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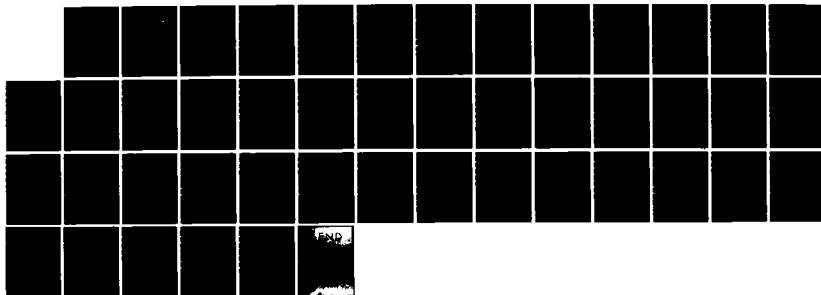
DRAFT AFR 55-24 SYSTEM OPERATIONAL CONCEPTS(U)
DEPARTMENT OF THE AIR FORCE WASHINGTON DC 05 SEP 84
AFR-55-24

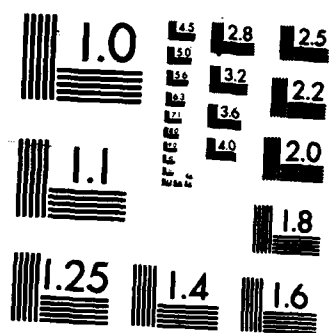
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AD-A147 313

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, D.C.

5 SEP 1984

REPLY TO
ATTN OF: X00

SUBJECT: Draft AFR 55-~~XX~~²⁴, System Operational Concepts

TO: See Distribution

1. The attached AFR 55-XX, System Operational Concepts, is provided for your review and use as an interim working regulation pending formal coordination. You are authorized to follow the procedures contained in this draft on all matters pertaining to the development, staffing and approval of Preliminary System Operational Concept (PSOC) and System Operational Concept (SOC) documents. We anticipate formal coordination will take place in the near future.

2. This latest version, dated 27 Aug 84, supersedes all previous publications and replaces guidance formerly contained in AFR 57-1, Statement of Operational Need, dated 29 Jun 79. It culminates an extensive review and rewrite process on the part of the Air Staff, Major Commands, and interested agencies. My staff exercised considerable time and energy in assessing the appropriateness and pertinency of each individual input. If you believe serious error or omissions exist, we request that you bring it to our attention immediately.

3. This regulation, when published, may vary slightly due to revisions resulting from the staffing, editing, and publication process. It will also contain a new attachment depicting the overall DoD/USAF acquisition cycle and when a PSOC and SOC document are required at the key events/milestones.

4. Your outstanding support and participation in the development of this regulation are very much appreciated. Our objective has been, and continues to be, to achieve a more meaningful dialogue between the operator, developer, supporter, tester, and associated participating commands. I believe this regulation meets that need and permits the operator to play a more active role in the acquisition of new, or improved weapon systems and equipment.

5. We continue to solicit your views on how to make this regulation a more effective and incisive document. Mr Daniel King, AF/XOOIP, AV 225-7719 is the Directorate point of contact.

FOR THE CHIEF OF STAFF


ROBERT D. BECKEL, Maj Gen, USAF
Director of Operations
DCS, Plans and Operations

- 2 Atchs
1. PSOC/SOC Distribution
List
2. Draft AFR 55-~~XX~~²⁴

This document has been approved
for public release and sale; its
distribution is unlimited.

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PSOC/SOC DISTRIBUTION LIST

HQ USAF ADDRESSEES

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/INEG	1
/MPXXX	1
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MAJCOM ADDRESSEES

HQ SPACECOM/XP/DO Peterson AFB, CO 80914	4/3
HQ AFCC/SIP/EIC/ISRR, Scott AFB IL 62225	3/1/1
HQ AFLC/XRQ, Wright-Patterson AFB OH 45433	12
HQ AFRES/XPXR, Robins AFB GA 31098	2
HQ AFSC/XR, Andrews AFB D.C. 20334	12
HQ AFOTEC/XP, Kirtland AFB NM 87117	5
HQ ATC/TTY, Randolph AFB TX 78150	6
HQ MAC/XPQ/SYA, Scott AFB IL 62225	6/1
AWS/SY, Scott AFB IL 62225	1
NGB/XO, Wash D.C. 20310	2
HQ PACAF/DOQ, Hickam AFB HI 96853	6
HQ SAC XP, Offutt AFB NE 68113	6
HQ TAC/XPJ, Langley AFB VA 23665	6
HQ USAFE/DOQ, APO New York 09012	10
HQ ESC/XPXQ, San Antonio TX 78243	6
OC-ALC/XRX, Tinker AFB OK 73145	2
OO-ALC/XRX, Hill AFB UT 84056	2
SA-ALC/XRX, Kelly AFB TX 78241	3
SM-ALC/XRX, McClellan AFB CA 95652	3
WR-ALC/XRX, Robins AFB GA 31098	3
AGMC/XRP, Newark AFS OH 43055	2
AFASPO, Gunter AFB AL 36115	1
DTIC/DDA, Cameron Station, Alexandria VA 22314	2
AFALC/XRX, Wright-Patterson AFB OH 45433	10
ANG/AFRES FWD, Tucson IAP, Tucson AZ 85734	1
AFIS, Ft Belvoir VA 22060	4
System Program Office (SPO) for specific system (TBD)	1
AFISC/SESD, Norton AFB CA 92409	1



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Operations

System Operational Concepts

PURPOSE: This regulation outlines Air Force policies, procedures, and responsibilities for the preparation, processing, and approval of Preliminary System Operational Concept (PSOC), and System Operational Concept (SOC) documents. It specifies the timing, content, format and terminology of the PSOC and SOC cycle as it relates to the overall acquisition process. *p. 2*

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NO. OF PRINTED PAGES:
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Attachments

1. Abbreviations and acronyms
2. Glossary
3. PSOC/SOC Distribution List
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→ The PSOC and SOC

1. GENERAL INFORMATION: The Preliminary System Operational Concept (PSOC) and System Operational Concept (SOC) publications are unique, user-oriented planning documents that describe an operating command's plans and intentions for the employment, deployment, and support of a specific system. The documents provide a description of the use environment, characteristics, parameters, technical performance, and support requirements of a proposed system or capability to satisfy a stated operational need. The SOC provides a continuing guidance/framework for system development during the acquisition cycle. It should be as thorough as possible during early phases, and be updated/expanded as the system baseline and operational and support factors become more defined.

a. OVERVIEW. Following Program Initiation (Milestone 0), a using command will be tasked to develop a PSOC or SOC document for selected Air Force programs. The former is required at Concept Selection (Milestone I) while the latter is required at Milestones II and III (Full Scale Development and Production/Deployment). There are two phases in the development and staffing of a PSOC/SOC. The first phase consists of a For Comment/Coordination review with participating commands and agencies. The second phase involves submittal of the updated document for HQ USAF review and approval. Once approved a PSOC/SOC will be published and distributed by the originating command to all interested commands and agencies for their use in program management, resource planning, and identification of associated operational requirements. These policies and procedures are covered in detail at paragraphs 2 and 4, respectively.

2. AIR FORCE POLICY: A PSOC or SOC is mandatory for all Joint Service Operational Requirements (JSOR), Justification For Major System New Starts (JMSNS), or other requirements documents such as a Statement of Operational Need (SON) that identifies an operational need whose solution will likely lead to a Major System Acquisition (MSA) program or Air Force Designated Acquisition Program (AFDAP). In addition, those requirements possessing a high degree of urgency or importance, Joint Service or North Atlantic Treaty Organization (NATO) implications, or which have high risk technology, will be

guided by the provisions of this regulation. A PSOC/SOC will also be required for those acquisition programs that have HQ Air Force directed Operational Test and Evaluation (OT&E). HQ USAF approval of a draft PSOC or SOC denotes concurrence of those planning factors, specifications, and command intentions depicted in the document. Therefore, an approved PSOC or SOC is an official USAF reference manual and is to be used as a baseline planning document from which other program management, resource planning, requirements documentation, and test and evaluation publications are derived.

a. PSOC PRINCIPLES. The PSOC is the initial planning document prepared to address anticipated operational and support factors associated with a particular candidate system. It will usually be general in nature and contain selected, basic information. All nine (I-IX) major sections of the format (Atch 4) must be addressed or referenced in a PSOC document when formally submitted to HQ USAF. Pertinent performance standards and support parameters (goals and thresholds) will be included. At this stage of the program, values for the required parameters may not be firm. The using command should include as definitive a value as possible for the standards and parameters, using ranges, or estimating technique values, for those parameters that are necessary to assess trade-off analysis and to influence system design. A PSOC will be submitted for each viable candidate system undergoing Milestone I review (Concept Selection). However, a PSOC is necessary for each candidate system only where there are substantial conceptual differences among the various alternative systems. As a goal, every effort will be made to submit a PSOC early enough to affect Request For Proposal (RFP) development and prior to the preparation of the Test and Evaluation Master Plan (TEMP). NOTE: In certain instances, it may be useful to develop a generic PSOC that describes generalized operational and support factors for a desired capability prior to the identification of specific candidate systems. An originating command is authorized to prepare this type of abbreviated document if pre-Milestone I program advocacy warrants and the criticality and importance of the requirement precludes awaiting the preparation of a conventional PSOC document. Staffing and coordination procedures will remain unchanged. (See para 4c for additional information on generic PSOC documents.)'

b. SOC PRINCIPLES. A SOC, while similar in format to a PSOC, is much more definitive and provides very specific quantitative and qualitative factors relating to the performance/support parameters and specifications of a particular system. It generally evolves from a PSOC during the Demonstration and Validation phase (following Milestone I) and is required at Milestone II and III (Full Scale Development and Production/Deployment). All major sections and appropriate subheadings must be addressed at time of submittal to HQ USAF. Quantitative performance and support data included in a SOC must be consistent with details of the program baseline and status of contractor proposals for that point in the acquisition process.

c. UPDATES/REVISIONS. PSOC or SOC documents will be updated as necessary to reflect revisions in program direction, scope, technical solution, threat assessment, or other meaningful change that could impact on design, cost, schedule, or supportability of the proposed system. Updates and revisions can be directed by HQ USAF or initiated unilaterally by the using command. Documents may be updated or revised in part or whole, and will require HQ USAF approval only if the change significantly impacts programmatic, operational, or support parameters that could increase costs, impose time constraints, or cause other meaningful impact. HQ USAF/XOO will be the final authority on questions relating to formal review and approval of an update or revision to a PSOC or SOC.

d. DISSEMINATION POLICY. A PSOC or SOC document is an integral part of the program documentation submitted for formal Air Force System Acquisition Review Council (AFSARC) or Defense System Acquisition Review Council (DSARC) review and approval. Because of potential source selection sensitivity and the possibility that information may be misinterpreted or changed, PSOC or SOC documents not yet approved by HQ USAF normally will not be released to agencies outside the Department of the Air Force. Following approval and inclusion of recommended revisions, the published document may be released to other government agencies and non-government agencies authorized to receive such information and having a valid need to know. A PSOC/SOC document, whether in draft form or approved, will not be released to non-government agencies or contractors where proprietary rights or conflicts of interest appear possible unless such information is deleted or sanitized. Accordingly, using commands should clearly state the constraints they wish placed on the review and/or distribution of a specific PSOC or SOC. Release of PSOC/SOC documents, in part or whole, will be governed by the provisions of AFR 80-45, Distribution Statements on Technical Documents, as revised by Secretary of Defense Interim Guidance dated 18 Oct 1983, "Procedures and Markings of Technical Documents." The designated Implementing Command will serve as the releasing authority for PSOC/SOC documents to Department of Defense (DoD) agencies and authorized contractors. Requests for draft documents by non-DoD government agencies must be directed to HQ USAF/XOO.

