

TECHNICAL MANUAL

**STORAGE OF AIRCRAFT
AND MISSILE SYSTEMS**

**F09603-87-C-1900
(ATOS)**

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TO MAKE THIS A COMPLETE PUBLICATION.**

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Published under authority of the Secretary of the Air Force

LIST OF EFFECTIVE PAGES

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands. Changes to wiring diagrams are indicated by shaded areas.

Dates of issue for original and changed pages are:

Original 0..... 1 April 1975 Change 2..... 1 December 1988
 Change 1..... 5 November 1984 Change 3..... 31 March 1992

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 12, CONSISTING OF THE FOLLOWING:

| Page No. | *Change No. | Page No. | *Change No. | Page No. | *Change No. |
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SECTION I

GENERAL

1-1. PURPOSE.

1-2. The purpose of this technical manual is to provide storage instructions for aircraft and missiles where transfer to the Aerospace Maintenance and Regeneration Center (AMARC) at Davis-Monthan AFB, AZ., is not practical. The following are included:

- a. Processing systems into a satisfactory state of preservation.
- b. Establishing an inspection and maintenance program for stored systems.
- c. The processing of stored systems to active status or for transfer to a contractor/depot for repair/overhaul, or for transfer to a disposal field.

NOTE

Reference shall be made to the individual system - 17 Technical Order for specific requirements on the system. Aircraft transferred to MASDC will be stored in accordance with T.O. 1-1-686.

1-3. RESPONSIBILITY.

- a. The Chief of Maintenance will be responsible for processing systems into storage, taking into consideration the length of time the system will be in storage and local climatic conditions.
- b. When it is necessary to place systems in storage, every reasonable effort will be expended by the storage activity to insure that stored systems can be withdrawn from storage with a minimum of manhours and requirements for parts.
- c. Activities performing maintenance on systems, which have a storage history within the past six months, shall accomplish the removal from storage requirements on all items which have not been previously cleared on systems maintenance forms.
- d. When the system's records indicate specific removal from storage requirements have not been accomplished, the removal section of individual systems storage technical orders (-17) shall be utilized.
- e. Storage of Systems awaiting PDM, modification, repair and/or return to the activity to which assigned, will be arranged for and accomplished by all AFLC, TRC, and Field Maintenance activities to meet their local requirements. The Temporary Storage Section of this publication will be the basis

for such storage requirements. The storing activities will be responsible for determining the additional requirements which must be complied with for the projected storage period involved. These additional requirements will be extracted from the Extended Storage Section of this publication, or be developed by the storing activity to meet the needs of the individual system being scheduled into a modification and/or maintenance program. A system whose time in storage is not known will be treated for Extended Storage.

1-4. TYPES OF STORAGE.

a. **TEMPORARY STORAGE** - Includes those systems undergoing minor repair, modification, awaiting re-assignment or disposition, being held as operational reserve, or other circumstances which would result in a system being grounded up to and including 90 days.

b. **LIMITED STORAGE** - Pertains to those aircraft or missiles which are to be retained for an indefinite period in Code XS (ref. AFM 65-110) pending determination of disposition, reclamation, sale, donation, etc. Aircraft in this category will be sent to the Aerospace Maintenance and Regeneration Center (AMARC), Davis-Monthan AFB, AZ., if practical. If not, they will be stored in accordance with Section II.

c. **EXTENDED STORAGE** - Includes those systems undergoing major repair, modification, awaiting assignment, withdrawal from active service, or other circumstances which would result in a system being grounded over 90 days.

d. **RECLAMATION STORAGE** - Applies to systems which are being scrapped.

e. **FLYABLE STORAGE** - Flyable storage is not covered by this Technical Order.

1-5. SURPLUS SYSTEMS.

Disposition of surplus systems will be at the direction of AFLC/MMAP Wright-Patterson AFB, Ohio. Procedures for disposition are given in AFM 67-1. Volume VI.

1-6. MATERIALS.

Table 1-1 gives a list of materials required by this Technical Order. Materials not listed may be required by referenced general series technical orders, or by -17 Technical Orders.

