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AIR FORCE SPACE COMMAND**

**AIR FORCE SPACE COMMAND  
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**Personnel**

**ADVANCED SPACE TRAINING AND  
EDUCATION**

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This instruction implements Air Force Instruction (AFI) 36-2201, Volume 1, *Training Development, Delivery, and Evaluation*, AFI 36-3701, *Space Professional Development Program* and AFI 36-2302, *Professional Development (Academic Degrees and Professional Continuing Education)*; it reflects guidance in Air Force Policy Directive (AFPD) 36-22, *Military Training*, AFPD 36-23, *Military Education*, AFPD 36-37, *Space Professional Development*; Air Force Space Command Instruction (AFSPCI) 36-2202, *Mission Ready Training, Evaluation and Standardization Programs*, Air University Instruction (AUI) 36-2306, *Air University Educational Program Review* and AUI 36-2315, *Student Disenrollment Procedures*. This guidance prescribes the roles, responsibilities, and processes associated with the management and development of Advanced Space Operations School (ASOpS) courses. It also describes Air Force Space Command (AFSPC) coordination with Air Education and Training Command (AETC) - Air University (AU) to conduct space Professional Continuing Education (PCE) executed through the National Security Space Institute (NSSI). It applies to military and civilian personnel assigned to AFSPC, subordinate units and external agencies. It also applies to Air National Guard (ANG) and Air Force Reserve Command (AFRC) units and members. Ensure that all records created as a result of processes prescribed in this

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**SUMMARY OF CHANGES**

This document has been substantially revised and must be completely reviewed. Major changes include: title change from “NSSI Course Management and Development” to “Advanced Space Training and Education”; organizational realignment of NSSI under AU and ASOpS under the Space Innovation & Development Center (SIDC); modification to ASOpS course change process; addition of AFSPC process to develop space PCE requirements and interface with NSSI.

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**1.1. Introduction.** Effective execution of a comprehensive space education and training program is critical to develop and maintain highly skilled, experienced, and motivated space professionals within the National Security Space (NSS) community. In 2009, the original NSSI was realigned to appropriately place space education and training within applicable Air Force organizations. As a result, the ASOpS and NSSI were formed. The ASOpS is part of the SIDC, and is responsible for fundamentals, deployment and advanced training courses. Within the SIDC, the ASOpS is assigned to the 595th Space Group. The NSSI is assigned to AETC, with responsibility for space PCE via the Space 200 and 300 courses. The NSSI is under AU’s Eaker Center for Professional Development (ECPD). For simplicity, this AFSPCI refers to the schools as ASOpS and NSSI with the understanding that space education and training matters will be managed within respective chains of command as required.

**1.2. Scope.** This AFSPCI provides guidelines for effective interaction between HQ AFSPC and external agencies regarding ASOpS and NSSI course management and development; outlines the roles of the Course Functional Manager (CFM) and the Space Education and Training Board (SETB); describes roles and responsibilities for key organizations; provides general guidance for course and student management; outlines the process for requesting, developing and modifying ASOpS courses; and describes how AFSPC integrates with AF and AETC processes to significantly change or request new NSSI courses.

**1.3. ASOpS** The ASOpS presents operationally focused training courses to meet HQ AFSPC requirements, as well as additional DoD space cadre requirements as resources permit. For additional information, see the ASOpS website: <https://www2.peterson.af.mil/ASOpS.htm>

1.3.1. Deployment Preparation. The ASOpS is responsible for the development and execution of curricula to train space warfighters on the integration of space power into military operations. The ASOpS also conducts the Weapons School Preparatory Course to prepare AFSPC candidates for the USAF Weapons School program.

1.3.2. Fundamentals. The ASOpS develops courses that provide general space education for the NSS community, personnel from DoD/National agencies and selected allies (through Foreign Military Sales (FMS)).

1.3.3. Advanced Courses (AC). The ASOpS provides ACs to develop subject matter experts with technical and tactical depth in space mission areas. ACs provide in-depth understanding of the design, vulnerability, operation, employment and tactics of specific weapon systems. AC graduates return to their organizations and employ their knowledge to strengthen unit training programs, develop tactics, techniques and procedures, and influence system development and acquisition.

1.3.4. Comparison to Combat Mission Ready (CMR) training. ASOpS courses enhance an individual's knowledge and understanding of specific subjects, but are not CMR courses. CMR courses are taught by AETC or AFSPC units, with HQ AFSPC/A3T oversight.

**1.4. NSSI.** The NSSI develops and executes Space 200 and 300 in support of the Air Force Space Professional Development Program (SPDP). Courses also support space cadre development for other services' and selected allies (through FMS). For additional information, see the NSSI website: <https://www2.peterson.af.mil/nssi/CESET/nssi/index.htm>

**1.5. Space & Cyberspace Professional Management Office (SCPMO), HQ AFSPC/A1MH.** The SCPMO is the Air Force lead for the SPDP and therefore is closely associated with the NSSI, which executes key elements of SPDP's education requirements. The SCPMO supports the AFSPC/CC's role as the Space Professional Functional Authority (SPFA) and establishes AF SPDP education policy. The SCPMO also serves as the AFSPC interface on Department of Defense (DoD) space cadre issues, synchronizing AF space cadre development efforts, coordinating requirements for selected NSSI and ASOpS courses, and addressing space education and advanced training needs across the NSS community.

**2.1. Course Functional Manager.** Each course has a CFM, the advocate with a principal interest in course development and execution to meet mission requirements. The CFM determines requirements for new courses; submits changes to existing courses; works closely with the ASOpS or NSSI to effectively develop and manage their courses; and advises the SETB on course requirements, as required.

**3.1. Space Education and Training Board.** The SETB is a collaborative forum that facilitates interschool cooperation and addresses issues associated with ASOpS- and NSSI-provided space education and training. The SETB provides a forum to consolidate tasking, assess resource requirements, establish priorities and review metrics (para 5.6). It is the preliminary review board for ASOpS courses during the course development process (para 6) and integrates AFSPC requirements into AU's curriculum process (para 7) for NSSI courses.

3.1.1. Membership:

3.1.1.1. Principal members:

Chief, Manpower, Organization & Resources Division (HQ AFSPC/A1M, Chair).  
Chief, Operations Training, Test, Exercises and Stan/Eval Division (HQ AFSPC/A3T).  
Commandant, NSSI (NSSI/CC).  
Commander, ASOpS (ASOpS/CC).