NOTE: These dissemination constraints do not apply to basic operational and support concept information which is specifically provided by the using command, through the implementing command, to the contractor to permit concept identification and exploration of alternate design concepts during the concept exploration phase. In addition, DoD agencies such as Defense Mapping Agency, Defense Nuclear Agency, Defense Communications Agency, and other Services, etc. may have a valid need to participate in the development and review of draft documents.

e. FREEDOM OF INFORMATION. HQ USAF/DADF will adjudicate requests for public release of information and will be the final authority as governed by AFR 12-30, Air Force Freedom of Information Act Program.

f. AFSARC/DSARC PROGRAMS. For programs requiring AFSARC or DSARC approval to proceed to the next acquisition phase, a PSOC will be required for each viable candidate system advocated at Milestone I (Concept Selection). Candidate systems proceeding to Milestone II or III (Full Scale Development and Production/Deployment) will each require a SOC. Candidate systems having a high degree of commonality may be consolidated into one document by the use of annexes and/or appendices.

g. HQ USAF/COMMAND FOCAL POINTS. HQ USAF directorates, commands, and agencies will establish a centralized focal point for expeditious review and coordination of PSOC/SOC documents. Commands should develop appropriate guidance to facilitate implementation of this regulation and to promote a better understanding of the overall acquisition process.

3. USE AND APPLICABILITY OF PSOC AND SOC DOCUMENTS: Approved PSOC's and SOC's serve as meaningful reference documents for a wide variety of functions. They are frequently utilized by participating commands, agencies, and Air Staff offices to identify, assess, and verify the adequacy, accuracy, and completeness of important program factors, requirements, and planning considerations. Their basis for development is derived from technical solutions proposed by contractors during the Concept Exploration Phase to satisfy USAF stated requirements. The PSOC and SOC provide the respective using command with an opportunity to describe, from their vantage point, their views and perceptions of each contractor proposal. This permits the command to document how the proposed system will be operated, deployed, employed, and supported. PSOC's assist the Air Force in its efforts to scope the final set of specifications that will be incorporated into the RFP that follows Milestone I. Both PSOCs and SOC's are used to advocate, integrate, and defend programs within DoD, Congress, and other government agencies. These documents also have specific uses that directly contribute to implementing, supporting, and participating commands and agencies involved in program development efforts:

a. SUPPORT AND DATA REQUIREMENTS.

(1) Verification that computer resource support planning is considered.

(2) Assurance that nuclear survivability requirements are considered.

(3) Identification of critical needs in the tactical electronic countermeasures (ECM) arena.

(4) Assurance that optimum interoperability among Air Force and Joint Service requirements is considered.

(5) Verification that required support for Traffic Control and Landing Systems (TRACALS) is adequate.

(6) Identification of related systems needed to support intelligence data and assessment of intelligence data bases to support weapons employment analysis.

(7) Development of weather support concepts, plans, and verification that associated weather support cost estimates are available.

(8) Identification of information system needs, software, and software support.

(9) Assessment of existing cartographic, geodetic, and geophysical data to support navigation and positioning accuracy for air delivery and weapon systems.

(10) Assessment of mission planning systems to support weapon system employment.

(11) Assessment of training support required, and if changes will be necessary to existing Air Training Command courses, or if new courses of instruction are needed.

(12) Identification of potential manpower requirements and associated skill levels.

b. PROGRAM PLANNING AND RESOURCES.

(1) Baseline from which to begin program planning.

(2) Assessment of the system's impact on a command's current resources and programs.

(3) Planning for selected command force structure and application of systems within commands.

(4) Aid in Request For Proposal (RFP) development.

(5) Early identification of potential problem areas.

(6) Development of the Operational Test and Evaluation program, and preparation of test approach, test program outline, and test plan.

c. SYSTEM ANALYSIS.

(1) Provides data for trade-off analysis between system performance, operational, and logistics support requirements, logistics support analysis, supportability and readiness analyses, life cycle cost (LCC) studies, repair level analyses, and sortie generation modeling.

(2) Identifies systems' impact on airlift operations and required system improvements.

d. COMMAND, CONTROL AND COMMUNICATIONS.

(1) Verification that adequate protection is provided for command, control, and communications (C³) links specified in AFR 23-30, Electronic Security Command and 100-45, Communications Security Policies, Procedures, and Instructions.

(2) Identification of Tactical Digital Information Link (TADIL) connectivity, and if additional modeling capabilities are required.

(3) Verification on the adequacy of C³ countermeasures/ electronic combat (CM/EC), COMPASS CALL requirements, and identification of systems that require vulnerability studies by the Air Force Electronic Warfare Center (AFEWC).

(4) Assurance that Communications Security (COMSEC), Electronic Security (ELSEC), Operations Security (OPSEC), and Electronic Combat (EC) factors have been considered.

4. STAFFING: The timely development, coordination, and approval of a PSOC or SOC document requires a cohesive, effective working relationship among the user, developer, supporter, tester, and HQ USAF. Action officers are encouraged to establish and maintain close liaison with their counterparts to ensure PSOC or SOC development progresses on schedule and problem areas are resolved in an expeditious manner. The PSOC/SOC distribution list is shown at Attachment 3; the format is depicted at Attachment 4.

a. PSOC/SOC TASKING. Air Staff Program Element Monitors (PEMs) will ensure that the responsible organization is notified as early as possible, but NLT the initial implementing Program Management Directive (PMD) of a pending tasking to develop a PSOC or SOC. The primary consideration for the start of a PSOC is the availability of developer (contractor) information since this forms the basis for PSOC development. The suspense (from date of tasking) for preparation of a PSOC or SOC will normally be 180 calendar days. The coordinated draft must be submitted to HQ USAF/XOO for formal Air Force approval at least 60 days prior to a milestone decision. PEMs will coordinate with, and receive approval from USAF/XOO prior to initiating any PSOC or SOC tasking.

b. DEVELOPMENT OF INITIAL DRAFT. The using command will, upon receipt of the tasking, develop an initial draft PSOC or SOC, utilizing information and data derived from appropriate functional offices, contractors, and implementing and supporting commands. An initial planning meeting, chaired by the using command, will generally be held within 30 days of receipt of direction to scope the concept and outline appropriate activities, assignments, and responsibilities.

c. GENERIC PSOC DOCUMENT. A using command may, on unique occasions, find it helpful to develop an abbreviated PSOC document prior to contractor/developer data becoming available. The depicted data will be based on a using command's early assumptions, planning factors, and intent as to how it anticipates it will operate and support a desired generic capability. Staffing procedures and document format will be similar to a PSOC. These early planning documents must be expanded and refined into a conventional PSOC as a program matures and it progresses towards a Milestone I decision. Therefore, its preparation and use should be limited to urgent, time sensitive program development efforts.

d. FOR COMMENT PHASE. A For Comment phase will be established to permit all involved commands, agencies, and Air Staff offices an opportunity to review and comment on the initial PSOC or SOC draft. The imposed suspense may be tailored to the urgency, importance, and complexities of the system under consideration; however, a suspense should not exceed 45 calendar days from date of tasking. The review level, addressees, and number of copies required for PSOC/SOC distribution are shown at Attachment 3.

e. HQ USAF REVIEW AND APPROVAL PHASE. Upon completion of the For Comment phase, the using command will submit the updated PSOC or SOC draft will then be submitted to HQ USAF/XOO for formal Air Staff review and approval. Copies of the document will also be submitted to interested commands and agencies wishing to coordinate on the formal draft. Up to 60 calendar days will normally be required to complete the processing and approval of a PSOC or SOC document. Intercommand or command issues not resolved in the final draft will be highlighted in the transmittal letter to HQ USAF/XOO for resolution as part of the PSOC/SOC approval process. Transmittal letters must be signed out at the O-6/comparable civilian level (or higher), and clearly state the originating command's intent, i.e., For Comment review, coordination, or request for approval. In addition, the name, rank, office symbol, and telephone number of the responsible action officer should be shown.

f. APPROVAL AUTHORITY. The Deputy Chief of Staff/Plans and Operations (AF/XO) is the approval authority for all PSOC and SOC documents. The Director of Operations (AF/XOO) shall serve as the AF/XO Executive Agent. HQ USAF may approve the document as written, grant approval as revised by inclusion of appropriate revisions, accord conditional approval pending receipt of additional information or further analysis, or return the document to the originator for reaccomplishment. The approval authority for PSOC or SOC documents self-initiated by a Major Command (MAJCOM) will be vested at the Deputy Chief of Staff level or other comparable

office of the respective command. Using commands will include HQ USAF/XOO in the For Comment phase (18 copies) for all self-generated documents.

g. PUBLICATION/DISTRIBUTION. The originating command will be responsible for the publication and distribution of the approved PSOC/SOC document as specified at Attachment 3.

5. RESPONSIBILITIES:

a. HQ USAF will:

(1) Identify those requirements and programs that require PSOC or SOC documents to be developed and designate the responsible commands by PMD tasking, letter, or electronic means.

