

MIL-M-8650C
AMENDMENT 2
7 April 1978
Superseding
MIL-M-8650C
AMENDMENT 1
25 August 1977

MILITARY SPECIFICATION

MOCKUPS, AIRCRAFT, GENERAL
SPECIFICATIONS FOR

This amendment forms a part of Military Specification MIL-M-8650C dated 8 July 1976, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

- * 2.1.1. Delete "For Navy procurement the Specification Sheets listed on Supplement 1 shall also be applicable." Add "For Navy Procurement the appendices 1 thru 9 of Supplement 2 shall also be applicable."

Delete "Supplement 1 dated 8 July 1976". Add "Replace with the attached Supplement 2 dated 25 August 1977".

Add the following to the bottom of the page:

"Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Engineering Specifications and Standards Department (Code 93), Naval Air Engineering Center, Lakehurst, NJ 08733, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter."

- * "The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment."

Custodians:
Army - AV
Navy - AS
Air Force - 11

Preparing Activity:
Navy - AS
Project No. 6910-0380

Review Activities;
Army - AV
Navy - AS
Air Force - 11

FSC 6910

Appendix 1 to MIL-M-8650B(AS)

13 May 1969

Superseding Appendix 3 of
1 April 1960DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360APPENDIX 1AIRFRAME SYSTEM - AIRCRAFT MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ AIRCRAFT

CONTRACT NO. _____/FY _____

This AIRFRAME SYSTEM checkoff list consists of the following sections (cross out those sections listed below that are not applicable and omit from list):

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| A. WING GROUP
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| B. TAIL GROUP
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PSC 6910

Prepared by: _____

Date: _____

NOTE: The abbreviation "N.A." used herein denotes "Not applicable".

A. WING GROUP

1. WING FOLDING/SWEEPING

- (a) WHAT DIRECTION DO THE OUTER PANELS FOLD? _____
- (1) HOW ARE THEY HELD IN THE FOLDED POSITION? _____
- (2) CAN AIRCRAFT BE HOISTED WITH WINGS FOLDED AND JURY STRUTS IN PLACE? _____
- (3) CAN AIRCRAFT BE HOISTED WITH WINGS SWEEPED? _____
- (b) HOW MANY HINGES ARE ON EACH PANEL? _____
- (c) HOW ARE PANELS ACTUATED? _____
- (1) WHERE ARE ACTUATING UNITS LOCATED? _____
- (d) HOW MANY MOVABLE HINGE PINS ON EACH PANEL? _____
- (1) HOW ARE THEY ACTUATED? _____
- (2) HOW ARE THEY LOCKED IN POSITION? _____
- (e) HOW IS CORRECT SEQUENCE BETWEEN MOVABLE HINGE PINS AND OUTER PANELS OBTAINED? _____
- _____
- (f) WHAT IS ARRANGEMENT OF WARNING FLAGS? _____
- (g) DOES POSITION OF OUTER PANEL POSITIVELY INDICATE THAT IT IS NOT IN THE FULLY SPREAD CONDITION? _____
- (h) WHAT ITEMS MAY BE LOCATED ON THE OUTER PANEL DURING FOLDING AND SPREADING OPERATIONS? _____
- DURING SWEEPING OPERATIONS? _____
- (i) DOES THE PANEL AND ALL ATTACHED ITEMS HAVE ADEQUATE GROUND CLEARANCE DURING FOLDING AND SPREADING? _____
- DURING SWEEPING? _____
- (j) CAN FLAPS, AILERONS, SPEED BRAKES, ETC., BE IN ANY POSITION DURING FOLDING AND SPREADING? _____
- DURING SWEEPING? _____
- (k) HOW ARE DOORS AT HINGE LINE OPERATED? _____
- (1) HOW ARE THEY LATCHED IN POSITION? _____
2. WHAT TYPE LATERAL CONTROL SURFACES ARE PROVIDED? _____
- (a) HOW IS LATERAL TRIM OBTAINED? _____

Appendix 1 to MIL-M-8650B(AS)

A. WING GROUP (Cont)

3. WHAT TYPE HIGH LIFT DEVICE IS PROVIDED? _____
4. WHAT TYPE HIGH DRAG DEVICE IS PROVIDED? _____
5. WHAT IS MAXIMUM WING SWEEP ANGLE? _____
INTERMEDIATE POSITION ANGLE? _____
FOR SPOTTING ON CARRIER? _____
6. HOW ARE WINGS ACTUATED? _____
7. WHAT DIRECTION DOES COCKPIT CONTROL MOVE FOR SWEEPING WINGS? _____
8. IS A ELECTRONIC PROGRAMMER USED TO SWEEP WINGS? _____
9. ARE WING GLOVES FIXED OR MOVABLE? _____
10. REMARKS. -

Checked by: _____

Date: _____

A. WING GROUP

1. WING FOLDING

- (a) WHAT DIRECTION DO THE OUTER PANELS FOLD? _____
 (1) HOW ARE THEY HELD IN THE FOLDED POSITION? _____
 (2) CAN AIRCRAFT BE HOISTED WITH WINGS FOLDED AND JURY STRUTS IN PLACE? _____
- (b) HOW MANY HINGES ARE ON EACH PANEL? _____
- (c) HOW ARE PANELS ACTUATED? _____
 (1) WHERE ARE ACTUATING UNITS LOCATED? _____
- (d) HOW MANY MOVABLE HINGE PINS ON EACH PANEL? _____
 (1) HOW ARE THEY ACTUATED? _____
 (2) HOW ARE THEY LOCKED IN POSITION? _____
- (e) HOW IS CORRECT SEQUENCE BETWEEN MOVABLE HINGE PINS AND OUTER PANELS OBTAINED? _____

- (f) WHAT IS ARRANGEMENT OF WARNING FLAGS? _____
- (g) DOES POSITION OF OUTER PANEL POSITIVELY INDICATE THAT IT IS NOT IN THE FULLY SPREAD CONDITION? _____
- (h) WHAT ITEMS MAY BE LOCATED ON THE OUTER PANELS DURING FOLDING AND SPREADING OPERATIONS? _____
- (i) DOES THE PANEL AND ALL ATTACHED ITEMS HAVE ADEQUATE GROUND CLEARANCE DURING FOLDING AND SPREADING? _____
- (j) CAN FLAPS, AILERONS, SPEED BRAKES, ETC., BE IN ANY POSITION DURING FOLDING AND SPREADING? _____
- (k) HOW ARE DOORS AT HINGE LINE OPERATED? _____
 (1) HOW ARE THEY LATCHED IN POSITION? _____
2. WHAT TYPE LATERAL CONTROL SURFACES ARE PROVIDED? _____
- (a) HOW IS LATERAL TRIM OBTAINED? _____
3. WHAT TYPE HIGH LIFT DEVICE IS PROVIDED? _____
4. WHAT TYPE HIGH DRAG DEVICE IS PROVIDED? _____
5. REMARKS. -

