BY ORDER OF THE COMMANDER
AIR FORCE GLOBAL STRIKE COMMAND

AIR FORCE INSTRUCTION 21-103

AIR FORCE GLOBAL STRIKE COMMAND SUPPLEMENT

ADDENDUM F

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Maintenance

EQUIPMENT INVENTORY, STATUS, AND UTILIZATION REPORTING SYSTEM/AIRBORNE LAUNCH CONTROL SYSTEM (ALCS) MINIMUM ESSENTIAL SUBSYSTEM LIST (MESL)

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This MESL complements AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting.* This applies to AFGSC units with Configuration Elements within the ALCS Weapons System. This addendum does not apply to the Air Force Reserve Command (AFRC) or the Air National Guard (ANG). This publication will not be supplemented or further implemented or extended. 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) Record Disposition Schedule (RDS). Send recommended changes or comments on AF Form 847, *Recommendation for Change of Publication*, to AFGSC/A4BX, 841 Fairchild Ave., Barksdale AFB LA 71110, email address, **AFGSC.A4BX.workflow@us.af.mil** and send information copies to the applicable OCR. The authorities to waive wing, and unit level requirements in this publication are identified with a tier number ("T-0, T-1, T-2, T-3")

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, utilizing guidance identified in AFI 33-360.

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 ALCS to perform specifically assigned wartime mission.

1.1. The following conditions affect ICBM launch capability, hardness, or survivability and must be reported on the AFGSC Status Sheet on NMC2. **(T-2)**

1.1.1. For the ALCS, any condition that degrades Command and Control functions and/or launching sorties would render the system NMC. **(T-2)**

1.2. Reporting. Do not report attaching hardware discrepancies (e.g., screws, washers, stripped threads) or damaged Radio Frequency Interference (RFI) shields as weapon system PMC conditions unless the hardware discrepancy results in inoperative essential subsystem per TOs. Request engineering guidance if hardware condition or multiple hardware/RFI discrepancies are to the extent that weapon system hardness/survivability could be rendered ineffective. **(T-2)**

1.3. Do not report Strategic Automated Command and Control System (SACCS) Outages in IMDS. **(T-2)**

2. Reading a MESL. A MESL is read by comparing the systems stated by Work Unit Code (WUC) against the Full System List (FSL). The systems in the MESLs incorporate all AFGSC assigned ALCS Systems. See **Table 1. (T-2)**

Table 1. ALCS MESL.

NO.	WUC	SYSTEM/SUBSYSTEM	FSL
1	QGET0	ALCS Processor (1666B)	X
2	QGEU0	ALCS I/O Memory Expansion Unit	X
3	QK1B0	Ultra-High Frequency (UHF) Receiver R-1358A/GSW-10 (-66)	X
4	QGEQ0	Visual Display Unit (VDU)	X1
5	QK1B0	UHF Receiver R-1358A/GSW-10 (-55)	X2
6	QGEJ0	Printer -102	X3
7	QGED0	Waveform Converter (WFC)	X
8	QGEL0	Multifunction Selector (MFS)	X4
9	QGEF0	Demodulator Decoder (D/D)	X5
10	QGEH5	Portable Storage Unit (PSU)	X
11	QGEU8	Code Processing Equipment (KI-45)	X
12	QGEU0	Volatile Keying Assembly (VKA or KIK-45)	X
13	QG000	Code Generator (KSK-45)	X
14	QG000	ALCS Permit Switch (ALCC Switch)	X
15	QGEG0	Tempest Isolation Filter (TIF)	X
16	QGEN7	Display Set Controller (DSC)	X6
17	QK200	Antenna	X
Note:			

1. Minimum of 1 VDU required to be PMC
2. Inoperative UHF Receiver Drawer does not cause Launch Facility (LF) to be considered NMC
3. Minimum of 1 Printer -102 required to be PMC
4. Minimum of 1 Multifunction Selector (MFS) required to be PMC
5. PMC if Demodulator Decoder (D/D) inop
6. Minimum of 1 Display Set Controller (DSC) required to be PMC

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting,* 16 December 2016

AFI 21-202V1_AFGSCSUP, *Missile Maintenance Management,* 22 August 2017

AFI 33-360, *Publications and Forms Management,* 15 February 2008

AFMAN 33-363, *Management of Records,* 01 March 2008

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AFRC—Air Force Reserve Command

ANG—Air National Guard

AFRIMS—Air Force Records Information Management System

ALCS—Airborne Launch Control System

CRPS—Code Retaining Power Supply

D/D—Demodulator Decoder

DSC—Display Set Controller

FMC—Full Mission Capable

IAW—In Accordance With

ICBM—Intercontinental Ballistic Missile

IMDS—Integrated Maintenance Data System

LF—Launch Facility

MESL—Mission Essential Subsystem List

MFS—Multifunction Selector

MOA—Memorandum of Agreement

MSD/L—Mass Storage Device/Loader

NMC—Non-Mission Capable

NMC2—Air Force Nuclear Munitions Command and Control

PMC—Partially Mission Capable

PS—Power Supply

PSU—Portable Storage Unit

RDS—Records Disposition Schedule

RFI—Radio Frequency Interference

SACCS—Strategic Automated Command and Control System

TIF—Tempest Isolation Filter

TO—Technical Order

UHF—Ultra High Frequency

VDU—Visual Display Unit

VKA—Volatile Keying Assembly

WFC—Waveform Converter