Table 1-1. LIST OF MATERIALS

| MATERIAL | SPECIFICATION | USE |
|---|--------------------------------------|---|
| 1. Auger Stokes | MS-21300 | Tie-down aircraft |
| 2. Barrier Material | MIL-B-131, Class 1 | To cover openings before sealing with strippable coating |
| 3. Cables tie-down 1/4" carbon steel | RR-W-410 | Tie-down aircraft |
| 4. Clamp | MIL-C-2281 | To clamp cables |
| 5. Cleaning and polishing compound for transparent acrylics | P-P-560 | To cover acrylics so that strippable coating will not adhere to surface |
| 6. Cushioning Material | PPP-C-1120 | To cover openings which will not be sealed |
| 7. Corrosion Preventative Compound | MIL-C-16173, Class 2 | For the protection of surfaces which cannot be painted |
| 8. Epoxy Primer | MIL-P-23377 | Touchup primer |
| 9. Strippable Coating (Base Coat) | MIL-C-6799, Type II, Class 1 (Black) | Base for the strippable coating system used to seal aircraft. |
| 10. Strippable Coating (Intermediate Coat) | MIL-C-6799, Type II, Class 4 (Gray) | Intermediate coat for the strippable coating system. |
| 11. Strippable Coating (Top Coat) | MIL-C-6799, Type II, Class 5 | Top coating for the strippable coating system used on aircraft. |
| 12. Brushable Touchup Coating | Pr. Nr. 5C-247-IBR | Touchup of strippable topcoating (Obtain from Spraylat Corp., 1 Park Ave, New York, N.Y.) |
| 13. Tape | MIL-T -22085, Type II | To cover radomes and hold barrier material in place if not covered with strippable coating. |
| 14. Tape | MIL-T-22085, Type III | Use to cover openings and hold barrier material in place before sealing. |
| 15. Wax | P-W-155 | To cover deicer boot so that strippable coating will not adhere to surface. |

Table 1-2. APPLICABLE DIRECTIVES

| | |
|-------------------------------|---|
| 1. TO 00-20-1 | Preventive Maintenance Program, General Requirements and Procedures. |
| 2. Deleted | |
| 3. TO 1-1-691 | Cleaning of Aerospace Equipment and Corrosion Control and Treatment for Aerospace Equipment. |
| 4. Deleted | |
| 5. TO 1-1-3 | Preparation, Inspection, and Repair of Aircraft, Fuel, Oil and Water Alcohol Cells. |
| 6. TO 1-1-4 | Exterior Finishes, Insignia, and Markings Applicable to USAF Aircraft and Missiles. |
| 7. TO 1-1-8 | Application of Organic Coatings, Aerospace Equipment. |
| 8. TO 1-1-686 | Desert Storage, Preservation and Process Manual for Aircraft. |
| 9. TO 2-1-32 | Desert Storage, Preservation and Process Manual - Aircraft Engineering and Aircraft Auxiliary Power Unit Engineering. |
| 10. TO 2J-1-18 | Corrosion Control of Gas Turbine Engines. |
| 11. TO 2R-1-1 | Corrosion Control of Reciprocating Aircraft Engines. |
| 12. TO 11W3-1-9 | Packing of Small Arms Materials with Volatile Corrosion Inhibitor (VCI). |
| 13. AFR 60-16 | General Flight Rules. |
| 14. AFM 65-110 | Standard Aerospace Vehicle and Equipment Inventory Status and Utilization Reporting |
| 15. AFM 67-1 | Volume VI, Chapter 10, USAF Supply Manual. |
| 16. DOD Manual 4160.21-M-1 | Defense Demilitarization Manual. |

SECTION II

PROCEDURES

2-1. GENERAL TREATMENT.

2-2. All systems except those entering reclamation storage shall be treated during preparation for storage as follows:

a. Systems shall be made maintenance safe by removal of explosive items in accordance with specific armament directives. These items will normally be returned to stock.

b. Exterior surfaces shall be cleaned in accordance with TO 1-1-691. Trash shall be removed from interior areas using a vacuum cleaner. Corrosive chemical deposits shall be removed by cleaning in accordance with TO 1-1-691.

c. Corrosion shall be treated in accordance with TO 1-1-691. Paint shall be touched up with the same material as is on the system in accordance with TO 1-1-8. (Refer to TO 1-1-4 for authorized coating system).

d. Within 72 hours after washing, all exposed exterior fittings shall be lubricated in accordance with -6 directives. If required by flight hours, other fittings will also be lubricated.

e. Engines shall be cleaned and stored in accordance with TO 2J-1-18 or TO 2R-1-11 as applicable.

f. Using organizations shall transfer complete system to storage activities in accordance with TO 00-20-1.

g. For those aircraft in or entering either temporary or extended storage, storage activities shall take action in accordance with the applicable, -21 TO to replace shortages.

h. Components and assemblies shall be stored in the system or in a nearby protected area. Storage of any component or assembly must not conflict with the specific directives for the care of that equipment.

i. Allied support equipment and spares peculiar to the systems stored and in excess of the requirements to support the active inventory shall also be stored at the site. Quantity of equipment stored will be limited to that quantity required to support the number of systems stored.

j. Removal of classified equipment other than communications equipment will be at the discretion of the Commanding Officer (unless otherwise specified in individual system technical orders).