3.1.2. Associated members:

SCPMO: facilitates the SETB.

CFMs: as required to advise SETB.

Invited members: as required.

### **3.2. Meeting frequency.**

3.2.1. The SETB will meet semiannually to review course requirements and discuss ASOpS and NSSI issues.

3.2.2. Out-of-cycle. An out-of-cycle SETB may convene to address time critical issues or when principal SETB members determine convening the board is required.

3.2.3. Paper or electronic boards. The SETB may use normal staffing processes for coordination of routine issues. In addition, the SETB members may convene a meeting via email or telecon to resolve issues.

### **4.1. Roles and Responsibilities.**

4.1.1. Vice Commander, AFSPC (CV):

4.1.1.1. Approves AF Form 19, Request to Establish a New Professional Continuing Education Course, to develop new or significantly change space PCE courses.

4.1.1.2. For existing space PCE courses, validates Curriculum Plans to meet AU's biennial Education Program Review Board (EPRB).

### **4.2. Director of Air, Space and Cyberspace Operations (A3):**

4.2.1. Approves course requirements specified in the Course Requirements Document (CRD) /Course Training Standard (CTS) to develop new or significantly change ASOpS courses.

### **4.3. Manpower, Organization & Resources Division (A1M):**

4.3.1. Principal member of the SETB (Chair).

4.3.2. Integrates manpower programs/requirements; coordinates HQ AFSPC activities supporting SPDP and the SPFA.

### **4.4. Space & Cyberspace Professional Management Office (A1MH):**

4.4.1. Facilitates the SETB; convenes Action Officer-level meetings prior to SETB to coordinate issues, as required.

4.4.2. Manages the AF SPDP; develops/executes SPDP policy for the SPFA.

4.4.3. Interfaces with the other services' space cadre offices to synchronize space professional development efforts, coordinate requirements for NSSI and ASOpS courses and address space education and training needs across the NSS community.

4.4.4. Conducts space education conferences and working groups, as required, to identify and integrate space education requirements.

4.4.5. In coordination with the HQ AFSPC Program Element Monitors (PEM) for the SIDC (PE35174F), advocates for ASOpS resources (funding, manpower) within the AFSPC Corporate Process, as required.

4.4.6. Provides input to AU's budgeting process for NSSI, as required.

4.4.7. Determines student throughput requirements for space PCE; identifies personnel eligible to attend and manages class rosters in coordination with NSSI.

4.4.8. In coordination with NSSI, drafts AF Form 19 to develop new NSSI courses; supports NSSI Curriculum Plan and course development efforts, as required.

4.4.9. Reviews Curriculum Plans to support validation of existing NSSI courses through the AU EPRB.

4.4.10. Maintain currency of AFSPC-AU agreements regarding the intercommand relationships, guidelines, and resourcing for execution of NSSI and ASOpS courses.

4.4.11. Maintains list of CFMs for all ASOpS courses; recertifies list annually.

#### **4.5. Career Development (A1KB):**

4.5.1. Executes functions within AETC's Oracle Training Administration (OTA) database for ASOpS and NSSI courses, as required.

4.5.2. Serves as the Point of Contact (POC) for AFSPC courses, including ASOpS courses, listed on the AETC Education and Training Course Announcement (ETCA) website.

#### **4.6. Operations Training, Test, Exercises and Stan/Eval Division (A3T):**

4.6.1. Principal member of the SETB.

4.6.2. Ensures ASOpS-conducted training is provided to personnel selected for possible deployment; ensures ASOpS-conducted prerequisite training is provided to candidates selected for the USAF Weapons School.

4.6.3. Manages the Combat Air Forces Exercise and Readiness Training Program Element (PE), PE27603F.

#### **4.7. ASOpS:**

4.7.1. Principal member of the SETB (Commander).

4.7.2. Designs, develops, executes and maintains courses to meet requirements as directed by HQ AFSPC.

4.7.3. Ensures courses are available to meet user requirements as determined by the course scheduling process, para 5.1., Course Scheduling.

4.7.4. In conjunction with CFMs, coordinates with other organizations (AETC, NSSI, Space and Missile Defense Command, units, etc.) to minimize redundancies, eliminate gaps, and ensure space training (non-CMR) needs are met across the NSS community.

4.7.5. Consults with external agencies on ASOpS course accreditation/articulation.

- 4.7.6. Drafts financial and manpower inputs to support SIDC inputs to the AFSPC Corporate Process.
- 4.7.7. Coordinates with students on Temporary Duty (TDY) order requirements and provides funding authorization for student TDYs funded through the SIDC PE35174F.
- 4.7.8. Certifies instructors, conducts follow-on training and periodically assesses instructional technique and presentation IAW SIDC guidelines.
- 4.7.9. Performs registrar functions (e.g., student notifications, reporting instructions) for courses IAW criteria/priorities established by CFMs, SETB and HQ AFSPC/A3.
- 4.7.10. Notifies the CFM when projected attendance is 50% or less of the target class size. Coordinates with CFMs to maximize class slot utilization, as required.
- 4.7.11. Establishes process to disenroll students from courses based on substandard performance.
- 4.7.12. Reports course metrics per para 5.6., Metrics.
- 4.7.13. Assesses CRD or change requests per para 6., Developing/modifying ASOpS Curricula.
  - 4.7.13.1. Determines applicability of Major Change (para 6.1.2.) criteria to proposed course changes.
  - 4.7.13.2. Assists CFMs/organizations in developing a CTS and refining training requirements to satisfy course objectives.
  - 4.7.13.3. Based on approved course requirements, develops a Course Resource Estimate (CRE) to identify resources required (funding, manpower, equipment, facility, etc.) for curriculum development and course execution.
  - 4.7.13.4. Upon AFSPC/A3 approval of course requirements and availability of resources, develops/modifies course.
- 4.7.14. Establishes a process for curriculum reviews. In collaboration with the CFM, periodically assesses course content to ensure requirements are being met.
- 4.7.15. IAW AFSPC-AU agreements regarding the intercommand relationships, guidelines, and resourcing for execution of NSSI and ASOpS courses, executes host responsibilities to ensure effective use of the shared ASOpS-NSSI Space Education and Training Center (SETC).

