

2 DECEMBER 1997



Operations

**DECLARATION OF INITIAL OPERATIONAL
CAPABILITY (IOC) AND FULL OPERATIONAL
CAPABILITY (FOC)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 10-6, Mission Needs and Operational Requirements. This instruction outlines the decision making process that AFSPC uses to declare Initial Operational Capability (IOC) and Full Operational Capability (FOC) for systems. This instruction applies to HQ AFSPC, subordinate units and the Air National Guard (ANG) when published in ANGIND2. It does not apply to Air Force Reserve Command units. Submit recommendation for changes to HQ AFSPC/DOT, 150 Vandenberg Street, Suite 1105, Peterson AFB CO 80914-4240.

SUMMARY OF REVISIONS

The revision of this publication is to meet the format standards required by Air Force. No content material has changed. Some required format change have been made to allow for the conversion process.

1. References:

- 1.1. DoD Directive 5000.1, Defense Acquisition, 15 Mar 96.
- 1.2. DoD Instruction 5000.2-R, Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs, 15 Mar 96.
- 1.3. AFPD10-6, Mission Needs and Operational Requirements, 19 Jan 93.
- 1.4. AFI10-201, Status of Resources and Training Systems, 1 Oct 95.
- 1.5. AFI10-601, Mission Needs and Operational Requirements Guidance and Procedures, 31 May 94.
- 1.6. AFI99-101, Developmental Test and Evaluation, 1 Nov 96.
- 1.7. NORAD/USSPACECOM Regulation (NUR) 10-603, Change Management of Operational NORAD and USSPACECOM Systems, 14 Jan 94.

2. Key Terms:

2.1. Designed Operational Capability (DOC). A summary of a unit's mission for which the unit has been equipped, organized or designed. (AFI10-201)

2.2. Development Test and Evaluation (DT&E). Testing and evaluation conducted to evaluate design approaches, validate analytical models, quantify contract technical performance and manufacturing quality, measure progress in system engineering design and development, minimize design risks, predict integrated system operational performance (effectiveness and suitability) in the intended environment and identify system problems (or deficiencies) to allow for early and timely resolution or correction. DT&E includes contractor testing. (AFI99-101)

2.3. Full Operational Capability (FOC). Full attainment of the capability to effectively employ a weapon, item of equipment or system of approved specific characteristics, which is manned and operated by a trained, equipped and supported military unit or force.

2.4. Initial Operational Capability (IOC). The first attainment of the capability to effectively employ a weapon, item of equipment or system of approved specific characteristics, and which is manned or operated by an adequately trained, equipped and supported military unit or force. (AFI10-601)

2.5. IOC/FOC Readiness Review Board. HQ AFSPC review board that determines readiness of a system for IOC or FOC declaration, and recommends the appropriate declaration to AFSPC/CC.

2.6. IOC/FOC Evaluation Criteria. Criteria, defined in each system Operational Requirement Document (ORD) or by the system's Integrated Concept Team (ICT), that must be met in order to make an IOC or FOC declaration.

2.7. Operational Test and Evaluation. Test and evaluation conducted in as realistic an operational environment as possible to estimate the prospective system's operational effectiveness and operational suitability. In addition, operational test and evaluation provides information on organization, personnel requirements, doctrine and tactics. It may also provide data to support or verify material in operating instructions, publications and handbooks. (AFI99-101)

2.8. Operational Acceptance. Formal acknowledgment by the operational community that an implemented change, modification or new acquisition meets the minimum operational requirements of the system.

2.9. Required Assets Availability (RAA) Date. A date agreed to by HQ Air Force Materiel Command and the using command where sufficient equipment, personnel, and logistics elements are available to the operational command to begin a trial period for equipment operation and support capability before initial operational capability declaration. Logistics elements include approved operational support equipment, critical spares, verified technical manuals, and training programs and courses. (AFI10-601)

Trial Period. The period in which an operating command becomes familiar with a system using operational techniques and procedures to determine the ability of the operational unit to employ the system. The purpose is to demonstrate to the operational commander that the unit can perform its designed operational mission or missions. Occurs between the RAA date and IOC declaration. (AFI10-601)

3. General:

3.1. Objective. The objective of this instruction is to establish a standardized AFSPC approach to the declaration of IOC and FOC.

