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DEPARTMENT OF THE NAVY
THE ASSISTANT SECRETARY OF THE NAVY
(INSTALLATIONS AND ENVIRONMENT)
1000 NAVY PENTAGON
WASHINGTON, D.C. 20350-1000

MAR 26 2003

MEMORANDUM FOR PRINCIPAL ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE (INSTALLATIONS AND ENVIRONMENT)

Subject: Joint Strike Fighter (JSF) Initial Training Site – ACTION MEMORANDUM

After an exhaustive review of the attached responses, the Air Force, Navy, and USMC are more resolute than ever, in our need to move forward with JSF basing and immediately begin the site survey process. While we strongly agree that the BRAC process is an excellent tool in aligning our infrastructure, we cannot be lulled into a false complacency and allow critical acquisition timelines to slip. Our analysis of the JSF beddown issues and our past experience in basing new weapons systems, drives us to the conclusion that waiting until BRAC to begin the JSF initial training basing and beddown process will delay IOC for the Marine Corps by two years and the Air Force by one year. The risk of waiting and allowing BRAC to determine the first JSF training base and hoping that we do not impact JSF milestones is far greater than the nominal risk of moving forward today.

In your letter dated March 11th, you indicated that BRAC considerations would be outweighed if operational requirements preclude a process subject to the framework and timelines established by statute for BRAC. The age of our legacy systems (e.g. AV-8, F/A-18, F-16 and A-10) is beginning to show. Currently, our high worldwide operations tempo has demanded these systems fly more hours than initially anticipated. While these aircraft continue to perform well, this increased tempo comes at a price. Air Force F-16/A-10s and USMC F/A-18s are experiencing severe airframe fatigue problems. The Marine Corps has already remanufactured 70% of its AV-8 Harrier fleet. With an Iraqi war beginning, these same systems will be called upon again to perform very demanding, long missions. Any delay to IOC for the JSF will significantly impact our nations future ability to project tactical airpower.

We believe that a close scrutiny of the underlying issues will convince you that the only method that will allow the Services to meet the JSF IOC dates is to move forward with an aggressive NEPA document. The site surveys need to begin now in order to smoothly transition from these legacy systems to the JSF. We hope our answers to your questions will help move this JSF Basing decision forward.

Wayne Arny
Deputy Assistant Secretary of the Navy
(Installations and Facilities)

Fred Kuhn
Deputy Assistant Secretary of the Air Force
(Installations)

Attachment:
Response to DUSD(I&E) JSF Training Site Stationing Questionnaire

cc: Anne Davis, DASN(IA)
Michael Aimone (SAF/IEB)

1.a. What are the facility requirements (number, size and type) required for a JSF training base?

As indicated in the BEC (Base Evaluation Criteria), there must be sufficient runways, air operations capability, hangars, parking apron space, and support spaces such as dining facilities, housing, and storage. The training base will also require a specialized ITC (Integrated Training Center). The BEC has limited the number of bases in the US that satisfy known specific climatic and geographic requirements, such as proximity and allowable use of training ranges. Specific details will be provided in the site surveys.

The ITC is a unique facility that does not exist at any installation. The draft training concept plan estimates between 80,000 and 150,000 square feet will be needed for the training center. As the training concept is further refined, we expect to know the final scope by the fall of 2003. This ITC will incorporate classrooms, applied instruction spaces, computer-based training laboratories, simulator devices, maintenance training mock-ups, computer support spaces, and training support spaces. The building will need to operate as a secure classified information facility (SCIF) due to the advanced technologies involved with the JSF. We do not anticipate any installation having facilities that could accommodate the ITC mission and have based the timelines upon the need to construct this mission-critical facility in time to meet initial training capabilities in 2008.

1.b. What facilities are needed to support the first 10 aircraft delivered in 2008?

Many of the operational facilities are independent of the number of aircraft. However, the first 10 aircraft will require typical facilities for a small training squadron, such as a hangar module, parking apron, housing, administrative spaces, etc., plus the ITC. The ITC is programmed to be built to full scope in 2008 for the commencement of IUT (Instructor Under Training) through put of both pilots and maintainers. To avoid disruption of training capabilities and minimize life-cycle costs of the ITC during this period of rapid growth of students and instructors, the ITC will be built to full scope. This is the critical path along with the NEPA process.

