

**BY ORDER OF THE COMMANDER
MACDILL AIR FORCE BASE (AMC)**

**AIR MOBILITY COMMAND
INSTRUCTION**



21-105

**MACDILL AIR FORCE BASE
Supplement
27 APRIL 2023**

Maintenance

FABRICATION PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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

RELEASABILITY: There are no releasability restrictions on this publication

OPR: 6 MXS/MXMFS

Certified by: 6 MXG/CC
(Col Charity A. Banks)

Supersedes: MAFI21-105_MACDILLAFBSUP, 08
February 2016

Pages: 12

This publication supplements Air Mobility Command Instruction (AMCI) 21-105, *Fabrication Program*. This publication applies to personnel assigned or attached to the 6th and 927th Maintenance Groups. This publication does not apply to the Air National Guard (ANG). It establishes procedures for Local Unit Markings, Aircraft and Support Equipment Paint Score Procedures, and Corrosion Training Requirements on the KC-135 aircraft. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. This publication may not be supplemented or further implemented/extended. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See Department of the Air Force Instruction (DAFI) 90-160, *Publications and Forms Management*, 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.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include a decrease in support equipment full paint cycle by ASM, a new “Spirit of Tampa Bay” logo, new tail flash lightning bolt color, and updated corrosion training links.

3.12.5.1. Support Equipment will be scheduled for corrosion inspection in two-year intervals, tracked in G081. Aerospace Ground Equipment (AGE) technicians will conduct corrosion inspections concurrently with phase inspections. All areas of the unit will be inspected, to include the engine compartment. AGE technicians will score each AGE unit’s condition by using criteria outlined in **T.O. 35-1-3**, Table **3-1.1** SE Scoring/Category Criteria during periodic inspections. AGE and Aircraft Structural Maintenance (ASM) will coordinate and forecast units to be processed through the corrosion section based on unit condition and availability. ASM will make every effort to paint two units per month. This may vary due to size and make-up of the AGE units and the paint and media-blast booth availability. Prior to delivery to the corrosion section, AGE personnel will ensure units are clean. To minimize the impact of corrosion on the equipment, during every phase and periodic inspection AGE personnel will check for corrosion and paint condition. AGE technicians will use the procedures in T.O. 35-1-3 to treat corrosion and to perform paint maintenance. AGE units will be washed by AGE personnel following criteria for wash intervals in T.O. 35-1-3.

3.14.2. All MacDill assigned aircraft maintenance personnel will receive corrosion prevention and identification refresher training annually which is accomplished during “Annual Block Training” hosted by the 6th Maintenance Group (6 MXG). Official copy will be maintained on WEBG081 training, screen 9119. Structural maintenance personnel (2A7X3) are exempt from corrosion familiarization training. Training is a combination of Interactive Multimedia Instruction (IMI) and MacDill specific supplemental training. IMI training will be accomplished by reviewing Corrosion and Prevention (I3ADU00TCB002) located at <https://usaf.dps.mil/teams/21080/Corrosion/Training/Forms/AllItems.aspx>. MacDill specific supplemental training will be accomplished by reviewing MacDill KC-135 Corrosion Training located at the following location: <https://usaf.dps.mil/p:/r/sites/6mxs/Fab/layouts/15/Doc.aspx?sourcedoc=%7B0473BB57-090B-49C5-B05B-D56B9687444E%7D&file=MacDill%20KC-135%20Corrosion%20Training.pptx&action=edit&mobileredirect=true>.

