

**BY ORDER OF THE COMMANDER
908TH AIRLIFT WING**

908TH AIRLIFT WING INSTRUCTION 10-701

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Operations

**908TH AIRLIFT WING PACERWARE,
SERENE BYTE, AND ELECTRONIC
WARFARE REPROGRAMMING
PROCEDURES**

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This instruction implements Air Force Policy Directive (AFPD) 10-7, *Command and Control Warfare*. It establishes procedures for a timely and orderly response to the Electronic Warfare Integrated Reprogramming (EWIR) process and how the 908 AW will respond to an EWIR Message. All references to the wing Electronic Combat Officer (ECO) refer to the ECO or designated alternate (selected 908th Airlift Wing (AW), Operations Support Squadron (OSS), and Weapons and Tactics Officer). It applies to all wing organizations with electronic warfare communication responsibilities. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication* as prescribed by AFI 11-215, *USAF Flight Manual Program (FMP)*. Route AF Form 847 to the 357 AS/DOKT at Maxwell AFB AL. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 37-123 (will convert to AFMAN 33-363), *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://afrims.amc.af.mil/>.

SUMMARY OF CHANGES

This interim change implements new changes to Responsibilities section and Approving Official block of this Air Wing Instruction. A margin bar indicates newly revised material.

1. General.

1.1. EWIR is a communication intensive process demanding close interaction with numerous wing agencies and is directed by the wing ECO.

1.2. EWIR is developed and implemented through PACER WARE (PW) and SERENE BYTE (SB) Messages from the Air Mobility Command (AMC) and Headquarters Air Force Reserve Command (HQ AFRC).

1.3. During contingency operations or periods of increased operations tempo, the 908th Maintenance Group (MXG/CC) may request a waiver letter from the 908 AW/CC excusing the 908 MXG from participating in SB exercises.

1.4. Successful EWIR requires a constant communication between all participants. During PW or SB reprogramming all units must maintain contact with the wing ECO.

2. Responsibilities.

2.1. The Wing ECO (or alternate):

2.1.1. Act as the overall coordinator and single Point of Contact (POC) for implementation of all 908 AW EWIR activities and update annually the appointment letter for the EWIR Action Team members.

2.1.2. Act as the OPR for this EWIR Instruction, distribute changes, and review annually for applicability and/or changes.

2.1.3. Direct the EWIR Action Team and convene the team upon notification of SB/PW from the Electronic Warfare Systems Section (EWFS).

2.1.4. Review aircrew and intelligence inputs to include Operational Report (OPREPs) and Mission Reports (MISREPs) for potential EW system deficiencies and prepare an Operational Change Request (OCR) when discrepancies identified.

2.1.5. Keep aircrews informed on current and reprogrammed EW equipment and their capabilities by publishing and briefing the contents of the latest Reprogramming Impact Message (RIM) and System Impact Message (SIM) provided by EWFS downloaded from the Electronic Combat Support Flight (ECSF) Website via Secret Internet Protocol Routing Network (SIPRnet).

2.1.6. Consolidate all agencies' reports and prepare a 908 AW After-action Report for HQ AFRC within three days of reprogramming termination.

2.1.7. The Wing ECO will send out the Unit Loading Message (ULM) received from EWFS to the MAJCOM.

2.2. 908 MXS Electronic Warfare Systems Shop (MXMVE) (EWFS):

2.2.1. Ensure all personnel assigned are familiar with all applicable EWIR documents, procedures, and operating instructions. The NCOIC of EWFS will update annually the PW/SB Capability letter and notify the ECO of any changes in the EWIR capability or personnel.

Note: Sometimes a software change can be issued as a Time Compliance Technical Order (TCTO). If this is the case, handle the software change IAW the instructions in the TCTO.

EWFS must notify the ECO prior to uploading any software to the defensive systems on the aircraft directed by a TCTO.

2.2.2. ECO and EW personnel will monitor the ECSF Website via Non-Classified Internet Protocol Routing Network (NIPRnet) for PW or SB messages applicable to 908 AW and will determine the action necessary based on the message type.

2.2.3. Upon receipt of PW or SB message it will be documented on the EWIR check sheet. EW personnel will contact the Electronic Combat Officer (ECO) to convene the EWIR Action Team. EW personnel will contact maintenance management to schedule meeting to discuss EWIR Action Team's decision and impact to maintenance and aircraft.

2.2.4. PW, SB and local exercise messages, which are informative in nature only (i.e. RIM, SIM or Maintenance Impact Message (MIM)), will be read and stored while awaiting the Implementation (IMP) message from the implementation authority (i.e. AMC or AFRC).

2.2.5. EW personnel will ensure equipment necessary for reprogramming is available and operational to support reprogramming at home station and deployed locations.