(2) Designate lead command for consolidating inputs and developing the document when more than one using command is involved.

(3) Task MAJCOMs to update PSOC/SOC documents at selected points in the acquisition process.

(4) Approve the PSOC, SOC, or updated document after Air Staff review and coordination.

(5) Ensure PSOC or SOC documents are compatible with approved overall Air Force policies, concepts, and strategies.

(6) Ensure the PSOC or SOC is consistent with all acquisition programs and budget documents. In particular, it will examine detailed requirements for consistency with approved program need statements (SON, JSOR, JMSNS, etc.). Affirm that a PSOC or SOC document does not exceed the magnitude and scope of the current validated requirement.

(7) Ensure the concept is reviewed for logistics compatibility with other documents (see AFR 800-18, Equipment Maintenance Policies, Objectives, and Responsibilities). The review for logistics compatibility should also consider software support for embedded computer resources.

(8) Consider, in conjunction with the using commands, the interoperability, standardization, and commonality of the proposed system with NATO, allied nations, and other Service's capabilities, both planned and ongoing.

(9) Obtain JCS approval, when required, for joint PSOC/SOC documents where Air Force is lead Service. Where another Service/agency is lead, task a lead command to review and consolidate command comments and forward to HQ USAF for review, approval, and submission to the lead Service/agency.

(10) Consider, in conjunction with the using commands, the capability of current support programs (Intelligence, Mapping, Charting & Geodesy, Information Systems, etc) to satisfy, and support employment concepts.

(11) Ensure that training requirements and related support have been considered.

(12) Affirm that all issues and considerations dealing with system integration, interface, and utilization have been fully assessed and evaluated.

b. Using commands will:

(1) Develop the PSOC, SOC, or updated documents for MSA, AFDAP, JSORs, and other programs that are within the scope of this regulation.

(2) Develop or update other PSOC or SOC documents based upon their own program requirements.

(3) When serving as lead command, consolidate inputs and develop and coordinate the document with other participating and using commands.

(4) Approve operational concepts for those system development, acquisition, modification, or OT&E programs not requiring HQ USAF approval.

(5) Provide operational and support inputs (including information systems resources) to HQ USAF and AFSC long-term planning activities on conceptual studies and analyses which identify and evaluate projected deficiencies or obsolescence in existing systems, technological opportunities, advanced capability concepts, and opportunities for increasing operational effectiveness or reducing overall costs. This type of information may be provided to the implementing command and appropriate contractors use during the Concept Exploration phase before a PSOC has been prepared or in instances where one is not warranted.

(6) Formalize the process for PSOC or SOC development and review:

(a) Provide a technically feasible detailed description of the operational characteristics and capabilities of the system required to perform the stated mission, and when operating under stressful or adverse conditions. Particular attention should be paid to counter-countermeasures and system flexibility necessary to succeed in a hostile environment.

(b) Provide early estimates of both training requirements and trained personnel requirements. Trained personnel requirements should be estimated by Air Force Specialty Code and

the fiscal year of training. Ensure that overall training support is considered early to include the projected need for training equipment. Using commands will be members of the Training Planning Team initiated under AFR 50-8.

(c) Define required and desired performance and support parameters for achieving initial and full operational capability for each alternative solution candidate.

(d) Monitor and coordinate on the system design, participate in Development Test and Evaluation (DT&E), and accomplish or participate in Operational Test and Evaluation (OT&E), as appropriate.

(e) Ensure that facility requirements are considered and defined in the PSOC and SOC.

(f) Develop, with the assistance of the implementing and supporting commands, weapon system reliability and maintainability (R&M) requirements and goals.

(g) Formally comment on other commands' PSOC or SOC documents to the originator within 45 days of tasking or as specified by the originating command.

(h) Provide draft copies to appropriate commands, agencies, and HQ USAF/XOO for review and comment IAW this regulation.

(i) With inclusion/revision of comments received during the For Comment phase, update the PSOC or SOC and provide to appropriate commands/agencies for final coordination as required. Submit the formal document for HQ USAF approval at least 60 days or more prior to a scheduled Milestone decision or as prescribed by HQ USAF.

(j) Publish and distribute the approved PSOC/SOC (see distribution table shown at Attachment 3).

(k) Following PSOC development and approval, assist the implementing, participating, and other interested operating commands in development of the Training Program Development Management Plan (TPDMP) as required by AFR 50-8.

(7) Coordinate Operations Security (OPSEC) considerations with participating and using commands. OPSEC considerations should include an assessment of the hostile intelligence threat; Essential Elements of Friendly Information (EEFI); and protective measures.

(8) Advise HQ USAF and the implementing and supporting commands when system capabilities are not responsive to the stated needs specified in the PSOC or SOC.

c. Air Force Systems Command (AFSC) will:

(1) Review and comment on PSOC, SOC, and updated documents as directed by the PMD. Provide comments to the originator within 45 days of tasking, or as specified by the originating MAJCOM.

(2) Assess the technical feasibility and risk of proposed systems in terms of meeting the validated requirement. Identify high risk areas and potential problem areas to the originating MAJCOM for its use in refining the PSOC or SOC.

(3) Integrate participating command efforts to ensure that system design, operational, and support concepts are appropriately developed, refined, and translated into the program baseline.

(4) Provide an assessment of the program baseline and identify trade-offs among system performance, life cycle cost, schedule, reliability, maintainability, survivability, producibility, system safety, support, and maintenance parameters. Ensure trade-offs are concurred in by the using command(s) and coordinated with the participating and supporting commands and agencies.

(5) Ensure throughout the system development phases the capability under development and design criteria continue to meet the parameters addressed in the approved PSOC/SOC, the documented threat, program baseline, and attendant training and support concepts. Advise other involved participants immediately where deviations exist.

(6) Review, assess, and/or propose alternative logistics support concepts/strategies to support the operational requirement.

(7) Develop an integrated logistics support program in accordance with AFR 800-8, Integrated Logistics Support. Use Logistics Support Analysis (LSA), (MIL-STD1388/1/2) to ensure all logistics requirements are addressed.

(8) Provide the data or applicable output summaries generated from the LSA program during DT&E to the using command, support command, OT&E command or agency, and Air Training Command to aid in establishing a data base for operational, training, and maintenance concepts.

(9) Ensure that training is considered and chair the Training Planning Team when initiated IAW AFR 50-8.

(10) Ensure that PSOC/SOC information and requirements are included in solicitation actions and subsequent contracts.

(11) Provide recommendations on the requirement for computer resource support.

(12) Participate as a supporting command for programs in which AFSC is not the implementing command.

(13) Define program deficiencies or disconnects between the PSOC, SOC, and baseline program. Notify HQ USAF, the using command, and participating commands of such discrepancies.

d. Air Force Logistics Command (AFLC) will:

(1) Review and comment on PSOC or SOC documents and updates as directed by the PMD. Provide comments to the originator within 45 days of tasking, or as specified by the originating MAJCOM.

(2) Participate with the using, implementing, OT&E, and other participating commands in the development of availability, maintainability, reliability, survivability, transportability, logistics supportability, safety, training, life cycle cost, software, and manpower criteria or constraints, based on experience with current operational systems.

(3) Coordinate with the using and other participating commands to ensure that system design, operational, and support concepts for each alternative solution candidate are equally developed.

(4) When serving as the implementing command, ensure training is included in the acquisition process, and life cycle training concepts are established (AFR 50-8).

(5) Define program deficiencies or disconnects between the PSOC, SOC, and baseline program. Notify HQ USAF, the using command, and participating commands of such discrepancies.

e. Air Training Command (ATC) will:

(1) Review and comment on PSOC or SOC documents and updates as directed by the PMD. Provide comments to the originator within 45 days of tasking, or as specified by the originating MAJCOM.

(2) Participate with using, implementing, and other participating commands to ensure that training factors are considered IAW AFR 50-8.

(3) Develop, in conjunction with the using command, a training concept for inclusion in the PSOC or SOC. Include the types of training proposed and resource requirements needed (training equipment and devices, spares, instructional materials, contractor data, facilities, manpower, and costs for temporary duty to schools.) Use the PSOC or SOC as a baseline to plan training support. Training requirements for computer resource support by the using and supporting commands should be specifically addressed.

(4) Coordinate training concepts with the OT&E command or agency, and using commands, including Air Reserve Forces, currently using or programmed to operate the equipment.

(5) Propose modifications to existing training equipment and devices, audiovisual materials, computer software, etc., if the training concepts require modification of training systems.

(6) Evaluate maintenance training system logistics supportability utilizing the LSA/Logistics Support Analysis Record (LSAR) input data.

(7) Define program deficiencies or disconnects between the PSOC, SOC, and baseline program. Notify HQ USAF, the using command and participating commands of such discrepancies.

f. Electronic Security Command (ESC) will:

(1) Review and comment on PSOC and SOC documents and all updates as directed by the PMD. Send comments to the originator and HQ AFLC/XR within 45 days of tasking or as specified by the originating MAJCOM.

(2) Assist commands in conducting mission area analyses on Communications Security (COMSEC), Electronic Security (ELSEC), Operations Security (OPSEC), and Electronic Combat (EC).

(3) Provide comments to the using, implementing and other participating commands on the COMSEC, ELSEC, OPSEC, and EC considerations of each alternative candidate solution.

(4) Assess system Electronic Countermeasures (ECM) vulnerabilities.

(5) Define program deficiencies or disconnects between the PSOC, SOC, and baseline program. Notify HQ USAF, the using command, and participating commands of such discrepancies.

g. Air Force Operational Test and Evaluation Center (AFOTEC) will:

(1) Review and comment on PSOC or SOC documents and updates as directed by the PMD. Provide comments to the originator within 45 days of tasking, or as specified by the originating MAJCOM.

(2) Use the approved PSOC or SOC document as a basis for planning, conducting, and reporting OT&E.

(3) Provide applicable data generated during test and evaluation to the using, supporting, and implementing commands to aid in update or refinement of the PSOC or SOC document.

(4) Define program deficiencies or disconnects between the PSOC, SOC, and baseline programs. Notify HQ USAF, the using command, and participating commands of such discrepancies.

h. Air Force Communications Command (AFCC) will:

(1) Review and comment on PSOC or SOC documents and updates as directed by the PMD. Provide comments to the originator within 45 days of tasking, or as specified by the originating MAJCOM.

