

**BY ORDER OF THE COMMANDER
AIR FORCE SPECIAL OPERATIONS
COMMAND**



**AIR FORCE SPECIAL OPERATIONS
COMMAND INSTRUCTION 21-102**

22 SEPTEMBER 2017

Certified current on 14 December 2018

Maintenance

**CORROSION CONTROL PROGRAM
AND PAINT REQUIREMENTS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available for downloading or ordering on the e-Publishing web site at www.e-Publishing.af.mil.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: AFSOC/A4MS

Certified by: HQ AFSOC/A4M
(Col Eric J. Soto)

Supersedes: AFSOCI21-102,
24 May 2012

Pages: 27

This instruction implements Air Force Policy Directive (AFPD) 21-1, *Managing Aerospace Equipment Maintenance*. It establishes policies, objectives and assigns responsibilities for implementing and maintaining an effective corrosion prevention and control program for aerospace systems, equipment, and components in Air Force Special Operations Command (AFSOC). It specifies responsibilities performed at each level of command and implements guidance presented in Air Force Instruction (AFI)20-114, *Air and Space Equipment Management*, A series, Technical Orders (T.O.s) 1-1-691-WA-1, *Aircraft Weapons Systems Cleaning and Corrosion Control*, 1-1-689-3-WA-1, *Avionic Cleaning and Corrosion Prevention/Control*, all applicable Air Force Occupational Safety and Health (AFOSH) standards, command checklists, and the specific aircraft –23 T.O.s. It establishes interior and exterior paint finishes standards for the size, location, and color of aircraft exterior markings for AFSOC aircraft by type and mission. This instruction applies to all AFSOC units having permanently assigned aircraft. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. Requests for waivers must be submitted to the OPR listed above for consideration and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, or T-3”) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. Non-tiered compliance items targeted for units above the wing or

equivalent, the waiver authority is AFSOC A4/A4MS. This instruction applies to AFSOC Air National Guard (ANG) and Air Force Reserve (AFRC) units only upon mobilization. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force (AF) Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command.

SUMMARY OF CHANGES

This rewrite revises AFSOCI 21-102 by (1) adding CV-22, MQ-9, U-28, C-145 and C-146 paint finish and marking requirements throughout the instruction; (2) removing UH-1N/H paint finish and marking requirements; (3) changes nose art approval authority from Wg/CC to A4.

Chapter 1— CORROSION PREVENTION AND CONTROL PROGRAM	4
1.1. General.....	4
1.2. MAJCOM Program Management Responsibilities.	4
1.3. Wing/Group Corrosion Manager Responsibilities.....	4
1.4. Corrosion Prevention Advisory Board (CPAB).....	5
1.5. Cleaning and Washing of Aircraft.	5
1.6. Contract Aircraft Cleaning Services.	6
1.7. Prevention.	6
1.8. Corrosive Chemical Substance.	6
1.9. Protective Coatings.	7
1.10. Aerospace Ground Equipment (AGE).	7
1.11. Mobility Equipment.....	8
1.12. Training.....	8
Chapter 2— AIRCRAFT PAINT REQUIREMENTS	9
2.1. General.....	9
2.2. AFSOC Variant C-130 Aircraft.	9
2.3. CV-22.....	10
2.4. MQ-9.....	10

2.5.	U-28.....	10
2.6.	C-145.	10
2.7.	C-146.	10
2.8.	MC-12W.	10
Chapter 3— INTERIOR PAINT REQUIREMENTS.		11
3.1.	AFSOC Variant C-130 Aircraft. Drawing #93104893. (T-2).....	11
3.2.	CV-22 flight Deck/Cargo compartment:.....	11
3.3.	MQ-9.....	11
3.4.	U-28.....	11
3.5.	C-145.	11
3.6.	C-146.	11
3.7.	MC-12W.	11
Chapter 4— AIRCRAFT RECONDITIONING		12
4.1.	General.....	12
Chapter 5— AIRCRAFT MARKINGS AND NOSE ART		13
5.1.	Nose Art.....	13
5.2.	Aircraft Markings.	13
Attachment 1— GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION		14
Attachment 2— AFSOC VARIANT C-130 SPECIFICATIONS		17
Attachment 3— CV-22 MARKING SPECIFICATIONS		20
Attachment 4— MQ-9 AIRCRAFT MARKING SPECIFICATIONS		22
Attachment 5— U-28 AIRCRAFT MARKING SPECIFICATIONS		23
Attachment 6— C-145 AIRCRAFT MARKING SPECIFICATIONS		25
Attachment 7— C-146 AIRCRAFT MARKING SPECIFICATIONS		26
Attachment 8— MC-12W AIRCRAFT MARKING SPECIFICATIONS		27

Chapter 1

CORROSION PREVENTION AND CONTROL PROGRAM

1.1. General. A definite interrelationship exists between preventing and controlling corrosion on aerospace equipment. Corrosion will decrease with an increase in corrosion prevention. At field level, the best and most economical means of corrosion prevention is frequent cleaning in conjunction with periodic maintenance, painting (touch-up), and corrosion inspections. Prevention is the hub to an effective corrosion control program; therefore, strict adherence to corrosion prevention policies is essential. United States Air Force (USAF) technical instructions for corrosion prevention, detection, treatment, and protection furnish general guidance concerning application of the AFSOC corrosion prevention and control program. The applicable USAF or manufacturer weapons system equipment manual will include inspection frequencies and maintenance requirements of specific weapons systems and equipment. There is no authorization to deviate from the requirements of this instruction without prior approval of AFSOC/A4M. Cross flow of information is essential to the program. This instruction authorizes all program managers' direct communications with their counterparts (all echelons) on any matter pertaining to the program.

1.2. MAJCOM Program Management Responsibilities.

1.2.1. In addition to the responsibilities outlined in AFI 20-114, *Air and Space Structural Equipment Management*, the AFSOC corrosion manager will:

1.2.2. Review Air Force publications concerning corrosion prevention and control for adequacy and coordination with appropriate agencies. **(T-2).**

1.2.3. Submit comments and recommendations based on experience to agencies responsible for the concept, definition, and acquisition of Air Force material. **(T-2).**

1.2.4. Coordinate with Air Force Materiel Command (AFMC) on the development and testing of corrosion control techniques and materiel. **(T-2).**

1.2.5. Communicate with Air Education Training Command (AETC) on the corrosion training curriculum. AFSOC/A4MMT will coordinate on all training matters that effect the AETC developed courses. **(T-2).**

1.2.6. Represent the command at the Corrosion Prevention Advisory Board (CPAB) for assigned weapons systems. **(T-2).**

1.3. Wing/Group Corrosion Manager Responsibilities.

1.3.1. The wing commander (SOG/CC for overseas units) will designate a corrosion control manager . Submit in January of each year, if changed: name, functional address, office symbol, e-mail address, DSN, and FAX to AFSOC/A4M. **(T-2).** Serving as the intermediate command focal point for the corrosion control program, the wing/group corrosion manager will:

1.3.2. Monitor subordinate units' compliance with applicable provisions of AFI20-114, *Air and Space Equipment Structural Management*, and this instruction. **(T-2).**

1.3.3. Ensure units develop and issue technical and administrative instruction on the AFSOC corrosion control program (i.e., local aircraft wash checklists). **(T-2).**

1.3.4. Review base requirements for training, facilities, equipment, and material to support the corrosion program. **(T-2)**.