Checked by: _____

Date: _____

B. TAIL GROUP

1. WHAT TYPE OF EMPENNAGE IS PROVIDED? _____

2. LONGITUDINAL CONTROL SURFACES

(a) WHAT TYPE IS PROVIDED? _____

(b) WHAT MEANS ARE PROVIDED FOR LONGITUDINAL TRIM? _____

3. DIRECTIONAL CONTROL SURFACES

(a) WHAT MEANS ARE PROVIDED FOR DIRECTIONAL TRIM? _____

4. REMARKS. -

Checked by: _____

Date: _____

C. FUSELAGE OR HULL

1. COCKPIT ENCLOSURE

- (a) WHAT TYPE COCKPIT ENCLOSURE IS PROVIDED? _____
- (b) WHAT IS TRACK ARRANGEMENT? _____
- (c) WHAT ARE MEANS FOR NORMAL OPERATION? _____
- (d) WHAT ARE MEANS FOR EMERGENCY OPERATION? _____
- (e) HOW IS SLIDING SECTION LATCHED IN OPEN POSITION? _____
- _____
- (f) WHAT TYPE RAIN REMOVAL SYSTEM IS PROVIDED? _____
- (g) IS WINDSHIELD WASHER OR DEGREASER PROVIDED? _____

2. CABIN ENCLOSURE

- (a) WHAT TYPE CABIN ENCLOSURE IS PROVIDED? _____
- (b) CAN SIDE PANELS BE OPENED? _____
- (c) WHAT TYPE RAIN REMOVAL SYSTEM IS PROVIDED? _____
- (d) IS WINDSHIELD WASHER OR DEGREASER PROVIDED? _____

3. FLOORING

- (a) WHAT TYPE FLOORING IS PROVIDED? _____
- (b) HOW IS FLOORING REMOVED FOR ACCESS TO STRUCTURE, ETC.? _____
- _____

4. DOORS

- (a) WHAT TYPE DOORS ARE PROVIDED BETWEEN COMPARTMENTS? _____
- _____
- (b) ARE DOORS SATISFACTORY AS TO SIZE? _____ OPERATION? _____ SECURING? _____

5. ARE WINDOWS AND PORTS PROPERLY LOCATED? _____

- (a) ARE THEY OF ADEQUATE SIZE FOR VISION AND LIGHT? _____

6. ARE HIGH DRAG DEVICES PROVIDED ON THE FUSELAGE? _____

7. REMARKS. -

Checked by: _____

Date: _____

D. LANDING GEAR (LAND TYPE)

1. WHAT TYPE OF GEAR IS PROVIDED? _____
2. DOES GEOMETRY OF GEAR APPEAR SATISFACTORY? _____
3. MAIN GEAR
 - (a) HOW DOES MAIN GEAR RETRACT? _____
 - (b) HOW IS MAIN GEAR OPERATED? _____
 - (c) HOW ARE WHEEL WELL DOORS ACTUATED? _____
 - (d) DO SHOCK STRUT FAIRINGS HAVE ADEQUATE GROUND CLEARANCE? _____
 - (e) WHAT ARE MEANS OF EMERGENCY EXTENSION? _____
 - (f) WHAT TYPE EMERGENCY BRAKES ARE PROVIDED? _____
 - (g) HOW ARE EMERGENCY BRAKES ACTUATED? _____
 - (h) HOW MANY WHEELS AUXILIARY GEAR? _____ MAINGEAR? _____
4. AUXILIARY GEAR
 - (a) WHAT TYPE SHIMMY DAMPER IS PROVIDED? _____
 - (b) WHAT TYPE STEERING DEVICE IS PROVIDED? _____
 - (c) WHAT IS NOSE WHEEL CASTOR ANGLE? _____
 - (d) CAN NOSE WHEEL PIVOT 360°? _____
 - (e) HOW DOES AUXILIARY GEAR RETRACT? _____
 - (f) HOW IS AUXILIARY GEAR OPERATED? _____
 - (g) HOW ARE WHEEL WELL DOORS ACTUATED? _____
 - (h) WHAT ARE MEANS OF EMERGENCY EXTENSION? _____
5. CAN EACH WHEEL BE READILY REPLACED? _____
6. REMARKS. -

Checked by: _____

Date: _____

E. FLIGHT CONTROL SYSTEMS

1. PRIMARY FLIGHT CONTROL SYSTEMS

(a) LIST THE FOLLOWING INFORMATION FOR PRIMARY FLIGHT CONTROL SYSTEMS:

	<u>LATERAL</u>	<u>DIRECTIONAL</u>	<u>LONGITUDINAL</u>
TYPE	_____	_____	_____
ARRANGEMENT AT WINGFOLD	_____	_____	_____

(b) LIST THE FOLLOWING INFORMATION FOR BOOST SYSTEMS:

	<u>LATERAL</u>	<u>DIRECTIONAL</u>	<u>LONGITUDINAL</u>
TYPE	_____	_____	_____
BOOST RATIO	_____	_____	_____

2. TRIM CONTROL SYSTEMS

(a) LIST THE FOLLOWING INFORMATION FOR TRIM CONTROL SYSTEMS:

	<u>LATERAL</u>	<u>DIRECTIONAL</u>	<u>LONGITUDINAL</u>
TYPE	_____	_____	_____

3. HIGH LIFT AND HIGH DRAG DEVICE CONTROL SYSTEMS

(a) LIST THE FOLLOWING INFORMATION FOR HIGH LIFT AND HIGH DRAG DEVICE CONTROL SYSTEMS:

	<u>HIGH LIFT DEVICE SYSTEM</u>	<u>HIGH DRAG DEVICE SYSTEM</u>
TYPE	_____	_____
BLOW BACK FEATURE	_____	_____
SYNCHRONIZATION	_____	_____

b. CABLE CONTROLS

- (a) ARE CABLE RUNS STRAIGHT? _____
- (b) ARE RIGGING TENSIONS AFFECTED BY DEFLECTION IN AIRPLANE STRUCTURE? _____
- (c) WHAT PROVISIONS ARE INCORPORATED TO COMPENSATE FOR EFFECTS OF TEMPERATURE VARIATIONS? _____

E. FLIGHT CONTROL SYSTEMS (Cont)

5. PUSH-PULL TUBE CONTROLS

- (a) HOW ARE TUBES SUPPORTED? _____
- (b) WILL AIRCRAFT ACCELERATIONS ACTING ON CONTROL SYSTEM COMPONENTS RESULT IN FORCES AT THE COCKPIT CONTROLS? _____
- (c) WILL STATIC CONTROL FORCES INCREASE WITH CONTROL DEFLECTION DUE TO THE LIFTING OF CONTROL SYSTEM COMPONENTS? _____

6. TORQUE-TUBE CONTROLS

- (a) ARE TORQUE TUBES SUPPORTED ON SELF-ALIGNING BEARINGS? _____
- (b) ARE SLIP JOINTS INCORPORATED IN THE SYSTEM? _____