Removal decisions shall be based on local storage facilities, conditions affecting corrosion and deterioration, and manhours required to remove and reinstall such equipment.

2-3. PARKING AND TIE-DOWN.

a. Systems placed in outside storage shall be spaced a sufficient distance apart to provide adequate clearance for maintenance, servicing, and fire lanes:

NOTE

Systems will be secured and ground in accordance with existing tie-down instructions contained in the applicable system technical manual (-2 or -17 TO).

b. Aircraft placed in storage on paved range or aprons shall be parked so tie-down rings can be used if available.

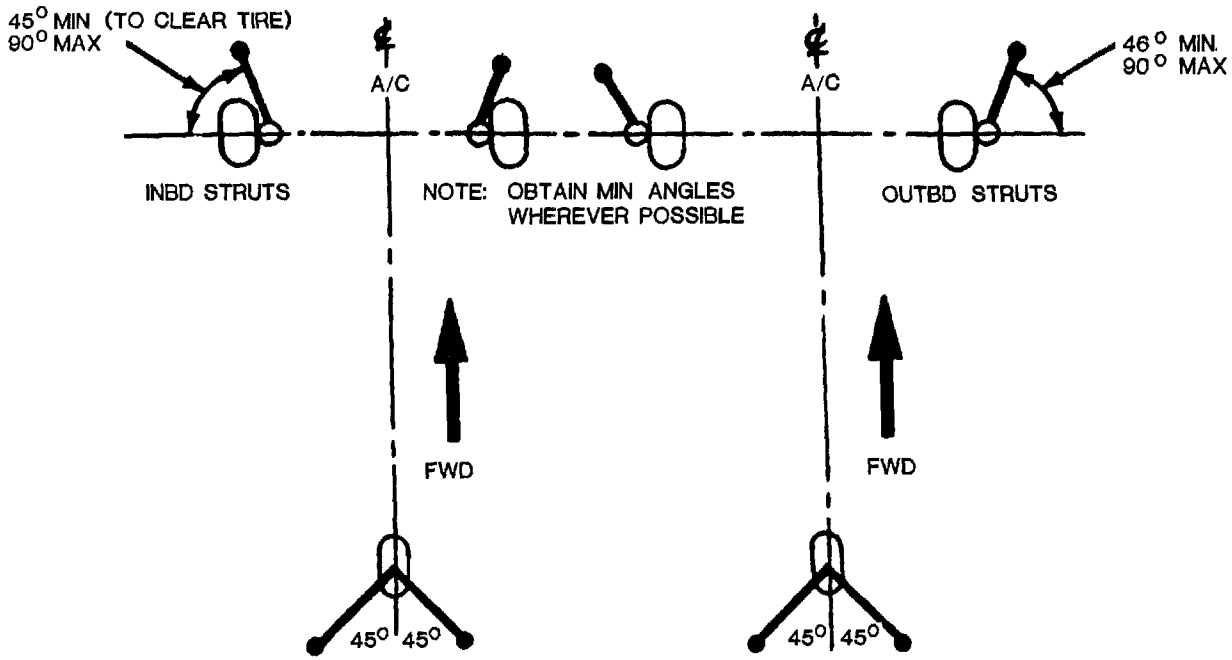
c. Aircraft placed in extended storage on other than paved range or aprons, where no tie-down points are available, shall be secured using auger stakes (MS 21300) placed in hard ground. Holes 1-1/2 inches in diameter and 24 inches deep should be predrilled for these stakes. See figures 2-1 and 2-2 for positioning and an example of stake location.

