BY ORDER OF THE COMMANDER 552D AIR CONTROL WING

552 AIR CONTROL WING INSTRUCTION 11-205

7 JUNE 2017



MSLITE/CRC MTC OPERATIONS



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at

www.e-Publishing.af.mil for downloading or ordering

RELEASABILITY: There are no releasability restrictions on this publication

OPR: 552 OSS/OST Certified by: 552 OG/CC

(Col Richard L. Land III)

Supersedes: 552 ACWI 11-205, Pages: 20

19 March 2014

This instruction implements Air Force Policy Directive 11-2, Aircrew Operations. It also implements guidance for 552d Air Control Group (ACG) Control and Reporting Center (CRC) Mission Training Center (MTC), CRC Mission Training Architecture Plan (CRC), the Facility for Interoperability Training (FIT), Mission Crew Test Rack (MCTR), 552d Operations Group (OG) Airborne Warning and Control System (AWACS) MTC, Mission Crew Training Systems (MCTS), the Mission Crew Simulator (MCS) and the 552d Air Control Wing's (ACW) Mission Simulator Live Intercept Training Environment (MSLITE) Program. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Form 847s from the field through the appropriate functional chain of command. This instruction is directive and applies to all units assigned to the 552 ACW. This publication may be supplemented at any level, but all Supplements must be routed to the OPR of this publication for coordination prior to certification and approval.

SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed. This revision includes major changes throughout the document. Changes include but are not limited to: Replacement of

the Mission Supervisor with Senior Ranking Officer (SRO), refined mission planning requirements for MSLITE operations, and mission cancellation requirement.

Chapter 1—	- GENERAL INFORMATION
1.1.	General
1.2.	Recommended Changes
1.3.	Waivers.
1.4.	Mission Simulator Live Intercept Training Environment (MSLITE) Program
1.5.	System Description.
Chapter 2—	- 552 OPERATIONS GROUP (OG) RESPONSIBILITIES
2.1.	552 OSS/OST will:
2.2.	Squadron Operations Officers (or Designated Representatives) will:
2.3.	Mission Coordinators (MC) will:
2.4.	Senior Ranking Officer (SRO) will:
2.5.	552 OSS/OSTS will:
Chapter 3—	- 552 AIR CONTROL GROUP (ACG) RESPONSIBILITES
3.1.	General
3.2.	752 OSS/OSR will:
3.3.	Squadron Operations Officers (or Designated Representatives) will:
3.4.	752 OSS/OST or Air Control Squadron (ACS) Squadron Director of Training (DOT) will:
3.5.	552 Air Control Group (ACG) Scheduling Roles and Responsibilities
3.6.	Scheduling Process.
3.7.	Control and Reporting Center (CRC) Senior Ranking Office (SRO) will:
3.8.	552 ACNS/SCXI will:
Chapter 4—	- MISSION PLANNING
4.1.	General
4.2.	Responsibilities
Chapter 5—	- MISSION OPERATIONS
5.1.	System Setup

552ACWI11-205	7 JUNE 2017
---------------	-------------

	5.2.	Execution.	14
	5.3.	Cancellations	14
	5.4.	Post Mission	14
Attach	ment 1–	- GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION	15
Attachment 2— 552 OG CERTIFICATION LETTER			19
Attach	ment 3	– 552OG MSLITE MISSION COORDINATOR TRAINING PROGRAM	
CHECKLIST			20

GENERAL INFORMATION

- **1.1. General.** This document identifies the methodology, equipment and procedures involved with MSLITE operations from the CRC MTC, AWACS MTC, MCTS, MCS, FIT, and MCTR systems. This document also outlines how the individual hardware and software components work together to provide a sensor picture and the required voice communications to conduct effective live training missions.
- **1.2. Recommended Changes.** Recommendations for changes are encouraged and must focus on specific areas and standards of performance. Forward comments through proper channels (Squadron Standardization and Evaluations, 552 OG/OGV, 552 ACG/ACGV) using AF Form 847.
- **1.3. Waivers.** 552 OG/CC (OG units) and 552 ACG/CC (ACG units) will serve as the Wing OPRs with waiver authority for all waiver requests to this instruction. File a copy of approved written waivers with this instruction (IAW AFI 33-360, *Publications and Forms Management*).
- **1.4. Mission Simulator Live Intercept Training Environment (MSLITE) Program**. The MSLITE program provides a means to supplement AWACS and CRC mission crew training. MSLITE provides a capability to use: the Joint Surveillance System (JSS) radar data, Identification Friend/Foe (IFF) data, Joint Range Extension (JRE) gateway data, and radio network data shared by the Federal Aviation Administration (FAA) and North America Aerospace Defense Command (NORAD) used to conduct live training events. Additionally, a single composite feed of eight sensors from the White Sands Missile Range (WSMR) complex is available to provide radar/IFF data for control missions in the WSMR airspaces. This feed is available in the E-3 MCS and CRC MTC.

