

## **FY 2014 U.S. Navy F-35C West Coast Home Basing Environmental Planning Team Narrative**

### **Introduction**

U.S. Fleet Forces Command (USFF) nominates the Navy team responsible for preparation of the U.S. Navy F-35C West Coast Home Basing Final Environmental Impact Statement (aka WC Joint Strike Fighter (JSF) Final EIS) for the FY14 CNO Environmental Planning Team Award. The WC JSF Environmental Planning Team was led by USFF, involved a large number of Navy stakeholder commands and was comprised of more than 100 individual team members and subject matter experts.

The F-35C is the Congressionally approved, new acquisition program to replace the Navy's aging FA-18 Hornet aircraft. The EIS studied the potential environmental impacts of providing facilities and functions to support home basing 100 F-35C aircraft in the Navy Pacific Fleet. The EIS project timeline supported facility construction and renovation beginning in 2015 and F-35C aircraft arrival beginning in 2017.

This project began with the publication of the Notice of Intent to prepare an EIS on 28 January 2011. The Notice of Availability of the WC JSF Final EIS was published on 16 May 2014. After the 30-day wait period and public comments on the Final EIS were addressed, PDASN(EI&E) signed the Record of Decision on 1 Oct 2014 selecting NAS Lemoore, California as the west coast home base location for Navy F-35C aircraft.

The environmental analysis in this EIS focused on: aircraft replacement and transition, facility and infrastructure requirements, personnel requirements, and aircraft operations in the airfield environment of NAF El Centro and NAS Lemoore and in Special Use Airspace within the vicinity of each installation. Environmental resource topics evaluated include: airfields and airspace, noise, air quality, safety, land use, infrastructure and utilities, socioeconomics, community services, ground traffic and transportation, biological resources, topography and soils, water resources, cultural and traditional resources, and hazardous materials and waste.

The EIS was prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code 4321 *et seq.*); the Council on Environmental Quality regulations implementing NEPA (40 Code of Federal Regulations Parts 1500-1508); and Department of the Navy Procedures for Implementing NEPA (32 Code of Federal Regulations 775). Furthermore, the EIS supported the goals and initiatives for west coast home basing of F-35C squadrons in accordance with the 2014 Quadrennial Defense Review, 2014 CNO's Strategic Laydown Plan and 14-2 Naval Air Force's Master Aviation Plan. The EIS and signed ROD are integral to implementing the Navy's long term aviation vision that will support Fleet operations for years to come.

### **Background**

The Navy's mission is to organize, train, equip, and maintain combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. U.S. Fleet Forces and U.S. Pacific Fleet fulfill this responsibility by establishing naval forces and forward presence, executing training programs and ensuring naval forces have access to ranges, operating

areas, and airspace needed to develop and maintain critical operational skills. The Navy's acquisition community builds and tests next generation aircraft to maintain military operational readiness using latest technological advances and to address future global threats. While meeting this operational mission, the Navy is also required to comply with applicable laws and regulations associated with environmental planning and protection, including NEPA, Clean Air Act, and the Coastal Zone Management Act.

### **Organization and Collaboration of 12 Navy Stakeholder Commands**

The WC JSF Environmental Planning Team was led by USFF N46, as action proponent, involved 12 additional Navy stakeholder commands and prepared in collaboration with ASN(EI&E), OPNAV N45 and OPNAV N98 staffs. Navy stakeholder commands include:

- U.S. Fleet Forces (USFF), action proponent
- U.S. Pacific Fleet (CPF)
- Naval Air Forces (CNAF)
- Strike Fighter Wing Pacific (CSFWP)
- NAS Lemoore
- NAF El Centro
- Headquarters, Marine Corps (Aviation, Land Use and Installations)
- F-35 Joint Program Office (JPO)
- Navy Installations Command (CNIC)
- Navy Region Southwest (CNRSW)
- Naval Facilities Engineering Command Atlantic (NAVFAC LANT)
- Naval Facilities Engineering Command Southwest (NAVFACSW)
- NAVAIR Aircraft Environmental Support Office (AESO)

USFF is the unified voice for all naval forces and training requirements and is responsible for organizing, manning, equipping, and training Navy units to conduct combat operations. USFF oversees all operational unit level and integrated/coordinated training for Commander Task Force 80 (CTF 80) and is responsible for environmental planning and NEPA documentation for CONUS homebasing actions and Atlantic training ranges. Similarly, CPF oversees all unit level and integrated training for Third Fleet, Seventh Fleet and subordinate commands (such as CNAF and CSFWP), and is responsible for environmental planning and NEPA documentation for Pacific training ranges.

