



**DEPARTMENT OF THE AIR FORCE**  
**HEADQUARTERS AIR FORCE GLOBAL STRIKE COMMAND**

AFI21-103\_AFGSCSUP\_ADD\_D\_GM2016-01

18 October 2016

MEMORANDUM FOR AFGSC Wings, MXGs  
and Squadrons

FROM: HQ AFGSC A4  
841 Fairchild Ave  
Barksdale, LA 71111

SUBJECT: Air Force Global Strike Command Guidance Memorandum to AFI21-103\_AFGSCSUP\_ADD\_D, Equipment Inventory, Status, and Utilization Reporting System/B-1B Minimum Essential Subsystem List

1. By Order of the Commander, Air Force Global Strike Command, this AFGSC Guidance Memorandum immediately establishes AFI21-103\_AFGSCSUP\_ADD\_D, *Equipment Inventory, Status, and Utilization Reporting System/B-1B Minimum Essential Subsystem List*. This Guidance Memorandum changes previously published guidance implemented under AFI 21-103 ACCSUP\_Addendum\_B dated 27 May 2015. Compliance with this Memorandum is mandatory. To the extent its directions are inconsistent with AFGSC publications, the information herein prevails, IAW AFI 33-360, *Publications and Forms Management*.
2. In advance of a rewrite of AFI21-103\_AFGSCSUP, the attachment to this memorandum provides guidance changes that are effective immediately.
3. This memorandum becomes void after one-year has elapsed from the date of this memorandum, or upon publication of an Interim Change or rewrite of the affected publication, whichever is earlier.

LAWRENCE S. KINGSLEY, SES, DAF  
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and Force Protection

Attachment:  
AFI 21-103 AFGSCSUP Addendum D

## AFI 21-103 AFGSCSUP Addendum D

### PURPOSE

**This MESL compliments AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*.** This publication applies to AFGSC units and Air Force Reserve Command (AFRC) Classic Associate unit members operating or maintaining USAF B-1B bomber aircraft. AFGSC and AFRC Classic Associate units are prohibited from supplementing AFI 21-103 or any AFGSC supplements to this AFI. 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 AFI 33-360, Publications and Forms Management, for a description of the authorities associated with the Tier numbers. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/>. Contact supporting records managers as required. Send recommended changes or comments on AF Form 847, *Recommendation for Change of Publication*, to Headquarters (HQ) AFGSC/A4BX at **AFGSC.A4BX.workflow@us.af.mil**.

### SUMMARY OF CHANGES

**This publication has been revised and must be completely reviewed.** This document requires review/rewrite to align under AFGSC Policy

**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 Status of Resources and Training reporting only and denotes Mission Capable (MC) aircraft capable of being configured for a contingency mission in accordance with AFGSC/USSTRATCOM Plan.

1.1. Qualifying notes are used to define aircraft exceptions and help explain complex degraded mission systems such as suspension equipment. **(T-2)**

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 aircraft may be deployed provided it is safe for flight and can be configured and generated to MRA status at an employment site. **(T-2)**

1.3. All AFGSC units will generate, or deploy and regenerate, using AFGSC MESLs. Major Command 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. **(T-2)**

**1.4. Reading the MESL.** A MESL is read by comparing the systems stated by Work Unit Code (WUC) against the Full System List (FSL) and all applicable Basic System Lists (BSLs) across the page. Each unit's Design Operational Capability (DOC) statement determines applicability of BSL columns. The aircraft MESLs incorporate all AFGSC assigned aircraft; therefore, it is important to compare only those columns listed in the MESL which are applicable to the unit's assigned aircraft. For example, units with CC (wartime) coded aircraft

would determine and report status using only the FSL and BSL columns related to their DOC statement. Units with TF (training) coded aircraft would determine and report status using only the FSL and Training (TNG) columns, and units with CB (test) coded aircraft would determine and report status using only the FSL and Test (TST) columns. Units with multiple coded aircraft will ensure status is reported using the MESL columns appropriate to the individual aircraft assignment code.

