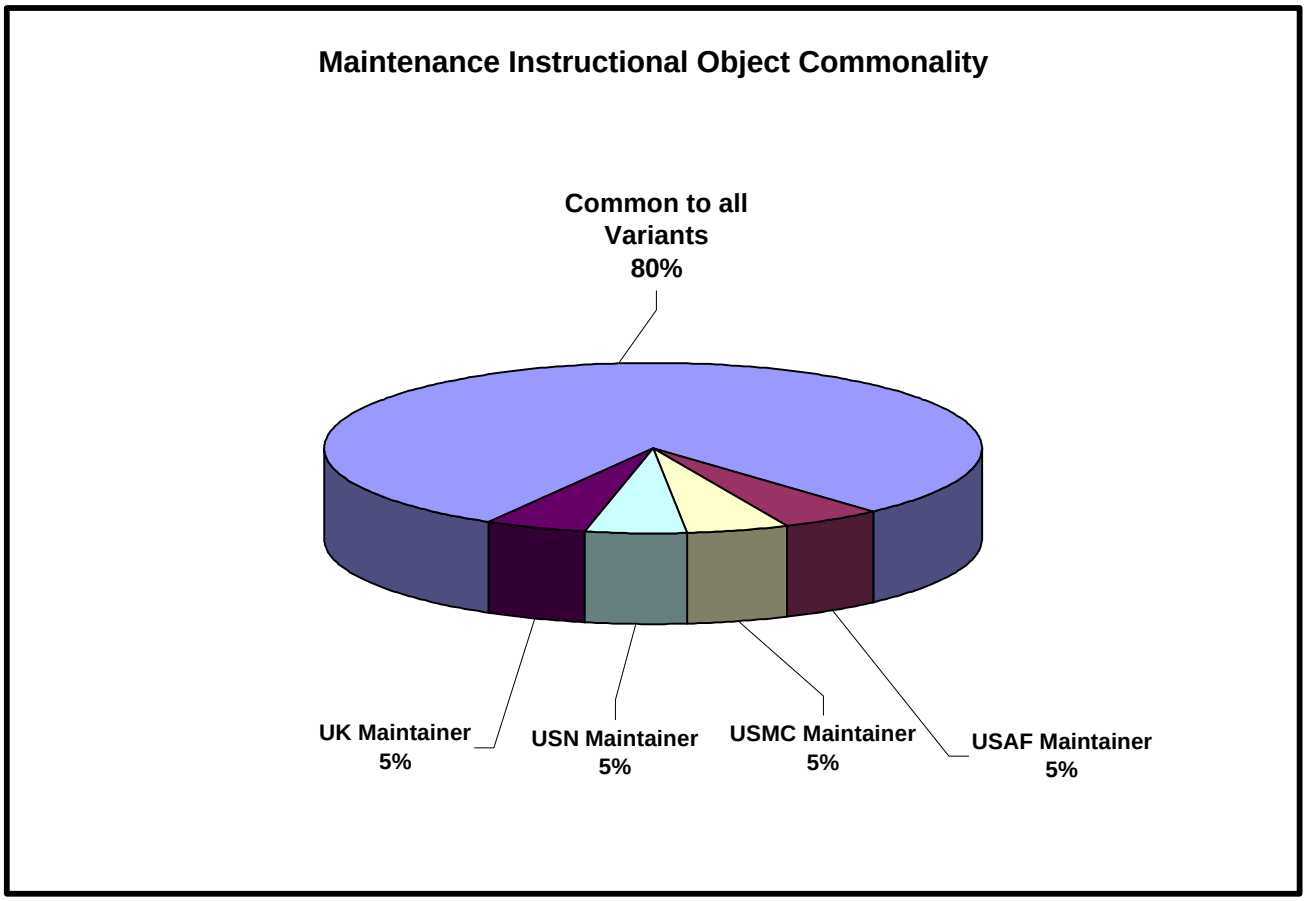

Figure 9. Commonality of Maintainer Training System.

4 JSF TRAINING SYSTEM.

The training system will support formal and informal training. It will include a Training Management System (TMS), deployable training, distributed training, embedded training, training devices , and courseware necessary to provide the most effective training. TMS will be compatible with the software tools identified in the JMS to minimize duplicating documentation. Training will be developed as re-useable instructional objects that may be assembled as lesson modules. Training may be delivered via academic classroom, laboratory, exercise, mission rehearsal, maintenance task preview, or On the Job Training (OJT). Training will be segmented as follows:

- Core training refers to training of tasks common to all JSF variants.
- Variant training refers to skills training specific to the CTOL, CV, and STOVL aircraft.
- Service specific training refers to training unique to the employment of each Services' operational, maintenance, and support concepts.

4.1 Performance Requirements.

The JSF training system will provide the training to operate, support, and maintain the JSF weapon system throughout its life-cycle. As stated in the JSF JMS, the JSF training system will:

a. Train pilots and maintainers to safely and effectively operate, maintain, support, deploy, and employ the JSF weapon system as described in the Service mission statements.
b. Include variant-specific cadre/type 1, initial, transition, refresher, and continuation training with throughput capacity to meet both wartime and peacetime service requirements.
c. Provide individualized, group, and team training for pilots.
d. Provide live environments for pilots throughout the training continuum.
e. Provide a continuous learning environment for pilots including local and distributed training, briefing, debriefing, and mission planning.
f. Provide individualized, group, and team training for maintainers.
g. Provide a continuous learning environment for maintainers including briefing, debriefing, maintenance planning, and maintenance task preview.
h. Provide a training management capability that manages, maintains, monitors, and records student progress and proficiency throughout the training continuum including formal and informal training.
i. Provide a training management capability for automated scheduling of training with requirements for mission qualified pilots and maintainers, utilizing key factors of pipeline duration, surge capability, attrition rates, throughput forecast and training resource requirements.
j. Provide a training management capability for diagnosis and remediation of student and instructor performance.
k. Provide a training management capability for diagnosis and remediation of training system performance.
l. Provide a training capability for the management of embedded training that matches the training capacity with requirements for qualified pilots and maintainers.

4.2 Pilot Training Overview.

JSF Pilot training segments will be provided as follows:

- FTU/FRS training, conducted at the FTU or FRS, and will produce a mission qualified pilot utilizing training comprised of the following:
  - Core training is ground training (not including simulator training) common to all Service variants.
  - Variant training is ground, flight, or simulator training specific to the basic operation of CTOL, CV, and STOVL variants of the JSF.
- Service specific training refers to training unique to the employment of each Service's operational concept.

FTU/FRS type training will provide detailed training in the operation of the aircraft systems for the purpose of developing flight-specific habit patterns, procedural memorization, and generating high levels of proficiency under high workload while using the JSF weapon system functions.

Service specific training will provide the aviation skills and knowledge required to safely and effectively operate the JSF weapons systems within the Service's operational concept with increasing levels of proficiency. Future iterations of the STP will reflect the requirement for teaching Instructor Pilots, Qualified Weapons Instructors, and Instrument Rating Examiners.

4.3 Maintainer Training Overview.

JSF Maintainer training segments will be provided as follows:

- Maintenance Training Wing (MTW)/NAMTRAGRU training refers to training conducted in a formal setting that supports the attainment of basic maintenance skills (i.e., 3 level/initial or 5 level/career) and leads to a mission qualified maintainer when Core, Variant, and Service Specific training are completed. Air Foce JSF maintainers will be identified by an AFSC prefix or suffix, as determined by the Air Force Career Field Manager when JSF training is completed. JSF specific training segments are comprised of the following:
  - Core training is conducted in the classroom or laboratory on maintenance tasks that are common to all JSF variants.
  - Variant training is conducted in the classroom or laboratory on maintenance tasks that are variant specific (i.e. CTOL, CV, and STOVL).
- Service specific training is JSF training unique to each Service's maintenance concept and operational environment.

Initial Skills Training/AETC Resident Regular Training is AFSC-centered training of a continuing nature conducted at an AETC base, location, or station. It includes courses designed for initial training, retraining from one AFSC to another, training on new or special equipment

and procedures, advancement within an AFSC, and initial skill multiphase AFSC awarding courses. See AETCI 36-2203 for further guidance.

The established training concept for most Navy and Marine Corps aviation maintenance training divides "A" School courses into two or more segments called Core and Strand. The "C" School courses are also divided into separate Initial and Career training courses. "A" School Core courses include general knowledge and skills training for the particular rating, while "A" School Strand courses focus on the more specialized training requirements for that rating and a specific aircraft or equipment, based on the student's fleet activity destination. Strand training immediately follows Core training and is part of the "A" School. Upon completion of Core and Strand "A" School, graduates attend the appropriate Initial "C" School for additional specific training. Initial "C" School training is intended for students in paygrades E-4 and below. Career "C" School training is provided for E-5 and above personnel to enhance skills and knowledge within their field.

Initial skills training is designed to provide selected Navy and Marine Corps non-rated personnel with basic theory, knowledge and skills which, when followed by appropriate NAMTRAGRU training and practical application, will lead to fulfillment of the technical requirements at the apprentice level.

NAMTRAGRU training will provide technical training for military and civilian personnel in the operation, maintenance and repair of aeronautical equipment/systems through theory and practical application to maintain full mission capable aircraft. This training is traditionally conducted in a formal setting that will support attainment of JSF maintenance personnel skills (i.e., 3 level/initial or 5 level/career) and will produce a mission qualified maintainer.

MTW/NAMTRAGRU type training will provide detailed training in the maintenance of the aircraft and aircraft subsystems necessary to maintain full mission capable aircraft.

Service specific training will provide the skills and knowledge required to safely and effectively maintain the JSF weapons system at increased levels of proficiency.

4.4 Types of Training.

To support the fielding and sustainment of JSF mission requirements, five different types of training will be provided. In the following paragraphs, JSF cadre/type 1, initial, transition, refresher, and continuation training are described.

4.4.1 Cadre/Type 1 Training.

For the purposes of this STP, the term cadre/type 1 training refers to training provided prior to establishing Ready For Training (RFT) capability. The four subsets of cadre/type 1 training; management familiarization, EMD test, instructor, and operator/maintainer personnel training, are described.

4.4.1.1 Management Familiarization Training.

Management familiarization training is provided to acquaint personnel with a specific system or to keep personnel abreast of changing concepts and requirements. JSF familiarization training

will be provided to selected maintenance managers, staff and supervisory personnel and direct support personnel (e.g., firefighters, security, environmental personnel, etc.) assigned to support the JSF weapon system. This training will be developed and provided as part of the unit level training activity.

4.4.1.2 EMD Test Training

The TEMP contains the overall plan regarding testing conducted during EMD. During the EMD phase of the program, training will be conducted to support DT&E and MOT&E as detailed in the EMD contract. In addition, the initial training capability will be established and tested by the Government.

4.4.1.2.1 Developmental Test and Evaluation Training.

During the DT&E phase of EMD, training will be provided to Integrated Test Force (ITF) pilots, maintainers, administrative, and management personnel to safely and effectively test, operate, support, and maintain the JSF weapon system. DT&E activities will be detailed during EMD in the Integrated Master Plan and Integrated Master Schedule.

4.4.1.2.2 MOT&E Training.

Commencing six months prior to each block of dedicated operational test, operationally representative training will be provided to pilots and maintainers. The MOT&E will assess, test, and evaluate the training system and submit reports per the JSF TEMP. Additionally, training may be necessary for support, management, and evaluator personnel.

4.4.1.3 Instructor Personnel Training.

Instructor personnel training refers to training that produces pilot and maintainer instructors necessary to establish an organic training capability.

4.4.1.4 Operator/Maintainer Training.

Operator/maintainer training refers to training that produces pilots and maintainers necessary to establish an Initial Operational Capability (IOC).

4.4.2 Initial Training.

Initial training refers to FTU/FRS type training provided to pilots and MTW/NAMTRAGRU training provided to maintainers entering the JSF training pipeline for the first time.

4.4.3 Transition/Conversion Training.

Transition training refers to training provided to personnel who are qualified on one system or equipment to operate or maintain another system or equipment.

4.4.4 Refresher Training.

Refresher training refers to training used to reinforce previous training and/or sustain/regain previously acquired skills and knowledge. It should be noted that the UK requirement for Refresher Training kicks in after 6 months of without flying on type.

4.4.5 Continuation Training.

Continuation training refers to instruction conducted after initial training to increase skill proficiency.

4.5 Functional Requirements.

4.5.1 Pilot Training System.

Table 15 lists the notional pilot training syllabi to be developed for the JSF aircraft for each pilot category. The course titles, descriptions, lengths, and required are presented using a baseline of legacy training systems modified (i.e., course length reduction) by expected training system technology insertion. The lengths of the courses are measured in instructional days. Separate pilot training course may be developed for each of the JSF variants and will be included in this section as the information on the JSF weapon training system matures. Course descriptions and lengths will be refined after contract award as the JSF training system matures. For detailed figures on pilot student throughput associated with pilot training, refer to the tables in Appendix B of this document.

Table 15. JSF Pilot Syllabi.

ELEMENT	JSF DATA
Title	**JSF CV/STOVL Replacement Pilot Category 1.**
Description	This pipeline will provide training for Category 1, first tour in model, replacement pilots in the JSF weapon system employment in the strike/fighter environment. The pipeline includes a complete syllabus for first-tour in model, normally a newly designated pilot.
Length	180 days.
Title	**JSF CV/STOVL Replacement Pilot Category 2.**
Description	This pipeline provides training for Category 2, transitioning, replacement pilots in the JSF weapon system employment in the strike/fighter environment. This transition syllabus is assigned to a pilot transitioning from another like aircraft.
Length	167 days.
Title	**JSF CV/STOVL Replacement Pilot Category 3.**
Description	This pipeline provides training for Category 3, refresher, and replacement pilots in the JSF weapon system employment in the strike/fighter environment. The refresher syllabus is assigned to pilots with prior experience in model that have been out of the aircraft greater than or equal to 18 months (24 months for USMC).
Length	131 days.
Title	**JSF CV/STOVL Replacement Pilot Category 4.**

ELEMENT	JSF DATA
Description	This pipeline provides training for Category 4, qualification training, replacement pilots in the JSF weapon system employment in the strike/fighter environment. This abbreviated refresher syllabus results in qualification for pilots with prior experience in model who have been out of the aircraft greater than 12 but less than 18 months (<24 months for USMC).
Length	28 days.
Title	**JSF CTOL BASIC OPERATIONAL TRAINING COURSE**
Description	This formal course provides initial qualification training in the JSF CTOL weapon system employment in the strike/fighter environment. This course will include a complete syllabus for newly designated pilot that has graduated from Introduction to Fighter Fundamentals and meets one of the following experience criteria: (1) Fighter assignment from SUPT; (2) T-37/T-38 instructor pilot selected for fighter assignment or (3) first-assignment FAC pilot selected for fighters.
Training days Total Ground Flying	126 days/22 days/104 days
Title	**JSF CTOL TRAINING COURSE TRANSITION/REQUALIFICATION COURSE**
Description	This formal course provides training for transitioning and re-qualifying pilots in the JSF CTOL weapon system employment in the strike/fighter environment. The transition syllabus will be assigned to pilots transitioning from other fighter aircraft. A re-qualification syllabus will be assigned to pilots previously qualified with prior JSF CTOL experience that is based on the length of time out of aircraft.
Training days Total Ground Flying	86 days/21 days/65 days
Title	**JSF CTOL INSTRUCTOR PILOT UPGRADE TRAINING**
Description	This formal course provides instructor pilot qualification training for JSF CTOL pilots selected to perform FTU instructional duties
Training days Total Ground Flying	44 days/8 days/36 days

4.5.2 Maintainer Training System.

Specific details on the maintainer training system by specialty have yet to be determined. It is expected that the courses developed will be modular in nature and the lengths of the courses, normally measured in instructional days, will be included as the JSF training system matures. Course descriptions and lengths will be refined after contract award as the JSF training system

matures. Detailed figures on maintainer student throughput associated with this training are provided in Appendix B of this document.

4.5.3 Embedded Training.

Examples of embedded training capabilities are described below however, the specific capability for JSF has yet to be selected and this section will be updated as the JSF weapon system matures.

a. Simulated Air-to-Air. A capability to simulate an aggressor entity. This capability will create a shadow using signature and other sensor data from a designated real entity to provide multi-ship tactics training. Shadow entities will appear at the same range as the host entity with a preset range, bearing, and altitude offset from the real entity. The goal of this capability is to reduce flight hours of supporting aircraft.
b. Simulated Ground Threats. A capability to simulate threats such as Surface-to-Air Missiles (SAM) and Anti-air-artillery fire. The goal of this capability is to reduce the dependence on instrumented ranges to generate ground threat entities.
c. Simulated Ground Targets. A capability to simulate ground target entities. The goal of this capability is to provide more realistic ordnance delivery training while reducing the dependence on target ranges.

4.5.4 Training Management System.

The TMS will be designed to integrate the management and control of unique JSF pilot and maintenance training as well as Service unique requirements. It will be designed to provide the capability to perform technical and managerial functions necessary to support, maintain, update, and provide configuration management for the JSF training system throughout its life-cycle. The potential for the JSF training system to include an embedded training management and assessment system to match the training capacity with requirements for mission ready personnel and to provide a training effectiveness measurement system for diagnostics/remediation of both human and system performance is currently being investigated. The training management element will provide the capability to support the management of the JSF training system by performing the functions of:

a. Student management.
b. Training system schedule management.
c. Evaluation and diagnostics.

    1) Human performance.
    2) TMS performance.

4.5.5 Training Devices and Technical Training Equipment.

The JSF training system will require various training devices and Technical Training Equipment (TTE) to support both pilot and maintainer training. The JSF and its associated training systems must provide these security features while allowing both maintainers and pilots with different clearance levels to access systems that process information at multiple levels of classification. The exact type and quantity of devices will depend on the training concept and training activities. Training devices will be designed specifically to support the "core" training concept and will support any cadre/type 1 training provided to the Services. The quantity and exact types of

training devices have not yet been determined. The data and delivery schedules for JSF training devices will be made available as the JSF weapon system development matures.

4.6 Other On-Board or In-Service Training Packages.

4.6.1 USAF Aircraft Maintenance Qualification Program.

The Aircraft Maintenance Qualification Program (AMQP) formalizes the OJT process and ensures everyone achieves a specified level of training. AMQP has four phases. Phase I consists of in-processing and maintenance orientation. Phase II consists of performance-based training. Phase III consists of continuation training. Phase IV consists of special qualification training. Refer to ACCI 36-2251 for additional information.

4.6.2 USAF Instructor Certification Course.

4.6.3 USAF Certification Training.

OJT certification training will provide JSF maintenance technicians with duty/task-specific hands-on maintenance training in the production environment. This certification training program will be developed as part of the Training Detachment program or unit OJT program. Training Detachment courses are those taught at selected operational bases by Air Education and Training Command (AETC). Tasks trained during certification training periods will be those tasks identified as skill-level upgrade tasks or critical skill tasks in the applicable AFSC Specialty Training Standard (STS) or Air Force Job Qualification Standard (AFJQS), or tasks identified through ISD as requiring hands-on training. AFI 36-2201 defines trainee, trainer, and certifier responsibilities and the certification process. All maintenance personnel will be required to be task qualified and certified prior to performing maintenance unsupervised. The following special certifications are currently in use for USAF legacy aircraft systems:

a. Engine run: Legacy systems have had a combination of certifications including separate low power and high power engine runs. Training consists of general principles, operating parameters, aircraft hold-down installation, and emergency procedures. Initial certification training, six month proficiency testing and annual re-certification evaluations are typical.
b. Borescope (rigid): Initial training includes equipment operation, inspection port location, inspection techniques, and damage/anomaly identification and analysis.
c. Borescope (flex): Use of the flex borescope is typically limited to more experienced technicians due to equipment expense/frailty and the possibility of leaving pieces of equipment inside the engine. Initial training includes equipment operation, inspection port location, inspection techniques, and damage/anomaly identification and analysis. Proficiency is tracked by frequency of accomplishing a borescope (typically a minimum one every 60 days is required). There is usually an annual re-certification required.
d. Borescope (blending): This certification and training process should be identical to the one for flex borescope.
e. Fuel cell maintenance: Training for the two-man concept to enter fuel cells. Included is all associated safety training (i.e. lock-out, tag-out).

f. Quality Assurance (QA) evaluations: Training is required for members of the QA staff for proper inspection techniques and system specific Quality Verification Inspections (i.e. pre and post engine installation inspections).
g. Aircraft weight and balance: Typically a small number of the QA staff gets trained on the procedures for performing, calculating, and documenting the aircraft weight and balance.
h. Integrated Combat Turns (ICT): Training for non-weapons certified members of an ICT crew. Positions include the Combat Turn Supervisor, A position crew chief and B position launch assist.
i. Hot pit refueling: Training and certification is required for the pad supervisor, A position (marshaling), B position launch assist, C position (fuel truck driver), and D position (fire guard). Annual re-certification training is required.
j. Aircraft towing: Procedures for tow vehicle operation, aircraft preparation for towing, tow supervisor responsibilities, and brake rider (in cockpit) responsibilities. Typically bi-annual written testing is required for re-certification.
k. Exceptional release for flight: Procedures for maintenance supervisors to review aircraft records, aircraft configuration, and readiness for flight. This is a one-time certification.
l. Egress, ejection seat maintenance: Training for maintenance personnel used to augment egress technicians. This training and certification is airframe specific.
m. Hazardous materials response: Typical certification is for specific materials only such as hydrazine on an F-16. Training is airframe specific.

4.6.4 **USN and USMC Certification Training.**

Certification is obtained thru completion of type WING/MAG directed/defined On the Job Training (OJT) syllabus. OJT consists of personnel performing maintenance tasks by demonstration and simulation, under the supervision of designated, qualified personnel. Experienced personnel instruct, demonstrate, and impart their skills to the less experienced. A maintenance task, applicable maintenance instructions and tools/test equipment are required to perform OJT. The trainee learns by seeing the job done and gains experience by participating in the work. OJT encompasses maintenance tasks ranging from basic administrative duties to complex aircraft/equipment testing, troubleshooting, and repair. A well-defined and comprehensive OJT syllabus will ensure maintenance personnel receive the training and acquire the skills necessary to meet the command's operational commitments. OJT is to be documented for all maintenance-related tasks until the trainee is qualified/proficient in that task. Once an individual is qualified/proficient, numerous written tests are performed and in some instances an aural board is required. Upon completion of all tests and, if applicable, aural board, certification documentation is forwarded thru the chain of command to the appropriate personnel for final signature and certification. The following special certifications are currently in use for USN and USMC legacy aircraft systems.

a. Engine Turn Certification.
b. Plane Captain Certification.
c. Ordnance Certification.
d. Release for Flight Certification.

4.6.5 USN Aviation Maintenance In-Service Training.

Aviation Maintenance In-Service Training (AMIST) is intended to support the Fleet training requirements and will function as an integral part of the new Aviation Maintenance Training Continuum System (AMTCS). AMIST provides standardized instruction to bridge the training gaps between initial and career training. With implementation of AMIST, technicians will be provided the training required to maintain a level of proficiency necessary to effectively perform the required tasks to reflect career progression.

4.6.6 USMC On-board Training.

Marine Corps on-board training is based on the current series of Marine Corps Order (MCO) P4790.12, Individual Training Standards System, and the Marine Aviation Training Management and Evaluation Program (MATMEP). This program is designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 series maintenance training requirements. It is a performance-based, standardized, level-progressive, documentable, training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies the task, skill, and knowledge requirements of each MOS. (MATMEP will be replaced by AMTCS in approximately FY05.)

4.6.7 UK On-board Training.

UK on-board training currently consists of OJT and is no different from that carried out ashore. The advent of technology enabled maintainer will lead to a review of the UK's on-board training requirement. The UK does not task certify its maintainers, they are taught a wide range of core skills that enable them to efficiently and safely carry out their duties

4.6.8 Pilot Proficiency Training.

Pilots will maintain their proficiency in the JSF aircraft through the use of simulators and in-aircraft flights. Aircraft training devices provide a cost-effective method that allow aircrew to simulate flight conditions to develop team coordination, practice weapon delivery, and simulate emergency procedures in a safe environment.

4.6.9 JSF Unique Systems Equipment Training.

JSF maintenance technicians and managers will be provided with duty/task-specific training to operate and maintain JDIS, PHM, LO, and JSF unique systems equipment. The details of this training and the maintenance and management personnel required to attend it will be identified in future updates of this document.

4.7 Training Locations.

Final training locations will be determined during EMD.

5 LOGISTICS SUPPORT.

5.1 Contractor Logistics Support.

This data will be made available as the JSF weapon system development matures.

5.2 JSF LRIP and Milestones.

Figure 10 illustrates the LRIP schedule for the JSF. It includes completed and pending milestones associated with the JSF program. This figure will be updated as the JSF program matures.

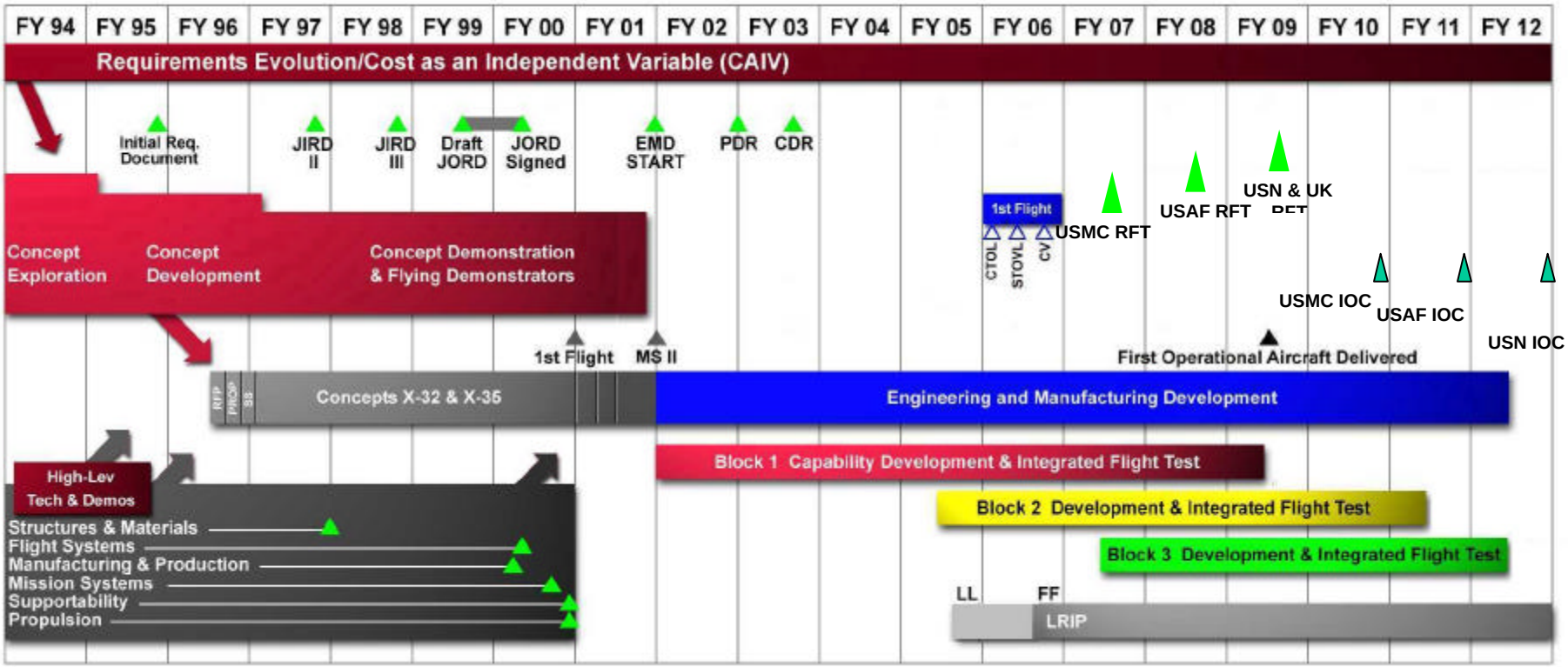

Figure 10. JSF LRIP and Milestones.

6 APPLICABLE DOCUMENTS.

The following specifications, standards, and documents, were used as source data for the development of this STP.

a. Joint Strike Fighter (JSF) Operational Requirements Document (ORD), CAF 302-95-I-A, 13 March 2000.
b. Joint Strike Fighter Draft Model Specification, 8 November 2000.
c. Draft Autonomic Logistics Planning Document, 24 April 2000.
d. Joint Strike Fighter Aircrew Fidelity Analysis Report, 6 April 2000.
e. Joint Strike Fighter Maintenance Training Fidelity Technical Report, 24 April 2000.
f. Alternative Concepts for Joint Strike Fighter (JSF) Training, 6 April 2000.
g. Joint Strike Fighter Modeling and Simulation Support Plan, Version 5.2, 8 November..
h. Draft Manpower Estimate Report for the Joint Strike Fighter (JSF) Aircraft, 24 September 2001.
i. Draft United States Air Force Joint Strike Fighter (JSF) System Training Plan (STP), 1 July 1999 (24 February 2000).
j. JSF Operational Employment and Support Concept (OESC), 15 March 1999. This is a classified document, contact the JSFPO for access.
k. JSF Training Situation Analysis, May 1999.
l. Draft JSF Test and Evaluation Master Plan (TEMP), 21 January 2000
m. AETCI 36-2203, Technical and Basic Military Training and Development, 8 March 2001.
n. AETCI 36-2205, Formal Aircrew Training Administration and Management, 29 June 2001.
o. ACCI 36-2251, Aircraft Maintenance Training Program, 20 July 2000.
p. AFI 36-2201, Developing, Managing, and Conducting Training, 26 April 2000.
q. OPNAVINST 4790.2H, Naval Aviation Maintenance Program, 2 July 2001. This document is available for viewing on the web at www.nalda.navy.mil/4790/default.html.
r. Marine Corps Order (MCO) P4790.12, Individual Training Standards System, 5 June 1995.
s. UK Tri-Service Guide to Training Needs Analysis.
t. UK Future Carrier Borne Aircraft Training Needs Analysis Phase I Scoping Study.
u. UK Report on Flying Training Requirements for the Future Carrier Borne Aircraft.
v. UK Report on CV Joint Combat Aircraft Pilot Training.

