Waterfront Maintenance Note Number 16

Antenna Refurbishment Procedures

Ref:  
(b) 407-5287561 REV B, Industrial Electromagnetic Compatibility (IEMC) work process instruction.  
(c) S9086-VD-STM-020 Chap. 631, REV 1, VOL 2, Preservation of Ship's In-Service Surface Preparation and Painting.  
(d) S9086-VD-STM-030 Chap. 631, REV 2, VOL 3, Preservation of Ship's In-Service Surface Ship/Submarine applications.  
(e) Applicable Antenna Tech manual  
(f) Shipboard CSOSS Procedures  
(g) Ships Tag Out Procedures  
(h) Applicable PMS Requirements  
(i) SERMC Antenna Refurbishment SMP  
(j) OPNAV 4790/85  
(k) MIP 4411/010, MRC U-11, Clean and Inspect VHF/UHF Antenna

1. **Purpose:** To establish procedures for scheduling and conducting antenna refurbishments IAW Refs (a)-(h).

2. **Background:** An antenna refurbishment should normally be accomplished between 24 - 48 months. Antenna refurbishments will not be accomplished for the purpose of replacing corroded hardware or simply for cosmetic reasons. Antennas must be evaluated by SERMC to determine if they are candidates for refurbishment. The evaluation must be a result of INSURV, C5RA, or a technical assistance 2-kilo. Refurbishment requests that have been properly screened and are on the following list will be routinely accepted. All other refurbishment requests will be on a case by case basis.

   AM-6534  AM-7317  AS-717  AS-A735  AS-1857  AS-2537  
   AS-2809  AS-2810  AS 2815  AS-2867  AS-3077  AS-3078  
   AS-3079  AS-3226  AS-3770  AS-3771  AS-3772  AS-3073  
   AS-4163  AS-4293  AS-4498  CU-2475  NT-66095 URA-38

Antennas will only be accepted for refurbishment during scheduled availabilities of three months or longer in duration. Total number of antennas accepted for refurbishment may be limited if requests exceed shop workload capabilities.
Antennas accepted for refurbishment should be delivered to SERMC prior to, or at the start of the availability. If for any reason during the refurbishment process an antenna becomes un-repairable, the antenna will be returned to the ship and the ship will have to order a replacement antenna. SERMC cannot order replacement antennas.

3. **Procedures:**

   a. Ships Force (S/F) shall:

      (1) Submit one 4790/2K per Antenna for refurbishment during ships maintenance availability.

      (2) Tag out all associated equipment in accordance with Ref (g).

      (3) Remove Antennas from the mast, 35’ HF whip antennas shall be staged on the pier for transport, all other antennas shall be transported to SERMC by S/F.

      (4) Prior to Antenna reinstallation, sand all Antenna mounting surfaces down to bare metal and coat with anti-seize compound IAW Ref (j). Cover area with plastic to ensure a clean surface is maintained. Ensure all wiring is properly labeled IAW Ref (b), bagged and sealed to ensure no water intrusion occurs. Do not use needle gun or grinder on mount.

      (5) Coat all reinstalled bolts with sealing compound, MIL-S-45180 Type II IAW Ref (j).

      (6) Clear safety tags IAW Ref (f).

      (7) Return system to normal operation.

   b. SERMC shall:

      (1) Coordinate work accomplished with S/F and SERMC Maintenance Team.

      (2) Provide for transportation of HF whip Antennas from/to ship.

      (3) Refurbish Antenna IAW Refs (c), (d) and (e).

      (4) Observe all required pre/post refurbishment requirements and record results.

      (5) Provide oversight and guidance to S/F personnel throughout the process.

4. **Points of Contact:** For further guidance or information, contact Combat Systems Antenna Refurbishment SERMC Code 953 at 904-270-5126 x3115 or x5824.