NOTE

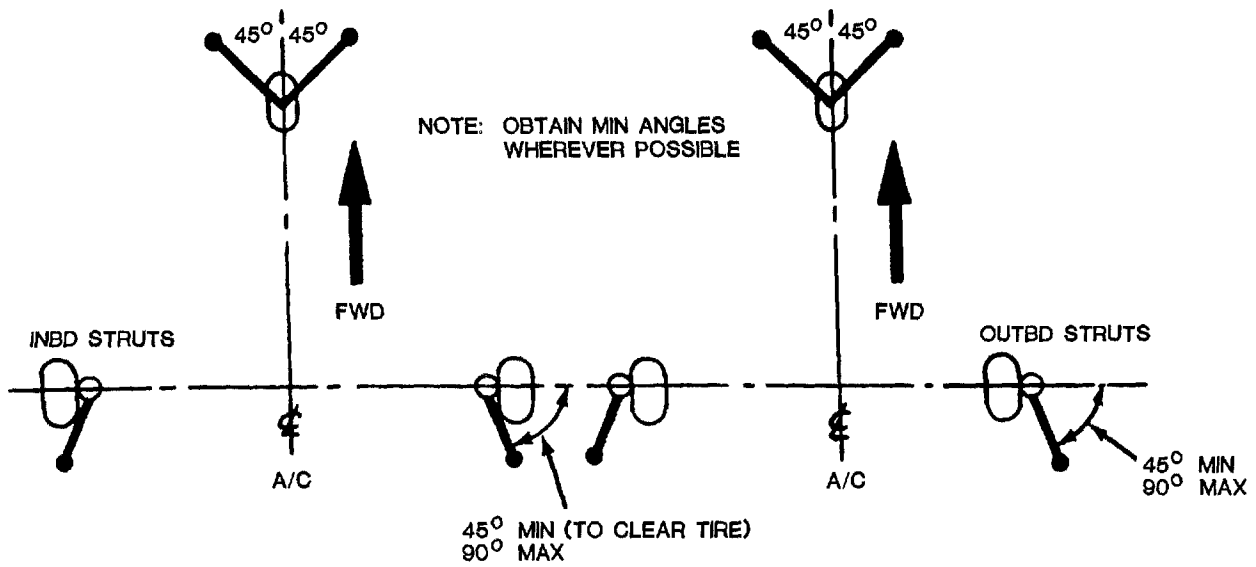
On large aircraft a greater number of stakes and cables will be required. See -17 and -2 Technical Orders for instruction on number of tie-down points.

d. Aircraft will be parked in staggered double rows, with each line of aircraft in a double row facing outward. Clearance between wing tips will be 11 feet. The distance between each double row and in the tow lanes shall be the width of the aircraft plus 30 feet. Cross lanes, 30 feet wide, shall be placed at least every 1080 feet for movement of fire equipment.

e. Aircraft in extended storage, parked on wheels having nylon tires, will be blocked with tires off the ground, per TO 4T-1-3, paragraph 3-1. Missiles in extended storage on trailers having wheels with nylon tires, will be blocked with trailer tires off the ground. During temporary storage, systems, (aircraft on wheels and missiles on trailers) will be moved at intervals not to exceed every third day, to



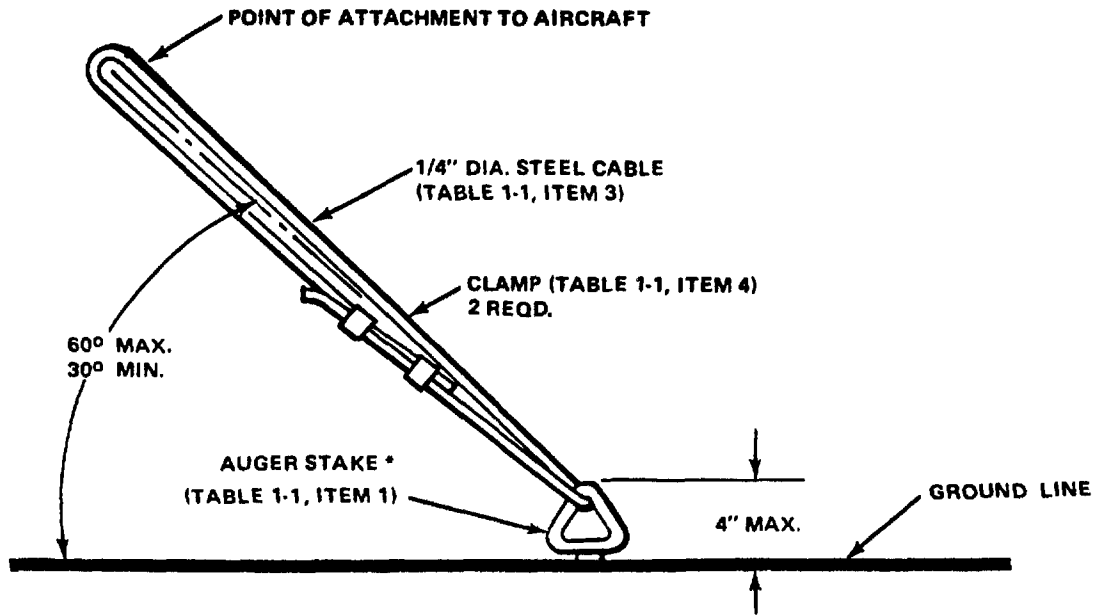
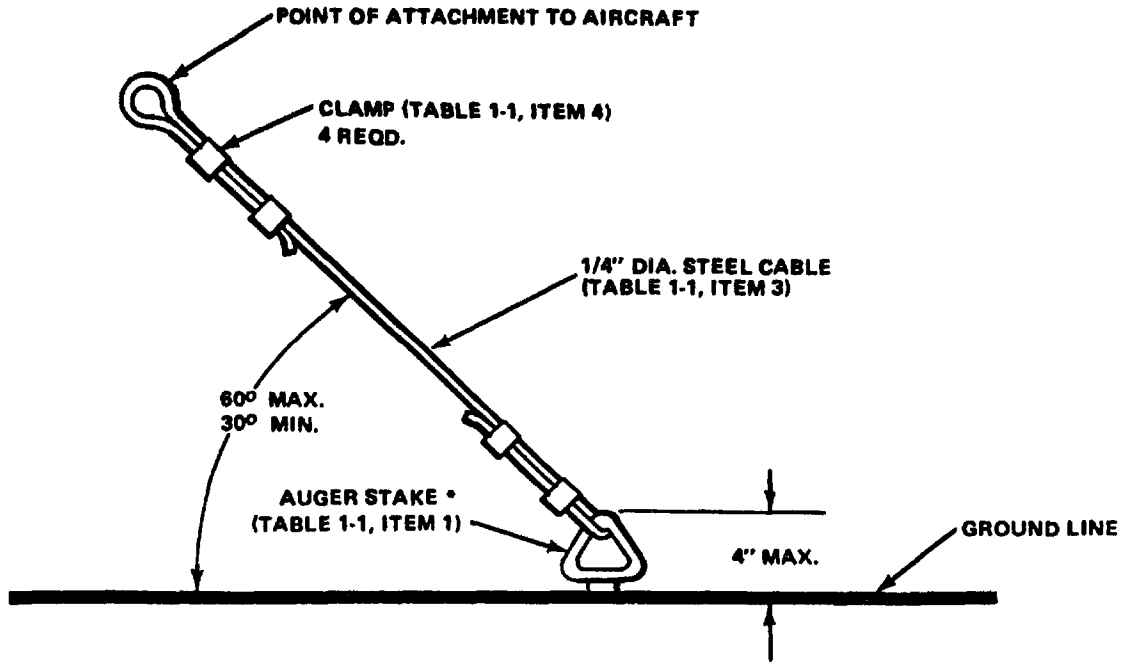
A - CONVENTIONAL LANDING GEAR