1.3.5. Develop and submit to AFSOC/A4MS comments and recommendations for improvement of the corrosion program as needed **(T-2)**.

1.3.6. Supplement AFSOC corrosion control directives, as required, to maintain a sound corrosion control program. **(T-2)**.

1.3.7. Forecast and plan funding to attend the Corrosion Prevention Advisory Board (CPAB) for assigned weapons systems. **(T-2)**.

1.3.8. Coordinate with each flying and maintenance squadron for CPAB action items and submit these items to AFSOC/A4M upon request. **(T-2)**.

1.4. Corrosion Prevention Advisory Board (CPAB).

1.4.1. AFI20-114, *Air and Space Equipment Structural Management*, authorizes a CPAB for all aircraft. The purpose of the CPAB is to investigate specific airframe corrosion-related problems, evaluate procedures, and make appropriate recommendations.

1.4.2. Membership includes representatives from AFSOC, other MAJCOMs, individual Air Logistics Centers (ALCs), and special operations forces (SOF) wing/groups.

1.4.3. Although the CPAB is primarily advisory in nature, its findings and recommendations represent the consensus of the board members.

1.4.4. The CPAB, with AFSOC notification, may make investigative visits to AFSOC units.

1.5. Cleaning and Washing of Aircraft.

1.5.1. Maintenance Group (MXG), Special Operations Squadron (SOS), and Maintenance Squadron (MXS) commanders will establish and enforce procedures and controls to ensure accomplishment of exterior and interior aircraft cleaning cycles in accordance with (IAW) T.O. 1-1-691-WA-1, *Aircraft Weapons Systems Cleaning and Corrosion Control*. AFSOC units located in severe corrosion environments or frequently operate low level flights over salt water must aggressively maintain a strict wash schedule for a sound corrosion prevention and control program. Units will provide by letter to AFSOC/A4MS, a history of assigned aircraft washes by 31 Jan for the previous year **(T-2)**. At a minimum it will include aircraft tail number and dates (for the year) washed. This data will be used to assist in pinpointing recurring causes of corrosion.

1.5.2. Units operating aircraft near or over salt water will develop local procedures to ensure that clear water rinse requirements in T.O. 1-1-691-WA-1, *Aircraft Weapons Systems Cleaning and Corrosion Control*, are met. Units will provide a copy of their procedures to AFSOC/A4M, for use in cross talks and command-wide dissemination of ideas. **(T-2)**.

1.5.3. All AFSOC aircraft stationed in severe corrosion environments will have a complete after wash corrosion inspection by structural maintenance personnel. **(T-2)**.

1.5.4. All AFSOC variant C-130 squadrons will ensure the urinal area of their aircraft is cleaned and inspected at each Basic Post Flight (BPO) and aircraft wash. **(T-2)**. This is a corrosion prone area requiring constant attention. Pay particular attention to corrosion prone areas identified in T.O. 1C-130A-23-WA-1, *System Peculiar Corrosion Control USAF Series*

All C-130 Series Aircraft (Except C-130J), T.O. 1C-130J-23-WA-1 Corrosion Prevention and Control Manual, USAF Series All C-130J, T.O. 1C-130(H/M)J-23-WA-1 Corrosion Prevention and Control Manual, USAF Series C-130H/M, or T.O. 1C-130(E)J-23-WA-1, Corrosion Prevention and Control Manual. USAF Series C-130(E)J.

1.5.5. Units eligible for wash interval waivers must submit waivers, IAW T.O. 1-1-691-WA-1, *Aircraft Weapons Systems Cleaning and Corrosion Control*, to AFSOC/A4MS then it will be sent to the System Program Director (SPD). The SPD has the final approval authority. AFSOC/A4MS will forward a copy of the waiver to the Air Force Corrosion Prevention and Control Office (AFCPCO). Waivers will expire one year after approval is granted. Each year a new waiver is required. **(T-2)**.

1.6. Contract Aircraft Cleaning Services.

1.6.1. For organizations utilizing a performance contract: the MXG/CC or MXS/CC, will establish local inspection requirements to ensure the provisions of the contract services are met **(T-2)**. Use the customer complaint system (reference AFI 63-138, *Acquisition of Services*) to identify deficient services.

1.6.2. The Contracting Officer's Representative (COR) will appoint, in writing, quality assurance evaluator (QAE) personnel to monitor contractor performance IAW AFI 63-138, *Acquisition of Services*. **(T-2)**.

1.7. Prevention.

1.7.1. All maintenance personnel, regardless of Air Force Specialty Code (AFSC), are responsible for identifying corrosion. Upon discovery of corrosion discrepancies that may affect aircraft structural integrity, safety of flight, or equipment serviceability beyond the using work center's capability to correct, a structural maintenance (2A7X3) specialist will be dispatched to evaluate the discrepancy. Enter all discrepancies noted during these inspections in the maintenance forms and Integrated Maintenance Data System (IMDS). **(T-2)**.

1.7.2. Aircraft avionics systems and instruments are extremely critical for safety of flight and are no less susceptible to corrosion than any other portion of the aircraft. All avionics work sections must be familiar with and have available for use, T.O. 1-1-689-3-WA-1, *Avionic Cleaning and Corrosion Prevention/Control*. It is the responsibility of avionics maintenance personnel to inspect and clean the pins and sockets of disconnected electrical connectors, black boxes, Line Replaceable Unit (LRU)'s, and inside equipment drawers, etc., for corrosion. When corrosion is identified beyond the capability of the Avionics shop to correct, request assistance from the structural maintenance shop.

1.7.3. It is not economical to treat minor hardware (screws, nuts, bolts, clamps, etc.) for corrosion. Replace any corroded minor hardware as soon as possible.

1.7.4. Ensure that MQ-9 ground control stations systems and instruments are inspected regularly for cleanliness and corrosion prevention measures as required. Refer to TO 1Q-1(M)B-2-2, *MD-1A Series Ground Control Station Maintenance Procedures*.

1.8. Corrosive Chemical Substance.

1.8.1. A corrosive chemical spill aboard an aircraft is one of the most potentially hazardous situations encountered by maintenance and aircrew personnel.

1.8.2. When a corrosive chemical leak or spill occurs aboard an AFSOC aircraft, immediately perform neutralization and clean-up of the chemicals upon landing IAW AFMAN24-204(I), *Preparing Hazardous Materials for Military Air Shipments*. Each unit involved will annotate the debriefing check sheets to ensure prompt notification of the structural maintenance shop. Make entries on the aircraft's forms as to what type of chemical spilled, area contaminated, specific neutralization procedures, and results of corrosion inspection. Expeditious chemical neutralization is essential to prevent structural damage. After neutralization, perform a comprehensive corrosion inspection of the affected area. **(T-2)**.

