

**BY ORDER OF THE COMMANDER
AIR EDUCATION AND TRAINING
COMMAND**



**AIR FORCE INSTRUCTION 11-290
AIR EDUCATION AND TRAINING COMMAND
Supplement 1**

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Flying Operations

**COCKPIT/CREW RESOURCE MANAGEMENT
TRAINING PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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AFI 11-290, 11 April 2001, is supplemented as follows:

This supplement establishes the HQ AETC Cockpit/Crew Resource Management (CRM) Training Program. It contains guidance unique to AETC and AETC-gained Air National Guard (ANG) and Air Force Reserve Command (AFRC) units, as well as ANG and AFRC associate personnel at AETC bases who conduct approved AETC flying syllabi enrolling active duty personnel. It applies to all AETC commanders, supervisors, and other personnel.

Units may supplement this instruction, but their supplements will not duplicate or be less restrictive than the basic AFI or this supplement. Prior to publication, unit supplements will be forwarded to HQ AETC/DOF for approval. Once approved, they will be posted behind the basic AFI and the AETC Sup 1.

Unless otherwise specified, HQ AETC/DO is the overall waiver authority for this supplement. However, HQ ANG/XO is the waiver authority for ANG units. Operations group commanders (OG/CC) of local units generating unit-level supplements are the waiver authority for those supplements.

AETC subordinate units will submit suggested changes to this supplement via AF IMT 847, **Recommendation for Change of Publication**, to HQ AETC/DOFV, 1 F Street, Suite 2, Randolph AFB TX 78150-4325. AETC-gained ANG units will send their recommended changes to ANG/XOT, 1411 Jefferson Davis Highway, Arlington, VA 22202. HQ ANG/XOT will then coordinate changes with HQ AETC/DOFV. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 37-123, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://webrims.amc.af.mil>.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This revision updates CRM program managers' offices of responsibility (paragraph **5.1.**); updates HQ AETC Steering Committee members (paragraph **5.3. (Added)**); updates review OPR (paragraphs **5.3.1. (Added)** and **5.3.2. (Added)**); expands training requirements (paragraph **5.3.3. (Added)**); expands guidance (paragraph **5.3.4. (Added)**); specifies course development requirements (paragraph **5.4. (Added)**); includes a requirement for individuals who teach CRM to complete CRM facilitator training (paragraph **5.5. (Added)**); provides stan/eval requirements (paragraph **5.6. (Added)**); clarifies squadron CRM program coordinator requirements (paragraph **5.7. (Added)**); includes battle management training (BMT) in the CRM training curriculum (paragraph **8.**); includes mission design series (MDS)-specific guidance (paragraph **8.1.**); generalizes aircrew positions (paragraph **8.1.1. (Added)**); revises grading items (**Table 1. (Added)**); updates academic CRM training for joint specialized undergraduate pilot training (JSUPT) (paragraph **8.1.2. (Added)** and **Table 2. (Added)**); updates academic CRM training for joint specialized undergraduate navigator training (JSUNT) (paragraph **8.1.3. (Added)**); updates CRM training skills (**Table 3. (Added)**); updates applicable training courses (paragraph **8.2.**); provides gained ANG training instructions (paragraph **8.2.1. (Added)**); provides formal lesson plan instructions and scheduling of training (paragraph **8.3.**); updates entries for MDS aircraft (**Table 4. (Added)**); expands guidance (paragraph **8.5.**); and updates **Attachment 3 (Added)** through **Attachment 7 (Added)**.

1. A crewmember is defined as one who is on aeronautical orders, flies in a designated crew position, and has an Air Force specialty code (AFSC) related to the flight activity involved.

5.1. The CRM program managers for AETC and ANG are HQ AETC/DOFV and HQ ANG/XOT, respectively.

5.2. See paragraph **5.3. (Added)** for the makeup and responsibilities of the HQ AETC Steering Committee.

5.3. (Added) **HQ AETC Steering Committee.** The HQ AETC Steering Committee, chaired by the CRM program manager, provides oversight and support. The steering committee will meet annually or as directed by the chair. Mandatory members are representatives from HQ ANG/XOT, HQ AETC/DOFP, HQ AETC/SEF, HQ AETC/SGP, 19 AF/DO, and HQ AETC/DOZ. Specific committee responsibilities are as follows:

5.3.1. (Added) Review CRM training program reviews and critiques (OPRs: HQ AETC/DOZ and HQ ANG/XOT).