B - TRICYCLE LANDING GEAR

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Figure 2-1. Angular Relationship of Cables to Aircraft



* IN HARD GROUND, HOLES MAY BE PRE-DRILLED 1 1/2\" DIA. BY 24\" DEEP.

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Figure 2-2. Angular Relationship of Cables to Ground

T.O. 1-1-17

completely change the area of tire contact with ground. Operational readiness or cold weather conditions may necessitate local requirements for more frequent rotation intervals, per TO 4T-1-3, paragraph 3-1 (r and s).

2-4. EXTENDED STORAGE.

2-5. Systems placed in extended storage (over 90 days) shall be further treated as follows:

a. Batteries shall be removed from life support equipment. This shall be noted on work records and a warning shall be placed in the cockpit.

b. Batteries shall be removed from battery compartments and the compartments cleaned in accordance with TO 1-1-691. Corrosion, if found, shall be treated in accordance with TO 1-1-691 and paint shall be touched up with epoxy primer. MIL-P-23377. Batteries will be returned to supply.

c. Guns and cannons shall be packaged in accordance with TO 11W3-1-9 or applicable supply directives and stored in a secure area, either on or off the aircraft, as directed by qualified munitions personnel.

d. Fuel tanks shall be preserved in accordance with TO 1-1-3. If contaminated, they shall be cleaned in accordance with TO 1-1-691. Insure that fuel cells are coated with oil in accordance with paragraph 6-14 of TO 1-1-3 after purging. Reticulated foam will be removed and stored in accordance with paragraph 7-52 of TO 1-1-3.

e. Preserve transmissions and gearboxes as follows:

(1) Drain operating lubricant from gearboxes to the maximum extent possible.

(2) Fill entire gearbox to maximum level possible with the lubricant required in this gearbox.

(3) Rotate gearbox a minimum of ten revolutions.

(4) Install storage tag to indicate that the unit is preserved.

2-6. EXTENDED STORAGE IN EXTERIOR LOCATIONS.

2-7. Systems stored outside for extended periods (90 days or more) shall be given the following additional treatment:

a. Exposed unpainted steel surfaces shall be coated with MIL-C-16173, Grade 2 (corrosion preventative compound), and covered with barrier material and or a strippable coating.

b. Helicopters shall have the upper surfaces of the main rotor head and transmission covered.

