

# ARCHIVED REPORT

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## EA-6B ICAP III Program - Archived 3/2008

### Outlook

- The Improved Capability (ICAP) III program is an effort to upgrade the U.S. Navy's EA-6B Prowler electronic attack aircraft
- Systems included in the program are the ALQ-99 jammer, the USQ-113 communications jammer, and the ALQ-218 radar warning receiver, on which Forecast already reports
- To be more accurate and less redundant, this report will be archived in 2008

### Orientation

**Description.** The Improved Capability (ICAP) III program upgrades the U.S. Navy's EA-6B aircraft with more advanced electronic warfare equipment.

#### Sponsor

U.S. Navy  
Naval Air Systems Command  
NAVAIR HQ  
EW Program Office PMA-272  
AIR-21422D  
47123 Buse Road Unit IPT  
Patuxent River, MD 20670-1547  
USA  
Web site: <http://www.nawcad.navy.mil>  
Tel: + 1 (301) 342-3000

**Status.** In service, upgrade program being planned.

**Total Produced.** A total of 170 EA-6A/B aircraft were produced. There are just over 100 aircraft in operation, about 20 in storage as attrition spares.

**Application.** Tactical jamming and carrier battle group support. The Prowler is flown by both the U.S. Navy and U.S. Marine Corps. It is the only support/escort jammer available to joint operations commanders.

**Price Range.** The unit replacement cost is estimated at \$52 million.

### Contractors

#### Prime

<b>BAE Systems Electronics &amp; Integrated Solutions</b>	<a href="http://www.eis.na.baesystems.com">http://www.eis.na.baesystems.com</a> , 65 Spit Brook Rd, Nashua, NH 03061-0868 United States, Tel: + 1 (603) 885-4321, Fax: + 1 (603) 885-2772, Consortium Member
<b>Northrop Grumman Corp</b>	<a href="http://www.northropgrumman.com">http://www.northropgrumman.com</a> , 1840 Century Park E, Los Angeles, CA 90067-2199 United States, Tel: + 1 (310) 553-6262, Fax: + 1 (310) 201-3023, Email: <a href="mailto:onewebmaster@ngc.com">onewebmaster@ngc.com</a> , Lead Contractor
<b>Rockwell Collins Inc</b>	<a href="http://www.rockwellcollins.com">http://www.rockwellcollins.com</a> , 400 Collins Rd NE, Cedar Rapids, IA 52498-0001 United States, Tel: + 1 (319) 295-1000, Fax: + 1 (319) 295-5429, Email: <a href="mailto:collins@rockwellcollins.com">collins@rockwellcollins.com</a> , Consortium Member

## EA-6B ICAP III Program

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Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 22 Commerce Road, Newtown, CT 06470, USA; [rich.pettibone@forecast1.com](mailto:rich.pettibone@forecast1.com)

## Technical Data

	<u>Metric</u>	<u>U.S.</u>
<b>Dimensions</b>		
Length	17.7 m	59 ft 10 in
Wingspan	15.9 m	53 ft
Height	4.9 m	16 ft 3 in
<b>Characteristics</b>		
Speed	920 kmph	500 kt
Ceiling	11,285 m	37,000 ft
Flying Range	+ 1,840 km	+ 1,000 nm
Speed	Mach 0.99 (max)	
	Mach 0.72 (cruise)	
On-Station Time	8 hr (refueled)	
Crew	4 (1 pilot, 3 EW officers)	

**Design Features.** The EA-6B Prowler electronic warfare aircraft was based on the A-6 Intruder airframe and designed for aircraft carrier and advanced base operations. It was equipped with a fully integrated electronic warfare system that combined long-range and all-weather capabilities and advanced electronic countermeasures for tactical mission support. A forward equipment bay and pod-shaped fairing on the vertical fin were added to the original A-6 airframe to house additional avionics equipment. The side-by-side cockpit arrangement gave maximum efficiency, visibility, and comfort for the crew of four (one pilot and three ECM officers).

The EA-6B was designed for jamming enemy land-based, shipborne, and airborne command, control, and communications, as well as destruction of the radars associated with early warning, target acquisition, surveillance, and anti-aircraft artillery, and with air-to-surface, surface-to-surface, and surface-to-air missiles. In this role, it supported tactical and battle group operations in dense radar-controlled environments. The mission expanded to include support jamming for Air Force attack missions as well.