3.2. Purpose for Declaring IOC/FOC. The purpose of declaring IOC and FOC is to announce an initial or full operational capability of a new or upgraded system to unified commanders, higher headquarters and AFSPC organizations, as applicable. For upgraded systems, IOC/FOC would only be needed if the system provides a significant new capability.

3.3. IOC/FOC Declaration. AFSPC/CC is the sole authority to declare IOC or FOC for an AFSPC system. IOC/FOC is declared when an acquired system meets the IOC/FOC Evaluation Criteria as defined in the system's ORD. If a system does not have an ORD, the applicable system's ICT will develop and document appropriate IOC/FOC Evaluation Criteria.

3.3.1. IOC and FOC are terms that apply to an operational system that goes through an acquisition process. These terms do not apply to units or organizations. A new unit would be "activated," not declared IOC. However, a newly activated unit is often part of the IOC decision relating to the system the unit operates. There is no specific Air Force guidance directly linking a specific unit's Status of Resources and Training Systems (SORTS) C-Rating with IOC or FOC. However, IOC and FOC indicate a certain capability or readiness and SORTS should be a consideration for IOC declaration. AFSPC should strive to achieve a C-Rating of at least C-3 for IOC and a C-Rating of C-1 for FOC.

3.3.2. AFSPC/CC may declare multiple IOCs for systems or equipment supported by multiple SORTS DOC statements. Additionally, multiple IOCs may be declared for incremental system deliveries, such as for satellite launches leading up to a full constellation.

3.3.3. FOC declaration applies only to those systems having an FOC declaration as part of their acquisition and deployment strategy, as defined in the ORD. If a system does not have an ORD, the applicable system's ICT will develop and document appropriate IOC/FOC Evaluation Criteria. Nominally, FOC is not declared until Air Force Materiel Command has delivered the full system, as defined in the system's ORD, and corrected all the system's discrepancies.

3.3.4. FOC may occur simultaneously with IOC, especially with one-of-a-kind systems. But it usually occurs later, especially if it involves bringing a certain number of like systems on line.

3.3.5. The applicable NAF/CC will select a time when the operational unit(s) will begin using the system (mission activation) and will announce to the appropriate unified commander(s) when the system is available to support operations along with any limitations. When mission activation is declared prior to IOC, this period will be treated as a Trial Period to exercise and refine operational procedures, training, documentation, logistics functions and all other processes required to support the mission. This period should also be used to surface any problems or deficiencies so they may be resolved before IOC declaration.

3.3.6. Operational Acceptance of changed/modified or new systems is not the same as IOC or FOC. Operational Acceptance is a formal decision within the operations community that a changed/modified or new system meets the operational requirements of the system. Operational users define their procedures to "operationally accept" changes to their systems. For example, Integrated Tactical Warning/Attack Assessment (ITW/AA) processes are defined and boards are established to determine Operational Acceptance of a system. See NUR10-603 for details on the change management of ITW/AA systems.

3.4. IOC/FOC Evaluation Criteria. IOC declaration is event-driven and not schedule-driven. The IOC/FOC Evaluation Criteria defines the events (operations, equipment, logistics, manpower, facilities, etc.) that must be met in order to declare IOC/FOC. The ICT will tailor the criteria as appropriate for each system. The following types of events/items should be included in the Evaluation Criteria:

- 3.4.1. Successfully meeting the RAA requirements and date.
- 3.4.2. Successfully completing an Operational Test and Evaluation (normally conducted by the Air Force Operational Test and Evaluation Center (AFOTEC), 17th Test Squadron or 576th Flight Test Squadron) and resolution of discrepancies.
- 3.4.3. Successfully completing a Trial Period that demonstrates the system and personnel can perform its assigned mission.
- 3.4.4. Proper logistics elements to include operational support equipment, spares, verified technical manuals, training programs and training courses are in place.
- 3.4.5. Adequate SORTS C-Rating to reflect the appropriate level of system performance, quantities received, operator and maintainer proficiency and an adequate support capability (this includes the operational structure, training, manpower and equipment needed to operate and maintain the system).
- 3.4.6. Development of other miscellaneous documents during acquisition phases leading up to IOC/FOC. The following is a sample list of the types of documents required prior to OT&E. This list is not all inclusive and should be tailored for each program.
 - 3.4.6.1. Approved Concept of Operations.
 - 3.4.6.2. Approved ORD or ICT-developed and documented IOC/FOC Evaluation Criteria.
 - 3.4.6.3. Approved System Training Plan.
 - 3.4.6.4. Approved Integrated Logistics Support Plan, Maintenance Concept and the Integrated Manpower, Personnel, and Comprehensive Training and Safety (IMPACTS).
 - 3.4.6.5. Approved Test and Evaluation Master Plan.
 - 3.4.6.6. Approved P-Plan and Unit Type Code (UTC).
 - 3.4.6.7. Approved SORTS DOC Statement.
 - 3.4.6.8. Approved Manpower Estimate Report.
 - 3.4.6.9. Approved Operational Protection Guides.
 - 3.4.6.10. Approved system security Designated Approval Authority (DAA) accreditation to operate the system.