#### **4.8. NSSI:**

- 4.8.1. Principal member of the SETB (Commandant).
- 4.8.2. Designs, develops, executes and maintains space PCE courses to meet SPDP education requirements.
- 4.8.3. Ensures courses are available to meet requirements as determined by the course scheduling process, para 5.1., Course Scheduling.
- 4.8.4. In conjunction with the SCPMO, coordinates with other organizations (ASOpS, Space and Missile Systems Center, units, etc.) to minimize redundancies, eliminate gaps, and ensure space professional education needs are met across the NSS community.

- 4.8.5. Performs registrar functions (e.g., student notifications, reporting instructions); coordinates with the CFM to maximize class slot utilization.
- 4.8.6. Generates TDY orders or provides a Line of Accounting Letter for students from non-AFSPC organizations attending NSSI courses and funded through the Space Education PE84760F.
- 4.8.7. Informs SCPMO of disenrollment proceedings, para 5.5., Student management, NSSI.
- 4.8.8. Reports course metrics per para 5.6., Metrics.
- 4.8.9. Provides NSSI initial instructor training IAW AU guidelines.
- 4.8.10. Assists AFSPC in developing the AF Form 19 per para 7, Developing/modifying NSSI Curricula.
  - 4.8.10.1. Determines applicability of AU Major Change (para 7.1) criteria to proposed course changes.
  - 4.8.10.2. Coordinates with AFSPC to develop Curriculum Plans IAW AU-ECPD guidance.
- 4.8.11. Collaborates with the CFM to periodically assess course content based on established course objectives using AU curriculum review process.
- 4.8.12. IAW AFSPC-AU agreements regarding the intercommand relationships, guidelines, and resourcing for execution of NSSI and ASOpS courses, execute tenant responsibilities to ensure effective use of the shared ASOpS-NSSI SETC.

#### **4.9. Course Functional Manager (CFM):**

- 4.9.1. Establishes course requirements via a CRD (para 6, Developing/modifying ASOpS Curricula) and CTS (ASOpS courses), or AF Form 19 and Curriculum Plan (NSSI courses).
- 4.9.2. Provides funding to develop and execute required courses; if unable to provide funding, supports ASOpS funding advocacy within the AFSPC Corporate Process directly and through the appropriate Command Lead.
- 4.9.3. With assistance from the ASOpS or NSSI, develops/modifies course objectives; reviews course material to support course development, as required.
- 4.9.4. Establishes student eligibility criteria in coordination with ASOpS or NSSI.
- 4.9.5. Estimates student throughput requirements or number of course offerings for each FY and submits requirements to AIMH for consolidation and presentation to the SETB.
- 4.9.6. As required, participates in course management (e.g., funding, course and student scheduling).
- 4.9.7. In coordination with course directors, determines if an offering will proceed when projected attendance is 50% or less of the target class size as specified on the CRD.
- 4.9.8. Reviews Major Changes in coordination with the ASOpS or NSSI, as required.

4.9.9. Participates in curriculum reviews for their courses and periodically assesses the course's ability to meet established requirements.

4.9.10. Coordinates with HQ AFSPC/A8I on foreign disclosure/releasability issues for ASOpS courses, as required.

#### **4.10. HQ AFSPC Command Leads:**

4.10.1. Coordinate on ASOpS course documentation relevant to their mission area prior to SETB coordination (e.g., HQ AFSPC/A3M, Command Lead for MILSATCOM, coordinates on SATCOM Advanced Course documentation).

4.10.2. Support ASOpS funding advocacy within the AFSPC Corporate Process, as required.

#### **4.11. Space Education and Training Board (SETB):**

4.11.1. Reviews projected ASOpS and NSSI requirements for upcoming and subsequent FYs and addresses long-term planning considerations.

4.11.1.1. Prioritizes ASOpS courses based on decisions made through the AFSPC Corporate Process; obtains HQ AFSPC/A3 guidance on course prioritization, when required.

4.11.1.2. Consolidates tasking for ASOpS courses based on guidance from the SPFA or HQ AFSPC/A3.

4.11.2. Reviews metrics (para 5.6, Metrics) for ASOpS and NSSI courses.

4.11.3. Coordinates on CRD and CTS and provides recommendation to HQ AFSPC/A3 on approval of course requirements (para 6). On approval of course requirements, reviews ASOpS CRE to assess resource implications for developing/executing the course.

4.11.4. Reviews AF Form 19s generated in NSSI course development process and provides a recommendation to AFSPC/CV for signature (para 7); reviews NSSI Curriculum Plans and provides a recommendation to AFSPC/CV on validation for AU's EPRB.

4.11.5. Reviews results and recommendations generated through curriculum reviews.

**5.1. Course Management.** Course management involves course scheduling, student scheduling, funding and management and metrics collection. In addition, by using AETC's OTA, students receive course notifications through their Unit Training Managers and receive credit for course completion in their official training records.

5.1. 1. Course scheduling. Course scheduling is a dynamic process tied to space education and training requirements and resource availability.

5.1.1.1. The SCPMO solicits CFM input for annual throughput or number of course offerings for ASOpS and NSSI courses. The actual number of courses offered in a FY may differ from the CFM's input due to resource availability and prioritization.

5.1.1.1.1. Mobile courses. Organizations will request ASOpS mobile courses

through the ASOpS. The request will include the timeframe, location and desired content. Requesting organizations will fund ASOpS TDY costs. The ASOpS will assess impact (schedule, instructor availability) and determine if they are able to support the mobile course offering.

5.1.2. AF space education and training requirements have priority for ASOpS and NSSI courses. The SCPMO forecasts space PCE throughput requirements for Active Duty/civilian space professionals and polls CFMs, ARC, other services and selected allies for ASOpS and NSSI requirements.

5.1.3. The SCPMO consolidates all ASOpS and NSSI course requirements for SETB review. The SETB will review the requirements, identify any additional resource constraints, and validate requirements for ASOpS and NSSI to develop course schedules.

5.1.4. The ASOpS and NSSI will schedule courses and forward schedules to the SCPMO; the SCPMO updates the SETB.

5.1.5. When projected attendance for an ASOpS course is 50% or less of the target class size, the ASOpS will notify the CFM at least 30 days prior to class start and provide a recommendation on whether or not the course should proceed; the CFM will determine if the course will proceed. The ASOpS will notify registered students of course cancellation.

**5.2. Student scheduling.** Student scheduling varies by course. In general, the process involves selecting students based on attendance criteria, populating class rosters and notifying students. Student notification timelines vary based on the target audience, course length and prerequisites.