1.5. System Description.

- 1.5.1. CRC MTC. The CRC MTC provides operations training, system integration and testing, as well as providing a platform for "Proof of Concept" CRC testing. The CRC MTC will allow operations to obtain 100% of the ready aircrew program (RAP) and continuation training requirements (IAW the Air Combat Command (ACC) RAP Tasking Memorandum and 13-1 Control and Reporting Center (CRC) Volume I). Additionally, 552 ACG personnel using the CRC MTC can perform functional tests of software changes prior to Combat Air Force (CAF) fielding.
- 1.5.2. CRC MSLITE. The CRC TYQ-23A MSLITE provides Initial Qualification Training (IQT), Mission Qualification Training (MQT) and Continuation Training (CT) for crew members of the CRC. The CRC MSLITE will allow operators to obtain 100% of RAP and CT requirements (IAW the ACC RAP Tasking Memorandum and 13-1 CRC Volume I).
- 1.5.3. AWACS MTC. The AWACS MTC provides IQT and CT for crewmembers for the E-3B/C baselines.
- 1.5.4. MCTS. The AWACS MCTS provide IQT and CT for crewmembers for the E-3G baseline.

- 1.5.5. MCS. The AWACS MCS provide IQT, MQT, and CT for crewmembers for the E-3B/C baselines.
- 1.5.6. FIT. The FIT provides system integration and testing for E-3 software interoperability testing of the E-3B/C baselines. MSLITE services are provided under the E-3 MCS Contact Support (CS) Performance Work Statement (PWS). If requested and available, the FIT can support MSLITE missions.
- 1.5.7. MCTR. The MCTR, collocation with the FIT, provides system integration and testing for E-3 software interoperability testing of the E-3G baseline. MSLITE services are provided under the E-3 MCS CS PWS. If requested and available, the MCTR can support MSLITE missions.

1.5.8. Sensor Data.

- 1.5.8.1. Radar and IFF sensor data are fed from specified JSS radar site(s) and are networked at the Air Defense Sectors (ADS) or the WSMR complex.
- 1.5.8.2. The sensor data is then forwarded to the 552 ACW Patch and Test Facility (PTF) via the Defense Information Systems Network (DISN) and routed to the Sensis box, Advanced Simulation Interface Buffer (ASIB), and/or the Multi Source Correlator Tracker (MSCT) to interface with the designated mission facility. *Note:* the MSCT is required to use the WSMR feed.
- 1.5.8.3. In all, seven facilities can support MSLITE operations: MCS, MCTS, FIT, MCTR, AWACS MTC, along with the CRC MTC and CRC Operations Module.

1.5.9. Communications Data.

- 1.5.9.1. Voice communications for fighter control are provided through NORAD Ground Air Transmitter Receiver (GATR) sites or the FAA Interior National Airspace System (NAS) National Defense Air to Ground (NDAG) Radios (USAF Mission) as coordinated with the appropriate NORAD ADS. The radio feeds are routed into the 552 ACW PTF via DISN. Then they are forwarded to the General Dynamics Communications System. Next they are sent to the Simulation Communication Switch (SCS) and finally into the designated mission facility. *Note:* the WSMR complex has 16 dedicated radios (four radios on each of the four radio towers).
- 1.5.9.2. Phones are available in each of the simulation facilities for technical coordination and troubleshooting with the 552 ACNS/SCXI, the ADSs, 552 OSS/OSQA (simulator maintenance), 726 Air Control Squadron (ACS), 729 ACS or the 607 ACS.
- 1.5.9.3. Direct communications with FAA Air Route Traffic Control Centers or military Air Traffic Control (ATC) agencies is no longer required (IAW *Special Military Operations (SMO)* FAA Order JO 7610.4). Crews will execute MSLITE missions using Tactical Monitor (TM) procedures (the airspace is released to the participating aircraft) IAW applicable Letters of Agreement.
- 1.5.10. Data Links. An encrypted sub-channel on a T1 circuit (Western ADS to PTF) provides the ability to exchange Link-16 communications data via the JREs in the CRC MTC, or the Space Warfare (SPAWAR) gateway. The SPWAR gateway emulates the E-28 Joint Tactical Information Distribution System (JTIDS) Cabinet on the E-3 and supports the E-3 B/C baselines.