4. IOC/FOC Declaration Process:

4.1. Events Leading to IOC/FOC. **Figure 1.** shows the notional process leading up to the IOC/FOC declaration. This diagram is not all-inclusive, but rather depicts key events leading up to IOC/FOC declaration.

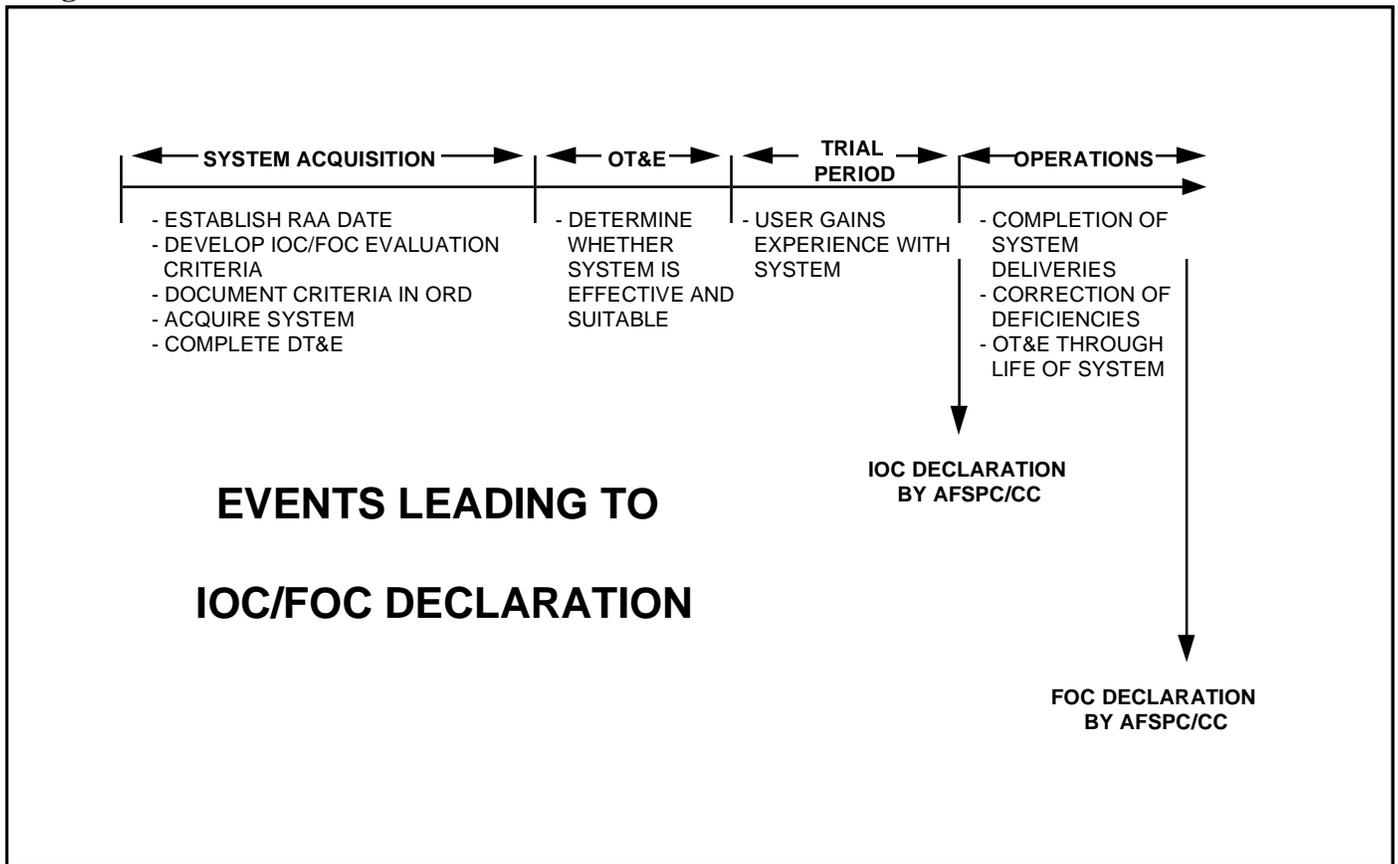
4.1.1. During the acquisition program, the RAA requirements and date are established along with the IOC/FOC Evaluation Criteria. Key acquisition documents, such as those listed in paragraph 3.4.6., are developed.