Blades may not covered. The covering shall have sufficient openings to allow water to drain out. Unpainted steel parts shall be coated with MIL-C-16173, Grade 2. No MIL-C-16173 will be applied to the blades except at attaching points.

c. Openings shall be covered to prevent entry of rain, animals, and dust. However, systems shall be vented to prevent moisture collection by opening drain holes, removing plugs, placing vents in cockpit, cabin, and other areas, or by temporarily removing a rivet. Openings less than one-inch will be closed to prevent water entry using tape (MIL-T-22085, Type III). Openings greater than one inch will be closed to prevent water entry using tape (MIL-T-22085, TYPE III and barrier material (MIL-B-131, Class 1). To prevent animal and dust entry, close openings on lower surfaces using cushioning material (PPP-C-1120). All of the above, except the cushioning material, shall be covered by a strip-pable coating system, MIL-C-6799, applied in accordance with Section IV. To prevent breaks in the coating at sharp edges, such as trailing edges of airfoils, apply preservation tape (MIL-T-22085, Type III) onto the first coating of the material and allow coating to dry tack-free before applying the succeeding covering coats.

d. Acrylic windows will be covered with MIL-C-6799, strippable coating to prevent damage by ultraviolet radiation. Apply coating in accordance with Section IV. To insure ease of removal of the strippable coating, apply a film of polish (P-P-560) before application of coating.

e. Deicer boots (except on propellers) will be covered with wax (P-W-155) and coated with MIL-C-6799 to prevent damage by ultraviolet radiation. Apply coating in accordance with Section IV. Propellers will not be covered.

f. Antennas will be cleaned in accordance with TO 1-1-691 and covered with tape (MIL-T-22085, Type II).

g. Tires will be sealed to wheel rims with strip-pable coating. Apply in accordance with Section IV. A sufficient amount will be applied to prevent moisture entering between the tire and rim.

2-8. INSPECTION OF STORED SYSTEMS.

a. All weapon systems placed in storage shall be carefully inspected at regular intervals of 60 days or less, dependent on local conditions. The Chief of Maintenance shall be responsible for establishing a program for periodic inspection of weapon systems which includes the prescribed inspections listed below:

(1) Insure proper preservation and ventilation of weapon systems and take immediate action to correct all unsatisfactory conditions.

(2) Insure that drain holes on underside of fuselage, wings, and control surfaces are kept open.

(3) Assure that covers have drain holes to prevent water accumulation.

(4) During hot weather, spot checks shall be made among each type and model of stored weapon system to determine maximum interior temperatures encountered. This shall be accomplished by hanging a standard thermometer in the interior of the system and recording readings during the hottest part of the day. If the temperature exceeds 160°F, action will be taken to ventilate the systems. Forced ventilation may be employed if other methods of ventilation are not adequate to prevent sweating of interior of systems and resultant accumulation of condensation and mildew.

(5) Astrodomes may be removed and replaced with a covered flue to aid ventilation.

(6) Adequate surveillance shall be made to assure that hydraulic stretch pressures are within limits on missiles that are to be maintained in stretch. Use available emergency pressurization facilities to maintain the proper stretch limits.

b. All systems placed in storage shall be inspected for corrosion and, if necessary, treated in accordance with TO 1-1-691 or applicable specific system corrosion manual (-23). In conducting an inspection for corrosion, particular attention shall be given to those areas where moisture will not evaporate rapidly. Portions of structures exposed to rocket, gun, and missile exhaust blast will also require particular attention. Normally, corrosion will not be as prevalent on painted surfaces as on unpainted surfaces of a system. If corrosion is present on painted surfaces, it will sometimes be indicated by blisters or a scaly appearance of the paint.

c. Exterior locks, grounds, blocks, tie-down cables, rods, and eyes, shall be inspected every 30 days and immediately after weapon systems have been subjected to winds exceeding 40 knots.

2-9. ENTRIES IN WEAPON SYSTEM FORMS.

2-10. Type of storage, date placed in storage, equipment removed from weapon system, etc., shall be recorded on the forms for the specific weapon system or on substitute records in accordance with TO 00-20-1.

2-11. TECHNICAL ORDER COMPLIANCE.

a. When a system is removed from storage, records will be screened, and all outstanding TCOTs will be complied with unless otherwise directed.

b. When an aircraft in storage has been declared excess and is to be transferred by air for final disposition, the aircraft shall be processed for onetime flight in accordance with instructions in TO 00-20-1 and AFR 60-16. Unnecessary equipment previously removed will not be reinstalled for onetime flight to a disposal site.

c. Inspection and maintenance requirements for return to operational status will depend upon the following:

- (1) Next periodic/phased inspection due.
- (2) Length of time in storage.
- (3) Type of storage.
- (4) Climatic condition of storage sites.
- (5) The operational and installed time of components.
- (6) Components and/or assemblies removed from the weapon system.

d. The inspection and maintenance shall insure that all systems, components, and assemblies are in serviceable condition and to disclose any defect which may not show up under an operational check.

e. If aircraft removed from storage require depot maintenance, and flight delivery to a repair facility, they will be prepared for one-time flight in accordance with TO 00-20-1 and AFR 60-16.

f. The activity processing weapon systems out of storage shall enter in the systems records all "removal from storage requirements" which are not accomplished.