Due to the complexity of the project and the need to balance the roles, responsibilities and command equities of all Navy stakeholder commands, extraordinary measures were necessary. There was continuous coordination by USFF N46 and 12 additional Navy stakeholder commands to identify operational requirements and shore infrastructure needs, prepare and review special studies, analyze potential environmental impacts in 14 resource areas, evaluate the cumulative impacts of related actions in 2 communities, meet project milestones and address the informational needs of command leadership, ensure that Navy leadership was fully aware of all proceedings prior to any press coverage, and brief the operational and shore infrastructure chains of command for document endorsement prior to forwarding the EIS to Echelon I. Furthermore, USFF coordinated with other DON action proponents to ensure F-35C training requirements

were adequately addressed in various training range complex (such as Fallon Range Training Complex and Hawaii-Southern California Training and Testing Activities) and two Legislative EISs for land withdrawal to support DoD training activities at Naval Air Weapons Station (NAWS) China Lake and Chocolate Mountains Aerial Gunnery Range.

### **Program Management Approach**

The scope of WC JSF Final EIS and the complexity of the issues required expertise in a wide range of subject matters, including airfield operations, environmental planning and compliance, natural resources, and program management. Core team members representing all Navy stakeholder commands are listed in Table 1. The WC JSF Environmental Planning Team developed an approach that was built around the following core principles:

- Collaborate on the format, content and methodology used in all F-35 NEPA documents with USMC and USAF environmental planning teams
- Establish and maintain a project team, aligned with roles and responsibilities of 12 Navy stakeholder commands and the information needs of command leadership
- Achieve clarity on proposed action related to operational and training requirements, and update environmental impact analyses as F-35C design matured and aircraft testing provided updated noise and air quality data and facility needs
- Collaborate within DON on related NEPA documents to ensure alignment and coverage of Navy F-35C training occurring on both land and at sea training ranges
- Use a consistent QA/QC approach which included EIS endorsement by all Navy stakeholder commands
- Translate and document complex technical concepts such as noise analysis and modeling for the new, high performance JSF aircraft into language suitable for the public to readily grasp and understand while being capable of withstanding legal scrutiny
- Engage the English and Spanish speaking public through use of public meetings and multiple public outreach resources (e.g. project website, newspapers, letters and postcards and other less conventional means – Facebook, Twitter, banner hung on main street of El Centro, handouts distributed at installation airshow and in area grocery stores)

Working groups were organized early in the planning process to establish a consistent methodology for preparation of joint NEPA documents and continued to support specific aspects throughout the WC JSF EIS project. The teams were required to develop analysis on an iterative basis as JSF data evolved and became available. The working groups are briefly described below and are comprised of core team members listed in Table 1. Ultimately the team coalesced all the working group's efforts into a Final EIS and ROD on time directly enabling the Navy to proceed with basing the JSF at NAS Lemoore, the most appropriate and cost effective location to support Fleet training and operational needs.

#### *Working Groups:*

1. Project Management and Document Development. Led by Lisa Padgett, this team focused on leading the WC JSF EIS team, maintaining schedule, coordinating special studies, quality control and quality assurance, coordinating efforts of all DoD/DON stakeholder commands and ensuring alignment and consistency with joint NEPA documents. The team ensured overall consistency of Navy message in all interaction and correspondence with the public and Congressional delegations.