4.1.2. After the system is delivered, operational units are activated (as required) and an appropriate level of trained personnel are in-place, an OT&E is conducted by an independent, objective operational test agency.

4.1.3. Following successful completion of OT&E and resolution of discrepancies, a Trial Period is entered. Trial Period demonstrates to the operations commander that the unit/system can perform its designed operational mission(s). The length of this Trial Period may vary significantly and, in some cases may not exist at all (in cases where the Trial Period may have occurred prior to or during the OT&E). Each system's Trial Period length should be defined in the system's ORD or by its ICT. Trial Period ends when AFSPC/CC declares IOC.

4.1.4. For systems with an FOC declaration, the full system is delivered and remaining system deficiencies are corrected. Once complete, AFSPC/CC declares FOC.

Figure 1. Generic IOC/FOC Declaration Timeline.



4.2. IOC/FOC Declaration Staffing. HQ AFSPC/DO is responsible for staffing the overall decision on whether or not to declare IOC or FOC. Within HQ AFSPC/DO, the system's Functional Area Manager, with support from the system's ICT, ensures the IOC/FOC declaration is staffed for approval. Two methods are available to staff the decision. The first is the IOC/FOC Readiness Review Board and is normally used for Acquisition Category (ACAT) I programs or programs where

a formal board is necessary. The second method is a Staff Summary Sheet (SSS) coordination. HQ AFSPC/DO will decide which method is appropriate for each program.

4.2.1. IOC/FOC Readiness Review Board. When HQ AFSPC/DO determines that an IOC/FOC Readiness Review Board is needed, the DO will recommend AFSPC/CV chair the board. Selected HQ AFSPC Directorates (CE, DO, DP, DR, FM, LG, SC, SE, SF and XP) plus the applicable NAF, wing(s), groups and squadron(s) are represented. In addition, the appropriate unified command(s), AFOTEC and Space Warfare Center may be invited. The HQ AFSPC/DO Functional Area Manager, with support from the system's ICT, develops a briefing addressing all areas from the system's IOC/FOC Evaluation Criteria. The Functional Area Manager briefs this information to the AFSPC/CV, with HQ AFSPC Directorates providing additional details/concerns as appropriate. The decision on whether or not to recommend AFSPC declare IOC/FOC will be made by the AFSPC/CV after hearing all concerns and recommendations from the members of the IOC/FOC Readiness Review Board. Members of the IOC/FOC Readiness Review Board will not have veto authority.

4.2.2. SSS Coordination. When HQ AFSPC/DO determines that an IOC/FOC Readiness Review Board is not required, the HQ AFSPC/DO Functional Area Manager, with support from the system's ICT, will develop a SSS that summarizes the particular system's readiness based on the IOC/FOC Evaluation Criteria. The Functional Area Manager will coordinate the SSS with the same offices as listed in paragraph [4.2.1](#).

4.2.3. AFSPC/CC IOC/FOC Declaration. AFSPC/CC receives the AFSPC/CV recommendation for IOC/FOC and, if accepted, declares IOC/FOC to HQ USAF/XO (for program administration purposes) via an official memorandum.

4.2.4. NAF/CC Mission Activation. The NAF/CC will declare to the applicable unified commander(s) that the system is operational at a certain point in time (and identify any limitations to that mission activation) via official message.

ROBERT C. HINSON, Brig Gen, USAF
Director of Operations