2-12. AIRCRAFT STORED FOR RECLAMATION.

2-13. The following will be performed on an aircraft when it is known that it will be scrapped, without one-time flight.

- a. Make aircraft maintenance safe in accordance with specific directive for the system.
- b. Turn all removed explosive items in to Supply for disposition.
- c. Install landing gear safety locks.
- d. Set rotor brakes (helicopters).
- e. Install main and tail rotor blade tie-down sleeves (helicopters).

T.O. 1-1-17

- f. Ground and secure aircraft in accordance with the -2 TO's and paragraph 2-2.
- g. Install dust excluders and foreign object covers.
- h. Preserve "SAVE" engines in accordance with TO 2-1-32. Remove "SAVE" engines.
- i. Remove battery and turn in to battery shop for reuse or disposal.
- j. Safety wire landing gear controls in the "DOWN" position.
- k. Install battens on control surfaces.
- l. Stencil aircraft with the notation "RECLM".
- m. Clean and flush toilet facilities.
- n. Drain water tanks, bilges, floats and sponsons.
- o. Secure cabin doors, windows, and canopies.
- p. Inventory aircraft in accordance with TO 00-35-780.

- q. Remove classified equipment.
- r. Remove equipment as necessary to demilitarize aircraft in accordance with Defense Demilitarization Manual, DOD 4160.21-M-1 and AFM67-1, Vol VI, Chapter 10.
- s. Remove guns and turn in to Supply for disposition.
- t. Drain liquid oxygen systems and bleed all gaseous systems to zero pressure using the procedures of the applicable -2 TO.
- u. Bleed all hydraulic accumulators to zero.
- v. Defuel aircraft in accordance with TO 1-1-3.
- w. Make preservation entries in aircraft records.
- x. Remove items required by the ALC System Managers Save List.

Treatment in accordance with other parts of this section is not required.

SECTION III
SYSTEMS STORAGE MAN-HOUR TABLE

3-1. The systems man-hour table 9 (Table 3-1) reflects the man-hours required for (1) processing systems into extended storage, (2) maintaining systems in extended storage on a monthly basis, (3) removing aircraft from extended storage and processing for one-time flight or removing missiles for operational service.

NOTE

The values are given only as a general guide. Actual man-hours at specific locations will vary due to local conditions.

TABLE 3-1. SYSTEMS STORAGE MAN-HOUR TABLE

| SYSTEM | PROCESS IN | MAINTENANCE | REMOVAL |
|-----------|------------|-------------|---------|
| A-37 | 115 | 8 | 225 |
| B-52 | 581 | 56 | 2543 |
| B-57 | 209 | 12 | 1235 |
| B-66 | 218 | 10 | 1065 |
| C-5 | 880 | 55 | 1320 |
| C-7A | 170 | 30 | 915 |
| C-9A | 165 | 14 | 550 |
| C-46 | 165 | 33 | 963 |
| C-47 | 176 | 27 | 880 |
| C-54 | 193 | 33 | 990 |
| C-118 | 220 | 33 | 1045 |
| C-119 | 193 | 33 | 1850 |
| C-121 | 312 | 11 | 1980 |
| C-123 | 165 | 33 | 880 |
| C-124 | 1125 | 136 | 4400 |
| C-130 | 1318 | 63 | 1004 |
| C-131 | 131 | 12 | 650 |
| C/K C-135 | 490 | 38 | 2700 |
| C-140 | 445 | 45 | 740 |
| C-141 | 1375 | 32 | 1080 |
| F-4 | 350 | 15 | 1200 |
| F-5A | 320 | 53 | 1000 |
| F-5B | 355 | 60 | 1055 |
| F-100 | 111 | 11 | 944 |
| F-102 | 167 | 28 | 868 |
| F-104 | 122 | 14 | 350 |
| F-105 | 124 | 11 | 1055 |
| F-106 | 167 | 28 | 868 |
| F-111 | 249 | 15 | 824 |
| H-1 | 38 | 12 | 260 |
| H-3 | 240 | 12 | 340 |
| H-19 | 132 | 10 | 242 |
| H-21 | 158 | 12 | 260 |
| H-34 | 109 | 10 | 317 |
| H-43 | 160 | 12 | 270 |
| H-53 | 166 | 30 | 267 |
| O-1 | 33 | 9 | 88 |
| O-2 | 33 | 9 | 98 |
| OV-10 | 50 | 11 | 110 |
| T-29 | 136 | 12 | 650 |
| T-33 | 157 | 9 | 314 |
| T-38 | 290 | 33 | 485 |
| T-39 | 90 | 10 | 250 |