**Table 1. B-1B MESL. (T-2).**

No.	WUC	SYSTEM/SUBSYSTEM	FSL	BSL		
				ASC	TNG*	TST**
1.	11	Airframe	X	X	X	X
2.	12F	Survival Equipment	X	X	X	X
3.	13	Landing Gear	X	X	X	X
4.	14	Flight Controls	X	X	X	X
5.	16	Ejection System	X	X	X	X
6.	19	Engine Starting 1, 2, 3, 4	X	X	X	X
7.	23	Power Plant	X	X	X	X
8.	24	APU	X	X1	X1	X1
9.	27	Accessory Drive Gearboxes	X	X	X	X
10.	39C	Pitot and Static	X	X	X	X
11.	39D	Window and Windshield Anti-Ice Defog	X2	X2	X2	X2
12.	39F	Alternate Anti-Ice/Defog	X	X	X	X
13.	41	Air Conditioning and Pressurization	X	X	X	X
14.	42	Electric Power Supply	X	X	X	X
15.	42CD	Stability Enhancement Function	X17	X17	X17	X17
16.	43	EMUX	X	X	X	X
17.	44AB	Panel and Instrument Lighting	X4	X4	X4	X4
18.	44AC	Annunciator Lighting	X	X	X	X
19.	44BC	Aft Station Annunciator Lighting	X	X4	X4	X4
20.	44CC	NVIS	X	X5	X5	X5
21.	44DA	Landing Lights	X	X3	X3	X3
22.	44DC	Anti-Collision Lights	X	X	X	X
23.	44DD	Position Lights	X10	X10	X10	X10
24.	44DE	Aerial Refuel/Wing Inspection Lights	X	X5	X5	X5

25.	44EA	Emergency Lighting	X	X	X	X
26.	45	Hydraulic	X	X	X	X
27.	46	Fuel System	X	X	X16	X16
28.	47	Oxygen System	X	X	X	X
29.	48CA	IDARS	X	X	X	X
30.	48CD	DDR	X	X5	X5	X5
31.	48E	Central Warning System	X	X	X	X
32.	49	Fire Protection	X	X7	X7	X7
33.	51	Electronic Multipurpose Components	X	X	X	X
34.	52A	AFCS	X	X	X	X
35.	52BA	Structural Mode Control System	X	X5	X5	X5
36.	52BB	Stall Inhibitor System	X17	X17	X17	X17
37.	55	CITS	X	X	X	X
38.	59AA	HF	X	X8	X8	X8
39.	59B	VHF and UHF Communications	X	X8, 9	X8, 9	X8, 9
40.	59BC	DCI (unless IBS modified)	X	X5	X5	X5
41.	59EA	Interphone	X	X	X	X
42.	73A	Navigation, Flight Environment	X	X	X	X
43.	73B	Navigation, Attitude and Direction	X	X	X	X
44.	73C	Navigation, Landing and Taxi Aids	X	X	X	X
45.	73DA	Nav, Independent and Position Determining	X	X	X	X
46.	73DB	Navigation, Doppler Radar	X	X	X	X
47.	73DC	Navigation, Offensive Radar (ORS)	X	X11	X5, 11	X5, 11
48.	73E	Nav, Dependent Position Determining	X	X12	X12	X12
49.	73ED	DCI, Terminal Data Link	X	X5	X5	X5
50.	73FE	Avionics Control Unit Complex	X	X13	X13	X13
51.	73FH	Navigation, Multi-Function Displays	X	X	X	X

52.	74	Pod, Sniper (if installed)	X5	X5	X5	X5
53.	75JA	Weapons Bays	X6	X6	X6	X6
54.	76AAJ	Electronic Warfare, ECM (Band 5 Aft)	X	X5	X5	X5
55.	76AB	Electronic Warfare, ECM (Band 6)	X	X5	X5	X5
56.	76ABD	Electronic Warfare, ECM (Band 6 RFS)	X	X5	X5	X5
57.	76AC	Electronic Warfare, ECM (Band 7)	X	X5	X5	X5
58.	76ACE	Electronic Warfare, ECM (Band 7)	X	X5	X5	X5
59.	76ADE	Electronic Warfare, ECM (Band 8 RFS)	X	X5	X5	X5
60.	76AE	Towed Decoy Subsystem	X	X5	X5, 14	X5
61.	76AJ	Electronic Warfare, ECM (Common Active Equipment)	X	X5	X5	X5
62.	76C	Electronic Warfare, Passive	X	X5	X5	X5
63.	76D	Electronic Warfare, Detection	X	X5	X5	X5
64.	76G	Electronic Warfare, Defensive Mgt	X	X5	X5	X5
65.	76H	Electronic Warfare, Warning (TWF)	X	X5	X5	X5
66.	82	IBS Integrated Avionics Architecture FIDL / MIDS R/T (if modified)	X	X	X	X
67.	97	Explosive Devices and Components (Egress)	X	X	X	X
* TF Coded Aircraft						
** CB Coded Aircraft						
<b>QUALIFYING NOTES:</b>						
1. Minimum One APU required for PMC						