The primary electronic countermeasures (ECM) system is the ALQ-99(V) jamming pod. The Navy is also procuring the upgraded USQ-113(V)3 communications jammer to expand the operational capabilities of the EA-6B into the communications frequency ranges. The ALQ-99(V) contains high-power transmitters and steerable high-gain antennas, along with the necessary generators and RF exciters.

The ALQ-99(V) podded installation improves operational flexibility because pod mixes can be used to counter specific threats. The aircraft can carry a maximum of five pods, although a typical mission load-out is three. Different emitter frequencies are countered by a range of transmitters that cover eight system-specific bands.

The heart of the jamming system has been the central processing unit (CPU), which performs jammer management and threat data processing. The system-integrated receiver (SIR) group supplies the basic threat data to the CPU, which identifies the emitter by comparing the data against a preprogrammed library of PRF, wavelength, order-of-battle, and location information. The CPU then either recommends jamming selections or automatically makes the choice, steering the transmission beams and checking transmitter tuning accuracy. The SIR components consist of a fin-top blister fairing and four blister fairings mounted in pairs on each side of the fin. Many of these components are being replaced by the ICAP III ALQ-218(V) system. This is covered in more detail in the **Variants** section of this report.

The USQ-113(V)3 communications and radar jammer uses a conventional receiver-transmitter and advanced software to provide an easy-to-use system that is capable of high-performance ESM/ECM and communications. The system was derived from the ARC-171(V) radio and designed to be a complete stand-alone communication countermeasures system. Recent contract action will develop the ability to operate over two radios with an expanded frequency range.

**Operational Characteristics.** The EA-6B Prowler provides an umbrella of protection for strike aircraft and ships by jamming enemy radar, electronic datalinks, and communications. It has become an indispensable asset and plays a key role in operations around the globe. Airborne electronic attack has become a key link in breaking the enemy "Kill Chain".

The ALQ-99(V) and USQ-113(V) combination can also be used to collect tactical electronic order of battle (EOB) data for dissemination through the command and control system while airborne, and which can be recorded and processed after missions to provide updates to various orders of battle.

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The Tactical Jamming System can provide active radar jamming support to assault support and attack aircraft as well as ground units. Additional suppression of enemy air defenses (SEAD) capability is available with the employment of the HARM weapon.

USMC Prowlers are unique in their integration with the Tactical Electronic Processing and Evaluation System (TERPES). TERPES provides post-mission analysis of EA-6B data for use in updating orders of battle. It also provides post-mission analysis of jamming and HARM employment.

The Navy is committed to supporting the EA-6B fleet through 2015. The Air Force retired its EF-111A jamming aircraft in 1996 and has since qualified USAF pilots on the Prowler so they can fly standoff and escort mission support to Air Force and joint missions. The mixed USAF/USN crews have performed well during combat operations.

The concept of using the EA-6B to jam ground communications links was expanded in Afghanistan. The air defense system of the Taliban had been decimated and the Prowlers had few targets, but there was a need to disrupt the enemy communications system. Cooperative operations with Compass Call aircraft proved highly effective. The EA-6B performed wide-band jamming while Compass Call EC-130s performed surgical electronic strike or SIGINT.

ICAP III will improve situational awareness on the battlefield. Communications jamming has become a regular part of the Prowler mission, and can also be used to jam ship navigation radars as a means of

denying harbor entry to vessels – a potential homeland defense application.

Four ICAP III jamming strategies are planned:

- Wide-Band. This is similar to ICAP II Pre-emptive Assign (PA)
- Detected Frequency, Fixed Spot. Similar to ICAP II Alarm Assign (AA)
- Frequency-Following. This is where a jammer is assigned to follow a threat in frequency
- Multiple Narrow Band (MNB). This is where new spots or more complex elements are added as new frequencies are detected

ICAP III can accomplish automatic (Narrow Band) jamming of selected threats. Because of the system improvements, even the older modes are more effective.

In Iraq, the Prowlers have been used to support ground force movements, a new mission. This can often be in the form of communications jamming, or Electronic Order of Battle collection. The aircraft have also been pressed into use to support Special Operations Forces. Urban combat and supply route protection have also been added to the EA-6B mission portfolio.

In operations in Iraq, planners attempted to use the EA-6B to jam the triggering signal or pre-detonate improvised explosive devices (IEDs) used by the insurgents. This technique became ineffective when insurgents switched to hard-wired or suicide-bomber triggering for the deadly devices.

## Variants/Upgrades

There have been three major improvements to the EA-6B since it became a Navy program in 1971: EXCAP, ICAP I, and ICAP II. A fifth-generation Prowler called ADVCAP was planned but canceled and replaced by the less costly ICAP III upgrade.