552 OPERATIONS GROUP (OG) RESPONSIBILITIES

2.1. 552 OSS/OST will:

- 2.1.1. Manage the overall MSLITE program for the 552 OG.
- 2.1.2. Design a program to train Mission Coordinators (MC) and SRO. This will include ACC Form 206, *Individual Mission Gradesheet*, to document/standardize the training.
- 2.1.3. Track MSLITE limitations and best practices.
- 2.1.4. Disseminate new/developing MSLITE information and best practices to the MCs and SROs.
- 2.1.5. Annually review the instruction for accuracy/currency of procedures.
- 2.1.6. Develop and distribute 552 OG specific procedures and checklists to standardize mission performance.

2.2. Squadron Operations Officers (or Designated Representatives) will:

- 2.2.1. Review all squadron load lists for MSLITE missions and determine the need for additional supervision based on airspace location, mission complexity, and/or overall experience of control team.
- 2.2.2. Ensure "Go/No-Go" and sign in procedures are followed to ensure crew members are trained, qualified, current and medically fit to perform control of live assets.
- 2.2.3. Duties Not Involving Flying (DNIF) aircrew may conduct MSLITE mission if their current DD Form 2992, *Medical Recommendation for Flying or Special Operational Duty*, annotates "May control from a ground-based Command and Control (C2) system."
- 2.2.4. If any crewmember is non-current, non-Combat Mission Ready (CMR), non-Basic Mission Capable (BMC)/Unqualified or IQT, an instructor will be assigned to that member.
- 2.2.5. Designate squadron personnel or contractors to fulfill the role of MCs.
- 2.2.6. Ensure one Air Force member, with a Blue Badge, is schedule for escort for any MSLITE mission conducted in the AWACS MTC or MCTS facilities. One Air Force Blue Badge escort will be present in the simulator container and to escort the MC. The escort for the MC must show 90 minutes prior to the scheduled activity start time so that the MC can perform setup operations for the MSLITE.
- 2.2.7. Ensure squadron-assigned MCs are mission crew members or contractors certified to perform duties IAW this instruction and are on all appropriate entry access lists (EAL).
- 2.2.8. Ensure all assigned personnel are CMR or BMC and qualified as a Mission Crew Commander (MCC), Senior Director (SD), Air Surveillance Officer (ASO), Electronic Combat Officer (ECO), Air Weapons Officer (AWO), or equivalent in new E-3G crew concept.
- 2.2.9. Ensure squadron personnel are not scheduled to perform as both the SRO and MC on any single mission (must be two separate individuals).

- 2.2.10. Determine crew availability for MSLITE add-on missions.
- 2.2.11. Make the determination (based on the SRO's recommendation) to cancel a scheduled MSLITE mission based on changes to personnel, facilities, fighters, or resources.

2.3. Mission Coordinators (MC) will:

- 2.3.1. Complete a certification program IAW **Attachment 3** of this instruction. Organizations will file MC certification letters in the individual's permanent training records (IAW Mission Design Series (MDS) specific Volume I guidance and local unit instructions).
- 2.3.2. Work closely with the SRO to determine mission requirements and ensure planned system setup and configuration will support the mission.
- 2.3.3. Provide system setup information (to include both the sensor and communications plans) to the 552 ACNS/SCXI and contact the SRO(s) No Later Than (NLT) 24 hours prior to activity start time.
- 2.3.4. Be the focal point for system setup and checkout prior to the arrival of the control team.
- 2.3.5. Ensure system is initialized with "Zulu" time (this allows synchronization with voice recordings during playback).
- 2.3.6. Ensure sensor data is recorded on the: mission system and 552 ACNS/SCXI; AWACS MTC; or MCTS personnel record voice data.
- 2.3.7. Brief the SRO on mission support equipment status (e.g. simulator/console/communication problems), status of radio checks, and any changes to the radios (from the planned configuration).
- 2.3.8. Monitor system performance during mission execution (IAW the MSLITE Coordinator Ready Reference).
- 2.3.9. Coordinate changes with ADS SD, 552 ACNS/SCXI, E-3 MCS CS technicians, MTC technicians, or MCTS technicians as appropriate.
- 2.3.10. Contact/coordinate with 552 ACNS/SCXI on all radio/sensor problems and provide required information to accurately open a maintenance ticket on the radio/radar.
- 2.3.11. Inform ADS SD, 552 ACNS/SCXI and AWACS MTC or MCTS technicians when the mission is complete.
- 2.3.12. Inform the 552 OSS/OSTS MSLITE scheduler, 552 ACSN/SCXI, FIT Scheduler 552 ACNS/SCPE (FIT mission only), MTC technicians (AWACS MTC), MCTS technicians, E-3 MCS CS contractor (MCS/FIT) and 552 Air Control Network Squadron (ACNS) technicians (MCTR/FIT) when MSLITE missions are cancelled or delayed.
- 2.3.13. Provide daily mission summaries to: 552 ACNS/SCXI, MTC technicians (AWACS MTC), MCTS technicians (E-3G contractor), MCS technicians (E-3 MCS CS contractor (FIT/MCS)), 552 OSS/OSTS and host squadron Director of Operations (DO).
- 2.3.14. Coordinate with the ADSs to de-conflict J-site preventative maintenance inspections with MSLITE missions.