5.2.1. ASOpS Courses. Table 5.1., Deployment / Fundamentals / Advanced Courses, describes the scheduling process by ASOpS course categories.

**Table 5.1. Deployment / Fundamentals / Advanced Courses.**

Deployment <sup>1</sup>	
Target Audience	- Space professionals selected for deployment, exercise support or AF Weapons School
Selection	- A3TW. Populates class slots based on need for deployment training (AFSPC tasking) or selection to Weapons School - Other organizations, services. Nominate personnel to attend on a 'space available' basis - ASOpS. Receives roster from A3TW; fills remaining slots with other target students from NSS community depending on class slot availability
Notification	- A3TW. Informs students of course and any additional prerequisites - ASOpS. Notifies students of class selection and provides initial reporting instructions
Fundamentals <sup>2</sup>	
Target Audience	- Members of NSS community - Personnel from DoD/National agencies - Selected allies (through FMS)

Selection	<ul style="list-style-type: none"> <li>- Students. Register for course on-line through the ASOpS website</li> <li>- ASOpS. Populates classes based on class slot availability and priority based on job/assignment</li> <li>- SCPMO. Verifies personnel requiring an ASOpS course for SPDP certification</li> </ul>
Notification	<ul style="list-style-type: none"> <li>- ASOpS. Notifies students of class selection and provides initial reporting instructions</li> </ul>
Advanced Courses	
Target Audience <sup>3</sup>	<ul style="list-style-type: none"> <li>- Space professionals or members from the NSS community working in the specific area of study with appropriate clearances</li> <li>- Eligibility criteria established by the CFM</li> </ul>
Selection	<ul style="list-style-type: none"> <li>- ASOpS. Sends course announcements<sup>4</sup> to space organizations</li> <li>- Space organizations. Nominate students IAW criteria specified in course announcement</li> <li>- ASOpS. Reviews nominations, selects students and submits the list of students to the CFM</li> <li>- Organizations. Generate orders based on ASOpS instructions; ensure students attend course</li> </ul>
Notification	<ul style="list-style-type: none"> <li>- ASOpS. Notifies organizations of selected students</li> </ul>
<p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. 14 AF selects and notifies personnel for Director, Space Forces training</li> <li>2. For mobile courses, the local (recipients) training manager or course coordinator populates the course and notifies students.</li> <li>3. ASOpS may grant waivers on a case-by-case basis per CFM guidance.</li> <li>4. Course announcement will include: eligibility criteria, nomination requirements and information on the selection process</li> </ol>	

5.2.2. NSSI, Space PCE courses. Effective student scheduling ensures the required number of space professionals attend space PCE. Table 5.2., Space PCE courses, describes the scheduling process.

5.2.2.1. Space PCE courses are essential elements of AF SPDP. To earn SPDP Certification Levels, AF space professionals must attend within established eligibility windows. Attendance is not based on competitive selection, but on SPDP eligibility criteria and class slot availability. ARC space professional POCs nominate Reserve and Guard personnel based on eligibility and slot allocations.

5.2.2.2. The SCPMO is responsible for class slot quotas for space PCE, which includes determining SPDP requirements; coordinating with the ARC and other services for their requirements; and balancing class slots based on requirements, available capacity and guidance from the SPFA. Quotas are based on Service, organization, personnel classification/grade (officer, enlisted, civilian, Guard, Reserve), Air Force Specialty Codes (AFSC) and year group.

5.2.2.3. AF space professionals include Total Force personnel directly involved in fielding, launching and employing space power and subject to SPDP certification requirements. Core disciplines include operations (13S / 1C6), scientists (61X),

engineers (62E), acquisition managers (63A), intelligence (14N / 1N0/2/5), weather (15W / 1W) and cyberspace operations and support (17D / 3D) as well as specified civilian personnel. Expansion to include additional disciplines is at the discretion of the SPFA.

5.2.2.4. Space cadre offices of the other services nominate personnel to attend courses based on their criteria and slot allocations.

**Table 5.2. NSSI Space PCE courses.**

Target Audience	- Space professionals meeting SPDP eligibility criteria - Members of other services' space cadres - (, through FMS
Selection	- SCPMO. Determines quotas/allocations; sends the eligible space professional candidates list to organizations. Populates initial class rosters and coordinates with NSSI on changes. Coordinates with other services and ARC on their quotas
Notification/Changes	- NSSI. Provides course instructions with lead time for prerequisites (students register through the NSSI registrar to receive information and prerequisites) - Organizations. Process orders and ensure students attend. Individual requests to change class dates must have wing commander (or equivalent) authorization

**5.3. Student Funding. In-residence NSSI and ASOpS courses require TDY to Colorado Springs, CO.** Table 5.3., Student TDY Funding Guidelines, provides general rules for funding student travel, lodging and per diem. The student notification will include instructions on fund cite authorization and TDY orders.

**Table 5.3. Student TDY Funding Guidelines.**

Courses	Student Category	Funding Source
Space PCE	AF space professionals	AU (PE84760F)1
	Other	Originating organization
Deployment	AF personnel selected for deployment or Weapons School preparation	A3TW (PE27603F)2
	Other	Originating organization
Fundamentals	AF space professionals <sup>3</sup>	SIDC (PE35174F)4
	Other	Originating organization
Advanced	AF space professionals	SIDC (PE35174F)4
	Other	Originating organization

**NOTE:**

1. Only AF members selected by HQ AFSPC/A3TW are funded by PE27603F.
2. For TDYs funded through PE84760F, the NSSI will generate orders or a Travel Authorization and Use of Funds memorandum for students IAW their local guidelines.
3. Only applies to space professionals attending an ASOpS course for SPDP certification.
4. For TDYs funded through PE35174F, AFSPC organizations will generate orders based on instructions that ASOpS includes in the student notification.

**5.4. Student management, ASOpS.** Student management ensures consistent and equitable administration of students enrolled in ASOpS courses. The ASOpS Commander is responsible for development and execution of student management policies. The following general guidelines ensure the ASOpS and CFMs are consistent in dealing with student absences and performance.

5.4.1. Students are expected to be present for all phases of instruction during a course. Unauthorized absences may result in student elimination. In extraordinary circumstances, authorized absences may be granted IAW ASOpS student management policies.

5.4.2. Performance. The ASOpS will establish measurement criteria for courses consistent with the CTS and criteria requiring an elimination board. The ASOpS will disseminate criteria to ensure students are aware of expected performance.

