

31 MARCH 2003



Operations

**ELECTRONIC WARFARE INTEGRATED
REPROGRAMMING (EWIR)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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Supersedes 8 FWI 10-101, 25 June 2001 Pages: 9
Distribution: F

This instruction implements AFD 10-1, *Mission Directives*. It establishes Kunsan Air Base policy, assigns responsibilities, and defines procedures for reprogramming EW systems under peacetime and wartime conditions. It is applicable to all assigned personnel to the 8th Fighter Wing, Kunsan Air Base, Korea supporting aircraft EW systems.

SUMMARY OF REVISIONS

This instruction updates the descriptions of responsibilities and organizational interfaces. The focus of this instruction is to inform participants of specific processes and to facilitate the timely and accurate completion of EWIR. It removes primary data download responsibilities from the 8th Communications Squadron, Base Communications Center (8 CS/SCBC). It further clarifies roles, responsibilities, and procedures during SB/PW messages and activities. Additionally, it changes the OPR for the program from 8 MXO/MXOPA to 8 OSS/OSP. New or revised material is indicated by an asterisk(*).

1. EWIR General Information and Objectives.

1.1. **General Information.** EW systems reprogramming is a result of operational deficiencies or a change in operational requirements. SB is an exercise of the emergency reprogramming process and PW is an actual reprogramming effort. Reprogramming includes modification of aircrew tactics, computer software, and may include changes to equipment settings. Changes will be dispatched to the 8 FW from HQ PACAF in the most expedient manner in accordance with AFI 10-703, *Electronic Warfare Integrated Reprogramming*. The SIPRNET is the primary method of receiving reprogramming data from the EWDDS. A secure data connection using the STU-III is secondary. Units will proceed with reprogramming actions only upon receipt of implementation directions from MAJCOM and 8th Operations Group (8 OG/CC) approval. Expedient distribution and execution is critical to counter new or updated threats and ensure aircraft/aircrew survivability, therefore all actions contained in this instruction must be executed without delay.

2. SB/PW Message information.

2.1. The normal flow and definition of messages for a SB/PW are as follows:

2.2. An initial message may alert the wing of an impending SB/PW event, or it could be no-notice with a SIM or RIM arriving first.

2.3. The SIM describes parametric changes to threats and details what effect the changes will have on a particular aircraft system.

2.4. **A RIM may follow the SIM.** The RIM details how the RC plans to compensate for the change in the threat and how the reprogramming actions affect the system. A TCTO or MIM may also arrive that defines the reprogramming procedures for maintenance personnel.

2.5. Along with the RIM, the data (reprogramming software) will be available on the EWDDS. The EWDDS is a classified network that can be accessed through SIPRNET or a STU-III modem.

2.6. The IMP is the authorization from HQ PACAF to reprogram the affected systems. However, prior to reprogramming any 8 FW aircraft or alternate mission equipment, the 8 OSS/OSPE will brief the 8 OG/CC on the effect of the SB/PW. Aircraft and EA pods will not be reprogrammed without approval from the 8 OG/CC.

2.7. The interval between messages can vary from a few hours, as in a PACAF SB exercise, to several months for a PW dealing with a routine software upgrade.

2.8. When the maintenance units are notified of the SB/PW (RIM and/or MIM), they will download the reprogramming software from the EWDDS. The EDNA and PLV equipment will be loaded with the new software at that time. However, reprogramming will not commence until the IMP arrives and the 8 OG/CC approves the reprogramming. 8 OG/CC approvals will be disseminated by the 8 OSS/OSPE during normal operations. The acting MD will disseminate 8 OG/CC approval instructions during exercise and contingency operations.

2.9. All units will compile their reprogramming times, pertinent actions, and problems encountered when reprogramming ceases and then pass this information to the 8 OSS/OSPE as soon as practical.

2.10. The systems affected by SB/PW at Kunsan AB are: ALR-69 RWR, ALR-56M RWR Set, ALE-50 ATD, ALE-47 CMDS, ALE-40, ALQ-184 EAP, and ALQ-213.

2.11. An 8 FW/SB_PW inbox is available on SIPRNET for senior leadership to gain access and view applicable messages.

3. Objective

3.1. To provide the 8 FW an expedient and accurate flow of information and actions in compliance of which MAJCOM directed reprogramming.

3.2. Acting 8 OSS/OSPE, will notify 8 MXO/MXOOM of a SB/PW within 30 minutes of 8 OG/CC approvals.

3.3. The goal is to accomplish the SB within two hours of notification from 8 MXO/MXOOM.

3.4. Unless otherwise indicated, a SB exercise will involve the reprogramming of two units of a particular EW system per Aircraft Maintenance Units.