**ALQ-99(V) Universal Exciter Upgrade (UEU).** The UEU is a Weapons Replaceable Assembly (WRA) that is pod-mounted on the EA-6B aircraft and operates in a real-time environment as part of the ALQ-99(V) tactical jamming system. It produces radar and communication jamming signals on two transmitter-related channels and performs testing and calibration functions under the direction of the onboard tactical computer.

**ALQ-99(V) Band 9/10 Transmitter.** This high-power radio frequency jammer works with the Universal Exciter Upgrade Weapons Replaceable

Assembly to provide expanded radar jamming capability for the suppression of modern, integrated air defense systems.

**ALQ-99(V) Band 7/8 Transmitter Upgrades.** Initial Operational Capability was achieved in FY05.

**Band 1-3 Upgrades.** These upgrades should be entering testing in the near future. IOC is planned for FY06.

**Band 4-6 Upgrades.** The Navy is conducting studies for these enhancements.

**Low-Band Transmitter (LBT).** The Navy rebaselined the LBT upgrade to the ALQ-99(V) jammer in September 2000, slipping IOC from the third quarter of FY04 to FY05.

**Wing Center Section Replacement.** By installing new wing center sections, the life of an EA-6B can be

## EA-6B ICAP III Program

extended by 6,000+ hours. The heavy use of EA-6Bs throughout the world made some wing section replacements necessary much sooner than anticipated. Several aircraft have either been grounded or put on limited flight restrictions because of cracks in this part of the airframe.

**Block-89A.** Block 89A is a common configuration baseline for the EA-6B fleet. It encompasses structural, flight safety, computer, navigation system, and communications upgrades. This upgrade achieved IOC in the fourth quarter of FY00 and is a prerequisite for the ICAP III upgrade. Block 89A has embedded GPS/INS.

**EA-6B ICAP III.** ICAP III is the seventh-generation EA-6B jamming system. It is an upgraded Block 89A Prowler with an improved ALQ-99(V) and tactical display system. The onboard systems have been made more reliable, and the USQ-113(V)3 integrated into the jamming suite. 121 WRAs were removed and 40 added.

ICAP III features a Selective Reactive Jamming capability that can detect the operating frequency and frequency changes of a threat emitter and quickly make jammer adjustments. An integrated receiver system covers frequency Bands 1 through 10, with sufficient signal direction-of-arrival measurement for emitter classification and jammer management.

The system backbone is the ALQ-218(V) that uses off-the-shelf and non-developmental equipment, as well as government-furnished hardware. The system also has the ability to perform High-Speed Anti-Radiation Missile (HARM) targeting concurrent with jamming.

The major benefit of ICAP III is that instead of preemptive, broadband jamming, the new receivers make it possible to transmit a narrow band of RF energy targeting a specific threat. This reduces the amount of energy needed to counter a hostile system, so less output

power is needed from the transmitter. Key operational advances are accurate, full-azimuth detection and location of threats coupled with fast, reactive emitter geolocation and targeting.

The new receivers will be able to track frequency-hopping radars and put jamming energy on a new signal quickly enough to reduce the likelihood of the radar being able to establish a new track. This was not possible with ICAP II. Power is concentrated in a narrow frequency range, instead of expending RF energy in unused parts of the spectrum. The narrower signal makes it possible to jam a threat using less power and makes detection by electronic support measures (ESM) systems less certain.

The upgrades improve situational awareness and help jam and suppress enemy air defenses by integrating offboard surveillance information (TRAP, TADIX B, and TIBS) and by providing better communications connectivity with other assets via Link 16. Link 16 is a critical part of the upgrade because it allows other battlefield sensors, such as Rivet Joint, to be integrated with the Prowler, significantly improving situational awareness for all forces in a combat area.

The USQ-113(V)3 is fully integrated so that data can be viewed through the main display system. EW officers no longer have to operate the communications jammer through a laptop computer carried on their laps. New display hardware will eventually be installed to effectively combine onboard and offboard data. The cockpit displays will be full color for better, more intuitive interpretation of the data presented.

ICAP III has at least twice the reliability of today's systems. Compared with the current mean time between failures of eight hours, the new receiver should have an MTBF of 15 to 16 hours, roughly 8 to 10 sorties. IOC was planned for FY05.

Functionally, the ALQ-218(V)1 was designed to minimize jammer off times (for Receiver Look-Through). It features wide RF coverage and wide instantaneous bandwidth. It can operate in a high-pulse-density environment and make precision parameter measurements. The processing algorithms can perform emitter classification in a highly fragmented data environment.