(2) Assess proposed systems and subsystems that are dependent upon air-ground-air communications, meteorological communications and equipment, information systems and equipment, and air traffic control communications capabilities. In addition, evaluate the impact of the PSOC or SOC on:

(a) Communications-Electronics (C-E) Systems.

(b) Computer security and networking concepts that either exist or are proposed to support Air Force requirements. Impact should address all system aspects (logistics, operations, personnel, training, etc.).

(3) Propose alternative information systems that support or interface with the system or related systems.

(4) Propose modifications to existing information, air traffic control, or meteorological systems to meet requirements specified in a PSOC or SOC.

(5) Define program deficiencies or disconnects between the PSOC, SOC, and baseline program. Notify HQ USAF, the using command, and participating commands of such discrepancies.

ABBREVIATIONS AND ACRONYMS

1. AAC Alaskan Air Command
2. ADP Automatic Data Processing
3. AFDAP Air Force Designated Acquisition Program
4. AFSARC Air Force System Acquisition Review Council
5. AFSARC/AAC Air Force System Acquisition Review Council/
Acquisition Assessment Committee
6. AUTODIN Automatic Digital Network
7. C³CM Command, Control, and Communications
Countermeasures
8. C-E Communications - Electronics
9. COMINT Communications Intelligence
10. COMSEC Communications Security
11. DDN Defense Data Network
12. DSARC Defense System Acquisition Review Council
13. DT&E Development, Test & Evaluation
14. EC Electronic Combat
15. ECM Electronic Countermeasures
16. ELSEC Electronic Security
17. FMC Full Mission Capable
18. FOT&E Follow-on Test and Evaluation
19. HUMINT Human Intelligence
20. ILS Integrated Logistics Support
21. IOT&E Initial Operational Test and Evaluation
22. IMINT Imagary Intelligence
23. IOC Initial Operational Capability
24. IS Information Systems

25.	<u>JSOR</u>	Joint Service Operational Requirement
26.	<u>JMSNS</u>	Justification for Major System New Start
27.	<u>LCC</u>	Life Cycle Costs
28.	<u>LSA</u>	Logistics Support Analysis
29.	<u>LSAR</u>	Logistics Support Analysis Record
30.	<u>MAJCOM</u>	Major Command
31.	<u>MC&G</u>	Mapping, Charting, & Geodesy
32.	<u>MDT</u>	Mean Downtime
33.	<u>MSA</u>	Major System Acquisition
34.	<u>MMH/S</u>	Maintenance Manhours per Sortie
35.	<u>MMR</u>	Mean Manhours to Repair
36.	<u>MMD</u>	Mean Mission Duration
37.	<u>MTBCF</u>	Mean Time Between Critical Failure
38.	<u>MTBD</u>	Mean Time Between Demand
39.	<u>MTBM</u>	Mean Time Between Maintenance
40.	<u>MTBR</u>	Mean Time Between Removal
41.	<u>NATO</u>	North Atlantic Treaty Organization
42.	<u>NMCB</u>	Not Mission Capable, Both
43.	<u>NMCM</u>	Not Mission Capable, Maintenance
44.	<u>NMCS</u>	Not Mission Capable, Supply
45.	<u>OPSEC</u>	Operations Security
46.	<u>OT&E</u>	Operational Test and Evaluation
47.	<u>P³I</u>	Pre-Planned Product Improvement
48.	<u>PMC</u>	Partial Mission Capable
49.	<u>PMD</u>	Program Management Directive
50.	<u>PSOC</u>	Preliminary System Operational Concept
51.	<u>RFP</u>	Request For Proposal

52.	<u>RRG</u>	Requirements Review Group
53.	<u>SIGINT</u>	Signal Intelligence
54.	<u>SON</u>	Statement of Operational Need
55.	<u>SOC</u>	System Operational Concept
56.	<u>SPO</u>	System Program Office
57.	<u>STAR</u>	System Threat Assessment Report
58.	<u>TAF</u>	Tactical Air Forces
59.	<u>TAR</u>	Threat Assessment Report
60.	<u>TELINT</u>	Telemetry Intelligence
61.	<u>TPDMP</u>	Training Program Development Management Plan
62.	<u>USAF</u>	United States Air Force
63.	<u>WSR</u>	Weapon System Reliability

GLOSSARY

1. ACQUISITION PROGRAM. A directed effort with the goal of providing a new or improved capability for a validated need. An acquisition program may include the development or procurement of systems, subsystems, equipment, munitions, or modifications. (AFR 800-2)
2. AIR FORCE DESIGNATED ACQUISITION PROGRAM (AFDAP). A program that is less than a major program and Milestone I, II, and III decisions are made by the Secretary of the Air Force (SAF) with the advice of the Air Force Systems Acquisition Review Council. AFDAPs will usually have estimated costs (Fiscal Year 80 dollars) for research, development, test and evaluation between \$100 and \$200 million or \$500 million and \$1 billion for procurement (production). (AFR 800-2)
3. AIR FORCE SYSTEMS ACQUISITION REVIEW COUNCIL (AFSARC). Secretary of the Air Force Order 20.6, 26 June 1976, established the AFSARC as the senior Air Force advisory council for providing recommendations on system acquisitions. (AFR 800-2)
4. AIR FORCE SYSTEMS ACQUISITION REVIEW COUNCIL (AFSARC) ASSESSMENT COMMITTEE (AAC). The AAC serves as a constructive critic on program issues to be presented at each AFSARC. It ensures that all presentations to the AFSARC are well balanced, from an overall Air Force perspective. (AFR 800-2)
5. AVAILABILITY. A measure of the degree to which an item is in an operable and committable stage when a mission is required. Availability is dependent upon reliability, maintainability, and logistics supportability. (AFR 800-18)
6. AUTOMATIC DIGITAL NETWORK (AUTODIN). A single, integrated, worldwide, high-speed, computer-controlled, general purpose communications network, providing record communications service to DoD and other designated Federal agencies. (AFM 11-1)
7. COMMAND, CONTROL, AND COMMUNICATIONS COUNTERMEASURES (C³CM). The integrated use of operations security, military deception, jamming, and physical destruction, supported by intelligence, to deny information to influence, degrade, or destroy adversary C³ capabilities and to protect friendly C³ against such actions. (DoDD 4600.4)
8. COMMUNICATIONS INTELLIGENCE (COMINT). Technical and intelligence information derived from foreign communications by other than the intended recipients. (JCS Pub 1)
9. COMMUNICATIONS SECURITY (COMSEC). The protection resulting from all measures designed to deny unauthorized persons information of value which might be derived from the possession and study of telecommunications, or to mislead authorized persons in their interpretation of the results of such possession and study. (AFR 55-30)

10. COMPATIBILITY. The capability of two or more operational items/systems to exist or function as elements of a larger operational system or operational environment free of mutual interference. (JCS Pub. 1)

11. CONCEPT OF OPERATIONS. A verbal or written statement, in broad outline, of a commander's assumptions or intent in regard to an operation or series of operations. The concept of operations frequently is embodied in campaign plans and operation plans, in the latter case particularly when the plan covers a series of connected operations to be carried out simultaneously or in succession. The concept is designed to give an overall picture of the operation. It is included primarily for additional clarity of purpose and is frequently referred to as a commander's concept. It is not related to a Preliminary/System Operational Concept. (JCS Pub. 1)

12. CRITICAL FAILURE. A failure, or combination of failures, that prevents an item from performing a specified mission. (MIL STD-721C)

13. DEFENSE DATA NETWORK (DDN). The DDN is a packet-switching network designed to meet the data communications requirements of the DoD. Network elements are grouped into two functional areas: (1) the backbone network, which comprises the trunk circuits and pocket switches, and (2) the access network, which comprises circuits and equipment that enable subscriber systems to connect to the backbone. (DCA Pamphlet)

14. DEFENSE SYSTEM ACQUISITION REVIEW COUNCIL (DSARC). The DSARC, as the highest level DOD corporate body for system acquisition, provides advice and assistance to the Secretary of Defense. (DODI 5000.2)

15. DEVELOPMENT, TEST & EVALUATION (DT&E). That testing and evaluation used to measure progress, verify accomplishment of development objections, and to determine if theories, techniques, and material are practicable; and if systems or items under development are technically sound, reliable, safe, and satisfy specifications. (AFR 80-14)

16. DORMANT RELIABILITY. Probability that an item will remain failure-free for a specified period of time in a non-operating mode under stated environmental conditions. (AFR 800-18)

17. DOWNTIME PER SORTIE. For a specified period of time, the total time the system is not mission capable, maintenance (NMCM), scheduled or unscheduled; not mission capable, supply (NMCS); or not mission capable, both (NMCB), scheduled or unscheduled; in clock hours divided by the number of sorties. (AFR 800-18)

18. ELECTRONIC COUNTER-COUNTERMEASURES (ECCM). The division of electronic warfare involving actions taken to ensure friendly effective use of the electromagnetic spectrum despite the enemy's use of electronic warfare. (AFM 11-1).

19. ELECTRONIC COUNTERMEASURES (ECM). The division of electronic warfare involving actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum. It includes jamming, and deceptive means. (AFM 11-1)

20. ELECTRONIC SECURITY (ELSEC). The protection resulting from all measures designed to deny unauthorized persons information of value which might be derived from their interception and study of noncommunications electromagnetic radiations, such as radar. (JCS Pub 1)

21. ELECTROSTATIC DISCHARGE (ESD) CONTROL. A program for the protection of sensitive electrical and electronic parts, assemblies and equipment. (DoD-STD-1686/DoD-HDBK-263)

22. FULL MISSION CAPABLE (FMC) RATE. The percent of possessed time that a system is capable of performing all of its assigned peacetime and wartime missions. (AFR 65-110)

23. HUMAN RESOURCES INTELLIGENCE (HUMINT). A generic term that identifies the intelligence collection discipline which uses human beings as both sources and collectors, where the human being is the principal collection instrument it includes, but is not limited to the gathering of intelligence information through observation, elicitation, exploitation, interrogation, or the acquisition of materials and documents. (DIAM 58-1)

24. IMPLEMENTING COMMAND. The command or agency designated by HQ USAF to manage an acquisition program. (AFR 800-2)

25. INFORMATION SYSTEMS (IS). A system that is a combination of people, equipment, facilities, procedures, and other resources, organized to process information. Processing includes creation, collecting, protection, analysis, storage, retrieval, dissemination, and disposition. (AFR 700-1)

26. 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. (JCS Pub. 1)

27. INTEGRATED LOGISTICS SUPPORT (ILS). A disciplined, unified, and interactive approach to the management and technical activities necessary to:

a. Integrate support considerations into system and equipment design.

b. Develop support requirements that are related consistently to readiness objectives, to design, and to each other.

c. Acquire the required support.

d. Provide the required support during the operational phase at minimum cost. (DODD 5000.39/AFR 800-8)

28. INTEROPERABILITY. The ability of systems, units or forces to provide services to, and accept services from, other systems, units, or forces, and to use the services so exchanged to enable them to operate effectively together. (JCS Pub. 1)

29. JOINT SERVICE OPERATIONAL REQUIREMENT (JSOR). A requirements document originated by more than one DoD agency to identify the need for a new or improved capability for use by two or more Services.