5.4.2.1. The ASOpS will maintain ongoing interaction with CFMs. At a minimum, the ASOpS will inform the CFM when a student will meet an elimination board. The ASOpS will pass results from the elimination board to the CFM and the student's unit commander.

5.4.2.2. Students disenrolled from a course will not receive credit for course completion and must wait six months and obtain a recommendation from their wing commander (or equivalent) to re-enroll. Placement in a class will be contingent on slot availability. If elimination changes the student's eligibility, the CFM will determine if the student may re-enroll based on the wing commander's recommendation.

5.4.3. Fitness standards. Due to the short duration of ASOpS courses, students are personally responsible for maintaining AF fitness standards; assessing compliance with AF fitness standards is the responsibility of the student's unit.

**5.5. Student management, NSSI.** The NSSI Commandant is responsible for student management policies IAW AUI 36-2315, Student Disenrollment Procedures, 19 Nov 2008. The NSSI will inform the SCPMO of disenrollment proceedings and student elimination from space PCE.

**5.6. Metrics.** To maintain consistency and accurately document space education and training throughput in both schools, ASOpS and NSSI will establish and monitor metrics for each course. Example metrics: courses conducted, throughput, percent graduated; demographics of students (e.g., rank, service, country). ASOpS and NSSI will submit metrics to SCPMO quarterly to meet higher headquarter reporting requirements.

**5.7. OTA Functions.** HQ AFSPC/A1KB supports ASOpS execution of OTA functions and updates the AETC's ETCA website with ASOpS course information.

**6.1. Developing/modifying ASOpS Curricula.** The curriculum development/modification process involves establishing and validating requirements specified in the CRD/CTS, estimating and advocating for resources, and developing/modifying/executing the course. A requestor can be the CFM, ASOpS or HQ AFSPC staff, the SETB, or an external organization. The process begins with a requestor submitting a CRD to the ASOpS or SCPMO (as SETB facilitator).

6.1.1. CRD and Major Changes. A CRD identifies the overarching requirements for a course. ASOpS uses the criteria for a Major Change to scope the effort to execute the change. A new course is processed as a Major Change.

6.1.1.1. CRD: A CRD establishes the "what, why, who and when" and must provide sufficient detail to allow the ASOpS and the SETB to determine if the course is within the scope of the ASOpS's mission and establish a priority for further requirements definition (Reference Attachment 2, CRD Template for additional details).

6.1.2. Major Change: changes to the CTS (revisions to tasks or learning levels); potential need for additional resources (manpower, facilities, funding); course deletions; and all requests to develop new courses. Other changes are assigned to the ASOpS for disposition.

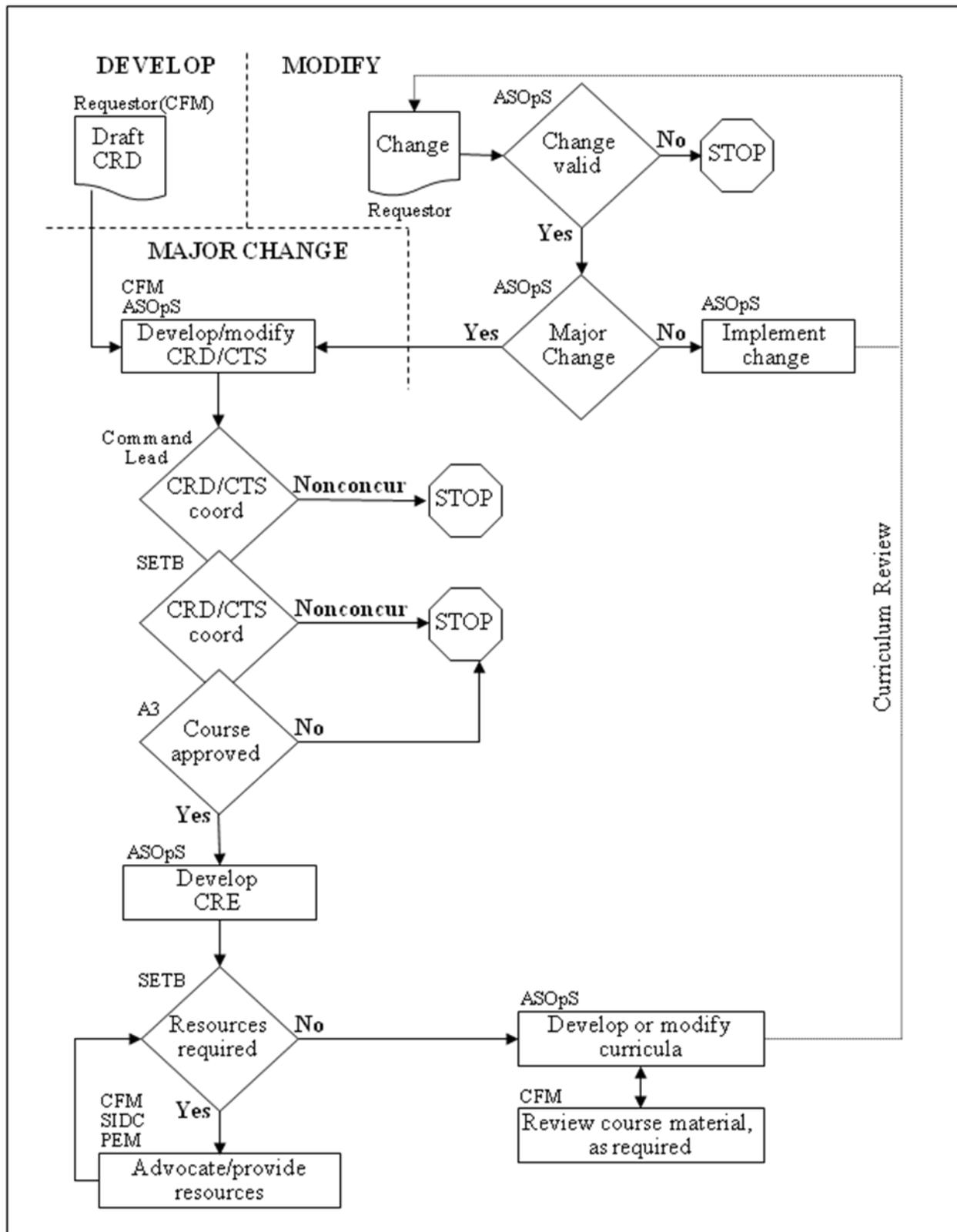
**6.2. Curriculum development/modification process.** Figure 6.1., ASOpS Curriculum Development/Modification Process, depicts the steps for developing/modifying ASOpS curricula. Paragraphs below discuss associated steps and decision points.