## Program Review

The EA-6B Prowler was developed to satisfy a U.S. Navy requirement for an ECM escort aircraft to protect Navy ships and aircraft by disrupting enemy radar and communications during strike and surveillance missions. Secondary missions include electronic

surveillance, anti-ship missile defense, and surface and air radar operator electronic counter-countermeasure (ECCM) training. The EA-6B is considered a crucial part of every carrier air wing operation.

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The EA-6A version of the A-6 was introduced in 1963 as an ECM escort. A total of 22 EA-6As were produced for the U.S. Marine Corps in the 1960s and introduced into active service in the 1970s. In Vietnam, the EA-6B was used for non-kinetic electronics fires (jamming), “soft-kill” of radar systems. Its main mission was Suppression of Enemy Air Defenses (SEAD).

Through the years, the EA-6B was procured and has undergone a constant series of upgrades and enhancements, taking advantage of advancing component and processing technology to stay ahead of the threat. RF spectrum dominance had always been the goal of the aircraft, something it could do so well that it has become the sole pre-emptive and escort jamming aircraft for all missions. Without an EA-6B to accompany a strike into a protected environment, most missions do not go.

ICAP II achieved IOC over the period 1986 to 1991. Block 82/86 featured a new Universal Exciter, advanced signal processing, CAINS, an upgraded Mission Planner, limited communications jamming, and an Interim HARM capability.

Block 86 added V/UHF/HF communications, production HARM compatibility, and enhanced processing.

Block 89 featured safety and fire detection/ extinguishing improvements, caution lights, and a Yaw Rate Indicator.

Block 89A added an Electronic Flight Indication System, GPS, a VHSIC computer, and ARC-210 radios.

### ***HARM Missiles Add Lethal Capability***

In 1987, the High-Speed Anti-Radiation Missile (HARM) was introduced, giving the Prowler a “hard kill” lethality, making pre-emptive and reactive SEAD possible. Operation Allied Force (OAF) in 1988 added a new effects-based target-set, communications jamming.

Operation Iraqi Freedom demonstrated and perfected the ability to use EA-6Bs to shape the battlefield with a combination of chaff and jamming (both radar and communications). SEAD continues to be a major mission, with SAM hunting packages added to the traditional escort role, along with Ground Force Support. EA-6Bs assisted ground force maneuver while providing EW Close Air Support and Information Operations (IO).

After the Iraqi air defenses were eliminated as a threat, Prowler operations began to focus on communications electronic attack to support Marine and Army ground forces. Innovation made it possible to employ the non-kinetic fires capability against unconventional

target sets, High-Value Targets (HVT) and Time Sensitive Targets (TST).

ICAP III is the latest, and probably final iteration of the classic jammer. The future of Prowler-based effects-based operations is going to be enhanced with an ongoing effort to expand the systems envelope. Much of this will be through software and tactical changes. Educating planning leadership will help them understand the value of employing all of the capabilities of this valuable asset.

Insuring that EA-6B personnel are colocated in Combined Air Operations Centers (CAOC) will help coordinate non-kinetic and kinetic fires targeting and execution, insuring real-time fires deconfliction and non-kinetic Battle Damage Assessment (BDA). This will be a lead-in to the follow-on EW assets being developed to follow the EA-6B.

### ***EW Counter Response***

PE#0604270N, Project E0556, funds the continuing development and integration of all EW systems for the EA-6B electronic attack aircraft. Two test articles were funded: two EA-6B aircraft modified to support the ICAP III program and eight low-band transmitter (LBT) engineering development models (EDMs).

This effort includes the conversion of the Tactical EA-6B Mission System (TEAMS) software to the Joint Mission Planning System (JMPS), and the development of the EA-6B Unique Planning Module.

There is a requirement for the EA-6B to participate in coordinated targeting scenarios such as network-centric warfare, FORCENet, improved Suppression of Enemy Air Defenses/Destruction of Enemy Air Defenses, (SEAD/DEAD), and other strategic-and theatre-based DoD networks and strategies. The ICAP III system upgrades facilitate the fusion and correlation of threat information to present sensor and targeting information to the theater commander via networked airborne, ground, and ship-based systems. This effort includes developing EA-6B access to the Link 16 EW network by incorporating the full EW Link 16 message set into the EA-6B and participation of the ICAP III within the network-centric warfare arena. This will greatly improve the Strike Group Commander’s situational awareness.