7. CONTROL SURFACE LOCKS

- (a) WHAT TYPE LOCKS ARE PROVIDED? _____
- (b) WHERE ARE THEY LOCATED? _____
- (c) HOW ARE THEY OPERATED? _____
- (d) WHAT SAFETY FEATURES ARE PROVIDED? _____

8. ARE ALL PARTS OF THE CONTROL SYSTEM ACCESSIBLE? _____

9. ARE ALL PARTS OF THE CONTROL SYSTEM PROTECTED AGAINST DAMAGE BY PERSONNEL? _____

10. REMARKS. -

Checked by: _____

Date: _____

F. FUEL TANK SYSTEM

1. FIXED FUEL TANKS

- (a) WHAT PROVISION IS MADE FOR ACCESS TO EACH TANK? _____

- (b) CAN EACH SELF-SEALING OR FLEXIBLE TANK BE INSTALLED WITH EXCESSIVE DEFORMATION? _____

- (c) DOES TANK SUPPORT CAVITY HAVE ADEQUATE DRAINAGE PROVISIONS? _____
- (d) CAN EACH TANK BE INSTALLED WITHOUT INTERFERING WITH OTHER TANKS? _____
- (e) IS THERE AN INSPECTION DOOR ON TOP OF EACH SELF-SEALING OR FLEXIBLE TANK? _____
- (1) CAN ENTIRE INTERIOR OF TANKS BE READILY INSPECTED THRU TANK INSPECTION DOORS WHEN TANKS ARE INSTALLED IN THE AIRCRAFT? _____
- (f) ARE AS MANY TANK FITTINGS AS PRACTICABLE MOUNTED ON INSPECTION DOORS OF SELF-SEALING OR FLEXIBLE TANKS? _____
- (g) WHAT ACCESS IS PROVIDED TO INSPECT TANK FITTINGS? _____

2. EXTERNAL AUXILIARY FUEL TANKS

- (a) LIST THE FOLLOWING INFORMATION FOR EXTERNAL AUXILIARY FUEL TANKS:

LOCATION	CAPACITY	TYPE	ALTERNATE TYPE

- (b) HOW ARE TANKS SUPPORTED? _____
- (c) WHAT TYPE OF SWAY BRACING IS USED? _____
- (d) WHAT OTHER ITEMS (PAIRINGS, ETC.) DO TANKS REQUIRE? _____
- (e) WHAT IS CLEARANCE OF TANKS, WITH FINS ATTACHED, WITH THE GROUND? _____

F. FUEL TANK SYSTEM (Cont)

3. MISCELLANEOUS

- (a) ARE FUEL LINES PROTECTED AND SUPPORTED PROPERLY TO PREVENT DAMAGE BY PERSONNEL DURING FLIGHT AND SERVICING OPERATIONS? _____
- (b) CAN ALL FITTINGS AND CONNECTIONS IN FUEL LINES BE READILY INSPECTED FOR LEAKAGE? _____
- (c) IS CLEARANCE BETWEEN FUEL LINES AND HOT DUCTS AT LEAST FOUR INCHES? _____
- (d) WHAT MEANS FOR DUMPING FUEL ARE PROVIDED? _____
- (1) WILL FUEL BE DISCHARGED ON ANY PART OF THE AIRCRAFT? _____
- (2) WHAT EFFECT DOES FUEL DUMPING HAVE ON THE C.G. OF THE AIRCRAFT? _____

4. AIR REFUELING SYSTEM

- (a) INSTALLATION? CAN THE TANKER PACKAGE BE INSTALLED READILY? _____
- (b) SERVICING: IS IT POSSIBLE TO PERFORM PREFLIGHT SERVICING, ADJUSTMENTS AND CHECKS WITHOUT REMOVING THE TANKER PACKAGE FROM THE AIRCRAFT? _____ IS ACCESS AVAILABLE TO ALL SERVICING POINTS? _____ CAN THE HOSE AND DROGUE BE EXTENDED? _____
- (c) INTERFERENCE: FOR TANKER EXTERNAL STORES IS GROUND CLEARANCE ADEQUATE UNDER VARIOUS LANDING GEAR STRUT AND TIRE CONDITIONS? _____ DOES INSTALLED STORE INTERFERE WITH MOVEMENT OF LANDING GEAR, FLAPS, SERVICING DOORS OR OTHER PARTS OF THE AIRCRAFT? _____
- (d) DUMPING: DOES IT APPEAR THAT FUEL DUMPED FROM THE TANKER PACKAGE WILL CLEAR THE AIRCRAFT WITHOUT IMPINGEMENT? _____

5. REMARKS. -

Checked by: _____

Date: _____

G. OIL TANK SYSTEM

1. IS OIL SYSTEM INTEGRAL WITH ENGINE? _____
2. OIL TANKS
 - (a) WHAT PROVISION IS MADE FOR ACCESS TO EACH TANK? _____
 - (b) CAN EACH SELF-SEALING OR FLEXIBLE TANK BE INSTALLED WITH EXCESSIVE DEFORMATION?

 - (c) IS THERE AN INSPECTION DOOR ON TOP OF EACH SELF-SEALING OR FLEXIBLE TANK? _____
 - (1) WHAT ACCESS IS PROVIDED TO THESE TANK INSPECTION DOORS? _____
 - (2) CAN ENTIRE INTERIOR OF TANKS BE READILY INSPECTED THRU TANK INSPECTION DOORS WHEN TANKS ARE INSTALLED IN THE AIRCRAFT? _____
 - (d) ARE AS MANY TANK FITTINGS AS PRACTICABLE MOUNTED ON INSPECTION DOORS OF SELF-SEALING OR FLEXIBLE TANKS? _____
3. MISCELLANEOUS
 - (a) ARE OIL LINES PROTECTED AND SUPPORTED TO PREVENT DAMAGE BY PERSONNEL DURING FLIGHT AND SERVICING OPERATIONS? _____
 - (b) IS CLEARANCE BETWEEN OIL LINE AND HOT DUCTS AT LEAST FOUR INCHES? _____
 - (c) CAN ALL FITTINGS AND CONNECTIONS IN OIL LINES BE READILY INSPECTED? _____
4. REMARKS. -

Checked by: _____

Date: _____

H. HYDRAULIC SYSTEMS

1. GENERAL

(a) LIST THE FOLLOWING INFORMATION FOR THE HYDRAULIC SYSTEMS:

	<u>UTILITY SYSTEM</u>	<u>FLIGHT CONTROL SYSTEM NO.1</u>	<u>FLIGHT CONTROL SYSTEM NO.2</u>
TYPE OF SYSTEM	_____	_____	_____
OPERATING PRESSURE	_____	_____	_____

2. ITEMS OPERATED

(a) LIST THE FOLLOWING INFORMATION FOR ITEMS OPERATED:

<u>ITEM</u>	<u>SYSTEM</u>	<u>CONTROL VALVE LOCATION</u>	<u>METHOD OF VALVE OPERATION</u>

3. RESERVOIRS

(a) LIST THE FOLLOWING INFORMATION FOR RESERVOIRS:

<u>TYPE</u>	<u>SYSTEM</u>	<u>LOCATION</u>	<u>SIZE</u>

H. HYDRAULIC SYSTEMS (Cont)

3. (Cont)

- (b) ARE EMERGENCY RESERVOIRS PROVIDED? _____
- (c) WHAT IS LOCATION OF EMERGENCY RESERVOIRS WITH RESPECT TO MAIN RESERVOIR? _____

- (d) IS SIGHT GAGE ON EACH RESERVOIR READILY VISIBLE FOR MAINTENANCE OPERATIONS? _____
- (e) CAN RESERVOIR FILTERS BE REPLACED WITHOUT REMOVING TANKS? _____
- (f) WHAT MEANS ARE PROVIDED AT THE FILLER NECK TO PREVENT SPILLAGE DUE TO OVER FLOW?

- (g) IN MULTIPLACE AIRCRAFT, CAN RESERVOIRS BE FILLED IN FLIGHT FROM A ONE GALLON CAN?

4. ACCUMULATORS

- (a) LIST THE FOLLOWING INFORMATION FOR ACCUMULATORS:

<u>TYPE</u>	<u>LOCATION</u>	<u>SIZE</u>
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5. ENGINE DRIVEN PUMPS

- (a) LIST THE FOLLOWING INFORMATION FOR ENGINE DRIVEN PUMPS:

<u>TYPE</u>	<u>LOCATION</u>	<u>SIZE</u>
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H. HYDRAULIC SYSTEMS (Cont)

6. AUXILIARY PUMPS

(a) LIST THE FOLLOWING INFORMATION FOR AUXILIARY PUMPS:

<u>TYPE</u>	<u>LOCATION</u>	<u>SIZE</u>
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7. LINE TYPE FILTERS

(a) CAN FILTER ELEMENTS BE READILY REPLACED? _____

(b) ARE INDICATOR BUTTONS ACCESSIBLE FOR PREFLIGHT INSPECTION? _____

8. BRAKE SYSTEM

(a) WHAT TYPE SYSTEM IS PROVIDED FOR BRAKES? _____

(b) CAN SYSTEM READILY BE BLED AT THE WHEELS? _____

(c) CAN BRAKE FLUID READILY BE REPLENISHED? _____

(d) ARE BRAKE SYSTEM LINES RUNNING DOWN SHOCK STRUTS ADEQUATELY PROTECTED? _____

(e) CAN WHEELS BE REMOVED WITHOUT DISCONNECTING HYDRAULIC LINES? _____ IF NOT, ARE SELF-SEALING COUPLINGS PROVIDED? _____

9. EMERGENCY OR AUXILIARY SYSTEM

(a) LIST THE FOLLOWING INFORMATION FOR ITEMS OPERATED:

<u>ITEM</u>	<u>TYPE</u>	<u>SYSTEM</u>	<u>CAPACITY</u>	<u>LOCATION OF BOTTLE</u>
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(b) ARE GAGES ON AIR BOTTLES READILY VISIBLE FOR PREFLIGHT CHECKS? _____

H. HYDRAULIC SYSTEMS (Cont)

10. INDICATORS

(a) WHAT INDICATORS ARE PROVIDED IN THE COCKPIT? _____

(b) WHAT ADDITIONAL INDICATORS ARE PROVIDED? _____

(1) WHERE ARE THEY LOCATED? _____

11. REMARKS. -

Checked by: _____

Date: _____

I. PNEUMATIC SYSTEM

1. GENERAL

(a) LIST THE FOLLOWING INFORMATION FOR THE PNEUMATIC SYSTEM:

TYPE OF SYSTEM _____

OPERATING PRESSURE _____

2. ITEMS OPERATED

(a) LIST THE FOLLOWING INFORMATION FOR ITEMS OPERATED:

<u>ITEM</u>	<u>CONTROL VALVE LOCATION</u>	<u>METHOD OF VALVE OPERATION</u>
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3. STORAGE TANKS

(a) LIST THE FOLLOWING INFORMATION FOR STORAGE TANKS:

<u>LOCATION</u>	<u>CAPACITY</u>
-----------------	-----------------

4. WHAT INDICATORS ARE PROVIDED? _____

5. REMARKS. -

Checked by: _____

Date: _____

J. FIRE PROTECTION

1. FIRE EXTINGUISHING SYSTEM

- (a) WHAT IS ARRANGEMENT OF FIXED ENGINE FIRE EXTINGUISHER SYSTEM? _____

- (b) WHAT TYPE OF PROTECTION DOES IT PROVIDE? _____
- (c) WHAT EXTINGUISHING AGENT IS USED? _____
- (d) WHAT IS SIZE AND NUMBER OF EXTINGUISHING AGENT CONTAINERS? _____
- (e) ARE EXTINGUISHING AGENT CONTAINERS READILY REMOVABLE? _____
- (f) ARE THE SAFETY DISCHARGE OUTLETS PLACARDED AND LOCATED FOR READY INSPECTION? _____
- (g) LIST INFORMATION FOR PORTABLE FIRE EXTINGUISHERS AS FOLLOWS:

LOCATIONSIZE

2. FIRE DETECTOR SYSTEM

- (a) WHAT TYPE OF SYSTEM IS PROVIDED? _____
- (b) IS THERE ANY DANGER OF WIRES IN THE DETECTOR SYSTEM BEING DAMAGED BY FIRE BEFORE THE FIRE REACHES THE DETECTOR UNITS? _____

3. ENGINE SECTION

- (a) WILL FIREWALL PREVENT FIRES IN ENGINE SECTION FROM SPREADING? _____
- (b) ARE DIAPHRAGMS PROVIDED TO SEPARATE THE POWER AND ACCESSORY SECTIONS? _____
- (c) WHAT TYPE INFLAMMABLE FLUID LINES ARE IN THE ENGINE COMPARTMENT? _____
- (d) ON MULTI-ENGINE AIRCRAFT, DO ALL INFLAMMABLE FLUID LINES HAVE SHUT-OFF VALVES AT THE FIREWALLS? _____
- (1) ARE THESE VALVES ON THE SIDE OF THE FIREWALL OPPOSITE TO THE ENGINE? _____
- (2) ARE THE SHUT-OFF VALVE SUPPORTING BRACKETS AND CONTROLS SO ARRANGED THAT THEY ARE NOT SUBJECT TO DAMAGE BY FIRE BEFORE THE VALVES CAN BE OPERATED? _____

