

STATEMENT OF WORK

SECTION 1: INTRODUCTION

1. This Statement of Work (SOW) defines the work effort associated with touchup painting and corrosion control, elevation counter weight fabrication and balance on the NRL Code 8124 AN/FSC 79 terminal in Guam.
2. The scope of work defined in this document is limited to removing any contaminants from the exterior surfaces of the antenna structure including mildew, repairing superficial damage to those surfaces, and applying a coating system that will protect the antenna surfaces for an extended period of time. In this Statement of Work, superficial surface damage is defined as surface rust and/or peeling paint. This SOW does not address structural corrosion. Structural corrosion is defined as corrosion affecting the integrity of the structure, and logically would require repair or replacement of the structure itself.
3. NRL Code 8124 AN/FSC 79 Terminal
The exterior surfaces of the AN/FSC 79 antennas include, and are limited to: 1) Reflector support assembly (quadripod, crow's nest, sub-reflector, reflector hub), 2) Antenna de-icing set components with heater/blower assembly, 3) Ring Girder, 4) elevated Equipment Room, 5) Elevation Wheel and Yoke Assembly, 6) hoist and supporting frame, 7) Ladders, stairways, and platforms, 8) Azimuth cone assembly and, 9) concrete base. Additional elevation counter weights will be fabricated, prepared and painted as detailed in this Statement of Work, then added to the terminal structure before the terminal is counter balanced.
4. The scope of work is generally that which would be expected of a refurbishment and painting vendor. It does not include "putting right" or repairing any components on the antenna. An example would be the repair or replacement of structurally corroded fasteners or electrical boxes. It does, however, include those tasks described in Section 2, "Surface Preparation Tasks."
5. Since surface preparation is limited to preparing the surfaces for painting, as opposed to entirely removing previous coatings, an epoxy mastic system is specified in this SOW. This SOW also specifies the subcontractor apply a brushed epoxy coating to all deteriorated areas (most commonly found on sharp edges, crevices, weld seams, back-to-back angles and hardware). The process is described in Section 3.

SECTION 2: SURFACE PREPARATION TASKS

1. The vendor shall perform the following surface preparation activities prior to touch-up painting:
 - a) Initial pressure wash all exterior surfaces to remove accumulated algae, grease, dirt, and loose paint, and use a surface cleaner product to provide a clean surface prior to touch-up painting.
 - b) Removal of any remaining surface corrosion and loose paint by mechanical means, which may include sanding, grinding, or other similar methods.
 - c) Removal of all evidence of the exterior surface corrosion and recoat as necessary.

SECTION 3: PROCESS DESCRIPTION

1. The vendor's process shall be designed to ensure the following results:
 - a) Adequate repair of the existing finish damage.
 - b) A high probability of compatibility with the existing finish.
 - c) Applicability to steel, aluminum, hot-dip galvanized steel surfaces and concrete surfaces.
 - d) A durable finish with an extended time until such time as the next full recoating will be required.
 - e) Environmental safety.
2. Surface Preparation
 - a) The vendor shall pressure wash to remove dirt, dust, mold, mildew, loose paint, oil, grease, and other contaminants.
 - b) Careful cleaning and surface treatment prior to all painting operations cannot be over-emphasized. This factor is of prime importance in obtaining a satisfactory paint finish. Cleaning shall be done with solvents, detergents, and processes that have no deleterious effect on the surface and that produce a surface satisfactory for receiving subsequent finishes. Loosely adhered paint and superficial rust shall be removed by pressure washing.
 - c) Dirt, grease, loose chalky paint, or other foreign material that have accumulated on the previously painted or galvanized surfaces shall be removed with a pressure washing or steam cleaning apparatus, which shall precede all other phases of cleaning. It is not intended that sound paint be removed using this process. Any paint that becomes loose, curled, lifted, or loses its bond with the preceding coat or coats after pressure washing shall be removed to sound paint or metal surface level by other means.
 - d) Application of a Sealer Coat.
 - (1) An epoxy penetrating sealer shall be applied to prepared surfaces as necessary to assure compatibility with the existing coatings and to seal all damaged areas. This sealant if used is applied by brush. The SAS team does not anticipate having to use any sealant on these terminals.
 - e) Application of a two part Epoxy.
 - (1) Application of a Direct-to-Rust (DTR) compound on all compromised metals to ensure corrosion protection. All sharp edges, weld seams, skip welds, bolts, crevices, and back-to-back angles where the existing coating has deteriorated will be brushed coated. Once DTR is applied a Direct-to-Metal acrylic topcoat paint is used. The application of this coat shall be all that is required to provide adequate finish protection to the touchup areas for at least four to five years.
 - f) Topcoat application.