7 MPT PRINCIPALS.

Table 16 lists the MPT principals for the JSF program.

Table 16. MPT Principals.

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Table 16. MPT Principal Points of Contact ~ Continued.

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Table 16. MPT Principal Points of Contact ~ Continued.

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FULL NAME	JOB TITLE	ACTIVITY	PHONE	E-MAIL
		0904		

Table 16. MPT Principal Points of Contact ~ Continued.

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APPENDIX A. JSF MANNING DOCUMENTS.

Table 17. Cumulative Manpower Totals.

FISCAL YEAR	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
Operational Squadrons Officer Manpower																							
USAF				34		34	136	60	130	102	94	52	130	129.75	105	105	126	105	110	110	42		
USN					19	57	38	57	38	76	57	57	19										
USMC			19	38	19	62	31	38	50	50	19	87	19	57	38	38							
UK			3	9	10	12	28	32	40	32	29												
CUMULATIVE TOTAL			**22**	**103**	**151**	**316**	**549**	**736**	**994**	**1254**	**1453**	**1649**	**1817**	**2003**	**2146**	**2289**	**2415**	**2520**	**2630**	**2740**	**2782**	**2782**	**2782**
Operational Squadrons Enlisted Manpower																							
USAF				204		194	796	361	755	602	565	294	775	676	635	655	778	655	659	729	246		
USN					135	405	270	405	270	540	405	405	135										
USMC	126	126	119		191	93	87																
UK			150	200	250	300	350	250															
TOTAL	126	126	269	404	576	992	1503	1016	1025	1142	970	699	910	676	635	655	778	655	659	729	246	0	0
CUMULATIVE TOTAL	**126**	**252**	**521**	**925**	**1501**	**2493**	**3996**	**5012**	**6037**	**7179**	**8149**	**8848**	**9758**	**10434**	**11069**	**11724**	**12502**	**13157**	**13816**	**14545**	**14791**	**14791**	**14791**
Training Squadrons Officer Manpower																							
USAF		4	22	8	34	68	34	68			34	42											
USN			11	23	28	10	35	17															
USMC	17	16	16		25	12	12																
UK				6		6	6	6															
CUMULATIVE TOTAL	**17**	**37**	**86**	**123**	**210**	**306**	**393**	**484**	**484**	**484**	**518**	**560**	**560**	**560**	**560**	**560**	**560**	**560**	**560**	**560**	**560**	**560**	**560**
Training Squadrons Enlisted Manpower																							
USAF		68	48	60	140	280	158	298	18	18	176	176	36	36	18	23	36	36	31	23	26		
USN			173	169	157	173	169	157															
USMC		132	132	131		264	72	71															
UK				5		5																	
TOTAL		200	353	365	297	722	399	526	18	18	176	176	36	36	18	23	36	36	31	23	26		
CUMULATIVE TOTAL	**0**	**200**	**553**	**918**	**1215**	**1937**	**2336**	**2862**	**2880**	**2898**	**3074**	**3250**	**3286**	**3322**	**3340**	**3363**	**3399**	**3435**	**3466**	**3489**	**3515**	**3515**	**3515**
TOTAL CUMULATIVE	**143**	**489**	**1182**	**2069**	**3077**	**5052**	**7274**	**9094**	**10395**	**11815**	**13194**	**14307**	**15421**	**16319**	**17115**	**17936**	**18876**	**19672**	**20472**	**21334**	**21648**	**21648**	**21648**

Table 18. USAF JSF (Generic) Operations Manpower Phasing 36-48 PMAI.

Work Center	36 PMAI								42 PMAI								48 PMAI							
	1ST INCR				2ND INCR				1ST INCR				2ND INCR				1ST INCR				2ND INCR			
	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
Wing																								
Command					3	4	1	8					3	4	1	8					3	4	1	8
Command Post					1	3		4					1	3		4					1	3		4
Ops Cont Ctr					1	14		15					1	14		15					1	14		15
Safety					1			1					1			1					1			1
Flt Safety	1			1	1	1		2	1			1	1	1		2	1			1	1	1		2
Weapons Safety		1		1		1		1		1		1		1		1		1		1		1		1
Weapons Sys Sec						48		48						48		48						48		48
Ops Group																								
Command					3	2	1	6					3	2	1	6					3	2	1	6
Stan Eval	1			1	2	1		3	1			1	2	1		3	1			1	2	1		3
Ops Support Sq																								
Command					1	1		2					1	1		2					1	1		2
Sq Admin					1	3		4					1	3		4					1	3		4
Intel					3	11		14					3	11		14					3	11		14
Ops Support					1			1					1			1					1			1
Current Ops					1			1					1			1					1			1
Flt Records						4		4						4		4						4		4
Scheduling	1			1	1	1		2	1			1	1	1		2	1			1	1	1		2
Weapons/Training	1			1	1	1		2	1			1	1	1		2	1			1	1	1		2
Airspace Mgt							1	1							1	1							1	1
Life Support	1			1	1	2		3	1			1	1	2		3	1			1	1	2		3
Training	1			1	1	1		2	1			1	1	1		2	1			1	1	1		2
Wpns and Tactics	1			1	3	2		5	1			1	3	2		5	1			1	3	2		5
Ops/Log Plans					3	5		8					3	5		8					3	5		8
Flying Sq (2)																								
Command	2	1		3	4	2		6	2	1		3	3	2		5	1	1		2	2	2		4

Work Center	36 PMAI								42 PMAI								48 PMAI							
	1ST INCR				2ND INCR				1ST INCR				2ND INCR				1ST INCR				2ND INCR			
	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
Sq Admin	1	4		5	2	8		10	1	4		5	2	8		10	1	4		5	2	8		10
Operations	1	7		8	2	14		16	1	7		8	2	14		16	1	7		8	2	14		16
Crews	23			23	46			46	23			23	53			53	30			30	60			60
Life Support		7		7		14		14		7		7		14		14		7		7		14		14
Intelligence	1	1		2	2	2		4	1	1		2	2	2		4	1	1		2	2	2		4
Sq Med Element	1	2		3	2	4		6	1	2		3	2	4		6	1	2		3	2	4		6
Total	**36**	**23**		**59**	**87**	**149**	**3**	**239**	**36**	**23**		**59**	**93**	**149**	**3**	**245**	**42**	**23**		**65**	**99**	**149**	**3**	**251**

PMAI Primary Mission Aircraft Inventory

Table 19. USAF JSF (Generic) Maintenance Manpower Phasing 36-48 PMAI.

OSC	Work Center	AFSC	36 PMAI								42 PMAI								48 PMAI							
			1 ST INCR				2 ND INCR				1 ST INCR				2 ND INCR				1 ST INCR				2 ND INCR			
			OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
	Wing																									
CPM	Maint Control Center	Multi		12		12		16		16		12		12		16		16		12		12		16		16
	Sub Total			12		12		16		16		12		12		16		16		12		12		16		16
	Operations Group																									
QA	Quality Assurance	Multi		3		3		6		6		3		3		6		6		3		3		6		6
OGW	Load Stand Crew	Multi		7		7		7		7		7		7		7		7		7		7		7		7
	Sub Total			10		10		13		13		10		10		13		13		10		10		13		13
	Operations Supt Sq																									
OSOA	Maint Analysis	Multi		7		7		9		9		7		7		9		9		7		7		9		9
OSOL	Supply Laision	2S0X1		1		1		1		1		1		1		1		1		1		1		1		1
OSOM	Programs	Multi		2		2		4		4		2		2		4		4		2		2		4		4
OSOS	Maint Scheduling	2R1X1		4		4		5		5		4		4		5		5		4		4		5		5
	Sub Total			14		14		19		19		14		14		19		19		14		14		19		19
	Flying Sq (2)																									

OSC	Work Center	AFSC	36 PMAI								42 PMAI								48 PMAI							
			1 ST INCR				2 ND INCR				1 ST INCR				2 ND INCR				1 ST INCR				2 ND INCR			
			OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
MA	**Ops Sq Maint Mgt**	**Multi**	1	8		9	2	16		18	1	8		9	2	16		18	1	8		9	2	16		18
MAO	**Sortie Generation Flt**	**Multi**	1	10		11	2	20		22	1	10		11	2	20		22	1	10		11	2	20		22
MAOC	**Aircraft Flt Mgt**	**2A3X3B**		4		4		8		8		4		4		8		8		4		4		8		8
	Alert	**2A3X3B**		12		12		24		24		12		12		27		27		15		15		30		30
	Aircraft Flt (Crew Chiefs)	**2A3X3B**		36		4		72		72		36		36		84		84		48		48		96		96
	End of Runway	2A3X3B		5		5		10		10		5		5		10		10		5		5		10		10
MAOS	Specialist Flt Mgt	**Multi**		**2**		2		4		4		**2**		2		4		4		2		2		4		4
	Avionics	2A2X0		**15**		15		30		30		**15**		15		35		35		20		20		40		40
	E/E	2A6X6		**9**		9		18		18		**9**		9		21		21		12		12		24		24
	Propulsion	2A6X1		**6**		6		12		12		**6**		6		14		14		8		8		16		16
MAOW	Weapons Flt Mgt	2W1X1		**2**		2		4		4		**2**		2		4		4		2		2		4		4
MAOWL	Weapons Loaders	2W1X1		**36**		36		72		72		**36**		36		84		84		48		48		96		96
	End of Runway	2W1X1		5		5		10		10		5		5		10		10		5		5		10		10
MAOWM	Weapons Maintenance	2W1X1		**15**		15		30		30		**15**		15		30		30		**15**		15		30		30
MAF	Sortie Support Flt	Multi		**1**		1		2		2		**1**		1		2		2		**1**		1		2		2
MAFI	Inspection Section	2A3X3B		**12**		12		24		24		**12**		12		27		27		**15**		15		30		30
MAFS	Support Section	Multi		**15**		15		30		30		**15**		15		30		30		**15**		15		30		30
	Sub Total		2	193		195	4	386		390	2	193		195	4	426		430	2	233		235	4	466		470
	Logistics Group																									
CC	Command	Multi	1	3		4	2	4		6	1	3		4	2	4		6	1	3		4	2	4		6
QA	Quality Assurance	Multi		8		8		16		16		8		8		16		16		8		8		16		16
	Sub Total		1	11		12	2	20		22	1	11		12	2	20		22	1	11		12	2	20		22
	Logistics Support Sq																									
CC	Command	Multi	1			1	1			1	1			1	1			1	1			1	1			1
CCQ	Squadron Admin	Multi		2		2		4		4		2		2		4		4		2		2		4		4
LGLO	Logistics Officer	Multi	1			1	1			1	1			1	1			1	1			1	1			1
LGLOB	Engine Mgt Branch	Multi		1		1		2		2		1		1		2		2		1		1		2		2
LGLOR	Programs	Multi		2		2		4		4		2		2		4		4		2		2		4		4

OSC	Work Center	AFSC	36 PMAI								42 PMAI								48 PMAI							
			1 ST INCR				2 ND INCR				1 ST INCR				2 ND INCR				1 ST INCR				2 ND INCR			
			OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
LGLOS	Supply Liaison	2S0X1		1		1		1		1		1		1		1		1		1		1		1		1
LGLT	Training Mgt	3S2X1		5		5		7		7		5		5		7		7		5		5		7		7
	Sub Total		2	11		13	2	18		20	2	11		13	2	18		20	2	11		13	2	18		20
	Maintenance Sq																									
CC	Command	Multi	1			1	1	1		2	1			1	1	1		2	1			1	1	1		2
CCQ	Squadron Admin	Multi	1	1		1	1	3		4	1	1		2	1	3		4	1	1		2	1	3		4
LGM	Maintenance Supervision	Multi	1	2		1	1	5		6	1	2		3	1	5		6	1	2		3	1	5		6
LGMC	Accessories Flt	Multi		1		1		1		1		1		1		1		1		1		1		1		1
LGMCE	ECS/Elect	2A6X6		3		3		6		6		3		3		8		8		5		5		10		10
LGMCF	Fuels	2A6X4		6		6		12		12		6		6		14		14		8		8		16		16
LGMCG	Egress	2A6X3		5		5		10		10		5		5		11		11		6		6		12		12
LGMCP	Pneudraulics	2A6X5		3		3		6		6		3		3		6		6		3		3		6		6
LGMF	Fabrication Flt	Multi		1		1		1		1		1		1		1		1		1		1		1		1
LGMFE	Survival Equipment	2A7X4		3		3		6		6		3		3		6		6		3		3		6		6
LGMFN	NDI	2A7X2		3		3		6		6		3		3		9		9		6		6		12		12
LGMFS	Structures	2A7X3		18		18		36		36		18		18		42		42		24		24		48		48
LGMG	Aerospace Gnd Equip Flt	2A6X2		28		28		46		46		28		28		52		52		35		35		57		57
LGMTR	Wheel/Tire	2A3X3B		5		5		10		10		5		5		11		11		6		6		12		12
LGMR	Armament	2W1X1		5		5		10		10		5		5		10		10		5		5		10		10
LGMW	Munitions	2W0X1	1	64		65	1	129		130	1	64		65	1	144		145	1	79		80	1	159		160
	Sub Total		4	148		152	4	288		292	4	148		152	4	324		328	4	185		189	4	359		363
	OVERALL TOTAL		**9**	**399**		**408**	**12**	**760**		**772**	**9**	**399**		**408**	**12**	**836**		**848**	**9**	**476**		**485**	**12**	**911**		**923**

Table 20. USAF JSF (Generic) Operations Manpower Phasing 60-72 PMAI.

OSC	Work Center	60 PAA												66 PAA												72 PAA											
		1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR			
		OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
	Wing																																				

OSC	Work Center	60 PAA												66 PAA												72 PAA											
		1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR			
		OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
CC	Command					3	1	1	**5**	3	5	1	**9**					3	1	1	**5**	3	5	1	**9**					3	1	1	**5**	3	5	1	**9**
CP	Command Post					1	1		**2**	1	3		**4**					1	1		**2**	1	3		**4**					1	1		**2**	1	3		**4**
CPO	Ops Cont Ctr					1	6		**7**	1	14		**15**					1	6		**7**	1	14		**15**					1	6		**7**	1	14		**15**
SE	Safety					1	1		**2**	1	1		**2**					1	1		**2**	1	1		**2**					1	1		**2**	1	1		**2**
SEF	Flt Safety	1			**1**	1	1		**2**	1	1		**2**	1			**1**	1	1		**2**	1	1		**2**	1			**1**	1	1		**2**	1	1		**2**
SEW	Weapons Safety		1		**1**		2		**2**		2		**2**		1		**1**		2		**2**		2		**2**		1		**1**		2		**2**		2		**2**
SP	Weapons Sys Sec						24		**24**		48		**48**						24		**24**		48		**48**						24		**24**		48		**48**
	Ops Group																																				
CC	Command					1	1	1	**3**	3	3	1	**7**					1	1	1	**3**	3	3	1	**7**					1	1	1	**3**	3	3	1	**7**
OGV	Stan Eval	1			**1**	2			**2**	2	1		**3**	1			**1**	2			**2**	2	1		**3**	1			**1**	2			**2**	2	1		**3**
	Ops Support Sq																																				
CC	Command					1			**1**	1	1		**2**					1			**1**	1	1		**2**					1			**1**	1	1		**2**
CCQ	Sq Admin					1	3		**4**	1	4		**5**					1	3		**4**	1	4		**5**					1	3		**4**	1	4		**5**
IN	Intel					1	6		**7**	3	11		**14**					1	6		**7**	3	11		**14**					1	6		**7**	3	11		**14**
OS	Ops Support					1			**1**	1			**1**					1			**1**	1			**1**					1			**1**	1			**1**
OSO	Current Ops					1			**1**	1	1		**2**					1			**1**	1	1		**2**					1			**1**	1	1		**2**
OSOF	Flt Records						3		**3**		7		**7**						3		**3**		7		**7**						3		**3**		7		**7**
OSOS	Scheduling	1			**1**	1			**1**	1	1		**2**	1			**1**	1			**1**	1	1		**2**	1			**1**	1			**1**	1	1		**2**
OST	Weapons/Training	1			**1**	1			**1**	1	1		**2**	1			**1**	1			**1**	1	1		**2**	1			**1**	1			**1**	1	1		**2**
OSTA	Airspace Mgt											1	**1**											1	**1**											1	**1**
OSTL	Life Support	1			**1**	1	1		**2**	1	2		**3**	1			**1**	1	1		**2**	1	2		**3**	1			**1**	1	1		**2**	1	2		**3**
OSTT	Training	1			**1**	1			**1**	1	1		**2**	1			**1**	1			**1**	1	1		**2**	1			**1**	1			**1**	1	1		**2**
OSTW	Wpns and Tactics	1			**1**	3	2		**5**	5	3		**8**	1			**1**	3	2		**5**	5	3		**8**	1			**1**	3	2		**5**	5	3		**8**
OSTX	Ops/Log Plans					3	4		**7**	4	7		**11**					3	4		**7**	4	7		**11**					3	4		**7**	4	7		**11**
	Flying Sq (3)																																				
CC	Command	1	1		**2**	3	2		**5**	5	3		**8**	1	1		**2**	2	2		**4**	4	3		**7**	1	1		**2**	2	2		**4**	3	3		**6**
CCQ	Sq Admin	1	4		**5**	2	8		**10**	3	12		**15**	1	4		**5**	2	8		**10**	3	12		**15**	1	4		**5**	2	8		**10**	3	12		**15**

OSC	Work Center	60 PAA												66 PAA												72 PAA											
		1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR			
		OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
DO	Operations	1	7		**8**	2	14		**16**	3	21		**24**	1	7		**8**	2	14		**16**	3	21		**24**	1	7		**8**	2	14		**16**	3	21		**24**
DOF	Crews	30			**30**	53			**53**	76			**76**	30			**30**	60			**60**	83			**83**	30			**30**	60			**60**	90			**90**
DOL	Life Support		7		**7**		14		**14**		21		**21**		7		**7**		14		**14**		21		**21**		7		**7**		14		**14**		21		**21**
IN	Intelligence	1	1		**2**	2	2		**4**	3	3		**6**	1	1		**2**	2	2		**4**	3	3		**6**	1	1		**2**	2	2		**4**	3	3		**6**
SGPFS	Sq Med Element	1	2		**3**	2	4		**6**	3	6		**9**	1	2		**3**	2	4		**6**	3	6		**9**	1	2		**3**	2	4		**6**	3	6		**9**
	Total	**42**	**23**		**65**	**89**	**100**	**2**	**191**	**125**	**183**	**3**	**311**	**42**	**23**		**65**	**95**	**100**	**2**	**197**	**131**	**183**	**3**	**317**	**42**	**23**		**65**	**95**	**100**	**2**	**197**	**137**	**183**	**3**	**323**

Table 21. USAF JSF (Generic) Maintenance Manpower Phasing 60-72 PMAI.

OSC	Work Center	AFSC	60 PMAI												66 PMAI												72 PMAI											
			1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR			
			OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
	Wing																																					
CPM	Maint Control Center	Multi		12		12		16		16		20		20		12		12		16		16		20		20		12		12		16		16		20		20
	Sub Total			12		12		16		16		20		20		12		12		16		16		20		20		12		12		16		16		20		20
	Operations Group																																					
QA	Quality Assurance	Multi		3		3		6		6		8		8		3		3		6		6		8		8		3		3		6		6		8		8
OGW	Load Stand Crew	Multi		7		7		7		7		7		7		7		7		7		7		7		7		7		7		7		7		7		7
	Sub Total			10		10		13		13		15		15		10		10		13		13		15		15		10		10		13		13		15		15
	Operations Supt Sq																																					
OSOA	Maint Analysis	Multi		9		9		11		11		13		13		9		9		11		11		13		13		9		9		11		11		13		13
OSOL	Supply Liaison	2S0X1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1
OSOM	Programs	Multi		2		2		3		3		4		4		2		2		3		3		4		4		2		2		3		3		4		4
OSOS	Maint Scheduling	2R1X1		4		4		5		5		6		6		4		4		5		5		6		6		4		4		5		5		6		6
	Sub Total			16		16		20		20		24		24		16		16		20		20		24		24		16		16		20		20		24		24
	Flying Sq (3)																																					
MA	Ops Sq Maint Mgt	Multi	**1**	**8**		9	2	16		18	3	24		27	1	8		9	2	16		18	3	24		27	1	8		9	2	16		18	3	24		27

OSC	Work Center	AFSC	60 PMAI												66 PMAI												72 PMAI											
			1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR			
			OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
MAO	Sortie Generation Flt	Multi	**1**	**10**		11	2	20		22	3	30		33	1	10		11	2	20		22	3	30		33	1	10		11	2	20		22	3	30		33
MAOC	Aircraft Flt Mgt	2A3X3B		**4**		4		8		8		12		12		4		4		8		8		12		12		4		4		8		8		12		12
	Alert	2A3X3B		**15**		15		27		27		39		39		15		15		30		30		42		42		15		15		30		30		45		45
	Aircraft Flt (Crew Chiefs)	2A3X3B		**48**		48		84		84		120		120		48		48		96		96		132		132		48		48		96		96		144		144
MAOC	End of Runway	2A3X3B		3		3		6		6		10		10		3		3		6		6		10		10		3		3		6		6		10		10
MAOS	Specialist Flt Mgt	Multi		**2**		2		4		4		6		6		2		2		4		4		6		6		2		2		4		4		6		6
	Avionics	2A2X0		**20**		20		35		35		50		50		20		20		40		40		55		55		20		20		40		40		60		60
	E/E	2A6X6		**12**		12		21		21		30		30		12		12		24		24		33		33		12		12		24		24		36		36
	Propulsion	2A6X1		**8**		8		14		14		20		20		8		8		16		16		22		22		8		8		16		16		24		24
MAOW	Weapons Flt Mgt	2W1X1		2		2		4		4		6		6		2		2		6		6		10		10		2		2		6		6		10		10
MAOWL	Weapons Loaders	2W1X1		**48**		48		84		84		120		120		48		48		96		96		132		132		48		48		96		96		144		144
	End of Runway	2W1X1		3		3		6		6		10		10		3		3		6		6		10		10		3		3		6		6		10		10
MAOWM	Weapons Maintenance	2W1X1		**15**		15		30		30		45		45		15		15		30		30		45		45		15		15		30		30		45		45
MAF	Sortie Support Flt	Multi		1		1		2		2		3		3		1		1		2		2		3		3		1		1		2		2		3		3
MAFI	Inspection Section	2A3X3B		15		15		27		27		39		39		15		15		30		30		42		42		15		15		30		30		45		45
MAFS	Support Section	Multi		15		15		30		30		45		45		15		15		30		30		45		45		15		15		30		30		45		45
	Sub Total		2	229		231	4	418		422	6	609		615	2	229		231	4	460		464	6	653		659	2	229		231	4	460		464	6	693		699
	Logistics Group																																					
CC	Command	Multi	1	1		2	1	3		4	2	4		6	1	1		2	1	3		4	2	4		6	1	1		2	1	3		4	2	4		6
QA	Quality Assurance	Multi		8		8		16		16		24		24		8		8		16		16		24		24		8		8		16		16		24		24
	Sub Total		1	9		10	1	19		20	2	28		30	1	9		10	1	19		20	2	28		30	1	9		10	1	19		20	2	28		30
	Logistics Support Sq																																					
CC	Command	Multi	1			1	1			1	1			1	1			1	1			1	1			1	1			1	1			1	1			1
CCQ	Squadron Admin	Multi		1		1		2		2		3		3		1		1		2		2		3		3		1		1		2		2		3		3
LGLO	Logistics Officer	Multi	1			1	1			1	1			1	1			1	1			1	1			1	1			1	1			1	1			1
LGLOB	Engine Mgt Branch	Multi		1		1		2		2		3		3		1		1		2		2		3		3		1		1		2		2		3		3
LGLOR	Programs	Multi		2		2		3		3		4		4		2		2		3		3		4		4		2		2		3		3		4		4
LGLOS	Supply Liaison	2S0X1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1
LGLT	Training Mgt	3S2X1		5		5		7		7		10		10		5		5		7		7		10		10		5		5		7		7		10		10
	Sub Total		2	10		12	2	15		17	2	21		23	2	10		12	2	15		17	2	21		23	2	10		12	2	15		17	2	21		23

OSC	Work Center	AFSC	60 PMAI												66 PMAI												72 PMAI											
			1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR				1 ST INCR				2 ND INCR				3 RD INCR			
			OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL	OFF	ENL	CIV	TOTAL
	Maintenance Sq																																					
CC	Command	Multi	1	1		2	1	1		2	1	1		2	1	1		2	1	1		2	1	1		2	1	1		2	1	1		2	1	1		2
CCQ	Squadron Admin	Multi	1	1		2	1	3		4	1	4		5	1	1		2	1	3		4	1	4		5	1	1		2	1	3		4	1	4		5
LGM	Maintenance Supervision	Multi	1	2		3	1	5		6	2	6		8	1	2		3	1	5		6	2	6		8	1	2		3	1	5		6	2	6		8
LGMC	Accessories Flt	Multi		1		1		2		2		2		2		1		1		2		2		2		2		1		1		2		2		2		2
LGMCE	ECS/Elect	2A6X6		5		5		8		8		11		11		5		5		10		10		13		13		5		5		10		10		15		15
LGMCF	Fuels	2A6X4		8		8		14		14		20		20		8		8		16		16		22		22		8		8		16		16		24		24
LGMCG	Egress	2A6X3		6		6		11		11		16		16		6		6		12		12		17		17		6		6		12		12		18		18
LGMCP	Pneudraulics	2A6X5		3		3		6		6		9		9		3		3		6		6		9		9		3		3		6		6		9		9
LGMF	Fabrication Flt	Multi		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1		1
LGMFE	Survival Equipment	2A7X4		3		3		6		6		9		9		3		3		6		6		9		9		3		3		6		6		9		9
LGMFN	NDI	2A7X2		6		6		9		9		12		12		6		6		12		12		15		15		6		6		12		12		18		18
LGMFS	Structures	2A7X3		24		24		42		42		60		60		24		24		48		48		66		66		24		24		48		48		72		72
LGMG	Aerospace Gnd Equip Flt	2A6X2		35		35		52		52		68		68		35		35		57		57		73		73		35		35		57		57		79		79
LGMTR	Wheel/Tire	2A3X3B		6		6		11		11		16		16		6		6		12		12		17		17		6		6		12		12		18		18
LGMR	Armament	2W1X1		5		5		10		10		15		15		5		5		10		10		15		15		5		5		10		10		15		15
LGMW	Munitions	2W0X1	1	79		80	1	144		145	1	209		210	1	79		80	1	156		157	1	221		222	1	79		80	1	156		157	1	238		239
	Sub Total		4	186		190	4	325		329	5	459		464	4	186		190	4	357		361	5	491		496	4	186		190	4	357		361	5	529		534
	OVERALL TOTAL		**9**	**472**		**481**	**11**	**826**		**837**	**15**	**1176**		**1191**	**9**	**472**		**481**	**11**	**900**		**911**	**15**	**1252**		**1267**	**9**	**472**		**481**	**11**	**900**		**911**	**15**	**1330**		**1345**

Table 22. USAF 24 Aircraft (Generic) Training Operations Manpower.

OSC	Work Center	24 PTAI
	Wing	
CC	Command	
CP	Command Post	
CPO	Ops Cont Ctr	

OSC	Work Center	24 PTAI
SE	Safety	
SEF	Flt Safety	
SEW	Weapons Safety	
SP	Weapons Sys Sec	
	Ops Group	
CC	Command	
OGV	Stan Evaluation	
	Ops Support Sq	
CC	Command	
CCQ	Sq Admin	
IN	Intel	
OS	Ops Support	
OSO	Current Ops	
OSOF	Flt Records	
OSOS	Scheduling	
OST	Weapons/Training	
OSTA	Airspace Mgt	
OSTL	Life Support	
OSTT	Training	
OSTW	Weapons and Tactics	
OSTX	Ops/Log Plans	
	Flying Sq	
CC	Command	2
CCQ	Sq Admin	5
DO	Operations	6
DOF	Crews	24
DOL	Life Support	4
IN	Intelligence	0
SGPFS	Squadron Medical Element	0
	Total	**41**

Table 23. USAF 24 Aircraft (Generic) Training Maintenance Manpower.