1.8.3. Clean aircraft and equipment soiled with fire extinguishing materials as soon as possible after exposure. **(T-2)**. Do not allow fire extinguishing residue, such as bromochloromethane or dibromodifluoromethane extinguishing materials, to remain on the equipment for a period of four hours or more. T.O. 1-1-691-WA-1, *Aircraft Weapons Systems Cleaning and Corrosion Control*, contains specific agent removal procedures. If the aircraft or equipment is impounded as a result of an accident, the accident investigation board shall consider the rapid corrosive attack of the fire extinguishing material. They will release the aircraft for removal of this material at the earliest possible time consistent with the accident investigation. Prompt action in accomplishing this procedure can result in savings of considerable man-hours and materiel.

1.9. Protective Coatings.

1.9.1. Application of quality coatings usually provides protection of aircraft and AGE surfaces. There are corrosion preventative compounds (CPC) and many types of inorganic coatings available to protect unpainted metals. Choice of the proper protective coatings depends upon technical order requirements, type of metal, available facilities, environmental conditions, and operating locations of the equipment. There are many more variables to take into consideration when choosing the proper coating; therefore, structural maintenance personnel must exercise sound judgment. Total repainting of aircraft is not authorized due to federal, state, and local environmental restrictions and lack of proper facilities. If corrosion treatment is beyond the work center's capability request engineering assistance IAW T.O. 00-25-107-WA-1, *Maintenance Assistance*. For CV-22's, submit a technical assistance request (TAR) through Quality Assurance to the V-22 Tech Assist Management Program (VTAMP) IAW T.O. 00-25-107-WA-1.

1.10. Aerospace Ground Equipment (AGE).

1.10.1. AGE corrosion control is equally as important as aircraft corrosion control. AGE T.O.s and the applicable equipment T.O.s contain adequate guidance for an effective corrosion prevention and control program.

1.10.2. AGE supervision will establish an aggressive corrosion control plan to ensure equipment is maintained to the highest standard (T-2). Schedule all corrosion repairs or repainting that is beyond the responsible work center's capability with the Aircraft Structural Maintenance Element or contract. **(T-3)**.

1.10.3. Apply markings IAW T.O. 35-1-3-WA-1, *Corrosion Prevention, Painting and Marking of USAF Support Equipment (SE)*. Markings may be applied in paint or vinyl.

1.10.4. The use of sprayable corrosion preventive compounds (CPC) is encouraged.

1.11. Mobility Equipment.

1.11.1. Mobility equipment that requires markings IAW AFI10-403, *Deployment Planning and Execution*, will have the mobility markings applied using color (flat black-37038) or (semi-gloss olive drab-24087). Markings may be applied in paint or vinyl.

1.12. Training.

1.12.1. Units will provide all (2AXXX) aircraft maintenance personnel (excluding AFSCs 2A7X3 Aircraft Structural Maintenance, 2A6X2 Aerospace Ground Equipment, those performing administrative, supply, and manning duties) with corrosion training. **(T-2)**. Training frequency will consist of annual familiarization. Corrosion training will be documented in IMDS. **(T-3)**.

1.12.2. Training curriculum will include, but is not limited to: **(T-2)**.

1.12.2.1. Corrosion identification procedures and techniques.

1.12.2.2. Knowledge of aircraft and equipment corrosion susceptible areas.

1.12.2.3. Reporting and documenting procedures for identified corrosion.

1.12.2.4. Proper selection and use of sealant for corrosion prevention.

1.12.2.5. Proper selection and use of corrosion preventive compounds.

Chapter 2

AIRCRAFT PAINT REQUIREMENTS

2.1. General. Aircraft paint programs are essential to aircraft longevity. Proper paint and marking procedures ensure standardization and prevent corrosion. Units will adhere to Air Force, Major Command (MAJCOM), Unit and T.O. guidance to ensure AFSOC aircraft are properly painted and marked. **(T-2).**

2.1.1. Deviation from Policy. At times it may be necessary to deviate from established guidance. Send deviation requests IAW T.O. 1-1-8-WA-1, **Chapter 9**, *Exterior Finishes, Insignia and Markings Applicable to USAF Aircraft*, signed by applicable maintenance unit commanders to AFSOC/A4MS, prior to application of any insignias or markings not authorized by this instruction. **(T-2).** Include exact reference dimensions and two copies of 8 by 10- inch color photographs depicting the proposed location and surrounding area with the request. (Colored digital pictures can be used in lieu of color photographs).

2.1.2. The 353 SOG is authorized to display the logo —Stray Goose on the vertical stabilizer of unit aircraft. Use gray color, Fed Std 595, # 36293.

2.1.3. Remove all command markings from aircraft prior to permanent transfer from AFSOC. This does not apply to aircraft being sent to permanent storage facilities.

2.2. AFSOC Variant C-130 Aircraft. (All coatings will be polyurethane MIL-PRF-85285, Type IV) Drawing# 93104893. **(T-2).**

2.2.1. Fuselage: Dark gray (Fed Std 595, 36118) from top of aircraft wrapped down to water line 159; light gray (Fed Std 595, #36293) will cover the rest. Feather dark gray into light gray.

2.2.2. Wings:

2.2.2.1. Top: Dark gray (Fed Std 595, #36118).

2.2.2.2. Bottom: Light gray (Fed Std 595, #36293) wrap dark gray around leading edge and feather into light.

2.2.3. Vertical Stabilizer: Dark gray (Fed Std 595, #36118).

2.2.4. Engine Nacelles: Dark gray (Fed Std 595, #36118).

2.2.4.1. Inlet scoop: Dark gray (Fed Std 595, #36118).

2.2.5. External Fuel Tanks/Air Refueling Pods/Pylons:

2.2.5.1. Top: Dark gray (Fed Std 595, #36118) wrapped around to water line 215.6.

2.2.5.2. Bottom: Light gray (Fed Std 595, #36293) Feathered dark gray into light gray.

2.2.5.3. Pylons: Dark gray (Fed Std 595, #36118).

2.2.6. All exterior markings will contrast primary top coat color.

2.2.7. AC-130U/J: All gun blast diffusers will be painted black (Fed Std 595, #37038).

2.2.8. Wheels: All fixed wing wheels shall be black (Fed Std 595, #37038).

2.3. CV-22. Follow Technical Order Guidance and drawing specifications. Contact the Fleet Support Team (FST) for the current version of drawing # 901020752, *CV-22 External Finish and Markings*. **(T-2)**.

2.4. MQ-9. Follow Technical Order Guidance and drawing specifications. **(T-2)**.

2.5. U-28. Follow Technical Order Guidance and drawing specifications (Drawing# 22770006, 22770008). **(T-2)**.

2.6. C-145. Follow Technical Order Guidance and drawing specifications (Drawing # 02030006, 02030007, 02030008, 02030009). **(T-2)**.