6.2.1. CRD (Requestor). Initiates the DEVELOP phase with a CRD for a new course. The CRD will enter the Major Change phase to validate and prioritize the requirement.

6.2.2. Change (Requestor). Initiates the MODIFY phase with a suggested change for an existing course. The MODIFY process begins with the ASOpS checking the validity of the change and assessing the impact to the curriculum.

6.2.3. Change Valid (ASOpS). The ASOpS reviews the change and determines if the change is valid and within the scope of the course. To make this assessment, the ASOpS may consult with the CFM. If the change is valid, the ASOpS will determine if the change meets criteria for a Major Change.

Figure 6.1. ASOpS Curriculum Development/Modification Process.



6.2.4. **Major Change (ASOpS).** The ASOpS determines if the change is a Major Change based on criteria in para 6.1.2., Major Change and informs the CFM. The ASOpS will provide a preliminary estimate of the expected impacts and resources required to initiate the change. If the change is not Major, the ASOpS implements the change based on need, opportunity and available resources.

6.2.5. Develop/modify CRD/CTS (CFM, ASOpS). The CFM and ASOpS will develop/modify a CRD and CTS to refine course requirements (e.g., determine desired learning outcomes, develop line items, and specify learning levels).

6.2.6. CRD/CTS coordination (Command Lead). The HQ AFSPC Command Lead (or other functional organization) reviews the course requirements in the CRD/CTS for courses aligned with their mission area.

6.2.7. CRD/CTS coordination (SETB). The SETB reviews the course requirements in the CRD/CTS as a preliminary review board prior to obtaining HQ AFSPC/A3 approval. For a change to an existing course, the SETB determines if it requires HQ AFSPC/A3 approval.

6.2.8. Course Approved (SETB). HQ AFSPC/A3 approves the course requirements specified in the CRD/CTS. Approval requires the ASOpS to develop the Course Resource Estimate and pursue funding with validated requirements.

6.2.9. Develop CRE (ASOpS). ASOpS develops a CRE to determine facility, equipment, funding and manpower required to conduct the course and submits the CRE to the SETB.

6.2.10. Resources required (SETB). The SETB reviews the CRE for completeness, determines impact on facilities and equipment and identifies areas of concern prior to seeking additional resources.

6.2.11. Advocate/provide resources (CFM, SIDC, PEM). If resources are available to develop/execute the course, the applicable organization will transfer funds to the SIDC PE (PE35174F). In most cases, new courses will require advocacy through the AFSPC Corporate Process. The PE35714F PEM will normally present the option and will need support from the CFM, ASOpS and SIDC to accurately convey required resources and mission impact. Command Leads may also provide critical advocacy. Once resources are available, the ASOpS will proceed with developing or modifying curricula.

6.2.12. Develop or modify curricula (ASOpS). Based on the course requirements, the ASOpS develops or modifies the curricula and associated courseware. The CFM will support the development effort by reviewing course material (syllabus, lessons, etc.), as requested by ASOpS.

**6.3. Curriculum Review.** ASOpS will establish periodic curriculum reviews to assess the adequacy of courses to meet established requirements and educational needs. In contrast to routine course evaluations, curriculum reviews will have a strategic focus and validate existing and future course requirements (e.g., new systems, revised strategy/doctrine). Specific review procedures may vary by course.

6.3.1. CFMs will coordinate with ASOpS to determine the approach for specific course reviews. For example, ASOpS and CFMs may conduct combined end-of-course

feedback sessions, field interviews or course surveys; CFMs may also conduct independent assessments. At a minimum, ASOpS and CFMs will review course documentation (e.g., CRD, CTS) annually.

6.3.2. Course change recommendations resulting from the review will follow the procedures in paragraph 6.1 above. The ASOpS, in coordination with the CFM, will report the results of the curriculum review to the SETB.

**7.1. Developing/modifying NSSI Curricula.** The SPFA provides overarching guidance and direction for space PCE. Development and modification of NSSI courses follows processes prescribed in AFI 36-2302, Professional Development (Academic Degrees and Professional Continuing Education). The following paragraphs describe the AFSPC approach to integrate with these processes.

7.1.1. AF Form 19, Request to Establish a New Professional Continuing Education Course, and AU Major Changes. The AF Form 19 establishes the requirement, coordination and approval for new PCE courses. Like the CRD, the AF Form 19 identifies the overarching need, including course description, objectives, justification, target audience and annual production. If a change to an existing course meets the AU Major Change criteria (25 percent or more hours curriculum modification or adjustment), the course is deleted and a new AF Form 19 is developed.

**7.2. AFSPC Process for Space PCE Requirements.** Figure 7.1., AFSPC Process for Space PCE Requirements, depicts the AFSPC process for identifying requirements to AU for developing/modifying space PCE curricula. The paragraphs below discuss associated steps and decision points.

7.2.1. AF Form 19 (Requestor). Initiates the DEVELOP process with an AF Form 19 for a new course. The AF Form 19 enters the Major Change process to validate the requirement.

7.2.2. Change (Requestor). Initiates the MODIFY process with a suggested change for an existing PCE course. The MODIFY process begins with the NSSI checking the validity of the change and assessing the impact to the curriculum.

7.2.3. Change Valid (NSSI). The NSSI reviews the change and determines if the change is valid and within the scope of the course. To make this assessment, the NSSI may consult the CFM. If the change is valid, the NSSI will determine if it is a Major Change.

7.2.4. Major Change (NSSI). For a Major Change (para 7.1.), the NSSI will inform the CFM and provides a preliminary estimate of the expected impacts and resources required for the change. If the change is not Major, the NSSI implements the change based on need, opportunity and available resources.

