

01 August 2022

SERMC CODE: 900

Waterfront Maintenance Note Number 12

**Close-In Weapons System (CIWS) Gun Ammo Handling System (GAHS)
Intermediate Level Overhaul Responsibilities**

The following references are provided to assist ships force in preparation for I-Level Overhaul of the CIWS Gun and Ammunition Handling System (GAHS).

- Ref:
- (a) CIWS FLEET ADVISORY 06/05
 - (b) COMNAVSURFOR San Diego CA 181706Z DEC 08
 - (c) SW221-JO-MMI-010/MK15, Intermediate Maintenance Technical Manual with Illustrated Parts Breakdown
 - (d) MRC 7112/r07 M-4R Gun Barrel Maintenance
 - (d) MRC 7112/R07 Q-4, Teardown/Inspection of Ammo handling system
 - (e) MRC 7112/R07 Q-12, Drum Teardown/Inspection
 - (f) MRC 7112/R07 S-2, Remove, Disassemble, and Clean Gun Body
 - (g) MRC 7112/R07 M-18R, Gun Firing Test (PSOT14)

1. Purpose: To define the specific shipboard / RMC responsibilities that are required in support of I-Level GAHS overhaul. Adherence to this procedure will enable all ships systems within the Mayport Naval Station basin to receive I-Level overhauls within the 18 month time frame specified in Ref (b).

2. Background: IAW Ref (a), CIWS GAHS is required to receive I-Level Overhaul by the applicable RMC and will be performed by the RMC once every 18 months. GAHS Overhaul will be performed by the RMC IAW with Ref (b). The RMC has been equipped and certified by the In-Service Engineering Agent (ISEA) to conduct I-Level maintenance and repair that exceeds PMS requirements at the shipboard level. I-level overhaul of the GAHS by the RMC, in addition to the normally scheduled shipboard PMS is intended to enhance material condition and reliability of the CIWS GAHS.

3. Procedure:

a. SERMC Code 951 (CIWS) shall:

- (1) Schedule overhauls through the respective Maintenance Teams (Port Engineer and Ship's Superintendent).
- (2) Verify one for one receipt and delivery of the following components:
 - (a) M61A1 Machine Gun
 - (b) Transfer Unit
 - (c) Exit Unit
 - (d) Entrance Unit

- (e) Entrance and Exit Drum Cover
- (f) Entrance and Exit Scoop Disks
- (g) Gun Drive Unit
- (h) Angle Drive Unit

(4) Ensure a fully overhauled and tested system is assembled on the Stand Alone Gun Assembly (SAGA) for Ships Force to witness.

(5) Verify serial numbers, inspect work for quality assurance, and witness the OPTTEST of the Overhauled GAHS on the (SAGA).

b. Ships Force (S/F) shall:

(1) Submit 4790/2K (60) working days prior to the scheduled overhaul start date. On dual System ships, a 4790/2K must be written for each CIWS mount. Include the following Information in Block 35 Remarks section of the 4790/2K:

“Request SERMC Code 951 conduct I-level overhaul of CIWS mount ____ Gun and Ammunition Handling System (GAHS). Maintenance to include teardown, cleaning, inspection and rebuild of the following components: M61A1Gun, Transfer Unit, Entrance Unit, Exit Unit, Gun Drive Unit, Drum Angle Drive Unit, Exit and Entrance Drum Covers and Scoop Discs. Request Ships Force utilizes SERMC facilities for cleaning, preservation, inspection and repair of the following components not included in the I-level overhaul: Ammunition and Conveyor Chuting, Conveyor Elements, Gun Barrels, End-Barrel Clamp, Mid-Barrel Clamp and Loader Unit.”

(2) On the scheduled start date of the overhaul, S/F to transport Ammunition Conveyor Chuting, Conveyor Elements, Gun Barrels, Mid and End barrel clamps to SERMC Code 951 for cleaning and preservation by S/F personnel utilizing SERMC facilities. Inspection/repairs will be performed by SERMC Electronics Mechanics on the following units:

- (a) M61A1 Machine Gun
- (b) Transfer Unit
- (c) Exit Unit
- (d) Entrance Unit
- (e) Entrance and Exit Drum Cover
- (f) Entrance and Exit Scoop Disks
- (g) Gun Drive Unit
- (h) Drum Drive Unit

(i) Gun Barrel Mid Clamp

(J) Ammunition Loader unit

(3) Ships force will perform general housekeeping and corrosion control as required to enable immediate installation of the overhauled GAHS. Ensure the clean and inspect portion of the applicable PMS has been performed on the Drum and Helix (MIP 7112/MRC Q-4, Drum and Ammunition Handling System for Block 1 Baseline 0/1, and or MIP 7112/ MRC Q-12, Drum and Ammunition Handling System. Reassembly of the GAHS will not commence until applicable PMS has been completed.

(4) S/F Personnel will witness full speed Operational Test of Overhauled GAHS on the Stand Alone Gun Assembly (SAGA) and validate ships Loader Unit by performing Upload/Download of dummy ammunition.

(5) S/F Personnel shall assist SERMC Code 951 with disassembly and reassembly of SAGA components for training purposes.

(6) S/F personnel conduct an OPTTEST IAW Ref (f), with S/F E-7 or ABOVE (Explosive Ordnance Safety Observer qualified). Upon successful completion of the OPTTEST, the observing E-7 or ABOVE shall sign for the successful completion of the overhaul and refurbishment. A detailed signed copy of Periodic System Operability Test 14 (PSOT 14) will be provided to SERMC personnel.

4. Points of Contact: For further guidance or information, contact SERMC Code 951 at 904-270- 5126 x3050 or x5824.