2.7. C-146. Follow Technical Order Guidance and drawing specifications. **(T-2)**.

2.8. MC-12W. Follow Technical Order Guidance and drawing specifications. The MC-12W is a commercially derivative aircraft and follows FAA approved paint schemes approved on the following STCs: 10481A56000-1, 10547A56200-1, 10116A56201, 10547A56250-1, 10547A56210-1, 10481MC00000-1, 10547MC56210-1, 10237A56000-1 and 10237MC5600. Contact MC-12W SPO for STCs. **(T-2)**.

Chapter 3

INTERIOR PAINT REQUIREMENTS.

3.1. AFSOC Variant C-130 Aircraft. Drawing #93104893. (T-2).

3.1.1. AC-130U, MC-130H, AC-130W, EC-130J, MC-130J, AC-130J: Flight Deck/Cargo Compartment: Dark gray (Fed Std 595, #36118). **Note:** Paint J model aircraft this color when repaint is needed will not be this color from the factory, Battle Management Center (BMC): Interior Black (Fed Std 595, #37038). Exterior (BMC) match color as interior cargo area of aircraft. **Note:** Paint J model aircraft this color when repaint is needed; will not be this color from the factory. AC-130W: Windshield and Clear Vision Window Area Posts: Black (Fed Std 595, #37038).

3.2. CV-22 flight Deck/Cargo compartment: Black (Fed Std 595, #37038) Follow technical order guidance and drawing specifications (Drawing# 901020752). **(T-2).**

3.3. MQ-9. Follow technical order guidance and drawing specifications. **(T-2).**

3.4. U-28. Follow technical order guidance and drawing specifications (Drawing# 22770006, 22770008). **(T-2).**

3.5. C-145. Follow technical order guidance and drawing specifications (Drawing # 02030006, 02030007, 02030008, 02030009). **(T-2).**

3.6. C-146. Follow technical order guidance and drawing specifications. **(T-2).**

3.7. MC-12W. Follow technical order guidance and drawing specifications. Contact MC-12W SPO for STCs. **(T-2).**

Chapter 4

AIRCRAFT RECONDITIONING

4.1. General.

4.1.1. The purpose of reconditioning is to prevent corrosion. Cleaning is the most important factor to prevent corrosion.

4.1.2. Any awaiting maintenance and/or inspections may be performed in conjunction with reconditioning.

4.1.3. Units are encouraged to ensure that an adequate number of personnel are available to complete intricate interior cleaning and inspecting to ensure corrosion is detected and repaired.

4.1.4. Units will maintain aircraft appearance with minimum loss of aircraft availability. **(T-3)**.

4.1.5. All Group Commanders must ensure operators and maintainers share equal responsibility for the cleanliness, appearance, and serviceability of aircraft interiors. It is everyone's responsibility to maintain the integrity of aircraft appearance.

Chapter 5

AIRCRAFT MARKINGS AND NOSE ART

5.1. Nose Art.

5.1.1. Nose Art may be applied to the forward area of the fuselage on AFSOC aircraft as specified below when approved by the MAJCOM A4. Do not use squadron identification. The nose art selected for each aircraft shall:

5.1.2. Be distinctive, symbolic, and designed in good taste. **(T-2)**.

5.1.3. Enhance unit pride. **(T-2)**.

5.1.4. Be representative of the unit. **(T-2)**.

5.1.5. Be gender neutral. **(T-2)**.

5.1.6. Be made of lusterless paints or vinyl. **(T-2)**.

5.2. Aircraft Markings.

5.2.1. Refer to Attachment 2 through Attachment 7 for specifications and markings for specific aircraft. The markings in this instruction have been coordinated and approved with Warner Robins ALC and Headquarters USAF.

5.2.2. Naming of aircraft must be coordinated through MAJCOM to HQ USAF/CV, for final approving authority. **(T-2)**.

5.2.3. Combat scores or Combat kills applied to AFSOC aircraft are not considered nose art and will not be displayed. Kill marks are not authorized by Headquarters USAF. **(T-2)**.

RENE M. LEON, Col, USAF
Director of Logistics

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

- AFPD 21-1, *Managing Aerospace Equipment Maintenance*, 29 Oct 2015
- AFI 10-403, *Deployment Planning and Execution*, 20 Sep 2012
- AFI 20-114, *Air and Space Equipment Structural Management*, 07 Jun 2011
- AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal Public, and Interagency Air Force Collections*, 06 Mar 2013
- AFI 33-360, *Publications and Forms Management*, 01 Dec 2015
- AFI 63-138, *Acquisition of Services*, 21 May 2013
- AFMAN 24-204 (I), *Preparing Hazardous Materials for Military Air Shipments*, 03 Dec 2012
- T.O. 1-1-8-WA-1, *Application and Removal of Organic Coatings, Aerospace and Non-Aerospace Equipment*, 12 Jan 2010
- T.O. 1-1-691-WA-1, *Aircraft Weapons Systems Cleaning and Corrosion Control*, 02 Nov 2009
- T.O. 1-1-689-3-WA-1, *Cleaning and Corrosion Control Volume III Avionics And Electronics*, 01 Mar 2005
- T.O. 00-25-107-WA-1, *Maintenance Assistance*, 01 Oct 2015
- T.O. 35-1-3-WA-1, *Corrosion Prevention, Painting and Marking of USAF Support Equipment (SE)*, 26 Apr 2014
- T.O. 1C-130A-23-WA-1, *System Peculiar Corrosion Control USAF Series All C-130 Series Aircraft (Except C-130J)*, 01 Apr 2013
- T.O. 1C-130J-23, *Corrosion Prevention and Control Manual USAF C-130J Series Aircraft*, 15 Jul 2005
- T.O. 1C-130(E)J-23-WA-1, *Corrosion Prevention and Control Manual USAF Series EC-130J AF99-1932, AF00-1934 and AF01-1935 Aircraft*, 01 Aug 2006
- T.O. 1C-130(H/M)J-23-WA-1, *Corrosion Prevention and Control Manual, USAF Series HC-130J AND MC-130J Aircraft*, 01 Sep 2011
- TO 1Q-1(M)B-2-2, *MD-1A Series Ground Control Station Maintenance Procedures*, 23 May 2017

Prescribed Forms

There are no forms prescribed by this publication.