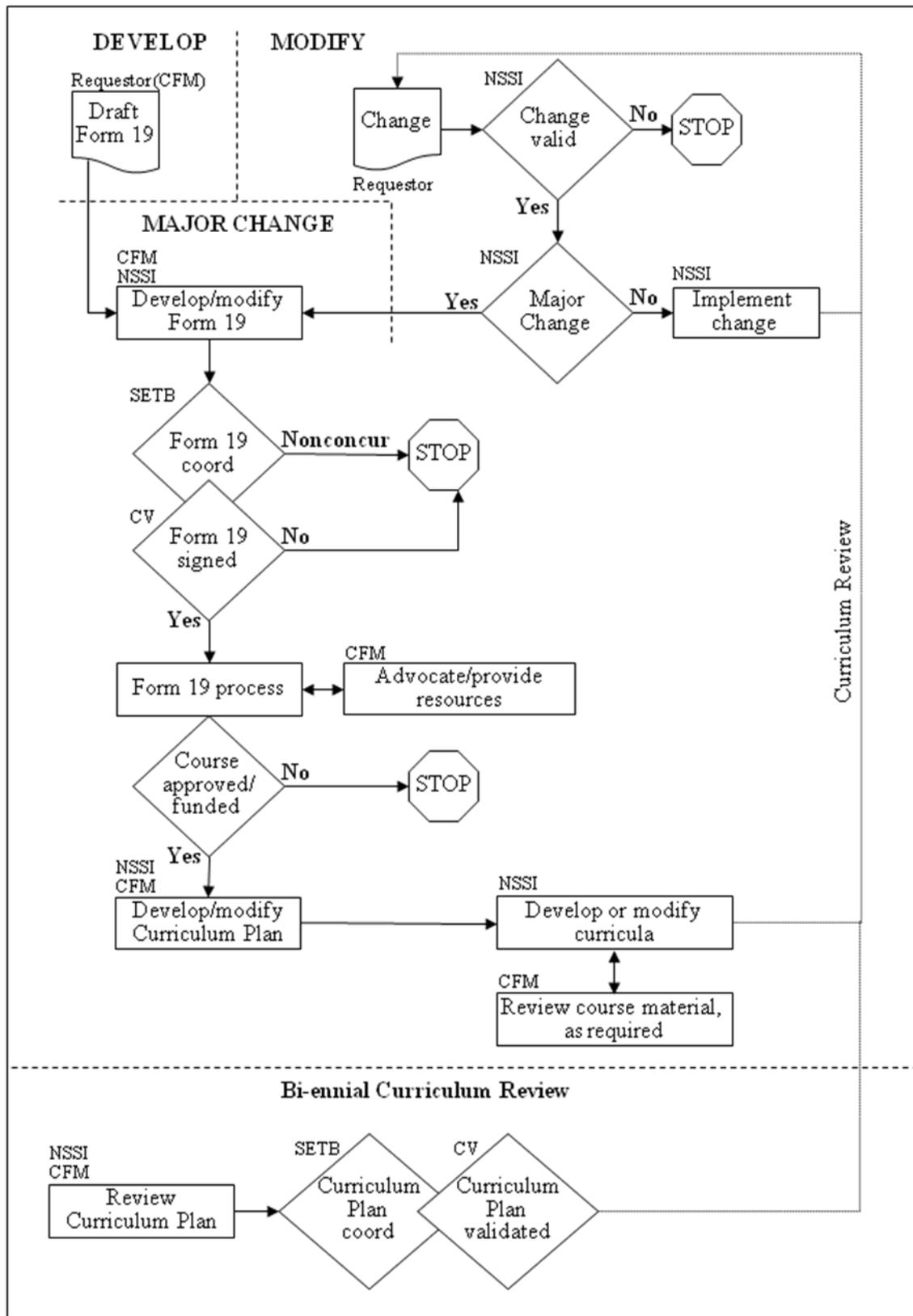
7.2.5. Develop/modify AF Form 19 (CFM, NSSI). The CFM and NSSI will develop/modify the AF Form 19 to refine course requirements (e.g., description, objectives, justification, etc.).

7.2.6. AF Form 19 coordination (SETB). The SETB completes a preliminary review of the AF Form 19 prior to obtaining AFSPC/CV signature.

7.2.7. AF Form 19 signed (CV). Course changes may require SPFA coordination prior to the AF-level AF Form 19 process. AFSPC/CV signs block 19 to initiate the AF Form 19 process.

7.2.8. AF Form 19 Process. The AF Form 19 is coordinated through multiple organizations (e.g., ECPD, AU, AETC, Air Staff) to research the requirement, estimate costs and approve the course. HQ AFSPC, in coordination with AU, may be required to advocate or provide resources for the course.

Figure 7.1. AFSPC Process for Space PCE Requirements.



7.2.9. Advocate/provide resources (CFM). In coordination with AU, the CFM will advocate for resources, as required. Course advocacy may require AFSPC support.

7.2.10. Develop/modify Curriculum Plan (NSSI, CFM). Once approved and funded, the NSSI develops or modifies a Curriculum Plan to identify course objectives. The NSSI collaborates with the CFM to ensure the course meets requirements.

7.2.11. Develop or modify curricula (NSSI). Based on the course requirements, the NSSI develops or modifies the curricula and associated courseware/documentation. The CFM will support the development effort by reviewing course material (syllabus, lessons, etc.), as requested by NSSI.

**7.3. Curriculum Review.** AUI 36-2306, Air University Educational Program Review, describes AU's formal curriculum review process. AU-ECPD conducts a biennial review to verify that NSSI courses contain content required by the CFM as documented in the Curriculum Plan.

7.3.1. Review Curriculum Plan (NSSI, CFM). The NSSI and CFM review the Curriculum Plan to assess course construct and objectives and provide results to the SETB.

7.3.2. Curriculum Plan coordination (SETB). The SETB coordinates on the Curriculum Plan as a preliminary review board and provides a recommendation to AFSPC/CV for validation.

7.3.3. Curriculum Plan validated (CV). AFSPC/CV validates the Curriculum Plan via a memo to ECPD/CC.

7.3.4. The validated Curriculum Plan meets the AU EPRB to approve the content, conduct and administration of NSSI courses. In addition to the formal biennial review, ECPD can request out-of-cycle reviews to consider any major change involving course revisions, additions, or deletions occurring since the last formal review.

**8. Modifications to this HQ AFSPCI.** This instruction will be reviewed annually for currency. Refer recommended changes and questions about this publication to the HQ AFSPC/A1MH, 150 Vandenberg St, Ste 1105, Peterson AFB, CO 80914-4230, email: [afspc.SPMO@peterson.af.mil](mailto:afspc.SPMO@peterson.af.mil) using the AF IMT 847, Recommendation for Change of Publication; route AF Form 847s from the field through the appropriate functional office's chain of command.