OSC	Work Center	AFSC	24 PAA						WG				Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL		DIRECT	NON SIM	OVHD/MGT	TOTAL		
	Wing													
CPM	Maint Control Center	Multi											AFMS	Overhead/mgt
	Sub Total										0	0		
	Operations Group													
QA	Quality Assurance	Multi											Command Guide	Overhead/mgt
OGW	Load Stand Crew	Multi											Command Guide	Overhead/mgt
	Sub Total										0	0		
	Operations Supt Sq													
OSOA	Maint Analysis	Multi											Command Guide	Overhead/mgt
OSOI	Inspection Spt (Phase)	2A3X3B											Command Guide	Overhead/mgt
OSOL	Supply Liaison	2S0X1											Command Guide	Overhead/mgt
OSOM	Programs	Multi											Command Guide	Overhead/mgt
OSOS	Maint Scheduling	2R1X1											Command Guide	Overhead/mgt
	Sub Total		0	0							0	0		
	Flying Sq													
MA	Ops Sq Maint Mgt	Multi				11	11						Command Guide	Overhead/mgt
MAO	Sortie Generation Flt	Multi				9	9						Command Guide	Overhead/mgt
MAOC	Aircraft Flt Mgt	2A3X3B				4	4						Command Guide	Overhead/mgt
	Alert	2A3X3B											Command Guide	On Equip
	End of Runway	2A3X3B								10		10	Command Guide	On Equip
	Aircraft Flt (Crew Chiefs)	2A3X3B	28	38			38						Simulation	On Equip
MAOS	Specialist Flt Mgt	2A3X2				2	2						Command Guide	Overhead/mgt
	2A2X0-Avionics	2A2X0	13	16			16						Simulation	On Equip
	2A6X6-Elec/Environmental	2A6X6	8	10			10						Simulation	On Equip
	2A6X1-Propulsion	2A6X1	5	6			6						Simulation	On Equip
MAOW	Weapons Flt Mgt	2W1X1				2	2						Command Guide	Overhead/mgt
	End of Runway	2W1X1								10			Command Guide	On Equip

OSC	Work Center	AFSC	24 PAA					WG				Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL	DIRECT	NON SIM	OVHD/MGT	TOTAL		
MAOWL	Weapons Loaders	2W1X1	20	29			29					Simulation	On Equip
MAOWM	Weapons Maintenance	2W1X1		12			12						
MAF	Sortie Support Flt	Multi				1	1					Command Guide	Overhead/mgt
MAFI	Inspection Section	2A3X3B		12			12						
MAFS	Support Section	Multi				15	15					Command Guide	Overhead/mgt
	Sub Total		74	123	0	44	167	0	20	0	10		
	Logistics Group												
CC	Command	Multi										AFMS	Overhead/mgt
QA	Quality Assurance	Multi										Command Guide	Overhead/mgt
	Sub Total		0	0						0	0		
	Logistics Support Sq												
CC	Command	Multi										AFMS	Overhead/mgt
CCQ	Squadron Admin	Multi										AFMS	Overhead/mgt
LGLO	Logistics Officer	Multi										Command Guide	Overhead/mgt
LGLOB	Engine Mgt Branch	Multi										Command Guide	Overhead/mgt
LGLOR	Programs	Multi										Command Guide	Overhead/mgt
LGLOS	Supply Liaison	2S0X1										Command Guide	Overhead/mgt
LGLT	Training Mgt	3S2X1										Command Guide	Overhead/mgt
	Sub Total		0	0						0	0		
	Maintenance Sq												
CC	Command	Multi										AFMS	Overhead/mgt
CCQ	Squadron Admin	Multi										AFMS	Overhead/mgt
LGMC	Accessories Flt	Multi										Command Guide	Overhead/mgt
LGMCE	ECS/Electric	2A6X6	3	4			4					Simulation	Off Equip
LGMCF	Fuels	2A6X4	5	6			6					Simulation	Off Equip
LGMCG	Egress	2A6X3	4	5			5					Simulation	Off Equip
LGMCP	Pneudraulics	2A6X5	2	3			3					Simulation	Off Equip
LGMF	Fabrication Flt	Multi										Command Guide	Overhead/mgt
LGMFE	Survival Equipment	2A7X4	4	3			3					Simulation	Off Equip
LGMFM	Metals	2A7X1									0	Simulation	Off Equip

OSC	Work Center	AFSC	24 PAA					WG				Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL	DIRECT	NON SIM	OVHD/MGT	TOTAL		
LGMFN	NDI	2A7X2	4	5			5					Command Guide	Off Equip
LGMFS	Structures	2A7X3	16	19			19					Simulation	On Equip
LGMG	Aerospace Gnd Equip Flt	2A6X2			27		27					AFMS	Off Equip
LGMTR	Wheel/Tire	2A3X3B	4	5			5					Simulation	Off Equip
LGMW	Munitions	2W0X1			32		32					AMMO Model	Off Equip
LGMP	Propulsion	2A6X1A										Command Guide	Overhead/mgt
LGMPJ	Jet Engine	2A6X1A										Simulation	Off Equip
LGMPT	Engine Test Cell	2A6X1A										Simulation	Off Equip
LGMR	Armament	2W1X1		4			4					Simulation	Off Equip
LGMV	Avionics Flt	Multi										Command Guide	Overhead/mgt
LGMVE	Electronic Warfare	2A1X7										Simulation	Off Equip
LGMVF	PMEL IV	2P0X1										Command Guide	Off Equip
LGMVS	Sensors/LANTIRN	2A1X1										Simulation	Off Equip
LGMVT	Avionics Test Station	2A0X1B										Simulation	Off Equip
	Sub Total		42	54	59		113	0	0	0	0		
	OVERALL TOTAL		116	177	59	44	280	0	20	0			
	ON EQUIPMENT		90	142	0		232		20				
	OFF EQUIPMENT		26	35	59		120	0	0				
	OVERHEAD/MGT		0	0		44	44			0	0		
	TOTAL		**116**	**177**	**59**	**44**	**280**	**0**	**20**	**0**	**0**		

Methodology: based on a comparison of the 1995 f-16 training LCOM to the 1998 f-16 combat LCOM, a flight line and backs hop manpower ratio was established (0.80 flight line and 0.67 back shop training versus combat). Economies are realized in a training environment in the back shop in a full up wing. This is due to each work center supporting all aircraft as opposed to a combat scenario of independent aircraft packages. Since these economies are not realized until the training wing is full up the flight line ratio of 0.80 was used for the back shop work centers instead of the 0.67 ratio.

Table 24. USAF JSF (Generic) Operational Test Operations Manpower.

OSC	Work Center	10 PDAI

	Wing	
CC	Command	
CP	Command Post	
CPO	Ops Cont Center	
SE	Safety	
SEF	Flt Safety	1
SEW	Weapons Safety	
SP	Weapons Sys Sec	
	Ops Group	
CC	Command	
OGV	Stan Evaluation	1
	Ops Support Sq	
CC	Command	
CCQ	Sq Admin	
IN	Intel	
OS	Ops Support	
OSO	Current Ops	
OSOF	Flt Records	
OSOS	Scheduling	
OST	Weapons/Training	
OSTA	Airspace Mgt	
OSTL	Life Support	
OSTT	Training	
OSTW	Weapons and Tactics	
OSTX	Ops/Log Plans	
	Flying Sq	
	Pilots	14
	Maint Liaison	1
	Supply	1
	Ops Resource Mgt	1
	Life Spt	1

OSC	Work Center	10 PDAI
	Dev Engineer	1
	Ops Analyst	2
	Intel	1
	Ops Suitability	1
	Computer Programmer	1
	Editor	1
	Total	**27**

Table 25. USAF JSF (Generic) Operational Test Maintenance Manpower.

OSC	Work Center	AFSC	10 PDAI						Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL			
	Wing									
CPM	Maint Control Center	Multi							AFMS	Overhead/mgt
	Sub Total									
	Operations Group									
QA	Quality Assurance	Multi							Command Guide	Overhead/mgt
OGW	Load Stand Crew	Multi							Command Guide	Overhead/mgt
	Sub Total									
	Operations Supt Sq									
OSOA	Maint Analysis	Multi							Command Guide	Overhead/mgt
OSOI	Inspection Spt (Phase)	2A3X3B							Command Guide	Overhead/mgt
OSOL	Supply Liaison	2S0X1							Command Guide	Overhead/mgt
OSOM	Programs	Multi							Command Guide	Overhead/mgt
OSOS	Maint Scheduling	2R1X1							Command Guide	Overhead/mgt
	Sub Total		0	0						
	Flying Sq									
MA	Ops Sq Maint Mgt	Multi				8	8		Command Guide	Overhead/mgt
MAO	Sortie Generation Flt	Multi				5	5		Command Guide	Overhead/mgt

OSC	Work Center	AFSC	10 PDAI						Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL			
MAOC	Aircraft Flt Mgt	2A3X3B				4	4		Command Guide	Overhead/mgt
	Alert	2A3X3B							Command Guide	On Equip
	End of Runway	2A3X3B							Command Guide	On Equip
	Aircraft Flt (Crew Chiefs)	2A3X3B	28	24			24		Simulation	On Equip
MAOS	Specialist Flt Mgt	2A3X2				2	2		Command Guide	Overhead/mgt
	2A2X0-Avionics	2A2X0	13	11			11		Simulation	On Equip
	2A6X6-Elec/Environmental	2A6X6	8	7			7		Simulation	On Equip
	2A6X1-Propulsion	2A6X1	5	6			6		Simulation	On Equip
MAOW	Weapons Flt Mgt	2W1X1				2	2		Command Guide	Overhead/mgt
	End of Runway	2W1X1							Command Guide	On Equip
MAOWL	Weapons Loaders	2W1X1	20	17			17		Simulation	On Equip
MAOWM	Weapons Maintenance	2W1X1		6			6		Simulation	On Equip
MAF	Sortie Support Flt	Multi				1	1		Command Guide	Overhead/mgt
MAFI	Inspection Section	2A3X3B		6			6		Simulation	On Equip
MAFS	Support Section	Multi				10	10		Command Guide	Overhead/mgt
	Sub Total		74	77	0	32	109			
	Logistics Group									
CC	Command	Multi							AFMS	Overhead/mgt
QA	Quality Assurance	Multi							Command Guide	Overhead/mgt
	Sub Total		0	0						
	Logistics Support Sq									
CC	Command	Multi							AFMS	Overhead/mgt
CCQ	Squadron Admin	Multi							AFMS	Overhead/mgt
LGLO	Logistics Officer	Multi							Command Guide	Overhead/mgt
LGLOB	Engine Mgt Branch	Multi							Command Guide	Overhead/mgt
LGLOR	Programs	Multi							Command Guide	Overhead/mgt
LGLOS	Supply Liaison	2S0X1							Command Guide	Overhead/mgt
LGLT	Training Mgt	3S2X1							Command Guide	Overhead/mgt
	Sub Total		0	0						
	Maintenance Sq									

OSC	Work Center	AFSC	10 PDAI						Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL			
CC	Command	Multi							AFMS	Overhead/mgt
CCQ	Squadron Admin	Multi							AFMS	Overhead/mgt
LGMC	Accessories Flt	Multi							Command Guide	Overhead/mgt
LGMCE	ECS/Electric	2A6X6	3	4			4		Simulation	Off Equip
LGMCF	Fuels	2A6X4	5	6			6		Simulation	Off Equip
LGMCG	Egress	2A6X3	4	5			5		Simulation	Off Equip
LGMCP	Pneudraulics	2A6X5	2	2			2		Simulation	Off Equip
LGMF	Fabrication Flt	Multi							Command Guide	Overhead/mgt
LGMFE	Survival Equipment	2A7X4	4	3			3		Simulation	Off Equip
LGMFM	Metals	2A7X1							Simulation	Off Equip
LGMFN	NDI	2A7X2	4	5			5		Command Guide	Off Equip
LGMFS	Structures	2A7X3	16	13			13		Simulation	Off Equip
LGMG	Aerospace Gnd Equip Flt	2A6X2			12				AFMS	Off Equip
LGMTR	Wheel/Tire	2A3X3B	4	5			5		Simulation	Off Equip
LGMW	Munitions	2W0X1			14		14		AMMO Model	Off Equip
LGMP	Propulsion	2A6X1A							Command Guide	Overhead/mgt
LGMPJ	Jet Engine	2A6X1A							Simulation	Off Equip
LGMPT	Engine Test Cell	2A6X1A							Simulation	Off Equip
LGMR	Armament	2W1X1		3			3		Simulation	Off Equip
LGMV	Avionics Flt	Multi							Command Guide	Overhead/mgt
LGMVE	Electronic Warfare	2A1X7							Simulation	Off Equip
LGMVF	PMEL IV	2P0X1							Command Guide	Off Equip
LGMVS	Sensors/LANTIRN	2A1X1							Simulation	Off Equip
LGMVT	Avionics Test Station	2A0X1B							Simulation	Off Equip
	Sub Total		42	46	26		72			
	OVERALL TOTAL		116	123	26	32	181			
	ON EQUIPMENT		90	90	0		90			
	OFF EQUIPMENT		26	33	26		59			
	7.1 OVERHEAD/MGT		0	0		32	32			
	TOTAL		**116**	**123**	**26**	**32**	**181**			

Table 26. USAF JSF (Generic) Operations Manpower for 15 PTAI Reserve Training Squadron.

OSC	Work Center	15 PAA
	Wing	
CC	Command	7
CP	Command Post	2
CPO	Ops Control Center	7
SE	Safety	2
SEF	Flt Safety	1
SEW	Weapons Safety	2
SP	Weapons Sys Sec	58
	Ops Group	
CC	Command	6
OGV	Stan Evaluation	1
	Ops Support Sq	
CC	Command	1
CCQ	Sq Admin	1
IN	Intel	6
OS	Ops Support	0
OSO	Current Ops	1
OSOF	Flt Records	2
OSOS	Scheduling	0
OST	Weapons/Training	1
OSTA	Airspace Mgt	0
OSTL	Life Support	1
OSTT	Training	2
OSTW	Weapons and Tactics	2
OSTX	Ops/Log Plans	0
	Flying Sq	
CC	Command	1
CCQ	Squadron Administration	4

DO	Operations	7
DOF	Crews	19
DOL	Life Support	6
IN	Intelligence	7
SGPFS	Squadron Medical Element	4
	Total	**151**

Table 27. USAF JSF (Generic) Maintenance Manpower for 15 PTAI Reserve Training Squadron.

OSC	Work Center	AFSC	15 PAA					Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL		
	Wing								
CPM	Maint Control Center	Multi				7	7	AFMS	Overhead/mgt
	Sub Total					7	7		
	Operations Group								
QA	Quality Assurance	Multi					0	Command Guide	Overhead/mgt
OGW	Load Stand Crew	Multi				5	5	Command Guide	Overhead/mgt
	Sub Total					5	5		
	Operations Supt Sq								
OSOA	Maint Analysis	Multi				4	4	Command Guide	Overhead/mgt
OSOI	Inspection Spt (Phase)	2A3X3B					0	Command Guide	Overhead/mgt
OSOL	Supply Liaison	2S0X1					0	Command Guide	Overhead/mgt
OSOM	Programs	Multi					0	Command Guide	Overhead/mgt
OSOS	Maint Scheduling	2R1X1					0	Command Guide	Overhead/mgt
	Sub Total					4	4		
	Flying Sq								
MA	Ops Sq Maint Mgt	Multi				11	11	Command Guide	Overhead/mgt
MAO	Sortie Generation Flt	Multi				9	9	Command Guide	Overhead/mgt
MAOC	Aircraft Flt Mgt	2A3X3B				4	4	Command Guide	Overhead/mgt
	Alert	2A3X3B					0	Command Guide	On Equip
	End of Runway	2A3X3B					0	Command Guide	On Equip

OSC	Work Center	AFSC	15 PAA					Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL		
	Aircraft Flt (Crew Chiefs)	2A3X3B	17	26			26	Simulation	On Equip
MAOS	Specialist Flt Mgt	2A3X2				2	2	Command Guide	Overhead/mgt
	2A2X0-Avionics	2A2X0	9	11			11	Simulation	On Equip
	2A6X6-Elec/Environmental	2A6X6	5	6			6	Simulation	On Equip
	2A6X1-Propulsion	2A6X1	4	5			5	Simulation	On Equip
MAOW	Weapons Flt Mgt	2W1X1				2	2	Command Guide	Overhead/mgt
	End of Runway	2W1X1			5		5	Command Guide	On Equip
MAOWL	Weapons Loaders	2W1X1	12	24			24	Simulation	On Equip
MAOWM	Weapons Maintenance	2W1X1		12			12	Simulation	On Equip
MAF	Sortie Support Flt	Multi				1	1	Command Guide	Overhead/mgt
MAFI	Inspection Section	2A3X3B		9			9	Simulation	On Equip
MAFS	Support Section	Multi				4	4	Command Guide	Overhead/mgt
	Sub Total		47	93	5	33	131		
	Logistics Group								
CC	Command	Multi				5	5	AFMS	Overhead/mgt
QA	Quality Assurance	Multi				10	10	Command Guide	Overhead/mgt
	Sub Total		0	0		15	15		
	Logistics Support Sq								
CC	Command	Multi				1	1	AFMS	Overhead/mgt
CCQ	Squadron Admin	Multi				2	2	AFMS	Overhead/mgt
LGLO	Logistics Officer	Multi					0	Command Guide	Overhead/mgt
LGLOB	Engine Mgt Branch	Multi				4	4	Command Guide	Overhead/mgt
LGLOR	Programs	Multi				2	2	Command Guide	Overhead/mgt
LGLOS	Supply Liaison	2S0X1				4	4	Command Guide	Overhead/mgt
LGLT	Training Mgt	3S2X1				2	2	Command Guide	Overhead/mgt
	Sub Total		0	0		15	15		
	Maintenance Sq								
CC	Command	Multi				5	5	AFMS	Overhead/mgt
CCQ	Squadron Admin	Multi				3	3	AFMS	Overhead/mgt
LGMC	Accessories Flt	Multi				1	1	Command Guide	Overhead/mgt

OSC	Work Center	AFSC	15 PAA					Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL		
LGMCE	ECS/Electric	2A6X6	2	3			3	Simulation	Off Equip
LGMCF	Fuels	2A6X4	4	5			5	Simulation	Off Equip
LGMCG	Egress	2A6X3	3	4			4	Simulation	Off Equip
LGMCP	Pneudraulics	2A6X5	3	4			4	Simulation	Off Equip
LGMF	Fabrication Flt	Multi				1	1	Command Guide	Overhead/mgt
LGMFE	Survival Equipment	2A7X4	2	3			3	Simulation	Off Equip
LGMFM	Metals	2A7X1					0	Simulation	Off Equip
LGMFN	NDI	2A7X2	3	4			4	Command Guide	Off Equip
LGMFS	Structures	2A7X3	10	12			12	Simulation	Off Equip
LGMG	Aerospace Gnd Equip Flt	2A6X2			15		15	AFMS	Off Equip
LGMTR	Wheel/Tire	2A3X3B	3	4			4	Simulation	Off Equip
LGMW	Munitions	2W0X1			44		44	AMMO Model	Off Equip
LGMP	Propulsion	2A6X1A						Command Guide	Overhead/mgt
LGMPJ	Jet Engine	2A6X1A						Simulation	Off Equip
LGMPT	Engine Test Cell	2A6X1A						Simulation	Off Equip
LGMR	Armament	2W1X1		4			4	Simulation	Off Equip
LGMV	Avionics Flt	Multi						Command Guide	Overhead/mgt
LGMVE	Electronic Warfare	2A1X7						Simulation	Off Equip
LGMVF	PMEL IV	2P0X1						Command Guide	Off Equip
LGMVS	Sensors/LANTIRN	2A1X1						Simulation	Off Equip
LGMVT	Avionics Test Station	2A0X1B						Simulation	Off Equip
	Sub Total		30	43	59	10	112		
	OVERALL TOTAL		77	136	64	89	289		
	ON EQUIPMENT		57	105	5		110		
	OFF EQUIPMENT		20	31	59		90		
	OVERHEAD/MGT		0	0		89	89		
	TOTAL		**77**	**136**	**64**	**89**	**289**		

Table 28. USAF JSF (Generic) Operations Manpower for 15 PMAI Reserve Squadron.

OSC	Work Center	15 PAA

OSC	Work Center	15 PAA
	Wing	
CC	Command	8
CP	Command Post	2
CPO	Ops Control Center	8
SE	Safety	2
SEF	Flt Safety	1
SEW	Weapons Safety	2
SP	Weapons Sys Sec	58
	Ops Group	
CC	Command	6
OGV	Stan Evaluation	1
	Ops Support Sq	
CC	Command	1
CCQ	Sq Admin	1
IN	Intel	9
OS	Ops Support	0
OSO	Current Ops	1
OSOF	Flt Records	1
OSOS	Scheduling	0
OST	Weapons/Training	1
OSTA	Airspace Mgt	0
OSTL	Life Support	0
OSTT	Training	2
OSTW	Weapons and Tactics	1
OSTX	Ops/Log Plans	0
	Flying Sq	
CC	Command	1
CCQ	Squadron Administration	2
DO	Operations	6
DOF	Crews	19
DOL	Life Support	8

OSC	Work Center	15 PAA
IN	Intelligence	0
SGPFS	Sq Med Element	4
	Total	**145**

Table 29. USAF JSF (Generic) Maintenance Manpower for 15 PMAI Reserve Squadron.

OSC	Work Center	AFSC	15 PAA					Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL		
	Wing								
CPM	Maint Control Center	Multi				7	7	AFMS	Overhead/mgt
	Sub Total					7	7		
	Operations Group								
QA	Quality Assurance	Multi					0	Command Guide	Overhead/mgt
OGW	Load Stand Crew	Multi				5	5	Command Guide	Overhead/mgt
	Sub Total					5	5		
	Operations Supt Sq								
OSOA	Maint Analysis	Multi				4	4	Command Guide	Overhead/mgt
OSOI	Inspection Spt (Phase)	2A3X3B					0	Command Guide	Overhead/mgt
OSOL	Supply Liaison	2S0X1					0	Command Guide	Overhead/mgt
OSOM	Programs	Multi					0	Command Guide	Overhead/mgt
OSOS	Maint Scheduling	2R1X1					0	Command Guide	Overhead/mgt
	Sub Total					4	4		
	Flying Sq								
MA	Ops Sq Maint Mgt	Multi				11	11	Command Guide	Overhead/mgt
MAO	Sortie Generation Flt	Multi				9	9	Command Guide	Overhead/mgt
MAOC	Aircraft Flt Mgt	2A3X3B				4	4	Command Guide	Overhead/mgt
	Alert	2A3X3B			15		15	Command Guide	On Equip
	End of Runway	2A3X3B			5		5	Command Guide	On Equip
	Aircraft Flt (Crew Chiefs)	2A3X3B	17	30			30	Simulation	On Equip
MAOS	Specialist Flt Mgt	2A3X2				2	2	Command Guide	Overhead/mgt

OSC	Work Center	AFSC	15 PAA					Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL		
	2A2X0-Avionics	2A2X0	9	14			14	Simulation	On Equip
	2A6X6-Elec/Environmental	2A6X6	5	8			8	Simulation	On Equip
	2A6X1-Propulsion	2A6X1	4	6			6	Simulation	On Equip
MAOW	Weapons Flt Mgt	2W1X1				2	2	Command Guide	Overhead/mgt
	End of Runway	2W1X1			5		5	Command Guide	On Equip
MAOWL	Weapons Loaders	2W1X1	12	30			30	Simulation	On Equip
MAOWM	Weapons Maintenance	2W1X1		15			15	Simulation	On Equip
MAF	Sortie Support Flt	Multi				1	1	Command Guide	Overhead/mgt
MAFI	Inspection Section	2A3X3B		11			11	Simulation	On Equip
MAFS	Support Section	Multi				4	4	Command Guide	Overhead/mgt
	Sub Total		47	114	25	33	172		
	Logistics Group								
CC	Command	Multi				5	5	AFMS	Overhead/mgt
QA	Quality Assurance	Multi				10	10	Command Guide	Overhead/mgt
	Sub Total		0	0		15	15		
	Logistics Support Sq								
CC	Command	Multi				1	1	AFMS	Overhead/mgt
CCQ	Squadron Admin	Multi				2	2	AFMS	Overhead/mgt
LGLO	Logistics Officer	Multi					0	Command Guide	Overhead/mgt
LGLOB	Engine Mgt Branch	Multi				4	4	Command Guide	Overhead/mgt
LGLOR	Programs	Multi				2	2	Command Guide	Overhead/mgt
LGLOS	Supply Liaison	2S0X1				4	4	Command Guide	Overhead/mgt
LGLT	Training Mgt	3S2X1				2	2	Command Guide	Overhead/mgt
	Sub Total		0	0		15	15		
	Maintenance Sq								
CC	Command	Multi				5	5	AFMS	Overhead/mgt
CCQ	Squadron Admin	Multi				3	3	AFMS	Overhead/mgt
LGMC	Accessories Flt	Multi				1	1	Command Guide	Overhead/mgt
LGMCE	ECS/Electric	2A6X6	2	3			3	Simulation	Off Equip
LGMCF	Fuels	2A6X4	4	6			6	Simulation	Off Equip

OSC	Work Center	AFSC	15 PAA					Source	Category
			LCOM	DIRECT	NON SIM	OVHD/MGT	TOTAL		
LGMCG	Egress	2A6X3	3	5			5	Simulation	Off Equip
LGMCP	Pneudraulics	2A6X5	3	5			5	Simulation	Off Equip
LGMF	Fabrication Flt	Multi				1	1	Command Guide	Overhead/mgt
LGMFE	Survival Equipment	2A7X4	2	3			3	Simulation	Off Equip
LGMFM	Metals	2A7X1					0	Simulation	Off Equip
LGMFN	NDI	2A7X2	3	5			5	Command Guide	Off Equip
LGMFS	Structures	2A7X3	10	15			15	Simulation	Off Equip
LGMG	Aerospace Gnd Equip Flt	2A6X2			15		15	AFMS	Off Equip
LGMTR	Wheel/Tire	2A3X3B	3	5			5	Simulation	Off Equip
LGMW	Munitions	2W0X1			44		44	AMMO Model	Off Equip
LGMP	Propulsion	2A6X1A						Command Guide	Overhead/mgt
LGMPJ	Jet Engine	2A6X1A						Simulation	Off Equip
LGMPT	Engine Test Cell	2A6X1A						Simulation	Off Equip
LGMR	Armament	2W1X1		5			5	Simulation	Off Equip
LGMV	Avionics Flt	Multi						Command Guide	Overhead/mgt
LGMVE	Electronic Warfare	2A1X7						Simulation	Off Equip
LGMVF	PMEL IV	2P0X1						Command Guide	Off Equip
LGMVS	Sensors/LANTIRN	2A1X1						Simulation	Off Equip
LGMVT	Avionics Test Station	2A0X1B						Simulation	Off Equip
	Sub Total		30	52	59	10	121		
	OVERALL TOTAL		77	166	84	89	339		
	ON EQUIPMENT		57	129	25		154		
	OFF EQUIPMENT		20	37	59		96		
	OVERHEAD/MGT		0	0		89	89		
	TOTAL		**77**	**166**	**84**	**89**	**339**		

Table 30. USMC 12 PAA Notional Squadron Manning Document.

TABLE OF MANPOWER REQUIREMENTS T/O: XXXX VMFA 12 JSF												
Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)												
T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
	1	**HEADQUARTERS**										
A/C	2	COMMANDING OFF	LTCOL	7523	M	N		1		1		O
A/C	3	EXECUTIVE OFF	MAJ	7523	M	N		1		1		O
SUP	4	SGTMAJ	SGTMAJ	9999	M	E			1		1	S
	10	**AVN SAFETY/STAND**										
	11	DIR SAFETY/STAND	MAJ	7596	M	N	X					
	12	AVN SAF OFF	MAJ	7596	M	N	X					
	13	NATOPS OFF	CAPT	7523	M	N	X					
	14	GRND SAF OFF	CAPT	7523	M	N	X					
	15	NATOPS NCO	SGT	7041	M	E	X					
	20	**S-1**										
	21	ADMIN OFF	MAJ	7523	M	N	X					
SUP	22	ASST ADMIN OFF	CWO2	170	M	O		1		1		S
SUP	23	ADMIN CHIEF	GYSGT	193	M	E			1		1	S
SUP	24	UD CLK	CPL	131	M	E			1		1	S
SUP	25	UD CLK	LCPL	131	M	E			1		1	S
SUP	26	PERS CLK	CPL	121	M	E			1		1	S
SUP	27	PERS CLK	LCPL	121	M	E			1		1	S
SUP	28	ADMIN CLK	LCPL	151	M	E			1		1	S
	29	CAREER PLAN OFF	CAPT	7523	M	N	X					
SUP	30	CAREER PLAN NCO	SSGT	8421	M	E			1		1	S

TABLE OF MANPOWER REQUIREMENTS T/O: XXXX VMFA 12 JSF												
Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)												
T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
	31	LEGAL OFF	CAPT	7523	M	N	X					
	32	LEGAL CLK	CPL	151	M	E	X					
	33	CMCC OFF	CAPT	7523	M	N	X					
SUP	34	CMCC CLK	CPL	151	M	E			1		1	S
	40	**S-2**										
	41	INTEL OFF	CAPT	7523	M	N	X					
SUP	42	INTEL CHIEF	SSGT	231	M	E			1		1	S
SUP	43	INTEL CLK	LCPL	231	M	E			1		1	S
	60	**S-3**										
	61	OPS OFF	MAJ	7523	M	N	X					
	62	ASST OPS OFF	CAPT	7523	M	N	X					
	63	FLT OFF	CAPT	7523	M	N	X					
	64	LSO	CAPT	7523	M	N	X					
OPS	65	OPS CHIEF	SGT	7041	M	E			1		1	S
OPS	66	OPS CLK	LCPL	7041	M	E			1		1	S
OPS	67	OPS CLK	LCPL	7041	M	E			1		1	S
	69	PILOT TRNG OFF/WTI	CAPT	7523	M	N	X					
				7577	N							
	70	NBC DEF OFF	CAPT	7523	M	N	X					
SUP	71	GMS TRNG NCO	SSGT	8711	M	E			1		1	S
A/C	72	PILOT	MAJ	7523	M	N		3		3		O
A/C	73	PILOT	CAPT	7523	M	N		6		6		O
A/C	73	A PILOT/EXCHANGE	CAPT	7523	M	N		1		1		O
A/C	74	PILOT	LT	7523	M	N		7		7		O

TABLE OF MANPOWER REQUIREMENTS T/O: XXXX VMFA 12 JSF												
Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)												
T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
	90	**S-4**										
	91	LOG OFF	MAJ	7523	M	N	X					
	92	ASST LOG/EMBARK OFF	LT	7523	M	N	X					
SUP	93	LOG/EMBARK NCO	CPL	431	M	E			1		1	S
SUP	94	LOG/EMBARK SPEC	LCPL	431	M	E			1		1	S
SUP	95	INF WPNS RPR	LCPL	2111	M	E			1		1	S
	100	**MEDICAL**										
	101	FLT SURGEON	LT	2100	N	O				1		S
	102	FLD MED TECH	HM1	8404	N	E					1	S
	103	AVN MED TECH	HM2	8406	N	E					1	S
	104	FLD MED TECH	HM3	8404	N	E					1	S
	300	**A/C MAINT DEPT**										
	301	A/C MAINT OFF	MAJ	7523	M	N	X					
				6002	N							
	302	ASST A/C MAINT OFF	CAPT	7523	M	N	X					
				6002	N							
	310	**MAINT ADMIN**										
SUP	311	NCOIC	SSGT	6047	M	E			1		1	S
SUP	312	MAINT ADMIN CLK	LCPL	6046	M	E			1		1	S
	320	MATERIAL CONTROL										
	321	MATERIAL CONTROL OFF	CWO2	6004	M	A	X					
	330	**MAINT CONT**										
SUP	331	MAINT CONTROL OFF	CWO2	6004	M	A		1		1		M