- (1) The application of a Direct to Metal (DTM) coating by whatever means suitable to the site conditions.

g) Reflective Surfaces.

- (1) If down time is granted on any of these terminals, the reflective surface, quadripod, crow's nest, hub and reflector support assembly will be inspected and restored as required.

3. PRODUCT DATA

- a) The following is a suggested list of products. The vendor shall be allowed to use alternate paints, primers, or washes, as long as they are equal or better in quality, environmental conformance, and properties to the items specified here.

(1) Surface Cleaner

Carboline "Surface Cleaner 3" concentrate is a biodegradable cleaning agent for degreasing and cleaning contaminated surfaces prior to painting. This is recommended for painted and unpainted steel, stainless steel, other non-ferrous metals, and concrete surfaces. May be diluted up to 10 parts water to 1 part cleaner, but can be used full-strength for difficult contaminant removal. Application of Carboline Surface Cleaner 3 is limited to combined air, product and surface temperatures above 40°F.

(2) Epoxy Coating (Applications by brush only)

Pittsburgh Paint Ref. 95-245, 95-249 series two part "Pitt-Guard Rapid-Coat Direct-To-Rust (DTR) Epoxy Mastic Coating, an identifying gray color to be used for "Stripe" coating and white for top coatings. Performs equally well on steel, concrete, hot dip galvanized steel, and aluminum. Its excellent wetting properties allow application and good performance over tightly adherent rust. Product is self-priming and has a very low VOC (2.8 lbs. /gal.). Thinning up to 10% is permitted, using a PPG proprietary thinner equivalent to zylene or xylol.

Application of PPG "Pitt-Guard Rapid-Coat Direct-To-Rust (DTR) Epoxy Mastic Coating is limited to air, product, and surface temperatures above 32°F (0°C), and surface temperature of at least 5°F (3°C) above the dew point. This product may be applied on damp surfaces but without frost or ice present.

Drying Schedule at 77°F (25°C)

- Dry to touch: 3-4 hours
- Dry to handle: 7-8 hours
- Dry to recoat: 3 hours, minimum

(3) Top Coat

Carboline "3359 DTM" (Direct-to-Metal) is an acrylic coating designed for both direct-to-metal and finish-coat applications. It provides excellent resistance to flash rusting, greatly reduces overspray due to its dry-fall properties, and has low odor. Product is self-priming and has a very low VOC (0.96 lbs./gal). Thinning up to 5% with water is permitted. Application of Carboline 3359 DTM is limited to air product and surface temperatures above 50°F (10°C), and a surface temperature at least 5°F (3°C) above the dew point.

Drying Schedule at 75°F (24°C)

To touch: 6 hours

To recoat: 2 hours

SECTION 4: VENDOR SUBMITTALS - DELIVERABLES

As a minimum, the vendor shall provide the following information to the NRL Code 8124 representative in Guam:

1. Schedule

Careful consideration shall be given to appropriate times when site representative may be able to inspect work in progress for quality and completeness, and those times shall be clearly depicted in the schedule. The work shall be planned so that only a minimum amount of downtime shall be schedule, which must be mutually agreed and coordinated with the NRL Code 8124 representative in Guam.

2. Deliverable Due Dates:

The vendor shall schedule a weekly status meeting with the NRL Code 8124 representative in Guam. The meeting agenda shall include, at a minimum: 1) weekly accomplishments; 2) the following weekly schedule activities; 3) items of interest/concern

3. Quality Control

The subcontractor shall outline his quality control plan as part of his proposal.

4. Safety

The vendor shall outline his safety plans and it is expected all personnel used on site will have undergone safety training as it pertains to this type of work.

5. Program Logistics and Support

The vendor shall outline how he intends to support this program logistically. A brief description of the contingencies the vendor has in place will be provided.

6. Key Personnel

The vendor shall provide a list of the key personnel to be associated with the program. All on-site personnel are to have previous experience in refinishing heavy, medium and small, steerable antennas.

SECTION 5: REMOVAL OF PAINT CHIPS

The vendor shall be responsible for the containment, collection, removal, and disposal of paint chips, or otherwise, in accordance with all EPA requirements. All paint chips and residue will be vacuumed and placed in marked 55-gallon drums for disposal. All processes for the preparation of surfaces and the application of all coatings, including all materials and products used, shall meet all EPA and local requirements.

SECTION 6: FINAL ACCEPTANCE

Upon completion of the touch-up painting work, the NRL Code 8124 representative in Guam will perform a walk-through and any discrepancies will be noted on a checklist and corrected. Final acceptance shall constitute satisfactory acceptance of the work and a Letter of Acceptance or Certificate of Conformance will be signed by the NRL Code 8124 representative in Guam.