5.3.2. (Added) Review syllabi and AFI 11-2 mission design series (MDS)-specific Volumes 2 for CRM compliance (OPR: HQ AETC/DOFP).

5.3.3. (Added) Review mishap reports for findings and recommendations impacting CRM training and coordinate implementation into applicable training programs (OPR: HQ AETC/SEF).

5.3.4. (Added) Review standardization/evaluation (stan/eval) CRM trends and ensure training is implemented to alleviate identified deficiencies (OPRs: HQ AETC/DOFV, 19 AF/DO, and HQ ANG/XOT).

5.4. (Added) **Courseware Development.** HQ AETC/DOZ and HQ ANG/XOT are responsible for developing and/or overseeing contractor development of CRM program courseware and continuation training

(CT) programs to meet the requirements of the basic AFI and AFI 11-2 MDS-specific volumes, as well as incorporating changes resulting from mishap and stan/eval trend data.

5.5. (Added) **Operations Groups.** Each OG/CC will appoint a CRM program coordinator to oversee (manage) the program (including local contract performance), assist squadron CRM program coordinators, act as a central point of contact for CRM issues, and provide feedback to the CRM program manager and OG/CC. Operations group CRM program coordinators do not have to be trained as CRM facilitators, but they will ensure anyone who teaches CRM for the purpose of completing required CRM academic training has successfully completed the CRM facilitator training recognized by the HQ AETC CRM Program Manager.

5.6. (Added) **CRM Skill Evaluation Criteria.** CRM skill evaluation criteria is currently being incorporated into all aircrew training syllabi, AFI 11-2 MDS-specific Volumes 2, and 13-series AFIs for which AETC is the lead command. Until this guidance is established in those documents, use AF IMT 4031, **CRM Skills Criteria Training/Evaluation**, to record performance and a three-point scale (Q = 1, Q- = 2, U = 3) for skill assessments. The operations group CRM program coordinator will compile the data from these assessments and develop trend evaluations in accordance with the guidance set forth in **Attachment 3 (Added)**, CRM Trend Monitoring Standards.

5.7. (Added) **Flying Squadrons.** Flying squadron commanders will appoint a CRM program coordinator to oversee (manage) the squadron CRM program and advise the commander. This individual will be a rated or designated aircrew member. In the absence of HQ AETC/DOZ-approved or contractor-developed courseware, the squadron CRM program coordinator will develop and maintain CRM CT meeting topics (**Attachment 4 (Added)**, CT Scenario Development), disseminate CRM material, and provide feedback to the operations group CRM program coordinator.

6.1.2. “Flight integrity and wingman consideration” may be substituted for “crew coordination and flight integrity.”

6.1.6. “Mission planning, briefing, and debriefing” may be substituted for “mission planning and debrief.”

8. **CRM Training Phases.** AETC primary CRM training curriculum is designed with a building block approach and is an integral part of the syllabus. Basic definitions and principles are the primary focus during joint specialized undergraduate pilot training (JSUPT), joint specialized undergraduate navigator training (JSUNT), battle management training (BMT), and the enlisted aircrew undergraduate course (EAUC). These concepts will be taught using guided discussions, case studies, videos, and role-playing exercises. Classroom instruction will be reinforced at JSUPT and JSUNT during flight line briefings, aircraft and simulator briefings, flights, and debriefings.

8.1. AETC flight training syllabi will contain CRM core concepts and associated CRM skills (reference AFI 11-2 MDS-specific Volumes 2, the basic AFI, and AF IMT 4031) in the course training standards.

8.1.1. (Added) **Flight and Simulator Grade Sheets.** Aircrew flight and simulator grade sheets will contain CRM grading items as specified in **Table 1. (Added)**.

Table 1. (Added) Aircrew Grade Sheet Requirements.