TABLE OF MANPOWER REQUIREMENTS T/O: XXXX VMFA 12 JSF												
Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)												
T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
SUP	332	MAINT CONT CHIEF	MGYSGT	6019	M	E			1		1	S
SUP	333	ASST MAINT CONT CHIEF	GYSGT	6017	M	E			1		1	S
SUP	334	M/C - A/F	SSGT	6057	M	E			1		1	S
SUP	335	M/C - ELECT	CPL	6337	M	E			1		1	S
SUP	336	ECAMS OPR	SGT	6047	M	E			1		1	S
SUP	337	ECAMS OPR	CPL	6046	M	E			1		1	S
SUP	338	M/C CLK	CPL	6046	M	E			1		1	S
	350	**IMRL**										
SUP	351	IMRL MANAGER	CPL	6042	M	E			1		1	S
SUP	352	IMRL ASST	LCPL	6042	M	E			1		1	S
	360	**TOOL CONT**										
SUP	361	NCOIC	SGT	6337	M	E			1		1	M
	370	**Q/A**										
	371	Q/A OFF	CAPT	7523	M	N	X					
SUP	372	NCOIC - ENG	GYSGT	6017	M	E			1		1	M
SUP	373	Q/A - A/F	SSGT	6057	M	E			1		1	M
SUP	374	Q/A - FLT EQPT	SSGT	6087	M	E			1		1	M
SUP	375	Q/A - COMM/NAV/WPNS	SSGT	6317	M	E			1		1	M
SUP	376	Q/A - ELECT	SGT	6337	M	E			1		1	M
SUP	377	Q/A - ORD	SGT	6531	M	E			1		1	M
SUP	378	MAINT ANALYST	SGT	6047	M	E			1		1	M
SUP	380	MAINT ANALYST	CPL	6046	M	E			1		1	M
SUP	381	TECH PUBS LIB	SGT	6047	M	E			1		1	M
SUP	382	Q/A CLK	LCPL	6046	M	E			1		1	M

TABLE OF MANPOWER REQUIREMENTS
T/O: XXXX VMFA 12 JSF

Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
	390	**PHASE MAINT**										
SUP	391	NCOIC	SSGT	6017	M	E			1		1	M
	400	**AIRCRAFT**										
	401	A/C OFF	CAPT	7523	M	N	X					
	410	**AIRFRAMES**										
SUP	411	NCOIC	GYSGT	6057	M	E			1		1	M
				9954	N							
FIX	412	A/F MECH/NDI OPR	SSGT	6057	M	E			1		1	M
FIX	413	A/F MECH	SGT	6057	M	E			3		3	M
FIX	414	A/F MECH	CPL	6057	M	E			4		4	M
FIX	415	A/F MECH	LCPL	6057	M	E			4		4	M
	420	**C/C**										
SUP	421	NCOIC	SSGT	6057	M	E			1		1	M
FIX	422	C/C - ENG	SGT	6017	M	E			1		1	M
FIX	423	C/C - FLT EQPT	CPL	6087	M	E			1		1	M
FIX	424	C/C - A/F	CPL	6057	M	E			1		1	M
FIX	425	C/C - ORD	CPL	6531	M	E			1		1	M
FIX	426	C/C - ELECT	SGT	6337	M	E			1		1	M
	430	**FLT EQPT**										
SUP	431	NCOIC	GYSGT	6087	M	E			1		1	M
FIX	432	SEAT MECH	SGT	6087	M	E			1		2	M
FIX	433	SEAT MECH	CPL	6087	M	E			1		2	M

TABLE OF MANPOWER REQUIREMENTS T/O: XXXX VMFA 12 JSF												
Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)												
T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
FIX	434	SEAT MECH	LCPL	6087	M	E			1		2	M
FIX	435	FLT EQPT MECH	SSGT	6060	M	E			1		1	M
FIX	436	FLT EQPT MECH	SGT	6060	M	E			1		1	M
FIX	437	FLT EQPT MECH	LCPL	6060	M	E			2		1	M
	500	**ORDNANCE**										
SUP	501	ORD OFF	CWO2	6502	M	A		1		1		M
SUP	502	ORD CHIEF	MSGT	6591	M	E			1		1	M
SUP	503	ORD TECH	GYSGT	6531	M	E			1		1	M
SGR	504	ORD TECH	SSGT	6531	M	E			1		1	M
SGR	505	ORD TECH	SGT	6531	M	E			2		2	M
SGR	506	ORD TECH	CPL	6531	M	E			5		5	M
SGR	507	ORD TECH	LCPL	6531	M	E			12		12	M
	600	**AVIONICS**										
SUP	601	AVION OFF	CWO3	6302	M	A		1		1		M
	602	ASST AVION OFF	LT	7523	M	N	X					
SUP	603	AVION CHIEF	MSGT	6391	M	E			1		1	M
SUP	604	COMM/NAV/WPNS SYS TECH	GYSGT	6317	M	E			1		1	M
FIX	605	COMM/NAV/WPNS SYS TECH	SGT	6317	M	E			2		2	M
FIX	606	COMM/NAV/WPNS SYS TECH	CPL	6317	M	E			2		2	M
FIX	607	COMM/NAV/WPNS SYS TECH	LCPL	6317	M	E			6		4	M
SUP	608	ELECT SYS TECH	GYSGT	6337	M	E			1		1	M
FIX	609	ELECT SYS TECH	SSGT	6337	M	E			2		1	M
FIX	610	ELECT SYS TECH	SGT	6337	M	E			1		1	M
FIX	611	ELECT SYS TECH	CPL	6337	M	E			2		2	M
FIX	612	ELECT SYS TECH	LCPL	6337	M	E			4		3	M

TABLE OF MANPOWER REQUIREMENTS T/O: XXXX VMFA 12 JSF												
Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)												
T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
	700	**LINE/GSE**										
	701	LINE OFF	CAPT	7523	M	N	X					
SUP	702	NCOIC	SSGT	6017	M	E			1		1	M
SGR	703	A/C MECH	SSGT	6017	M	E			3		3	M
SGR	704	A/C MECH	SGT	6017	M	E			4		4	M
SGR	705	A/C MECH	CPL	6017	M	E			8		8	M
SGR	706	A/C MECH	LCPL	6017	M	E			8		8	M
SUP	708	GSE HYD/PNE/STR MECH	CPL	6072	M	E			1		1	M
SUP	709	GSE HYD/PNE/STR MECH	LCPL	6072	M	E			1		1	M
	800	**MALS AUGMENT**										
	820	**SUPPLY**										
SUP	821	SUP CLK	CPL	6672	M	E			2		2	S
SUP	822	SUP CLK	LCPL	6672	M	E			4		4	S
	823	*** DELETED ***										
	830	**MAINT**										
OFF	831	P/P MECH	SGT	6027	M	E			1			
OFF	832	P/P MECH	CPL	6027	M	E			1			
OFF	833	P/P MECH	LCPL	6027	M	E			2			
SUP	834	HYD MECH	GYSGT	6094	M	E			1		1	M
OFF	835	HYD MECH	SGT	6094	M	E			1		1	M
OFF	836	HYD MECH	LCPL	6094	M	E			1		2	M
OFF	837	STR MECH	SSGT	6092	M	E			1		1	M
OFF	838	WELDER	CPL	6043	M	E			1			

TABLE OF MANPOWER REQUIREMENTS T/O: XXXX VMFA 12 JSF												
Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)												
T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
OFF	839	STR MECH/NDI	CPL	6044	M	E			1		4	M
OFF	840	STR MECH	CPL	6092	M	E			1		3	M
OFF	841	FLT EQPT MECH	LCPL	6060	M	E			1		2	M
	870	**AVIONICS**										
OFF	871	ADV A/C COM/NAV SYS TECH	SSGT	6414	M	E			1			
OFF	872	COMM SYS TECH	LCPL	6412	M	E			1			
OFF	873	COMM SYS/CRYPTO	CPL	6422	M	E			1			
				6412	N							
OFF	874	NAV SYS TECH	LCPL	6413	M	E			1			
OFF	875	ELECT SYS TECH	CPL	6432	M	E			2		1	M
OFF	876	ELECT SYS TECH	LCPL	6432	M	E			1		2	M
OFF	877	ADV ATE TECH	SSGT	6469	M	E			2			
OFF	878	ATS TECH	SGT	6462	M	E			1			
OFF	879	ATS TECH	CPL	6462	M	E			1			
OFF	880	ATS TECH	LCPL	6462	M	E			2			
OFF	881	RTS/RSTS TECH	SGT	6467	M	E			1			
OFF	882	RTS/RSTS TECH	CPL	6467	M	E			1			
OFF	883	RTS/RSTS TECH	LCPL	6467	M	E			2			
OFF	884	HTS TECH	CPL	6465	M	E			1			
OFF	885	HTS TECH	LCPL	6465	M	E			1			
OFF	886	A/C FLIR/EOTS TECH	SGT	6466	M	E			1			
OFF	887	A/C FLIR/EOTS TECH	LCPL	6466	M	E			2			
OFF	888	PME TECH	SGT	6492	M	E			1			
OFF	889	PME TECH	LCPL	6492	M	E			1			

TABLE OF MANPOWER REQUIREMENTS T/O: XXXX VMFA 12 JSF												
Based on Legacy F/A 18 Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)												
T/E:		**12 PAA JSF TO**			B	T	S					
	LINE	BLT			R	Y	T			MER	MER	MER
BKT	NO.	ENGLISH DESCRIPTION CRD		MOS	N	P	A	OFF	ENL	OFF	ENL	CAT
	930	**ORD**										
OFF	931	AVN ORD SYS TECH	SSGT	6541	M	E			1			
OFF	932	AVN ORD SYS TECH	SGT	6541	M	E			1			
OFF	933	AVN ORD SYS TECH	LCPL	6541	M	E			1			
OFF	934	AVN ORD SYS TECH	LCPL	6541	M	E			2			
SUP	935	AVN ORD SYS TECH	GYSGT	6541	M	E			1			
OFF	936	AVN ORD SYS TECH	SGT	6541	M	E			1			
OFF	937	AVN ORD SYS TECH	LCPL	6541	M	E			1			
OFF	938	AVN ORD SYS TECH	LCPL	6541	M	E			2			
	960	**GSE**										
OFF	961	GSE HYD/PNE/STR MECH	LCPL	6072	M	E			1			
OFF	962	GSE HYD/PNE/STR MECH	LCPL	6072	M	E			1			
OFF	963	GSE ELECT/REFG MECH	SGT	6073	M	E			1			
OFF	964	GSE ELECT/REFG MECH	CPL	6073	M	E			1			
OFF	965	GSE ELECT/REFG MECH	LCPL	6073	M	E			1			
		ORGANIZATION TOTALS						**23**	**195**	**24**	**162**	

Table 31. USMC 20 PAA Notional Squadron Manning Document.

TABLE OF MANPOWER REQUIREMENTS USMC T/O: XXXX VMFA 20 JSF											
Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)											
T/E:		**20 PAA JSF TO**									
						B	T	S			
	LINE	BLT		ALPHA		R	Y	T			
BKT	NO.	ENGLISH DESCRIPTION	WORK CENTER	GRADE	MOS	N	P	A			
A/C	2	COMMANDING OFF		LTCOL	7509	M	N		1		O
A/C	3	EXECUTIVE OFF		LTCOL	7509	M	N		1		O
SUP	4	SGTMAJ		SGTMAJ	9999	M	E			1	S
SUP	15	NATOPS CLK		LCPL	7041	M	E			1	S
SUP	22	ASST ADMIN OFF		CWO2	170	M	O		1		M
SUP	23	ADMIN CHIEF		GYSGT	193	M	E			1	S
SUP	24	PERS CLK		SGT	121	M	E			1	S
SUP	25	PERS CLK		LCPL	121	M	E			1	S
SUP	26	UD CLK		CPL	131	M	E			1	S
SUP	27	UD CLK		LCPL	131	M	E			2	S
SUP	28	ADMIN CLK		CPL	151	M	E			1	S
SUP	29	ADMIN CLK		LCPL	151	M	E			1	S
SUP	31	CAREER PLAN NCO		SSGT	8421	M	E			1	S
SUP	42	INTEL CHIEF		SSGT	231	M	E			1	S
OPS	65	OPS CHIEF		SSGT	7041	M	E			1	S
OPS	66	OPS CLK		LCPL	7041	M	E			2	S
SUP	70	GMS TRNG NCO		SSGT	8711	M	E			1	S
A/C	71	PILOT		MAJ	7509	M	N		3		O
A/C	72	PILOT		CAPT	7509	M	N		6		O
A/C	72A	PILOT/EXCHANGE		CAPT	7509	M	N		1		O
A/C	73	PILOT		LT	7509	M	N		9		O
SUP	93	EMBARK CLK		CPL	431	M	E			1	S
SUP	94	INF WPNS RPR		LCPL	2111	M	E			1	S
SUP	101	FLT SURGEON		LT	2102	N	O		1		
SUP	102	FLD MED TECH		HM1	8404	N	E			1	
SUP	103	AVN MED TECH		HM2	8406	N	E			1	

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 20 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E: **20 PAA JSF TO**

BKT	LINE NO.	BLT ENGLISH DESCRIPTION	WORK CENTER	ALPHA GRADE	MOS	BR N	TY P	ST A			
SUP	104	FLD MED TECH		HM3	8404	N	E			1	
SUP	303	A/C MAINT CHIEF		MSGT	6019	M	E			1	M
SUP	311	MAINT ADMIN CHIEF		GYSGT	6047	M	E			1	S
SUP	312	MAINT ANALYST		SSGT	6047	M	E			1	S
SUP	313	MAINT ADMIN CLK		SGT	6047	M	E			1	S
SUP	314	MAINT ADMIN CLK		CPL	6046	M	E			2	S
SUP	321	MATERIAL CONT OFF		LT	6002	M	A		1		M
SUP	331	MAINTENANCE CONT OFF		CWO2	6004	M	A		1		M
SUP	333	M/C - A/F	020 (MAINT CONTROL)	SGT	6055	M	E			1	S
SUP	334	M/C - COMM/NAV	020 (MAINT CONTROL)	SSGT	6315	M	E			1	S
SUP	335	M/C - ELECT	020 (MAINT CONTROL)	CPL	6335	M	E			1	S
SUP	336	M/C - CLK		LCPL	6046	M	E			1	S
SUP	351	IMRL MANAGER		CPL	6042	M	E			1	S
SUP	352	IMRL ASST		LCPL	6042	M	E			1	S
SUP	361	NCOIC	05D (TOOL ROOM)	GYSGT	6015	M	E			1	M
SUP	362	TOOL CONT CLK	05D (TOOL ROOM)	CPL	6055	M	E			1	M
SUP	363	TOOL CONT CLK	05D (TOOL ROOM)	LCPL	6315	M	E			1	M
SUP	372	Q/A CHIEF		MSGT	6019	M	E			1	M
SUP	373	Q/A - ENG	040 (QA)	SSGT	6015	M	E			1	M
SUP	374	Q/A - A/F	040 (QA)	SSGT	6055	M	E			1	M
SUP	375	Q/A - SEAT MECH	040 (QA)	SSGT	6085	M	E			1	M
SUP	376	Q/A - COMM/NAV	040 (QA)	SSGT	6315	M	E			1	M
SUP	377	Q/A - ELECT	040 (QA)	SSGT	6335	M	E			1	M
SUP	378	Q/A - ORD	040 (QA)	SSGT	6531	M	E			1	M
SUP	379	TECH PUBS LIB		SGT	6047	M	E			1	S
SUP	380	Q/A CLK		LCPL	6046	M	E			1	S
SUP	391	NCOIC	310 (PLANE CAPTAIN BR)	SSGT	6015	M	E			1	M
SUP	402	A/C CHIEF	120 (AIR FRAMES)	GYSGT	6055	M	E			1	M

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 20 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E: **20 PAA JSF TO**

						B	T	S			
	LINE	BLT		ALPHA		R	Y	T			
BKT	NO.	ENGLISH DESCRIPTION	WORK CENTER	GRADE	MOS	N	P	A			
SUP	411	A/F NCOIC	120 (AIR FRAMES)	GYSGT	6055	M	E			1	M
FIX	412	A/F MECH/NDI OPR	120 (AIR FRAMES)	SSGT	6055	M	E			1	M
FIX	413	A/F MECH	120 (AIR FRAMES)	SGT	6055	M	E			3	M
FIX	414	A/F MECH	120 (AIR FRAMES)	CPL	6055	M	E			6	M
FIX	415	A/F MECH	120 (AIR FRAMES)	LCPL	6055	M	E			14	M
SUP	421	NCOIC	12C (CORROSION CNTL)	SSGT	6055	M	E			1	M
FIX	422	C/C - ENG	12C (CORROSION CNTL)	LCPL	6015	M	E			1	M
FIX	423	C/C - A/F	12C (CORROSION CNTL)	CPL	6055	M	E			2	M
FIX	424	C/C - A/F	12C (CORROSION CNTL)	LCPL	6055	M	E			1	M
FIX	425	C/C - SEAT MECH	12C (CORROSION CNTL)	LCPL	6085	M	E			1	M
FIX	426	C/C - ORD	12C (CORROSION CNTL)	LCPL	6531	M	E			2	M
FIX	427	C/C - COMM/NAV/WPNS	12C (CORROSION CNTL)	LCPL	6315	M	E			1	M
FIX	428	C/C - ELECT SYS TECH	12C (CORROSION CNTL)	LCPL	6335	M	E			1	M
SUP	432	ALSS NCOIC	130 (ALSS BRANCH)	GYSGT	6085	M	E			1	M
FIX	441	SEAT MECH	13B (SEAT SHOP)	SGT	6085	M	E			1	M
FIX	442	SEAT MECH	13B (SEAT SHOP)	CPL	6085	M	E			3	M
FIX	443	SEAT MECH	13B (SEAT SHOP)	LCPL	6085	M	E			4	M
FIX	451	FLT EQPT MECH	13A (FLIGHT EQUIPMENT)	SSGT	6060	M	E			1	M
FIX	452	FLT EQPT MECH	13A (FLIGHT EQUIPMENT)	SGT	6060	M	E			1	M
FIX	453	FLT EQPT MECH	13A (FLIGHT EQUIPMENT)	CPL	6060	M	E			1	M
FIX	454	FLT EQPT MECH	13A (FLIGHT EQUIPMENT)	LCPL	6060	M	E			2	M
SUP	501	ORD OFF		CWO2	6502	M	A		1		M
SUP	502	ORD CHIEF		MSGT	6591	M	E			1	M
SGR	503	ORD TECH	230 (ORDNANCE)	SSGT	6531	M	E			2	M
SGR	504	ORD TECH	230 (ORDNANCE)	SGT	6531	M	E			3	M
SGR	505	ORD TECH	230 (ORDNANCE)	CPL	6531	M	E			6	M
SGR	506	ORD TECH	230 (ORDNANCE)	LCPL	6531	M	E			12	M
SUP	601	AVION OFF		CWO2	6302	M	A		1		M

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 20 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E: **20 PAA JSF TO**

						B	T	S			
	LINE	BLT		ALPHA		R	Y	T			
BKT	NO.	ENGLISH DESCRIPTION	WORK CENTER	GRADE	MOS	N	P	A			
SUP	602	AVION CHIEF		MSGT	6391	M	E			1	M
SUP	603	COMM/NAV SYS TECH	210 (AVIONICS)	GYSGT	6315	M	E			1	M
FIX	604	COMM/NAV SYS TECH	210 (AVIONICS)	SGT	6315	M	E			2	M
FIX	605	COMM/NAV SYS TECH	210 (AVIONICS)	CPL	6315	M	E			5	M
FIX	606	COMM/NAV SYS TECH	210 (AVIONICS)	LCPL	6315	M	E			2	M
SUP	607	ELECT SYS TECH	220 (AVIONICS)	GYSGT	6335	M	E			1	M
FIX	608	ELECT SYS TECH	220 (AVIONICS)	SGT	6335	M	E			2	M
FIX	609	ELECT SYS TECH	220 (AVIONICS)	CPL	6335	M	E			4	M
FIX	610	ELECT SYS TECH	220 (AVIONICS)	LCPL	6335	M	E			5	M
SUP	702	NCOIC	310 (PLANE CAPTAIN BR)	GYSGT	6015	M	E			1	M
SGR	703	LINE MECH	310 (PLANE CAPTAIN BR)	SSGT	6015	M	E			2	M
SGR	704	LINE MECH	310 (PLANE CAPTAIN BR)	SGT	6015	M	E			8	M
SGR	705	LINE MECH	310 (PLANE CAPTAIN BR)	CPL	6015	M	E			7	M
SGR	706	LINE MECH	310 (PLANE CAPTAIN BR)	LCPL	6015	M	E			14	M
SUP	707	GSE HYD/PNE/STR MECH	330 (SUPPORT EQUIP BR)	SGT	6072	M	E			1	M
SUP	708	GSE HYD/PNE/STR MECH	330 (SUPPORT EQUIP BR)	LCPL	6072	M	E			1	M
SUP	821	SUP CLK		SGT	6672	M	E			1	S
SUP	822	SUP CLK		CPL	6672	M	E			1	S
SUP	823	SUP CLK		LCPL	6672	M	E			3	S
OFF	831	P/P MECH	410 (POWER PLANTS)	SSGT	6025	M	E				
OFF	832	P/P MECH	410 (POWER PLANTS)	CPL	6025	M	E				
OFF	833	P/P MECH	410 (POWER PLANTS)	LCPL	6025	M	E				
OFF	834	HYD MECH	520 (HYDRAULICS)	CPL	6094	M	E				
OFF	835	HYD MECH	520 (HYDRAULICS)	LCPL	6094	M	E			1	M
SUP	836	STR MECH		GYSGT	6092	M	E			1	M
OFF	837	WELDER	51C (WELDING SHOP)	CPL	6043	M	E				
OFF	838	STR MECH/NDI	530 (NDI SHOP)	SGT	6044	M	E			2	M
OFF	839	STR MECH	510 (METAL SHOP)	LCPL	6092	M	E			4	M

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 20 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E: **20 PAA JSF TO**

BKT	LINE NO.	BLT ENGLISH DESCRIPTION	WORK CENTER	ALPHA GRADE	MOS	BR	TYP	STA			
OFF	840	FLT EQPT	810 (FLIGHT EQUIPMENT)	LCPL	6060	M	E				
OFF	871	COMM SYS TECH	61A (COMM SHOP)	LCPL	6412	M	E				
OFF	872	NAV SYS TECH	61B (NAV SHOP)	CPL	6413	M	E				
OFF	873	NAV SYS TECH	61B (NAV SHOP)	LCPL	6413	M	E				
OFF	874	COMM SYS/CRYPTO	61D (COMSEC/CRYPTO)	LCPL	6422	M	E				
OFF	875	MICRO-MIN RPR TECH	69B/C (MICRO/MIN SHOP)	LCPL	6423	M	E				
OFF	876	ADV A/C ELECT SYS TECH	620 (ELECTRIC SHOP)	SSGT	6434	M	E				
OFF	877	ELECT SYS TECH	620 (ELECTRIC SHOP)	SGT	6432	M	E			1	M
OFF	878	ELECT SYS TECH	69A (HYBRID TEST SET)	LCPL	6465	M	E				
SUP	879	ADV ATE TECH	62F/630/64D/650/69A	GYSGT	6469	M	E			1	M
OFF	880	A/C ELECT EQP TEST CELL	650 (EETS/METS)	CPL	6468	M	E				
OFF	881	A/C ELECT EQP TEST CELL	650 (EETS/METS)	LCPL	6468	M	E				
OFF	882	PME TECH	670 (CALIBRATION)	CPL	6492	M	E				
OFF	883	PME TECH	670 (CALIBRATION)	LCPL	6492	M	E				
OFF	884	RTS/RSTS TECH	65B (CASS)	CPL	6467	M	E				
OFF	885	RTS/RSTS TECH	65B (CASS)	LCPL	6467	M	E				
OFF	931	AVN ORD SYS TECH	710 (ORDNANCE)	SGT	6541	M	E				
OFF	932	AVN ORD SYS TECH	710 (ORDNANCE)	CPL	6541	M	E				
OFF	933	AVN ORD SYS TECH	710 (ORDNANCE)	LCPL	6541	M	E				
OFF	934	AVN ORD SYS TECH	710 (ORDNANCE)	SGT	6541	M	E				
OFF	935	AVN ORD SYS TECH	710 (ORDNANCE)	CPL	6541	M	E				
OFF	936	AVN ORD SYS TECH	710 (ORDNANCE)	LCPL	6541	M	E				
OFF	961	GSE HYD/PNE/STR MECH	920 (GSE)	CPL	6072	M	E				
OFF	962	GSE ELECT/REFG MECH	930/970 (GSE)	LCPL	6073	M	E				
A/C	1002	DET CDR		MAJ	7509	M	N		1		O
A/C	1003	ASST DET CDR		CAPT	7509	M	N		1		O
SUP	1022	PERS CLK		LCPL	121	M	E			1	S
SUP	1023	UD CLK		LCPL	131	M	E			1	S

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 20 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E: **20 PAA JSF TO**

BKT	LINE NO.	BLT ENGLISH DESCRIPTION	WORK CENTER	ALPHA GRADE	MOS	BR	TY	ST			
SUP	1042	INTEL CLK		LCPL	231	M	E			1	S
OPS	1053	OPS CHIEF		SGT	7041	M	E			1	S
OPS	1054	OPS CLK		LCPL	7041	M	E			1	S
A/C	1057	PILOT		CAPT	7509	M	N		4		O
A/C	1058	PILOT		LT	7509	M	N		4		O
SUP	1092	EMBARK CLK		LCPL	431	M	E			1	S
SUP	3101	MAINT ADMIN CLK		CPL	6046	M	E			1	S
SUP	3102	MAINT ADMIN CLK		LCPL	6046	M	E			1	S
SUP	3202	MAINT/MAT CONT CHIEF	020 (MAINT CONTROL)	GYSGT	6015	M	E			1	S
SUP	3302	M/C - ENG	020 (MAINT CONTROL)	SGT	6015	M	E			1	S
SUP	3303	M/C - A/F	020 (MAINT CONTROL)	CPL	6055	M	E			1	S
SUP	3304	M/C - ELECT	020 (MAINT CONTROL)	SGT	6335	M	E			1	S
SUP	3305	M/C CLK		LCPL	6046	M	E			1	S
SUP	3601	NCOIC	120 (AIR FRAMES)	SGT	6055	M	E			1	M
SUP	3602	TOOL CONT CLK	310 (PLANE CAPTAIN BR)	CPL	6015	M	E			1	M
SUP	3701	NCOIC	310 (PLANE CAPTAIN BR)	SSGT	6015	M	E			1	M
SUP	3702	Q/A - ENG	040 (QA)	SGT	6015	M	E			1	M
SUP	3703	Q/A - A/F	040 (QA)	SGT	6055	M	E			1	M
SUP	3704	Q/A - SEAT MECH	040 (QA)	SGT	6085	M	E			1	M
SUP	3705	Q/A - ORD	040 (QA)	SGT	6531	M	E			1	M
SUP	3706	Q/A - COMM/NAV	040 (QA)	SGT	6315	M	E			1	M
FIX	4101	A/F MECH	120 (AIR FRAMES)	SSGT	6055	M	E			1	M
FIX	4102	A/F MECH	120 (AIR FRAMES)	SGT	6055	M	E			1	M
FIX	4103	A/F MECH	120 (AIR FRAMES)	CPL	6055	M	E			2	M
FIX	4104	A/F MECH	120 (AIR FRAMES)	LCPL	6055	M	E			5	M
FIX	4201	NCOIC	12C (CORROSION CNTL)	SGT	6055	M	E			1	M
FIX	4202	C/C - ENG	12C (CORROSION CNTL)	CPL	6015	M	E			1	M
FIX	4203	C/C - ORD	12C (CORROSION CNTL)	LCPL	6531	M	E			1	M

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 20 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E: **20 PAA JSF TO**

						B	T	S			
	LINE	BLT		ALPHA		R	Y	T			
BKT	NO.	ENGLISH DESCRIPTION	WORK CENTER	GRADE	MOS	N	P	A			
FIX	4204	C/C - COMM/NAV	12C (CORROSION CNTL)	LCPL	6315	M	E			1	M
FIX	4301	SEAT MECH	13B (SEAT SHOP)	CPL	6085	M	E			2	M
FIX	4302	FLT EQPT MECH	13A (FLIGHT EQUIPMENT)	SGT	6060	M	E			1	M
FIX	4303	FLT EQPT MECH	13A (FLIGHT EQUIPMENT)	CPL	6060	M	E			1	M
SUP	5001	ORD CHIEF	230 (ORDNANCE)	GYSGT	6531	M	E			1	M
SGR	5002	ORD TECH	230 (ORDNANCE)	SGT	6531	M	E			1	M
SGR	5003	ORD TECH	230 (ORDNANCE)	CPL	6531	M	E			2	M
SGR	5004	ORD TECH	230 (ORDNANCE)	LCPL	6531	M	E			5	M
SUP	6001	AVION CHIEF	210 (AVIONICS)	GYSGT	6315	M	E			1	M
FIX	6002	COMM/NAV SYS TECH	210 (AVIONICS)	LCPL	6315	M	E			1	M
FIX	6003	COMM/NAV SYS TECH	210 (AVIONICS)	LCPL	6315	M	E			2	M
FIX	6004	ELECT SYS TECH	220 (AVIONICS)	SSGT	6335	M	E				
FIX	6005	ELECT SYS TECH	220 (AVIONICS)	CPL	6335	M	E			1	M
FIX	6006	ELECT SYS TECH	220 (AVIONICS)	LCPL	6335	M	E			1	M
SUP	7002	NCOIC	310 (PLANE CAPTAIN BR)	SSGT	6015	M	E			1	M
SGR	7003	LINE MECH	310 (PLANE CAPTAIN BR)	SGT	6015	M	E			1	M
SGR	7004	LINE MECH	310 (PLANE CAPTAIN BR)	CPL	6015	M	E			2	M
SGR	7005	LINE MECH	310 (PLANE CAPTAIN BR)	LCPL	6015	M	E			8	M
SUP	7006	GSE HYD/PNE/STR MECH	330 (SUPPORT EQUIP BR)	CPL	6072	M	E			1	M
SUP	8201	SUP CLK		LCPL	6672	M	E			1	S
SUP	8202	SUP CLK		LCPL	6672	M	E			1	S
OFF	8301	P/P MECH	410 (POWER PLANTS)	SGT	6025	M	E				
OFF	8302	P/P MECH	410 (POWER PLANTS)	LCPL	6025	M	E				
OFF	8303	HYD MECH	520 (HYDRAULICS)	SSGT	6094	M	E			1	M
OFF	8304	HYD MECH	520 (HYDRAULICS)	CPL	6094	M	E			1	M
OFF	8305	HYD MECH	520 (HYDRAULICS)	LCPL	6094	M	E			1	M

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 20 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E: **20 PAA JSF TO**

						B	T	S			
	LINE	BLT		ALPHA		R	Y	T			
BKT	NO.	ENGLISH DESCRIPTION	WORK CENTER	GRADE	MOS	N	P	A			
OFF	8306	WELDER	51C (WELDING SHOP)	SSGT	6043	M	E			2	M
OFF	8307	STR MECH/NDI	530 (NDI SHOP)	CPL	6044	M	E			2	M
OFF	8308	STR MECH	510 (METAL SHOP)	CPL	6092	M	E			4	M
OFF	8309	FLT EQPT MECH	810 (FLIGHT EQUIPMENT)	LCPL	6060	M	E			1	M
OFF	8701	ADV A/C COMM/NAV SYS TECH	610 (COM/NAV)	SSGT	6414	M	E				
OFF	8702	COMM SYS TECH	61A (COMM SHOP)	CPL	6412	M	E				
OFF	8703	NAV SYS TECH	61B (NAV SHOP)	LCPL	6413	M	E				
OFF	8704	NAV SYS TECH	61B (NAV SHOP)	CPL	6413	M	E				
OFF	8705	ELECT SYS TECH	620 (ELECTRIC SHOP)	LCPL	6432	M	E			2	M
OFF	8706	A/C ELECT EQP TEST CELL	650 (EETS/METS)	SGT	6468	M	E				
OFF	8707	A/C ELECT EQP TEST CELL	650 (EETS/METS)	CPL	6468	M	E				
OFF	8708	A/C ELECT EQP TEST CELL	650 (EETS/METS)	LCPL	6468	M	E				
OFF	8709	ECM SYS TECH	64B (ECM SHOP)	CPL	6482	M	E				
OFF	8710	RTS/RSTS TECH	65B (CASS)	CPL	6467	M	E				
OFF	8711	RTS/RSTS TECH	65B (CASS)	LCPL	6467	M	E				
OFF	9000	PERS CLK		LCPL	121	M	E				
OFF	9001	UD CLK		LCPL	131	M	E				
OFF	9301	AVN ORD SYS TECH	710 (ORDNANCE)	CPL	6541	M	E				
OFF	9302	AVN ORD SYS TECH	710 (ORDNANCE)	LCPL	6541	M	E				
OFF	9303	AVN ORD SYS TECH	710 (ORDNANCE)	LCPL	6541	M	E				
OFF	9601	GSE HYD/PNE/STR MECH	920 (GSE)	SSGT	6072	M	E			1	M
OFF	9602	GSE HYD/PNE/STR MECH	920 (GSE)	LCPL	6072	M	E			2	M
OFF	9603	GSE ELECT/REFG MECH	930/970 (GSE)	CPL	6073	M	E			1	M
OFF	9604	GSE ELECT/REFG MECH	930/970 (GSE)	LCPL	6073	M	E			2	M
									37	**280**	

Table 32. USMC 40 PAA Notional Training Squadron Manning Document.