The NEPA analysis cannot be segmented or done in phases, regardless of whether the first 10 aircraft are able to make use of existing facilities. Consequently, the Services, in making their basing and related decisions, are required to evaluate the full scope of JSF issues when their planning (i.e., site surveys, NEPA analysis, etc.) is initiated. These requirements include not only the basic facilities and infrastructure needs, but also identification and analysis of the potential direct and indirect environmental impacts the new mission beddown may have in relation to various attributes, such as air quality, noise, sensitive species, etc.

1.c. What additional facilities are needed for the next delivery?

A normal proportional increase in the facilities listed above for follow on aircraft would be required. Additional unique facilities will be delineated during the basing process.

2. What would prevent existing hangars and other facilities from temporarily accommodating the small number of aircraft initially delivered?

If existing facilities are available and suitable for the function, they will be used. Most likely, upgrades, relocations, and repairs as determined in the Facilities Requirement Document and the site surveys, will be required if an existing facility is available. While we will maximize the use of existing facilities, as feasible, the critical path to an operational training base is completion of the ITC.

In addition, as discussed in #1.b. above, in planning for the potential future JSF beddown, the Services, in making their basing and related decisions, are required to evaluate the full scope of JSF issues in their site surveys and subsequent NEPA analysis.

3. How do the facility requirements for JSF differ from other advanced aircraft?

The joint strike fighter is an evolutionary aircraft and differs significantly from legacy aircraft. However, many of the key facility components that are required by other advanced aircraft will also be required for JSF. For example, the external power supply for legacy aircraft requires an external AC power input. However, for F/A-22 and JSF, the external power supply will be DC power. Other more significant changes from other advanced aircraft is the requirement to radically change and conform current service unique training practices to reduce the training syllabus and maximize pilot throughput. The Integrated Training Center will make extensive use of simulation facilities and SCIF compartments to complete the course curriculum. This transformation will require a unique facility, complete and ready for use prior to the arrival of the first JSF aircraft.

Although there are known JSF unique facility requirements, there are a number of Service unique facility requirements that will also be necessary at the initial training base. For example, the Navy and Marine Corps' requirement to perform operations from a carrier require extensive landing practices prior to arriving at the operational squadron. These repetitive Fleet Carrier Landing Practices (FCLP) frequently tie up the home base air pattern and are typically conducted away from home base at an Outlying Landing Field (OLF). Other service unique requirements are also required (i.e. JSF STOVL landing pads).

4. Why must facility construction be completed in 2007?

In order to implement OSD PDM direction, facility construction must be completed by April 2007 to support a Ready-for-Training (RFT) date of April 2008 for commencement of Instructor Under Training (IUT) throughput of both pilot and maintainer instructors. These instructors are needed to support the USMC Initial Operational Capability (IOC) date of FY 2010. Training of USMC pilots and maintainers will need to commence in October 2008 (FY 2009). In addition, to support Operational Test and Evaluation (OT&E) in FY 2010, training of OT&E pilots and maintainers will need to commence in FY2009. A breakdown of April 2007 – April 2008 is as follows;

a. April – June 2007: Complete facility testing and correct any discrepancies. Install encryption servers and complete connections to the Virtual Private Network (VPN). Install basic furnishing such as desks, phones, administrative computers and administrative computer networks.
b. July – September 2007: Install and test Electronic Classroom computer and projection equipment. Install and test pilot and maintainer courseware. Install and test interactive courseware workstations used for self-paced training.
c. October – December 2007: Install and test Aircraft Systems Maintenance Trainers, Ejection System Maintenance Trainers, and Weapons Load Trainers. Install and test Pilot Egress Trainer, Desk Top Virtual Cockpit Trainers, Cockpit Flight Simulators, and Full Mission Simulators.
d. January – March 2008: Install and test the Training Management System. Perform test and integration of the entire Training System (including DMT functionality) in preparation for the April 1, 2008 RFT date. Commence initial instructor training and complete OT&E preliminary evaluations.