CHRISTOPHER T. EMMERT, Colonel, USAF  
Director of Manpower, Personnel and Services

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 36-22, Air Force Military Training, 22 March 2004

AFPD 36-23, Military Education, 27 September 1993

AFPD 36-37, Space Professional Development, 23 March 2006

AFI 36-2201, Volume 1, Training Development, Delivery, and Evaluation, 1 October 2002

AFI 36-2302, Professional Development (Academic Degrees and Professional Continuing Education), 11 July 2001

AFI 36-3701, Space Professional Development Program, 18 May 2010

AUI 36-2306, Air University Educational Program Review, 24 September 2007

AUI 36-2315, Student Disenrollment Procedures, 19 November 2008

AFSPCI 36-2202, Volume 1, 14 AF Mission Ready Training, Evaluation And Standardization Programs, 1 January 2010

***Prescribed Forms***

No Forms prescribed by this publication

***Adopted Forms***

AF Form 19, *Request to Establish a New Professional Continuing Education Course*

AF Form 847, *Recommendation for Change of Publication*

***Abbreviations and Acronyms***

**AC**—Advanced Course

**AETC**—Air Education and Training Command

**AFI**—Air Force Instruction

**AFPD**—Air Force Policy Directive

**AFRC**—Air Force Reserve Command

**AFSC**—Air Force Specialty Code

**AFSPC**—Air Force Space Command

**AFSPCI**—Air Force Space Command Instruction

**ANG**—Air National Guard

**ARC**—Air Reserve Component

**ASOps**—Advanced Space Operations School

**AU**—Air University

**AUI**—Air University Instruction  
**CFM**—Course Functional Manager  
**CMR**—Combat Mission Ready  
**CRD**—Course Requirements Document  
**CRE**—Course Resource Estimate  
**CTS**—Course Training Standard  
**DoD**—Department of Defense  
**ECPD**—Eaker Center for Professional Development  
**EPRB**—Educational Program Review Board  
**ETCA**—Education and Training Course Announcement  
**FMS**—Foreign Military Sales  
**IAW**—In Accordance With  
**NSS**—National Security Space  
**NSSI**—National Security Space Institute  
**OPR**—Office of Primary Responsibility  
**OTA**—Oracle Training Administration  
**PCE**—Professional Continuing Education  
**PE**—Program Element  
**PEM**—Program Element Monitor  
**POC**—Point of Contact  
**SETB**—Space Education and Training Board  
**SETC**—Space Education and Training Center  
**SIDC**—Space Innovation and Development Center  
**SPDP**—Space Professional Development Program  
**SPFA**—Space Professional Functional Authority  
**SCPMO**—Space and Cyberspace Professional Management Office  
**TDY**—Temporary Duty

### *Terms*

**Course Functional Manager (CFM)**— The course advocate who has the principal interest in the content and execution of an ASOpS and NSSI course.

**Course Requirements Document (CRD)**— Identifies requirements for an ASOpS course.

**Course Training Standard (CTS)**— Identifies training tasks and required learning levels.

**Curriculum Plan**— Identifies course construct/objectives to meet education requirements.

**Major Change**— Changes to a course that involve: changes to the CTS (revisions to tasks or learning levels); potential need for additional resources (manpower, facilities, funding); course deletions; all requests to develop new courses.

**Space Education and Training Board (SETB)**— A senior level decision-making forum addressing issues associated with ASOpS and NSSI provided space education and training. Key roles include consolidating tasking, determining requirements, coordinating on course documents and reviewing metrics. Principal members: A1M(chair), A3T, NSSI/CC, ASOpS/CC.

**Space Professional**— Total Force personnel directly involved in fielding, launching and employing space power; subject to SPDP certification requirements. Core disciplines include operations, intelligence, weather, cyberspace operations and support, scientists, engineers, and acquisition managers; core AFSCs 13S, 14N, 15W, 17D, 61S, 62E, 63A (officer); 1C6 and selected 1N0/2/5, 1W and 3D (enlisted) as well as specified civilian personnel. Expansion to include additional disciplines is at the discretion of the SPFA.

**Space Professional Functional Authority (SPFA)**— AFSPC/CC role as designated by SECAF: articulates Space Professional requirements to Functional Authorities in the form of long- and short-term manpower forecasts; personnel requirements; and education, training, and experience criteria necessary to develop a sufficient Space Professional cadre; provides strategic-level guidance to the functional communities that contribute to USAF space capabilities.

## Attachment 2

## COURSE REQUIREMENTS DOCUMENT (CRD)

Figure A2.1. Course Requirements Document (CRD)

<p>Course Requirements Document (CRD)</p> <p>[Course Title]</p> <p>Advanced Space Operations School</p> <p>Date: [Date submitted]</p> <p>Course Functional Manager: (A3M example)</p> <p>[Office] HQ AFSPC/A3M, MILSATCOM Division</p> <p>[Phone, DSN/Comm] DSN: 662-0226; Comm: 719-554-0226</p> <p>[Organization Email] afspc.a3m.wf@afspc.af.mil</p> <p>Purpose: [General intent/scope and top level objectives; desired knowledge outcomes (i.e., what is the end state for graduates)]</p> <p>Justification: [Rationale for developing the course and impact if not conducted; alternate sources/alternatives considered and why they do not satisfy requirements; supporting documentation, if available]</p> <p>Target Audience: [Who the course is intended for. Consider:</p> <ul style="list-style-type: none"> <li>- Service or Agency (Army, AF, Navy, NASA, etc)</li> <li>- Category/Rank (Officer, Enlisted, Civilian with associated ranks, grades)</li> <li>- Air Force Specialty Code (or other Service/civilian equivalents)</li> <li>- General background (space experience, mission area expertise, SPDP Certification Level)</li> <li>- Organizations (what organizations would benefit from the course)]</li> </ul> <p>Projected Annual Course Offerings: [Number of times the course should be offered per year and any specific timing considerations.]</p> <p>Projected Annual Student Throughput: [Number of students per year that will attend]</p> <p>Security Classification: [Security classification and releasability to foreign nationals (foreign national access to course material will require an OPSEC/releasability review)]</p> <p>Timeframe for Implementation: [When the course is required]</p> <p>Funding//Manpower Sources: [Sources for funding/manpower]</p> <p>Additional Information: [Any other details associated with the course]</p>
COORD / APPROVAL
Command Lead (Coord): A3M, 23 Aug 10

SETB (Coord): 7 Sep 10
A3 (Approve): 28 Sep 10