TABLE OF MANPOWER REQUIREMENTS USMC T/O: XXXX VMFA 40 JSF													
Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)													
T/E		**40 PAA JSF T0**											
						B	T	S					
LINE			BLT	ALPHA		R	Y	T	AV8B MARINES			JSF MER	
NO.		ENGLISH DESCRIPTION	CRD	GRADE	MOS	N	P	A	OFF	ENL	CIV	OFF	ENL
1		**HEADQUARTERS**											
2		CO		LTCOL	7509	M	N		1			1	
3		XO		MAJ	7509	M	N		1			1	
4		SGT MAJ		SGTMAJ	9999	M	E			1			1
10		**AVN SAF/STAND**											
11		DIR SAF/STAND		MAJ	7596	M	N	X				1	
12		AVN SAF OFF		CAPT	7596	M	N	X				1	
13		STAND OFF		CAPT	7509	M	N	X				1	
14		GRND SAF OFF		CAPT	7509	M	N	X				1	
15		NATOPS		CPL	7041	M	E			1			1
20		**S-1 DEPT**											
21		ADMIN OFF		MAJ	7509	M	N	X				1	
22		ASST ADMIN OFF		CWO2	0170	M	O		1			1	
24		PERS CHIEF		GYSGT	0193	M	E			1			1
25		ADMIN CLK		CPL	0151	M	E			1			1
25	A	ADMIN CLK		LCPL	0151	M	E			1			1
26		PERS CLK		SGT	0121	M	E			1			1
27		PERS CLK		LCPL	0121	M	E			1			1
28		PERS CLK		LCPL	0121	M	E			3			3
29		U/D CLK		CPL	0121	M	E			1			1
30		U/D CLK		LCPL	0121	M	E			2			2
31		CAREER PLAN OFF		CAPT	7509	M	N	X				1	

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E **40 PAA JSF T0**

LINE NO.		ENGLISH DESCRIPTION	BLT CRD	ALPHA GRADE	MOS	B R N	T Y P	S T A	AV8B MARINES OFF	AV8B MARINES ENL	AV8B MARINES CIV	JSF MER OFF	JSF MER ENL
32		CAREER PLAN NCO		SSGT	8421	M	E			1			1
33		LEGAL OFF		CAPT	7509	M	N	X				1	
34		LEGAL CLK		CPL	0151	M	E			1			1
35		CMCC OFF		CAPT	7509	M	N	X				1	
36		CMCC CLK		LCPL	0151	M	E			1			1
60		**S-3 DEPT**											
61		OPS OFF		MAJ	7509	M	N	X				1	
62		ASST OPS OFF		MAJ	7509	M	N	X				1	
63		OPS CHIEF		GYSGT	7041	M	E			1			1
64		OPS CLK		SGT	7041	M	E			1			1
65		OPS CLK		CPL	7041	M	E			2			2
66		OPS CLK		LCPL	7041	M	E			4			4
67		TRNG OFF/WTI		MAJ	7509	M	N	X				1	
68		ISD OFF		CAPT	7509	M	N	X				1	
69		GRND TRNG OFF		CAPT	7509	M	N	X				1	
70		GMS TRNG NCO		SSGT	8711	M	E			1			1
71		NBC DEF OFF		CAPT	7509	M	N	X				1	
72		NBC DEF NCO		LCPL	5711	M	E			1			1
73		TRNG RECORDS CLK		LCPL	7041	M	E			1			1
74		TRNG RECORDS CLK		LCPL	7041	M	E			1			1
75		INSTR PILOT		MAJ	7509	M	N		11			15	
76		INSTR PILOT		CAPT	7509	M	N		22			28	
90		**S-4**											
91		LOG OFF		MAJ	7509	M	N	X				1	

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E		**40 PAA JSF T0**											
						B	T	S					
LINE			BLT	ALPHA		R	Y	T	AV8B MARINES			JSF MER	
NO.		ENGLISH DESCRIPTION	CRD	GRADE	MOS	N	P	A	OFF	ENL	CIV	OFF	ENL
92		ASST LOG/EMBARK OFF		CAPT	7509	M	N	X				1	
93		INF WPNS RPR		LCPL	2111	M	E			1			1
94		LOG/EMBARK NCO		CPL	0431	M	E			1			1
95		LOG/EMBARK CLK		CPL	0431	M	E	X					1
96		LOG/EMBARK SPEC		LCPL	0431	M	E			2			2
100		**MEDICAL**											
101		FLT SURGEON		LT	2102	N	O					1	
102		AVN MED TECH		HM2	8406	N	E						1
103		FLD MED TECH		HM3	8404	N	E						1
104		FLD MED TECH		HM3	8404	N	E						1
300		**A/C MAINT DEPT**											
301		A/C MAINT OFF		MAJ	7509	M	N	X				1	
302		ASST A/C MAINT OFF		CAPT	6002	M	A		1			1	
303		ACFT MAINT CHIEF-FRS		MGYSGT	6002	M	E			1			1
310		MAINT ADMIN											
311		MAINT ADMIN NCOIC		SSGT	6046	M	E			1			1
312		MAINT ADMIN CLK		CPL	6046	M	E			1			1
313		MAINT ADMIN CLK		LCPL	6046	M	E			1			1
320		MAINT/MAT CONTROL											
321		MAINT/MAT CONT OFF		CAPT	6004	M	A		1			1	
322		ASST ACFT MAINT CHIEF-FRS		MSGT	6019	M	E			1			1
323		MAINT/MAT CONT CLK		LCPL	6217	M	E	X					1
330		**MAINT CONT**											

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E **40 PAA JSF T0**

LINE NO.		ENGLISH DESCRIPTION	BLT CRD	ALPHA GRADE	MOS	B R N	T Y P	S T A	AV8B MARINES OFF	AV8B MARINES ENL	AV8B MARINES CIV	JSF MER OFF	JSF MER ENL
331		MAINT CONT CHIEF		MSGT	6019	M	E	X					1
332		M/C - ENG		GYSGT	6212	M	E			1			1
333		M/C - A/F		GYSGT	6252	M	E			1			1
334		M/C - COMM/NAV SYS TECH		SSGT	6312	M	E			1			1
335		M/C - ELECT SYS TECH		SSGT	6332	M	E			1			1
350		IMRL											
351		IMRL MANAGER		LCPL	6042	M	E			1			1
360		TOOL CONT											
361		TOOL CONT NCOIC		SGT	6312	M	E			1			1
362		TOOL CONT CLK		LCPL	6252	M	E			1			1
363		TOOL CONT CLK		LCPL	6312	M	E			1			1
370		**Q/A**											
371		Q/A OFF		CAPT	7509	M	N	X				1	
372		NCOIC		GYSGT	6212	M	E			1			1
373		Q/A - A/F		GYSGT	6252	M	E			1			1
374		Q/A - FLT EQPT		SSGT	6282	M	E			1			1
375		Q/A - COMM/NAV SYS TECH		SSGT	6312	M	E			1			1
376		Q/A - ELECT SYS TECH		SSGT	6332	M	E			1			1
377		Q/A - ORD		SGT	6531	M	E			1			1
378		MAINT ANALYST		SSGT	6046	M	E			1			1
379		MAINT ANALYST/ADPE-FMF		SGT	6046	M	E			2			2
380		TECH PUBS LIB		LCPL	6312	M	E			1			1
390		PHASE MAINT											
391		NCOIC PHASE MAINT		SSGT	6212	M	E			1			1

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E **40 PAA JSF T0**

LINE NO.		ENGLISH DESCRIPTION	BLT CRD	ALPHA GRADE	MOS	B R N	T Y P	S T A	AV8B MARINES OFF	AV8B MARINES ENL	AV8B MARINES CIV	JSF MER OFF	JSF MER ENL
400		**A/C DIV**											
401		A/C DIV OFF		CAPT	7509	M	N	X				1	
402		Asst A/C DIV OFF		MGySGT	6002	M							1
410		**AIRFRAMES**											
411		NCOIC		GYSGT	6252	M	E			1			2
412		AIRFRAME MECH		SSGT	6252	M	E			1			2
413		A/F MECH/NDI OPR		SGT	6034	M	E			2			5
414		A/F MECH		CPL	6252	M	E			4			11
415		A/F MECH		CPL	6252	M	E			8			
416		A/F MECH		LCPL	6252	M	E			12			23
420		**C/C**											
421		NCOIC		GYSGT	6252	M	E			1		1	
422		C/C MECH - A/F		CPL	6252	M	E			1			2
423		C/C MECH - A/F		LCPL	6252	M	E			1			3
424		C/C MECH - COMM/NAV SYS		LCPL	6312	M	E			1			2
425		C/C MECH - ELECT SYS TECH		LCPL	6332	M	E			2			2
426		C/C MECH - ORD		LCPL	6531	M	E			1			3
430		**FLT EQPT**											
431		NCOIC		GYSGT	6048	M	E			1			1
432		ASST NCOIC		SSGT	6282	M	E			1			2
433		ASST NCOIC		SSGT	6048	M	E			1			2
434		SAF EQPT MECH		SGT	6282	M	E			3			4
435		SAF EQPT MECH		LCPL	6282	M	E			9			5
436		FLT EQPT MECH		SGT	6048	M	E			3			

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E **40 PAA JSF T0**

LINE NO.		ENGLISH DESCRIPTION	BLT CRD	ALPHA GRADE	MOS	B R N	T Y P	S T A	AV8B MARINES OFF	AV8B MARINES ENL	AV8B MARINES CIV	JSF MER OFF	JSF MER ENL
437		FLT EQPT MECH		CPL	6048	M	E			1			1
438		FLT EQPT MECH		LCPL	6048	M	E			6			2
500		**ORDNANCE**											
501		ORD OFF		CWO3	6502	M	A		1			1	
502		NCOIC		GYSGT	6531	M	E			1			2
503		AVN ORD TECH		SGT	6531	M	E			6			6
504		AVN ORD TECH		SSGT	6531	M	E			2			13
505		AVN ORD TECH		CPL	6531	M	E			6			12
506		AVN ORD TECH		LCPL	6531	M	E			10			20
600		**AVIONICS**											
601		AVIONICS OFF		CWO5	6302	M	A		1				
602		AVIONICS CHIEF		MGYSGT	6391	M	E			1			1
603		COMM/NAV SYS TECH		GYSGT	6312	M	E			1		1	2
604		COMM/NAV SYS TECH		SGT	6312	M	E			1		2	4
605		COMM/NAV SYS TECH		SGT	6312	M	E			4		3	6
606		COMM/NAV SYS TECH		CPL	6312	M	E			6		5	6
607		COMM/NAV SYS TECH		LCPL	6312	M	E			11		7	
608		ELECT SYS TECH		GYSGT	6332	M	E			1			1
609		ELECT SYS TECH		SSGT	6332	M	E			2			2
610		ELECT SYS TECH		SGT	6332	M	E			7		2	4
611		ELECT SYS TECH		CPL	6332	M	E			4		3	3
612		ELECT SYS TECH		LCPL	6332	M	E			12		6	4
700		**LINE/GSE**											

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E **40 PAA JSF T0**

LINE NO.		ENGLISH DESCRIPTION	BLT CRD	ALPHA GRADE	MOS	B R N	T Y P	S T A	AV8B MARINES OFF	AV8B MARINES ENL	AV8B MARINES CIV	JSF MER OFF	JSF MER ENL
701		LINE OFF		CAPT	7509	M	N	X					
702		NCOIC		GYSGT	6212	M	E			1			1
703		A/C MECH		SSGT	6212	M	E			2			5
704		A/C MECH		SGT	6212	M	E			5			14
705		A/C MECH		CPL	6212	M	E			18			25
706		A/C MECH		LCPL	6212	M	E			34			23
707		GSE HYD/PNE/STR MECH		CPL	6072	M	E			1			1
708		GSE HYD/PNE/STR MECH		LCPL	6072	M	E			2			2
801		**MALS AUGMENT**											
820		SUPPLY											
821		SUP NCOIC		SGT	6672	M	E			2			2
822		AVN SUP CLK		CPL	6672	M	E			2			2
823		AVN SUP CLK		LCPL	6672	M	E			5			5
830		MAINT											
831		P/P MECH		GYSGT	6222	M	E			1			
832		P/P MECH		SGT	6222	M	E			1			
833		P/P MECH		CPL	6222	M	E			2			
834		P/P MECH		LCPL	6222	M	E			1			
835		HYD MECH		LCPL	6062	M	E			4			3
836		STR MECH/NDI		SGT	6033	M	E			1			3
837		WELDER		SGT	6043	M	E			1			4
838		STR MECH		LCPL	6092	M	E			2			18
839		FLT EQPT MECH		SGT	6048	M	E			2			
840		FLT EQPT MECH		CPL	6048	M	E			1			4
841		FLT EQPT MECH		LCPL	6048	M	E			1			

TABLE OF MANPOWER REQUIREMENTS **USMC T/O: XXXX VMFA 40 JSF**													
Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)													
T/E		**40 PAA JSF T0**											
						B	T	S					
LINE			BLT	ALPHA		R	Y	T	AV8B MARINES			JSF MER	
NO.		ENGLISH DESCRIPTION	CRD	GRADE	MOS	N	P	A	OFF	ENL	CIV	OFF	ENL
870		AVIONICS											
871		ADV COMM/NAV SYS TECH		GYSGT	6414	M	E			1			
872		NAV SYS TECH		CPL	6413	M	E			2			
874		NAV SYS TECH		LCPL	6413	M	E			5			
875		COMM SYS TECH		LCPL	6412	M	E			2			
876		MICRO-MIN RPR		CPL	6423	M	E			1			
877		MICRO-MIN RPR		LCPL	6423	M	E			2			
878		ADV ELECT INST/FLT CNTL		GYSGT	6434	M	E			1		1	4
879		ADV ELECT INST/FLT CNTL		SSGT	6434	M	E			4		7	4
880		ELECT INST/FLT CNTL SYS		SGT	6432	M	E			1			
881		ELECT INST/FLT CNTL SYS		CPL	6432	M	E			1			
882		ELECT INST/FLT CNTL SYS		LCPL	6432	M	E			4			
883		ATE TECH		GYSGT	6469	M	E			1			
884		A/C INS TECH		SGT	6464	M	E			1			
885		A/C INS TECH		LCPL	6464	M	E			3			
886		HTS TECH		LCPL	6461	M	E			3			
889		A/C ELECT EQP TEST CELL		SGT	6468	M	E			2			
890		A/C ELECT EQP TEST CELL		LCPL	6468	M	E			3			
891		ADV A/C ECM TECH		GYSGT	6486	M	E			1			
892		A/C ECM TECH		CPL	6482	M	E			1			
893		A/C ECM TECH		CPL	6482	M	E			2			
894		PME TECH		CPL	6492	M	E			2			
930		**ORDNANCE**											
931		AVN ORD SYS TECH		SSGT	6541	M	E			2			
932		AVN ORD SYS TECH		GYSGT	6541	M	E			1			

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E **40 PAA JSF T0**

LINE NO.		ENGLISH DESCRIPTION	BLT CRD	ALPHA GRADE	MOS	B R N	T Y P	S T A	AV8B MARINES OFF	AV8B MARINES ENL	AV8B MARINES CIV	JSF MER OFF	JSF MER ENL
933		AVN ORD SYS TECH		LCPL	6541	M	E			1			
934		AVN ORD SYS TECH		SGT	6541	M	E			1			
960		**GSE**											
961		GSE HYD/PNE STRU MECH		SGT	6072	M	E			1			2
962		GSE HYD/PNE/STRU MECH		LCPL	6072	M	E			3		6	8
963		GSE ELECT/REFRIDGE MECH		SGT	6073	M	E			1			3
964		GSE ELECT REFRIDGE MECH		CPL	6073	M	E			1			4
965		GSE ELECT/REFRIDGE MECH		LCPL	6073	M	E			3			5
1500		**FREST**											
1501		FRS DIR OF MAINT TRNG		MAJ	6302	M	A	X				1	
1502		ACFT MAINT CHIEF-FREST		MSGT	6019	M	E			1			1
1503		IMRL											
1504		IMRL MANAGER		CPL	6042	M	E			1			1
1505		IMRL ASST		LCPL	6042	M	E			1			1
1506		**ADMIN DIV**											
1507		**PERS ADMIN BR**											
1508		PERS CHIEF		GYSGT	0193	M	E			1			1
1509		PERS CLK		LCPL	0121	M	E			2			2
1510		PERS CLK		LCPL	0121	M	E			1			1
1511		UD CLK		LCPL	0121	M	E			2			2
1512		ADMIN CLK		LCPL	0151	M	E			1			1
1514		TRNG ADMIN BR											
1515		ISD CURR DEV SPECIALIST		GYSGT	6332	M	E			1			1

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E		**40 PAA JSF T0**											
						B	T	S					
LINE			BLT	ALPHA		R	Y	T	AV8B MARINES			JSF MER	
NO.		ENGLISH DESCRIPTION	CRD	GRADE	MOS	N	P	A	OFF	ENL	CIV	OFF	ENL
1516		MAINT ADMIN CLK		CPL	6046	M	E			2			2
1517		TRNG NCOIC		GYSGT	6541	M	E			1			1
1518		TRNG NCO		CPL	7041	M	E			1			1
1519		ADP NCOIC		CPL	4066	M	E			1			1
1520		ADP CLERK		LCPL	4066	M	E			1			1
1521		AVN SUP		SSGT	6672	M	E			1			1
1522		AVN SUP		LCPL	6672	M	E			1			1
1523		MONITOR/SCHED											
1524		SCHED COORD		GYSGT	6212	M	E			1			1
1525		ADMIN CLK		CPL	0151	M	E			1			1
1526		MAINT CONTROL NCOIC		GYSGT	6212	M	E			1			1
1527		MATMEP COORDINATOR		GYSGT	6414	M	E			1			1
1528		STUDENT COORDINATOR		GYSGT	6222	M	E			1			1
1529		NITRAS/BNA		SSGT	6252	M	E			1			1
1530		TRNG DIV											
1531		**AVION TRNG**											
1532		AVION TRNG OFF		CWO5	6302	M	A		1			1	
1533		NCOIC		GYSGT	6332	M	E			1			1
1534		CHIEF INSTR		GYSGT	6332	M	E			1			1
1535		**INTEGRATED AVIONICS**											
1536		INSTR		SSGT	6486	M	E			3			3
1537		INSTR		SGT	6412	M	E			2			3
1538		INSTR		SSGT	6414	M	E			2			
1540		INSTR		SGT	6483	M	E			4			

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E **40 PAA JSF T0**

LINE NO.		ENGLISH DESCRIPTION	BLT CRD	ALPHA GRADE	MOS	B R N	T Y P	S T A	AV8B MARINES OFF	AV8B MARINES ENL	AV8B MARINES CIV	JSF MER OFF	JSF MER ENL
1541		**"O" LEVEL TRNG SECT**											
1542		INSTR		SSGT	6312	M	E			2			3
1543		INSTR		SGT	6312	M	E			6			8
1544		INSTR		SSGT	6332	M	E			2			3
1545		INSTR		SSGT	6332	M	E			3			4
1546		**"I" LEVEL TRNG SECT**											
1547		INSTR		SGT	6412	M	E			3			2
1548		INSTR		SGT	6413	M	E			4			2
1549		INSTR		GYSGT	6414	M	E			2			1
1550		INSTR		SSGT	6434	M	E			3			1
1551		INSTR		SGT	6432	M	E			2			1
1552		INSTR		SGT	6468	M	E			2			1
1553		**A/C MAINT TRNG SECT**											
1554		MAINT TRNG OFF		CAPT	6004	M	A		1			1	
1555		ASST ACFT MAINTCHIEF-FREST		MSGT	6019	M	E			1			1
1556		CHIEF INSTR		GYSGT	6212	M	E			1			1
1557		**"O" LEVEL TRNG SECT**											
1558		INSTR		GYSGT	6212	M	E			1			1
1559		INSTR		SGT	6212	M	E			8			9
1560		INSTR		GYSGT	6252	M	E			2			2
1561		INSTR		SGT	6252	M	E			4			5
1563		INSTR		SSGT	6282	M	E			1			3

TABLE OF MANPOWER REQUIREMENTS
USMC T/O: XXXX VMFA 40 JSF

Based on Legacy AV-8B Report NO. I5921C4A-1 as of: 98/10 (FEB 98 Troop List)

T/E **40 PAA JSF T0**

LINE NO.		ENGLISH DESCRIPTION	BLT CRD	ALPHA GRADE	MOS	B R N	T Y P	S T A	AV8B MARINES OFF	AV8B MARINES ENL	AV8B MARINES CIV	JSF MER OFF	JSF MER ENL
1564		INSTR		SGT	6282	M	E			1			1
1565		**"I" LEVEL TRNG SECT**											
1566		INSTR		GYSGT	6222	M	E			1			1
1567		INSTR		SGT	6222	M	E			3			2
1570		INSTR		GYSGT	6074	M	E			1			
1571		INSTR		SSGT	6074	M	E			1			1
1572		INSTR		SGT	6074	M	E			5			3
1573		ORD TRNG BR											
1574		ORD TRNG OFF		CAPT	6502	M	A		1			1	
1575		NCOIC		MSGT	6591	M	E			1			1
1576		CHIEF INSTR		GYSGT	6531	M	E			1			1
1577		**CONV WPNS TRNG SECT**											
1578		INSTR		GYSGT	6531	M	E			1			1
1579		INSTR		SGT	6531	M	E			1			1
1581		**ARM MAINT TRNG SECT**											
1582		INSTR		GYSGT	6541	M	E			1			1
1583		INSTR		SSGT	6541	M	E			2			2
1584		INSTR		SGT	6541	M	E			19			19
1590		**"O" LEVEL TRNG SECT**											
1591		INSTR		SSGT	6531	M	E			1			1
1592		INSTR		SGT	6531	M	E			5			5

Table 33. USN 12 PAA Notional Squadron Manning Document.

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
EXEC DEPT												
SQN CO	8670	1311H	O			1	OPS/OPS SUPT			1		
SQN XO	8672	1311H	O			1	OPS/OPS SUPT			1		
SQN DEPT HD	8675	1311I	O			4	OPS/OPS SUPT			4		
COMMAND MASTER CHIEF		POCM	S		9580	1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
ASDO		APO2	S			1	OVRHD/MGT			1		
IWPO		APO2	S			1	OVRHD/MGT			1		
SECURITY WATCH		AN	S			1				1		
						10				**10**	**0**	
ADMIN DEPT												
ADMIN DEPT HEAD	2615	6410K	S			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
ADMIN OFFICER		YNCS	S			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
ADMIN SUPVR		YN1	S			1	OVRHD/MGT			1		
ADMIN CLERK		YN2	S			1	OVRHD/MGT			1		
ADMIN CLERK		YN3	S			1				1		
						5				**5**	**0**	
PERS OFFICE												
PERS SUPVR		PNC	S		9588	1	OVRHD/MGT			1		
PERS CLERK		PN2	S			1	OVRHD/MGT			1		
PERS CLERK		PN3	S			1				1		
						3				**3**	**0**	
FIRST LT OFFICE												
PPO		PO2	S			1	OVRHD/MGT			1		
PPO		PO2	S			1	OVRHD/MGT			1		CURRENT AMD

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**REQT**	**SOURCE**	**REQT**	**MAF**	**REQT**	**DELTA**	**REMARKS**
												REQUIREMENT
FAC MAINTMAN		AN	S			3	OVRHD/MGT			3		
SECURITY/FIRE WATCH		AN	S			1	OVRHD/MGT			1		
						6				**6**	**0**	
OPS DEPT												
AVIATOR/LSO	8501	1311J	O			2	OPS/OPS SUPT			2		NAVMAC (Buncher) COMMENT
AVIATOR	8501	1311J	O			2	OPS/OPS SUPT			2		
AVIATOR (41588/BSC14200)	8501	1311K	O			9	OPS/OPS SUPT			9		
TAC INTEL	9682	1630L	S			1	OPS/OPS SUPT			1		
						14				**14**	**0**	
OPS OFFICE												
OPS CLERKSUPVR		YN1	S			1	OPS/OPS SUPT			1		
OPS CLERK		YN3	S			1	OPS/OPS SUPT			1		
INTEL CLERK		IS2	S	3923		1	OPS/OPS SUPT			1		NEW NAVMAC STD.
ADP SYSTEM SUPPORT		IT2	S	2780		1	OPS/OPS SUPT			1		NAVMAC (Buncher) COMMENT
RR PHONE TALKER		AN	S			2	OPS/OPS SUPT			2		
						6				**6**	**0**	
SAFETY DEPT												
SAFETY PO		APO1	S			1	OVRHD/MGT			1		
						1				**1**	**0**	
MAINTENANCE DEPT												
A/C OMNT GEN	8190	1520I	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
						1				**1**	**0**	
MAINT/PROD CNTRL W/C 020												
A/C OMNT MTL	8176	6380J	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
A/C OMNT/MTL/MMCO-ASST	8176	7340N	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
MAINT/PROD CTL COORD		APOCM	S	8300		1	OVRHD/MGT			1		
MAINT CTL COORD		APOCS	S			1	OVRHD/MGT			1		
MAINT CTL COORD		APOC	S			1	OVRHD/MGT			1		
FLIGHT DECK COORD		APOC	S			2	OVRHD/MGT			2		
MAINT CTL CLK/ECAMS OPER		AZ1	S	6301		1	OVRHD/MGT			1		
MAINT CTL CLK/ECAMS OPER		AZ3	S	6301		1	OVRHD/MGT			1		
MAINT CTL CLERK		AZAN	S			2	OVRHD/MGT			2		
NSA/DATA ANALYST		AZ2	S	6315		1	OVRHD/MGT			1		
						12				**12**	**0**	
MAINT ADMIN W/C 030												
MAINT ADMIN CLERK		AZ2	S			1	OVRHD/MGT			1		
ADP SYSTEM SUPPORT		IT3	S	2735		1	OVRHD/MGT			1		Rating change from RM to IT
						2				**2**	**0**	
Q/A/ANAL W/C 040												
QA SUPVR		APOCS	M			1	OVRHD/MGT			1		
QA REP		AD1	M	83XX		1	OVRHD/MGT			1		
QA REP		AE1	M	83XX		1	OVRHD/MGT			1		
QA REP		AME1	M	83XX		1	OVRHD/MGT			1		
QA REP		AMH1	M	83XX		1	OVRHD/MGT			1		
QA REP		AMS1	M	83XX		1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT (Removed SNEC)