Information from Tyndall AFB indicates the time allocated between Ready For Occupancy and RFT for the F/A-22 Pilot Training Facility was 10 months. The JSF ITC is a more complex training facility in the areas of security, communications networks, and combined pilot and maintainer training.

5. Why must the facilities to support the initial JSF training base accommodate a maximum capacity of 140 aircraft in 2008?

The planned loading and mission for the initial JSF FRS/FTU is 140 aircraft. Therefore planning, programming, and construction of sufficient facilities for this projected loading and mission by 2011 must be assured. We usually do not construct facilities in advance of their need, but there are circumstances when it is not reasonable, from either an economic or operational basis, to add onto a new facility every year. In those cases, we would size the building to its full capacity to avoid disrupting the training operations and minimize life-cycle costs.

6. If the initial facilities must accommodate 140 training aircraft, how many training aircraft will be required to support the 1,005 aircraft delivered through 2017?

As a general rule, approximately 20-25% of the delivered aircraft will be required to support the training mission.

7. How many training sites may be required? Is there a specific number or estimated range?

Considering the planned procurement for the JSF program, a number of basing actions for both training and operational assets will be required to support the program of record. The specifics of the Services' future requirements should be detailed in the 20-year Force Structure Plan to be developed in conjunction with the BRAC process.

8. Why would MILCON program/design of the initial facilities, described as an integrated training center or "schoolhouse" for pilots and maintainers, four short take-off and vertical landing pads, and reconfiguration of the flight line electrical distribution system encompass two years?

The facilities listed in this question were submitted as JSF unique facilities, and are not the only initial facilities expected for the FTU/FRS beddown. Other facilities such as dormitories, temporary living facilities, dining facilities, etc., may be required initially and can only be determined through a site survey process. Once the site is known, the estimated two-year timeline is needed to fully identify all project requirements, properly phase/program the projects to coincide with the beddown buildup plan, submit the projects through the POM process or BRAC funding process and execute the design process. Two years is an average planning/programming/design cycle. Based on actual MILCON project design examples provided by the Air Force, the average design time alone was 10 months. Regardless, the critical path for MILCON projects in support of this beddown is the construction time, which must follow the NEPA analysis and signature of the ROD.

9. How much planning and design work can be accomplished in advance of site selection? If planning and design for standard facilities, such as those described in question 8, can be accomplished in advance of site selection, could the facilities not be site adapted?

Referencing our 4 Feb 03 brief we gave to PADUSD (I&E), we defined site selection as the date the ROD is signed. Prior to site selection and given design funds availability, up to 90% of the planning and design work can be accomplished. Site adaptation of design work is possible, however, depending upon the actual construction site, facility type and environmental constraints; the adapted design may require extensive redesign in the areas of utilities, foundation, wall structures, parking, landscaping, etc. Regardless of how much work is accomplished prior to site selection, construction contract award cannot occur before the NEPA analysis is complete and the ROD is signed.

10. Was design/build approach evaluated?

Yes, all construction delivery methods were considered, including design/build. This approach is not recommended for projects with complex requirements such as the Integrated Training Center; an undeveloped concept with requirements such as SCIF, computer training systems and simulators.

11. Why would construction of the initial facilities, as described in question 8, encompass two years?

The facilities listed in question 8 were submitted as JSF unique facilities and are not the only initial facilities expected for the FTU beddown. Other facilities such as dormitories, temporary living facilities, dining facilities, etc., may be required initially and can only be determined through a site survey process. Our project management guidelines (based on historical project data), used in planning construction timelines, show the contract award/construction process to take up to two years.

12. Why does site selection under the BRAC scenario begin at the outset of Fiscal Year 2008 and not in Fiscal Year 2005 (may 2005) when the Secretary transmits BRAC recommendations to the Commission are first published or at the beginning of Fiscal Year 2006 (October 2005) assuming the recommendations are accepted by Congress within the timeframe provided for by law?