2.4. Senior Ranking Officer (SRO) will:

- 2.4.1. Review crew currency and "Go/No-Go" reports to ensure all crewmembers are CMR/BMC and current. Non-CMR/non-BMC/Unqualified, IQT, or non-current crewmember must have an instructor.
- 2.4.2. Act as primary for supported unit coordination. The SRO will contact fighter units if controller/fighter coordination issues (which jeopardize the MSLITE mission) arise during mission planning and/or execution.
- 2.4.3. Before the conclusion of mission planning, brief mission essentials and "Go/No-Go" compliance to the Squadron Operations Officer (or their designated representative).
- 2.4.4. Incur primary responsibility for the overall flight safety of the mission (IAW FAA Order JO 7610.4, *Special Operations Document Information*, AFI 11-214, *Air Operations Rules and Procedures*, and applicable mission training rules). *Note:* TM is the preferred MSLITE control option; however, crews will execute IAW published LOAs for the assigned working airspace. The SRO must pre-coordinate use of shoutlines and ATC contact with the MC or they will not establish. See paragraph 5.1.4 for further details.
- 2.4.5. Execute a supervisory role and be familiar with all associated equipment and Letter of Agreements(LOAs).
- 2.4.6. Following the mission, complete 552 OG Form 49A, *Distributed Mission Operations/MSLITE Mission Tasking & Summary*, AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*, and simulator or live Mission Accomplishment Report (MAR).
- 2.4.7. Provide the MC a copy of the 552 OG Form 49A.
- 2.4.8. File original 552 OG Form 49A, MAR and AFTO Form 781 with Squadron Aviation Resource Management (SARM).

2.5. 552 OSS/OSTS will:

- 2.5.1. Schedule MSLITE missions and assign a unique mission identifier.
- 2.5.2. Create a 552 OG Form 49A.
- 2.5.3. Incorporate the MSLITE missions into the weekly/daily schedules.
- 2.5.4. Coordinate with 552 OSS/OSOL (long-range scheduling) for MSLITE mission fighter activity. 552 OSS/OSOL will coordinate with the appropriate external agencies.
- 2.5.5. Be the focal point for any problems associated with MSLITE mission scheduling.
- 2.5.6. Coordinate with the FIT scheduler, 552 ACNS/SCPE, on any short-notice changes to the MSLITE missions scheduled for the FIT. Ensure the FIT schedule allows for one and a half hours of set-up time prior to the start of the activity.
- 2.5.7. Cross check schedules to prevent redundancy in resource scheduling. Resolve any duplication at the lowest level.

552 AIR CONTROL GROUP (ACG) RESPONSIBILITES

3.1. General. The 752 Operation Support Squadron (OSS) will manage the overall scheduling, training, and operational use of the CRC MTC and Mission Training Architecture Plan (MTAP) (752 OSS/OSO DSN 852-1013) for all personnel. All conflicts will be addressed and resolved as appropriate.

3.2. 752 OSS/OSR will:

- 3.2.1. Provide overall program management for the CRC MTC and MTAP.
- 3.2.2. This includes a budget plan to include technical refresh, warranty and maintenance agreements, and new requirements as defined.
- 3.2.3. Manage software/equipment changes/updates.
- 3.2.4. Contact the appropriate agency to resolve equipment limiting factors, if able, before the next scheduled mission.
- 3.2.5. Act as the Point of Contact (POC) for CRC MTC and CRC MSLITE issues or questions.