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY				LCOM	MER	LEGACY &
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
QA REP		AT1	M	83XX		1	OVRHD/MGT			1		
QA REP/ARM INSP		AO1	M	83XX		1	OVRHD/MGT			1		
QA LIBRN		AZ2	M			1	OVRHD/MGT			1		
						9				**9**	**0**	
MAT SCRNG/PROC/ACCTG W/C 05A/B												
A/C MTLCTL & AL	8925	7380N	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
MTL CTL SUPVR		AK1	S			1	OVRHD/MGT			1		
MTL CTL CLERK		AK3	S			1	OVRHD/MGT			1		
MTL CTL CLERK		AKAN	S			1	OVRHD/MGT			1		
						4				**4**	**0**	
IMRL MGR/TOOL CTL CEN W/C 05C/D												
TOOL CTL/IMRL MGR		AP02	M		9590	1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
TOOL CTL CLERK		AN	M			2	OVRHD/MGT			2		
HAZMAT CTRL & MGT SUPVR		APO1	M		9595	1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
						4				**4**	**0**	
A/C DIV W/C 100												
A/C DIV SUPVR		APOCS	M			1	OVRHD/MGT			1		
						1				**1**	**0**	
P/P BR W/C 110												
P/P MAINTMAN SUPVR		ADC	M	83XX		1	ON ACFT FIX			0		NAVMAC (Buncher) COMMENT
P/P MAINTMAN		AD1	M	83XX		1	ON ACFT FIX			1		
P/P MAINTMAN		AD2	M	83XX		2	ON ACFT FIX			2		
P/P MAINTMAN		AD3	M	88XX		3	ON ACFT			3		

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
							FIX					
P/P MAINTMAN		ADAN	M	88XX		4	ON ACFT FIX			4		Reduce MAF to account for
						11		**8**	**12**	**10**	**-1**	two engines vs one & min crew
STRUC/HYD SHOP W/C 12A/B												
A/F MAINTMAN SUPVR		AMSC	M	83XX		1	OVRHD/MGT			1		
A/F MAINTMAN		AMH1	M	83XX		1	ON ACFT FIX			1		
A/F MAINTMAN		AMH2	M	83XX		1	ON ACFT FIX			1		
A/F MAINTMAN		AMS2	M	83XX		2	ON ACFT FIX			1		
A/F MAINTMAN		AMH3	M	88XX		1	ON ACFT FIX			1		
A/F MAINTMAN		AMS3	M	88XX		3	ON ACFT FIX			3		
A/F MAINTMAN		AMHAN	M	88XX		1	ON ACFT FIX			1		
A/F MAINTMAN		AMSAN	M	88XX		4	ON ACFT FIX			3		Reduced to account for 100% spike
						14		**14**	**21**	**12**	**-2**	in sustained surge (day 8-30)
CORR CNTRL SHOP W/C 12C												
CORROS CTL SUPVR		AMS1	M	83XX		1	ON ACFT FIX			1		
CORROS CTL TEAM MBR		AMS2	M	83XX		2	ON ACFT FIX			2		
CORROS CTL TEAM MBR		AD3	M	88XX		1	ON ACFT FIX			1		Driven by OPNAVINST 4790.2
CORROS CTL TEAM MBR		AO3	M	88XX		1	ON ACFT			1		

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**REQT**	**SOURCE**	**REQT**	**MAF**	**REQT**	**DELTA**	**REMARKS**
							FIX					
CORROS CTL TEAM MBR		AT3	M	88XX		1	ON ACFT FIX			1		
CORROS CTL TEAM MBR		AMSAN	M	88XX		4	ON ACFT FIX			4		NAVMAC (Buncher) COMMENT
						10				**10**	**0**	
A/C SURV EQUIP SHOP W/C 13A												Not LCOM modeled
AVTR EQUIP MAINTMAN SUPVR		PR1	M			1	OVRHD/MGT			1		
AVTR EQUIP MAINTMAN		PR2	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
AVTR EQUIP MAINTMAN		PR3	M			1	OVRHD/MGT			1		
AVTR EQUIP MAINTMAN		PRAN	M			1	OVRHD/MGT			1		
						4				**4**	**0**	
EGR/ENVIR SYS SHOP W/C 13B												
SFTY EQUIP MAINTMAN SUPVR		AME1	M	83XX		1	ON ACFT FIX			1		
SFTY EQUIP MAINTMAN		AME2	M	83XX		2	ON ACFT FIX			2		NEW NAVMAC STD
SFTY EQUIP MAINTMAN		AME3	M	88XX		2	ON ACFT FIX			2		MPWG REDUCED 5/11/00
SFTY EQUIP MAINTMAN		AMEAN	M	88XX		2	ON ACFT FIX			2		MPWG REDUCED 5/11/01
						7		**6**	**9**	**7**	**0**	
PER MAINT BR W/C 140												
PC SUPVR - ASST		APO1	M			1	ON ACFT FIX			1		
						1				**1**	**0**	
AV/ARM DIV W/C 200												
A/C OMNT AV/WP	8199	1520J	M			1	OVRHD/MGT			1		NAVMAC (Buncher)

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
												COMMENT
AV/WEPS DIV SUPVR		APOCS	M			1	OVRHD/MGT			1		
						2				**2**	**0**	
ELEC/INST BR W/C 220												
ELEC/INST MAINTMAN SUPVR		AE1	M	83XX		1	ON ACFT FIX			1		
ELEC/INST MAINTMAN		AE2	M	83XX		2	ON ACFT FIX			2		
ELEC/INST MAINTMAN		AE3	M	88XX		3	ON ACFT FIX			2		
ELEC/INST MAINTMAN		AEAN	M	88XX		4	ON ACFT FIX			2		
						10		**5**	**7**	**7**	**-3**	
ARM BR W/C 230												
(G5) A/C OMNT AV/WP	8199	7360O	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
ARM MAINTMAN SUPVR		AOC	M	83XX		1	OVRHD/MGT			1		
ARM MAINTMAN		AO1	M	83XX		3	ON ACFT SGR			3		New NAVMAC Standard
ARM MAINTMAN		AO2	M	83XX		6	ON ACFT SGR			6		New NAVMAC Standard
ARM MAINTMAN		AO3	M	88XX		7	ON ACFT SGR			7		New NAVMAC Standard
ARM MAINTMAN		AOAN	M	88XX		10	ON ACFT SGR			10		New NAVMAC Standard
						28		**12**	**18**	**28**	**0**	
INT WPNS BR W/C 280												
WEP SYS MAINTMAN SUPVR		ATC	M	83XX		1	ON ACFT FIX			0		
WEP SYS MAINTMAN		AT1	M	83XX		2	ON ACFT FIX			1		
WEP SYS MAINTMAN		AT2	M	83XX		3	ON ACFT			2		

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
							FIX					
WEP SYS MAINTMAN		AT3	M	88XX		4	ON ACFT FIX			2		
WEP SYS MAINTMAN		ATAN	M	88XX		5	ON ACFT FIX			3		
						15		**6**	**9**	**8**	**-7**	
LINE DIV W/C 300												
LINE DIV SUPVR		APOCS	M			1	OVRHD/MGT			1		
						1				**1**	**0**	
P/ C BR W/C 310												
PC SUPVR		APOC	M			1	OVRHD/MGT			1		
PC SUPVR - ASST		APO1	M			1	ON ACFT SGR			1		
PC SUPVR - ASST		APO2	M			2	ON ACFT SGR			2		New NAVMAC Standard
PC		APO3	M			3	ON ACFT SGR			3		New NAVMAC Standard
PC		AN	M			20	ON ACFT SGR			20		New NAVMAC Standard
						27		**12**	**18**	**27**	**0**	
TRBLSHTR BR W/C 320												
TROUBLESHOOTER SUPVR		AD1	M	83XX		1	ON ACFT SGR			1		
TROUBLESHOOTER		AD2	M	83XX		1	ON ACFT SGR			1		
TROUBLESHOOTER		AE2	M	83XX		2	ON ACFT SGR			1		
TROUBLESHOOTER		AME2	M	83XX		2	ON ACFT SGR			2		NAVMAC Standard & Skill Required
TROUBLESHOOTER		AMH2	M	83XX		1	ON ACFT SGR			1		
TROUBLESHOOTER		AMS2	M	83XX		1	ON ACFT			1		

NAVY JSF 12 AIRCRAFT FORWARD DEPLOYED SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**REQT**	**SOURCE**	**REQT**	**MAF**	**REQT**	**DELTA**	**REMARKS**
							SGR					
TROUBLESHOOTER		AT2	M	83XX		2	ON ACFT SGR			1		
						10		**4**	**6**	**8**	**-2**	
INT SVCS												
RAPID SUPPLYMAN		AK2	S			1	OVRHD/MGT			1		
RAPID SUPPLYMAN		AK3	S			1	OVRHD/MGT			1		
RAPID SUPPLYMAN		AN	S			2	OVRHD/MGT			2		
RAPID SUPPLYMAN		AKAN	S			2	OVRHD/MGT			2		
DISBURSING CLK		DK2	S	2905		1	OVRHD/MGT			1		
MED TECH		HM2	S	8406		1	OVRHD/MGT			1		
MESS MGT SPEC		MS2	S			1	OVRHD/MGT			1		
MESS MGT SPEC		MS3	S			1	OVRHD/MGT			1		
MESS MGT SPEC		MSSN	S			2	OVRHD/MGT			2		
INTEL SPEC		IS3	S	3923		1	OVRHD/MGT			1		Deleted IS2 billet & moved to Ops Office
CVW LOX CREW		AMEAN	S			1	OVRHD/MGT			0		JSF OBOGS EQUIPPED 5/11/00
HAZMAT		AN	S			1	OVRHD/MGT			1		
CVW TIGER TEAM		AN	S			1	OVRHD/MGT			1		
FOOD SERVICEMAN		AN	S			10	OVRHD/MGT			10		NAVMAC (Buncher) COMMENT
SHIP MAA		APO2	S			2	OVRHD/MGT			2		
EDF MAA		APO2	S			1	OVRHD/MGT			1		
LAUNDRYMAN		AN	S			2	OVRHD/MGT			2		
ARM TEAM MBR		AO2	S			1	OVRHD/MGT			1		
ARM TEAM MBR		AO3	S			1	OVRHD/MGT			1		
CVW FIRE/SECURITY WATCH		AN	S			2	OVRHD/MGT			2		CURRENT AMD REQUIREMENT
						35				**34**	**-1**	
						253				**237**	**-16**	

Table 34. USN 12 PAA Notional Reserve Squadron Manning Document.

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
EXEC DEPT												
SQN CO	8670	1311H	S			1	OPS/OPS SUPT			1		
SQN XO	8672	1311H	S			1	OPS/OPS SUPT			1		
SQN DEPT HD	8675	1311I	S			4	OPS/OPS SUPT			4		
COMMAND MASTER CHIEF		POCM	S		9580	1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
ASDO		APO2	S			1	OVRHD/MGT			1		
IWPO		APO2	S			1	OVRHD/MGT			1		
SECURITY WATCH		AN	S			1				1		
						10				**10**	**0**	
ADMIN DEPT												
ADMIN DEPT HEAD	2615	6410K	S			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
ADMIN OFFICER		YNCS	S			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
ADMIN SUPVR		YN1	S			1	OVRHD/MGT			1		
ADMIN CLERK		YN2	S			1	OVRHD/MGT			1		
ADMIN CLERK		YN3	S			1				1		
						5				**5**	**0**	
PERS OFFICE												
PERS SUPVR		PNC	S		9588	1	OVRHD/MGT			1		
PERS CLERK		PN2	S			1	OVRHD/MGT			1		
PERS CLERK		PN3	S			1				1		
						3				3	0	

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
FIRST LT OFFICE												
PPO		PO2	S			1	OVRHD/MGT			1		
FAC MAINTMAN		AN	S			3	OVRHD/MGT			3		
SECURITY/FIRE WATCH		AN	S			1	OVRHD/MGT			1		
						5				**5**	**0**	
OPS DEPT												
AVIATOR/LSO	8501	1311J	O			2	OPS/OPS SUPT			2		NAVMAC (Buncher) COMMENT
AVIATOR	8501	1311J	O			2	OPS/OPS SUPT			2		
AVIATOR (41588/BSC14200)	8501	1311K	O			9	OPS/OPS SUPT			9		
TAC INTEL	9682	1630L	S			1	OPS/OPS SUPT			1		
						14				**14**	**0**	
OPS OFFICE												
OPS CLERKSUPVR		YN1	S			1	OPS/OPS SUPT			1		
OPS CLERK		YN3	S			1	OPS/OPS SUPT			1		
RSTARS/TM		APOC	S			1	OPS/OPS SUPT			1		CURRENT AMD REQUIREMENT
RSTARS/TM		APO2	S			1	OPS/OPS SUPT			1		CURRENT AMD REQUIREMENT
INTEL CLERK		IS2	S	3923		1	OPS/OPS SUPT			1		NEW NAVMAC STD
ADP SYSTEM SUPPORT		IT2	S	2780		1	OPS/OPS SUPT			1		NAVMAC (Buncher) COMMENT
RR PHONE TALKER		AN	S			2	OPS/OPS SUPT			2		

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
						8				8	0	
SAFETY DEPT												
SAFETY PO		APO1	S			1	OVRHD/MGT			1		
						1				1	0	
MAINTENANCE DEPT												
A/C OMNT GEN	8190	1520I	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
						1				**1**	**0**	
MAINT/PROD CNTRL W/C 020												
A/C OMNT MTL	8176	6380J	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
A/C OMNT/MTL/MMCO-ASST	8176	7340N	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
MAINT/PROD CTL COORD		APOCM	M	8300		1	OVRHD/MGT			1		
MAINT CTL COORD		APOCS	M			1	OVRHD/MGT			1		
MAINT CTL COORD		APOC	M			1	OVRHD/MGT			1		
FLIGHT DECK COORD		APOC	M			2	OVRHD/MGT			2		
MAINT CTL CLK/ECAMS OPER		AZ1	M	6301		1	OVRHD/MGT			1		
MAINT CTL CLK/ECAMS OPER		AZ3	M	6301		1	OVRHD/MGT			1		
MAINT CTL CLERK		AZAN	M			2	OVRHD/MGT			2		
NSA/DATA ANALYST		AZ2	M	6315		1	OVRHD/MGT			1		
						12				12	0	
MAINT ADMIN W/C 030												
MAINT ADMIN CLERK		AZ2	S			1	OVRHD/MGT			1		

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
ADP SYSTEM SUPPORT		IT3	S	2735		1	OVRHD/MGT			1		Rating change from RM to IT
						2				**2**	**0**	
Q/A/ANAL W/C 040												
QA SUPVR		APOCS	M			1	OVRHD/MGT			1		
QA REP		AD1	M	83XX		1	OVRHD/MGT			1		
QA REP		AE1	M	83XX		1	OVRHD/MGT			1		
QA REP		AME1	M	83XX		1	OVRHD/MGT			1		
QA REP		AMH1	M	83XX		1	OVRHD/MGT			1		
QA REP		AMS1	M	83XX		1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT (Removed SNEC)
QA REP		AT1	M	83XX		1	OVRHD/MGT			1		
QA REP/ARM INSP		AO1	M	83XX		1	OVRHD/MGT			1		
QA LIBRN		AZ2	M			1	OVRHD/MGT			1		
						9				**9**	**0**	
MAT SCRNG/PROC/ACCTG W/C 05A/B												
A/C MTLCTL & AL	8925	7380N	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
MTL CTL SUPVR		AK1	M			1	OVRHD/MGT			1		
MTL CTL CLERK		AK3	M			1	OVRHD/MGT			1		
MTL CTL CLERK		AKAN	M			1	OVRHD/MGT			1		
						4				**4**	**0**	
IMRL MGR/TOOL CTL CEN W/C 05C/D												
TOOL CTL/IMRL MGR		AP02	S		9590	1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
TOOL CTL CLERK		AN	S			2	OVRHD/MGT			2		
HAZMAT CTRL & MGT SUPVR		APO1	S		9595	1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
						4				**4**	**0**	
A/C DIV W/C 100												
A/C DIV SUPVR		APOCS	M			1	OVRHD/MGT			1		
						1				**1**	**0**	
P/P BR W/C 110												
P/P MAINTMAN SUPVR		ADC	M	83XX		1	ON ACFT FIX			0		NAVMAC (Buncher) COMMENT
P/P MAINTMAN		AD1	M	83XX		1	ON ACFT FIX			1		
P/P MAINTMAN		AD2	M	83XX		2	ON ACFT FIX			2		
P/P MAINTMAN		AD3	M	88XX		3	ON ACFT FIX			3		
P/P MAINTMAN		ADAN	M	88XX		4	ON ACFT FIX			4		Reduce MAF to account for
						11		**8**	**12**	**10**	**-1**	**two engines vs one & min crew**
STRUC/HYD SHOP W/C 12A/B												
A/F MAINTMAN SUPVR		AMSC	M	83XX		1	OVRHD/MGT			1		
A/F MAINTMAN		AMH1	M	83XX		1	ON ACFT FIX			1		
A/F MAINTMAN		AMH2	M	83XX		1	ON ACFT FIX			1		
A/F MAINTMAN		AMS2	M	83XX		2	ON ACFT FIX			1		
A/F MAINTMAN		AMH3	M	88XX		1	ON ACFT FIX			1		
A/F MAINTMAN		AMS3	M	88XX		3	ON ACFT FIX			3		
A/F MAINTMAN		AMHAN	M	88XX		1	ON ACFT FIX			1		
A/F MAINTMAN		AMSAN	M	88XX		4	ON ACFT FIX			3		Reduced to account for 100% spike

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
						14		**14**	**21**	**12**	**-2**	**in sustained surge (day 8-30)**
CORR CNTRL SHOP W/C 12C												
CORROS CTL SUPVR		AMS1	M	83XX		1	ON ACFT FIX			1		
CORROS CTL TEAM MBR		AMS2	M	83XX		2	ON ACFT FIX			2		
CORROS CTL TEAM MBR		AD3	M	88XX		1	ON ACFT FIX			1		Driven by OPNAVINST 4790.2
CORROS CTL TEAM MBR		AO3	M	88XX		1	ON ACFT FIX			1		
CORROS CTL TEAM MBR		AT3	M	88XX		1	ON ACFT FIX			1		
CORROS CTL TEAM MBR		AMSAN	M	88XX		4	ON ACFT FIX			4		NAVMAC (Buncher) COMMENT
						10				**10**	**0**	
A/C SURV EQUIP SHOP W/C 13A												**Not LCOM modeled**
AVTR EQUIP MAINTMAN SUPVR		PR1	M			1	OVRHD/MGT			1		
AVTR EQUIP MAINTMAN		PR2	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
AVTR EQUIP MAINTMAN		PR3	M			1	OVRHD/MGT			1		
AVTR EQUIP MAINTMAN		PRAN	M			1	OVRHD/MGT			1		
						4				**4**	**0**	
EGR/ENVIR SYS SHOP W/C 13B												
SFTY EQUIP MAINTMAN SUPVR		AME1	M	83XX		1	ON ACFT FIX			1		
SFTY EQUIP MAINTMAN		AME2	M	83XX		2	ON ACFT FIX			2		NEW NAVMAC STD

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
SFTY EQUIP MAINTMAN		AME3	M	88XX		2	ON ACFT FIX			2		MPWG REDUCED 5/11/00
SFTY EQUIP MAINTMAN		AMEAN	M	88XX		2	ON ACFT FIX			2		MPWG REDUCED 5/11/01
						7		**6**	**9**	**7**	**0**	
PER MAINT BR W/C 140												
PC SUPVR - ASST		APO1	M			1	ON ACFT FIX			1		
						1				**1**	**0**	
AV/ARM DIV W/C 200												
A/C OMNT AV/WP	8199	1520J	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
AV/WEPS DIV SUPVR		APOCS	M			1	OVRHD/MGT			1		
						2				**2**	**0**	
ELEC/INST BR W/C 220												
ELEC/INST MAINTMAN SUPVR		AEC	M	83XX		1	OVRHD/MGT			1		CURRENT AMD REQUIREMENT
ELEC/INST MAINTMAN		AE1	M	83XX		1	ON ACFT FIX			1		
ELEC/INST MAINTMAN		AE2	M	83XX		2	ON ACFT FIX			2		
ELEC/INST MAINTMAN		AE3	M	88XX		3	ON ACFT FIX			2		
ELEC/INST MAINTMAN		AEAN	M	88XX		4	ON ACFT FIX			2		
						11		**5**	**7**	**8**	**-3**	
ARM BR W/C 230												
(G5) A/C OMNT AV/WP	8199	7360O	M			1	OVRHD/MGT			1		NAVMAC (Buncher) COMMENT
ARM MAINTMAN SUPVR		AOC	M	83XX		1	OVRHD/MGT			1		
ARM MAINTMAN		AO1	M	83XX		3	ON ACFT SGR			3		New NAVMAC Standard

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
ARM MAINTMAN		AO2	M	83XX		6	ON ACFT SGR			6		New NAVMAC Standard
ARM MAINTMAN		AO3	M	88XX		7	ON ACFT SGR			7		New NAVMAC Standard
ARM MAINTMAN		AOAN	M	88XX		10	ON ACFT SGR			10		New NAVMAC Standard
						28		12	18	28	0	1 ACCOUNTED
INT WPNS BR W/C 280												**FOR IN W/C 12C**
WEP SYS MAINTMAN SUPVR		ATC	M	83XX		1	ON ACFT FIX			0		
WEP SYS MAINTMAN		AT1	M	83XX		2	ON ACFT FIX			1		
WEP SYS MAINTMAN		AT2	M	83XX		3	ON ACFT FIX			2		
WEP SYS MAINTMAN		AT3	M	88XX		4	ON ACFT FIX			2		
WEP SYS MAINTMAN		ATAN	M	88XX		5	ON ACFT FIX			3		
						15		**6**	**9**	**8**	**-7**	**1 ACCOUNTED**
LINE DIV W/C 300												**FOR IN W/C 12C**
LINE DIV SUPVR		APOCS	M			1	OVRHD/MGT			1		
						1				1	0	
P/ C BR W/C 310												
PC SUPVR		APOC	M			1	OVRHD/MGT			1		
PC SUPVR - ASST		APO1	M			1	ON ACFT SGR			1		
PC SUPVR - ASST		APO2	M			2	ON ACFT SGR			2		New NAVMAC Standard
PC		APO3	M			3	ON ACFT SGR			3		New NAVMAC Standard
PC		AN	M			20	ON ACFT SGR			20		New NAVMAC Standard
						27		12	18	27	0	
TRBLSHTR BR W/C 320												

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
TROUBLESHOOTER SUPVR		AD1	M	83XX		1	ON ACFT SGR			1		
TROUBLESHOOTER		AD2	M	83XX		1	ON ACFT SGR			1		
TROUBLESHOOTER		AE2	M	83XX		2	ON ACFT SGR			1		
TROUBLESHOOTER		AME2	M	83XX		2	ON ACFT SGR			2		NAVMAC Standard & Skill Required
TROUBLESHOOTER		AMH2	M	83XX		1	ON ACFT SGR			1		
TROUBLESHOOTER		AMS2	M	83XX		1	ON ACFT SGR			1		
TROUBLESHOOTER		AT2	M	83XX		2	ON ACFT SGR			1		
						10		4	6	8	-2	
INT SVCS												
RAPID SUPPLYMAN		AK2	S			1	OVRHD/MGT			1		
RAPID SUPPLYMAN		AK3	S			1	OVRHD/MGT			1		
RAPID SUPPLYMAN		AN	S			2	OVRHD/MGT			2		
RAPID SUPPLYMAN		AKAN	S			2	OVRHD/MGT			2		
DISBURSING CLK		DK2	S	2905		1	OVRHD/MGT			1		
MED TECH		HM2	S	8406		1	OVRHD/MGT			1		
MESS MGT SPEC		MS2	S			1	OVRHD/MGT			1		
MESS MGT SPEC		MS3	S			1	OVRHD/MGT			1		
MESS MGT SPEC		MSSN	S			2	OVRHD/MGT			2		
INTEL SPEC		IS3	S	3923		1	OVRHD/MGT			1		Deleted IS2 billet & moved to Ops Office
CVW LOX CREW		AMEAN	S			1	OVRHD/MGT			0		JSF OBOGS EQUIPPED 5/11/00

NAVY JSF 12 AIRCRAFT RESERVE SQUADRON												
						LEGACY			LCOM	MER	LEGACY &	
		GRADE/				SQDN	REQT	LCOM	PLUS	SQDN	MER	
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	REQT	SOURCE	REQT	MAF	REQT	DELTA	REMARKS
HAZMAT		AN	S			1	OVRHD/MGT			1		
CVW TIGER TEAM		AN	S			1	OVRHD/MGT			1		
FOOD SERVICEMAN		AN	S			10	OVRHD/MGT			10		NAVMAC (Buncher) COMMENT
SHIP MAA		APO2	S			2	OVRHD/MGT			2		
EDF MAA		APO2	S			1	OVRHD/MGT			1		
LAUNDRYMAN		AN	S			2	OVRHD/MGT			2		
ARM TEAM MBR		AO2	S			1	OVRHD/MGT			1		
ARM TEAM MBR		AO3	S			1	OVRHD/MGT			1		
						33				32	-1	
						253				237	-16	

Table 35. USN 30 PAA Notional Training Squadron Manning Document (Atlantic).

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
EXEC DEPT								
SQN CO		1302G	O				1	
SQN XO		1301H	O				1	
SQN DEPT HD		1312I	O				5	
FLIGHT SGN		2102J	S					2
COMMAND MASTER CHIEF		POCM	S		9580			1
CAREER COUNS		NCC	S					1
CAREER COUNS - ASST		NC1	S					1
ASDO		APO1	S					5
MSGR		AN	S					5
SECURITY WATCH		AN	S					10
								25
ADMIN DEPT								
ADMIN - ASST		1000J	S	J			1	
LEGAL OFF		1000K	S	K			1	
ADMIN CLERK		YNC	S					1
ADMIN CLERK		YN1	S					1
ADMIN CLERK		YN2	S					2
ADMIN CLERK		YN3	S					1
ADMIN CLERK		YNSN	S					2
								7
FIRST LT OFFICE								
HANGAR SUPVR		PO2	S					1
FAC SUPVR		PO3	S					1
BEQ MAA		PO2	S					3
BEQ MAA		PO2	S	9999				1
BEQ WATCH		AN	S					2
FAC MAINTMAN		AN	S					4

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**SOURCE**	**REQT**	**REQT**
								12
OPERATIONS DEPT								
LSO		1312J	O				2	
OPERATIONS OFFICE							**2**	
OPS CLERK SUPVR		AZ2	S					1
OPS CLERK		YNSN	S					2
ADP SYSTEMS SUPPORT		IT2	S	2780				1
								4
TRAINING DEPT								
TRAINING ASST		1312J	T				1	
ED TRA PLN GEN		1312J	T				1	
TRA PLN AVFLT		1312J	T				2	
TRA PLN AVGND		1312J	T				2	
GRND SCH INST		1312J	T				8	
FLGTINST PILOT		1312J	T				33	
TRAINING OFFICE							**47**	
TRA CLERK SUPVR		YN3	S					1
TRA CLERK		YNSN	S					3
ISD CLERK LIBRN		YNSN	S					1
INTEL LIBRN		IS2	S					1
								6
SAFETY DEPT								
AV MOD MGR		1312J	O				1	
NATOPS		1312J	O				1	
SAFETY PO		APO1	S					1
SAFETY CLERK		YNSN	S					1
								2
MAINTENANCE DEPT								
A/C OMNT GEN ASST		1520I	M	I			1	

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
MAINTENANCE/PRODUCTION CONTROL W/C 020							**1**	
A/C OMNT MTL		1520J	M	J			1	
MAINT/PROD CTL COORD		APOCM	S	8300				1
MAINT CTL COORD		APOCS	S					2
MAINT CTL COORD		APOC	S					5
FLIGHTLINE OPS COORD		APOC	S					1
MAINT CTL CLERK		AZC	S					1
MAINT CTL CLK/ECAMS OPER		AZ1	S	6301				1
MAINT CTL CLERK		AZ1	S					1
MAINT CTL CLK/ECAMS OPER		AZ2	S	6301				1
MAINT CTL CLERK		AZ2	S					1
MAINT CTL CLERK		AZ3	S					2
MAINT CTL CLERK		AZAN	S					1
MAINTENANCE ADMINISTRATION W/C 030								**17**
MAINT ADMIN CLERK		AZ2	S					1
MAINT ADMIN CLERK		AZAN	S					1
ADP SYSTEM SUPPORT		IT3	S	2735				1
QUALITY ASSURANCE/ANALYSIS W/C 040								**3**
A/C MNT QC		1312J	O				1	
QA SUPVR		APOCS	M					1
QA REP		AD1	M	83XX				2
QA REP		AE1	M	83XX				2
QA REP		AME1	M	83XX				1
QA REP		AMH1	M	83XX				2
QA REP		AMS1	M	83XX				2
QA REP		AT1	M	83XX				2
QA REP/ARM INSP		AO1	M	83XX				1
QA LIBRN		AZ2	M					1
QA LIBRN - ASST		AZAN	M					1

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
QA DATA ANALY		AZ2	M					1
MATERIAL SCRNG/PROCURMT/ACCTG W/C 05A/B								**16**
A/C OMNT MTL ASST		3100K	S				1	
MTL CTL SUPVR		AKC	S					1
MTL CTL CLERK		AK1	S					2
MTL CTL CLERK		AK2	S					2
MTL CTL CLERK		AK3	S					4
MTL CTL CLERK		AKAN	S					3
HAZMAT CTL & MGT SUPVR		APO1	S		9595			1
IMRL MANAGER/TOOL CTL CENTER W/C 05C/D								**13**
TOOL CTL/IMRL MGR		AK2	M		9590			1
AIRCRAFT DIVISION W/C 100								**1**
(G15) A/C OMNT A/C		1312J	O				1	
A/C DIV SUPVR		APOCS	M					1
POWER PLANTS BRANCH W/C 110								**1**
P/P MAINTMAN SUPVR		ADC	M	83XX				1
P/P MAINTMAN		AD1	M	83XX				3
P/P MAINTMAN		AD2	M	83XX				5
P/P MAINTMAN		AD3	M	88XX				7
P/P MAINTMAN		ADAN	M	88XX				10
STRUCTURES/HYDRAULIC SHOP W/C 12A/B								**26**
A/F MAINTMAN SUPVR		AMCS	M	83XX				1
A/F MAINTMAN		AMHC	M	83XX				1
A/F MAINTMAN		AMH1	M	83XX				2
A/F MAINTMAN		AMS1	M	83XX				2
A F MAINTMAN		AMH2	M	83XX				5
A/F MAINTMAN		AMS2	M	83XX				5

