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AIR FORCE GLOBAL STRIKE
COMMAND**



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**STRUCTURAL MAINTENANCE AND
CORROSION CONTROL PROGRAMS**

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This instruction implements corrosion controls and bomber structural maintenance. It establishes procedural guidance to establish and support the Corrosion Prevention and Control, Non Destructive Inspection and Advanced Composites maintenance programs. This publication does not apply to Air National Guard, Air Force Reserve, or Civil Air Patrol units. Supplements will not lessen the requirements nor change the basic content or intent of this instruction. Process supplements in accordance with (IAW) AFI 33-360, *Publications and Forms Management*. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF IMT 847, Recommendation for Change of Publication; route AF IMT 847s from the field units through the appropriate functional area unit's chain of command to HQ AFGSC/A4M, 41 Orville Wright Avenue, STE 5341, Barksdale AFB LA 71110. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363,

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(341MW) This publication supplements AFGSCI21-105, *Structural Maintenance and Corrosion Control Programs*, 11 January 2012, and defines specific details of the Malmstrom AFB structural maintenance and corrosion programs. It applies to all personnel, military, civilian, or contractors, assigned to or contracted with Malmstrom AFB. It does not apply to the US Air Force Reserve or Air National Guard who are not permanent party to Malmstrom AFB. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using AF Form 847, **Recommendation for Change of Publication**; route AF Form 847 through the wing publishing office. Waivers to this supplement are not authorized. Supplementing this supplement is not authorized. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

This is a new instruction written with focus on specific work center guidance and maintenance responsibilities. This document must be completely reviewed. Units have 90 days from the date of publication to fully implement new/revised procedures. Aircraft markings that do not comply with Attachment 2 will be corrected during the next scheduled phase inspection.

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Chapter 1

BOMBER AIRCRAFT METALS TECHNOLOGY PROGRAM

1.1. HQ AFGSC/A4M Responsibilities. AFGSC/A4M is responsible for providing detailed guidance to subordinate units. The designated AFGSC Program Manager will:

1.1.1. Manage the Aircraft Metals Technology career field for AFGSC.

1.1.2. Manage the AFGSC welder certification program IAW TO 00-25-252, *Certification of Military Aircraft, Missile & Support Equipment Welders*, and this instruction.

1.1.3. Approve all intra-command Aircraft Metals Technology TDY manning assistance requests.

1.1.4. Develop and coordinate AFGSC policy and procedures for Aircraft Metals Technology functions.

1.1.5. Coordinate all intra-command Aircraft Metals Technology temporary and permanent equipment transfers.

1.1.6. Support the Aircraft Metals Technology career field by participating in Metals Technology managers meetings/working groups, advisory board meetings, and utilization and training workshops.

1.2. Maintenance Group Commander (MXG/CC) Responsibilities. The MXG/CC is the certifying official for unit-level welding examinations. This responsibility may be delegated IAW TO 00-25-252.

1.3. Maintenance Squadron Commander Responsibilities. Ensures funding is available for required Air Logistics Center (ALC) welding certifications.

1.4. Fabrication Flight Chief Responsibilities. The Fabrication Flight Chief is responsible to the squadron commander for effective and efficient resource utilization. The Flight Chief will:

1.4.1. Ensure all journeyman, craftsman (SSgt and TSgt) or civilian equivalent welders assigned to the Aircraft Metals Technology section are certified IAW TO 00-25-252 to perform welding operations in the following base metal groups: I (Carbon and Low Alloy Steel), II (Stainless Steels), III (Nickel--Base Alloys), IV (Aluminum Base Alloys), V (Magnesium--Base Alloys), VI (Titanium--Base Alloys), VII (Cobalt--Base Alloys).

1.4.2. Determine requirement for local/ALC welder qualification/certifications.

1.4.3. Forecast funding requirements for ALC welding certifications.

1.5. Aircraft Metals Technology Responsibilities. The Section Chief is responsible for daily operations and will:

1.5.1. Ensure assigned Aircraft Metals Technology personnel maintain welding certifications outlined in paragraph 4.4.1.

1.5.2. Coordinate requests for an ALC or other qualified organization to qualify welders. If qualification and certification is accomplished locally, coordinate certification requirements with the Non Destructive Inspection (NDI) section to ensure X-Ray capability exists.

1.5.3. Ensure the Observing Official is a 7-level Aircraft Metals Technology technician or civilian equivalent welder and properly documents DD Form 2757, *Welding Examination Record*. The Observing Official will sign block 13.

1.5.4. Ensure a 7-Level Aircraft Metals Technology technician or civilian equivalent welder performs a complete visual inspection and properly documents DD Form 2757. The Examining Official (not the NDI tester) will sign and date block 18.

1.5.5. Ensure a qualified Non Destructive Inspection technician performs radiographic inspection and properly documents DD Form 2757. The NDI technician will complete block 20.

Chapter 2

NON DESTRUCTIVE INSPECTION (NDI) AND OIL ANALYSIS PROGRAM (OAP)

2.1. HQ AFGSC/A4M Responsibilities. AFGSC/A4 is responsible for overall NDI and OAP program management within the command. The designated program manager will:

- 2.1.1. Manage the NDI career field for AFGSC.
- 2.1.2. Support the NDI Program Office by participating in NDI equipment evaluations, field surveys, NDI Executive Working Group, NDI Product Improvement Teams, Air Force NDI managers meetings/working groups, advisory board meetings, and utilization and training workshops.
- 2.1.3. Coordinate all intra-command NDI temporary and permanent equipment transfers.
- 2.1.4. Approve all intra-command NDI TDY manning assistance requests.
- 2.1.5. Develop and coordinate AFGSC policy and procedures for NDI and OAP functions.
- 2.1.6. Forecast and ensure scheduling of 2A7X2 supplemental training.

2.2. Maintenance Squadron Commander Responsibilities. The Maintenance Squadron Commander (MXS/CC) is responsible for effective NDI and OAP programs. The MXS/CC will:

- 2.2.1. Ensure only properly trained personnel with AFSC 2A7X2 operate NDI equipment and perform NDI.
- 2.2.2. Ensure visual inspections are not performed by NDI personnel unless specifically called for by technical orders.

2.3. NDI Responsibilities. The Section Chief is responsible for daily operations and will:

- 2.3.1. Organize, direct and manage the Wing NDI Program IAW TO 33B-1-1, *Non-Destructive Inspection Methods, Basic Theory*, and applicable directives.
- 2.3.2. Ensure all NDI equipment required performing NDI on assigned weapon systems and support equipment is available and operational.
- 2.3.3. Ensure environmental controls are maintained IAW technical order guidance where radiographic film is stored and where the OAP spectrometers are operated.
- 2.3.4. Ensure NDI personnel do not make serviceability determinations of materials and components except when directed to do so by technical orders.
- 2.3.5. Ensure accurate oil analysis data is distributed to the central Air Force database on or about the 15th and last day of the month.
- 2.3.6. Ensure all deployable spectrometers are properly secured and protected before being deployed out of the OAP Laboratory.
- 2.3.7. Perform and document daily (every duty day) standardization checks IAW applicable technical orders on all assigned spectrometers. Exception: three duty days prior to deployment for a specific spectrometer and three duty days after receipt of a spectrometer returning from deployment.

2.3.8. Ensure all assigned spectrometers are left in standby mode when analysis is not being conducted.

2.3.9. Develop a local checklist for analyzing correlation samples IAW TO 00-5-1, *AF Technical Order System*.

2.3.10. Ensure all assigned oil analysis spectrometers are Joint Oil Analysis Program approved and certified IAW TO 33-1-37-1, *Joint Oil Analysis Program Laboratory Manual, Vol I, Introduction, Theory, Benefits, Customer Sampling Procedures, Programs and Reports*.

2.3.11. Request contractor repair through the Air Force OAP Office whenever an oil analysis spectrometer cannot be repaired locally or is out of service due to maintenance for more than 24 hours.

2.3.12. Comply with contingency operations in TO 33-1-37-2, *Joint Oil Analysis Program Laboratory Manual, Vol II, Spectrometric and Physical Test Laboratory Operating Requirements and Procedures*, when no back up oil analysis spectrometer is available locally.

2.3.13. Forecast funding to attend and participate in applicable NDI working groups and meetings.

Chapter 3

LOW OBSERVABLE (LO) AIRCRAFT STRUCTURAL MAINTENANCE (ASM) PROGRAM

3.1. HQ AFGSC/A4M Responsibilities. AFGSC/A4 is responsible for overall LO ASM program management within the command. The designated program manager will:

- 3.1.1. Manage the command's LO ASM maintenance career field.
- 3.1.2. Coordinate all intra-command LO ASM TDY manning assistance requests.
- 3.1.3. Represent AFGSC at 2A7X5 utilization and training workshops.
- 3.1.4. Represent AFGSC at LO conferences and meetings.
- 3.1.5. Forecast and ensure scheduling of 2A7X5 supplemental training.
- 3.1.6. Coordinate all intra-command LO temporary and permanent equipment transfers.

3.2. Maintenance Group Commander Responsibilities. The MXG/CC is responsible for establishing and maintaining an effective LO maintenance program. The MXG/CC will:

- 3.2.1. Appoint an experienced 2A7X5 technician to QA.
- 3.2.2. Ensure LO trainees have an opportunity to obtain proficiency in all aspects of their career field.

3.3. LO ASM . The section chief will:

- 3.3.1. Maintain a comprehensive training plan that ensures assigned personnel develop and maintain proficiency in all facets of LO coatings/materials, composite repair, signature assessment and aircraft inspection techniques.
- 3.3.2. Ensure no other maintenance is accomplished on aircraft, equipment, or within environmentally controlled/cordoned off areas when hazardous/toxic materials are in use that requires the use of specialized personal protective equipment. In the event specialized respiratory protection equipment is required, personnel will be properly fitted for the equipment and trained in its use IAW AFOSH Std 48-137, *Respiratory Protection Program*.
- 3.3.3. Forecast funding to attend and participate in applicable LO meetings, Corrosion Prevention Advisory Boards (CPABs) and other structural related programs/meetings.
- 3.3.4. Ensure deficiency reports (DR) are accomplished as necessary IAW TO 00-35D-54, *USAF Deficiency Reporting, Investigation, and Resolution*.