2. Must have Left and Right Side Window Defog
3. Must have one operational Landing Light IAW AFI 11-202V3_AFGSCSUP_1 paragraph 5.20.5
4. AFI 11-2B-1V3 and Local Sup Requirements for Flight (Annunciator Panels at all Stations, Aft Flood or Spot for Night or IMC TF Ops)
5. PMC unless required for a specific mission.
6. Three operational weapons bays for FMC, two operational weapons bays for PMC. Operational bays must have RLDS, spoiler, and doors operational in primary OR alternate, one operational door sensor per position per door and pass CBMTS check
7. Fire Detection Loop A or B required in each Engine, Over Wing Fairing, APU and ADS Bay for PMC
8. For PMC, SATCOM, either AN/ASC-19 or ARC-210 Voice SATCOM, required for Long Range Communications when HF is inoperative (HF required for overseas ops)
9. ARC-210 Radio (UHF, VHF, and Voice SATCOM functionality) with KY-100 and the ARC-164 Radio with KY-58 required for FMC. In all cases if only one radio with Secure Voice Capability is available, then the HF must be operational for PMC. At least one radio must have Secure Voice (Either KY-100 or KY-58) capability for PMC.
10. Position lights must be operational between sunset and sunrise IAW AFI 11-202V3, paragraph 5.20.3, to include glove lights when exposed due to mission requirements.
11. One Channel operational required for PMC
12. Must have GPS, IFF and Air-to-Air TACAN
13. One of two CACUs, one of two TFACUs, and one of two RDTs operational required
14. Only the CDU must be operational with training mode functional for FMC
15. Only one OSO MFD required for PMC
16. Wing scavenge pump operation not required for FMC
17. SIS or SEF required for PMC

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## **Attachment 1**

### **GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

#### ***References***

AFI 11-2B-1V2, *B-1 Aircrew Evaluation Criteria*, 13 June 2008

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, 13 September 2010

AFI 11-202V3\_ACCSUP\_1, *General Flight Rules*, 28 November 2012

AFI 11-2B-1V3, *B-1 Operations Procedures*, 7 January 2011

AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*, 26 January 2012

TCTO 1B-1B-1364, *Installation of Digital Communications Improvement (DCI) Kit, PN L0501015, B-1 Aircraft*

TCTO 1B-1B-1378, *Installation of Laptop Controlled Targeting Pod (LCTP) Kit, PN L0501020-010, B-1 Aircraft*

#### ***Abbreviations and Acronyms***

**AFCS** - Automatic Flight Control System

**APU** - Auxiliary Power Unit

**ASC** - Air to Surface Conventional

**BSL** - Basic Systems Lists

**CITS** - Central Integrated Test System

**CDU** - Countermeasures Dispensing Unit

**CBMTS** - Conventional Bomb Module Test Set

**DCI** - Digital Communications Improvement

**DOC** - Design Operational Capability

**ECM** - Electronic Countermeasures

**EMUX** - Electrical Multiplexing

**FMC** - Fully Mission Capable

**FSL** - Full System List

**HF** - High Frequency

**HQ** - Headquarters

**IDARS** - Integrated Data Acquisition and Recording System

**IBS** - Integrated Battle Stations

**IAW** - In Accordance With

**LCTP** - Laptop Controlled Targeting Pod

**MAJCOM** - Major Command

**MC** - Mission Capable

**MESL** - Mission Essential Subsystem List

**MRA** - Mission Ready Available

**NVIS** - Night Vision Instrument System

**OCR** - Office of Coordinating Responsibility

**RLDS** – Rotary Launcher Drive Subsystem

**SEF** – Stability Enhancement Function

**SIS** – Stall Inhibitor System

**TNG** - Training

**TST** - Test

**WUC** - Work Unit Code