

**BY ORDER OF THE COMMANDER
AIR FOR MATERIEL COMMAND**



AIR FORCE INSTRUCTION 21-103

**AIR FORCE MATERIEL COMMAND
Supplement
ADDENDUM_G**

18 OCTOBER 2011

Certified Current On 8 September 2015

Maintenance

**EQUIPMENT INVENTORY, STATUS AND
UTILIZATION REPORTING SYSTEM/UH-1N
MINIMUM ESSENTIAL SUBSYSTEM LIST
(MESL)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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RELEASABILITY: There are no releasability restrictions on this publication.

OPR: HQ AFMC/A4MM

Certified by: HQ AFMC/A4M
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Pages: 3

This instruction implements AFD 21-1, *Air and Space Maintenance*, AFI 21-101, *Aircraft and Equipment Maintenance Management*, and AFI 21-103, *Equipment Inventory, Status and Utilization Reporting*. It establishes policy and assigns responsibility to provide AFMC Test Fleet aircraft status changes/updates in accordance with (IAW) current maintenance conditions and the developed MDS specific mission essential subsystem list (MESL). This instruction applies to all AFMC organizations that manage or perform maintenance on AFMC owned/possessed aircraft regardless of Air Force Specialty Code. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW AFMAN 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. Send comments and suggested improvements to this instruction on AF Form 847, *Recommendation for Change of Publication*, to HQ AFMC/A4MM, 462 Chidlaw Road, Wright-Patterson AFB OH 45433-5006.

These MESLs complement AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*. They apply to maintenance activities supporting AFMC test missions across AFMC.

1. General. The MESL is the basis of status reporting IAW 21-103. MESLs lay the ground work for reporting the status of assigned/possessed AFMC test fleet aircraft and equipment

supporting AFMC test missions. They list the minimum essential systems and subsystems that must work on test fleet aircraft to perform specifically assigned unit test, training or other missions.

1.1. Qualifying notes are used to define system exceptions and help explain complex degraded mission systems.

1.2. It is understood that any aircraft or support equipment system or subsystem may be subjected to test or tested under a test scenario and/or are test dependent as directed by the test mission director. If identified by test mission director, those systems or subsystems if not already identified by qualifying notes must be operational to be considered FMC or PMC for that mission.

2. Reading the MESL. A MESL is read by comparing the systems stated by WUC or UNS column (column 2) against the Full Systems List (FSL) and all applicable Basic Systems List (BSLs) across the page (DTE - Developmental Test and Evaluation, DTS - Developmental Test Support, TNG - Training). Each unit's Design Operational Capability (DOC) statement determines applicability of BSL columns. The aircraft or equipment MESLs incorporate all AFMC assigned/possessed aircraft/equipment and therefore it is important to compare only the columns listed in the MESL which are applicable to the units assigned/possessed aircraft. For example, units with training (TF) coded aircraft would determine report status using only the FSL and TNG columns. Units with multiple coded aircraft will ensure status is reported using the MESL columns appropriate to the individual aircraft/equipment assignment code or type mission being flown.

UH-1N MINIMUM ESSENTIAL SUBSYSTEM LIST (MESL)

NO.	WUC	SYSTEM/SUBSYSTEM	FSL	BSL		
				DTE	DTS	TNG
1.	12A00	Cargo Suspension System	X	X		
2.	12B00	Litter Kit	X	X		
3.	12C00	Troop Seats	X	X		
4.	12E00	Windshield Wiper	X	X	X	X
5.	13210	Ground Handle Wheels	X	X		
6.	22BAE	Fuel Flow Indicator	X	X	X	X
7.	41100	Bleed Air Heat and Ventilation	X	X	X	X
8.	42310	AC Power Supply	X	X1	X1	X1
9.	42510	Electrical Power Indicator	X	X	X	X
10.	44110	Dome Lights	X	X		
11.	44120	Instrument Panel Lights	X	X4	X4	X4
12.	44130	Instruments Secondary Lights	X	X4	X4	X4
13.	44140	Pedestal Lights	X	X4	X4	X4
14.	44150	Overhead Console Lights	X	X4	X4	X4
15.	44160	Utility Lights	X	X		
16.	44210	Navigation Lights	X	X	X	X
17.	44230	Landing Light	X	X3	X3	X3
18.	44250	Search Light	X	X3	X3	X3
19.	44300	Caution Lights	X	X	X	X

20.	44500	Strobe Lights	X	X	X	X
21.	4611E	Fuel Boost Pump	X	X	X	X
22.	4613C	Fuel Quantity Indicator	X	X6	X6	X6
23.	46300	Auxiliary Fuel System	X	X6	X6	X6
24.	49200	Rescue Hoist	X	X		
25.	49300	Forrest Penetrator	X	X		
26.	49500	Stokes Litter	X	X		
27.	51100	Flight Instruments	X	X2	X2	X2
28.	51120	Pitot Static System	X	X	X	X
29.	51210	Gyro Compass	X	X2	X2	X2
30.	51220	Standby Compass	X	X	X	X2
31.	5131A	Free Air Temperature Indicator	X	X	X	X
32.	5131B	Clock	X	X	X	X
33.	62000	VHF Radio	X	X5	X5	X5
34.	63000	UHF Radio	X	X5	X5	X5
35.	64000	Interphone System	X	X	X	X
36.	65000	Identify Friend or Foe (IFF)	X	X	X	X
46.	68000	Global Positioning System	X	X	X	X
37.	71110	UHF/DF	X	X	X	X
38.	71Z00	Tacan	X	X	X	X
39.	71320	VOR/ILS	X	X	X	X
40.	7121Q	Course Indicator	X	X	X	X
41.	71510	Marker Beacon	X	X	X	X
42.	91210	Passenger Alarm	X	X	X	X
43.	9131A	Medical Kit	X	X	X	X
44.	9131B	Cabin Fire Extinguisher	X	X	X	X
45.	9711B	Hoist Guillotine Squib	X	X6	X6	
46.	71000	FM/Maritime Flexcomm II Radio	X	X6	X6	

QUALIFYING NOTES:

1. Only one inverter and generator required.
2. Pilot's instruments required.
3. WUCs 44230 and 44250 one or the other required for night missions.
4. Required for night missions only.
5. Either UHF or VHF required.
6. Test dependent. As determined by test director based on mission objectives.

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