Among current efforts, the ICAP III system is completing operational testing. Baseline ICAP III software is being updated and high priority deficiencies corrected. This work also continues the development of the ALQ-218(V) system and tactics.

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Funding was set at \$12.566 million in FY04, \$12.501 million in FY05, \$4.135 million in FY06, and \$1.826 million in FY07.

### *ICAP III Update*

In this ongoing effort, avionics items are being integrated with the ICAP III system. This includes integrating both software upgrades and avionics systems, that include a second Embedded Global Positioning System/Inertial Navigation System (EGI), HARM, ALE-47(V), low-band transmitter, Band 7/8, night vision devices (NVDs), USQ-113(V) software improvements, and data fusion with national assets. Bringing ICAP III to full potential includes four Block upgrades approximately 15 months apart.

Funding for these efforts has been programmed at \$16.417 million in FY04, \$6,402 million in FY05, \$14.403 million in FY06, and \$14.361 million in FY07.

### *Jammer & Techniques Optimization(JATO)*

This project funds software development, among other efforts. One of the focuses will be to optimize tactics that take full advantage of the ALQ-218(V)'s Selective Reactive Jamming capabilities.

Funding for JATO was set at \$9.640 million in FY04, \$10.305 million in FY05, \$10.504 million in FY06, and \$11.608 million in FY07.

Transition of the TEAMS software to the JMPS began in FY03 and will continue through FY07.

Systems integration of Link 16 began in FY02. Testing and correction of defects found in the Link 16 modification are to be corrected so the EA-6B will be able to participate within FORCENet and contribute to the greater situational awareness allowed by network-centric warfare efforts.

### *Acquisition Strategy*

The low-band transmitter development contract was awarded after a full and open competition to BAE Systems. Following development and successful DT/OA, sole-source LRIP contracts will be awarded. Following successful OT, a sole-source production contract will be awarded.

The ICAP III contract, an EMD CPIF/AF basic contract with two fixed-price incentive (FPI) production options, was awarded to a Northrop Grumman team in March 1998 following Milestone II and a full and open competition. The contract was changed to a CPAF contract in FY99. LRIP was scheduled for FY03. Milestone III, full-rate production, and IOC are scheduled for FY05.

ICAP III Test & Evaluation accomplishments included:

DT-IIA-D (Integrated Test & Evaluation/Contractors Test) – October 1998 through January 2003. 1,800 ground hours, 83 flights, 174.7 flight hours.

OT-IIA (Operational Assessment) – January through March 2003. ICAP III found to be “Operationally Effective and Potentially Operationally Suitable.”

DT-IIIE (Technical Evaluation) – May 2003 through February 2004. 1,067 ground hours, 191 flight hours.

OT-IIB (OPEVAL) – April through September 2004. included two carrier detachments and a successful HARM firing. ICAP III was found “Not Operationally Suitable and Not Operationally Suitable and Recommended for Training Purposes Only.” (Limited Fleet introduction for training purposes.)

DT-IIIA (DT Assist) – January through July 2005. 440 ground hours, 251.1 flight hours (140 flights).

OPEVAL Verification of Correction Deficiencies – All OPEVAL and carryover TECHEVAL Deficiencies resolved. It was declared “Operationally Effective and Operational Suitable. Recommended for Fleet Release.”

## EA-6B ICAP III Program

## Contracts/Orders &amp; Options

(Contracts over \$5 million.)

<b>Contractor</b>	<b>Award (\$ millions)</b>	<b>Date/Description</b>
Northrop Grumman	48.8	Feb 2004 – ID/IQ contract for services and material for minor inspections, repairs, maintenance, support, and minor modification installations on the EA-6B. To be completed February 2008. (N00019-04-D-0018)
BAE Systems	13.0	Jul 2004 – ID/IQ contract for procurement of up to 57 USQ-113(V) radio countermeasures sets for the EA-6B. Completed September 2006. (N00019-04-D-0081)
Advanced Information Engineering Services	30.0	Jan 2005 – Ceiling-priced CPFF ID/IQ contract to provide engineering services in support of the Airborne Electronic Attack/EA-6B Integrated Product Team. To be completed January 2010. (N68936-05-D-0007)
BAE Systems	17.1	Feb 2005 – Mod to a previously awarded FFP contract for the procurement of six low-band transmitters for the EA-6B. To be completed November 2007. (N00019-04-C-0122)
BAE Systems	10.0	Apr 2005 – A not-to-exceed mod to a previously awarded FFP contract for the procurement of eight low-band transmitters for the EA-6B aircraft. To be completed March 2008. (N00019-04-C-0122)
Electronic Warfare Associates Gov Systems	5.7	Jun 2005 – FFP contract for an EA-6B ICAP III Flight Station Weapons System Trainer (FS/WST). To be completed June 2007. (N61339-05-C-0096)
Northrop Grumman	8.5	Jun 2005 – FFP order against a previous basic ordering agreement for spares for the EA-6B ICAP III LRIP aircraft. Completed October 2006. (N00019-00-G-0425)