I T E M	A	B
	Flying Environment	CRM Grading Items
1	Flight and simulator	Situational awareness; communication; risk management and decision-making; task management; and mission planning, briefing, and debriefing.
2	Formation or tactical employment	Flight integrity and wingman consideration.
3	Crew aircraft	Crew coordination and flight integrity.

8.1.2. (Added) **JSUPT Academic CRM Training.** **Table 2. (Added)** contains CRM topics to be covered in academics during each phase of pilot training. These topics and associated skills will be reinforced during simulator and flight training throughout the program. Students will have a basic awareness of CRM skills on completion of JSUPT and be able to apply these skills in their assigned aircraft on completion of the formal training unit (FTU).

Table 2. (Added) JSUPT CRM Academic Training.

I T E M	A	B
	Training Phase (note 1)	CRM Skills
1	Phase I or preflight	Situational awareness; crew coordination, flight integrity, and wingman consideration; and task management.
2	Phase II (T-6, T-37, T-34)	Communication and risk management and decision-making.
3	Phase III: a. T-38/T-38C	Mission planning, briefing, and debriefing and task management.
4	b. T-1	Crew coordination and flight integrity, task management, and mission planning, briefing, and debriefing.
5	c. T-44	Crew coordination and flight integrity, risk management
6	d. UH-1	and decision-making, and mission planning, briefing and debriefing.
7	Introduction to fighter fundamentals (IFF) (T-38 and T-38C)	Situational awareness and flight integrity and wingman consideration.
8	FTUs (all aircraft)	Aircraft-specific CRM core skills and case studies.

NOTE:

1. Refer to AFI 11-2 MDS-specific, Volumes 1 and 2 (or AF IMT 4031 if CRM skills evaluation criteria has not been incorporated into the AFI).

8.1.3. (Added) **JSUNT Academic CRM Training. Table 3. (Added)** contains the CRM topics covered in academics during each phase of navigator training. These topics and associated skills will be enforced during simulator and flight training throughout the program. Students will have a basic awareness of CRM skills on completion of JSUNT and be able to apply these skills in their assigned aircraft on completion of the FTU. HQ AETC/DOZ develops the courseware taught by aerospace physiologists. CRM skills will be practiced and reinforced during flight.

Table 3. (Added) JSUNT Academic CRM Training.

I T E M	A	B
	Phase	CRM Skills
1	Phase I	Situational awareness, risk management and decision-making, task management, and mission planning, briefing and debriefing.
2	Phase II: a. Strike Track	Situational awareness, communication, flight integrity and wingman consideration, and task management.
3	b. Heavy Track	Situational awareness, communication, crew coordination and flight integrity, and task management.
4	Phase III: a. IFF	Situational awareness, flight integrity and wingman consideration, and mission planning, briefing and debriefing.
5	b. Global	Mission planning, briefing, and debriefing.
6	FTU (Strike and Heavy Tracks)	Aircraft-specific application of CRM core skills, case studies, and mission oriented simulator training (MOST), if applicable.

8.1.4. (Added) **Battle Management Training (BMT).** CRM training is required in BMT aircrew courses, specifically those involving air battle managers and airborne warning and control system weapons directors. Undergraduate-level courses will cover the six core CRM skills at an introductory awareness level and prepare aircrew for aircraft-specific FTU CRM training. Graduate-level courses (the AFSC 1A451D weapons director syllabus and battle management instructor qualification training [regardless of AFSC]), will cover aircraft-specific application of CRM core skills and skills case studies.

8.1.5. (Added) **Enlisted Aircrew Undergraduate Course (EAUC).** This course covers the six core CRM skills at an introductory awareness level and prepares enlisted aircrew for aircraft-specific FTU CRM training.

8.2. Instructors will teach CRM training in all training media and build on the awareness and introductory level of training students receive at JSUPT, JSUNT, BMT, and/or EAUC. Classes should discuss application of CRM core skills at each crew position and provide crewmembers the opportunity to interact and learn from each other. Crewmembers should attend CRM academic classes together. Instructors will use case studies to give crewmembers positive examples of CRM skill application. A core CRM skills review should be included during discussion of aircraft-specific skill application.