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AETC—Air Education Training Command

AFSC—Air Force Specialty Code

AF—Air Force

AFPCPO—Air Force Corrosion Prevention and Control Office

AFI—Air Force Instruction

AFMC—Air Force Materiel Command

AFOSH—Air Force Occupational Safety and Health Standard

AFPD—Air Force Policy Directive

AFSOC—Air Force Special Operations Command

ALCs—Air Logistics Centers

AFRC—Air Force Reserve Command

AFMAN—Air Force Manual

AFRL—Air Force Research Laboratory

AFRIMS—Air Force Records Information Management System

ANG—Air National Guard

BPO—Base Post Flight

CAMS/IMDS—Core Automated Maintenance System/Integrated Maintenance Data System

CPAB—Corrosion Prevention Advisory Board

CPC—Corrosion Preventative Compounds

HQ—Headquarters

MXS—Maintenance Squadron

OPR—Office of Primary Responsibility

MXG—Maintenance Group

RDS—Records Disposition Schedule

SOS—Special Operations Squadron

SOF—Special Operations Forces

SPD—System Program Director

TAR—Technical Assistance Request

T.O—Technical Orders

VTAMP—V-22 Tech Assist Management Program

USAF—United States Air Force

Attachment 2

AFSOC VARIANT C-130 SPECIFICATIONS

Table A2.1. AFSOC Variant C-130 Specifications

Designator	Markings	Location	Size	Color
A	Crew Chief	Directly above and centered on crew entrance door.	1.75 inch	36293 or 37035 Lusterless black vinyl
B	USAF and Aircraft Radio Call Numbers	Both sides of vertical stabilizer. USAF 12 inches above tail call number and centered; numbers 60 inches above horizontal stabilizer.	6 inch	36293
C	Station numbers (last four digits of aircraft serial number)	Nose of aircraft, right and left side. Place to edge of numbers on WL 192 and leading edge at FS 134.	6 inch	36293
D	Ice Detection	See paint drawing # 93104893	See drawing	37038
E	National Star Insignia	See paint drawing # 8226763	15 inch	36293
F	Nose Art	Left side of fuselage. 33 inches aft and 13 inches above line extending parallel to bottom of pilot's lower kick window.	Not to exceed 4 feet by 4 feet square	Lusterless paint/vinyl
G	Refueling Marking (Radio Call Number)	Aft edge of UARRSI doubler panel. Full aircraft serial number. (i.e. 69-6575)	4 inch	36622
Note:	Ammunition Placard	Right side of fuselage centered between FWD edge of air deflector door and SPR panel. Top of block even with top of SPR door. (AC-130U/J, MC-130W, C-130E, MC-130J)	16X10	36293

Figure A2.1. AFSOC Variant C-130 Specifications.

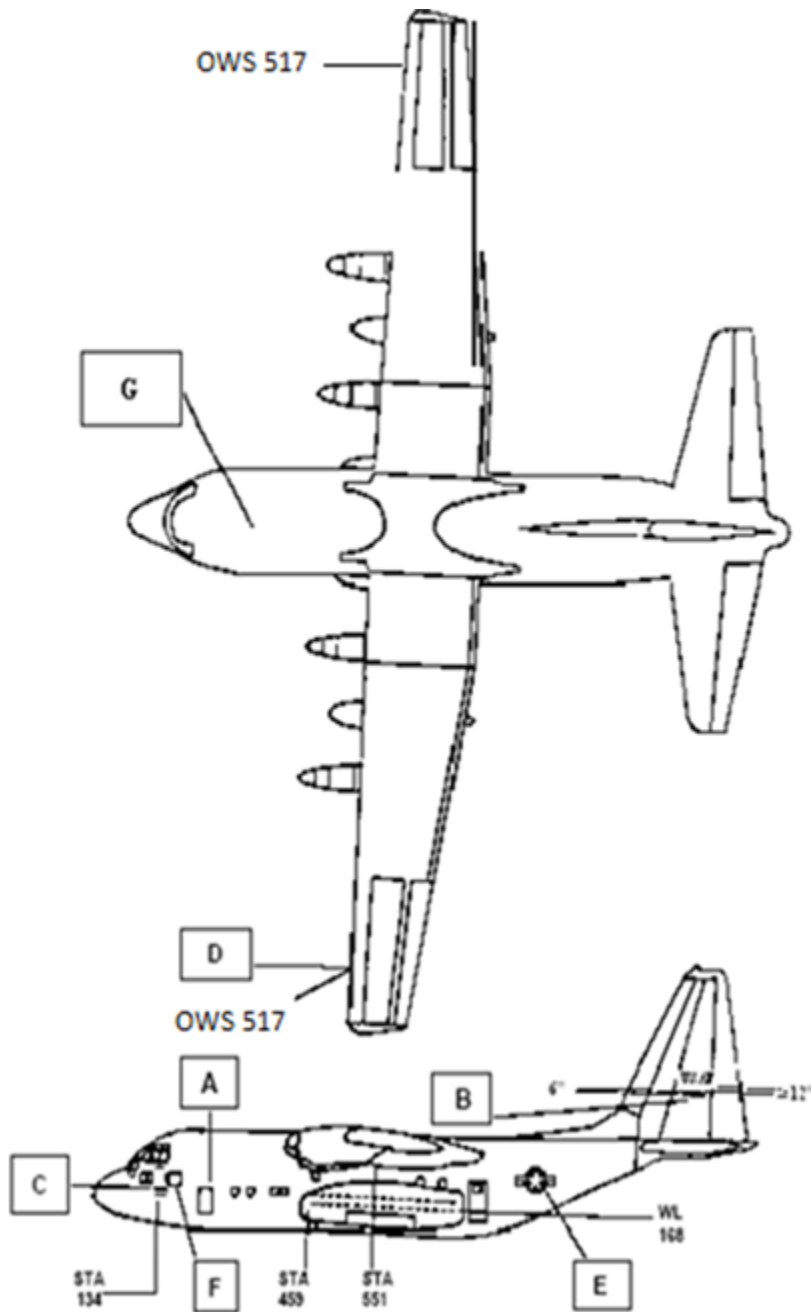
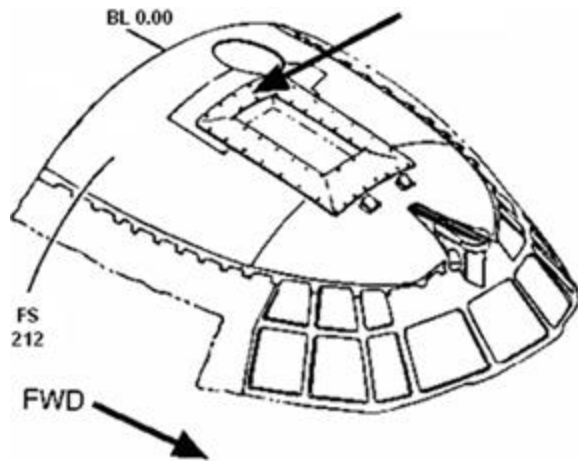


Figure A2.2. AFSOC Variant Refueling Door.