2. Facility Planning. Led by Rick Keys, this team focused on facility planning, siting and land use compatibility concerns and identified basic facility requirements as F-35 aircraft maintenance concepts, maintenance training and flight simulator capabilities evolved. This team addressed the challenging task of trying to nail down constantly evolving facility requirements so the environmental planners could evaluate potential impacts.
3. Operational Requirements. Led by Rick Keys, this team focused on airspace use (range use, military training routes, airfield operations) and other operational requirements to support environmental impact analyses. This team also developed and implemented a consistent approach for technical support studies supporting airspace and noise analysis based on best available science and validated F-35 Joint Program Office (JPO) data packages which described operational training requirements and aircraft noise produced as part of F-35 operational test and evaluation efforts.
4. Air Quality. Led by Lisa Padgett, this team focused on developing an air conformity model to assess air quality impacts associated with aircraft operations, transportation and construction. The team refined the model and updated air quality calculations as the F-35C design matured and aircraft testing data based on updated F-35 JPO data packages with air emission factors became available.
5. Outreach. Led by Ted Brown, this team developed a proactive public outreach and engagement strategy with appropriate key messages and talking points to ensure DoD/DON was providing consistent responses to inquiries by media, elected leaders and the public. The team conducted media training and risk communication training to prepare the entire project team to interact with the public and the news media. Recognizing the fact that 20% of the local population spoke Spanish at home, the team also developed a strategy to engage the Spanish-speaking public and translated the EIS executive summary into Spanish.

<b>Name</b>	<b>Title/Position/Organization</b>	<b>Discipline</b>
Lisa Padgett	USFF NEPA Home Basing Program Manager	Environmental Engineering
Rick Keys	USFF Operational Shore Readiness	Operational and Facility Planning
Ted Brown	USFF Environmental Public Affairs Officer	Public Affairs
CDR Mike Maule	USFF Environmental Counsel	Environmental Law
Todd Williamson	NAVFACLANC EIS Project Manager (Lead)	Environmental Planning, Cumulative Impacts
Bonnie Curtiss	NAVFACLANC Noise and Encroachment	Noise Modeling, Noise Science
Amberly Hall	NAVFACLANC Environmental Counsel	Legal Consistency
Amy Kelley	NAVFACSW EIS Project Manager (Deputy)	Environmental Planning, Team Coordination, NEPA Endorsement
Christopher Stathos	CNRSW Regional Environmental Coordinator (Lead)	Environmental Consistency Review, NEPA Endorsement
John Robusto	CNAF N8	Operational Review
CDR Kevin Norton	NAS Lemoore Public Works	Utilities and Infrastructure
Roman Benitez	NAS Lemoore Facility Planning	Land Use, Socioeconomics, Transportation
Kim Rasmussen	NAS Lemoore Environmental Planning	Air Quality, Topography and Soils, Water Resources

Melinda Larson	NAS Lemoore Public Affairs Officer	Public Outreach
LT Mark Stack	NAS Lemoore Airfield Operations	Airfield Operations, Airspace and Range Usage
LCDR Federico Perez-Romero	NAF El Centro Public Works	Utilities and Infrastructure
David Hulse	NAF El Centro Environmental Planning	Land Use, Socioeconomics, Transportation
Marc Willis	NAF El Centro Airfield Operations	Airfield Operations, Airspace use and Range Scheduling
Kristopher Haugh	NAF El Centro Public Affairs (Deputy)	Public Outreach
CDR Brian Douglass	CSFWP F-35C Project Requirements Officer	Training Requirements, Facilities
CARDNO-TEC	Consulting Firm	NEPA document preparation
Wyle Laboratories	Consulting Firm	Noise Modeling and Analysis
AECOM	Consulting Firm	Traffic Study
ATAC	Consulting Firm	Airspace Usage and Modeling

### *Environmental Planning Goals*

The objectives laid out for the WC JSF Environmental Planning Team were ambitious:

- Produce high quality environmental planning documents and obtain a Record of Decision (ROD) to homebase 100 F-35C aircraft and meet operational timelines for military construction and aircraft delivery.
- Support environmental analyses with the best available science and special studies to evaluate the potential environmental effects of aircraft operations, training, military construction, air quality and socioeconomic impacts of homebasing F-35C aircraft, military personnel and their families.

### **Outstanding Efforts**

- *Chain of Command Alignment.* Throughout the life of the project, USFF and 12 Navy stakeholder commands collaborated in the development of the Final EIS and all supporting studies, addressed command equities and information needs of command leadership, met project schedule milestones, and briefed the chain of command for document endorsement. Furthermore, the team overcame challenges of numerous key personnel turn-overs (Installation Commanding Officers and Public Works Officers), questions surrounding the program of record delays in the F-35 acquisition program and impacts associated with furloughs and government shutdowns.
- *Congressional and House Armed Services Committee (HASC) Interest.* WC JSF home basing was a high profile project that generated considerable Congressional and HASC interest, culminating in numerous written responses to queries and two briefs. In particular, coalitions such as Imperial Valley United for Joint Strike Fighter formed and communities surrounding NAS Lemoore and NAF El Centro actively lobbied in Washington D.C., conducted rallies and circulated petitions to garner support for home basing in their community due to the economic benefits of military construction, salaries and housing for military personnel and families working and living in their communities. Congressional and public advocates for El Centro were particularly relentless with questions and comments, challenging many areas of the analysis including economics, distances to training ranges,

and noise analysis. The team collaborated to provide requested information in a timely manner and ensure consistency with the NEPA analysis.