8.2.1. (Added) **Student Simulator, Weapons System Trainer (WST), and Aircraft Sorties.** Instructors will discuss CRM skills as part of all training event briefings and debriefings. They will use positive and negative CRM skill application observations to generate post flight discussion (**Attachment 5 (Added)**). Instructors will grade CRM core skills after each training aircraft or simulator sortie. For ANG units, the current HQ ANG/XO-approved CRM contractor will provide annual CRM training to current ANG FTU WST and simulator contract instructors. These instructors will provide the training listed in paragraph **8.2.** and **8.3.**

8.3. CT is based on a periodic cycle and is MDS-specific for each crewmember's position and mission. Instructional techniques that create opportunities for students to practice CRM skills will be emphasized. CRM instructors should be able to observe, instruct, evaluate, and debrief CRM skills in an effective manner. Training materials must be updated periodically (at least annually, according to paragraph 2.2.2. of the basic AFI), based on evaluation trends and mishaps. (Follow guidance in AFI 11-2 MDS-specific, Volumes 1 and 2.) Formal lesson plans must be developed for periodic training and retained by the unit for at least 3 years. See the guidance in **Attachment 3 (Added)** and **Attachment 4 (Added)** of this supplement. The unit will determine the scheduling of the training, which may be conducted during quarterly meetings if aircrews attend or review all of the training to receive credit.

8.3.3. (Added) Each quarter, at least one meeting of all assigned aviators (at CT meetings, safety meetings, OG/CC or squadron commander calls, etc.) will include CRM topics based on the grading items in **Table 4. (Added)**. The squadron CRM program coordinator will update scenarios and grading situations at least annually. This is an excellent forum to facilitate an understanding of CRM skill application on training sorties. Topics should focus on the role CRM plays in preventing mishaps and the observation and reinforcement of CRM skills and techniques to enhance student training. Aerospace physiology units at JSUPT and JSUNT bases have CRM videos and reference materials suitable for case studies and discussions.

Table 4. (Added) T-1, T-6, T-37, and T-38 or T-38C Quarterly CRM Requirements.

I T E M	A	B
	Quarter	CRM Grading Items
1	Jan – Mar	Risk management and decision-making and communication.
2	Apr – Jun	Crew coordination, flight integrity, and wingman consideration.
3	Jul – Sep	Mission planning, briefing, and debriefing.
4	Oct – Dec	Situational awareness and task management.

8.4. Flight training instructors are the key to a successful CRM training program. Instructors must be able to integrate CRM training into all flight and simulator sorties. CRM CT will be conducted according to **Table 5. (Added)**. Instructors are responsible for developing trainees CRM skills and demonstrating positive CRM practices. Instructor trainees will be given instruction on the use of the IFG insert at **Attachment 5 (Added)**, CRM Briefing and Debriefing Guide, or identical information contained in their debriefing guides for training sorties as part of their annual training. **Attachment 6 (Added)**, Flight Instructor Training Standards, provides standards for flight instructor training. All instructor training and upgrade programs will contain academic training designed to qualify the instructor candidate to conduct

CRM instruction. Instructors for aircraft and simulator sorties are not required to be trained as CRM facilitators.

Table 5. (Added) CRM CT for AETC Flight Training Instructors.

I T E M	A	B
	Aircraft	Training
1	T-6, T-37, T-38/ T-38C-UPT, and T-1	Emergency procedures (EP) and CRM refresher simulator and CRM scenario and grading topic at CT meetings.
2	AT-38/T-38C-IFF	Academic refresher (note 1) and EP and CRM refresher simulator.
3	F-15, F-16, and F-22	Academic refresher (note 1) and tactical and EP simulators.
4	C-21	Academic refresher (note 1) and MOST simulators.
5	C-5, C-17, C-130, and KC-135	
6	T-43 pilot and navigator	Academic refresher (note 1) (all) and MOST simulators (pilots).
7	MC-130H	Academic refresher (note 1).
8	HC and MC-130P, UH-1, HH-60, and MH-53	Academic refresher (note 1) and MOST simulators.