30. JUSTIFICATION FOR MAJOR SYSTEM NEW START (JMSNS). The document prepared by HQ USAF to support the initiation of a Major Acquisition program or Air Force Designated Acquisition Program and submitted with the Program Objective Memorandum (POM) in which funds for the budget year of the POM are requested. (DOD 5000.1/.2)

31. LIFE CYCLE COST (LCC). The total cost of an item or system over its full life. It includes the cost of development, acquisition, ownership (operation, maintenance, support, etc.) and, where applicable, disposal. To be meaningful, an expression of life cycle cost must be placed in context with the cost elements included, period of time covered, assumptions and conditions applied, and whether it is intended as a relative comparison or absolute expression of expected cost effects. (AFR 800-1)

32. LIMITED PRODUCTION. The initial, low rate production of a system in limited quantity to be used in operational test and evaluation for verification of production engineering and design maturity and to establish a production base prior to a decision to proceed with production.

33. LOGISTICS SUPPORT ANALYSIS RECORD (LSAR). A documented source of validated, integrated, and design related data for an acquisition program. (MIL STD 1388-1-2/AFR 800-8)

34. MAINTAINABILITY. A characteristic of design and installation which is the probability that a system or component will conform to its designed conditions of use within a given period of time when maintenance is performed. The period of time is expressed in terms such as man-hours per flying hour, clock hours to complete, hours-to-troubleshoot, or hours-to-repair. (AFR 80-5)

35. MAINTENANCE CAPABILITY. Availability of those maintenance resources (facilities, tools, test equipment, drawings, technical publications, trained maintenance personnel, engineering support, and spare parts) needed to carry out maintenance.

36. MAINTENANCE CAPACITY. A measure of maintenance capability, usually expressed as the amount of direct labor man-hours that can be applied with an industrial shop, or other entity during a 40-hour week (one shift and 5 days).

37. MAINTENANCE CONCEPT. An initial description of maintenance considerations and constraints submitted as a part of the acquisition process. It is introduced for design consideration, refinement, and revision in the concept exploration phase of each new system, equipment or modification. When refined and definitized, it becomes a Maintenance Plan. (AFR 66-14)

38. MAINTENANCE DOWNTIME PER SORTIE. For a specified period of time, the total time the system is NMCM and NMCB, scheduled or unscheduled, in clock hours divided by the number of sorties. (AFR 800-18)

39. MAINTENANCE MANHOURS PER SORTIE (MMH/S). The base level, direct maintenance manhours required to support an aircraft system divided by the number of sorties.

40. MAINTENANCE PLAN. The design, method, or scheme for doing a maintenance mission or reaching a maintenance objective.

41. MAJOR SYSTEM ACQUISITION (MSA). A system acquisition program designated by the Secretary of Defense to be of such importance and priority as to require special management attention. These programs commonly exceed \$200M RDT&E, and/or \$1B in procurement costs. (DOD 5000.1)

42. MEAN DOWNTIME (MDT). Average elapsed time between loss of mission capable status and restoration of the system to mission capable status. (AFR 800-18)

43. MEAN MANHOURS TO REPAIR (MMR). Total corrective base level manhours divided by the total on equipment corrective maintenance events for a given period of time. (AFR 800-18)

44. MEAN MISSION DURATION (MMD). Average interval of time over which a space system is expected to operate without mission failure. (AFR 800-18)

45. MEAN TIME BETWEEN CRITICAL FAILURE (MTBCF). The average time between failure of essential system functions. (AFR 800-18)

46. MEAN TIME BETWEEN DEMAND (MTBD). Measure of the system reliability parameter related to demand for logistic support: The total number of system life units (e.g., flying hours, sorties, etc.) divided by the total number of item demands on the supply system during a stated period of time. (AFR 800-18)

47. MEAN TIME BETWEEN MAINTENANCE (MTBM). Total life units (for example, operating hours, flight hours, rounds) divided by the total number of maintenance (base level) events for a specific period of time. (AFR 800-18)

48. MEAN TIME BETWEEN MAINTENANCE (INDUCED). Average time between the on-equipment corrective events associated with malfunctions resulting from other than internal design and manufacturing characteristics, for example, improper maintenance, operator error, foreign object damage, failures due to malfunction of associated equipment. (AFR 800-18)

49. MEAN TIME BETWEEN MAINTENANCE (INHERENT). Average time between the on-equipment corrective events associated with malfunctions resulting from internal design and manufacturing characteristics. (AFR 800-18)

50. MEAN TIME BETWEEN MAINTENANCE (NO DEFECT). Average time between the on-equipment corrective events associated with equipment which have no confirmed malfunction, such as removals which subsequently bench check satisfactory. (AFR 800-18)

51. MEAN TIME BETWEEN MAINTENANCE (PREVENTIVE). Average time between maintenance events including removals, replacement, or reinstallation associated with scheduled maintenance or time changes. (AFR 800-18)

52. MEAN TIME BETWEEN REMOVAL (MTBR). Measure of the system reliability parameter related to demand for logistic support: The total number of system life units divided by the total number of items removed from that system during a stated period of time. This term is defined to exclude removals performed to facilitate other maintenance and removals for TCTOs (product improvement). (AFR 800-18)

53. MEASURE OF EFFECTIVENESS. A quantitative, or qualitative measure of a system's performance, or characteristics, to which it performs a task, or meets an objective under specific conditions.

54. OPERATING COMMAND. The command or agency primarily responsible for the operational employment of a system, subsystem, or item of equipment. May also be referred to as using command. (AFR 800-2)

55. OPERATIONAL CONCEPT. A statement about intended employment of a weapon system that provides guidance for posturing and supporting combat forces. Standards are specified for deployment, organization, basing, and support from which detailed resource requirements and implementing programs can be derived. Generally, this type of concept addresses a generic capability or a weapon system that is non-major in magnitude and importance. Operational Concepts should not be confused with PSOC/SOC documents which require HQ USAF approval. (AFM 11-1)

56. OPERATIONAL LEVELS OF PERFORMANCE. An operating/using command's stated quantitative or qualitative performance requirements for a system against which results of test and evaluations can be compared.
57. OPERATIONAL TEST AND EVALUATION (OT&E). Test and evaluation conducted to estimate the system's military utility, operational effectiveness, and operational suitability. (AFM 11-1)
58. OPERATIONS SECURITY (OPSEC). The process of denying adversaries information about friendly capabilities and intentions by identifying, controlling, and protecting indicators associated with the planning, and conduct of military operations and other activities. (JCP Pub 18)
59. OPERATIONS SECURITY (OPSEC) INDICATORS. Actions or information classified or unclassified, obtainable by an adversary, that would result in adversary appreciations, plans, and actions harmful to achieving friendly intentions and preserving friendly military capabilities.
60. PARTIAL MISSION CAPABLE (PMC). Percent of possessed time that a system is capable of performing at least one but not all of its assigned wartime missions. (AFR 800-18)
61. PARTICIPATING COMMAND. A command or agency designated by HQ USAF to support and advise the implementing command during a development/acquisition program. (AFR 800-2)
62. PERFORMANCE REQUIREMENTS: THRESHOLDS AND GOALS.
- a. THRESHOLD. Minimum level of acceptable performance or capability
 - b. GOAL. The upper level of system performance or capability that provides a desired enhancement.
63. PRELIMINARY SYSTEM OPERATIONAL CONCEPT (PSOC). Similar to a SOC, but prepared earlier in the acquisition cycle when specific quantitative and qualitative factors and parameters may not be firm and exact. PSOC documents usually evolve into a SOC as an acquisition program matures.
64. PRE-PLANNED PRODUCT IMPROVEMENT (P³I). An evolutionary approach designed to minimize technological risk and shorten time required to field new weapon systems. The approach envisions deliberate planning for use of less advanced technologies initially in a system while consciously planning to incorporate more advanced technologies after the system has been placed in operation.
65. PRODUCIBILITY. The composite of characteristics which, when applied to equipment, design, and production planning, leads to the most effective and efficient means of manufacturing systems.

66. PROGRAM MANAGEMENT DIRECTIVE (PMD). The official HQ USAF management directive used to provide direction to implementing, operating, supporting, and participating commands and to satisfy documentation requirements. It is used during the entire acquisition cycle to state requirements, request studies, and initiate, approve, change, transition, modify, or terminate programs. The content of the program management directive, including required HQ USAF review and approval actions, is tailored to the needs of each individual program. (HOI 800-1)

67. RELIABILITY. The probability that a system or equipment will perform a required function under specified conditions, without failure for a specified period of time, or at a given point in time. (AFR 800-18)

a. LOGISTICS RELIABILITY. A measure of a system's ability to operate as planned under defined operational and support concepts using specified logistics resources.

b. MISSION RELIABILITY. A measure of the ability of a system to complete its planned mission or function.

68. SIGNAL INTELLIGENCE (SIGINT). A category of intelligence information comprising all communications intelligence, electronics intelligence, and telemetry intelligence. (JCS Pub 1)

69. SORTIE GENERATION RATE. Number of sorties that can be flown per aircraft per day under specified operational and maintenance concepts. (AFR 800-18)

70. REQUIREMENTS REVIEW GROUP (RRG). A HQ USAF general officer review board which reviews, evaluates, and recommends validation for new or improved operational capabilities. (AFR 57-1)

71. STATEMENT OF OPERATIONAL NEED (SON). A formal numbered document used to identify an operational deficiency and state the need for a new or improved capability for USAF forces. (AFR 57-1)

72. SUPPORTING COMMAND. The command assigned responsibility for providing logistics support. It assumes program management responsibility from the implementing command. (AFR 800-2)

73. SURVIVABILITY. The capability of a system to avoid or withstand a hostile environment and still accomplish its designated mission. (AFR 80-38)

74. SYSTEM. All AF weapon systems, subsystems, equipment, support equipment, and munitions. (AFR 800-18)

75. SYSTEM ACQUISITION PROCESS. A sequence of specified decision events and phases of activity directed to achievement of established program objectives in the acquisition of systems. It extends from approval of a requirement through successful deployment of the system or termination of the program.