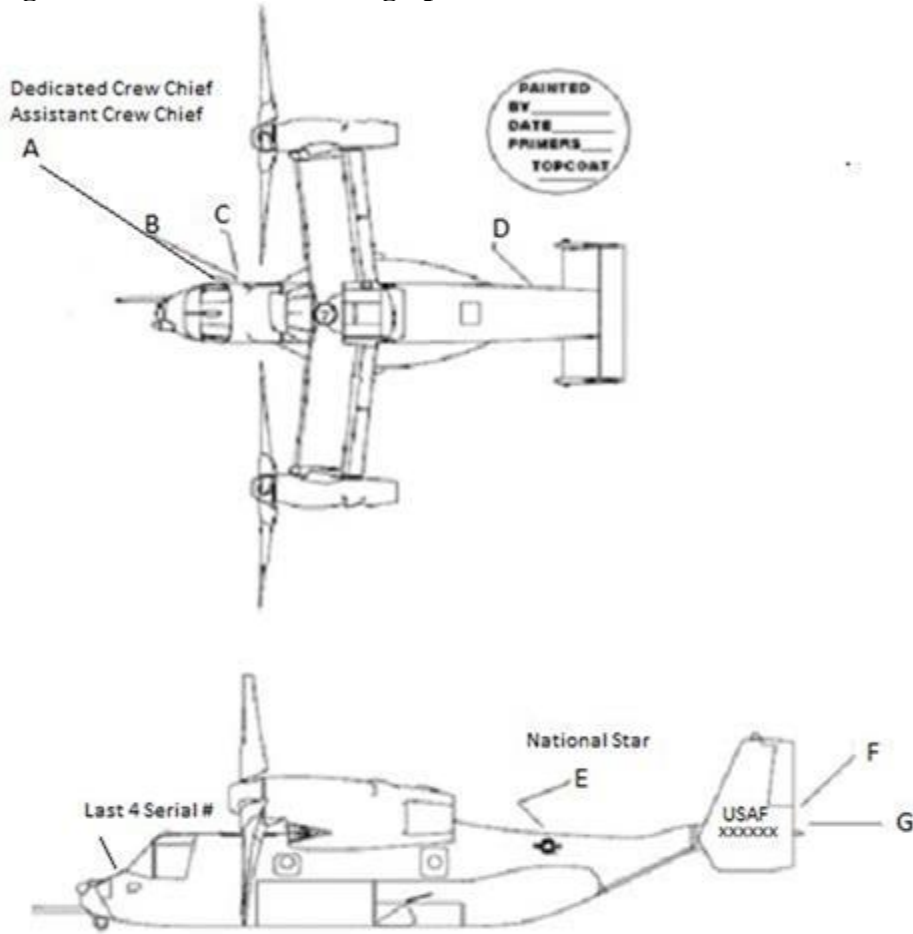
Attachment 3

CV-22 MARKING SPECIFICATIONS

Table A3.1. CV-22 Marking Specifications.

Designator	Marking	Location	Size	Color
A	Crew Chief	Right side of fuselage only. Aft of crew entry door and adjacent to top of door opening. Vinyl authorized.	1.75 inch	36293 (Lusterless paint/vinyl)
B	Nose Art	Right side only, between aft of pilot window and crew entry door above SIRFC antenna. Vinyl authorized.	Not to exceed 2 square feet	36293
C	Armament Placard	Below Rt Fwd SIRFC antenna and Fwd of crew entry door.	10X8 inch	36293
D	Paint Facility ID	Rt side fuselage transition area even with leading edge of horizontal stabilizer.	3 inch	36293
E	National Star	Lt & Rt side fuselage, approx FS 580.	15 inch	36293
F	USAF	Center above radio call sign.	6 inch	36293
G	Aircraft Serial Number Below USAF	Lt & Rt outboard vertical stabilizer, 6-digit serial number. Note: Nose center below last 4 number only	Vertical stab: 10 inch, 1 inch spacing Nose: Not to exceed 4 inch	36293

Figure A3.1. CV-22 Marking Specifications.



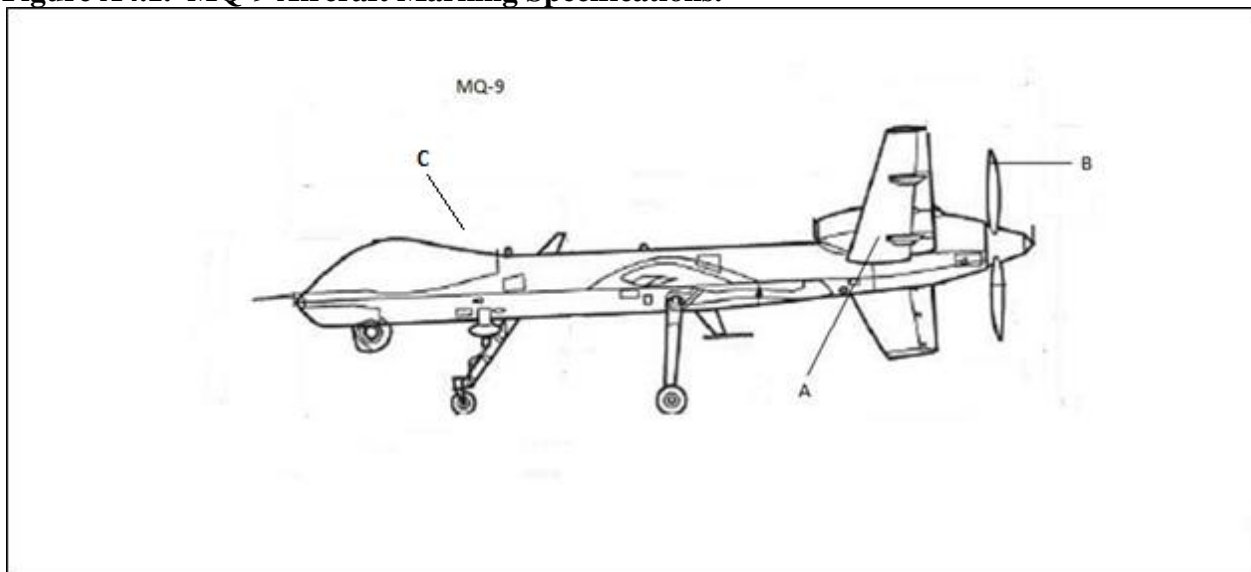
Attachment 4

MQ-9 AIRCRAFT MARKING SPECIFICATIONS

Table A4.1. MQ-9 Aircraft Marking Specifications.

Designator	Marking	Location	Size	Color
A	Radio Call Numbers	Horizontal: Located on the left and right sides of the lower tail leveled 4 inches below fuselage Alignment: Centered between leading and trailing edge of rudder	5 inch block letters, AF over 5 inch numbers	37038
B	Propeller Blade Tips	4-inch band around blade tips	4 inch band	33538
C	DCC Names	Located on right side of forward fuselage Vertical: 2 inches below chine line Horizontal: End of name starting at aft edge of lower radome cover with left edge aligned with left edge of ADCC name. DCC and ADCC names justified aft as a group	1.75 inch block letters	37038
Note: Refer to Technical Order for paint color and scheme				

Figure A4.1. MQ-9 Aircraft Marking Specifications.



Attachment 5

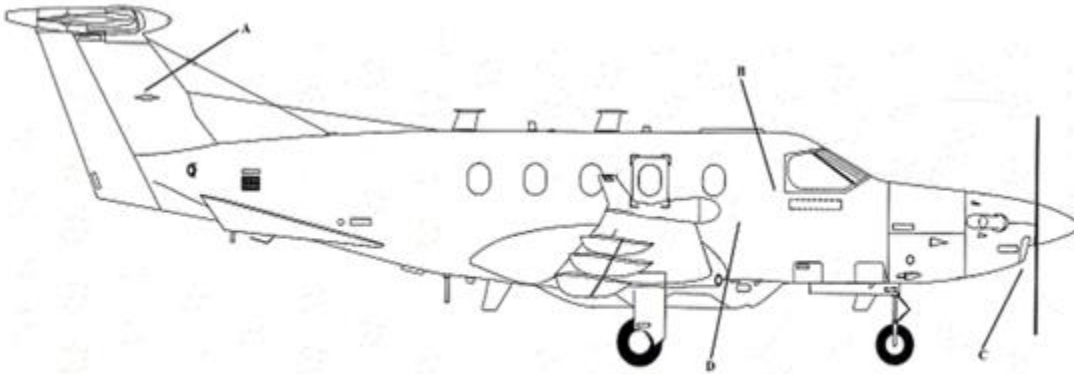
U-28 AIRCRAFT MARKING SPECIFICATIONS

Table A5.1. U-28 Aircraft Marking Specifications.