2.2.6. EW personnel will access the SIPRnet and login to the ECSF web site to download software changes specified in the (IMP).

EW personnel will prepare the required equipment for reprogramming aircraft EW systems. Equipment preparation will include but will not be limited to recharging Common Aircraft Portable Reprogramming Equipment (CAPRE) AN/PYM-1 battery, installing hard drive and copying software change files(s) to the classified CAPRE hard drive, and checking in the files within the CAPRE host software IAW T.O. 33D7-3-27-1 sections 2.4.4.3. through 2.4.5.2.2.

2.2.7. EW personnel will not load the software change on any aircraft EW systems unless specifically authorized to do so by the implementation authority in the IMP and with the approval of the Wing ECO.

2.2.8. After receiving approval, EW personnel will coordinate with the Avionics Branch Chief to schedule and coordinate aircraft for Electronic Warfare system (EWFS) reprogramming as directed in message instructions. The Avionics Branch Chief will coordinate with MXG/CC, MXS Superintendent, Plans and Scheduling, Quality Assurance (QA), Maintenance Operation Center (MOC), and Aircraft Maintenance Squadron (AMXS). A detailed plan and timeline will be created and provided to EW personnel.

2.2.9. EW personnel will provide the EWIR unit data sheet indicating any problems encountered to the Wing ECO within 72 hours of date specified in IMP. The unit data sheet will include the Date Time Group (DTG), message type and EW system affected for each message received. Procedures and expertise in performing these functions can be addressed with the Air Warfare Center (AWC).

2.2.10. Conduct local exercises as necessary to maintain continuity of the EWIR system.

2.2.11. Maintain a current listing of operational and training software and Mission Data (MD) for EW systems.

2.3. Provide the 908 AW ECO with threat changes that impact EW systems.

2.3.1. Review aircrew debriefings and mission reports for unusual EW equipment operation that could indicate a potential threat change.

2.3.2. Assist the 908 AW ECO in preparing OCRs.

2.3.3. Report unusual findings in MISREPs.

3. Prescribed Forms: 908 AW Form 1, *908th Airlift Wing Electronic Integrated Programming Check Sheet.*

3.1. Preparing the 908 AW Form 1.

3.1.1. An electronic version of this form is available on the e-Publishing website.

3.1.2. **Date of Notification of SB/PW:** The date the message was first received will be entered in this block.

3.1.3. **Time of Notification of SB/PW:** The time the message was first received will be entered in this block.

3.1.4. **Received Notification of SB/PW by:** Enter the method of notification (i.e. NIPRnet email notification, phone call, or found message on ECSF Website) by using the drop box named Select Reason.

3.1.5. **Affected System:** Click the radio button for the appropriate system that is impacted by the message.

3.1.6. **MSEWDDS Access Date/Time:** The date and time that the MSEWDDS site was accessed to download message from SIPRNET.

3.1.7. **Status of Download:** Click the radio button by the appropriate box.

3.1.8. **Date/Time Data Received:** Enter the date and time that the download of the message from the SIPRNET is complete.

3.1.9. **CAPRE Load Start Date/Time:** Enter the start date and time that the CAPRE is loaded with the Operational Flight Program (OFP) or Mission Data Files (MDF).

3.1.10. **CAPRE Load Stop Time:** Once the OFP or MDF is loaded into the CAPRE immediately check the file into the CAPRE Host Software. Once the file is successfully checked in IAW 33D7-3-27-1 sections 2.4.4.3 through 2.4.5.2.2 enter this time in this block.

3.1.11. **Date/Time (IMP) Implementation Message Received:** The majority of the time the awareness of a SB/PW message will precede the Implementation Message. If this is the case enter the date and time that the Implementation Message was received.

3.1.12. **Date/Time EWIR Action Team Convened:** Enter the date and time that the EWIR Action Team meets to discuss EWIR Action items.

- 3.1.13. **Date/Time MX Meeting:** Enter the date and time that the Maintenance meeting takes place to decide impact on maintenance and aircraft (i.e. scheduling). NOTE: This meeting should always take place after the EWIR Action Team meeting.
- 3.1.14. **Attendees:** Enter the name of the individuals that attended the meeting to include the office or area of responsibility they represent.
- 3.1.15. **A/C Tail Number:** Enter the eight (8) digit aircraft tail number in these blocks separately.
- 3.1.16. **Date Start/Stop Time:** Enter the date and start/stop time that the download into the affected systems is actually accomplished.
- 3.1.17. **OPS CHK C/W:** Enter whether the operational checks were good or bad.
- 3.1.18. **Comments:** Enter what is bad about the operational checks if applicable and any anomalies found during the software download or operational checks.
- 3.1.19. The 908 AW/MXS/MXMVE (EWFS) will keep the Electronic Warfare Integrated Reprogramming Check Sheet until the completion of a newer software version that is the same affected system and software type (i.e. MDF or OFP). Disposal of previous Check Sheets will be accomplished by shredding them in the Classified Shredder located in the Electronic Warfare Systems office.