76. SYSTEM DESIGN CONCEPT. An idea expressed in terms of general performance, capabilities, and characteristics of hardware and software oriented either to operate or to be operated as an integral whole in meeting a mission need. (OMB Circular A-109)

77. SYSTEM OPERATIONAL CONCEPT (SOC). A formal document that describes the intended purpose, employment, deployment, and support of a specific system. It assists in identifying the quantitative and qualitative performance and support specifications needed to satisfy the operational need and provides initial guidance to operating forces for employing the new or improved system. Specified are standards of deployment, organization, basing and support from which detailed resource requirements and implementing programs can be derived. It must be compatible with long-range Air Force goals and objectives and consistent with Air Force strategy, force structure, concepts for the future employment of aerospace forces, and current and emerging doctrine.

78. SYSTEM PROGRAM OFFICE (SPO). The organization within the implementing command comprised of technical, business management and administrative personnel assigned full-time to a system program director. The office may be augmented with additional personnel from participating organizations to manage the development and procurement of a system. (AFR 800-2)

79. SYSTEM SAFETY. The optimum degree of safety within the constraints of operational effectiveness, time, and cost, attained through specific application of system safety engineering throughout all phases of a system. (AFM 11-1, volume I)

80. SYSTEM THREAT ASSESSMENT REPORT (STAR). A document prepared by the intelligence community that describes the threat environment against which the proposed U.S. major weapon system will operate. STAR's may be approved by AF/IN and/or DIA. (DIAR 55-3)

81. SYSTEM TRAINING CONCEPT. A document summarizing ATC training policy based on review of a user's requirements and planning factors reflected in the System Operational Concept and updates. It outlines conceptual guidance on Test and Evaluation and deployment training planning efforts. The basis for future training planning actions are documented in the system training plan.

82. TELEMETRY INTELLIGENCE (TELINT). Technical and intelligence information derived from the intercept, processing, and analysis of foreign telemetry. (JCS Pub 1)

83. TEST. Any program or procedure designed to obtain, verify, or provide data for the evaluation of research and development (other than laboratory experiments), progress in accomplishing development objectives, or performance and operational capability of systems, subsystems, components, and equipment items.

84. TEST AND EVALUATION. That testing and evaluation used to measure progress, verify accomplishment of development objectives, and to determine if theories, techniques, and material are practicable, and if systems or items under development are technically sound, reliable, safe, and satisfy specifications. (AFR 80-14)

85. THREAT ASSESSMENT REPORT (TAR). A TAR is the intelligence baseline that is produced to support non-major system acquisition programs. It contains AF/IN validated intelligence and is similar to the STAR in format.

86. TRAINING CONCEPT. An initial description of training considerations and constraints submitted as a part of the acquisition process.

87. TRAINING SUPPORT COMMAND. The participating command, normally Air Training Command (ATC), responsible for training support from initial implementation throughout the life cycle of systems or equipment. The responsibility may include contract flight or simulator aircrew training.

88. UPTIME RATIO. Percent of possessed time that Communications, Electronics, and Meteorological systems are operational. (AFR 65-662)

89. WEAPON SYSTEM. A final combination of subsystems, components, parts, and materials that make up an entity used in combat to destroy, injure, defeat, or threaten the enemy.

90. WEAPON SYSTEM RELIABILITY (WSR). The probability that a system will complete a specified mission, given that the system was initially capable of performing that mission. WSR is a measure of system reliability as it affects the mission, but excludes factors such as probability of kill, circular error probable, and other measures of capability. (AFR 800-18)

91. WEAPON SYSTEM RELIABILITY AND MAINTAINABILITY. A measure of merit that encompasses reliability, maintainability, or availability expressed in operational terms that include the combined effects of item design, quality, installation, environment, operation, maintenance, repair, funding, and management policy. (AFR 800-18)

PSOC/SOC DISTRIBUTION LIST

1. Draft PSOC/SOC documents and updates must be sent simultaneously to the commands and agencies listed below for review and comment. Following the For Comment phase and inclusion of pertinent comments and revisions, the updated, formalized version is submitted for HQ USAF approval. Distribution requirements showing number of copies required for each addressee at the various stages of PSOC/SOC development should be followed without exception. NOTE: Changes to this list should be brought to the attention of HQ USAF/XOOIP.

<u>ADDRESSEE</u>	<u>COPIES</u>	<u>FOR COMMENT</u>	<u>FORMAL VERSION</u>	<u>PUBLISHED</u>	<u>SELECTED SYS ONLY</u>	<u>COMMENTS</u>
HQ USAF/XOOI Wash D.C. 20330	18	X	X	X		
HQ SPACECMD/XP/DO, Peterson AFB, CO 80914	4/3	X		X		
HQ AFCC/SIP/EIC/ISRR, Scott AFB IL 62225	3/1/1	X				
HQ AFLC/XRQ, Wright-Patterson AFB OH 45433	12	X	3	1		
HQ AFRES/XPXR, Robins AFB GA 31098	2	X	X			
HQ AFSC/XR, Andrews AFB D.C. 20334	12	X				
HQ AFOTEC/XP, Kirtland AFB NM 87117	5	X	X			
HQ AITC/TTY, Randolph AFB TX 78150	6	X				
HQ MAC/XPQ/SYA, Scott AFB IL 62225	6/1	X				
AWS/SY, Scott AFB IL 62225	1	X			X	(Meteorological and/or
NGB/XO, Wash D.C. 20310	2	X				Space Environmental
HQ PACAF/DOQ, Hickam AFB HI 96853	6	X				Support to AWS).
HQ SAC/XP, Offutt AFB NE 68113	6	X	X			
HQ TAC/XPJ, Langley AFB VA 23665	6	X				
HQ USAFE/DOQ, APO New York 09012	10	X				
HQ ESC/XPXQ, San Antonio TX 78243	6	X				
OC-ALC/XRX, Tinker AFB OK 73145	2	X	1			
OO-ALC/XRX, Hill AFB UT 84056	2	X	1			
SA-ALC/XRX, Kelly AFB TX 78241	3	X	1			
SM-ALC/XRX, McClellan AFB CA 95652	3	X	1			
WR-ALC/XRX, Robins AFB GA 31098	3	X	1			
AGMC/XRP, Newark AFS OH 43055	2	X	1			
AFASPO, Gunter AFB AL 36115	1	X				
DTIC/DDA, Cameron Station, Alexandria VA 22314	2			X		
AFALC/XRX, Wright-Patterson AFB OH 45433	10	X	4	1		
ANG/AFRES FWD, Tucson IAP, Tucson, AZ 85734	1	X				
AFIS, Ft Belvoir VA 22060	4	X	X	X		
System Program Office (SPO) for specific system (TBD)	1	X	X	X		
AFISC/SESD, Norton AFB CA 92409	1	X	X	X		

PSOC/SOC

FORMAT

I. PROGRAM DATA: (This Section provides background information, pertinent mission areas and tasks, and related program documentation.)

A. Title:

B. Point of Contact: (Name, rank/grade, office symbol and telephone number.)

C. Mission Area: (Use USDR&E designations depicted in AFR 57-1.)

D. Mission Tasks: (Describe, in brief terms, the mission, overall tasks or responsibilities and what the system will achieve or accomplish. Cite appropriate DOD, JCS or USAF guidance, directives, plans, mission area analyses (MAA) deficiencies, etc.)

E. Requirement Document: (Validated SON, approved JMSNS, JSOR, etc. State number, date and title, as appropriate. If other than a validated requirements document, cite source.)

F. Program Management Directive: (Cite PMD number, date and title that initiated preparation of the PSOC/SOC. If other than PMD, state source.)

G. Level of Dissemination: (State agencies, contractors, etc. the PSOC/SOC may be released to and where such requests should be submitted.)

II. OPERATIONAL SYSTEM: (This Section establishes pertinent, realistic baselines for the system at initial operational capability (IOC) and full operational capability (FOC) and provides information on what the system is and how well it must perform.)

A. System Description: (Include definitions for initial and full capability.)

B. System Standards:

	<u>THRESHOLD</u>	<u>GOAL</u>
1. Performance Parameters: (Airspeed, altitude, range, duration, delivery accuracy, weapons effectiveness, radio frequencies, weight, payload capacity, system capacity/capability, etc).	_____	_____
2. Interoperability/Standardization/Commonality: (USAF, other Services, NATO/Allies).	_____	_____
3. System Survivability: (Vulnerability, detection, radar cross section, ECCM capabilities,	_____	_____

defensive/offensive avionics, chemical/biological/radiation hardness, nuclear hardness, nuclear and non-nuclear electromagnetic pulse hardening, etc).

C. Pre-Planned Product Improvement (P³I). (Describe provisions, or implications for system growth or improvement such as Class IV or V modifications, etc).

III. THREAT ASSESSMENT: (Describe enemy threat, and possible threat from weapons manufactured by western nations projected at IOC and for the life cycle of the system. As an alternative, you may reference a current threat assessment contained in an active SON, JSOR, JMSNS, STAR, AFSC Project Program Threat document, etc.)

IV. OPERATIONAL ENVIRONMENT: (Describe atmospheric and space environmental effects, electromagnetic spectrum considerations, etc. If applicable, define the chemical/biological environment in which the equipment will have to function and the worst case conditions under which it will have to be maintained (e.g., use of protective gloves and gas masks, or other unique situations.)

V. EMPLOYMENT: (This Section describes when and how the system will be used and its military utility.)

A. General Employment Description:

B. Mission Scenarios/Tactics: (Describe separate scenarios and employment tactics, as necessary, depicting situations in which the system will be employed. Specify different scenarios for peace and wartime, if appropriate. Address system employment and how it will be integrated with existing, developing, or planned systems and operational procedures.)

C. Mission Mix: (Discuss anticipated proportion of time system will be operating in different mission scenarios described in paragraph B. above.)

D. Force Structure: (Outline anticipated numbers of systems to be produced and the units, wings, etc. in which the system will operate.)