4. REMARKS. -

Checked by: _____

Date: _____

K. AIR CONDITIONING

1. LIST INFORMATION FOR AIR CONDITIONING AS FOLLOWS:

	<u>COCKPIT</u>	<u>OTHER COMPARTMENTS</u>
(a) HEATER		
LOCATION	_____	_____
MANUFACTURER	_____	_____
MODEL	_____	_____
RATED OUTPUT	_____	_____
(b) FRESH AIR INLETS		
LOCATION	_____	_____
SIZE	_____	_____
(c) SYSTEM OUTLETS		
LOCATION	_____	_____
SIZE	_____	_____
(d) SHUT-OFF VALVE		
LOCATION	_____	_____
HOW OPERATED	_____	_____

2. PRESSURIZATION

- (a) WHAT IS DIFFERENTIAL PRESSURE OF THE COCKPIT? _____
- (b) WHAT IS SOURCE OF COMPRESSED AIR SUPPLY? _____
- (c) WHERE IS PRESSURE REGULATOR LOCATED? _____
- (1) IS THE VALVE INTERLOCKED WITH ENCLOSURE AND SEAT EJECTION CONTROLS? _____
- (d) WHERE IS THE COMBINATION RELIEF, DUMP, AND SAFETY VALVE LOCATED? _____
- (1) IS THE VALVE INTERLOCKED WITH ENCLOSURE AND SEAT EJECTION CONTROLS? _____
- (e) WHAT IS SIZE AND LOCATION OF FITTINGS FOR COMPRESSED AIR SUPPLY TO COCKPIT FOR GROUND TESTS? _____
- (1) WHAT IS SIZE AND LOCATION OF FITTINGS FOR STATIC PRESSURE CONNECTION? _____

3. REMARKS. -

Checked by: _____

K-1

Date: _____

L. ANTI-ICING, WASHING, AND DEGREASING

1. NON-TRANSPARENT AREAS

- (a) FOR WHAT NON-TRANSPARENT AREAS IS ANTI-ICING PROVIDED? _____

- (b) WHAT TYPE ANTI-ICING IS PROVIDED? _____
- (c) WHAT IS HEAT SOURCE FOR THERMAL ANTI-ICING? _____
- (1) WHERE ARE HEATERS OR HEAT EXCHANGERS LOCATED? _____
- (2) HOW IS OVERHEATING OF SURROUNDING STRUCTURE, FUEL TANKS, ETC., PREVENTED? _____

- (3) IS A SOLENOID SHUT-OFF VALVE LOCATED IN THE HEATER FUEL LINE AT THE POINT WHERE IT JOINS THE MAIN FUEL SYSTEM? _____
- (4) HOW IS THIS VALVE OPERATED? _____
- (5) WHERE IS VALVE CONTROL LOCATED? _____
- (6) IS VALVE CONTROL IDENTIFIED? _____
- (d) WHAT ANTI-ICING CONTROLS ARE PROVIDED? _____
- (1) WHERE ARE THEY LOCATED? _____

2. TRANSPARENT AREAS

- (a) STATE "YES", "NO", OR "N.A." IN REGARD TO THE FOLLOWING:

	<u>ANTI-ICING</u>	<u>DEFOGGING</u>	<u>DEFROSTING</u>
WINDSHIELD	_____	_____	_____
ENCLOSURE	_____	_____	_____
CAMERA WINDOW	_____	_____	_____
BOMBER'S WINDOW	_____	_____	_____

- (b) WHAT TYPE IS PROVIDED? _____
- (c) WHAT CONTROLS ARE PROVIDED? _____
- (d) WHERE ARE CONTROLS LOCATED? _____
- (e) ARE WINDSHIELD WIPERS PROVIDED? _____
- (f) RAIN REMOVAL PROVIDED BY WHAT MEANS? _____

Appendix 1 to MIL-M-8650B(AS)

L. ANTI-ICING, WASHING, AND DEGREASING (Cont)

3. DEGREASING (For Aircraft with reciprocating engines installed forward of windshield)

(a) FOR WHAT TRANSPARENT AREAS IS WASHING OR DEGREASING PROVIDED? _____

(b) WHAT IS TANK CAPACITY? _____

(c) WHERE IS TANK LOCATED? _____

(d) WHERE IS TANK FILLER NECK LOCATED? _____

(e) WHERE IS TANK GAGE LOCATED? _____

(f) WHAT TYPE PUMP IS PROVIDED? _____

(g) WHAT CONTROLS ARE PROVIDED? _____

(h) WHERE ARE CONTROLS LOCATED? _____

4. REMARKS. -

Checked by: _____

Date: _____

M. ANCHOR GEAR

1. WHAT TYPE AND SIZE ANCHOR IS PROVIDED? _____
 (a) WHERE IS ANCHOR STOWED? _____
2. WHAT TYPE AND SIZE ANCHOR LINE IS PROVIDED? _____
3. WHAT TYPE DAVIT IS PROVIDED? _____
 (a) DOES DAVIT EXTEND FAR ENOUGH OUTBOARD TO PERMIT ANCHOR TO CLEAR CHINE? _____
 (b) DOES DAVIT PERMIT REQUIRED ANGULARITY OF THE ANCHOR LINE? _____
4. WHAT TYPE WINCH IS PROVIDED? _____
5. WHAT TYPE AND SIZE PENDANT IS PROVIDED? _____
6. HOW MANY AND WHAT TYPE SEA ANCHORS ARE PROVIDED? _____
 (a) WHERE ARE SEA ANCHORS STOWED? _____
7. WHAT TYPE SNUBBING POSTS ARE PROVIDED? _____
 (a) WHERE ARE THEY LOCATED? _____
8. WHAT IS CLEAR OPENING SIZE OF WARM-UP AND STERN TOW FITTING? _____
 (a) CAN LINE ATTACHMENT BE MADE FROM INSIDE HULL? _____
9. IS A KEEL HOOK FITTING PROVIDED? _____
10. WHAT IS CLEAR OPENING SIZE OF HANDLING AND STEADYING FITTINGS? _____
 (a) WHERE ARE THEY LOCATED? _____
11. IS BUOY HOOK OR BOAT HOOK PROVIDED? _____
 (a) WHERE IS IT STOWED? _____
12. WHERE IS BUOY LINE STOWED? _____
13. REMARKS. -