4.1.1.1. All MacDill assigned aircraft will be paint scored within one week of arriving on station (i.e., depot maintenance, transfer, deployment). A one-to-five-point score system will be used to assess the aircraft’s paint condition and to determine the amount of work and time required to restore defective areas. Scoring will be documented on a paint score worksheet using the area diagrams in **Attachment 4**. Each aircraft will receive a follow-up inspection in conjunction with the minor Critical Corrosion Inspection (CCI) or Home Station Check (HSC). These inspections will be documented on a Health of Fleet tracking log and maintained in our official records in the O: drive. Reference copies can be accessed at the following link: <https://usaf.dps.mil/sites/6mxs/Fab/Fab%20Daily%20Ops/Forms/AllItems.aspx>. The results of the paint scores will be used during the weekly scheduling meeting and every effort will be made to schedule hangar time for the highest scoring aircraft. In order to facilitate the painting of aircraft with minimal down time, touch-ups should be accomplished towards the end of the week and allowed to cure over the weekend.

5.5.2.3. **(Added)** Approval letters for MacDill, AFB's aircraft names, nose art, tail flash, and rudder markings can be found in our official records in the O: drive and reference copies may be found at the following location: <https://usaf.dps.mil/sites/6mxs/fab/structural%20maintenance/forms/standard%20view.aspx?viewid=51adc737%2D6fc6%2D45b7%2Db5e6%2D0313e3d0e0d3&id=%2Fsites%2F6mxs%2FFab%2FStructural%20Maintenance%2FCorrosion%20Control%2FWing%20Corrosion%20Manager%20Program%2FAircraft%20markings>.

5.5.9.2. Tail flash will be constructed of matte blue 220 vinyl (P57497), matte white foil (GCS-10) for MACDILL letters, and matte sunflower yellow (GCS-625) or cardinal red (220 -53) for lightning bolt. Tail flash will be centered on empennage and approximately measure 12" tall by 99" long, with "MILITARY BLOCK A.K. REV.C" font. Font height and length is as follows: 12.126" by 108.238" (**Attachment 3**, Figures **A3.2** and **A3.3**).

5.5.9.3. "Spirit of Tampa Bay" is authorized on designated aircraft. This sticker along with the aircraft nose markings will be applied as shown in **Attachment 3, Figure A3.1**. The "Spirit of Tampa" sticker will be 17.955" tall by 20.240" wide. The four-digit aircraft serial number sticker will be 6" tall by 17.764" wide, the "6 ARW" sticker will be 6" tall by 22.740" wide, and the "927 ARW" sticker will be 6" tall by 31.736" wide. All three will use "MILITARY BLOCK A.K. REV.C" font in order to ensure that the proper placement and spacing is met. The PDF file for the "Spirit of Tampa" image can be found at the following link: <https://usaf.dps.mil/sites/6mxs/fab/structural%20maintenance/forms/standard%20view.aspx?viewid=51adc737%2D6fc6%2D45b7%2Db5e6%2D0313e3d0e0d3&id=%2Fsites%2F6mxs%2FFab%2FStructural%20Maintenance%2FCorrosion%20Control%2FWing%20Corrosion%20Manager%20Program%2FAircraft%20markings%2FSpirit%20of%20Tampa>.

5.5.10.5. **(Added)** Aircraft paint identification placard size, shape, and information requirements do not apply at MacDill AFB. Corrosion facility is not equipped to accommodate full paint procedures.

ADAM D. BINGHAM, Colonel, USAF
Commander, 6th Air Refueling Wing

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

AFI 33-322, *Records Management and Information Governance Program*, 28 Jul 2021

AMCI 21-105, *Fabrication Program*, 9 Oct 2020

AFPD 21-1, *Maintenance of Military Material*, 01 Aug 2018

DAFI 90-160, *Publications and Forms Management*, 14 Apr 2022

T.O. 35-1-3, *Corrosion Prevention and Control, Cleaning, Painting, and Marking of USAF Support Equipment*, 26 Jan 2022

Prescribed Forms

None

Adopted Forms

DAF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AF—Air Force

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AGE—Aerospace Ground Equipment

AMCI—Air Mobility Command Instruction

ANG—Air National Guard

ASM—Aircraft Structural Maintenance

CC—Commander

CCI—Critical Corrosion Inspection

DAFI—Department of the Air Force Instruction

ETIC—Expected Time in Commission

HSC—Home Station Check

IAW—In Accordance With

IMI—Interactive Multimedia Instruction

MAJ—Major

MXS—Maintenance Squadron

N/A—Not Applicable

OPR—Office of Primary Responsibility

RDS—Records Disposition Schedule

SE—Support Equipment

T.O.—Technical Order

Attachment 3 (Added)

APPROVED AIRCRAFT NAME AND MACDILL TAIL FLASH

Figure A3.1. Approved Aircraft Name.