4. 8 OSS/OSPE.

- 4.1. Act as the focal point for all 8 FW EWIR activities and designates alternate ECO.
- 4.2. Coordinates with Intelligence to develop OCR when required.
- 4.3. Provides a MML to 8 CS/SCBC authorizing individuals (8 OSS/OSPE and alternates) to receive SB/PW message traffic for 8 OSS/OSP. Also, maintain current MMLs from the agencies identified in para 5.4.
- 4.4. Quarterly verifies the MMLs are up to date.
- 4.5. Review message addresses on incoming messages and update as required.
- 4.6. Upon receiving notification of reprogramming message traffic, determine urgency and applicability. Based on the message and 8 OG/CC approvals, instruct 8 MXO/MXOOM as to who and when to notify the agencies on the message.
- 4.7. Notify the 8 MXO/MXOPA for whichever systems are affected by a SB/PW reprogramming message.
- 4.8. Download SB/PW files from the EWDDS for use as backups.
- 4.9. During contingency and exercise operations, notify the MD of received SB/PW message traffic and if necessary to expedite the process, may directly pass the SB/PW message information to the 35th Fighter Squadron (35 FS/AMU), 80th Fighter Squadron (80 FS/AMU) and 8th Maintenance Squadron, Avionics Flight (8 MXS/MXMV).
- 4.10. Write messages required by tasking, such as the ULM, when reprogramming is complete.
- 4.11. Ensure EW systems are returned to their original configuration or as directed by HQ PACAF after exercise termination.
- 4.12. Ensure deployed units have accurate points of contact and inform HQ PACAF/DOTW, USAFAWC/EC, 513 ETS, and WR-ALC/LNE of status.
- 4.13. Conduct an after action meeting, if required, to address concerns.
- 4.14. Compile history of events and file ULM and after action report to higher headquarters (PACAF/DOTW).
- 4.15. Conduct as minimum, quarterly SB/PW exercises. SB scenarios during a CERE will count towards this requirement.
- 4.16. Maintain an updated list of OFP versions after every SB/PW reprogramming action. In the case of exercises where several reprogramming efforts can happen, the updated list can wait until after the exercise.
- 4.17. After 8 OG/CC approvals, and before notification of 8 MXO/MXOOM, ensure SB/PW messages are forwarded to the appropriate agencies inbox. Include any specific reprogramming instructions as necessary.

5. 8 CS/SCBC:

- 5.1. Maintain a local checklist for communications squadron personnel use when SB/PW messages are received. Ensure all personnel receive proper training in the SB/PW message process and can execute those procedures when required.

5.2. Upon receipt of a SB/PW message, immediately run the 8 OSS MML. This applies to all messages, no matter what time, or classification. Continue with the notification pyramid on the 8 OSS/OSP MML until someone is contacted. DO NOT leave a message on an answering machine. If no contact can be made, notify 8 MXO/MXOOM for **PRIORITY/URGENT** messages only. Also include the system affected.

5.3. When reading message traffic information to anyone authorized to receive SB/PW messages, read only the **unclassified** subject line and date-time-group information over the phone. Also include the system affected.

5.4. **Maintain MMLs for the following agencies:** 8 OSS, 35 FS, 80 FS, 80 AMU, 35 AMU, and 8 MXS/MXMV.

5.5. Track notification times and points of contact.

5.6. At all times the 8 FW/PW Pacer Ware inbox will be checked at least every 60 minutes.

5.7. **Create and maintain SB/PW inboxes:** 8 FW/SB_PW, 35 FS/SB_PW, 80 FS/SB_PW, and 8 MXS/SB_PW.

6. 35 FS/DOWE and 80 FS/DOWE:

6.1. **Act as the primary alternates to 8 OSS/OSPE.** Assume responsibilities as outlined in paragraph 4. when acting as 8 OSS/OSPE.

6.2. Ensure sufficient numbers of personnel have SIPRNET accounts with access to the respective Fighter Squadron SB/PW inbox (35 FS/SB_PW or 80 FS/SB_PW).

6.3. Provide a MML to 8 CS/SCBC authorizing individuals to receive SB/PW message traffic.

6.4. Upon notification from the 8 OSS/OSPE, coordinate with intelligence to build briefings informing aircrews of changes.

6.5. Coordinate with Top-3 to prioritize aircraft for reprogramming.

6.6. Coordinate with 8 AMXS/MXA035/080/MXA035P/080P to set reprogramming priority.

7. 8 MXO/MXOPA:

7.1. **Act as the secondary alternate to 8 OSS/OSPE.** Assume responsibilities as outlined in paragraph 4. when acting as 8 OSS/OSPE.