## Timetable

<b>Month</b>	<b>Year</b>	<b>Major Development</b>
	1966	EA-6A design contract
	1969	Initial EA-6B production
	1983	ADVCAP contract awarded
	1991	Final EA-6B production
	1990s	Remanufacturing
Dec	1993	Band 2/3 DT-IIH TECHEVAL
	FY94	Integration of Universal Exciter unit into ICAP II; five EDM units delivered
Feb	1994	ADVCAP contract terminations announced
Apr	1994	OT-IIB OPEVAL
Aug	1995	Program Decision Memorandum ups Navy Prowler force from 80 to 104 aircraft and directs retirement of EF-111A, increasing force by one squadron
Feb	1996	OSD Program Budget Decision releases \$200 million to upgrade the EA-6B radar receiver
2Q	FY96	UEU Milestone III
4Q	FY96	UEU full-rate production
Jun	1997	Band 9/10 Tx DT completed
Jul-Aug	1997	Band 9/10 OPEVAL
4Q	FY97	ICAP III Milestone II, low-band Tx/Rx Milestone II



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<u>Month</u>	<u>Year</u>	<u>Major Development</u>
	1998	Block 89A upgrades begin to enter inventory
1Q	FY98	Band 9/10 Tx Milestone III
2Q	1998	ICAP III Milestone II, Upgrade EMD contract awarded
3Q	FY98	Low-band Tx/Rx Milestone III; EF-111A retired
Oct	1998	Block 89A TEMP approved
4Q	FY98	Low-band Tx/Rx DT/OT begun
Early	1999	USQ-113(V) connectivity, final FOT&E and IOC approved
3Q	FY99	ICAP III PDR
4Q	FY99	Block 89A full-rate production
2Q	FY00	ICAP III CDR
	FY00	Start of EA-6B upgrades
Nov	2001	First flight of an ICAP III EA-6B; EF-18 makes first demonstration flight
2Q-4Q	FY02	ICAP III DT
2Q-2Q	FY02-03	Developmental Testing (DT)
2Q-4Q	FY03-04	Low-Band Tx Combined DT-IIA/OT-II
2Q-2Q	FY03-04	Operational Assessment/TECHEVAL/OPEVAL start
3Q	FY03	ICAP III LRIP decision, contract award
2Q-4Q	FY04	OPEVAL (ICAP III DT IIB/OT-II)
1Q-3Q	FY04-05	ICAP III LRIP
2Q	FY05	Milestone III (ICAP III), ICAP III FRP Award
2Q-2Q	FY05-08	Full-Rate Production
2Q-2Q	FY05-06	ICAP III Block I/II DT-IIIA/B, Block II OT-IIIA
3Q	FY05	IOC ICAP III
4Q-2Q	FY06-07	Block III DT-IIIC/OT-IIIB
	2015	Planned retirement of the EA-6B

## Worldwide Distribution/Inventories

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This is a **U.S.**-only program.

## Forecast Rationale

The Improved Capability (ICAP) III program is an effort to upgrade the U.S. Navy's EA-6B Prowler electronic attack aircraft. The program is made up of a variety of equipment that are modified versions of or replacements for older electronic warfare equipment. These systems include the ALQ-99 jammer, the USQ-113 communications jammer, the ALQ-218 radar warning receiver, and a variety of other networking and data processing equipment. These upgrades will allow the EA-6B to operate with the Navy until the EA-18G Growler becomes operational and is phased into service.

Since Forecast International already has reports about each of the systems named above, this report is redundant. Therefore, it will be archived next year. This will be a more specific and accurate representation of the market. For information about the ICAP III or the EA-6B see reports on the ALQ-99 (in Tab B), USQ-113 (in Tab B), ALQ-218 (in Tab C) and Forecast International's Aerospace Group's report on the Grumman EA-6.

## Ten-Year Outlook

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The systems in the ICAP III already are reported on in individual reports. This report will be archived in 2008.

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