Checked by: _____

Date: _____

H. BEACHING GEAR

1. WHAT TYPE BEACHING GEAR IS PROVIDED? _____
- (a) CAN GEAR BE CARRIED IN THE AIRCRAFT? _____
2. LIST INFORMATION FOR MAIN GEAR AS FOLLOWS:
- | | <u>TYPE</u> | <u>SIZE</u> | <u>METHOD OF OPERATION</u> |
|--------|-------------|-------------|----------------------------|
| WHEELS | _____ | _____ | |
| TIRES | _____ | _____ | |
| BRAKES | _____ | _____ | _____ |
3. LIST INFORMATION FOR AUXILIARY GEAR AS FOLLOWS:
- | | <u>TYPE</u> | <u>SIZE</u> |
|--------|-------------|-------------|
| WHEELS | _____ | _____ |
| TIRES | _____ | _____ |
4. WHAT IS METHOD OF ATTACHING GEAR TO AIRPLANE? _____
- _____
5. WHAT TYPE OF BALLAST AND BUOYANCY TANKS ARE USED? _____
- _____
6. WHERE ARE JACK PADS LOCATED? _____
7. ARE ADEQUATE WHEELS PROVIDED FOR HANDLING THE GEAR ON THE GROUND? _____
8. WHERE ARE MAIN GEAR TOW FITTINGS LOCATED? _____
9. WHAT MEANS ARE PROVIDED FOR TURNING MAIN GEAR WHEELS TO THE 45° AND 90° POSITIONS?
- _____
- _____
10. ARE PROVISIONS MADE IN AUXILIARY GEAR FOR STEERING? _____
11. REMARKS. -

Checked by: _____

Date: _____

Appendix 2 to MIL-M-8650B(AS)

13 May 1969

Superseding Appendix 1 of
1 April 1960DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360APPENDIX 2AIRCREW SYSTEMS - AIRCRAFT MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ AIRCRAFT

CONTRACT NO. _____ /FY _____

This AIRCREW SYSTEMS checkoff list consists of the following sections (cross out those sections listed below that are not applicable and omit from list):

- | | |
|--|--|
| A. COCKPIT (PILOT/COPILOT/NFO)
(NAVAL FLIGHT OFFICER))
(PAGES A-1 TO A-30) | F. RADAR OPERATOR'S STATION
(PAGES F-1 TO F-2) |
| B. SAFETY OF AIRCREW
(PAGE B-1) | G. NAVIGATOR'S STATION
(PAGE G-1) |
| C. ACCESS
(PAGES C-1 TO C-2) | H. FLIGHT ENGINEER'S STATION
(PAGES H-1 TO H-2) |
| D. ATMOSPHERIC PROTECTION SYSTEM
(PAGE D-1) | I. CIC OPERATOR'S STATION
(PAGES I-1 TO I-2) |
| E. RADIO OPERATOR'S STATION
(PAGES E-1 TO E-2) | J. FURNISHINGS AND EQUIPMENT
(PAGES J-1 TO J-2) |
| K. (OTHER) STATION
(PAGES K-1 TO K-2) | |

FSC 6910

Prepared by: _____

Date: _____

NOTE: The abbreviation "N.A." used herein denotes "Not applicable".

A. COCKPIT

1. GENERAL

a. SEATS (PILOT/CO-PILOT/NFO (NAVAL FLIGHT OFFICER))

(1) FIXED SEATS (MANUAL ESCAPE CAPABILITY ONLY)

(a) IS THE VERTICAL AND FORE-AND-AFT ADJUSTMENT ACCOMPLISHED TOGETHER _____
OR SEPARATELY? _____1. ARE THE ADJUSTMENTS MADE MANUALLY _____ OR BY A SEAT ADJUSTMENT
MOTOR? _____2. IN WHAT INCREMENTS CAN THE ADJUSTMENTS BE MADE? VERTICALLY _____
FORE-AND-AFT _____

3. HOW IS SEAT ADJUSTMENT ACCOMPLISHED? _____

4. WHERE IS (ARE) THE ADJUSTMENT CONTROL(S) LOCATED? VERTICAL ADJUSTMENT
FORE-AND-AFT ADJUSTMENT _____

(b) HOW IS ADJUSTMENT OF THE HEADREST ACCOMPLISHED? _____

(c) WHAT TYPE OF PERSONNEL PROTECTIVE AND SURVIVAL EQUIPMENT IS THE SEAT
DESIGNED TO ACCOMMODATE?
PERSONNEL PROTECTIVE _____

PARACHUTE _____

SEAT CUSHION _____

EMERGENCY OXYGEN _____

SURVIVAL EQUIPMENT KIT(S) _____

(d) HOW IS MANUAL EGRESS FROM THE SEAT EFFECTED? _____

(e) IS SUFFICIENT CLEARANCE AVAILABLE THROUGHOUT THE RANGE OF SEAT VERTICAL
AND FORE-AND-AFT ADJUSTMENTS FOR THE FULLY EQUIPPED CREWMAN TO EFFECT
MANUAL ESCAPE? _____

PROBLEMS NOTED _____

(f) WHAT TYPE OF PERSONNEL RESTRAINT SYSTEM IS USED? _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

a. SEATS (Cont)

(1) FIXED SEATS (MANUAL ESCAPE) (Cont)

(g) IS THE SEAT EQUIPPED WITH A CORRECTLY MOUNTED INERTIA REEL CONFORMING TO APPLICABLE MILITARY SPECIFICATION? YES _____ NO _____ (MILSPEC NO. _____)

1. WHERE IS THE INERTIA REEL MANUAL CONTROL LOCATED? _____

(h) IS THERE AN INDICATOR PROVIDED SO PILOT/CO-PILOT CAN DETERMINE DESIGN EYE REFERENCE LEVEL? _____

(i) WHAT RANGE OF CREWMEN CAN BE ACCOMMODATED BY EACH SEAT-CREW STATION INSTALLATION?

SITTING HEIGHT _____

EYE HEIGHT SITTING _____

HEAD HEIGHT _____

FUNCTIONAL ARM REACH _____

BUTTOCK KNEE LENGTH _____

BUTTOCK LEG LENGTH _____

BIDELTOID DIAMETER _____

HIP BREADTH-SITTING _____

(j) WHAT ARE (a) THE BUTTOCK TANGENT LINE ANGLE WITH THE TRUE HORIZONTAL _____

(b) THE BACK TANGENT LINE WITH THE TRUE VERTICAL _____ AND _____

(c) THE OPEN BODY ANGLE? _____

1. DO ANY OF THE ANGLES CHANGE WITH CHANGES IN VERTICAL AND/OR FORE-AND-AFT SEAT POSITION? YES _____ NO _____ (IF YES, DESCRIBE _____

_____)

(k) WERE ANY DEVIATIONS FROM APPLICABLE SEAT SPECIFICATIONS NOTED DURING REVIEW? YES _____ . NO _____ . DESCRIBE: _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont.)

1. GENERAL (Cont)

a. SEATS (Cont)

(2) EJECTABLE SEATS

(a) WHAT TYPE SEAT IS PROVIDED? _____

(b) IS THE VERTICAL AND FORE-AND-AFT ADJUSTMENT ACCOMPLISHED TOGETHER _____
OR SEPARATELY? _____1. ARE THE ADJUSTMENTS MADE MANUALLY _____ OR BY A SEAT ADJUSTMENT
MOTOR? _____2. IN WHAT INCREMENTS CAN THE ADJUSTMENTS BE MADE?
VERTICALLY _____

FORE-AND-AFT _____

3. HOW IS SEAT ADJUSTMENT ACCOMPLISHED? _____

4. WHERE IS(ARE) THE ADJUSTMENT CONTROL(S) LOCATED?
VERTICAL ADJUSTMENT _____

FORE-AND-AFT ADJUSTMENT _____

(c) IS AUTOMATIC SEAT BUCKET BOTTOMING PART OF THE PRE-EJECTION SEQUENCE?