- *Collaboration with DOD NEPA Counterparts.* Early in the planning process, USFF recognized the need for collaboration with USAF and USMC counterparts for a consistent and transparent approach to the NEPA analysis for all related F-35 NEPA documents. For example, the Operational Requirements working group devised the consistent methodology to assess aircraft, transportation and construction noise, identified the need for supplemental noise metrics, developed a consistent format to present noise data, and collaborated on the operational data needs to support the impact analysis of airfield and range training in DoD/DON NEPA documents.
- *Collaboration with F-35 Acquisition Community.* To obtain the best available information as the F-35 design matured, core team members visited Lockheed Martin's F-35 manufacturing facility in Fort Worth, TX and F-35 Initial Joint Training Facility at Eglin AFB on several occasions; and collaborated with F-35 Joint Program Office (JPO), CNAF fleet integration team, and Lockheed Martin engineers on data needs to support the environmental analyses. In the beginning, the team worked with engineering estimates based on legacy aircraft and F-35 performance goals, and updated the environmental analyses as fidelity of data improved first through design and manufacturing testing on prototype aircraft and then with comprehensive operational testing of low-rate initial production aircraft. As the F-35C aircraft design matured, more information on pilot training requirements, simulator capabilities, maintenance concepts and facility needs became known. Simple queries for information could take six months or more to resolve depending on acquisition program schedules. For example, the length of time for hot pit aircraft refueling was not known and this information was necessary to support noise modeling and air emissions calculations. During the project, team members and support contractors worked with the acquisition community to develop and validate aircraft flight profiles, aircraft noise profiles and engine emission factors, and to tailor conceptual facility plans for each basing alternative in order to analyze the potential environmental effects.
- *Transparency of F-35C training requirements.* USFF coordinated with other DON action proponents to ensure F-35C training requirements were adequately addressed in various training range complexes (such as Fallon Range Training Complex and Hawaii-Southern California Training and Testing Activities) and two Legislative EISs for land withdrawal to support DoD training activities at Naval Air Weapons Station (NAWS) China Lake and Chocolate Mountains Aerial Gunnery Range.
- *Addressing overflight concerns.* The U.S. Department of the Interior (DOI) submitted a formal comment letter in response to the public release of the Final EIS. The DOI expressed concerns on behalf of the National Park Service (NPS) regarding the proposed increase in annual operations over NPS lands. The team conferred with the National Park Service, including representatives from King's Canyon-Sequoia and Death Valley National Parks concerning aircraft overflights of the parks. The team negotiated an agreement to work with the National Park Service to address concerns about military overflights of the parks and the visitor wilderness experience. This would be accomplished through the Joint Planning and Policy Board (JPPB) for the R-2508 Range Complex, a group chartered by DoD. Members of the JPPB are the Commanders of the Naval Air Warfare Center-Weapons Division at Naval Air Weapons Station China Lake; Air Force Test Center at Edwards AFB; and the National Training Center at Fort Irwin. The JPPB has established

regulations for mission planning and overflights of the National Parks and Wilderness Areas underlying the R-2508 airspace. The Navy will coordinate any issues raised by the National Park Service through the JPPB to ensure resolution with all R-2508 stakeholders. The team memorialized this agreement in the ROD.

### **Accomplishments**

WC JSF Environmental Planning Team achieved all its objectives and prepared a high quality, defensible NEPA document which met operational timelines for construction and aircraft arrival. The collaboration of all Navy stakeholders ensured that command equities to home base 100 west coast F-35C aircraft were met; F-35 JPO data packages were validated; that all F-35C training requirements were adequately addressed in various training NEPA documents; and that the Naval Aviation Enterprise was posed to support mission requirements for years to come. Furthermore, the collaboration of DoD stakeholder commands was unprecedented and will provide successful foundation to support future joint endeavors.