3.3. Squadron Operations Officers (or Designated Representatives) will:

- 3.3.1. Designate crews for missions allocated during 552 ACW weekly scheduling process.
- 3.3.2. Ensure TYQ-23A qualified personnel have completed the certification program and are on all appropriate access lists.
- 3.3.3. Designate personnel to oversee operations and coordination during the mission.
- 3.3.4. Ensure all personnel are prepared to perform duties IAW this instruction and approved unit Standard Operating Procedures.
- 3.3.5. (**As required**) Coordinate with fighter units concerning any Ground Control Intercept/fighter discrepancies affecting mission effectiveness.
- 3.3.6. Determine crew availability for MSLITE add-on missions.
- 3.3.7. Make the determination to cancel a scheduled mission based on changes to the availability of the facilities, the fighters or the required communications/data resources.

3.4. 752 OSS/OST or Air Control Squadron (ACS) Squadron Director of Training (DOT) will:

- 3.4.1. Annually review this instruction for accuracy/currency of procedures.
- 3.4.2. Develop organization specific procedures and checklists to satisfy the requirements of this instruction.

3.5. 552 Air Control Group (ACG) Scheduling Roles and Responsibilities.

3.5.1. 752 OSS/OSO (Current Operations) is responsible for the planning, coordination, and dissemination of short and long range scheduling for live training missions, exercises, and mission crew simulator sessions for the 552 ACG.

- 3.5.2. 752 OSS Scheduling Office will:
 - 3.5.2.1. Be the MSLITE scheduling agency for the 726 ACS, 729 ACS, and 752 OSS.
 - 3.5.2.2. Collect information pertaining to mission and training requirements from each unit.
 - 3.5.2.3. De-conflict unit requests; coordinate with 552 OSS/OSO and allocate available missions IAW the following order of precedence: (1) units preparing for deployment, (2) units needing to maintain currency, (3) units in post-deployment reconstitution.
- 3.5.3. The 726 ACS and 729 ACS Scheduling Offices will:
 - 3.5.3.1. Be the MSLITE scheduling points of contact for their units.
 - 3.5.3.2. E-mail MSLITE requests to the 752 OSS/OSO Scheduling office by noon Central Standard Time every Wednesday.
 - 3.5.3.3. Immediately contact the 752 OSS/OSO Scheduling office with any MSLITE request changes.

3.6. Scheduling Process.

- 3.6.1. The 752 OSS scheduling office will:
 - 3.6.1.1. Collect, de-conflict, prioritize, and track unit requests.
 - 3.6.1.2. Match unit requests to available mission and coordinate with the 552 OSS/OSO.
 - 3.6.1.3. Schedule missions for 726 ACS, 729 ACS, and 752 OSS and provide mission timing and fighter squadron contact information or notify unit POCs that no mission is available.
 - 3.6.1.4. For 752 OSS missions, submit Mission Support Requests to Mission Coordinator and 552 ACNS/SCXI.
- 3.6.2. The 726 ACS and 729 ACS will:
 - 3.6.2.1. Contact the fighter squadron about their scheduled mission and obtain mission details/briefing card.
 - 3.6.2.2. Build the mission in the scheduling program (Patriot Excalibur) IAW squadron guidance, assign crew members, and conduct all external coordination.
 - 3.6.2.3. Track MSLITE missions separately from local, live missions and report results on Wing Standup slides.

3.7. Control and Reporting Center (CRC) Senior Ranking Office (SRO) will:

- 3.7.1. Review individual/crew currency and "Go/No-Go" reports to ensure all crewmembers are CMR/BMC and current. Each crewmember that is non-CMR/non-BMC/Unqualified, IOT or non-current will have an instructor.
- 3.7.2. Incur primary responsibility for the overall flight safety of the mission (IAW FAA Order JO 7610.4, AFI 11-214) and applicable mission training rules.
- 3.7.3. Brief the MC of all mission changes NLT 2 hours prior to mission start time (essential to coordinate changes with the supporting external agencies).

- 3.7.4. CRC MSLITE Only. Ensure sensor data is recorded on the mission system and 552 ACNS/SCXI records voice data.
- 3.7.5. Provide daily mission summaries to 552 ACNS/SCXI and 752 OSS/OSOR and the AF Form 4145, *Daily Activity Log*, to 752 OSS/OST.