E. Command Structure: (Discuss interface requirements with any theater-unique command and control structures within which the system would operate.)

F. Communications: (Identify unique communications requirements and sources for satisfying them during employments. See also VII.P.1.)

VI. DEPLOYMENT: (This Section describes how the system will be moved, where it will go, and how it will be sheltered and protected.)

A. Transportability: (Explain, in broad terms, how the system is to be moved to/within the theater. Specific weight, cube requirements are to be covered in Section VII E.)

B. Basing: (Detail the basing and associated facilities available for training locations, CONUS and overseas operating bases, and projected bare, satellite, dispersal, and forward operating base requirements. See also Sections II.B.3. and VII.G.)

VII. SUPPORT: (This section describes selected integrated logistics support (ILS) elements and related support factors required to achieve economical and effective support of a primary system or equipment throughout its life cycle.) (DODD 5000.39 and AFR 800-8)

A. Reliability and maintainability interface: (Identify mission reliability, logistic reliability, system availability, and maintainability factors for initial operational capability (IOC) and full operational capability (FOC). Where appropriate, show threshold (required level of performance and goal (desired level of system capability.) (AFR 80-5)

<u>THRESHOLD</u>	<u>GOAL</u>
(IOC and FOC)	

1. Mission Reliability

(a) Weapon System Reliability (WSR)	_____	_____
(b) Mean Time Between Critical-Failure (MTBCF)	_____	_____
(c) Mean Mission Duration (MMD)	_____	_____
(d) Launch Flight Reliability	_____	_____
(e) Captive Carry Reliability	_____	_____

2. Logistic Reliability

(a) Mean Time Between Maintenance (MTBM)	_____	_____
(b) Mean Time Between Demand (MTBD)	_____	_____
(c) Mean Time Between Removal	_____	_____

	<u>THRESHOLD</u> (IOC and FOC)	<u>GOAL</u>
3. System Availability		
(a) Full Mission Capability (FMC)	_____	_____
(b) Partial Mission Capable (PMC)	_____	_____
(c) Nonmission Capable Maintenance (Percent)	_____	_____
(d) Nonmission Capable Supply (Percent)	_____	_____
(e) Nonmission Capable Both (Percent)	_____	_____
(f) Sortie Generation Rate	_____	_____
(g) Turnaround Time	_____	_____
(h) Launch Availability	_____	_____
(i) Duty Cycle (if appropriate)	_____	_____
(j) Back-up Requirements (if appropriate)	_____	_____
(k) Utilization Tasking per Day (if appropriate)	_____	_____
(l) Time per Deployment (if appropriate)	_____	_____
(m) Deployments per Year (if appropriate)	_____	_____

4. Maintainability: (State requirements/criteria for repair activities needed to meet the required operational capability, e.g., repair times, repair levels, testability, maintainability characteristics, support equipment requirements (including automatic test equipment), manpower skills, and facility requirements.) (AFR 66-14 and AFR 800-18)

	<u>THRESHOLD</u> (IOC and FOC)	<u>GOAL</u>
(a) Mean Down Time (MDT)	_____	_____
(b) Maintenance Manhours per Sortie (MMH/S)	_____	_____
(c) Mean Manhours to Repair (MMR)	_____	_____
(d) Maintenance Manhours per Operating Hour	_____	_____
(e) Mean Repair Time	_____	_____
(f) Maintenance Downtime per Sortie (MDPS)	_____	_____
(g) Failure Diagnostics	_____	_____

NOTE: Performance characteristics may be presented as two levels of capability: threshold and goal. The former indicates a required level of performance while the latter depicts a desired level of system capability.

B. Maintenance Planning: (Identify the actions, support, and documentation necessary to establish concepts and requirements for on-and off-equipment maintenance to be performed during the life of the system or equipment.) (AFR 66-44)

1. Define actions and support necessary to ensure the system or equipment attains the specified operational capability, with lowest LCC. (AFR 88-11)

2. State maintenance tasks to be accomplished for on-and off-equipment maintenance.

3. Show interservice, organic and contractor mix, workloads, and time phasing for accomplishing depot maintenance requirements. (AFR 66-7)

4. State extent and use of interim contractor support. (AFR 800-21)

5. Define actions and support necessary for site activations.

C. Support Equipment: (Identify equipment required to support the system. This includes ground handling and maintenance equipment, tools, metrology and calibration equipment, test equipment, automatic test equipment (when used in a support role), on- and off-equipment maintenance, and related computer programs and software. Special test equipment should also be shown that is used for testing, maintenance, and support of end items during manufacturing and testing that will later be developed as support equipment.) (AFR 800-12)

D. Supply Support: (Show proposed approach for provisioning initial support and acquiring, distributing and replenishing inventory spares and repair parts.) (AFR 65-2 and AFM 67-1)

E. Packaging, Handling, Storage, and Transportation: (This includes technical requirements such as fragility, dimensions, weight and hazardous characteristics. Specify maximum allowable cubic dimensions per load/pallet, maximum weight per load/pallet, and maximum number of loads/pallets. If the equipped unit is required to maintain its own nets and pallets, this should be stated. Maximum time permitted should also be specified. State the need, if any, for special containers in support of mobility operations.) (AFR 71-1; 80-18; AFM 75-1/75-2; and MIL STD-1510)

F. Technical Data: (Describe requirements for developing and distributing technical data. Such data may include engineering drawings, lists, specifications, standards, process sheets, manuals, technical reports and orders, catalog items, etc.) AFR 8-2, AFR 800-4)

G. Facilities: (Specify facility and shelter requirements that are external and additional to the system-designed survivability features of hardening, EMP protection, etc. found in Section II, B3. If unique facilities are required, specify the number and type, e.g., Tab V shelters, radar nose docks, etc. For structures other than those covered in AFR 86-1, a drawing of the facility should accompany the PSOC or SOC.) (AFR 86-1)

H. Manpower Requirements and Personnel:

1. Manning

- (a) Organizational.
- (b) Staff Support.
- (c) Operations. (Include crew ratio and composition.)
- (d) Logistics and Training Manpower Requirements. (Include Air Logistics Centers and Technical Training Centers.)
- (e) Maintenance Personnel per Unit. (Include both on-system and indirect specialist support e.g., munitions, maintenance, etc.)
- (f) Medical. (If appropriate.)
- (g) Base Operating Support.
- (h) Facility Maintenance.
- (i) Physical Security.

2. Time-Phased Reporting of Personnel Requirements by AFSC/skill level. (Type and level of information required prior to Milestone I (PSOC), Milestone II (SOC), or Milestone III (SOC update) is depicted in matrix.)

	PSOC	SOC	SOC UPDATE
(a) Total numerical requirements by officer, enlisted, and civilian.	X		
1. By AFSC and skill level		X	
2. Revised number by AFSC and skill level			X
(b) Projected AFSC utilization	X		
1. Projected monthly workload		X	
2. Revised monthly workload			X
(c) Projected requirements of new AFSC's or AFSC sub-groups (shredouts)	X		
1. Revised requirements		X	X

	PSOC	SOC	SOC UPDATE
(d) Projected impact on existing requirements		X	
1. Revised requirements			X
(e) Projected manpower reductions to compensate for new requirements			X

3. Personnel Impacts:

- (a) Expected Source of System Specialists
- (b) Impact on Draw-down System.
- (c) Critical Skills Requirements.

I. Training and Training Support

1. Training Concept: (Aircrew, Operator, Maintenance, etc. See AFRs 50-81, 50-9, 50-11 and 50-23) (Describe briefly the training support concept from development through deployment phases.)

(a) Training Agencies: (Identify who is responsible for developing and conducting each phase of training.)

(b) Required Training Equipment: (Include both inventory items and training devices.)

(1) Projected Type, Number and Locations Required.

(2) Interim Training Support Provisions.

2. Trainer/Simulator Usage For Each Device:

(a) Organization/Location Where Device will be Installed.

(b) Quantitative Requirements and Method of Computation.

3. Inventory Item Usage for Each Training Set:

(a) Organization/Location Where Device will be Installed.

(b) Quantitative Requirements and Method of Computation.

4. Trained Personnel Required: (Initial/Recurring training requirements by location, type, AFSC, and FY).

(a) Identify Date of Initial Requirement for Trained Graduates.

(b) Identify Time-Phased Training Requirements (number by quarter) for Deployment Phase.

(c) Identify Sustaining Requirements (Number by Year) Beginning with IOC and Running Through Completion of the Deployment Phase.

J. Logistics Support Management Information: (Identify pertinent data requirements that are necessary for effective management by Government and/or contractor ILS managers in planning for and acquiring other ILS elements. A primary source of information is that derived from the logistics support analysis (LSA), work breakdown structure, etc.) (MIL STD-1388-1/2, and MIL STD-881a)

K. Computer Resources/Information Systems Support: (Describe special computer program documentation, related software, source data, facilities, hardware, etc., required for system support. Where applicable, address the interface of 300- and 800-series publications.) (AFR 300-15/800-14)

1. Design and Development Constraints: (Outline constraints such as existing or off-the-shelf hardware or software, operating environment, package limitations, standards (e.g., higher order language, architecture, memory loader verifier, reliabilities required, partitioning needed due to operational requirements.)

2. Computer Hardware and Software: (Outline computer hardware/software requirements including interface methods and software quality control. Interfaces include message formats for passing data between systems, interaction between subsystems and identification of other systems which may require changes due to requirements of the system. Include design constraints, system requirements, and support concepts.) (AFR 300-2)

3. Rapid Programming/Reprogramming Support: (Specify interface to AUDODIN, DDN, AUTOVON or other networks. Indicate required reaction times for all support agencies from change requirement notification to receipt of software change by using unit. Specify maximum allowable times between software update and corollary test program set/automatic test equipment update.)

4. Critical/Security Processing: (Address computer security, how sensitive information will be protected, and how the integrity of critical processing will be ensured.)

L. Energy Management: (State energy requirements and constraints associated with the life cycle of the system such as special fuels, solar, geothermal, electrical, synthetic, etc.) (AFR 18-1; AFR 144-1)

M. Survivability: (Indicate critical design features, functions, or processes of ILS and associated equipment needed to enhance system survivability.) (AFR 800-38)

N. ILS Test and Evaluation: (Avionics shop, portable flight-line testers, electronics lab, automatic test equipment, etc. Include required capability and confidence levels for automatic test, built-in-test, semiautomatic and manual test, if expected to be used. The total capability should satisfy the requirement to detect and isolate 100% of all known faults. Specify the percent of stimulus and measurement to be resident within the line replaceable unit (LRU)/shop replaceable unit (SRU) in support of the on-equipment maintenance requirement. State the number of days/sortie rate per day to be supported/sustained with off-equipment test equipment available at the employment bases.)