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
A F MAINTMAN		AMH3	M	88XX				6
A/F MAINTMAN		AMS3	M	88XX				6
A/F MAINTMAN		AMHAN	M	88XX				9
A/F MAINTMAN		AMSAN	M	88XX				9
CORROSION CONTROL SHOP W/C 12C								**46**
CORROS CTL SUPVR		AMSC	M	83XX				1
CORROS CTL TEAM MBR		AMS1	M	83XX				1
CORROS CTL TEAM MBR		AMS2	M	83XX				2
CORROS CTL TEAM MBR		AD3	M	88XX				1
CORROS CTL TEAM MBR		AE3	M	88XX				1
CORROS CTL TEAM MBR		AMS3	M	88XX				1
CORROS CTL TEAM MBR		AO3	M	88XX				1
CORROS CTL TEAM MBR		AMSAN	M	88XX				4
AIRCREW SURVIVAL EQUIP SHOP W/C 13A								**12**
AVTR EQUIP MAINTMAN		PR1	M					1
AVTR EQUIP MAINTMAN		PR2	M					1
AVTR EQUIP MAINTMAN		PR3	M					2
AVTR EQUIP MAINTMAN		PRAN	M					2
EGRESS/ENVIRONMENTAL SYS SHOP W/C 13B								**6**
SFTY EQUIP MAINTMAN SUPVR		AMEC	M	83XX				1
SFTY EQUIP MAINTMAN		AME1	M	83XX				2
SFTY EQUIP MAINTMAN		AME2	M	83XX				3
SFTY EQUIP MAINTMAN		AME3	M	88XX				5
SFTY EQUIP MAINTMAN		AMEAN	M	88XX				6
PERIODIC MAINTENANCE BRANCH W/C 140								**17**
PERIODIC MAINT CREW SUPVR		APO1	M					1

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**SOURCE**	**REQT**	**REQT**
AVIONICS/ARMAMENT DIVISION W/C 200								**1**
A/C OMNT AV/WP		1312J	O				1	
AV/WEPS DIV SUPVR		APOCS	M					1
ELECTRONICS BRANCH W/C 210								**1**
ELECT MAINTMAN SUPVR		ATC	M	83XX				1
ELECT MAINTMAN		AT1	M	83XX				2
ELECT MAINTMAN		AT2	M	83XX				5
ELECT MAINTMAN		AT3	M	88XX				6
ELECT MAINTMAN		ATAN	M	88XX				8
ELECTRICAL/INSTRUMENT BRANCH W/C 220								**22**
ELEC/INST MAINTMAN SUPVR		AEC	M	83XX				1
ELEC/INST MAINTMAN		AE1	M	83XX				2
ELEC/INST MAINTMAN		AE2	M	83XX				5
ELEC/INST MAINTMAN		AE3	M	88XX				6
ELEC/INST MAINTMAN		AEAN	M	88XX				9
ARMAMENT BRANCH W/C 230								**23**
ARM MAINTMAN SUPVR		AOC	M	83XX				1
ARM MAINTMAN		AO1	M	83XX				3
ARM MAINTMAN		AO2	M	83XX				9
ARM MAINTMAN		AO3	M	88XX				10
ARM MAINTMAN		AOAN	M	88XX				14
LINE DIVISION W/C 300								**37**
A/C OMNT LINE		1312J	O				1	
LINE DIV SUPVR		APOCS	M					1
PLANE CAPTAIN BRANCH W/C 310								**1**
PC SUPVR		APOC	M					1

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
PC SUPVR - ASST		APOC	M					1
PC SUPVR - ASST		APO1	M					2
PC SUPVR - ASST		APO2	M					2
PC		APO3	M					7
PC		AN	M					41
TROUBLESHOOTER BRANCH W/C 320								**54**
TROUBLESHOOTER		AD2	M	83XX				1
TROUBLESHOOTER		AE2	M	83XX				1
TROUBLESHOOTER		AMH2	M	83XX				1
TROUBLESHOOTER		AMS2	M	83XX				1
TROUBLESHOOTER		AT2	M	83XX				1
								5
SEA DUTY COMPONENT								
MARINE AUGMENTATION DIVISION								
MARINE AUGMENT SUPPORT		AD2	M	83XX				2
MARINE AUGMENT SUPPORT		PR2	M					2
MARINE AUGMENT SUPPORT		AE3	M	88XX				2
MARINE AUGMENT SUPPORT		ATAN	M	88XX				2
MARINE AUGMENT SUPPORT		AMEAN	M	88XX				2
MARINE AUGMENT SUPPORT		AMS1	M	83XX				2
MARINE AUGMENT SUPPORT		AEAN	M	88XX				4
MARINE AUGMENT SUPPORT		AMHAN	M	88XX				2
MARINE AUGMENT SUPPORT		AO3	M	88XX				2
MARINE AUGMENT SUPPORT		AOAN	M	88XX				2
MARINE AUGMENT SUPPORT		APO3	M	88XX				2
						TOTAL		**24**
NEUTRAL DUTY COMPONENT								
MAINTENANCE/PRODUCTION CONTROL W/C 020								
MAINT CTL COORD		APOCS	M					1

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
MAINT CTL COORD		APOC	M					3
MAINT CTL CLERK		AZ1	M					1
MAINT CTL CLK/ECAMS OPER		AZ2	M	6301				1
MAINT CTL CLERK		AZAN	M					2
QUALITY ASSURANCE/ANALYSIS W/C 040								**8**
QA REP		AD1	M	83XX				1
QA REP		AE1	M	83XX				1
QA REP		AME1	M	83XX				1
QA REP		AMH1	M	83XX				1
QA REP/ARM INSP		AO1	M	83XX				2
MATERIAL SCRNG/PROCURMT/ACCTG W/C 05A/B								**6**
MTL CTL CLERK		AK2	S					1
MTL CTL CLERK		AK3	S					1
POWER PLANTS BRANCH W/C 110								**2**
P/P MAINTMAN		AD1	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				3
P/P MAINTMAN		AD3	M	88XX				4
P/P MAINTMAN		ADAN	M	88XX				4
STRUCTURES/HYDRAULIC SHOP W/C 12A/B								**12**
A/F MAINTMAN		AMHC	M	83XX				1
A/F MAINTMAN		AMS1	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				2
A/F MAINTMAN		AMS2	M	83XX				3
A/F MAINTMAN		AMH3	M	88XX				2
A/F MAINTMAN		AMS3	M	88XX				2
A/F MAINTMAN		AMHAN	M	88XX				2

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
A/F MAINTMAN		AMSAN	M	88XX				2
AIRCREW SURVIVAL EQUIP SHOP W/C 13A								**15**
AVTR EQUIP MAINTMAN		PR2	M					2
AVTR EQUIP MAINTMAN		PR3	M					2
EGRESS/ENVIRONMENTAL SYS SHOP W/C 13B								**4**
SFTY EQUIP MAINTMAN		AME1	M	83XX				1
SFTY EQUIP MAINTMAN		AME2	M	83XX				2
SFTY EQUIP MAINTMAN		AME3	M	88XX				2
ELECTRONICS BRANCH W/C 210								**5**
ELECT MAINTMAN		AT1	M	83XX				1
ELECT MAINTMAN		AT2	M	83XX				2
ELECT MAINTMAN		AT3	M	88XX				2
ELECT MAINTMAN		ATAN	M	88XX				2
ELECTRICAL/INSTRUMENT BRANCH W/C 220								**7**
ELEC/INST MAINTMAN		AE1	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE3	M	88XX				2
ELEC/INST MAINTMAN		AEAN	M	88XX				3
ARMAMENT BRANCH W/C 230								**7**
ARM MAINTMAN		AO1	M	83XX				1
ARM MAINTMAN		AO2	M	83XX				1
ARM MAINTMAN		AO3	M	88XX				3
ARM MAINTMAN		AOAN	M	88XX				3
PLANE CAPTAIN BRANCH W/C 310								**8**

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
PC SUPVR		APOC	M					1
PC SUPVR - ASST		APO1	M					1
PC SUPVR - ASST		APO2	M					1
PC		APO3	M					3
PC		AN	M					28
						TOTAL ACTIVE		**435**
FRS DET NAR NORFOLK (RESERVE COMP)								
FLIGHT INSTRUCTOR BRANCH								
FLGTINST PILOT/ DET OIC		1312H	T			1		
FLGTINST PILOT/ DET AOIC		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
FLGTINST PILOT		1312I	T			1		
MAINT/PRODUCTION CTL W/C 020						**12**		
MAINT CTL CLERK		AZ1	M	6315				1
MAINT CTL CLERK		AZ2	M					1
MAINT CTL CLERK		AZ3	M					1
MATERIAL SCREENING/ PROCUREMENT W/C 050								**3**
MTL CTL CLERK		AK1	M					1
MTL CTL CLERK		AK2	M					1

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
POWER PLANTS BRANCH W/C 110								**2**
P/P MAINTMAN		AD1	M	83XX				1
P/P MAINTMAN		AD1	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD3	M	88XX				1
STRUCTURE/HYDRAULIC SHOP W/C 12A/B								**8**
A/F MAINTMAN SUPVR		AMHC	M	83XX				1
A/F MAINTMAN		AMS1	M	83XX				1
A/F MAINTMAN		AMS1	M	83XX				1
A/F MAINTMAN		AMS2	M	83XX				1
A/F MAINTMAN		AMS2	M	83XX				1
A/F MAINTMAN		AMS2	M	83XX				1
A/F MAINTMAN		AMS3	M	88XX				1
A/F MAINTMAN		AMS3	M	88XX				1
A/F MAINTMAN		AMS3	M	88XX				1
A/F MAINTMAN		AMS3	M	88XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH3	M	88XX				1
A/F MAINTMAN		AMHAN	M	88XX				1
AIRCREW SURVIVAL EQUIP SHOP W/C13A								**17**

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
AVTR EQUIP MAINTMAN		PR2	M					1
EGRESS/ENVIRONMENT SHOP W/C 13B								**1**
SAFETY EQUIP MAINTMAN		AME2	M	83XX				1
SAFETY EQUIP MAINTMAN		AME2	M	83XX				1
ELECTRONICS BRANCH W/C 210								**2**
ELECT MAINTMAN		AT1	M	83XX				1
ELECT MAINTMAN		AT1	M	83XX				1
ELECT MAINTMAN		AT2	M	83XX				1
ELECT MAINTMAN		AT2	M	83XX				1
ELEC/INSTRUMENT BRANCH W/C 220								**4**
ELEC/INST MAINTMAN		AE1	M	83XX				1
ELEC/INST MAINTMAN		AE1	M	83XX				1
ELEC/INST MAINTMAN		AE1	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE3	M	88XX				1
ELEC/INST MAINTMAN		AE3	M	88XX				1
ELEC/INST MAINTMAN		AEAN	M	88XX				1
ELEC/INST MAINTMAN		AEAN	M	88XX				1
ELEC/INST MAINTMAN		AEAN	M	88XX				1
ARMAMENT BRANCH W/C 230								**14**
ARM MAINTMAN SUPVR		AOC	M	83XX				1

NAVY JSF 30 A/C FRS (LANT)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
ARM MAINTMAN		AO2	M	83XX				1
ARM MAINTMAN		AO2	M	83XX				1
ARM MAINTMAN		AOAN	M	88XX				1
PLANE CAPTAIN BRANCH W/C 310								**4**
PC		AN	M					1
PC		AN	M					1
PC		AN	M					1
PC		AN	M					1
PC		AN	M					1
								5
						TOTAL RESERVE		**72**
						OVERALL TOTAL		**507**

Table 36. USN 30 PAA Notional Training Squadron Manning Document (Pacific).

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
EXEC DEPT								
SQN CO		1302G	O				1	
SQN XO		1301H	O				1	
SQN DEPT HD		1312I	O				5	
FLIGHT SGN		2102J	S				2	
COMMAND MASTER CHIEF		POCM	S		9580			1
CAREER COUNS		NCC	S					1
CAREER COUNS - ASST		NC1	S					1
ASDO		APO1	S					5
MSGR		AN	S					5
SECURITY WATCH		AN	S					10
							9	**23**
ADMIN DEPT								
ADMIN - ASST		1000J	S	J			1	
LEGAL OFF		1000K	S	K			1	
ADMIN CLERK		YNC	S					1
ADMIN CLERK		YN1	S					1
ADMIN CLERK		YN2	S					2
ADMIN CLERK		YN3	S					1
ADMIN CLERK		YNSN	S					2
							2	**7**
FIRST LT OFFICE								
HANGAR SUPVR		PO2	S					1
FAC SUPVR		PO3	S					1
BEQ MAA		PO2	S					3
BEQ MAA		PO2	S	9999				1
BEQ WATCH		AN	S					2
FAC MAINTMAN		AN	S					4

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**SOURCE**	**REQT**	**REQT**
								12
OPERATIONS DEPT								
LSO		1312J	O				2	
OPERATIONS OFFICE							2	
OPS CLERK SUPVR		AZ2	S					1
OPS CLERK		YNSN	S					2
ADP SYSTEMS SUPPORT		IT2	S	2780				1
								4
TRAINING DEPT								
TRAINING ASST		1312J	T				1	
ED TRA PLN GEN		1312J	T				1	
TRA PLN AVFLT		1312J	T				2	
TRA PLN AVGND		1312J	T				2	
GRND SCH INST		1312J	T				8	
FLGTINST PILOT		1312J	T				33	
TRAINING OFFICE							**47**	
TRA CLERK SUPVR		YN3	S					1
TRA CLERK		YNSN	S					3
ISD CLERK LIBRN		YNSN	S					1
INTEL LIBRN		IS2	S					1
								6
SAFETY DEPT								
AV MOD MGR		1312J	O				1	
NATOPS		1312J	O				1	
SAFETY PO		APO1	S					1
SAFETY CLERK		YNSN	S					1
							2	**2**
MAINTENANCE DEPT								
A/C OMNT GEN ASST		1520I	M	I			1	
MAINTENANCE/PRODUCTION CONTROL W/C 020							**1**	

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
A/C OMNT MTL		1520J	M	J			1	
MAINT/PROD CTL COORD		APOCM	S	8300				1
MAINT CTL COORD		APOCS	S					2
MAINT CTL COORD		APOC	S					5
FLIGHTLINE OPS COORD		APOC	S					1
MAINT CTL CLERK		AZC	S					1
MAINT CTL CLK/ECAMS OPER		AZ1	S	6301				1
MAINT CTL CLERK		AZ1	S					1
MAINT CTL CLK/ECAMS OPER		AZ2	S	6301				1
MAINT CTL CLERK		AZ2	S					1
MAINT CTL CLERK		AZ3	S					2
MAINT CTL CLERK		AZAN	S					1
MAINTENANCE ADMINISTRATION W/C 030								**17**
MAINT ADMIN CLERK		AZ2	S					1
MAINT ADMIN CLERK		AZAN	S					1
ADP SYSTEM SUPPORT		IT3	S	2735				1
QUALITY ASSURANCE/ANALYSIS W/C 040								**3**
A/C MNT QC		1312J	O					1
QA SUPVR		APOCS	M					1
QA REP		AD1	M	83XX				2
QA REP		AE1	M	83XX				2
QA REP		AME1	M	83XX				1
QA REP		AMH1	M	83XX				2
QA REP		AMS1	M	83XX				2
QA REP		AT1	M	83XX				2
QA REP/ARM INSP		AO1	M	83XX				1
QA LIBRN		AZ2	M					1
QA LIBRN - ASST		AZAN	M					1

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
QA DATA ANALY		AZ2	M					1
MATERIAL SCRNG/PROCURMT/ACCTG W/C 05A/B								**17**
A/C OMNT MTL ASST		3100K	S					1
MTL CTL SUPVR		AKC	S					1
MTL CTL CLERK		AK1	S					2
MTL CTL CLERK		AK2	S					2
MTL CTL CLERK		AK3	S					4
MTL CTL CLERK		AKAN	S					3
HAZMAT CTL & MGT SUPVR		APO1	S		9595			1
IMRL MANAGER/TOOL CTL CENTER W/C 05C/D								**14**
TOOL CTL/IMRL MGR		AK2	M		9590			1
AIRCRAFT DIVISION W/C 100								**1**
(G15) A/C OMNT A/C		1312J	M					1
A/C DIV SUPVR		APOCS	M					1
POWER PLANTS BRANCH W/C 110								**2**
P/P MAINTMAN SUPVR		ADC	M	83XX				1
P/P MAINTMAN		AD1	M	83XX				3
P/P MAINTMAN		AD2	M	83XX				5
P/P MAINTMAN		AD3	M	88XX				7
P/P MAINTMAN		ADAN	M	88XX				10
STRUCTURES/HYDRAULIC SHOP W/C 12A/B								**26**
A/F MAINTMAN SUPVR		AMCS	M	83XX				1
A/F MAINTMAN		AMHC	M	83XX				1
A/F MAINTMAN		AMH1	M	83XX				2
A/F MAINTMAN		AMS1	M	83XX				2

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**SOURCE**	**REQT**	**REQT**
A F MAINTMAN		AMH2	M	83XX				5
A/F MAINTMAN		AMS2	M	83XX				5
A F MAINTMAN		AMH3	M	88XX				6
A/F MAINTMAN		AMS3	M	88XX				6
A/F MAINTMAN		AMHAN	M	88XX				9
A/F MAINTMAN		AMSAN	M	88XX				9
CORROSION CONTROL SHOP W/C 12C								**46**
CORROS CTL SUPVR		AMSC	M	83XX				1
CORROS CTL TEAM MBR		AMS1	M	83XX				1
CORROS CTL TEAM MBR		AMS2	M	83XX				2
CORROS CTL TEAM MBR		AD3	M	88XX				1
CORROS CTL TEAM MBR		AE3	M	88XX				1
CORROS CTL TEAM MBR		AMS3	M	88XX				1
CORROS CTL TEAM MBR		AO3	M	88XX				1
CORROS CTL TEAM MBR		AMSAN	M	88XX				4
AIRCREW SURVIVAL EQUIP SHOP W/C 13A								**12**
AVTR EQUIP MAINTMAN		PR1	M					1
AVTR EQUIP MAINTMAN		PR2	M					1
AVTR EQUIP MAINTMAN		PR3	M					2
AVTR EQUIP MAINTMAN		PRAN	M					2
EGRESS/ENVIRONMENTAL SYS SHOP W/C 13B								**6**
SFTY EQUIP MAINTMAN SUPVR		AMEC	M	83XX				1
SFTY EQUIP MAINTMAN		AME1	M	83XX				2
SFTY EQUIP MAINTMAN		AME2	M	83XX				3
SFTY EQUIP MAINTMAN		AME3	M	88XX				5
SFTY EQUIP MAINTMAN		AMEAN	M	88XX				6

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
PERIODIC MAINTENANCE BRANCH W/C 140								**17**
PERIODIC MAINT CREW SUPVR		**APO1**	**M**					**1**
AVIONICS/ARMAMENT DIVISION W/C 200								**1**
A/C OMNT AV/WP		1312J	O					1
AV/WEPS DIV SUPVR		APOCS	M					1
ELECTRONICS BRANCH W/C 210								**2**
ELECT MAINTMAN SUPVR		ATC	M	83XX				1
ELECT MAINTMAN		AT1	M	83XX				2
ELECT MAINTMAN		AT2	M	83XX				5
ELECT MAINTMAN		AT3	M	88XX				6
ELECT MAINTMAN		ATAN	M	88XX				8
ELECTRICAL/INSTRUMENT BRANCH W/C 220								**22**
ELEC/INST MAINTMAN SUPVR		AEC	M	83XX				1
ELEC/INST MAINTMAN		AE1	M	83XX				2
ELEC/INST MAINTMAN		AE2	M	83XX				5
ELEC/INST MAINTMAN		AE3	M	88XX				6
ELEC/INST MAINTMAN		AEAN	M	88XX				9
ARMAMENT BRANCH W/C 230								**23**
ARM MAINTMAN SUPVR		AOC	M	83XX				1
ARM MAINTMAN		AO1	M	83XX				3
ARM MAINTMAN		AO2	M	83XX				9
ARM MAINTMAN		AO3	M	88XX				10
ARM MAINTMAN		AOAN	M	88XX				14
LINE DIVISION W/C 300								**37**

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**SOURCE**	**REQT**	**REQT**
A/C OMNT LINE		1312J	O					1
LINE DIV SUPVR		APOCS	M					1
PLANE CAPTAIN BRANCH W/C 310								**2**
PC SUPVR		APOC	M					1
PC SUPVR - ASST		APOC	M					1
PC SUPVR - ASST		APO1	M					2
PC SUPVR - ASST		APO2	M					2
PC		APO3	M					7
PC		AN	M					41
TROUBLESHOOTER BRANCH W/C 320								**54**
TROUBLESHOOTER		AD2	M	83XX				1
TROUBLESHOOTER		AE2	M	83XX				1
TROUBLESHOOTER		AMH2	M	83XX				1
TROUBLESHOOTER		AMS2	M	83XX				1
TROUBLESHOOTER		AT2	M	83XX				1
SEA DUTY COMPONENT								
MARINE AUGMENTATION DIVISION								
MARINE AUGMENT SUPPORT		AD1	M	83XX				2
MARINE AUGMENT SUPPORT		AD2	M	83XX				2
MARINE AUGMENT SUPPORT		AD3	M	88XX				2
MARINE AUGMENT SUPPORT		ADAN	M	88XX				4
MARINE AUGMENT SUPPORT		AMS1	M	83XX				2
MARINE AUGMENT SUPPORT		AMH2	M	83XX				2
MARINE AUGMENT SUPPORT		AMS3	M	88XX				2
MARINE AUGMENT SUPPORT		AMHAN	M	88XX				2
MARINE AUGMENT SUPPORT		AO2	M	83XX				2
MARINE AUGMENT SUPPORT		AOAN	M	88XX				2

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**SOURCE**	**REQT**	**REQT**
MARINE AUGMENT SUPPORT		APO2	M					2
							TOTAL	24
FRS DET LEMOORE (RESERVE COMP)								
FLIGHT INSTRUCTOR BRANCH								
FLGTINST PILOT/ DET OIC		1312H	T					1
FLGTINST PILOT/ DET AOIC		1312I	T					1
YEOMAN		YN2	S					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
FLGTINST PILOT		1312I	T					1
MAINT/PRODUCTION CTLW/C 020								**13**
MAINT CTL CLERK		AZ1	M	6315				1
MAINT CTL CLERK		AZ2	M					1
MAINT CTL CLERK		AZ3	M					1
MATERIAL SCREENING/ PROCUREMENT W/C 050								**3**
MTL CTL CLERK		AK1	S					1
MTL CTL CLERK		AK2	S					1
POWER PLANTS BRANCH W/C 110								**2**
P/P MAINTMAN		AD1	M	83XX				1
P/P MAINTMAN		AD1	M	83XX				1

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**SOURCE**	**REQT**	**REQT**
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD2	M	83XX				1
P/P MAINTMAN		AD3	M	88XX				1
STRUCTURES/HYDRAULICSHOP W/C 12A/B								**8**
A/F MAINTMAN SUPVR		AMHC	M	83XX				1
A/F MAINTMAN		AMS1	M	83XX				1
A/F MAINTMAN		AMS1	M	83XX				1
A/F MAINTMAN		AMS2	M	83XX				1
A/F MAINTMAN		AMS2	M	83XX				1
A/F MAINTMAN		AMS2	M	83XX				1
A/F MAINTMAN		AMS3	M	88XX				1
A/F MAINTMAN		AMS3	M	88XX				1
A/F MAINTMAN		AMS3	M	88XX				1
A/F MAINTMAN		AMS3	M	88XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH2	M	83XX				1
A/F MAINTMAN		AMH3	M	88XX				1
A/F MAINTMAN		AMHAN	M	88XX				1
AIRCREW SURVIVAL EQUIP SHOP W/C 13A								**17**
AVTR EQUIP MAINTMAN		PR2	M					1
EGRESS/ENVIRONMENTALSYS SHOP W/C 13B								**1**

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	PNOBC	RATE	MER CAT	PNEC	SNEC	SOURCE	REQT	REQT
SAFETY EQUIP MAINTMAN		AME2	M	83XX				1
SAFETY EQUIP MAINTMAN		AME2	M	83XX				1
SAFETY EQUIP MAINTMAN		AME2	M	83XX				1
SAFETY EQUIP MAINTMAN		AME3	M	88XX				1
ELECTRONICS BRANCH W/C 210								**4**
ELECT MAINTMAN		AT1	M	83XX				1
ELECT MAINTMAN		AT1	M	83XX				1
ELECT MAINTMAN		AT2	M	83XX				1
ELECT MAINTMAN		AT2	M	83XX				1
ELEC/INSTRUMENT BRANCH W/C 220								**4**
ELEC/INST MAINTMAN		AE1	M	83XX				1
ELEC/INST MAINTMAN		AE1	M	83XX				1
ELEC/INST MAINTMAN		AE1	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE2	M	83XX				1
ELEC/INST MAINTMAN		AE3	M	88XX				1
ELEC/INST MAINTMAN		AE3	M	88XX				1
ELEC/INST MAINTMAN		AEAN	M	88XX				1
ELEC/INST MAINTMAN		AEAN	M	88XX				1
ELEC/INST MAINTMAN		AEAN	M	88XX				1
ARMAMENT BRANCH W/C 230								**14**
ARM MAINTMAN SUPVR		AOC	M	83XX				1
ARM MAINTMAN		AO1	M	83XX				1

NAVY JSF 30 A/C FRS (PAC)								
							MER	MER
		GRADE/				REQT	SQDN	SQDN
TITLE	**PNOBC**	**RATE**	**MER CAT**	**PNEC**	**SNEC**	**SOURCE**	**REQT**	**REQT**
ARM MAINTMAN		AO2	M	83XX				1
ARM MAINTMAN		AO2	M	83XX				1
ARM MAINTMAN		AO3	M	88XX				1
ARM MAINTMAN		AOAN	M	88XX				1
ARM MAINTMAN		AOAN	M	88XX				1
PLANE CAPTAIN BRANCHW/C 310								**7**
PC		AN	M					1
PC		AN	M					1
PC		AN	M					1
PC		AN	M					1
PC		AN	M					1
								5
						TOTAL RESERVE		**78**
						OVERALL TOTAL		410

APPENDIX B. STUDENT THROUGHPUTS.

B.1 JSF STUDENT THROUGHPUT.

A pictorial representation of the student training throughput associated with JSF manpower is illustrated in Figure 11. Early projections of total JSF and cumulative total student throughputs as the JSF phases in are noted in Table 23.

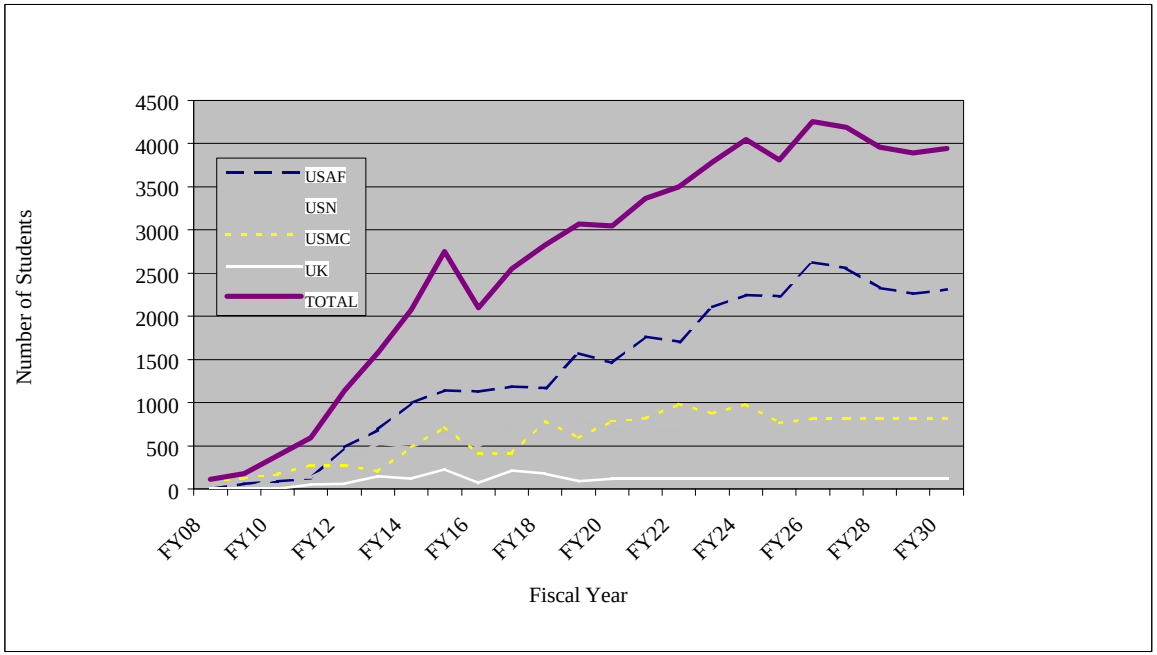

Figure 11. JSF Total Student Throughput.

B.1.1 PILOT TRAINING REQUIREMENTS.

Government estimated annual total throughputs for JSF pilot training and instructor requirements for each Service through the year 2030 were calculated and included in Table 23. The numbers were derived by multiplying the total student pilots per year by sorties per student plus aggressor/chase plane sortie hours divided by number of flying days per year. Table 24 contains the Average Daily Student Load (ADSL) for USAF student pilots and Average On Board (AOB) for USN, USMC, and UK student pilots. ADSL is derived using the Course length (instructional days) multiplied by number of programmed students divided by number of training days (246 days) for the year. AOB equals the sum of the planned annual input multiplied by course length in calendar days (inclusive of weekends and holidays) divided by 365.