NOTE:

1. CRM academic refreshers will focus on instruction skills (standards) in **Attachment 6 (Added)**, unit trends, and AFI 11-2 MDS-specific guidance.

8.4.3. (Added) EP and CRM simulator training for instructor pilots will include at least one CRM-focused scenario. A prebrief (approximately 20 minutes) will focus on one or two CRM skills and the effective use of all available resources to include simulated student participation, air traffic control (ATC), runway supervisory unit (RSU), supervisor of flying (SOF), pilot meteorological service (PMSV), etc. Debrief performance on the CRM skills, using AF IMT 4031 or, if CRM skills have been incorporated into the applicable AFI 11-2 MDS-specific Volume 2, on a locally generated, command approved, aircraft-specific performance assessment form. Individual rating blocks may be left blank for CRM behaviors not targeted or observed during training. A three-point scale: Q = 1, Q- = 2, U = 3 will be used during this training event. Aircraft-specific performance assessment forms will use this scale as well. Evaluation sheets will remain anonymous and be sent to the respective squadron training office at the end of each month for compilation. Compilation will include trend evaluation in accordance with the guidance set forth in **Attachment 3 (Added)**. Contract simulator managers will maintain a book of CRM mission-specific scenarios for use during EP and CRM simulators. The scenarios will be updated each fiscal year.

8.4.4. (Added) Contract flight or simulator instructors are the key to successful training and will be trained in CRM based on the standards set in **Attachment 6 (Added)**. Contracts should reflect this requirement.

8.5. CRM academic classroom instructors must have completed an approved CRM facilitator course. The program manager will approve courses for use by instructors who train AETC personnel. Flight instructors will be trained in the necessary CRM instructional skills during formal flight instructor training. For AETC-gained ANG units, the current HQ ANG/XOT-approved CRM provider will provide all annual training and student syllabus classroom academic training for ANG FTUs in accordance with HQ AETC/DO- and HQ ANG/XO-coordinated syllabi and courseware.

11. (Added) **IMTs Adopted.** AF IMTs 8, **Certificate of Aircrew Qualification**; 847, **Recommendation for Change of Publication**; and 4031, **CRM Skills Criteria Training/Evaluation.**

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

AFMAN 37-123, *Management of Records*

Air Force Records Disposition Schedule (RDS)

Abbreviations and Acronyms

AFRC—Air Force Reserve Command

AFSC—Air Force specialty code

ANG—Air National Guard

BMT—battle management training

CT—continuation training

EAUC—enlisted aircrew undergraduate course

EP—emergency procedure

FTU—flying training unit

IFG—in-flight guide

JPATS—joint primary aircraft trainer system

JSUNT—joint specialized undergraduate navigator training

JSUPT—joint specialized undergraduate pilot training

MDS—mission design series

OG/CC—operations group commander

stan/eval—standardization/evaluation

WST—weapon system trainer

Attachment 3 (Added)**CRM TREND MONITORING STANDARDS**

A3.1. (Added) Data Collection. Ensure CRM skills data is collected on AF IMT 4031 or through AF IMT 8, **Certificate of Aircrew Qualification**, based on CRM behaviors specified in the applicable AFI 11-2 MDS-specific Volumes 2.

A3.2. (Added) Data Storage:

A3.2.1. (Added) Units may store data for analysis at the wing, group, or squadron level in accordance with local policy.

A3.2.2. (Added) Data for students and permanent party will be stored in separate locations.

A3.2.3. (Added) Data storage may be electronic or paper, and files must be saved in two geographically separated storage locations.

A3.2.4. (Added) Units will retain CRM raw data in accordance with paragraph 9. of the basic AFI. However, units will retain CRM trend summaries so an historical database for unit trend analysis will exist.

A3.3. (Added) Data Analysis. Data analysis will be performed on a quarterly basis, using the process described in paragraph **5.7. (Added)** of this supplement. Trends in grading of CRM core skills, identified by stan/eval, will be summarized and recorded.

A3.4. (Added) Data Reporting. Report all trends through the appropriate 19 AF/DO branch to HQ AETC/DOFV.