O. Operations Security (OPSEC): (Describe precautions and protective measures to be taken to prevent enemy intelligence from acquiring pertinent data, directly or indirectly, about the system or its components, its purpose and/or its capabilities. Address planned actions to eliminate the potential for Essential Elements of Friendly Information (EEFI) compromise. Protective measures may include Communications Security (COMSEC), TEMPEST, physical, Information Security, Tactical Deception plus any other security systems or tactics which can be employed to deny hostile intelligence collectors information about EEFI.) (AFR 55-30)

P. Related Support Factors

1. Communications Support: (Specific description in quantitative terms i.e., circuit (voice, data, facsimile, graphics, or video requirements, COMSEC, O&M personnel, AFSC's, etc.). Include data communications and computer network support and address anti-jam requirements.)

2. Data Collection Sources: (Data systems used to collect information and projected locations.)

3. Structural Integrity Program: (Describe scope of SIP if one is needed.)

4. Ground Support Operations: (Show nonstandard operations including handling, transporting, loading, unloading, configuration, servicing, etc., needed for intended system use.)

5. Physical Security Requirements: (Also, see Section VII.H.1(i))

6. Corrosion Control Program: (Corrosion control/prevention factors that will affect design of equipment.)

7. Electrostatic Discharge (ESD) Control: (ESD control factors that will affect design of equipment.)

8. Depot Maintenance: (Programmed Depot Maintenance (PDM), Analytical Condition Inspection (ACI), etc.)

9. Operational Intelligence Support: (Special information systems equipment and data base support pertaining to target and mission planning materials, etc. Specify unit level requirements for automatic update and computer-controlled manipulation of enemy order of battle numbers, locations, and electronic characteristics. Discuss the required intelligence interface with the air tasking order and mission planning.)

10. Weather Support: (As it pertains to weapon selection, mission planning and execution, system performance, etc. Include weather communication interface and space environment support, when required.)

11. Mapping, Charting, and Geodesy (MC&G): (Cartographic materials, geodetic, and geophysical data needed to provide navigation accuracy, simulated geographic displays, target positioning, etc.)

12. Maintenance tasks to be accomplished on-equipment and off-equipment: (State mobility support concept i.e., remove, repair, and replace or remove and replace.)

VIII. SAFETY: (Identify critical safety issues to be addressed during system development and deployment. Give special consideration for application of system safety programs (AFR 800-16), nuclear safety (if applicable) (AFR 122-1), and the use of hazardous materials and processes (AFOSH Standards). System safety engineering factors such as unique safety procedures or safety design (radiation hazards, high voltage, high pressure, etc. should also be considered. Pertinent areas would include system, industrial, occupational, nuclear, explosives, and flight.)

IX. COROLLARY PROGRAM DATA:

A. Program Status: (Show key events or decisions completed or planned, projected IOC, FOC, etc.)

B. Planned Test Strategy: (See AFR 80-14.)

1. Development, Test and Evaluation (DT&E).
2. Initial Operational Test and Evaluation (IOT&E).
3. Follow-on Test and Evaluation (FOT&E).

NOTES:

1. This information, if available, is to be provided by the implementing command and appropriate participating commands during the For Comment phase if such functions are outside the using command's purview.

2. The using command should identify critical operational issues which are to be addressed during the test and evaluation program such as environmental constraints, tactical employment criteria/limitations, baseline testing requirements, etc.

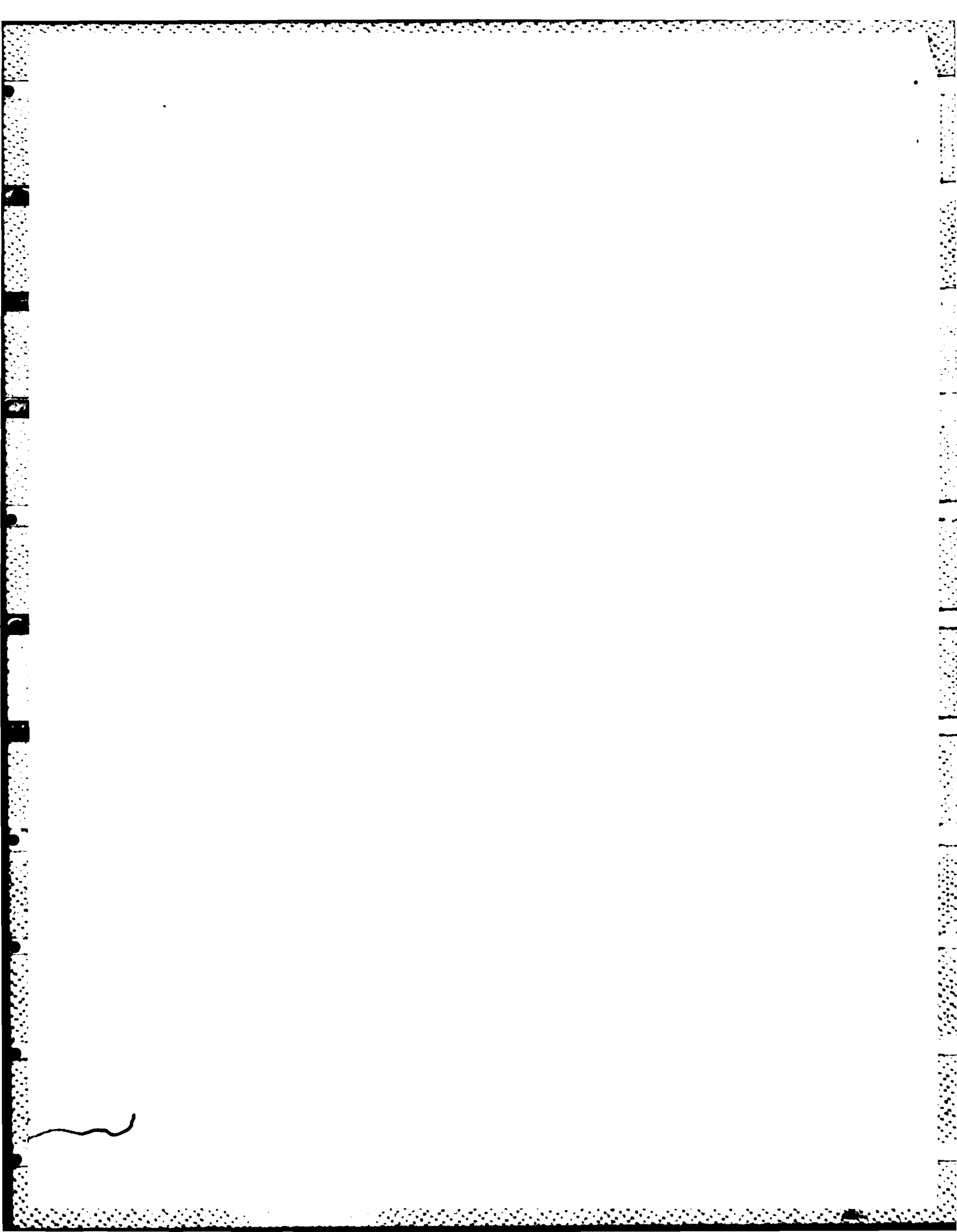
3. Section IX data is dynamic in nature and subject to change as the program matures. Consequently, the originating command may wish to make this information available as an appendix or attachment to the document.

4. PSOC's should address or reference all nine major sections. Formal SOC documents must address all major sections and provide qualitative and quantitative factors for each measure of merit, where appropriate.

REFERENCE OF RELATED REGULATIONS,
DIRECTIVES, INSTRUCTIONS AND CIRCULARS
=====

- AFR 12-30, Air Force Freedom of Information Act Program, 15 Dec 82.
- AFR 23-30, Electronic Security Command, 13 Aug 82.
- AFR 26-XX, Manpower Policies and Procedures for System Acquisitions.
- AFR 50-8, Instructional System Development, 10 Jul 81.
- AFR 50-9, Special Training, 13 Jul 81.
- AFR 50-11, Management and Utilization of Training Devices, 11 Oct 77.
- AFR 50-23, On-the-Job Training, 30 Sept 82.
- AFR 55-30, Operations Security, 11 Apr 83.
- AFR 57-1, Statement of Operational Need (SON), 29 Jun 84.
- Defense Intelligence Agency Instructions 65-2, 29 Jan 64.
- AFR 66-14, Equipment Maintenance Policies, Objectives, and Responsibilities, 15 Nov 78.
- AFR 80-14, Test and Evaluation, 12 Sept 80.
- AFR 80-18, Department of Defense Engineering for Transportability, 1 Sept 78.
- AFR 80-45, Distribution Statements on Technical Documents, 26 Mar 71.
- AFR 96-9, How to Establish Requirements for Maps, Charts, Geodetic Survey's and Related Products and Services, 20 Dec 83.
- AFR 100-45, Communications Security Policies, Procedures and Instructions, 22 Sept 80.
- OMB Circular A-109, Major System Acquisitions, 5 Apr 76.
- AFR 200-13, Threat Support to the Weapon System Acquisition Process, 17 Apr 84.

- AFR 400-64, Logistics Support Plans for Ground C-E Systems and Equipment, 1 Jul 78.
- AFR 700-1, Managing Air Force Information Systems, 2 Mar 84.
- AFR 800-2, Acquisition Program Management, 13 Aug 82.
- AFR 800-8, Integrated Logistics Support, 7 Feb 80.
- AFR 800-14, Vol I, Management of Computer Resources in Systems, 12 Sept 75.
- AFR 800-14, Vol II, Acquisition of Support Procedures for Computer Resources in Systems, 26 Sept 75.
- AFR 800-16, USAF System Safety Program, 6 Jun 79.
- AFR 800-18, Air Force Reliability and Maintainability Program, 15 June 82.
- DODD 5000.1, Major System Acquisition, 29 Mar 82.
- DODI 5000.2, Major System Acquisition Procedures, 8 Mar 83.
- DODD 5000.39, Acquisition and Management of Integrated Logistics Support for Systems and Equipment, 17 Nov 83.



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