TABLE 3-1. SYSTEMS STORAGE MAN-HOUR TABLE (CONT)

| SYSTEM | PROCESS IN | MAINTENANCE | REMOVAL |
|--------|------------|-------------|---------|
| T-41 | 33 | 9 | 88 |
| T-43 | 220 | 18 | 660 |
| HU-16 | 193 | 22 | 1244 |
| U-6 | 72 | 12 | 132 |
| MK4RU | 0 | 0 | 96 |
| GM-25 | 169 | 14 | 151 |
| GM-17 | 122 | 487 | 2227 |

SECTION IV

APPLICATION OF STRIPPABLE COATING COMPOUND

4-1. GENERAL.

4-2. General procedures for application, equipment required, and safety requirements for coating are found in TO 1-1-8.

4-3. PREPARATION OF MATERIALS.

4-4. Prepare compounds for application under clean conditions using clean equipment. Do not open containers until ready for use. Clean container covers first and open carefully to prevent dirt from falling into compound. Before mixing compound, carefully remove surface skins, if present. Mix compounds thoroughly either by stirring with a paddle or by using a power mixer or agitator until any settled pigment is completely mixed. For proper use, compounds should be smooth, homogeneous, and of a consistency resembling heavy cream. Additional agitation may be required to restore compounds to usable condition if they have been stored under adverse conditions.

4-5. To improve sprayability, compounds may be diluted with lukewarm water to a maximum of 3 ounces of water per gallon of compound. Additional dilution will adversely affect the physical properties of the compound.

4-6. COVERING OF RUBBER SURFACES. To prevent adhesion build-up and difficulty in removal of coatings from rubber surfaces such as deicer boots, apply a thin even coating of water emulsion wax. (P-W-155). The wax coating should not be buffed or polished.

NOTE

Waxes containing silicones shall not be used on rubber surfaces before applying strippable coatings because the coating material will "bead-up" and not form a continuous film.

4-7. INSTALLATION OF RIPCORDS. To aid in removal of masking material and coating compounds, when entire aircraft is to be coated install nylon ripcord inserts using cord. (MIL-C-5040, Type I). Tie finger-size loops in exposed ends of the ripcords. Install ripcords at the cockpit and follow the outline of the canopy parting surface in such a manner that the cockpit can be opened during storage or transit and resealed without seriously affecting the integrity of the remaining coating.

4-8. APPLICATION OF COMPOUNDS (MIL-C-6799, TYPE II).

4-9. BLACK (CLASS 1) OR GRAY (CLASS 4) COATING COMPOUNDS. Apply the first coating to

clean, dry surfaces in a standard box coat fashion (one horizontal pass followed by one vertical pass), depositing a wet film on each. Hold the nozzle of the gun 8 to 12 inches from surface at all times and follow the contour of the surface carefully; otherwise an uneven film and waste of material will result. Do not arc the gun at any time during the pass.

4-10. When spraying curved surfaces continue to follow the contour of the surface and feather any edges in by overtraveling. Apply the first coat approximately 6 to 7 mils thick dry to 12 to 14 mils thick wet. Wet film thickness can be determined with a Nordson or similar wet film gage. Dry film thickness can be determined by cutting out 1-inch square sections and measuring with an Ames or equivalent dry film gage. Allow a sufficient period of time to obtain a tack-free surface on the first coat before applying the second coat. The change from a glossy to a dull finish will usually indicate that surface is tack-free.

4-11. Apply the second coating of gray or black base material in the same manner as the first. The second coat must also be deposited as a wet film. Allow the second base coating to dry to a tack-free surface before applying the white reflective topcoating.

NOTE

If lack of equipment makes it necessary to walk on previously coated surfaces while applying successive coats it will be necessary for each coating to be thoroughly dry before additional spraying is started.

4-12. WHITE TOPCOATING COMPOUND. (CLASS 5). After the second base coating is dry to a tack-free surface apply the white topcoating in two coats. Apply the first coat in a standard box coat fashion using a wide fan spray pattern and holding the gun about 18 inches from the surface to produce a dry film. When properly applied, the first topcoat should barely cover the black/gray base coat. Apply the second and final coat in a standard box fashion holding the gun 8 to 10 inches from the surface to deposit a wet film. The final dry film thickness of the topcoating shall be at least 4 to 6 mils. Thoroughly inspect the topcoating for areas where the black base coating is visible and apply a touchup topcoat as necessary.

NOTE

Solvent-type brushable topcoating compound is good for repairing cracks and covering pinholes in the white topcoating. This material is available under the designation of SC-247-IBR from the Spraylat Corporation One Park Avenue, New York, New York 10016.