Figure A3.2. Approved MacDill Tail Flash Example 1.



Figure A3.3. Approved MacDill Tail Flash Example 2.



Attachment 4 (Added)

AIRCRAFT PAINT SCORING PROCESS

A4.1. The following process was developed to assess the condition of painted surfaces on aircraft and to assign priority for paint touch-up according to need. This process involves scoring of all assigned aircraft by qualified structural maintenance personnel using a simple point system.

Figure A4.1. Paint Score Criteria.

Score	Score Description
(1)	a. Areas missing paint less than two square inches in any given section of the aircraft b. New hardware c. Areas around light lenses
(2)	Areas missing paint between two and four square inches in any given section of the aircraft
(3)	Area missing paint between four and seven square inches in any given section of the aircraft
(4)	a. Areas missing paint between seven and ten square inches in any given section of the aircraft b. Aft engine faring requiring rework
(5)	a. Tail Flash repairs, areas of missing paint greater than 10 square inches b. Areas of two colors beside each other c. Peeling paint under the wing d. Any section of the leading edge

Paint score expected time in commission (ETIC)

Score	ETIC	
0-10	12 hrs	+ paint cure
11-20	24 hrs	+ paint cure
21-30	36 hrs	+ paint cure
31-up	48 hrs	+ paint cure

Figure A4.2. Sample Scoring Sheet.

PAINT SCORE WORK SHEET				
AIRCRAFT 0336T			DATE : 12-Nov-14	
Section	Score			Remarks
	Upper	L/E	Lower	
A		0		
B	3		2	Chips and scratches under cargo door, right overwing hatch scratched chipped
C		3	1	L/E has missing paint/#1 Sailboat has missing paint on trailing edge
D		3		Missing paint/#1 eng inlet-outer skin has chip and scratch at 9' position
E	1	1	1	Chips around landing light/ Rivets have missing paint/ panel on lower skin has screw with scratches
F	ENTER NUMBER SCORE			
G	HERE			ENTER DESCRIPTION HERE
H		5		Left & right horizontals
I	1			Row of fasteners forward of dovetail has missing paint
J		2	1	L/E missing paint # 4 sailboat missing paint
K		4		L/E missing paint #3 sailboat has missing and burnt paint
L		1		minor chips around landing light
M				
Total score	29			
ETIC	36 + paint cure			
Name / Man #	Nichols/12345			
Painted By	Date	Primer	Top Coat	Notes
OC/ALC	8-Feb-12	10P20-13	ECM-F-6173	PAINT PLACARD LOCATED ON LEFT SIDE OF FUSELAGE FORWARD OF TAIL

Figure A4.3. Aircraft Areas.

- A** – Nose area (forward of crew entry hatch)
- B** – Left forward fuselage (crew entry hatch to wing leading edges)
- C** – Area between number one engine and wing tip
- D** – Area between number one and number two engine
- E** – Area between number two engine and fuselage
- F** – Fuselage from wing leading edge to trailing edge
- G** – Left Aft fuselage
- H** – Tail section (Horizontal and Vertical Stabs)
- I** – Right Aft fuselage
- J** – Area between number four engine and wing tip
- K** – Area between number three and number four engine
- L** – Area between fuselage and number three engine
- M** – Right forward fuselage

Attachment 5 (Added)
AIRCRAFT VIEWS

Figure A5.1. Front View.