7.2. Coordinate with 8 OSS/OSP to be included in the MML for receipt of classified message traffic.

7.3. Quarterly verify 8 MXO/MXOOM SB/PW checklist is current.

7.4. Quarterly ensure appropriate permissions are maintained for the unit SIPRNET boxes.

7.5. Coordinate between 8 OSS/OSPE, squadron maintenance, 35 FS/DOWE, and 80 FS/DOWE for procedures/preparations for tasking.

7.6. Assist the 8 AMXS/MXA035 and MXA080 with any reprogramming needs.

7.7. Review after action surveys for critical problems, discrepancies, etc. After completion of review forward surveys to the 8 OSS/OSPE.

8. 8 MXO/MXOOM:

- 8.1. **Upon notification from 8 CS/SCBC of SB/PW message traffic, contact in order listed:** Wing Avionics Manager (8 MXO/MXOPA), 8 OSS/OSPE, 35 FS and 80 FS/DOWE, and 8 OG/CC. Stop at first contact.
- 8.2. Develop and maintain checklist procedures allowing immediate notification to the 8 MXG, 35 FS and 80 FS, 8 MXS and 8 AMXS in the event of a SB/PW message as instructed by the acting 8 OSS/OSPE, MD or 8 OG/CC.
- 8.3. During exercise and contingency operations, coordinate with the appropriate 8 AMXS specialist expeditor and 8 MXS/MXMV for all reprogramming start/stop times and overall completion times.
- 8.4. Track times by aircraft tail number for all EW systems. Additionally, the ALQ-184 ECM Pod will be tracked by pod serial number.
- 8.5. Keep the MD updated on the reprogramming effort with reprogramming start/stop times, aircraft tail number and when affected the ALQ-184 ECM Pod serial number.

9. 8 AMXS/MXA035S and MXA080S:

- 9.1. Ensure sufficient numbers of personnel have SIPRNET accounts with access to the respective Aircraft Maintenance Units SB/PW inbox (35 FS/SB_PW or 80 FS/SB_PW). Ensure personnel are authorized to read SB/PW messages.
- 9.2. Ensure sufficient numbers of personnel have EWDDS access and are properly trained to download messages and/or software.
- 9.3. Provide a MML to 8 CS/SCBC authorizing individuals to receive SB/PW message traffic.
- 9.4. Upon notification from 8 MXO/MXOOM, immediately dispatch personnel to access the AMU SB/PW inbox and print out the message.
- 9.5. The acting 8 OSS/OSPE may directly deliver the message information to expedite the notification process.
- 9.6. In the event SIPRNET is down, send a runner to 8 CS/SCBC and obtain a printout of the message and download the applicable software.
- 9.7. **For ALR-69, ALR-56M, ALE-47, ALQ-184 and ALE-50 RIM/MIM:** Gain access to the EWDDS and download data, and prepare the EDNA for use.
- 9.8. Do not reprogram until the IMP message is received and 8 OG/CC approved.
- 9.9. Coordinate with 35 FS and 80 FS/DOWEs, MXA035/080s, and MXA035P/080Ps for reprogramming priority.
- 9.10. Track all start/stop times by aircraft tail number for all EW systems. Additionally, the ALQ-184 ECM Pod, will be tracked by pod serial number. All start/stop times will be reported to 8 MXO/MXOOM for tracking.
- 9.11. Annotate AFTO Form 781A, *Maintenance Discrepancy and Work Document*, for reprogramming action.
- 9.12. Notify 8 OSS/OSPE of critical problems/delays in system reprogramming and upon reprogramming completion.

9.13. Track actions and record on after action survey (See [Attachment 2](#)). Send survey to 8 MXO/MXOPA upon completion.

10. 8 MXS/MXMV:

10.1. Ensure sufficient numbers of personnel have SIPRNET accounts with access to the Avionics Flight SB/PW inbox (8 MXS/SB_PW). Ensure personnel are authorized to read SB/PW messages.

10.2. Ensure sufficient numbers of personnel have EWDDS access and are properly trained to download messages and/or software.

10.3. Provide a MML to 8 CS/SCBC authorizing individuals to receive SB/PW message traffic.

10.4. Upon notification from 8 MXO/MXOOM, immediately dispatch personnel to access the Avionics Flight SB/PW inbox and print out the message.

10.5. The acting 8 OSS/OSPE may directly deliver the message information to expedite the notification process.

10.6. In the event SIPRNET is down, send a runner to 8 CS/CSBC and obtain a printout of the message and download the applicable software.

10.7. Gain access to the EWDDS and download the data. For ALQ-184 RIM/MIM: Set up PLV cartridges and/or test station and await IMP message. **For ALR-69 RIM/MIM:** Prep test station and await the IMP message.