Table 37. Student Pilot Throughputs.

FISCAL YEAR	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
USMC																							
Squadron Stand-ups			19	38	19	62	31	38	50	50	19	87	19	57	38	38							
Instructor Pilots (FRS # 1 & 2)	17	16	16		25	12	12																
Replacements (33%)				16	22	35	41	41	74	87	93	99	50	63	69	88	100	113	113	113	113	113	113
Total Training Requirement	**17**	**16**	**35**	**54**	**66**	**109**	**85**	**79**	**124**	**137**	**112**	**186**	**69**	**120**	**107**	**126**	**100**	**113**	**113**	**113**	**113**	**113**	**113**
USAF																							
Squadron Stand-ups				34		34	136	60	130	102	94	52	130	130	105	105	126	105	110	110	42		
Instructor Pilots (FTUs 1-10)		4	22	8	34	68	34	68			34	42											
Replacements (33%)				4	11	22	23	45	123	154	197	231	240	248	269	305	328	363	391	425	462	498	512
Total Training Requirement		**4**	**22**	**46**	**45**	**124**	**193**	**173**	**253**	**256**	**325**	**325**	**370**	**378**	**374**	**410**	**454**	**468**	**501**	**535**	**504**	**498**	**512**
USN																							
Squadron Stand-ups					19	57	38	57	38	76	57	57	19										
Instructor Pilots (FRS # 1 & 2)			11	23	28	10	35	17															
Replacements (33%)					20	20	27	66	79	77	89	115	113	132	138	138	138	138	138	138	138	138	138
Total Training Requirement			**11**	**23**	**67**	**87**	**100**	**140**	**117**	**153**	**146**	**172**	**132**	**132**	**138**	**138**	**138**	**138**	**138**	**138**	**138**	**138**	**138**
UK																							
Squadron Stand-ups					9	9		18		18	18												
Instructor Pilots (for Training Sqdn)				6		6	6	6															
Replacements (30%)							9	5	5	11	11	16	22	22	22	22	22	22	22	22	22	22	22
Total Training Requirement				**6**	**9**	**15**	**15**	**29**	**5**	**29**	**29**	**16**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**
Total Service Training Requirement		**20**	**68**	**129**	**188**	**336**	**392**	**421**	**499**	**575**	**612**	**699**	**592**	**651**	**640**	**695**	**714**	**740**	**773**	**808**	**776**	**770**	**784**

Table 38. Student Pilot ADSL/AOB

Service ADSL/AOB	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
USAF		2	12	24	24	66	102	91	134	136	172	172	195	200	197	217	240	247	265	283	266	263	270
USN			5	11	34	44	50	70	58	76	73	86	66	66	69	69	69	69	69	69	69	69	69
USMC	8	8	18	27	33	54	42	40	62	68	56	93	34	60	53	63	50	56	56	56	56	56	56
UK				3	4	7	7	15	3	14	14	8	11	11	11	11	11	11	11	11	11	11	11
TOTAL	**8**	**10**	**34**	**66**	**95**	**171**	**201**	**215**	**257**	**294**	**315**	**358**	**306**	**336**	**330**	**359**	**370**	**383**	**400**	**419**	**402**	**399**	**406**

B.1.2 MAINTAINER TRAINING THROUGHPUT REQUIREMENTS.

Training throughput requirements for JSF maintainer training are based on the number of aircraft being delivered in the next year for each Service. Table 26 identifies the maintainer training throughput requirements for each Service Table 27 contains the ADSL for USAF maintainers and AOB for USN, USMC, and UK maintainers. ADSL is derived using the Course length (instructional days) multiplied by number of programmed students divided by number of training days (246 days) for the year. AOB equals the sum of the planned annual input multiplied by course length in calendar days (inclusive of weekends and holidays) divided by 365. Upon completion of technical training, USAF Crew Chiefs will attend a three week OJT course at the operational training base. This training is referred to as Crew Chief “Hot Training”. Table 28 contains the annual Crew Chief "Hot Training" Throughput Requirement and ADSL for this training.

Table 39. Maintainer Student Throughputs.

Fiscal Year	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
USAF Annual Throughput Requirement	72	168	240	360	528	864	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	444	0	0	0
Cum Total		240	480	840	1,368	2,232	3,552	4,872	6,192	7,512	8,832	10,152	11,472	12,792	14,112	15,432	16,752	18,072	19,392	20,712	21,156	21,156	21,156	21,156
Replenishment			50	101	176	287	469	746	1,023	1,300	1,578	1,855	2,132	2,409	2,686	2,964	3,241	3,518	3,795	4,072	4,350	4,443	4,443	4,443
Total USAF Throughput	**72**	**168**	**290**	**461**	**704**	**1,151**	**1,789**	**2,066**	**2,343**	**2,620**	**2,898**	**3,175**	**3,452**	**3,729**	**4,006**	**4,284**	**4,561**	**4,838**	**5,115**	**5,392**	**4,794**	**4,443**	**4,443**	**4,443**
USN Annual Throughput Requirement	0	0	108	240	384	576	576	576	576	576	576	576	576	420	0	0	0	0	0	0	0	0	0	0
Cum Total		0	108	348	732	1,308	1,884	2,460	3,036	3,612	4,188	4,764	5,340	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760
Replenishment					94	198	353	509	664	820	975	1,131	1,286	1,442	1,555	1,555	1,555	1,555	1,555	1,555	1,555	1,555	1,555	1,555
Total USN	**0**	**0**	**108**	**240**	**478**	**774**	**929**	**1,085**	**1,240**	**1,396**	**1,551**	**1,707**	**1,862**	**1,862**	**1,555**	**1,555**	**1,555**	**1,555**	**1,555**	**1,555**	**1,555**	**1,555**	**1,555**	**1,555**

Fiscal Year	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Throughput																								
USMC Annual Throughput Requirement	84	192	384	384	384	432	432	432	432	432	432	432	432	432	432	432	432	396	300	0	0	0	0	0
Cum Total		276	660	1,044	1,428	1,860	2,292	2,724	3,156	3,588	4,020	4,452	4,884	5,316	5,748	6,180	6,612	7,008	7,308	7,308	7,308	7,308	7,308	7,308
Replenishment				132	209	286	372	458	545	631	718	804	890	977	1,063	1,150	1,236	1,322	1,402	1,462	1,462	1,462	1,462	1,462
Total USMC Throughput	**84**	**192**	**384**	**516**	**593**	**718**	**804**	**890**	**977**	**1,063**	**1,150**	**1,236**	**1,322**	**1,409**	**1,495**	**1,582**	**1,668**	**1,718**	**1,702**	**1,462**	**1,462**	**1,462**	**1,462**	**1,462**
UK Annual Throughput Requirement		24	72	96	120	144	144	144	48	96	144	144	144	144	144	144	48	0	0	0	0	0	0	0
Cum Total		24	96	192	312	456	600	744	792	888	1,032	1,176	1,320	1,464	1,608	1,752	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Replenishment				18	36	59	87	114	141	150	169	196	223	251	278	306	333	342	342	342	342	342	342	342
Total UK Throughput		**24**	**72**	**114**	**156**	**203**	**231**	**258**	**189**	**246**	**313**	**340**	**367**	**395**	**422**	**450**	**381**	**342**	**342**	**342**	**342**	**342**	**342**	**342**

Table 40. Maintainer Student ADSL/AOB

Service ADSL/AOB	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
USAF	35	82	142	225	344	562	873	1008	1143	1278	1413	1549	1684	1819	1954	2090	2225	2360	2495	2630	2338	2167	2167	2167
USN	0	0	12	27	54	87	104	122	139	157	174	192	209	209	175	175	175	175	175	175	175	175	175	175
USMC	9	22	43	58	67	81	90	100	110	119	129	139	149	158	168	178	187	193	191	164	164	164	164	164
UK		2	5	7	7	9	10	11	12	13	15	16	17	18	19	20	21	22	21	18	18	18	18	18
TOTAL	45	106	202	316	471	738	1077	1241	1404	1568	1731	1895	2058	2204	2316	2462	2608	2749	2882	2988	2696	2525	2525	2525

Table 41. USAF Crew Chief "Hot Training" Student Throughput and ADSL

	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
USAF Annual Crew Chief "Hot Training" Throughput Requirement	21	50	71	107	156	256	391	391	391	391	391	391	391	391	391	391	391	391	391	391	131	0	0	0
Cum Total		71	142	249	405	661	1,052	1,443	1,834	2,225	2,615	3,006	3,397	3,788	4,179	4,570	4,961	5,352	5,743	6,134	6,265	6,265	6,265	6,265
Replenishment			15	30	52	85	139	221	303	385	467	549	631	713	796	878	960	1,042	1,124	1,206	1,288	1,316	1,316	1,316
Total Throughput	21	50	86	136	209	341	530	612	694	776	858	940	1,022	1,104	1,186	1,269	1,351	1,433	1,515	1,597	1,420	1,316	1,316	1,316
ADSL	10	24	42	67	102	166	258	298	338	379	419	459	499	539	579	619	659	699	739	779	692	642	642	642

APPENDIX C. LIST OF ACRONYMS.

LIST OF ACRONYMS

AAW	Anti-Aircraft Warfare
ACC	Air Combat Command
ACE	Aviation Combat Element
AETC	Air Education and Training
AD	Aviation Machinist's Mate
AE	Aviation Electrician's Mate
AFJQS	Air Force Job Qualification Standard
AFOTEC	Air Force Operational Test & Evaluation Center
AFRL	Air Force Research Laboratory
AFSC	Air Force Specialty Code
AI	Attack Operations/Air Interdiction
AL	Autonomic Logistics
ALC	Air Logistics Center
ALPD	Autonomic Logistics Planning Document
AM	Aviation Structural Mechanic
AME	Aviation Structural Mechanic (Safety Equipment)
AMIST	Aviation Maintenance In-Service Training
AMQP	Aircraft Maintenance Qualification Program
AMTCS	Aviation Maintenance Training Continuum System
AN	Airman
AO	Aviation Ordnanceman
AOB	Average On Board
AR	Armed Reconnaissance
ARG	Amphibious Ready Group
ASC	Aeronautics Systems Command
ASD	Average Sortie Duration
A_I	Inherent Availability
ASUW	Anti-Surface Warfare
AT	Aviation Electronics Technician
BAI	Back-up Aircraft Inventory
BFM	Basic Fighter Maneuvers
C4ISR	Command Control Communications Computers Intelligence Surveillance and Reconnaissance
CAS	Close Air Support
CI	Configuration Item
CINC	Commander-In-Chief

LIST OF ACRONYMS

CMC	Commandant of the Marine Corps
CNATRA	Chief of Naval Air Training
CNET	Chief of Naval Education and Training
CNO	Chief of Naval Operations
COD	Carrier On-board Delivery
COE	Concept of Employment
COMNAVAIRLANT	Commander, Naval Air Forces Atlantic Commander, Naval Air Forces Atlantic
COMNAVAIRPAC	Commander, Naval Air Forces Atlantic Commander, Naval Air Forces Pacific
COMOPTEVFOR	Commander, Operational Test & Evaluation Force
CSAR	Combat Search and Rescue
CTOL	Conventional Take Off and Landing
CV	Fixed Wing Carrier
CVF	Future UK Carrier
CVN	Aircraft Carrier Nuclear
CVNX	Aircraft Carrier, Nuclear, Experimental
CVSG	UK Legacy Aircraft Carrier
CVW	Carrier Air Wing
D-Level	Depot Level
DCA	Defensive Counter Air
DMMH	Direct Maintenance Man-hours
DMSpA	Direct Maintenance Manpower Spaces per Aircraft
DT	Development Test
DT&E	Developmental Test and Evaluation
EA	Electronic Attack
EAF	Expeditionary Air Force
EMD	Engineering and Manufacturing Development
EP	Electronic Protection
ES	Electronic Warfare Support
ESH	Environmental, Safety and Health
FAC (A)	Forward Air Controller (Airborne)
FD	Fault Detection
FRS	Fleet Readiness Squadron
FTD	Field Training Detachment
FTU	Formal Training Unit
FY	Fiscal Year
GPS	Global Positioning System

LIST OF ACRONYMS

GR&A	Ground Rules & Assumptions
HQ	Headquarters
ICT	Integrated Combat Turns
I-Level	Intermediate Level
IOC	Initial Operational Capability
IOT&E	Initial Operational Test and Evaluation
IPT	Integrated Product Team
ISD	Instructional Systems Development
ITF	Integrated Test Force
JDIS	Joint Distributed Information System
JIRD	Joint Initial Requirements Document
JITT	Just In Time Training
JMS	Joint Model Specification
JSF	Joint Strike Fighter
JSFPO	JSF Program Office
LCC	Life-Cycle Cost
LCOM	Logistics Composite Model
LDT	Logistics Delay Time
LO	Low Observable
LRC	Line Replaceable Component
LRIP	Low Rate Initial Production
MAGTF	Marine Air-Ground Task Force
MALS	Marine Aviation Logistics Squadron
MALSP	Marine Aviation Logistics Support Program
MATMEP	Marine Aviation Training Management and Evaluation Program
MCCDC	Marine Corps Combat Development Command
MCO	Marine Corps Order
MER	Manpower Estimate Report
MFHBFA	Mean Flight Hours Between False Alarm
$MFHBF_{DC}$	Mean Flight Hours Between Failures $_{\text{Design Controllable}}$
MFHBOMF	Mean Flight Hour Between Operational Mission Failure
MMH/FH_{Sch}	Maintenance Man Hours per Flight Hour $_{\text{Scheduled}}$
MMH/FH_{Unsch}	Maintenance Man Hours per Flight Hour $_{\text{Unscheduled}}$
MOB	Main Operating Bases
MOS	Military Occupational Specialty
MOT&E	Multi-Service Operational Test and Evaluation
MPT	Manpower Personnel and Training
MTBF	Mean Time Between Failure

LIST OF ACRONYMS

MTTR	Mean Time to Repair
MTW	Maintenance Training Wing
MWSS	Marine Wing Support Squadron
NAMTRAGRU	Naval Air Maintenance Training Group
NAWCTSD	Naval Air Warfare Center Training Systems Division
NAWC WPNS	Naval Air Warfare Center Weapons Division
NDI	Non-Destructive Inspection
OBIGS	On Board Inert Gas Generating System
OBOGS	On-Board Oxygen Generating System
OCA	Offensive Counter Air
OESC	Operational Employment and Support Concept
OJT	On the Job Training
O-Level	Organizational Level
OMF	Operational Mission Failure
OMFTS	Operational Maneuver From the Sea
OPNAV	Office of the Chief of Naval Operations
ORD	Operational Requirements Document
PAA	Primary Aircraft Assigned
PAI	Primary Aircraft Inventory
PFI	Power Fail Interrupt
PHM	Prognostics and Health Management
POL	Petroleum, Oil And Lubricants
QA	Quality Assurance
R&M	Reliability and Maintainability
RAF	Royal Air Force (United Kingdom)
RECCE	Aerial Reconnaissance
RFT	Ready For Training
RN	Royal Navy (United Kingdom)
SA	Strategic Attack
SAM	Surface-to-Air Missile
SCAR	Strike Coordination and Reconnaissance
SE	Support Equipment
SEAD	Suppression of Enemy Air Defenses
SGR	Sortie Generation Rate
STOVL	Short Take Off Vertical Landing
STP	System Training Plan
STS	Specialty Training Standard
STW	Strike Warfare

LIST OF ACRONYMS

SUW	Surface Warfare
TAC (A)	Tactical Air Controller (Airborne)
TACAIR	Tactical Aircraft
TAI	Total Aircraft Inventory
TBD	To Be Determined
TEMP	Test and Evaluation Master Plan
TMS	Training Management System
TRAP	Tactical Recovery of Aircraft and Personnel
TYCOM	Type Commander
UK	United Kingdom
USAF	United States Air Force
USMC	United States Marine Corps
USN	United States Navy
UTC	Unit Type Code
VFA	Fighter/Attack Squadron
VHF	Very High Frequency
VMA	Marine Attack Squadron
VMAT	Marine Attack Training Squadron
VMFA	Marine Fighter Attack Squadron
VMFAT	Marine Fighter Attack Training Squadron
VOD	Vertical On-board Delivery

APPENDIX D. JSF PROGRAM DEFINITIONS.

These definitions apply in this and other JSF documents and are not to be confused with other definitions of these terms that may be in use by the Services.

TERM	DEFINITION
Air System	The JSF Air System consists of the Air Vehicles and all associated equipment, related facilities, materials, software, services, personnel, training, manufacturing, disposal, deployment, and support required to ensure that the Air System would accomplish its intended operational role as a self-sufficient unit, or as an integrated part of a multi-system and multi-service operation. The JSF Air System consists of the two inter-related elements: Air Vehicle and AL that operate within the context of its external interfaces and environments.
Air Vehicle	Includes the aircraft and the on-board hardware/software necessary to perform assigned missions, autonomous operation and communication with off-board systems.
Average Daily Student Load (ADSL)	ADSL is derived using the Course length (instructional days) multiplied by number of programmed students divided by number of training days (246 days) for the year.
Average On Board (AOB)	AOB equals the sum of the planned annual input and the predicted annual graduates (output, derived by applying the a backout factor) divided by two with the quotient multiplied by course length in calendar days (inclusive of weekends and holidays) divided by 365. $AOB = \frac{Input + Output}{2} \times \frac{course\ length\ (calendar\ days)}{356}$
Autonomic Logistics System	An integrated, knowledge-based system that encompasses JSF maintenance planning, manpower and personnel, supply support, support equipment, training, technical data, computer resource support, facilities, packaging, handling storage and transportation, PHM, and design interface while coordinating with mission planning, engineering, safety, command and control functions, within a responsive logistics infrastructure to support mission execution.
Autonomous	The JSF Air Vehicle utilization of on-board systems only, except for the reception of Global Positioning System (GPS) information and of ownership relevant broadcast information.
Backout factor	A **backout factor** is applied to shift a percentage of input from one year back to the previous year to ensure the required output is available in the original year. It is applied only to courses in excess of two weeks in length and convened on a continuous basis (back to back). The backout factor is equal to two-hundredths the course length in weeks and is expressed as a percentage (20 week course x .02 = .4 backout factor).
Cadre/Type 1 Training	Air System operations and maintenance training provided prior to establishment of formal training.
Configuration Item (CI)	An aggregation of hardware and/or software or any portion thereof that satisfies a function and is designated for configuration control.
Constructive Environment	A non-real time simulation or model used to represent complex mission, maintenance, and battle scenario(s).

TERM	DEFINITION
Continuation Training	Instruction conducted after initial training and essential to mission readiness.
Continuous Learning Environment	The method of providing goals, performance and feedback before, during and after training task performance throughout an individual's career.
Conversion Training	See transition training.
Course Length	The number of calendar days that expire from the class convening date through and including the class graduation date of a particular class. Weekends and holidays are included in the count even though classes are not conducted on those days. The convening date is counted as the first day; the graduation date is the last day. Example: A course convening on Monday of one week and graduating Friday of the second has a course length of 12 days.
Deployable	A system that is capable of being transported and used in forward operating and embarked locations.
Direct Maintenance Manpower Spaces per Aircraft (DMSpA)	Measures the personnel needed to directly support the JSF over the most demanding phase of campaign or peacetime operations. This includes both on and off aircraft maintenance. It does not include indirect maintenance, support, overhead and management personnel. The values established reflect the assumptions that are identified in the JSF GR&A for Supportability Analysis. It does not include bomb buildup and support equipment maintenance personnel. A change in SGR, Average Sortie Duration (ASD), PAA or other conditions outlined in the GR&A will change the DMSpA value.
Distributed mission training (DMT)	DMT is an Air Force simulator modernization program that will use telecommunications networks to provide high-fidelity training on-demand at the location of the trainee using fixed and mobile systems. DMT will network geographically separated high-fidelity aerospace crew simulators with other battlefield systems into a real-time synthetic battlefield. DMT will provide a realistic full spectrum combat training system for combat-coded aircraft and aircrews.
Distributed training	Distributed training is structured training provided without the physical presence of the instructor. It may draw upon resources which are physically distant from the location where learning is taking place and may include the use of one or more of the following media: correspondence course materials, audio/videotapes, CD-ROMs, audio/videoteletraining, interactive television, and video conferencing, to provide right-time, right-place learning.

JSF Program Definitions ~ Continued.

TERM	DEFINITION
Embedded Training	Training that is provided by capabilities built into or added onto operational systems, subsystems, or equipment, to enhance and maintain the skill proficiency of personnel.
Fault	A hardware or software anomaly that propagates into a failure or maintenance event. A fault may be an induced, manufacturing, or material defect. In software, a fault is caused by defective, missing, or extra instructions or sets of related instructions that result in one or more actual failures or create a problem that results in a maintenance event. For the purposes of PHM only, the terms, fault detection/isolation and failure detection/isolation are interchangeable.
Fault Detection (FD) Rate	A measure of on-board system effectiveness. Percent of correct detections given detectable failures. (Not a measure of coverage. Assumes a given level of coverage.) $FD = \frac{\text{Number Of Correct Detections}}{\text{Number Of Detectable Failures}} \times 100\%$
Power Fail Interrupt (PFI) Fault Isolation Rate	A measure of on-board system accuracy. Percent of correct fault isolation given correct detection. (Not a measure of coverage. Assumes a given level of coverage.) $PFI = \frac{\text{Number Of Correct Isolations}}{\text{Number Of Correct Detections}} \times 100\%$
Flight Safety Critical	A function is flight safety critical if loss of the function results in an unsafe flight condition or inability to maintain vehicle control
Group Training	Instructor-centered training with fixed periods of instruction. All class members or small groups are instructed on the same task at the same time.
Individualized Training	Training that allows each student and/or instructor to determine the pace, start time, amount, and kind of instruction based on individual goals or objectives.
Inherent Availability (to be use for Training Equipment/Devices and Support Equipment)	Measure of ability to operate under stated conditions, as defined in the Services operational environment. $A_I = \frac{MTBF_{\text{Support Equipment and Training Equipment/Devices}}}{MTBF_{\text{Support Equipment and Training Equipment/Devices}} + MTTR}$ Note: Mean Time Between Failure (MTBF).
Initial Training	Initial training refers to FTU/FRS type training provided to pilots and MTW/NAMTRAGRU training provided to maintainers entering the JSF training pipeline for the first time.
Interoperable	(Air System) The ability of systems, units, or forces to provide services to and to accept services from other systems, units or forces and to use these services to help them operate effectively together. (Mission Systems) The condition achieved among communications-electronics systems or items of communication-electronics when information and services can be exchanged directly and satisfactorily between them and/or their users.
Line Replaceable Component (LRC)	An item removed and replaced as a single unit to correct a deficiency or malfunctions on the Air System on the flight line/flight deck. Such items have a distinctive stock number or identified by unique Work Unit Code. (Excludes consumables (screws, nuts, bolts and type How Malfunction Code type 105 items).)

JSF Program Definitions ~ Continued.

TERM	DEFINITION
Live Environment	Real world/real-time flight/maintenance operations.
Logistics Infrastructure	Supply chain, packaging, handling, storage, and transportation, support equipment and tools, facilities, and off-equipment/depot maintenance to support the Air Vehicle.
Maintenance Man Hours per Flight Hour $_{\text{Scheduled, Design Controllable}}$ (MMH/FH $_{\text{Sch}}$)	Measures the average man-hours per flight hour needed to maintain an aircraft at required levels of readiness. Includes all on-aircraft and off-aircraft (base level only) scheduled maintenance event man-hours. MMH/FH $_{\text{Sch}}$ = Total Scheduled Maintenance Event Man Hours Design Controllable/Total Flight Hours
Maintenance Man Hours per Flight Hour $_{\text{Unscheduled}}$ (MMH/FH $_{\text{Unsch}}$)	Measures the average man-hours per flight hour needed to maintain an aircraft at required levels of readiness. Includes all on-aircraft and off-aircraft (base level only) unscheduled maintenance event man-hours. MMH/FH $_{\text{Unsch}}$ = Total Unscheduled Maintenance Events Man Hours/Total Flight Hours.
Mean Flight Hour Between Operational Mission Failure (MFHBOMF):	A measure of the number of hours between failures that result in a loss of the capability to perform one or more mission essential functions during the mission. Operational Mission Failures (OMF) are maintenance events that have when discovered codes of A, B, C, and D). MFHBOMF = $\frac{\text{Total Flight Hours}}{\text{Number Of OMF}}$
Mean Flight Hours Between Failures $_{\text{Design Controllable}}$ ($MFHBF_{DC}$)	Measures the average flight hours between the on-equipment corrective maintenance events associated with hardware and software malfunctions resulting from inherent design and or manufacturing processes/characteristics $MFHBF_{DC}$ = Total Flight Hours/Number of Design Controllable Failures.
Mean Flight Hours Between False Alarm (MFHBFA) (Safety Critical)	A measure of on-board system accuracy and reliability. The average number of flight hours between related false alarms of safety critical functions. Fault detection indications that are resolved by prescribed fault management procedures are not considered to be false alarms. Multiple occurrences of the same false detection indication during a mission are considered to be a single event. MFHBFA = Total Flight Hours/Number Of Related Safety Critical False Alarms
Mean Flight Hours Between False Alarm (System)	A measure of on-board system accuracy and reliability. The average number of flight hours between false alarms. Fault detection indications that are resolved by prescribed fault management procedures are not considered to be false alarms. Multiple occurrences of the same false detection indication during a mission are considered to be a single event. MFHBFA = Total Flight Hours/Number Of False Alarms

JSF Program Definitions ~ Continued.

TERM	DEFINITION
Mean Time to Repair (MTTR)	A basic measurement of maintainability. MTTR is measured from the time the maintenance event begins until the item is ready for operation (includes environmental, preparation and cure time). Total of all unscheduled maintenance events' elapsed time divided by the total number of unscheduled maintenance events (on aircraft). (Does not include Logistics Delay Time (LDT). MTTR = Sum of Corrective Maintenance Time (Clock)/Total Number of Unscheduled Maintenance Events. * NOTE: LDT refers to that maintenance down time which is expended as a result of waiting for a spare part to become available, waiting for the availability of an item of test equipment in order to perform maintenance, waiting for transportation, waiting to use a facility required for maintenance, and so on. LDT does not include active maintenance time, but does constitute a major element of total maintenance down time). * Excludes support general, daily inspections (i.e., preflight, postflight, through flight, and turnaround inspections), and cannibalization.
Maintenance Task Preview	A limited rehearsal using an interactive representation of the expected operating environment.
Mission Rehearsal	The capability to integrate planning and intelligence information with the interactive demands of sensors and crew station environments that afford the opportunity to rehearse realistic threat and mission contingency scenarios.
Mission Qualified Pilot	Pilot capable of safely and effectively operating and employing the Air System for variant mission tasks.
Mission Qualified Maintainer	Maintainer capable of safely and effectively performing tasks without further training for system, sub-system components, weapons and related equipment to provide full mission capable aircraft.
On-demand Training	Task training provided on an as requested basis.
Open Interface	An “open interface” is an attribute of an open system and is characterized by well defined, widely used, preferably non-proprietary standards that are developed/adopted by recognized standards bodies or the commercial market place.

JSF Program Definitions ~ Continued.

TERM	DEFINITION
Open System	A system that implements open standards for interfaces, services, and supporting formats to enable components to be used across a wide range of systems with minimal change, to interoperate with other components on local and remote systems, and to interact with users in a style that facilitates portability. An open system is characterized by: (1) modular structure and partitioning of required functionality into discrete entities or objects; (2) well defined, widely used, preferably non-proprietary interfaces/protocols; (3) use of standards which are developed/adopted by recognized standards bodies or the commercial market place; (4) definition of all aspects of system interfaces, both internal and between the Air Vehicle and the external environment, to enable adding or tailoring of functions for new or modified systems capabilities; and (5) explicit provision for expansion or upgrading through the incorporation of additional or higher performance elements with minimal impact on the system. Complete definition of all aspects of JSF open avionics systems architecture is contained in JAAD 3.0 (Reference JMS Section 2.0).
Operational and Maintenance Data	Data to include the following: weapon status, consumable status (i.e., fuel, oil, hydraulic fluid), fact based LO System Effectiveness and Status, parts status, aircraft forms, PHM status of monitored systems and subsystems, Air Vehicle configuration, and mission map load.
Prognostics and Health Management (PHM)	An integrated system, both as part of the Air Vehicle and off-board, within the JSF Air System that provides the diagnostic, prognostic, and health management characteristics, as defined below: (1) Diagnostics provides: Accurate detection and isolation of a fault and/or failure condition of a system, component, or sub-element. (2) Prognostics provides: a. Early detection of the precursor and/or incipient fault condition to a component or sub-element failure condition and to predict useful life remaining based on actual material condition. b. Predicted useful life remaining at anytime during this progression of an incipient fault condition to final component failure. c. Accumulated life usage for Air Vehicle life limited components. (3) Health Management provides: The ability to maximize Air System mission accomplishment in the presence of degraded Air Vehicle functional capability. Health management includes the ability to conduct maintenance, supply, and other logistics actions based on actual and predicted material condition of the Air Vehicle.
Refresher Training	Training used to reinforce previous training and/or sustain/regain previously acquired skills and knowledge.
Safety Critical	A term applied to a condition, event, operation, process or item of whose proper recognition, control, performance or tolerance is essential to safe system operation or use; e.g., safety critical function, safety critical path, safety critical component.

JSF Program Definitions ~ Continued.

TERM	DEFINITION
Significantly Modified	Any time an LRC or sub-assembly of an LRC is modified by 40 percent or more, includes parts count or component layout.
Student Training Day	
Team Training	Instruction and/or applied exercises that prepare an organizational team to accomplish required tasks and/or missions as a unit.
Training	Instruction and applied exercises for the attainment and retention of knowledge, skills, and attitudes.
Training Detachment	
Transition Training	Training provided to personnel who are qualified on one system or equipment to operate or maintain another system or equipment.