(d) IS AUTOMATIC SEAT POSITIONING PART OF THE PRE-EJECTION SEQUENCE? _____

(e) IS AUTOMATIC REMOVAL OF EQUIPMENT FROM THE ESCAPE PATH PART OF THE PRE-
EJECTION SEQUENCE? _____(f) IS THE CANOPY (OR ESCAPE HATCH) JETTISONED _____ OR SEVERED _____
AS PART OF THE EJECTION SEQUENCE? _____(g) CAN THE CREWMEMBER BE EJECTED THROUGH THE CANOPY (OR ESCAPE HATCH) AUTO-
MATICALLY IN THE EVENT THE JETTISONING/SEVERANCE SYSTEM FAILS TO FUNCTION?1. DOES THE SEAT CONTACT THE CANOPY (OR ESCAPE HATCH) AND BREAK A PATH FOR
THE CREWMAN? _____(h) IS AN AUTOMATED UNDERWATER ESCAPE SEQUENCE PROVIDED? YES _____ NO _____
(IF YES, DESCRIBE OPERATION? _____)

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

a. SEATS (Cont)

(2) EJECTABLE SEATS (Cont)

(1) FOR WHAT TYPE OF PERSONNEL PROTECTIVE AND SURVIVAL EQUIPMENT IS THE SEAT DESIGNED TO ACCOMMODATE?

PERSONNEL PROTECTIVE _____

PARACHUTE _____

SEAT CUSHION _____

EMERGENCY OXYGEN _____

SURVIVAL EQUIPMENT KIT(S) _____

(j) HOW IS MANUAL EGRESS FROM THE SEAT EFFECTED? _____

(k) IS SUFFICIENT CLEARANCE AVAILABLE THROUGHOUT THE RANGE OF SEAT VERTICAL AND FORE-AND-AFT ADJUSTMENTS FOR THE FULLY EQUIPPED CREWMAN TO EFFECT MANUAL ESCAPE FROM THE AIRCRAFT? _____

(l) WHAT FORE-AND-AFT CLEARANCE _____ AND ATHWARTSHIPS CLEARANCE _____ IS PROVIDED THROUGHOUT THE EJECTION PATH?

(m) ARE THERE ANY PROTRUSIONS INTO THE SPACE REQUIRED CLEAR FOR EITHER MANUAL EGRESS OR EJECTION SAFETY? _____

1. DESCRIBE TYPE AND AMOUNT OF PROTRUSION _____

(n) WHAT TYPE OF PERSONNEL RESTRAINT SYSTEM IS USED? _____

(o) IS THE SEAT EQUIPPED WITH A CORRECTLY MOUNTED BALLISTIC-POWERED INERTIA-LOCKING SHOULDER HARNESS TAKE-UP DEVICE CONFORMING TO THE APPLICABLE MILITARY SPECIFICATION? _____

1. WHERE IS THE DEVICE MANUAL CONTROL LOCATED? _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

a. SEATS (Cont)

(2) EJECTABLE SEATS (Cont)

(p) WHAT RANGE OF CREWMEN CAN BE ACCOMMODATED BY EACH SEAT-CREW STATION INSTALLATION?

SITTING HEIGHT _____

EYE HEIGHT, SITTING _____

HEAD HEIGHT _____

FUNCTIONAL ARM REACH _____

BUTTOCK KNEE LENGTH _____

BUTTOCK LEG LENGTH _____

BIDELTOID DIAMETER _____

HIP-BREADTH-SITTING _____

(q) WHAT ARE (a) THE BUTTOCK TANGENT LINE ANGLE WITH THE TRUE HORIZONTAL _____, (b) THE BACK TANGENT LINE WITH THE TRUE VERTICAL _____, AND (c) THE OPEN BODY ANGLE? _____

1. DO ANY OF THE ANGLES CHANGE WITH CHANGES IN VERTICAL AND/OR FORE-AND-AFT SEAT POSITION? YES _____ NO _____ (IF YES, DESCRIBE _____)

(r) WHAT IS THE ANGLE AT WHICH THE SEAT IS EJECTED? _____

1. WHAT IS THE RELATIONSHIP BETWEEN THE EJECTION ANGLE AND THE BACK TANGENT LINE? _____

2. WHAT IS THE RELATIONSHIP BETWEEN THE ROCKET MOTOR THRUST ANGLE AND THE BACK TANGENT LINE? _____

(s) IN MULTIPLACE INSTALLATIONS

1. ARE SEATS AND CANOPIES SEQUENCED OR SEATS ONLY? _____

2. HOW IS SEQUENCE SYSTEM INITIATED?

(a) BY PILOT _____

(b) BY CREWMAN _____

3. HOW IS SEQUENCE INITIATION CONTROLLED?

(a) COMMAND SELECTOR (FRONT & REAR) _____

(b) COMMAND SELECTOR (REAR ONLY) _____

(c) OTHER _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

a. SEATS (Cont)

(2) EJECTABLE SEATS (Cont)

(t) ESCAPE SYSTEM ACTUATION MEANS:

1. PRIMARY - (NORMALLY FACE CURTAIN)

(a) IN THE STOWED POSITION, WHAT IS THE RELATIONSHIP BETWEEN FACE CURTAIN HANDLES AND TOP OF HELMET OF 98% HEAD HEIGHT CREWMAN WITH EYE AT DESIGN EYE POSITION? _____

(b) IN THE EXTENDED POSITION ARE THE HANDGRIPS IN THE OPTIMUM POSITION? _____

1. WHAT TYPE HANDGRIPS ARE USED? _____

2. WHAT IS THE DISTANCE BETWEEN HANDGRIPS? _____

2. SECONDARY FIRING MEANS:

(a) TYPE & SIZE _____

(b) LOCATION _____

(c) SAFETY PROVISIONS _____

(u) WHAT LEG RETENTION IS INCORPORATED? _____

(v) WHAT LOWER TORSO AND/OR HEAD RESTRAINTS ARE INCORPORATED? _____

(w) ARE ALL PERSONAL SERVICES CONNECTIONS BETWEEN THE AIRCRAFT AND THE SEAT OR PILOT AUTOMATICALLY BROKEN PRIOR TO OR DURING EJECTION? _____

(x) IS AN AUTOMATIC PERSONNEL RESTRAINT SYSTEM RELEASE PROVIDED? _____

(y) IS AN AUTOMATIC PARACHUTE OPENER PROVIDED? _____

(z) IS THE VERTICAL DIMENSION OF THE HEADREST SUCH THAT THE PILOT'S HEAD WILL GO BELOW IT, DUE TO BODY COMPRESSION, WHEN THE SEAT IS EJECTED? _____