10.8. Do not reprogram until the IMP message is received and 8 OG/CC approved.

10.9. **For ALQ-184:** Track completions by ECM Pod serial number. **For ALR-69:** Track completions by processor serial numbers. All start and stop times are required for tracking.

10.10. **For ALR-69:** Coordinate with 8th Logistics Readiness Squadron to reprogram supply assets.

10.11. All start/stop times will be reported to 8 MXO/MXOOM for tracking.

10.12. Notify 8 MXO/MXOPA of critical problems/delays in system reprogramming and upon reprogramming completion.

10.13. Track actions and record on after action survey (See [Attachment 2](#)). Send survey to the 8 MXO/MXOPA upon completion.

11. Mission Director:

11.1. During contingencies and exercises, if contacted first for SB/PW messages, run the MD checklist. Notify the agencies in an expedient manner.

11.2. Upon receipt of an IMP message, coordinate with the 8 OSS/OSPE and 8 OG/CC. Direct Squadron Top-3 to coordinate with their respective MA's to initiate reprogramming action.

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Commander

Attachment 1**LIST OF ABBREVIATIONS, ACRONYMS, OFFICE SYMBOLS**

List of Abbreviations, Acronyms.

AFI	Air Force Instruction
ALIC	Avionics Launcher Interface Computer
ATD	Active Towed Decoy
CERE	Combat Employment Readiness Exercise
CMDS	Countermeasures Dispenser System
EAP	Electronic Attack Pod
ECM	Electronic Countermeasures
ECO	Electronic Combat Officer
EDNA	Enhanced Diagnostic Aid/Enhanced Data Transfer Terminal
EW	Electronic Warfare
EWDDS	Electronic Warfare Bulletin Board System
EWIR	Electronic Warfare Integrated Reprogramming
IMP	Implementation Message
LRU	Line Replaceable Unit
MAJCOM	Major Command
MIM	Maintenance Instruction Message
MD	Mission Director
MML	Message Management Letter
OCR	Operational Change Request
OFF	Operational Flight Program
PACAF	Pacific Air Force
PLV	Program Load Verifier
PW	Pacer Ware
RC	Reprogramming Center
RIM	Reprogramming Impact Message
RWR	Radar Warning Receiver
SB	Serene Byte
SIM	System Impact Message

SIPRNET Secret Internet Protocol Router Network
 STU-III Secure Telephone Unit, III
 TCTO Time Compliance Technical Order
 ULM Unit Load Message

A1.1. Office Symbols/Telephone List.

<u>Office Symbol</u>	<u>Office</u>	<u>Telephone Number</u>
8 CS/SCBC	Base Communications Center	782-5516 (STU-III 782-5516)
8 MXG/CC	Maintenance Group Commander	782-7170
8 MXS/MXMV	Electronic Warfare Systems	782-4508/5290 (STU-III 782-5289)
8 MXG/MXGW	Wing Weapons Manager	782-4407
8 MXO/MXOPA	Wing Avionics Manager	782-4030
8 MXO/MXOOM	Maintenance Operation Center	782-4136
8 AMXS/MXA035	Aircraft Maintenance Chief	782-7605
8 AMXS/MXA035P	Production Supervisor	782-5309
8 AMXS/MXA035S	Specialist Flight	782-4559
8 AMXS/MXA080	Aircraft Maintenance Chief	782-4952
8 AMXS/MXA080P	Production Supervisor	782-4191
8 AMXS/MXA080S	Specialist Flight	782-4271 (STU-III 782-7040/5528)
8 OG/CC	Operations Group Commander	782-8675
8 OSS/OSP	Weapons & Tactics Flight Commander	782-4814 (STU-III 782-5033)
8 OSS/OSPE	Electronic Warfare Officer	782-4814
35 FS/DO	Operations Officer	782-5486
35 FS/DOWE	Electronic Combat Pilot	782-4497
80 FS/DO	Operations Officer	782-5100
80 FS/DOWE	Electronic Combat Pilot	782-5736

Attachment 2

AFTER ACTION SURVEY

A2.1. Complete one survey for each EW system affected. Complete applicable sections only.

DATE:

OFFICE SYMBOL:

NAME:

PHONE:

A2.2. EW System Involved:

TIME			ACTION TAKEN	AVERAGE TIME TO REPROGRAM ASSET
Start	Stop	Event		

A2.3. Support Equipment Used/Serviceability:

A2.4. Problems and/or Lessons Learned:

A2.5. Recommendations:

A2.6. Actions Taken or Planned for Resolving Problems:

A2.7. Comments: