

**BY ORDER OF THE COMMANDER  
AIR COMBAT COMMAND**

**AIR FORCE INSTRUCTION 21-103**



**AIR COMBAT COMMAND**

**Supplement**

**ADDENDUM\_Q**

**13 AUGUST 2014**

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**Maintenance**

**EQUIPMENT INVENTORY, STATUS AND  
UTILIZATION REPORTING SYSTEM/E-9A  
MINIMUM ESSENTIAL SUBSYSTEM LIST  
(MESL)**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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**This MESL compliments AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*.** It applies to all E-9A ACC units. This addendum does not apply to Air National Guard or Air Force Reserve Command units and members. 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 the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Contact supporting records managers as required. Send recommended changes or comments on AF Form 847, *Recommendation for Change of Publication*, to HQ ACC/A4CA-E4, 219 Dodd Blvd, Langley AFB VA 23665-2791, and send information copies to the applicable Office of Collateral Responsibility (OCR). This publication may not be supplemented or further implemented/extended. The authorities to waive wing/unit level requirements in this publication are identified as T-2. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers.

## *SUMMARY OF CHANGES*

**This document is substantially revised and must be completely reviewed.** This document added and removed items from Table 1. The requirements for an airframe, propeller system, and power plant have been removed, while additions include various communication and navigational devices. Notes concerning each item have also been changed accordingly.

**1. General.** The MESL is the basis of status reporting IAW AFI 21-103. MESLs lay the ground work for reporting the status of aircraft availability. They list the minimum essential systems and subsystems that must work on an aircraft for it to perform specifically assigned unit wartime, training, test or other missions. Mission Ready Available (MRA) is used in readiness Status of Resources and Training Systems reporting only and denotes Mission Capable (MC) aircraft capable of being configured for a contingency mission in accordance with COMACC Omnibus Plan.

1.1. Qualifying notes are used to define aircraft exceptions and help explain complex degraded mission systems such as suspension equipment.

1.2. Aircraft status for generation and deployment: The goal is to generate or deploy Fully Mission Capable (FMC) aircraft, recognizing status actually achieved may be less than FMC. A Not Mission Capable (NMC) aircraft may be deployed provided it is safe for flight and can be configured and generated to MRA status at an employment site.

1.3. All ACC units will generate, or deploy and regenerate, using ACC MESLs. Major Command (MAJCOM) differences in MESLs are acknowledged. Upon actual deployment to another MAJCOM theater, the gaining MAJCOM has the responsibility to resource and specify the unit's requirements and resource the differences in support/mission equipment.

1.4. Reading the MESL. Due to the unique nature of the E-9, no -06 work unit code (WUC) manual was created for this program; there are no WUCs within **Table 1** to reference. This MESL instead is read by comparing the systems listed in the Full Systems List (FSL) and all applicable Basic Systems List (BSLs) across the page. Each unit's Design Operational Capability (DOC) statement determines applicability of BSL columns. The aircraft MESLs incorporate all ACC assigned aircraft and therefore it is important to compare only those columns listed in the MESL which are applicable to the unit's assigned aircraft.

Table 1. E-9A MESL.

NO.	SYSTEM/SUBSYSTEM	FSL	BSL		
			RPT	TRY	OPS
1.	Air Conditioning/Pressurization	X	X1	X1	X1
2.	Flight Deck Ultra High Frequency (UHF)	X	X2	X2	X2
3.	Flight Deck Very High Frequency (VHF)	X	X2	X2	X2
4.	Flight Deck High Frequency (HF)	X			
5.	Radar HF Data Link	X			
6.	UHF Relay Voice Communication Equipment	X	X2	X2	
7.	Crew Communication System	X	X	X	X
8.	Electrical Power System	X	X	X	X
9.	Mission Power System	X	X	X	
10.	Equipment/Furnishings	X	X	X	X
11.	Emergency Equipment	X	X	X	X
12.	Fire Detection System	X	X	X	X
13.	Fire Extinguisher System	X	X	X	X
14.	Flight Controls	X	X	X	X
15.	Stall Warning System	X	X3	X3	X3
16.	Fuel System	X	X	X	X
17.	Hydraulic System	X	X	X	X
18.	Ice and Rain Protection	X	X	X	X
19.	Telemetry Heat System	X			
20.	Telemetry Relay Subsystem	X		X	
21.	Landing Gear and Brake System	X	X	X	X
22.	Lighting, Exterior and Interior	X	X4	X4	X4
23.	Navigation Equipment	X	X4	X4	X4
24.	#1 Attitude Heading Reference Sys (AHRS)	X	X	X	
25.	Flight Instruments	X	X4	X4	X4
26.	Weather Radar	X			
27.	Flight Director System	X	X5	X5	X5
28.	TCAS	X	X	X	X
29.	EGPWS	X	X6	X6	X6
30.	Sea Surveillance System	X	X		
31.	Drone Control and Relay System	X	X	X	
32.	Flight Deck Oxygen System	X	X	X	X
33.	Cabin Oxygen System	X	X	X	
34.	Auto Flight	X			
QUALIFYING NOTES:					
1. Must be operational in either Auto or Manual for FMC.					
2. One of two must be operational for FMC.					
3. One system may be inoperable for Partially Mission Capable (PMC).					
4. As required by AFI 11-202V3, <i>General Flight Rules</i> , and/or the De Havilland Dash 8 Master Minimum Equipment Listing (MMEL).					

5. UNS-1D Flight Management System must be operational with Global Positioning System (GPS) long-range Sensor for FMC

6. EGPWS must be operable for operations over land. EGPWS may be inoperative for missions over Gulf of Mexico with overland operations limited to departure from and arrival to Tyndall AFB only.

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

AFI 11-202 V3, General Flight Rules, 22 October 2010

***Prescribed Forms***

This addendum does not prescribe any forms.

***Adopted Forms***

AF Form 847, *Recommendation for Change of Publication*

***Abbreviations and Acronyms***

**ACC**—Air Combat Command

**AHRS**—Attitude Heading Reference System

**COMACC**—Commander, ACC

**EGPWS**—Enhanced Ground Proximity Warning System

**GPS**—Global Positioning System

**HF**—High Frequency

**HQ**—Headquarters

**IAW**—In Accordance With

**MMEL**—Master Minimum Equipment Listing

**NMC**—Not Mission Capable

**OPS**—OPS Support Mission

**RPT**—Range Patrol

**TCAS**—Traffic Collision Avoidance System

**TRY**—Telemetry

**UHF**—Ultra High Frequency

**VHF**—Very High Frequency

**WUC**—Work Unit Code