Chapter 4

GENERAL CORROSION PREVENTION AND CONTROL PROGRAM REQUIREMENTS

4.1. HQ AFGSC/A4M Responsibilities. HQ AFGSC/A4M will appoint an overall MAJCOM functional manager for the Corrosion Prevention and Control Program. The functional manager will be augmented by weapon system experts from the AFGSC/A4M staff as required for program management. The Corrosion Prevention and Control Program Manager will:

- 4.1.1. Manage AFGSC's Corrosion Prevention and Control Program for all assigned weapon systems.
- 4.1.2. Serve as the command's focal point for corrosion prevention and control issues and coordinate all actions with staff directorates as appropriate.
- 4.1.3. Prepare and update the operating command corrosion prevention and control instruction.
- 4.1.4. Serve as co-chair on the AFGSC CPAB.
- 4.1.5. Attend the Tri-Service Corrosion Conference, the AF Corrosion Conference and the Environmental Symposium.
- 4.1.6. Establish minimum requirements for corrosion control training.
- 4.1.7. Ensure Air Force Materiel Command (AFMC) conducts annual site surveys for ICBM facilities and surveys appropriate to the operational need of assigned aircraft units.
- 4.1.8. Serve as the command's interface with Air Education and Training Command (AETC) and the Air Force Institute of Technology (AFIT) for corrosion training course content changes.
- 4.1.9. Maintain current Steel Structure Painting Council (SSPC) or National Association of Corrosion Engineers (NACE) training on coating system application and cathodic protection systems.
- 4.1.10. Maintain file copies of approved unit corrosion prevention and control training programs. Unit programs will be reviewed for applicability to like units and forwarded as appropriate.
- 4.1.11. Coordinate MAJCOM approval for test programs through appropriate Weapon System Team.

4.2. Maintenance Group Commander Responsibilities. The MXG/CC or 576 FLTS/CC is responsible for establishing and maintaining an effective corrosion prevention and control program. The MXG/CC will:

- 4.2.1. Appoint the following individuals, in writing, as the Corrosion Prevention and Control Program Manager for their respective areas:
 - 4.2.1.1. ICBM MXG/CC will appoint the Corrosion Shop Foreman as the MXG program manager. The 576 FLTS/CC will appoint the corrosion QAE as the 576 FLTS program manager.

4.2.1.2. ICBM MXG/CC or 576 FLTS/CC will appoint the lead helicopter QAE as the helicopter program manager.

4.2.1.3. Bomber MXG/CC will appoint the Aircraft Structural Maintenance (ASM) section chief as the MXG program manager.

4.3. Corrosion Prevention and Control Program Manager Responsibilities. In addition to specific responsibilities in Chapters 5 through 8, the program manager will:

4.3.1. Serve as the point of contact for corrosion prevention and control between the unit and AFGSC/A4M.

4.3.2. Provide technical guidance on corrosion prevention and control issues.

4.3.3. Ensure military technicians, Department of Air Force (DAF) civilians, and government contracted corrosion control technicians inspect for and treat corrosion IAW technical orders using approved products.

4.3.4. Ensure military technicians, DAF civilians, and government contracted corrosion control technicians handle and dispose of hazardous materials/waste IAW local, state, and federal guidelines.

4.3.5. Ensure corrosion specialists are not diverted to programs or projects for beautification purposes. Utilization of corrosion specialists for anything other than weapon system maintenance requires specific authorization of the AFGSC functional manager.

4.4. Training. Each MXG will implement a training program for corrosion prevention and control.

4.4.1. All maintenance technicians who maintain aircraft, missile, or communications-electronics systems will receive initial training and annual refresher training. 2A7X3, 2A7X5, and ICBM corrosion control specialists are exempt from this requirement.

4.4.2. Training will be documented in IMDS.

4.4.3. MXGs may use AETC/AFIT products to develop a local training program.

4.4.3.1. Training will include the following:

4.4.3.1.1. How to identify corrosion.

4.4.3.1.2. How to report and record corrosion.

4.4.3.1.3. Corrosion prone areas.

4.4.3.1.4. Possible causes of corrosion.

4.4.3.1.5. Requirements for treatment of minor corrosion.

4.4.3.1.6. Proper use of cleaning compounds.

4.4.3.2. Training programs will be forwarded to AFGSC Corrosion Prevention and Control Program Manager for review/approval.

4.4.4. 2A7X3, 2A7X5, and ICBM corrosion control specialists will attend site-specific environmental compliance training as designated by the installation Environmental office.

4.5. Procedures. Corrosion control programs shall be oriented towards the prevention and control of corrosion through frequent cleaning, corrosion inspection and early detection, application of proper treatment materials/procedures, and maintenance painting. Frequent cleaning has proven to be the most effective means of preventing corrosion. Maintenance painting is defined for field purposes as spot painting, sectionalized painting, and complete scuff sand and overcoat. The corrosion prevention and control program is divided into three components.

4.5.1. **Prevention.** Corrosion prevention must be a proactive part of the overall program. Use of proper materials and procedures IAW approved technical order procedures during maintenance activities is critical to program success.

4.5.1.1. Repainting aircraft, missile system facilities/components, communications-electronic systems, or support equipment solely for beautification purposes is not authorized.

4.5.1.2. Supervisors must enforce general housekeeping and cleaning as part of every maintenance activity.

4.5.2. **Detection.** All maintenance technicians will perform corrosion inspections as part of routine maintenance activities.

4.5.2.1. Supervision at all levels must emphasize active participation by all technicians during scheduled inspections (i.e., phase work and periodic inspections) as well as unscheduled maintenance.

4.5.2.2. Conduct inspections for corrosion in concealed/hard to access locations when opened for any other work.

4.5.2.3. Quality Assurance evaluators will evaluate program effectiveness during normal evaluations and inspections and comment as appropriate based on the circumstances of individual evaluations/inspections.

4.5.3. **Treatment.** There are two general categories of treatment.

4.5.3.1. Remove and replace. Performed by maintenance technicians responsible for system maintenance when component is beyond repair or treatment in place is not possible or cost effective.

4.5.3.2. Treatment in place. Minor corrosion can be treated by maintenance technicians during the course of routine maintenance as directed by weapon system specific TOs. Large scale or more severe corrosion on installed equipment/components will be treated by corrosion specialists.

4.6. CPAB. HQ AFGSC/A4M will host a CPAB for ICBM units annually. CPAB requirements for aircraft units will be fulfilled through the annual aircraft/helicopter CPABs. See Chapter 6 for specific ICBM CPAB requirements.

Chapter 5

BOMBER AIRCRAFT STRUCTURAL MAINTENANCE AND CORROSION PREVENTION AND CONTROL PROGRAM

5.1. HQ AFGSC/A4M Responsibilities. AFGSC/A4 is responsible for overall ASM program management within the command. The designated program manager will:

5.1.1. Manage the ASM career field for AFGSC.

5.1.2. Represent AFGSC at assigned weapon system corrosion prevention advisory boards (CPAB), AF/DOD corrosion conferences, Advanced Composite conferences, and field surveys.

5.1.3. Approve all intra-command ASM TDY manning assistance requests.

5.1.4. Coordinate all intra-command ASM temporary and permanent equipment transfers.

5.1.5. Develop and coordinate AFGSC policy and procedures for ASM functions.

5.1.6. Represent AFGSC at 2A7X3 utilization and training workshops.

5.1.7. Forecast and ensure scheduling of 2A7X3 supplemental training.

5.2. Wing Commander Responsibilities. Wing Commanders will review and approve all aircraft paint waiver requests prior to submission to HQ AFGSC/A4M.

5.3. Maintenance Group Commander Responsibilities. The MXG/CC is responsible for establishing and maintaining an effective ASM/Corrosion Prevention and Control Program. The MXG/CC will:

5.3.1. Ensure adequate facilities, equipment, manpower, material and funding are available to support a sound corrosion prevention and control program. Minimum requirements:

5.3.1.1. Ensure an adequate corrosion control facility is available to wash aircraft, perform minor maintenance, and paint assigned aircraft on a year round basis.

5.3.1.2. Ensure requirements outlined in AFI 32-1024, *Standard Facility Requirements*, are met for support equipment (SE) and aircraft small parts. This capability can be incorporated in the aircraft corrosion control facility if space permits.

5.3.1.3. Ensure paint facility control technology meets local, state and federal Environmental Protection Agency requirements in conjunction with current National Emission Standards for Hazardous Air Pollutants.

5.3.1.4. Outside wash racks may be used on a temporary basis when approved by the Base Civil Engineer.

5.3.2. Appoint an aircraft wash rack facility manager to ensure proper cleaning materials, equipment and supplies are maintained in accordance with applicable technical orders, AFI 21-101, *Aircraft and Equipment Maintenance Management*, and AFGSC supplements.

5.3.3. Ensure frequency of wash/rinse cycles are maintained IAW TO 1-1-691, Aircraft Weapons Systems, Cleaning and Corrosion Control and revised as necessary based on changes in mission and location.

5.3.4. Ensure Plans, Scheduling and Documentation sections report any assigned aircraft wash overdue more than 30 days with an official memo to HQ AFGSC/A4M not later than seven days after the 30-day overdue date. When aircraft are located in severe corrosion environments the overdue wash reporting requirement is 15 days. Within this memo, include reason for overdue and corrective action taken to prevent further occurrences.

5.4. Aircraft Maintenance Squadron Operations Officer (OO) Responsibilities. The Maintenance Squadron Operations Officer is responsible for oversight of aircraft wash requirements. The OO will:

5.4.1. Ensure frequency-of-cleaning/wash cycles are established for assigned aircraft to maximize corrosion prevention. Monitor aircraft wash schedules to eliminate overdue washes. In no case will unit wash cycles exceed the maximum wash cycles listed in TO 1-1-691.

5.4.2. Ensure wash crew supervisors are experienced/qualified 5-levels or above. The wash crew supervisor will be trained by the Corrosion Prevention and Control Program Manager or a qualified 7-level aircraft structural maintenance technician. Training shall be documented in the wash rack supervisor's training record.

5.4.2.1. Ensure trained wash crew supervisors are present throughout the duration of aircraft washes.

5.4.3. Provide a task trained and qualified aircraft wash crew, to include as a minimum, a dedicated Crew Chief and/or assistant dedicated Crew Chief and ensure availability of personal protective equipment within the work center.

5.5. Corrosion Prevention and Control Program Manager Responsibilities. The corrosion manager is the clearinghouse for all aircraft and support equipment cleaning, corrosion and organic coatings related information and taskings. The Corrosion Prevention and Control Program Manager will:

5.5.1. Ensure creation of a wing supplement to this instruction to include, but not limited to the following:

5.5.1.1. Local corrosion prevention training requirements.

5.5.1.2. NAF, Wing, OG, Operational Test and Bomb Squadron commander aircraft designation and marking requirements of identified aircraft.

5.5.1.3. Local unit marking requirements e.g. tail stripes, crew names, nose art, etc.

5.5.1.4. Aircraft paint identification placard size, shape and information requirements.

5.5.2. Ensure corrosion inspections are accomplished during each phase/periodic inspection for aircraft and equipment assigned.

5.5.3. Ensure required equipment is obtained for efficient and effective corrosion prevention and control program.

5.5.4. Train or designate a 7-level ASM technician to train AMXS wash crew supervisors in all aspects of aircraft wash and to develop and implement a wash crew supervisor training plan.

5.5.5. Ensure development and utilization of local aircraft wash checklists IAW TO 00-5-1.

5.5.6. Ensure personnel are trained prior to taking receipt/custody of wash rack facilities and equipment.

5.5.6.1. Aircraft wash facilities and corrosion control programs are unique to each base. Base specific training is required for all newly assigned personnel. Training from a previous base will not be used.

5.5.6.2. Ensure training is documented in appropriate training records.

5.5.7. Enforce the use of approved coating materials and cleaning compounds as determined by TOs, Qualified Products Listings (QPL) and Qualified Products Database (QPD).

5.5.8. Ensure unit's corrosion related training courses are properly administered and tracked IAW Chapter 4.

5.5.9. Ensure coating system scoring and maintenance is accomplished IAW paragraph 5.12.2.

5.6. ASM Responsibilities. The section chief will:

5.6.1. Ensure no other maintenance is accomplished on aircraft, equipment, or within environmentally controlled/cordoned off areas when hazardous/toxic materials are in use that requires the use of specialized personal protective equipment. In the event specialized respiratory protection equipment is required, personnel will be properly fitted for the equipment and trained in its use IAW AFOSH Std 48-137.

5.6.2. Forecast funding to attend and participate in applicable CPABs and other corrosion/structural related programs/meetings.

5.6.3. Submit CPAB agenda items to HQ AFGSC/A4M ASM Manager.

5.6.4. Serve as the ASM technical assistant to the Group Commander.

5.7. Wash Rack Facility Manager Responsibilities. The Wash Rack Facility Manager will:

5.7.1. Ensure the required number and sizes of fire extinguishers are available and serviceable.

5.7.2. Ensure grounding points are inspected and approved IAW TO 00-25-172.

5.7.3. Ensure fall protection lifeline cables are installed when required and properly maintained IAW AFOSH Stds 91-501, *Air Force Consolidated Occupational Safety Standard*, and 91-100, *Aircraft Flightline – Ground Operations and Activities*.

5.7.4. Ensure wash rack facility and surrounding area is kept clean and properly maintained.

5.7.5. Maintain all wash rack equipment in serviceable condition (i.e., water hoses, pumps, air hoses, powered wash equipment, support equipment, etc).

5.8. Wash Crew Supervisor Responsibilities. The Wash Crew Supervisor will:

5.8.1. Provide daily safety briefings explaining hazards associated with wash rack operations.

5.8.2. Ensure aircraft wash crews are task trained and qualified.

5.8.3. Ensure proper safety equipment, personal protective equipment and cleaning materials are serviceable and used IAW AFOSH Stds 91-501 and 91-100.

5.8.4. Enter the requirement for wash, perform cleanliness inspection, sign the wash completion and enter the lubrication requirement in the AFTO Form 781A, *Maintenance Discrepancy and Work Document*.

5.8.5. Ensure fall protection is serviceable and used when required IAW AFOSH Stds 91-501 and 91-100.

5.8.6. Inspect all wash rack equipment for serviceability (i.e., water hoses, pumps, air hoses, powered wash equipment, support equipment, etc).

5.8.7. Ensure wash rack facility and surrounding area is clean before and after use.

5.9. Quality Assurance Responsibilities. Quality Assurance will:

5.9.1. Inspect a minimum of 10 percent of aircraft every quarter for cleanliness and lubrication after wash.

5.9.2. Monitor the use of approved coating materials and cleaning compounds as determined by TO, QPL or QPD for cleaning compounds and AFRL/MLSA for coating materials.

5.10. Aerospace Ground Equipment (AGE) Flight Chief Responsibilities. The AGE Flight Chief is responsible for the efficient utilization of AGE resources. The AGE Flight Chief will:

5.10.1. Ensure an effective corrosion control program is established and enforced for assigned equipment IAW AFI 21-101, TO 35-1-3, *Corrosion Prevention, Painting and Marking of USAF Support Equipment*, and this instruction.

5.10.2. Develop and implement a tracking system to prioritize complete paint for AGE equipment based on a “worst is first” principle.

5.10.3. Ensure IMDS is used to schedule and document AGE painting.

5.10.4. Ensure maintenance, servicing and inspection activity personnel are oriented to corrosion prevention and control.

5.10.5. Ensure powered and non-powered AGE is cleaned, thoroughly inspected, and touched-up as necessary during each periodic inspection with the appropriate, approved materials.

5.10.6. Enforce proper use of approved cleaning compounds IAW TO 35-1-3 and the QPL/QPD. Obtains QPLs from wing Corrosion Prevention and Control Program Manager every 6 months and uses them in conjunction with applicable TOs to verify all compounds on-hand are authorized for use on designated equipment.

5.10.7. Schedule work beyond AGE work center capability into the appropriate fabrication work center.

5.10.8. Ensure tone-down procedures are followed as described in paragraph 5.13. of this instruction.

5.11. Corrosion Prevention and Control Program Requirements. This section establishes basic corrosion prevention and control program requirements to be used in conjunction with specific functional area guidance contained in this instruction.

5.11.1. Owning activities will wash and clean their aircraft and support equipment.

5.11.2. Corrosion Prevention and Control Program Manager and/or ASM personnel will assist the owning activities in their corrosion prevention efforts by accomplishing scheduled corrosion inspections on aircraft, support and test equipment.

5.11.3. Only ASM personnel will perform aircraft inspection work cards specified for accomplishment by ASM in the applicable -6 TO. All maintenance personnel, regardless of AFSC, will examine each part removed and inspect the inside of all exposed areas for corrosion. Avionics maintenance personnel will inspect the electrical connectors of avionics line replaceable units (LRUs), inside equipment drawers, etc., for corrosion. All deficiencies noted during these inspections will be appropriately documented. When corrosion discrepancies are discovered that may affect aircraft structural integrity or safety of flight/operation or are beyond the using organization's capability to evaluate/repair, an aircraft structural maintenance specialist will be requested.

5.11.4. Maintenance personnel who remove/install aircraft panels and doors must ensure seals are serviceable and sealant applied to panels and fasteners as specified in applicable aircraft technical orders.

5.11.5. Maintenance personnel will report all corrosion deficiencies through IMDS. Accurate documentation of maintenance actions in support of the corrosion control program is essential to support future manning, equipment requirements, training and parts/material procurement requirements.

5.12. Aerospace Vehicle Coating and Marking Requirements.

5.12.1. This section provides guidance for applying command approved, non-USAF standard aircraft coatings and markings as authorized in TO 1-1-8, *Application and Removal of Organic Coatings, Aerospace and Non-Aerospace Equipment*. Paint schemes/configurations and USAF standard aircraft markings will be applied in accordance with TO 1-1-8 and the applicable aircraft technical order.

5.12.2. Coating System Scoring and Maintenance. All AFGSC units are required to score aircraft coating systems to determine when restoration or touch-up painting is required. Aircraft painting will be scheduled on a "worst is first" basis to maintain coating system integrity. All aircraft coating systems, except B-2, will be evaluated /rated every 6 months. Supervisors will use ratings to determine corrosion treatment/paint scheduling priority. Units are required to adopt maintenance-painting techniques stated in TO 1-1-8 to maintain aircraft corrosion protection between overcoats.

5.12.3. Aircraft Markings. Aircraft markings will be applied to aircraft as specifically authorized by this instruction, TO 1-1-8, or the applicable aircraft technical orders. Low Observable (LO) aircraft markings not currently approved require a waiver from HQ AFGSC/A4M with System Program Directorate (SPD) approval due to strict survivability analysis requirements. Aircraft inputs to depot will be marked IAW with Air Force directives and this instruction only, unless otherwise approved by HQ AFGSC/A4M. HQ AFGSC/A4M is the point of contact for B-2, B-52, and T-38A aircraft painting and markings. All aircraft markings and basic paint schemes will be maintained intact, legible and distinct in color. Command standardization of markings by mission design series (MDS) is of primary concern. AFGSC specific requirements are located in [Attachment 2](#).

5.12.3.1. Stenciling. Markings may be applied using stencils or decals. Refer to TO 1-1-8 to determine the compatibility of stenciling paints, paint finishes and decal applications.

5.12.3.2. Command Insignia. The application of the command insignia on aircraft is mandatory. Size and location of command insignias by MDS are specified in [Attachment 2](#).

5.12.3.3. Organizational Insignia (Wing). The application of wing insignia is mandatory. Insignia will be applied IAW [Attachment 2](#).

5.12.3.4. Organizational Insignia (Squadron). Squadron insignia may be applied to B-52 aircraft at the wing's option IAW [Attachment 2](#).

5.12.3.5. Distinctive Unit Aircraft Identification Marking. Unit designators are mandatory for AFGSC aircraft. Unit designators listed in [Attachment 3](#) will be applied IAW [Attachment 2](#).

5.12.3.6. Tail Stripe. Tail stripes are applied as a wing option IAW [Attachment 2](#), used to identify aircraft operation squadrons. The Wing Commander must approve all tail stripe designs. Each operations squadron will have a tail stripe unique to that squadron. The use of the same tail stripe by two or more squadrons within a wing is not permitted. The stripe may be any color or pattern, and may contain a logo. Photographs of locally approved tail stripe designs must be provided to HQ AFGSC/A4M for review and file. Units will not repaint tail flashes/stripes during deployed operations. Once deployed, aircraft will retain their original paint configurations, unless otherwise directed by AFCENT/CC.

5.12.3.7. Aircrew and Crew Chief Names. Aircrew/Crew Chief names may be applied to all command aircraft. Crew Chief/assistant(s) names shall be applied to all aircraft assigned to units with an established Dedicated Crew Chief (DCC) program. All names must be removed IAW TO 1-1-8 prior to deployment from home station in direct combat zones or when participating in contingencies that may subject aircraft to hostile fire abroad. Application of nicknames, punctuation, and/or call signs is not permitted. All aircraft in the wing will be standard with the exception of the designated Commander's aircraft, which may have different lettering but will not exceed established height requirements. A background block for pilot/Crew Chief names may be used. The block should be in contrasting color to the section of the aircraft where applied. For B-52 aircraft, the Wing Commander may approve a locally designed name block to promote unit pride. Photographs must be provided to HQ AFGSC/A4M for review and file. See [Attachment 2](#) for approved locally designed name blocks. For B-2 aircraft, a locally procured black nose gear door cover matching the sizing/placement criteria in [Attachment 2](#) may be installed.

5.12.3.8. Commander's Aircraft Markings. Commander's aircraft referred to in this instruction are those designated as NAF, Wing, or OG commanders of flying squadrons and Operational Test aircraft (OT). The NAF Commander may select one wing within the command to have an aircraft specifically marked. Wing Commanders may select one aircraft per MDS to apply commander type markings. All other commanders are authorized only one aircraft each to be marked with standardized commander type

markings. Standard insignias and markings will not be altered in location, dimension, or configuration to accommodate commander's aircraft markings. The following are markings authorized for use on commander's aircraft:

5.12.3.8.1. Wing and/or NAF insignias. The wing and/or NAF insignias will be applied on the right forward fuselage and a collage of assigned flight/operations squadron insignias will be applied on the left forward fuselage.

5.12.3.8.2. Highlighting of unit designator and bomb wing designator. All highlighting will be done in contrasting gray, black or white as long as it meets primary basecoat gloss requirements (i.e., gloss, camouflage or gunship). All unit designators and radio call numbers will remain on vertical stabilizers or as depicted in applicable technical orders.

5.12.3.9. Nose Numbers. Aircraft tail numbers shall be in block or Helvetica letters, not to exceed four digits. Specific location and size for each different type aircraft is contained in [Attachment 2](#). The paint material(s) used to apply nose numbers shall have the same gloss requirement as the base aircraft coating.

5.12.3.10. Bomber Combat Marking. Designated bomber aircraft with a successful weapons release in combat operations are authorized to display a conventional bomb and/or CALCM silhouette on that aircraft. These markings will be applied in contrasting shades that conform to the basic aircraft camouflage requirements. B-2 and B-52 combat marking configurations are located in [Attachment 2](#).

5.12.3.11. Nose Art. For purposes of clarification, "nose art" shall be the term used to identify specialized artwork applied to any area of the aircraft. Nose art is only authorized on the B-52. The only exception to this policy is application of the AF approved "Let's Roll" nose art design. Wing Commanders may designate one aircraft within the wing to apply the "Let's Roll" design. The aircraft selected is at the Wing Commander's discretion. Waivers for additional aircraft will not be entertained. Placement of nose art is authorized on the left side of the aircraft only. Authorized nose art is limited to 3 feet by 3 feet in size and shall meet the following criteria:

5.12.3.11.1. Distinctive, symbolic and designed in good taste.

5.12.3.11.2. Enhance unit pride.

5.12.3.11.3. Gender neutral.

5.12.3.11.4. Match gloss requirements of the basic paint scheme, i.e., aircraft with flat camouflage schemes require application of nose art in flat colors.

5.12.3.11.5. All designs will be reviewed and approved by the Wing Commander prior to routing to AFGSC/A4/7 for final approval by the senior logistics official. World War II nose art that meets the above criteria may be used. Cartoon-type characters may be used; however, the unit will be responsible for all copyright issues. Removal of nose art prior to deployment will be at the discretion of the Wing Commander.

5.12.3.12. Unique Unit Markings.

5.12.3.12.1. Anniversary Markings. When applied, anniversary markings will not interfere with required aircraft markings and must be removed immediately after the anniversary period (1-year maximum). Waivers are not required. Wing Commanders must approve the markings, and photographs must be provided to HQ AFGSC/A4M for review and file.

5.12.3.12.2. State flags and logos other than anniversary type are not considered unit unique markings.

5.12.3.13. Aircraft Naming. AFGSC/PA is the clearinghouse for all requests to name AFGSC aircraft. All requests must ultimately be approved by AF/CV. This includes markings previously considered unit unique and are community related/appreciation types such as "Spirit of," "City of" and "State of." Naming aircraft is a tradition designed to commemorate or honor individuals, geographic locations, or events either for the support provided by the Air Force on a long-term basis, or because of its significance to Air Force history or heritage. Recommendations must include a proposed name, suggested aircraft and tail number, and detailed justification for the proposed name. Contact your wing Public Affairs office for details.

5.12.3.14. Aircraft Travel Pods. Travel pods will be painted in gloss paint the same color as the aircraft with no additional markings. Travel pods designated for commanders may contain the position and name of the individual and appropriate insignia. Lettering may be of any color and style, but shall not exceed 6 inches in height. Commander's travel pod paint scheme, final marking sizes, and placements will be approved by the WG/CC and documented within local unit operating instructions.

5.12.3.15. Paint Identification Placard. The paint identification block is a mandatory marking. The block may be of a unique design, or state outline, but must not exceed 6 inches by 6 inches in size and will match the color of other markings on the aircraft. Waiver requests are not required for this item, however, Wing Commander approval is required, and photographs of the design must be provided to HQ AFGSC/A4M for review and file.

5.12.3.16. Competition Aircraft. Units participating in competitions will follow the guidelines established in competition rules for aircraft appearance. Competitions shall be considered "come as you are" and no waivers will be granted. "Come as you are" is defined as no special effort, painting, or additional markings applied to enhance or improve the overall appearance of the aircraft. This includes polishing of titanium, commander markings, etc.

5.12.3.17. Aircraft Transfer. The following markings must be removed prior to formal transfer of aircraft to other units or MAJCOMs (aircraft retiring to AMARC need not have any markings removed).

5.12.3.17.1. Organizational insignias.

5.12.3.17.2. Distinctive unit aircraft identification.

5.12.3.17.3. Tail stripe.

5.12.3.17.4. Aircrew and Crew Chief names.

5.12.3.17.5. Unit-unique markings.

5.12.3.17.6. Nose art may be retained if gaining unit agrees.

5.12.3.18. Waivers. Wing Commanders must submit waiver requests to HQ AFGSC/A4M for approval/disapproval. Waivers that are in violation of aircraft technical orders will not be accepted. Waiver requests must include the following:

5.12.3.18.1. Clear statement of present procedure/markings.

5.12.3.18.2. Clear statement of proposed change.

5.12.3.18.3. Justification to include historical significance, if applicable.

5.12.3.18.4. Photographs: Two high quality digital color photographs, one of present marking and one of requested change.

5.12.3.19. Photo Requirements. All photo requirements may be met by a high quality digital photograph. All AFGSC units must submit one full length (landscape orientation) of the commander's aircraft each time a marking change occurs to HQ AFGSC/A4M for review and file. Units will provide photos of unique markings for all local option changes authorized by this instruction (i.e., tail stripe/name block design and/or color changes, paint data placard, nose art, etc.) to HQ AFGSC/A4M for review and file.

5.12.3.20. Total Force Integration (TFI). For TFI locations under the classic association, coordination is required from both wing commanders to identify specific aircraft for unit identification and/or organizational insignia changes. These proposed changes are in support of ownership, pride and esprit de corps between active duty, reserve, and guard partnering wings. Once change requests are approved by the principal aircraft owning Wing Commander, the request will be routed to HQ AFGSC/A4M for final review and approval IAW TO 1-1-8.

5.13. Tone Down.

5.13.1. Aerospace Ground Equipment (AGE).

5.13.1.1. When feasible, equipment will be completely stripped and properly prepared IAW TOs 1-1-8 and 35-1-3 before applying polyurethane coatings.

5.13.1.2. Minimum reflectorizing requirements will be IAW TO 35-1-3. Black subdued reflectorized tape will be used in lieu of white when left optional by TO 35-1-3.

5.13.1.3. Safety/danger/warning markings will be non-reflective red.

5.13.1.4. Caution markings will be non-reflective black.

5.13.1.5. Informational markings will be non-reflective black and be kept to a minimum.

5.13.1.6. Dedicated squadron identification markings will not exceed a 2-inch by 6-inch area below two field numbers if the equipment area permits.

5.13.1.7. Fuel designation markings will be 1-inch non-reflective black letters on the filler cap or most conspicuous area adjacent to the filler cap.

5.13.1.8. Locally devised field numbers will be black.

5.13.1.9. Interior areas of AGE exposed during operation will be toned down to match exterior painted surfaces.

5.13.1.10. AGE arriving on base and requiring tone down will be painted within 180 days of receipt.

Chapter 6

ICBM CORROSION PREVENTION AND CONTROL PROGRAM

6.1. Maintenance Group Commander Responsibilities. The MXG/CC or 576 FLTS/CC is responsible for establishing and maintaining an effective Corrosion Prevention and Control Program. The MXG/CC or 576 FLTS/CC will:

6.1.1. Ensure adequate facilities, equipment, manpower, material and funding are available to support a sound corrosion prevention and control program.

6.2. Corrosion Prevention and Control Program Manager Responsibilities. The corrosion manager is the clearinghouse for all corrosion and coatings related information and taskings and will:

6.2.1. The Corrosion Shop Foreman or government contract Quality Assurance Evaluator (QAE) will be designated as the Corrosion Prevention and Control Program Manager.

6.2.2. The Corrosion Shop Foreman or government contract QAE will attend the annual ICBM CPAB, AF Corrosion Conference, AF Environmental Symposium and Foreman's Meeting as specified by the AFGSC Corrosion Prevention and Control Program Manager.

6.2.3. The Corrosion Shop Foreman or government contract QAE representative, instructor(s), and evaluator(s) will attend SSPC or NACE training on coating system application. Forward all projected training through the AFGSC Corrosion Prevention and Control Program Manager.

6.2.4. Develop and publish local corrosion prevention training requirements as required.

6.2.5. Ensure only authorized chemical cleaning materials and corrosion removal methods are used and that Material Safety Data Sheets are available for each chemical used.

6.2.6. Ensure required equipment is obtained for an efficient and effective corrosion prevention and control program.

6.2.7. Enforce the use of approved coating materials and cleaning compounds as determined by TOs, QPL and QPD.

6.3. General Policy.

6.3.1. Only certified corrosion control technicians (CCT) or contracted corrosion control technicians will perform coating removal/application tasks required by applicable -6 work cards.

6.3.2. Corrosion control technicians will not be used for projects/tasks outside those required for ICBM facilities and support equipment without prior authorization of the HQ AFGSC/A4M Corrosion Prevention and Control Program Manager.

6.3.3. Specifications for contracts affecting ICBM systems/subsystems must be routed through the MXG Corrosion Prevention and Control Program Manager for approval prior to implementation. The MXG Corrosion Prevention and Control Program Manager is responsible for ensuring coating systems used by contractors meet AFI and technical orders requirements.

6.3.4. Missile Engineering must coordinate all Master Change Log activities and RP/RPIE changes through the MXG Corrosion Prevention and Control Program Manager.

6.3.5. On-base launch facility trainers will be scheduled on a 3-year cycle for corrosion inspection/treatment using the applicable LF -6 work cards.

6.4. Painting.

6.4.1. LF topside areas are extremely susceptible to environmental factors. The Corrosion Shop Foreman must exercise sound professional judgment when determining when to spot paint or completely recoat surfaces. Complete recoats are authorized for topside surfaces.

6.4.2. For areas other than LF topside, limit painting to the smallest practical area required to maintain a professional appearance and an effective coating system.

6.4.3. All coating systems used on weapon system components and structures, to include real property installed equipment and operational ground equipment, will comply with technical requirements in TOs 21M-LGM30F-101, 1-1-8, 1-1-691, 35-1-3, or applicable equipment TOs.

6.4.4. Units will maintain weapon system components IAW [Attachment 4](#).

6.4.4.1. Units will deplete existing stocks of paint prior to switching to color schemes specified in this instruction.

6.4.4.2. All coatings purchased after implementation of this instruction will be IAW [Attachment 4](#).

6.4.4.3. A detailed paint plan for living facilities or other above ground facilities at the Missile Alert Facility is not required.

6.4.4.4. **(Added-341MW)** The 341 MMXS Corrosion Shop will provide in-shop and on-base corrosion treatment and painting for Aerospace Ground Equipment (AGE), Missile Support Equipment (MSE), R/S Handling Gear, On-Base Trainers, Proof Load Test Facility (PLTF) and for base agencies that support Missile Wing activities. These agencies include: Vehicle Equipment Section (341 MOS/MXOPQ); Special Weapons Flight (341 MUNS/MXWS); AGE Shop (341 MOS/MXOPA); Rivet Mile (341 MMXS/MMXSR) and Helicopter Maintenance (341 MOS/MXOOH).

6.4.4.5. **(Added-341MW)** MAF LCC Corrosion Work Procedures: To address concerns associated with painting in the LCC and exposure of missile combat crew members to paints, solvents and other chemicals, corrosion control and painting in the LCC will be performed IAW with the following procedures. **NOTE:** Air sampling was conducted by Base Environmental Engineering (BEE), 341 MDOS/SGOAB, on 5-7 Dec 2005 and 4-6 Dec 2006. Air sampling covered three day periods and included paint removal, priming and painting activities. Results revealed that “corrosion personnel performing the work are below exposure levels as noted in the corrosion control (067A) sampling results. Missileers are further removed from the generation source during the process activities than the personnel that were sampled.”

6.4.4.5.1. **(Added-341MW)** 341 MMXS Corrosion Shop will schedule a Day 1, 3-Year dash six corrosion inspection 30-60 days prior to the scheduled inspection due date. At this time corrosion specialists will conduct a thorough site inspection to

identify and verify discrepancies. Corrosion, water intrusion, water leaks and standing water will be documented in IMDS. Discrepancies that will prevent corrosion treatment from being performed, such as standing water under the LCC enclosure will be prioritized and coordinated with CES and other appropriate work centers to ensure completion before scheduling LCC painting.

6.4.4.5.2. (Added-341MW) Before performing painting operations at an LCC, 341st Maintenance Operations Squadron Scheduling Control (341 MOS/MXOOS) and 341 MMXS Corrosion Shop will:

6.4.4.5.2.1. (Added-341MW) Schedule corrosion control work in the LCC and ESA room at least one week prior to performing work.

6.4.4.5.2.2. (Added-341MW) Coordinate with 341st Operations Group (341 OG/OGVO) to ensure crews are briefed and prepared to accommodate the scheduled work.

6.4.4.5.2.3. (Added-341MW) Ensure that all 5 MAF's in the squadron are on alert with no time slots transferred. If any LCC's in the squadron are off alert, painting will not be scheduled in that squadron until all 5 LCC's are back on line. Painting may be conducted on a targeted MAF if it is off alert for other reasons and it's return to alert status will not be effected by LCC painting.

6.4.4.5.2.4. (Added-341MW) Verify that all prerequisite work orders identified above (para 6.4.4.5.1.) are completed.

6.4.4.5.2.5. (Added-341MW) A 341 MMXS Corrosion Control Team (CCT) will dispatch on the scheduled date and coordinate with the missile combat crew to ensure all 5 LCC's are on alert before they begin LCC corrosion removal. **NOTE:** Corrosion Control personnel are not Code Handler qualified and cannot maintain control of the LCC during corrosion control work. The CCT will perform corrosion removal operations and during this time, two Missile Combat Crew members must be present and provide proper code control.

6.4.4.5.2.6. (Added-341MW) It is recommended that missileers wear hearing protection during the corrosion removal process.

6.4.4.5.2.7. (Added-341MW) Before applying primer, CCT members will coordinate with the combat crew to ensure they are prepared to transfer monitoring responsibilities and perform console shutdown. The missile combat crew will initiate the 341 OG LCC Corrosion Control Shutdown checklist and perform time slot transfer. After priming is completed, CCT will leave the LCC first with the missile combat crew being the last personnel to go topside. Ensure that the LCC air handler remains operating.

6.4.4.5.2.8. (Added-341MW) After CCT personnel exit the LCC, the combat crew will proceed topside and reenter the LCC as required to perform safety and security checks. Topcoat application will be completed at a later time, after the primer has dried.

6.4.4.5.2.9. (Added-341MW) To complete topcoat application, the combat crew will re-occupy the LCC before CCT to ensure proper code control. CCT will

proceed with topcoat application in coordination with the combat crew. Once completed, CCT will again exit the LCC first and the combat crew will follow them topside. The combat crew will reenter the LCC as required to perform Safety and Security checks.

6.4.4.5.2.10. **(Added-341MW)** After adequate drying and ventilation time, typically 24-48 hours, the combat crew will assess and decide when the LCC atmosphere is sufficiently cleared to reoccupy. Upon making the decision to reoccupy, the combat crew will complete the 341 OG LCC Corrosion Control Startup check list. Normal LCC operation will continue at this point.

6.4.5. Do not paint equipment/components where the operational capability or designed function of an item would be impaired by paint. The following areas will not be painted:

6.4.5.1. Fabric or plastic surfaces.

6.4.5.2. Bare or untreated concrete surfaces. (Exception: warning lines, caution lines, designators, etc. required by technical orders.)

6.4.5.3. Surfaces in contact with weather seals and gaskets. (Exception: surfaces specifically directed by TO 21M-LGM30F-101 and TO 21M-LGM30F-112, *General Inspection and Repair Procedures ICBM Systems*.)

6.4.5.4. Radio frequency interference (RFI) gaskets/shields and surfaces in contact with RFI gaskets/shields.

6.4.5.5. Machined surfaces of moving parts.

6.4.5.6. Identification plates and warning signs.

6.4.5.7. Lubrication devices and grease fittings.

6.4.5.8. Electrical terminal strips, ground straps, connectors, wires, and bus bars.

6.4.5.9. Blast valve assemblies, hydraulic and pneumatic tubing, fittings and controls.

6.4.5.10. Shock Isolator piston rods.

6.4.5.11. Abrasive (non-skid) surfaces/floor plates.

6.4.5.12. Asphalt shingles.

6.4.5.13. Equipment drawers.

6.4.5.14. Sound-proofed surfaces.

6.4.5.15. Wooden ladders.

Chapter 7

UH-1N HELICOPTER CORROSION PREVENTION AND CONTROL PROGRAM

7.1. HQ AFGSC/A4M Responsibilities. AFGSC/A4 is responsible for overall ASM program management within the command. The designated program manager will:

7.1.1. Manage the UH-1N career field for AFGSC.

7.1.2. Represent AFGSC at assigned weapon system corrosion prevention advisory boards (CPAB), AF/DOD corrosion conferences, and field surveys.

7.1.3. Approve all intra-command TDY manning assistance requests.

7.1.4. Coordinate all intra-command temporary and permanent equipment transfers.

7.1.5. Develop and coordinate AFGSC policy and procedures for UH-1N functions.

7.2. Wing Commander Responsibilities. Wing Commanders will review and approve all aircraft paint waiver requests prior to submission to HQ AFGSC/A4M.

7.3. Maintenance Group Commander Responsibilities. The MXG/CC is responsible for establishing and maintaining an effective Corrosion Prevention and Control Program. The MXG/CC will:

7.3.1. Ensure adequate facilities, equipment, manpower, material and funding are available to support a sound corrosion prevention and control program.

7.3.2. Appoint by letter, a Corrosion Prevention and Control Program Manager to ensure all facets of corrosion prevention are being conducted for UH-1N operations.

7.3.3. Ensure adequate facilities, equipment, manpower, material and funding are available to support a sound corrosion prevention and control program.

7.3.4. Ensure facility control technology meets local, state and federal Environmental Protection Agency requirements in conjunction with current National Emission Standards for Hazardous Air Pollutants.

7.3.5. Ensure adequate wash rack facilities are available to wash aircraft on a year round basis. An outside wash rack may be used on an interim basis when weather conditions permit and when approved by Base Civil Engineer.

7.3.6. Ensure frequency of wash/rinse cycles are maintained IAW TO 1-1-691, and revised as necessary based on changes in mission and location.

7.4. Corrosion Prevention and Control Program Manager Responsibilities. The corrosion manager is the clearinghouse for all UH-1N corrosion and coatings related information and taskings and will:

7.4.1. Develop and publish local corrosion prevention training requirements as required.

7.4.2. Ensure corrosion inspections are accomplished during each periodic inspection for assigned equipment.

7.4.3. Ensure only authorized chemical cleaning materials and corrosion removal methods are used and that Material Safety Data Sheets are available for each chemical used.

7.4.4. Ensure required equipment is obtained for an efficient and effective corrosion prevention and control program.

7.4.5. Enforce the use of approved coating materials and cleaning compounds as determined by TOs, QPL and QPD.

7.4.6. Report corrosion program deficiencies outside unit control through proper channels.

7.4.7. Determine the adequacy of corrosion control work cards for assigned equipment based on mission and location. Submit technical order changes to address deficiencies.

7.5. General Policy. Maintain aircraft paint scheme, markings, and decals IAW TOs 1-1-8 and 1-1-691, and this instruction.

7.5.1. Do not apply unauthorized decals or markings to aircraft AFGSC/A4M is the approval authority for deviations from the instructions or technical orders. Submit drawings or paintings for approval to AFGSC/A4M.

7.5.2. Aircraft transferring from other commands should comply with AFGSC instructions within 90 days after transfer.

7.5.3. Appearance Standards. Maintain aircraft paint, markings, and corrosion preventive coatings in a manner that will enhance the overall appearance and provide for the best corrosion protection.

7.5.3.1. Do not paint aircraft solely for beautification.

7.5.3.2. Markings, warnings, and decals shall be legible and distinct.

7.5.3.3. Inspect and clean aircraft IAW applicable TOs or as needed to maintain acceptable cleanliness and corrosion prevention.

7.6. Corrosion Prevention and Control Program. All unit personnel must identify problem areas and maintenance personnel must identify, inspect, repair, and prevent corrosion.

7.6.1. Salt Water Environment. Aircraft subject to a salt-water environment will require additional emphasis to prevent corrosion during daily and phase/periodic inspections.

7.6.2. Aircraft Wash. Aircraft wash cycles will be IAW TO 1-1-691 or as required maintaining a clean, corrosion, and dirt-free condition.

7.6.3. Repair aircraft using applicable technical data. Ensure technicians comply with safety and environmental concerns.

7.6.4. Maintain and use proper protective equipment to include rain gear, face shields or goggles, rubber gloves, boots, and safety harness as required by AFOSH standards.

7.6.5. Aircraft wash rack shall meet all Federal, State, local, and county environmental requirements, to include disposal of wastewater, storage, and use of aircraft soaps/cleaning agents.

7.6.6. Use only authorized aircraft cleaning materials, to include spot cleaning materials, as required by specific aircraft TOs and ensure the actual on-hand materials are on the Qualified Products Listing.

7.6.7. Lube helicopters and drain pitot-static system within four hours after wash. Enter a red X entry for lube and pitot-static drain on Aircraft AFTO Form 781A.

7.6.8. Apply soil barrier as needed to the tailboom areas affected by engine exhaust on the UH-1N helicopters.

7.6.9. Wash aircraft and cowling prior to phase inspection input.

7.6.10. For aircraft away from home station for more than 30 days, comply with appropriate wash cycle as possible with available facilities.

7.6.11. Aircraft coatings. Repair deteriorated aircraft coatings and areas of corrosion when discovered in order to provide continued surface protection. Protect metals unable to receive a primer with a corrosion preventative compound or another type of coating. Paint or touch up camouflaged aircraft with subdued coatings.

7.7. UH-1N Paint:

7.7.1. Paint scheme. Use a camouflage paint scheme on main airframes.

7.7.2. Coating System Scoring and Maintenance. All AFGSC units are required to score aircraft coating systems to determine when restoration or touch-up painting is required. Aircraft painting will be scheduled on a "worst is first" basis to maintain coating system integrity. All aircraft coating systems will be evaluated /rated every 6 months. Supervisors will use ratings to determine corrosion treatment/paint scheduling priority. Units are required to adopt maintenance-painting techniques stated in TO 1-1-8 to maintain aircraft corrosion protection between overcoats.

7.7.3. Aircraft Markings. Aircraft markings will be applied to aircraft as specifically authorized by HQ AFGSC, this instruction, TO 1-1-8, or the applicable aircraft technical orders. Aircraft inputs to depot will be marked IAW with Air Force directives and this instruction only, unless otherwise approved by HQ AFGSC/A4M. HQ AFGSC/A4M is the point of contact for UH-1N aircraft painting and markings. Approved markings and locations are listed in [Attachment 2](#). All aircraft markings and basic paint schemes will be maintained intact, legible and distinct in color. Command standardization of markings by mission design series (MDS) is of primary concern.

7.7.4. Stenciling. Markings may be applied using stencils or decals. Refer to TO 1-1-8 to determine the compatibility of stenciling paints, paint finishes and decal applications.

7.7.5. Command Insignia. The application of the command insignia on aircraft is mandatory. Size and location of command insignias by MDS are specified in [Attachment 2](#).

7.7.6. Organizational Insignia. TO 1-1-8 (optional). If used, the insignia will be applied to both sides on the cargo doors. The operational squadron insignia may be applied on the left side in place of the wing insignia. Wing and squadron insignias will be the same color scheme as the command insignia. See [Attachment 2](#).

7.7.7. Distinctive Unit Aircraft Identification Marking. The application of the unit designator is mandatory for AFGSC aircraft unless otherwise directed. HQ AFGSC/A4M is the office of primary responsibility (OPR) for the assignment of unit designators. The primary factor used to determine appointment of unit designators is the aircraft/unit

assignment location. TO 1-1-8 or the applicable aircraft TO will provide color restrictions and location for the unit designator. The unit designator will be applied in accordance with guidelines in **Attachments 2 and 3** of this instruction.

7.7.8. Crew Chief and Pilot name (Optional): All names must be removed prior to deployment from home station in direct combat zones or when participating in contingencies that may subject aircraft to hostile fire abroad. Application of nicknames, punctuation, and/or call signs is not permitted. Style and size of letters are a unit option but will not exceed 3 inches in height. All aircraft in the wing will be standard. See **Attachment 2**.

7.7.9. Tail Stripe. Tail stripes are applied as a wing option, used to identify aircraft operation squadrons. Each operations squadron will have a tail stripe unique to that squadron. The use of the same tail stripe by two or more squadrons within a wing is not permitted. The tail stripe will be applied at the upper portion of the vertical stabilizer, and must be in the form of a straight stripe. The width will not exceed 9 inches. The stripe may be any color or pattern, and may contain a logo. Photographs of tail stripe designs must be provided to HQ AFGSC/A4M for approval. See **Attachment 2**.

7.7.10. Tail Markings: See **Attachment 2**.

7.7.11. Nose Numbers (Optional): If used, aircraft nose numbers shall be in block or Helvetica letters, not to exceed four digits. Specific location and size is listed in **Attachment 2**. The paint material(s) used to apply nose numbers shall have the same gloss requirement as the base aircraft coating.

7.7.12. Nose Art. For purposes of clarification, “nose art” shall be the term used to identify specialized artwork applied to any area of the aircraft. Placement of nose art is authorized on the left side of the aircraft only. Authorized nose art is limited to 3 feet by 3 feet in size and shall meet the following criteria:

7.7.12.1. Distinctive, symbolic and designed in good taste.

7.7.12.2. Enhance unit pride.

7.7.12.3. Gender neutral.

7.7.12.4. Match gloss requirements of the basic paint scheme, i.e., aircraft with flat camouflage schemes require application of nose art in flat colors.

7.7.12.5. All designs will be reviewed and approved by the Wing Commander prior to routing to AFGSC/A4/7 for final approval by the senior logistics official. World War II nose art that meets the above criteria may be used. Cartoon-type characters may be used; however, the unit will be responsible for all copyright issues. Removal of nose art prior to deployment will be at the discretion of the Wing Commander.

7.7.13. Aircraft Transfer. The following markings must be removed prior to formal transfer of aircraft to other units or MAJCOMs (aircraft retiring to AMARC need not have any markings removed).