Attachment 4 (Added)**CT SCENARIO DEVELOPMENT**

A4.1. (Added) Format. Develop and document CT scenarios and grading situations using Steps 1 through 6 below. Use case studies, following the format at **Attachment 7 (Added)**, Format for a Case Study, to:

A4.1.1. (Added) Support academically based CRM training.

A4.1.2. (Added) Aid aircrew in identifying instances of ineffective CRM and correlating them to specific CRM skills.

A4.1.3. (Added) Stimulate aircrew CRM awareness and knowledge of CRM skills.

A4.1.4. (Added) Serve as a basis for further development into flight or simulator scenarios.

A4.2. (Added) Step 1. Determine a focus CRM core concept and associated skills. Begin with a brief (three- to five-line) description on how the associated skills are applied to your aircraft.

A4.3. (Added) Step 2. Identify an existing incident or mishap or develop a scenario or grading situation. Sources include Air Force safety mishap reports (ensure the reports are sanitized according to safety guidance), squadron member flight experiences, student sorties, Federal Aviation Administration and National Transportation Safety Board reports, the Internet, flight safety magazines, and anonymous reports.

A4.4. (Added) Step 3:

A4.4.1. (Added) Write a concise and sanitized case study synopsis of the event. Prepare a 1/2- to 2-page narrative description of pertinent facts derived from your selected source material, as follows:

A4.4.1.1. (Added) Paint a mental picture of the situation for your audience.

A4.4.1.2. (Added) Provide enough information to make sound judgments about how the crew handled their situation.

A4.4.1.3. (Added) Establish clear cause-and-effect relationships.

A4.4.2. (Added) If the source material you have chosen for development lacks sufficient information in some areas to paint a complete picture of the situation, fill in these details to maximize the effectiveness of your synopsis. Enhancements and additions to the source material should:

A4.4.2.1. (Added) Ensure a clear representation of cause-and-effect relationships due to CRM skills usage.

A4.4.2.2. (Added) Emphasize particular CRM skills.

A4.4.2.3. (Added) Be tailored to your audience. Consider time constraints, experience level, and any other relevant factors.

A4.5. (Added) Step 4:

A4.5.1. (Added) Develop focus questions to guide a discussion. Questions should be "how" or "why" types to encourage discussion and lead the group to discover positive CRM examples and points that may indicate a breakdown in CRM skills. Encourage students to suggest alternative actions when a breakdown in CRM skills is identified. Case study focus questions will serve as a catalyst for productive discussion and highlight the use of focus skills.

A4.5.2. (Added) Focus question formation involves:

A4.5.2.1. (Added) Noting each occurrence of focus skills and whether it helped (or could have helped) in accomplishing the mission.

A4.5.2.2. (Added) Selecting the best of these instances and writing 5 to 10 questions to bring out key points.

A4.5.2.3. (Added) Developing the answers you hope to get in response.

A4.6. (Added) Step 5. Generate two or three summary teaching points for your case study to reiterate the lessons learned during study of this aircrew experience. Add any additional lessons learned during the discussion to the list.

A4.7. (Added) Step 6. Present the case study. Allow time to read and discuss the synopsis in relation to the focus questions. Lead a discussion, highlighting key points as the discussion develops.

Attachment 5 (Added)

CRM BRIEFING AND DEBRIEFING GUIDE

A5.1. (Added) Information for In-Flight Guide (IFG) CRM Inserts. The information in **Table A5.1. (Added)** will be incorporated into IFGs by all AETC units operating initial rotary wing training T-1, T-6, T-37, T-38/T-38C-UPT&IFF, and T-43 aircraft. All other AETC units will incorporate this information into either IFGs or mission debriefing books used during each flight and simulator debriefing

Table A5.1. (Added) Information for IFG CRM Inserts.