Designator	Marking	Location	Size	Color
A	Aircraft Tail Number	Both Sides Centered on Vertical Stabilizer	6 inch	36293
B	Aircraft Serial Number	Behind Pilot Window	2 inch	36293
C	Flares Only	Forward Belly	1 inch	36118
D	Armament Placard	Left Side Only	10 inch	36118

Note: Refer to Technical Order for paint color and scheme

Figure A5.1. U-28 Aircraft Marking Specifications.



Note: PG-6-650 (semi-gloss light gray).

Figure A5.2. U-28 Flares Only Marking (Bottom View).

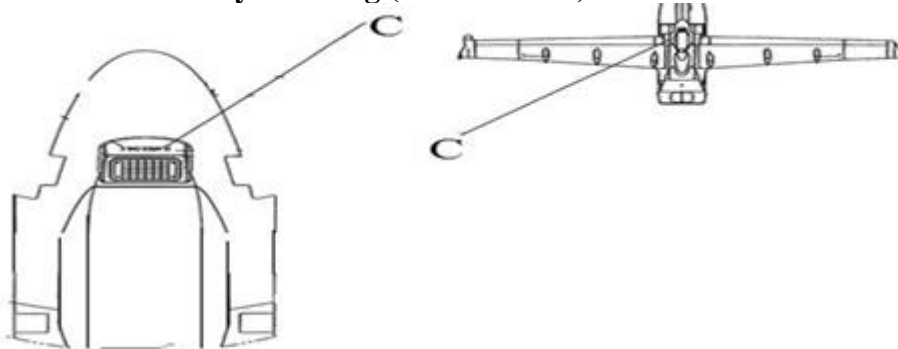


Figure A5.3. U-28 Armament placard.

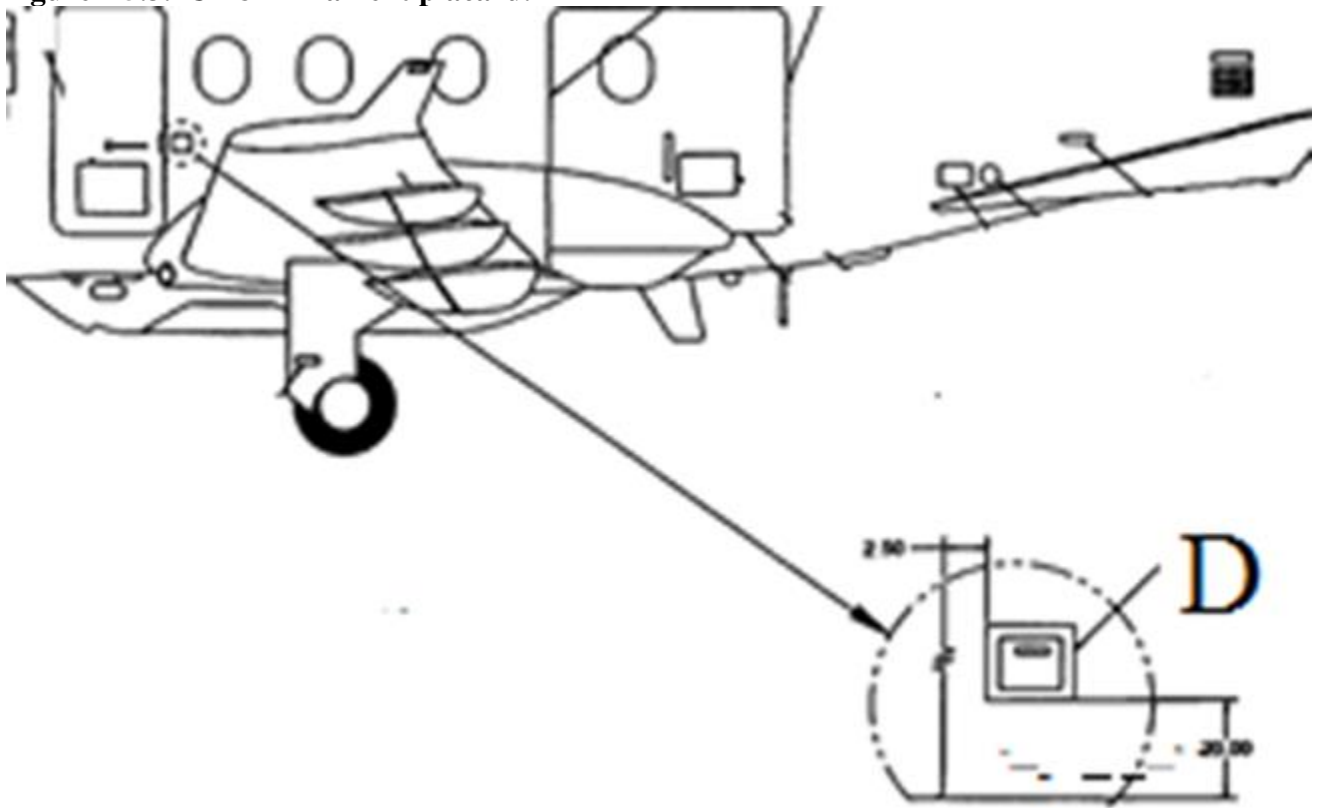
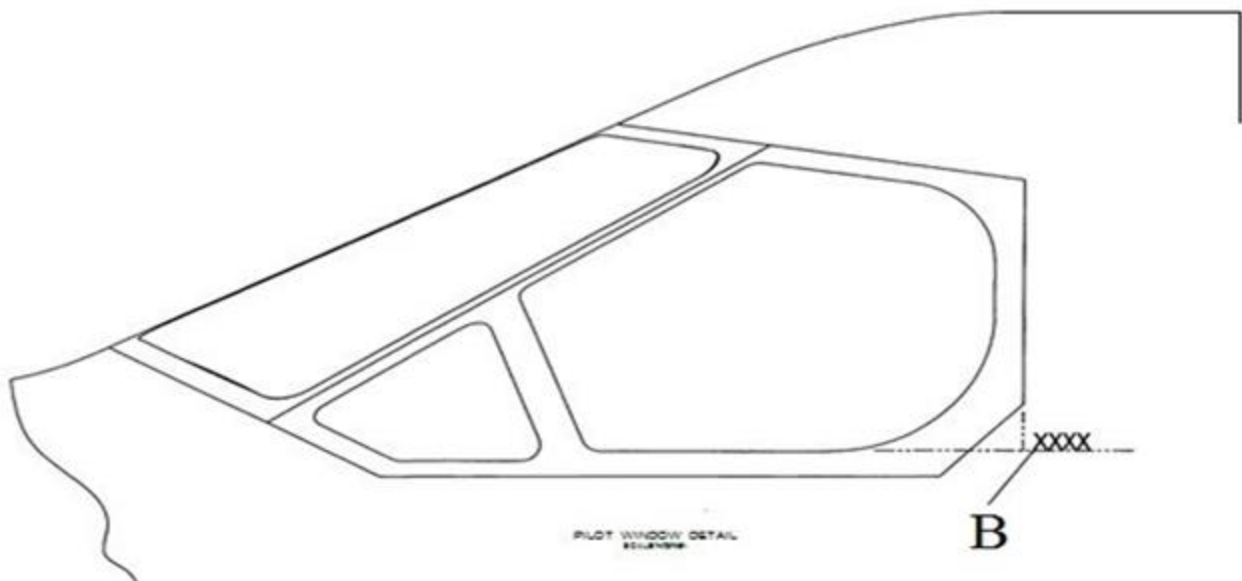