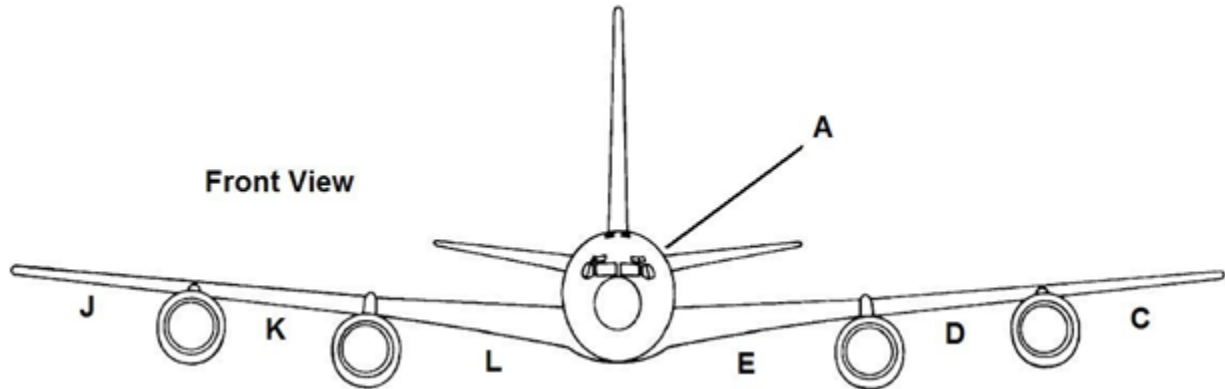


Figure A5.2. Left and Right Sides.