I T E M	A	B	C
	CRM Skill	Positive Factors	Negative Factors
1	Mission planning, briefing, and debriefing	Is organized; clearly assesses and defines mission, environment, aircraft, and situation; covers contingencies; and checks understanding.	Neglects; is rushed, incomplete, or vague; lectures; or ignores.
2	Situational awareness	Anticipates, monitors, prevents loss, recognizes own or others loss, regains.	Is disoriented, confused, or lost fixated.
3	Crew coordination, flight integrity, and wingman consideration	Leads, identifies roles and expectations, sets tone, respects, encourages, and is assertive.	Judges, ridicules, overreacts, ignores, imposes, or accepts error.
4	Communication	Clear, concise, listens, interprets, efficient, and gets or gives feedback.	Interrupts, withholds, discounts, is ambiguous, or mumbles.
5	Task management	Prioritizes, assign tasks, creates time, plans, delegates, and uses checklist discipline.	Is rushed, overloaded, or complacent; misprioritizes.
6	Decision-making	Identifies and assesses problems, explores solutions, makes appropriate decision, and involves and informs crew.	Avoids, delays, vacillates, argues, or fails to consider consequences of decision.
7	Debriefing	Is objective, gives thorough feedback, nonthreatening, recaps key points, solicits inputs, and provides corrective actions.	Is rushed, incomplete, and vague; lectures; blames; or ignores.

Attachment 6 (Added)**FLIGHT INSTRUCTOR TRAINING STANDARDS****A6.1. (Added) Briefing Phase:**

A6.1.1. (Added) Ensure CRM objectives and expectations for the mission are clearly stated and understood by the student.

A6.1.2. (Added) Ensure the student understands where CRM skills will enhance mission performance.

A6.1.3. (Added) Solicit student comments about where CRM will enhance mission effectiveness and safety.

A6.1.4. (Added) Discuss particular areas for student CRM development and improvement.

A6.2. (Added) Flying Phase:

A6.2.1. (Added) Use in-flight activities to reinforce CRM skill objectives.

A6.2.2. (Added) Where appropriate, cue student to upcoming activities and events to maximize CRM skill development.

A6.2.3. (Added) Where appropriate, highlight traps in the flying environment that can be avoided by using CRM skills.

A6.2.4. (Added) Given student's proficiency, adjust CRM instruction to maximize his or her performance.

A6.3. (Added) Debriefing Phase:

A6.3.1. (Added) Effectively use mission debriefs to reinforce student's CRM skills.

A6.3.2. (Added) Identify key points in the mission where CRM affected mission performance.

A6.3.3. (Added) Adjust debriefing techniques to match student's experience and capabilities.

A6.3.4. (Added) Where appropriate, allow the student to error-analyze CRM skill applications.

A6.3.5. (Added) Review and discuss expectations set in the briefing phase.

A6.3.6. (Added) Reinforce effective CRM performed during the mission.

A6.3.7. (Added) Identify areas for student's CRM improvement.

A6.3.8. (Added) In **Attachment 5 (Added)**, ensure the information in **Table A5.1. (Added)** is included in each IFG for the MDS specified in paragraph **A5.1. (Added)** and each IFG or debriefing book for all other AETC-operated MDSs.

Attachment 7 (Added)
FORMAT FOR A CASE STUDY

(Aircraft) COMPLETED CASE STUDY

TITLE:

FOCUS CORE CONCEPT AND SKILLS:

SOURCE:

OBJECTIVE: To review mission-specific CRM skill application and enhance instructional techniques.

INTRODUCTORY TEACHING POINTS: *(Give a short brief on the focus CRM concept and skills.)*

DESCRIPTIVE SYNOPSIS: *(List the synopsis with CRM skill annotations.)*

FOCUS QUESTIONS AND ANSWERS: *Examples are as follows:*

- 1. How did a breakdown in situational awareness lead to the mishap?*
- 2. What resources did the pilot have to regain situational awareness?*
- 3. What indications did the instructor pilot have that the student was task overloaded?*
- 4. How can the instructor teach the student to recognize when he or she is overloaded?*
- 5. What techniques can the instructor give the student to effectively manage his or her tasks?*

SUMMARY—LESSONS LEARNED: *(Cover lessons learned and the role specific CRM skills played in this scenario. How can instructors use this scenario for student training?)*

WILLIAM M. FRASER III, Major General, USAF
Director of Operations