Figure A5.4. U-28 Aircraft Serial Number.



Attachment 6

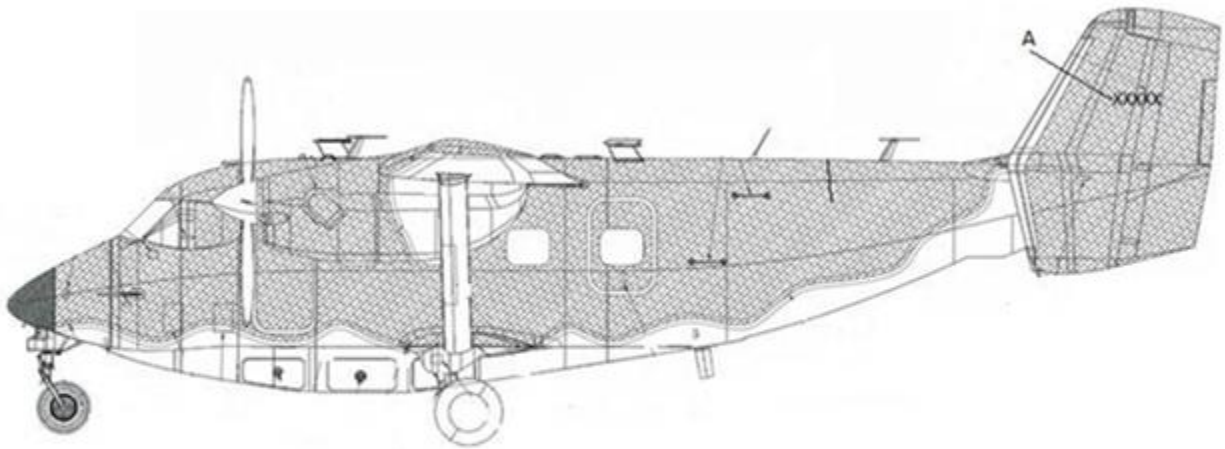
C-145 AIRCRAFT MARKING SPECIFICATIONS

Table A6.1. C-145 Aircraft Marking Specifications.

Designator	Marking	Location	Size	Color
A	Tail number 5 digit	Left and Right Side tail	6 inch	36293

Note: Refer to Technical Order for paint color and scheme

Figure A6.1. C-145 Aircraft Marking Specifications.



Note: 36118 (dark gray)
 36293 (light gray, belly)

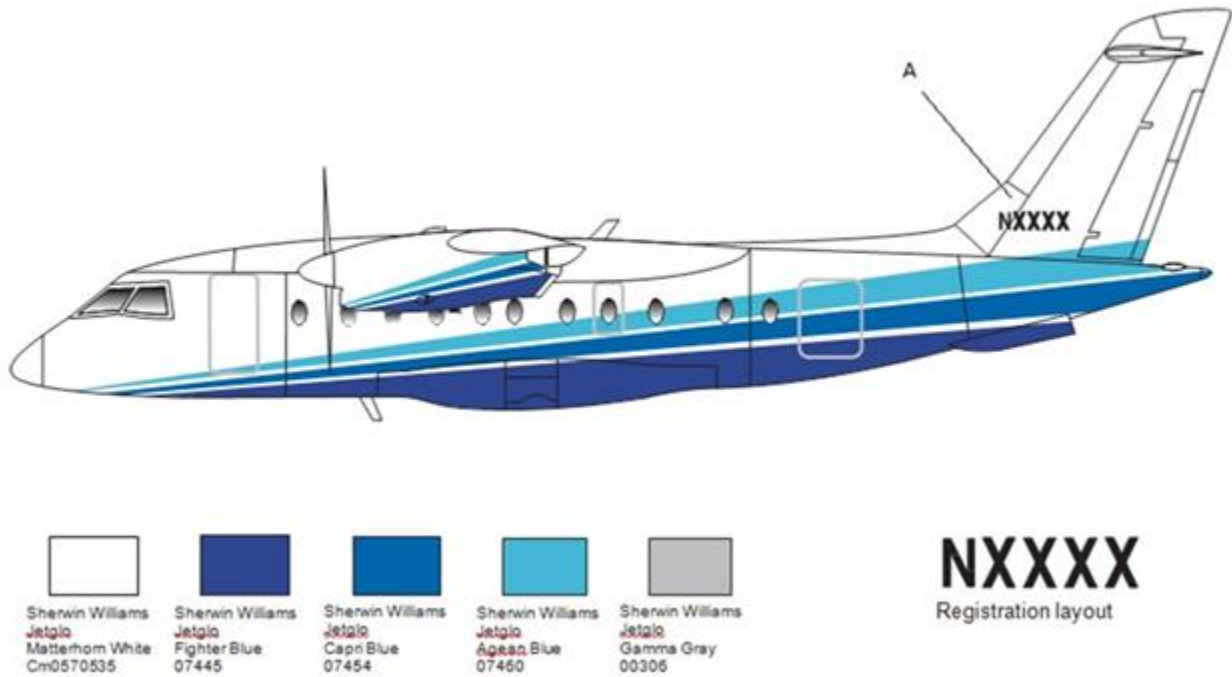
Attachment 7

C-146 AIRCRAFT MARKING SPECIFICATIONS

Table A7.1. C-146 Aircraft Marking Specifications

Designator	Marking	Location	Size	Color
A	Serial number 5 digit	Left and Right Lower Tail	12 inch	Black
Note: Refer to Technical Order for paint color and scheme				

Figure A7.1. C-146 Serial Numbers.



Attachment 8

MC-12W AIRCRAFT MARKING SPECIFICATIONS

Table A8.1. MC-12W Aircraft Marking Specifications

Designator	Marking	Location	Size	Color
A	Serial number 6 digit	Left and Right forward of lower tail	10 inch	Black
Note: Refer to MC-12W SPO for paint color and scheme				

Figure A8.1. MC-12W Aircraft Marking Specifications