3.8. 552 ACNS/SCXI will:

- 3.8.1. Complete sensor data and communication setup 30 minutes prior to mission operations.
- 3.8.2. Be responsible for technical operations, troubleshooting, and support during mission operations.
- 3.8.3. Be available via direct access shoutline or by phone for immediate response during live fly operations.
- 3.8.4. Record voice data of each live fly mission.
- 3.8.5. Configure the Simulator Communication Switching System (SCSS) to support the communication requirements and route the feeds to the Mission Simulator (MSIM), FIT, OG MTC and/or CRC MTC in accordance with local operating procedures.
- 3.8.6. Brief any malfunctions with mission support equipment immediately to the MC who will determine the impact and brief the CRC SRO.
- 3.8.7. Make telephone contact with the ADS technicians to report J-site/GATR radio or radar problems.
- 3.8.8. Provide response to all mission summaries to clarify any radio/radar problems and job status. The response should be addressed through the same channels as the mission summary.

MISSION PLANNING

- **4.1. General.** Responsibility for mission planning rests with the SRO.
- 4.2. Responsibilities.
 - 4.2.1. Crews.
 - 4.2.1.1. Crews will complete mission planning IAW MDS specific guidance, this instruction, and all other relevant directives on the day prior to the activity or as coordinated with squadron operations offices.
 - 4.2.2. SRO.
 - 4.2.2.1. The SRO will brief/debrief all crewmembers to ensure safe and effective mission accomplishment.
 - 4.2.2.2. To ensure correct system setup and effective support from external agencies, the SRO will pass, at a minimum: activity timing, airspace, preferred radar and radio sites (to include number of radios required), Link setup (if required) and responsible ATC agency to the MC NLT 24 hours prior to activity start time. When mission planning the day prior, control frequencies will be passed to the MC NLT 1500L the duty day prior to the activity. When conducting mission planning on the same day as the activity, control frequencies will be passed to the MC NLT 2 hours prior to activity start time.
 - 4.2.2.3. **(E-3 MCS only)** The SRO will also confirm system initialization parameters with the MC.
 - 4.2.3. Squadron Operations Officer (SOO) or designated representative. During mission planning, SOO or their designated representative, in conjunction with the SRO will review crew currencies and "Go/No-Go" items. If any crewmember is non-current, non-CMR/non BMC/Unqualified or IQT, an instructor will be assigned to that member.

MISSION OPERATIONS

- **5.1. System Setup.** MCs will begin system setup and check out NLT 90 minutes prior to activity start time. 552 OG setup will be IAW MSLITE Mission Coordinator Ready Reference. CRC MTC MSLITE setup will be IAW unit Standard Operating Procedures (SOPs).
 - 5.1.1. (552 OG only) Unless replaced by civilian or contract position, squadron Computer Display and Maintenance Technician (CDMT) will start system initialization NLT 90 minutes prior to activity start time. After the MC verifies the system is configured correctly for operations, the CDMT will need concurrence from the SRO to perform any manual system interrupts or "restarts."
 - 5.1.2. The SRO must approve continued operations of malfunctioning equipment that could potentially affect the mission. The SRO will evaluate the impact of using degraded equipment against the mission tasking and the inability to meet that tasking. The SRO will coordinate system maintenance requests through the MC in the 552 ACNS.
 - 5.1.3. If system or equipment malfunctions are significantly hampering mission task, the SRO will discuss mission cancellation considerations with the respective squadron's operations supervisor. Squadron operations officers or their designated representatives are the final authority for mission cancellations. (See 5.3. Cancellations)
 - 5.1.4. The crew will be on position NLT 1 hour prior to airspace time. TM operations will be IAW in FAA Order JO 7610.4. Military Radar Unit (MRU) operations may be supported upon request; however, shoutlines are not available in all airspaces limiting the available MRU options. See applicable airspace LOAs for further guidance.
 - 5.1.5. The SRO will obtain permission from the respective ADS prior to conducting "ops check" of the Ultra High Frequency (UHF) Guard (243.0 MHz) frequency and monitor the frequency while aircraft are under control. MSLITE users will not transmit on 243.0 or Air Intercept Control Common 364.2 unless directed to do so by the CRC SRO.
 - 5.1.6. The SRO will ensure that a Tactical Chat kit is checked out for any mission requiring Tactical Chat employment in the AWACWS MCS. The SRO will ensure that security procedures for Tactical Chat are adhered to.
 - 5.1.7. The individual checking out the Tactical Chat kit must be on a current Tactical Chat access list.
 - 5.1.8. The mission crew signed into the Tactical Chat computers will maintain an awareness of personnel around them to ensure personnel in the vicinity are cleared for access to the Secret Internet Protocol Router Network.
 - 5.1.9. The MC and mission crew member that check out the Tactical Chat kit will ensure that Tactical Chat access signs are placed in all entrances to the simulator to ensure that personnel transiting through the MCS have clearance for Secret Internet Protocol Router Network or are re-directed to take an alternate route to get to their destination.