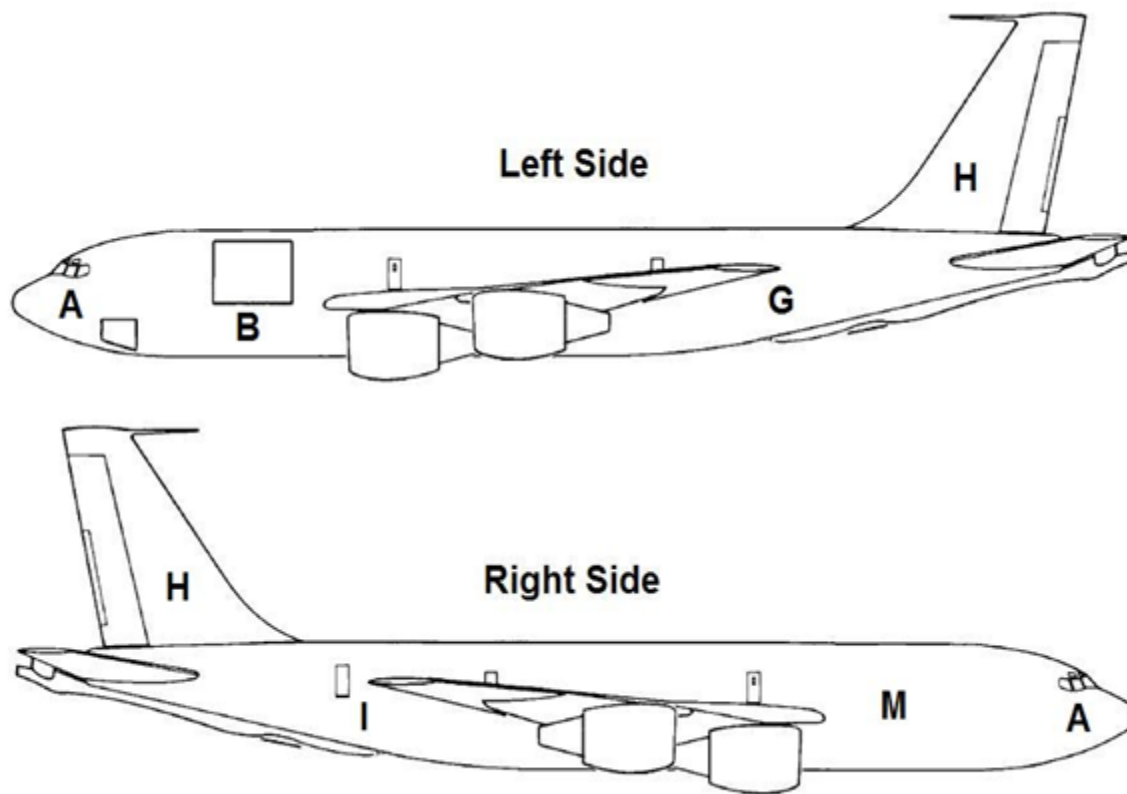


Figure A5.3. Top View.

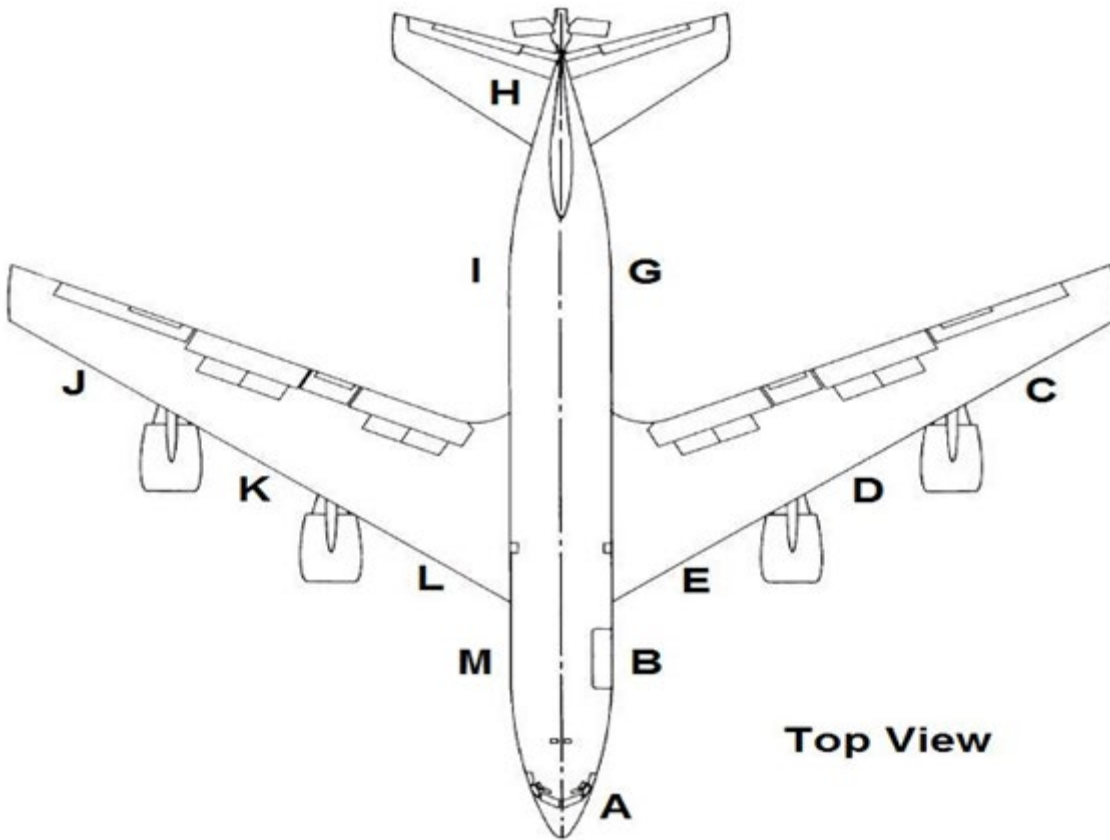


Figure A5.4. Bottom View.