|| BRETT J. CLARK, Colonel, USAFR
Commander

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

AFPD 10-7, *Command and Control Warfare*, 6 September 2006

AFI 10-703, *Electronic Warfare Integrated Reprogramming*, 31 Oct 2001

T.O. 33D7-3-27-1, *Common Aircraft Portable Reprogramming Equipment (CAPRE) Operation and Reference Manual*, 10 Mar 2005

Abbreviations and Acronyms

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AMC—Air Mobility Command

AWC—Air Warfare Center

BCC—Base Communication Center

CAPRE—Common Aircraft Portable Reprogramming Equipment

CMDS—Counter Measures Dispenser System

CP—Command Post

DAT—Data Message

DCS—Digital Computer System

DTG—Date/Time Group

ECM—Electronic Counter Measures

ECO—Electronic Combat Officer

ECSF—Electronic Combat Support Flight

EOB—Electronic Order of Battle

ERC—Emergency Reprogramming Center

EW—Electronic Warfare

EWIR—Electronic Warfare Integrated Reprogramming

EWFS—Electronic Warfare Systems

IAW—In Accordance With

IMP—Implementation Message

MD—Mission Data

MIM—Maintenance Instruction Message

MISPREP—Mission Reports

MOC—Maintenance Operation Center
MSEWDDS—Multi-Service Electronic Warfare Data Distribution System
MX—Maintenance
MXG—Maintenance Group
MXMVE—Electronic Warfare Systems Shop
MWS—Missile Warning System
NCOIC—Non-Commissioned Officer In Charge
NIPRnet—Non-Classified Internet Protocol Routing Network
OCR—Operational Change Request
OG—Operations Group
OI—Operation Instruction
OPREP—Operational Report
OPS CK C/W—Operational Check Complied With
OSS—Operations Support Squadron
POC—Point of Contact
PW—Pacer Ware
RDS—Records Disposition Schedule
RIM—Reprogramming Impact Message
RWR—Radar Warning Receiver
SB—Serene Byte
SIM—System Impact Message
SIPRnet—Secret Internet Protocol Routing Network
TCTO—Time Compliance Technical Order (Referred to as a TCT in EWIR messages)
ULM—Unit Loading Message
USAF—United States Air Force

Terms

After Action Report—Similar to ULM. All units report any problems or solutions they may have encountered during the SB/PW event to major command or Event Coordinator listed in the message.

Air Warfare Center—Based at Eglin AFB; provides technical expertise and procedures to update Electronic Combat equipment. The AWC is responsible for updating the ECSF. Emergency Reprogramming Center is on call 24 hours a day and issues messages and data for SB/PW.

Electronic Combat Officer—Ensures the SB/PW events flow smoothly within the wing.

Electronic Reprogramming Center (ERC)—plans to compensate for the change in the threat (i.e. reprogram the affected defensive system). Information contained in a PW RIM must be briefed to all crewmembers. The RIM should include a filename or procedures for receiving and loading “the fix” into our Defensive Systems.

Implementation Message—Issued by HQ AMC or HQ AFRC, this message authorizes the ECO to direct EWFS to load new software in possessed aircraft/equipment. Timing criteria for a SB begins with receipt of the IMP.

Maintenance Instruction Message—Message from AWC. Similar to RIM – provides “how to” information to reprogram equipment. Message should include a filename if data is being sent.

Maintenance Operations Coordination Center—Located in Building 845 Room 19, the MOCC acts a point of contact for communication and maintenance.

PACER WARE—the unclassified term for an actual change or notification of a deficiency to an Electronic Warfare (EW) system.

Reprogramming Impact Message—Message from AWC that details how the

SERENE BYTE—The unclassified term for an exercise change or deficiency notification to an EW system.

System Impact Message—Message from AWC that warns crewmembers that a threat has changed in some way. The SIM includes sensitive information that details what effect a change might make on our capability to wage war on the enemy. Information contained in a PW SIM must be briefed to all crewmembers ASAP!

Time Compliance Technical Order—Basic Air Force change (usually hardware) to any aircraft/support equipment. A TCTO is usually issued from ALC.

Unit Loading Messages—Written by the Coordinator, this message notifies headquarters and AWC that the SB/PW has been accomplished. Must be sent NLT 48 hours after software upload is complete. References for this are in AFI 10-703, Electronic Warfare Integrated Reprogramming.