7.7.13.1. Organizational insignias.

7.7.13.2. Unit designator.

7.7.13.3. Tail stripe.

7.7.13.4. Pilot and Crew Chief names.

7.7.13.5. Unit-unique markings.

7.7.13.6. Nose art may be retained if gaining unit agrees.

7.7.14. Waivers. Wing Commanders must submit waiver requests to HQ AFGSC/A4M for approval/disapproval. Waivers that are in violation of aircraft technical orders will not be accepted. Waiver requests must include the following:

7.7.14.1. Clear statement of present procedure/markings.

7.7.14.2. Clear statement of proposed change.

7.7.14.3. Justification to include historical significance, if applicable.

7.7.14.4. Photographs: Two high quality digital color photographs, one of present marking and one of requested change.

7.7.14.5. All designs will be reviewed and approved by the Wing Commander prior to routing to AFGSC/A4/7 for final approval by the senior logistics official. World War II nose art that meets the above criteria may be used. Cartoon-type characters may be used; however, the unit will be responsible for all copyright issues. Removal of nose art prior to deployment will be at the discretion of the Wing Commander.

7.7.14.6. Photo Requirements. All photo requirements may be met by a high quality digital photograph. Units will provide photos of unique markings for all local option changes authorized by this instruction (i.e., tail stripe/name block design and/or color changes, paint data placard, nose art, etc.) to HQ AFGSC/A4M for review and file.

CLIFFORD B. STANSELL, Colonel, USAF
Deputy Director, Logistics, Installations and
Mission Support

(341MW)

ROBERT W. STANLEY II, Colonel, USAF
Commander

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

- TO 00-5-1, *AF Technical Order System*, 01 May 2011
- TO 00-25-252, *Certification of Military Aircraft, Missile & Support Equipment Welders*, 15 April 2011
- TO 00-35D-54, *USAF Deficiency Reporting, Investigation, and Resolution*, 1 November 2011
- TO 1-1-8, *Application and Removal of Organic Coatings, Aerospace and Non-Aerospace Equipment*, 16 June 2011
- TO 1-1-689, *Avionics Cleaning and Corrosion Prevention/Control*, 01 March 2005
- TO 1-1-691, *Aircraft Weapons Systems Cleaning and Corrosion Control*, 11 May 2011
- TO 21M-LGM30F-101, *LGM30 Weapon System Corrosion Control and Treatment*, 04 October 2010
- TO 21M-LGM30F-112, *General Inspection and Repair Procedures ICBM Systems*, 24 May 2010
- TO 31R-10-5, *Antenna Systems, Maintenance, Repair and Testing*, 10 July 1992
- TO 31-10-24, *Communication Systems Grounding, Bonding and Shielding*, 15 November 2011
- TO 33B-1-1, *Nondestructive Inspection Methods*, 10 September 2010
- TO 33-1-37-1, *Joint Oil Analysis Program Laboratory Manual, Vol I, Introduction, Theory, Benefits, Customer Sampling Procedures, Programs and Reports*, 15 Sep 2011
- TO 33-1-37-2, *Joint Oil Analysis Program Laboratory Manual, Vol II, Spectrometric and Physical Test Laboratory Operating Requirements and Procedures*, 15 September 2011
- TO 35-1-3, *Painting of Aerospace Ground Equipment*, 15 July 2011
- (Added-341MW)** AF Form 847, Recommendation for Change of Publication
- AFI 32-1024, *Standard Facility Requirements*, 14 July 2011
- AFI 32-1054, *Corrosion Control*, 01 March 2000
- AFI 48-145, *Occupational and Environmental Health Program*, 15 September 2011
- AFI 90-821, *Hazard Communication*, 30 March 2005
- AFI 91-302, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*, 18 April 1994
- AFOSH Std 48-137, *Respiratory Protection Program*, 10 February 2005
- AFOSH Std 91-100, *Aircraft Flightline – Ground Operations and Activities*, 01 May 1998
- AFOSH Std 91-501, *Air Force Consolidated Occupational Safety Standard*, 07 July 2011

Prescribed Forms

No Forms or IMT's prescribed by this publication

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AFOSH—Air Force Occupational Safety and Health

CEM—Communications-Electronics-Meteorological

CPAB—Corrosion Prevention Advisory Board

CTK—Composite Tool Kit

DR—Deficiency Reports

IAW—In Accordance With

MSDS—Material Safety Data Sheet

SMD—Structural Management Director

SME—Subject Matter Expert

SPM—System Program Manager

TDY—Temporary Duty

QAE—Quality Assurance Evaluator

QPD—Qualified Products Database

QPL—Qualified Products Listings

Attachment 2**MARKING SPECIFICATIONS****Figure A2.1. Marking Specifications****B-2****COMMAND INSIGNIA:** 24 inches (subdued)

Located on left side at FS 304.5 (center of crest), with crest bottom at WL 167.2.

ORGANIZATIONAL (WING) INSIGNIA: 24 inches (subdued)

Located on right side of aircraft at FS 304.5 (center of crest), crest bottom at WL 167.2.

UNIT DESIGNATOR: 16 inches (subdued) 30-degree negative slant

Top of unit designator to be 15 inches from top of main landing gear door, 50 inches from extreme aft end of door.

TAIL STRIPE: The tail stripes will be 18 feet long by 11.25 inches high from leading edge to trailing edge of main landing gear doors.

AIRCRAFT NAME: (all measurements to top of letters)

“SPIRIT” located: 10.5 inches from top of main landing gear door, 57 inches from extreme forward of door in 8 inch block letters with a 30 degree negative slant.

“OF” located: 19.5 inches down from top of main landing gear door, centered underneath the “SPIRIT” in 6 inch block letters with a 30 degree negative slant.

“STATE/CITY” located: 26.5 inches from top of main landing gear door, centered beneath the “SPIRIT” in 8 inch block letters with a 30 degree negative slant.

PILOT/AIRCREW/CREW CHIEF NAMES: (all measurements to top of letters)

Pilot: The word “PILOT” is centered on left half of nose gear door 8 inches from the top of the door in 1.75-inch letters. The pilot’s name is centered below the word “PILOT,” 13.5 inches from the top of the door.

Mission Commander: The word “MISSION COMMANDER” is centered on right half of nose gear door, 8 inches from top of door in 1.75-inch letters. The mission commander’s name is centered below “Mission Commander,” 13.5 inches from the top of the door.

Crew Chief/Assistant: The letters “DCC” are centered on nose gear door, 26 inches from top of door, 1.75-inch letters. The Crew Chief’s name is centered 1 inch below “DCC” also in 1.75-inch letters. The letters “ADCC” are centered 1 inch below the Crew Chief name in 1.75-inch letters and the assistant Crew Chiefs are centered below with 1 inch spacing from “ADCC,” also in 1.75-inch letters.

NOSE NUMBERS: Last five digits of tail number, 6 inches in height, 12 inches from bottom of nose gear door and centered.

COMBAT MARKINGS:

Units may apply a single bomb/CALCM silhouette on the exterior of the nose landing gear door. A conventional bomb or CALCM silhouette may be displayed for each combat sortie flown with

a successful weapons release. These silhouettes will contain the combat operation acronym, "OEF" embedded in the center of the marking.

B-52

COMMAND INSIGNIA: 24 inches (subdued)

Insignia is applied to both sides of the vertical stabilizer. Top of insignia will be located 41 1/2 inches below tail stripe. Leading edge of insignia will be 62 inches in from leading edge of tail on both sides of tail. Bottom point/tip of insignia will be located on center seam of main spar line.

ORGANIZATIONAL INSIGNIA: 24 inches (subdued)

Right side: On forward fuselage, center of insignia at B.S. 218.7 and W.L.187.5.

Left side: On forward fuselage, center of insignia at B.S. 218.7 and W.L.187.5.

UNIT DESIGNATOR SQUADRON AIRCRAFT: 42 inches

Left side: Top of unit designator located 36 inches below box antenna. The trailing edge of the second letter is on a vertical line down from the tip of the command insignia, using the lower point of the center lightning bolt in the insignia as a line up reference.

Right side: Top of unit designator located 36 inches below box antenna. The trailing edge of the first letter is on a vertical line down from the tip of the command insignia, using the lower point of the center lightning bolt in the insignia as a line up reference.

UNIT DESIGNATOR COMMANDER'S AIRCRAFT: 42 inches

When used in conjunction with the bomb wing designator the location will be as follows:

Left Side: Top of unit designator located 20 inches below box antenna. The trailing edge of the second letter is on a vertical line down from the tip of the command insignia, using the lower point of the center lightning bolt in the insignia as a line up reference.

Right Side: Top of unit designator located 20 inches below box antenna. The trailing edge of the second letter is on a vertical line down from the tip of the command insignia, using the lower point of the center lightning bolt in the insignia as a line up reference.

BOMB WING DESIGNATOR COMMANDER'S AIRCRAFT: 18 inches

Left and right side: Top of bomb wing designator will be located 6 inches below unit designator and aligned with radio call numbers.

TAIL STRIPE: The tail stripe will be applied at the upper portion of the vertical stabilizer, and must be in the form of a straight stripe. The width will not exceed 15 inches.

PILOT/AIRCREW/CREW CHIEF NAMES:

Pilot/aircrew: Centered under pilot's window.

Crew Chief/assistant: Block is 15 inches by 36 inches. Block is located on BS 261.00 and WL 139.00.

2 BW Crew chief/assistant: Block is the shape of Louisiana and 30 inches by 24 inches. Forward bottom edge of block is aligned with BS 258.70 and WL 139.

5 BW Crew Chief/assistant: Block is the shape of North Dakota and 15 inches by 35.547 inches. Forward bottom corner of block is aligned with BS 267. and WL 139.

Style and size of letters are a unit option but will not exceed 3 inches in height.

A background block for Pilot/Crew Chief names may be used. The block should be in contrasting color to the section of the aircraft where applied. The Wing Commander may approve a locally designed name block to promote unit pride.