The site selection process under the BRAC scenario does not begin at the outset of Fiscal Year 2008. Instead the actual site selection, via the NEPA Record of Decision (ROD), would be accomplished at this time. Under the BRAC schedule, the Services will be waiting for the outcomes of the BRAC process to know what base(s) is available for basing consideration. Consequently, the earliest the Services could initiate their site selection process would be toward the end of FY2005. If NEPA analysis commenced then, we would anticipate the earliest a ROD could be issued is early in FY 2008. Also, under the BRAC scenario, the Services view any attempt to further develop basing activities or modify recommendations made to the Commission, during the Commission's deliberations, as potentially prejudicial and risky.

13. Why must the NEPA analysis in the BRAC scenario start six months after Congressional approval of BRAC recommendations?

The NEPA analysis will start as soon as practicable after finalization of the BRAC recommendations that identifies those installations available for JSF basing.

14. Could the NEPA analysis start earlier, in May 2005, after the Secretary releases recommendation? If not, why not?

Once the Secretary has submitted Defense's recommendations for closure or realignment to the Base Closure Commission (May 2005), if JSF basing is being considered under the Commission's process, the Services may not be in a position to start their NEPA analysis in support of JSF decision-making.

While we know of no specific prohibition, under the BRAC scenario, to beginning actions before approval by the Commission, beginning these actions could be viewed as prejudicial.

Since the Services would not know the outcome of the Commission's deliberations, the Service's would find themselves in the unenviable position of making "pre-decisional" suppositions

regarding these deliberations which, in the opinion of the Service's, is contrary to the intent of the Commission's independent charter. Initiating the site selection process (i.e., site surveys, NEPA, etc) now, before the Commission is established, would avoid creating those negative impressions.

15. If the site selected was previously a flight training base, will a full Environmental Impact Statement be required or could an Environmental Assessment satisfy the NEPA requirements?

The JSF is a new aircraft, dissimilar to any aircraft in the Services' current inventory, therefore, while it is possible that an Environmental Assessment could satisfy the NEPA requirements, similar mission does not equate to similar environmental impacts. The premise of the NEPA issue is not whether the site selected was previously a flight-training base, but whether there are significant, environmental impacts associated with the proposed siting. Given the initial assessment of potential changes in the context and intensity of the full scope of the flight training at potential JSF bases, and potential impacts related to noise and air emissions, we anticipate that preparation of an EIS will be required for the JSF beddown. Additionally, since we know there will be other basing actions that will need to occur, preparing a full EIS for the first action will ensure subsequent decision-makers will reap the benefit of that comprehensive analysis of requirements and impacts.

16. Implementation, but not site selection, is subject to NEPA litigation within BRAC. Has the increased risk of a selection decision being delayed by court action in the non-BRAC scenario been considered?

Yes, the Services consistently weigh the various aspects of their procedural application of NEPA compliance, including potential litigation risk. The BRAC statute provides an express exemption from NEPA, thereby reducing litigation risk to some extent. However, that exemption is fairly narrow. The exemption applies only to the decision to close or realign a military installation. Where the BRAC commission directs realignment of functions to a specific military installation as an integral part of the direction to close or realign an installation, the selection of that specific receiving site is covered by the exemption. In many BRAC commission recommendations a specific receiving site has not been identified. Rather, the Service was left with choices to make between more than one receiving site that meets the mission need. In that case, the selection of a receiving site is not an integral part of the decision to close or realign an installation, and is not covered by the express exemption from NEPA provided by Congress in the BRAC legislation. Even if specific recommendation language is forwarded by SECDEF to the Commission, it could be changed and broadened in the Commission review process. Even where litigation risk is reduced to some extent by designation of a specific receiving site, risk can still be substantial. The Services have found that litigation risk associated with the implementation aspects of the BRAC decision-making process still exist, especially when there are contentious environmental and land use issues related to implementation of the realignment. In either case, the proper application of NEPA and related substantive laws is the most productive and efficient way to handle any action requiring NEPA compliance.

17. This question was withdrawn by OSD per conversation with Mr. Gibbs.