5.2. Execution.

- 5.2.1. All missions that involve control of live airborne assets will have voice and data recorded if the facility has recording capability. The MC will enable recording or prompt the contractor or squadron-assigned CDMT to enable data recording or coordinate with civilian contractors to have the mission recording saved for missions executed in the MTC and MCTS. For accurate data playback, the computer systems will be initialized with accurate "Zulu" time. The AWACS MTC has the capability to record voice data.
- 5.2.2. In order to mitigate fatigue issues, 552 ACW MSLITE missions will use a 10 hour crew rest requirement. This time must include an opportunity for at least 8 hours of uninterrupted sleep. Duty day limitations will be 16 total hours, but may be adjusted on a case-by-case basis if previously coordinated with the owning SQ/CC. If operations are being conducted in the MTC or MCTS, anticipated duty day extensions up to or beyond 16 hours may require advanced coordination for the use of surge hours. This should be requested as far in advance as possible.

5.3. Cancellations.

- 5.3.1. (552 OG) Once system setup begins, missions will only be cancelled in the event of system malfunction, the controlled aircraft cancels, or ADS re-tasking. Every effort will be made to meet commitments and maximizing training.
- 5.3.2. In the event of a mission cancellation, the SRO will coordinate with the flight lead, ADS, and MC. The SRO will inform ATC of the cancellation if prior coordination has been made.
- 5.3.3. The SRO will call 552 OSS/OSO and their SOO or designated representative, to notify them of mission changes prior to leaving the respective control facility.
- 5.3.4. (552 OG) 552 OSS/OSTS must also be notified as they compile the training information for the daily Wing Standup slides. The 552 OG Form 49A will be used by 552 OSS/OSTS to document mission changes, cancellations, or system issues.

5.4. Post Mission.

- 5.4.1. The SRO will fill out and turn in mission summary paperwork with all pertinent information regarding training effectiveness and mission deviations. This mission summary is critical to brief the 552 ACW leadership at Wing Standup the day following the mission and is essential to formulate effective lessons learned.
- 5.4.2. (**552 ACG**) CRC SRO will provide daily mission summaries to 552 ACNS/SCXI and 752 OSS/XPR and the AF Form 4145, AFTO Form 781, and MAR.
- 5.4.3. (552 OG) SRO will complete 552 OG Form 49A, AFTO Form 781, and MAR.

DAVID M. GAEDECKE, Colonel, USAF Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 11-214, Air Operations Rules and Procedures, 14 August 2012

AFI 13-1 CRC, *Volume I, Control and Reporting Center (CRC)-Training*, 13 October 2015(found on the 729th SharePoint under operations)

AFI 33-360, Publications and Forms Management, 1 December 2015

AFMAN 33-363, Management of Records, 1 March 2008

AFPD 11-2, Aircrew Operations, 19 January 2012

Adopted Forms

AF Form 673, Air Force Publication/Form Action Request

AF Form 847, Recommendation for change of Publication

AF Form 4145, Daily Activity Log

AFTO Form 781, ARMS Aircrew/Mission Flight Data Document

FAA Order JO 7610.4, Special Operations Document Information

552 OG Form 49A, DMO/MSLITE Mission Tasking & Summary

Abbreviations and Acronyms

ACC—Air Combat Command

ACG—Air Control Group

ACNS—Air Control Network Squadron

ACS—Air Control Squadron

ACW—Air Control Wing

ADS—Audio Distribution System

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFRIMS—Air Force Records Information Management System