NOSE NUMBERS: Last four digits, 12 inches in height, located immediately aft of BS 236.30 and centered on WL 187.5.

COMBAT MARKINGS:

Bomb markings will be enclosed in a 27-inch by 27-inch, 1-inch bordered area with the left edge at FS 117.20 bottom edge on WL 139. A conventional bomb or CALCM silhouette may be displayed in the box for each combat sortie flown with a successful weapons release. The CALCM marking will be a maximum of 10 inches and the conventional bomb silhouette a maximum of 5 inches. Once the box is full, an existing column of CALCM/Bombs will be removed and replaced with a single CALCM/Bomb silhouette containing a number 10 at the top of the applicable row.

T-38

COMMAND INSIGNIA: 10 inches

Vertical: Top of insignia 4 inches below anti-collision light.

Horizontal: Centered on line with trailing edge of anti-collision light.

ORGANIZATIONAL INSIGNIA: 10 inches (subdued/CTP, full color AT-38)

Vertical: Centered on 3 o'clock position (left) and 9 o'clock position (right).

Horizontal: Center of insignia 24 inches aft of intake lower opening.

UNIT DESIGNATOR: 12 inches

Vertical: 4 inches below command insignia.

Horizontal: Leading edge of first letter centered on command insignia.

TAIL STRIPE: The tail stripe will be applied at the upper portion of the vertical stabilizer, and must be in the form of a straight stripe. The width will not exceed 9 inches.

PILOT AND CREW CHIEF NAMES:

Pilot: Name centered on left forward canopy rail.

Crew Chief: Name centered on left aft canopy rail.

Assistant Crew Chief: Name centered on right aft canopy rail.

Style and size of letters are a unit option but will not exceed 3 inches in height.

A background block for Pilot/Crew Chief names may be used. The block should be in contrasting color to the section of the aircraft where applied.

NOSE NUMBER: 4 inches

Last three/four digits of the tail number horizontally on both sides of nose gear door.

UNIQUE PAINT SCHEME:

Companion Trainer Program T-38 aircraft are authorized a gloss gray paint scheme, federal stock code number 16099.

UH-1N

COMMAND INSIGNIA: 10 inch insignia, both sides of the vertical fin.

Vertical: Bottom of insignia one inch above aircraft ID marking

Horizontal: Centered on vertical fin

ORGANIZATIONAL INSIGNIA (Optional): 18-inch insignia, both sides of aircraft.

Vertical Station: water line 33

Horizontal Station: fuselage station 80

UNIT AIRCRAFT IDENTIFICATION MARKING: Use two-letter base designation (Attachment 3) in ten-inch black letters.

PILOT/CREW CHIEF NAMES (Optional): May be applied to either or both pilot and co-pilot's doors. Use 4-inch black lettering, any font style. Units that elect to apply Pilot/Crew Chief names will use a standard scheme.

TAIL STRIPE: The tail stripe will be applied at the upper portion of the vertical stabilizer, and must be in the form of a straight stripe. The width will not exceed 9 inches. The stripe may be any color or pattern, and may contain a logo.

TAIL MARKINGS: Aircraft Serial Number-Year Group: four-inch numbers on top of eight-inch last four or five of serial number.

NOSE NUMBERS (Optional): 4 inches, last three/four digits of the tail number horizontally centered beneath the glide slope antenna.

Attachment 3

AFGSC DISTINCTIVE UNIT AIRCRAFT IDENTIFICATION MARKINGS LIST

Table A3.1. AFGSC Distinctive Unit Aircraft Identification Marking List

CODE	AIRCRAFT	UNIT/ LOCATION/ COMMAND
FE	UH-1N	90 MW F.E. Warren AFB WY
LA	B-52H	2 BW Barksdale AFB LA
MM	UH-1N	341 MW Malmstrom AFB MT
OT	B-52H	53 TEG Barksdale AFB LA
MT	B-52H UH-1N	5 BW Minot AFB ND 91 MW Minot AFB ND
WM	B-2A, T-38A	509 BW Whiteman AFB MO

Attachment 4
ICBM PAINT PLAN

Table A4.1. Paint Plan

Launch Control Center (LCC)	Paint Color Code	Color
Acoustical enclosure – external	16376	Lt Grey
Acoustical enclosure – internal	17925	White
Battery Storage below LCC floors	16376	Lt Grey
Blast door exterior and racings (except machined surfaces)	16376	Lt Grey
Blast door interior	16376	Lt Grey
Cable trays	16376	Lt Grey
Ducts, pipes and conduits	Same as associated equipment/fixtures	
Electrical surge arrestor (ESA) room walls/floor	16376	Lt Grey
Equipment racks	24525	Lt Green
ESA room panels, door and trim	16376	Lt Grey
External metal racks	24525	Lt Green
LCC liner	16376	Lt Grey
Miscellaneous tanks and brackets	Same as associated equipment/fixtures	
Shock isolators	17925	White
Tunnel junction floor	16376	Lt Grey
Tunnel junction walls	17925	White
Unit reference designator (URD) background	13655	Yellow
URD stencils	17038	Black
Launch Control Equipment Building		
Air conditioning equipment	16376	Lt Grey
Automatic switching unit	16376	Lt Grey
Diesel engines and switch gear	Per Manufacturer	Per Manufacturer
Diesel start battery rack	17038	Black
Electrical panels - exterior	16376	Lt Grey
Floors	16376	Lt Grey
Tanks, Ducts, pipes and conduits	Same as associated equipment/fixtures	
URD background	13655	Yellow
URD stencils	17038	Black
Walls	17925	White
Launch Control Support Building		
Air conditioning equipment	16376	Lt Grey
Automatic switching unit	16376	Lt Grey
Diesel engines and switch gear	Per Manufacturer	Per Manufacturer
Diesel start battery rack	17038	Black
Electrical panels - exterior	16376	Lt Grey

Floors	16376	Lt Grey
Tanks, Ducts, pipes and conduits	Same as associated equipment/fixtures	
URD background	13655	Yellow
URD stencils	17038	Black
Walls	17925	White
Launch Facility Support Building (LSB)		
Air conditioning equipment	16376	Lt Grey
Diesel engine and switch gear	Per Manufacturer	
Diesel start battery racks	17038	Black
Electrical panels	16376	Lt Grey
Exhaust fan	16376	Lt Grey
Exposed metal and hangar supports	Same as associated equipment/fixtures	
Floors		Red Oxide Primer
Instrument air compressor	16376	Lt Grey
Pipes, conduits and tanks	Same as associated equipment/fixtures	
Repeater telephone set	24525	Lt Green
Under floor ducting	16376	Lt Grey
URD background	13655	Yellow
URD stencils	17038	Black
Walls	17925	White
Launch Facility Topside		
Air intake vent plate	16376	Lt Grey
Clutter plate mast	16376	Lt Grey
Collimator Bench	17925	White
Diesel fill cover (metal or fiberglass)	16376	Lt Grey
Diesel fill pipe and cap	16376	Lt Grey
Hatch covers, grates and ladders	16376	Lt Grey
IMPSS antenna	17925	White
Launcher closure arrestors (Vandenberg)	16376	Lt Grey
Launcher closure door (top trim)	16376	Lt Grey
Launcher closure door (front, metal portion)	16376	Lt Grey
Launcher closure door revetment walls (Vandenberg)	16376	Lt Grey
Launcher closure thermal shield	36440	Non-skid Grey
LSB door/frame	16376	Lt Grey
Miscellaneous exposed metal surfaces	16376	Lt Grey
Primary access hatch hand driven linear actuator	16376	Lt Grey
Security pit and cover	16376	Lt Grey
Sump pump drain line	16376	Lt Grey
Transporter-erector pylons	16376	Lt Grey
Transporter-erector tiedown slots	16376	Lt Grey
UHF radio marker posts	17925	White
URD background	13655	Yellow

URD stencils	17038	Black
Launch Facility Equipment Rooms		
Walls and ceiling	17925	White
Ballistic actuator evener housing	15045	Blue
Launch tube heater	16376	Lt Grey
Umbilical retract	15045	Blue
Sump pump (SP-102) control box	No coating authorized	
Work cage distribution box	15045	Blue
Electro-mechanical linear actuator	15045	Blue
Motor generator	15045	Blue
Battery support brackets	17925	White
Launcher closure ballistic actuator	15045	Blue
Air conditioner alarm and control panel (Old)	16376	Lt Grey
Emergency fan	15045	Blue
Air tank (2nd level)	16376	Lt Grey
Safety stripes	13655	Yellow
AC-5H drain line protection ramp	13655	Yellow
Launch tube heater control panel	16376	Lt Grey
Emergency fan air duct	15045	Blue
Secondary door	15045	Blue
Ladder (1st to 2nd level)	17925	White
Monorail I-beam assembly	17925	White
Shock isolators	24525	Lt Green
Shock isolated floor movement limit lines	17038	Black
Primary door (interior)	17925	White
Primary door (exterior band)	16376	Lt Grey
Personnel access shaft	17925	White
Primary door bearing surface	16376	Lt Grey
Pipes and conduits	Same as associated equipment/fixtures	
Launcher distribution panel	16376	Lt Grey
Communications jack boxes	17925	White
Rattlespace EMI screen	IAW TO 21M-LGM30F-101	
Rattlespace floor under foam blocks	16376	Lt Grey
Floors	16376	Lt Grey
ESA room walls/floor	16376	Lt Grey
ESA room panels, door and trim	16376	Lt Grey
Air conditioner equipment (New)	16376	Lt Grey
Electro-Mechanical Actuator (EMA)	16376	Lt Grey
EMA support racks	16376	Lt Grey
Equipment rack air duct	17925	White
J-Ladder platform	No coating authorized	

LER Safety Posts	13655	Yellow
URD background	13655	Yellow
URD stencils	17038	Black
Launch Tube		
Launch tube steel liner	17925	White
Launch tube floor	17925	White
Pipes and conduits	17925	White
Missile suspension system travel limit markings	17038	Black
Missile suspension system and components	15045	Blue