ASIB—Advanced Simulation Interface Buffer

ASO—Air Surveillance Officer

ATC—Air Traffic Control

AWACS—Airborne Warning and Control System

AWO—Air Weapons Officer

BMC—Basic Mission Capable

C2—Command and Control

CAF—Combat Air Force

CDMT—Computer Display Maintenance Technician

CMR—Combat Mission Ready

CRC—Control and Reporting Center

CS—Contract Support

CT—Continuation Training

DISN—Defense Information System Network

DNIF—Duties Not Involving Flying

DO—Director of Operations

DOT—Director of Training

DSN—Defense System Network

EAL—Entry Access List

ECO—Electronic Combat Officer

FAA—Federal Aviation Administration

FIT—Facility for Interoperability Testing

GATR—Ground Air Transmitter Receiver

IFF—Identification Friend/Foe

IQT—Initial Qualification Training

JO—Joint Order

JRE—Joint Range Extension

JSS—Joint Surveillance System

JTIDS—Joint Tactical Information Distribution System

LOA—Letter of Agreement

MAR—Mission Accomplishment Report

MC—Mission Coordinator

MCC— Mission Crew Commander

MCS—Mission Crew Simulator

MCTR—Mission Crew Test Rack

MCTS—Mission Crew Training System

MDS—Mission Design Series

MQT—Mission Qualification Training

MRU—Military Radar Unit

MS—Mission Simulators

MSCT—Multi Source Correlator Tracker

MSIM—Mission Simulator

MSLITE—Mission Simulator Live Intercept Training Environment

MTAP—Mission Training Architecture Plan

MTC—Mission Training Center

NAS—National Airspace System

NDAG—National Defense Air to Ground

NLT—No Later Than

NORAD—North American Aerospace Defense Command

OG—Operations Group

OPR—Office of Primary Responsibility

OSS—Operation Support Squadron

POC—Point of Contact

PTF—Patch and Test Facility

PWS—Performance Work Statement

RAP—Ready Aircrew Program

RDS— Records Disposition Schedule

SARM—Squadron Aviation Resource Management

SCS— Simulation Communication Switch

SCSS—Simulator Communication Switching System

SD—Senior Director

SMO—Special Military Operations

SOO— Squadron Operations Officer

SOP—Standard Operating Procedures

SPAWAR—Space Warfare

SRO—Senior Ranking Officer

TM—Tactical Monitor

UHF— Ultra High Frequency

WSMR—White Sands Missile Range

Terms

AN/TYQ-23A—The mobile command and control system used by the CRC.

J-site—This is a Radar and Radio Site used by the Air Defense Sector.

Shoutline—A method for point to point communication using landline for coordination.

Attachment 2

552 OG CERTIFICATION LETTER

Figure A2.1. Sample Certification Letter.

DD Mmm YY

MEMORANDUM FOR 96X

AACS/DO FROM: 96X AACS/DOT

SUBJECT: MSLITE Mission Coordinator Certification

- (Rank, First Name, Last Name) is certified as a Mission Coordinator for MSLITE missions. (Rank, Last Name) has been trained in the Mission Coordinator duties as outlined in 552ACWI 11-205, Mission Coordinator Responsibilities.
- 2. This crewmember is:

Certifier, authorized to provide certification training.

Not authorized to provide certification training.

FIRST MI. LAST, Rank, USAF 96X AACS Chief of Training

1st Ind, 96X AACS/DO Concur/Nonconcur

> FIRST MI. LAST, Rank, USAF 96X AACS Director of Operations

Attachment 3

5520G MSLITE MISSION COORDINATOR TRAINING PROGRAM CHECKLIST

Figure A3.1. Training Program Checklist.

TRAINEE		SQUADRON				
This program will be used for a trainee, from any mission crew position, to become an MSLITE Mission Coordinator. Upon completion of this program, the trainee will have this checklist, substantiating ACC Form 206s, and the Mission Coordinator Certification Letter (552 ACWI 11-205 Attachment 2) completed and inserted into their training folder IAW 552 OGI 11-202.						
Section 1: Academic Training Academics are a blend of briefings and self-study. Trainee is required to complete study of 552 ACWI 11-205 and demonstrate knowledge of this instruction to a certified MSLITE Mission Coordinator. Certifiers will cover the MSLITE system as to its operational concept of design, capabilities and limitations. Areas of concentration will be system setup, ATC and Sector coordination, mission planning coordination, and documentation procedures (Mission Report). Section 1 Completed: Date Mission Coordinator						
Section 2: Familiarization Training Trainee will complete an indoctrination of the MSLITE facility as to its operational abilities, security procedures, and coordination procedures with the 552 ACNS/SCXI. All training will be conducted under supervision of a certified MSLITE Mission Coordinator. Areas of concentration will be mission planning coordination with the 552 ACNS, procedures to set up and check out MSLITE systems, as well as the capabilities and limitations of the system. Section 2 Completed: DateMission Coordinator						
Section 3: Shadow and Certification Mission Events Trainee will complete one shadow mission event and two certification mission events documented on an ACC Form 206. The shadow mission event will be graded to level 1, the final certification mission event to an overall level 2. All shadow and certification mission events will be under supervision of a certified MSLITE Mission Coordinator Certifier.						
Shadow Date	_Cert. 1 Date	Cert. 2 Date				
		Msn Coordinator				
Section 3 Completed: Date		Mission Coordinator				
Mission Coordination Training Completion:						
DateDOT Representative						