(aa) WHAT GROUND SAFETY DEVICES ARE INCORPORATED? _____

1. DO THEY COMPLY WITH THE APPLICABLE EJECTION SEAT SPECIFICATION? _____

A. COCKPIT (Cont)

1. GENERAL (Cont)
- a. SEATS (Cont)
- (2) EJECTABLE SEATS (Cont)
- (bb) DIMENSIONAL DATA
1. LIST THE BASIC COCKPIT DIMENSIONS AS REQUIRED BY FIGURE 1, SHEETS 1 AND 3. (PAGES A-11, A-13)
 2. LIST THE COCKPIT CLEARANCE DIMENSIONS AS REQUIRED BY FIGURE 1, SHEETS 2 AND 3. (PAGES A-12, A-13)
- (cc) WERE ANY DEVIATIONS FROM APPLICABLE SEAT SPECIFICATIONS NOTED DURING REVIEW? YES _____ NO _____ DESCRIBE: _____
- _____
- _____
- (dd) ANY SPECIAL CONTROLS ON SEAT? _____
- _____
- (ee) DO EJECTION SEATS HAVE TO BE REMOVED TO PERMIT MAINTENANCE OF COCKPIT EQUIPMENT? _____
- WHICH EQUIPMENT? _____
- HOW FREQUENTLY? _____
- (3) FIXED SEATS INSTALLED IN COCKPIT CAPSULE AIRCREW ESCAPE SYSTEM
- (a) WHAT TYPE SEAT IS PROVIDED? _____
- _____
- (b) IS THE VERTICAL, FORE-AND-AFT-AND-TILT ADJUSTMENT ACCOMPLISHED TOGETHER OR SEPARATELY?
1. ARE THE ADJUSTMENTS MADE MANUALLY _____ OR BY A SEAT ADJUSTMENT MOTOR? _____
 2. IN WHAT INCREMENTS CAN THE ADJUSTMENTS BE MADE?

VERTICALLY _____

FORE-AND-AFT _____

TILT _____
 3. HOW IS SEAT ADJUSTMENT ACCOMPLISHED? _____
 4. WHERE IS(ARE) THE ADJUSTMENT CONTROL(S) LOCATED?

VERTICAL ADJUSTMENT _____

FORE-AND-AFT _____

TILT _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

a. SEATS (Cont)

(3) FIXED SEATS (CAPSULE ESCAPE) (Cont)

(c) WHAT FORE-AND-AFT CLEARANCE _____ AND ATHWARTSHIPS CLEARANCE _____ IS PROVIDED FOR EACH CREWMEMBER WHEN EQUIPMENTS ARE STOWED?

(d) ARE THERE ANY PROTRUSIONS INTO THE SPACE REQUIRED CLEAR FOR CREW SAFETY DURING EITHER MANUAL EGRESS OR AUTOMATED ESCAPE? _____

(e) IS AN AUTOMATED UNDERWATER ESCAPE SEQUENCE PROVIDED? YES _____ NO _____ (IF YES, DESCRIBE OPERATION _____)

(f) FOR WHAT TYPES OF PERSONNEL PROTECTIVE AND SURVIVAL EQUIPMENT IS THE SEAT DESIGNED TO ACCOMMODATE?
PERSONNEL PROTECTIVE _____

SEAT CUSHION _____

EMERGENCY OXYGEN _____

SURVIVAL EQUIPMENT KIT(S) _____

(g) HOW IS MANUAL EGRESS FROM THE SEAT EFFECTED? _____

(h) IS SUFFICIENT CLEARANCE AVAILABLE THROUGHOUT THE RANGE OF SEAT VERTICAL AND FORE-AND-AFT ADJUSTMENTS FOR THE FULLY EQUIPPED CREWMAN TO EFFECT MANUAL ESCAPE FROM THE AIRCRAFT? _____

(i) WHAT TYPE OF PERSONNEL RESTRAINT SYSTEM IS USED? _____

(j) IS THE SEAT EQUIPPED WITH A CORRECTLY MOUNTED BALLISTIC-POWERED INERTIA-LOCKING SHOULDER HARNESS TAKE-UP DEVICE CONFORMING TO THE APPLICABLE MILITARY SPECIFICATION? _____

1. WHERE IS THE DEVICE MANUAL CONTROL LOCATED? _____

A. COCKPIT (Cont)

1. GENERAL (Cont)

a. SEATS (Cont)

(3) FIXED SEATS (CAPSULE ESCAPE) (Cont)

(k) WHAT RANGE OF CREWMAN CAN BE ACCOMMODATED BY EACH SEAT-CREW STATION INSTALLATION?

SITTING HEIGHT _____

EYE HEIGHT, SITTING _____

HEAD HEIGHT _____

FUNCTIONAL ARM REACH _____

BUTTOCK KNEE LENGTH _____

BUTTOCK LEG LENGTH _____

BIDELTOID DIAMETER _____

HIP-BREADTH-SITTING _____

(l) WHAT ARE (a) THE BUTTOCK TANGENT LINE ANGLE WITH THE TRUE HORIZONTAL _____, (b) THE BACK TANGENT LINE WITH THE TRUE VERTICAL _____ AND (c) THE OPEN BODY ANGLE? _____

1. DO ANY OF THE ANGLES CHANGE WITH CHANGES IN VERTICAL AND/OR FORE-AND-AFT SEAT POSITION? YES _____ NO _____ (IF YES, DESCRIBE _____)

(m) WHAT IS RANGE OF THE ANGLES AT WHICH THE COCKPIT CAPSULE IS EJECTED FROM THE AIRCRAFT? _____

1. WHAT IS THE RELATIONSHIP BETWEEN THE COCKPIT CAPSULE EJECTION ANGLE AND THE BACK TANGENT LINES? _____

2. WHAT IS THE RELATIONSHIP BETWEEN THE ROCKET MOTOR THRUST ANGLE AND THE BACK TANGENT LINE? _____

(n) WHAT TYPE ESCAPE SYSTEM FIRING CONTROLS ARE USED? _____

1. WHERE ARE THEY LOCATED? _____

2. WHICH CREWMEMBERS CAN INITIATE ESCAPE SEQUENCE? _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

a. SEATS (Cont)

(3) FIXED SEATS (CAPSULE ESCAPE) (Cont)

(o) WHAT LOWER TORSO AND/OR HEAD RESTRAINTS ARE INCORPORATED? _____
_____(p) WHAT GROUND SAFETY DEVICES ARE INCORPORATED? _____
_____1. DO THEY COMPLY WITH THE APPLICABLE COCKPIT CAPSULE AIRCREW ESCAPE
SYSTEM SPECIFICATION? _____(q) WERE ANY DEVIATIONS FROM APPLICABLE COCKPIT CAPSULE AIRCREW ESCAPE
SYSTEM SPECIFICATION NOTED DURING REVIEW? YES _____ NO _____ DESCRIBE:

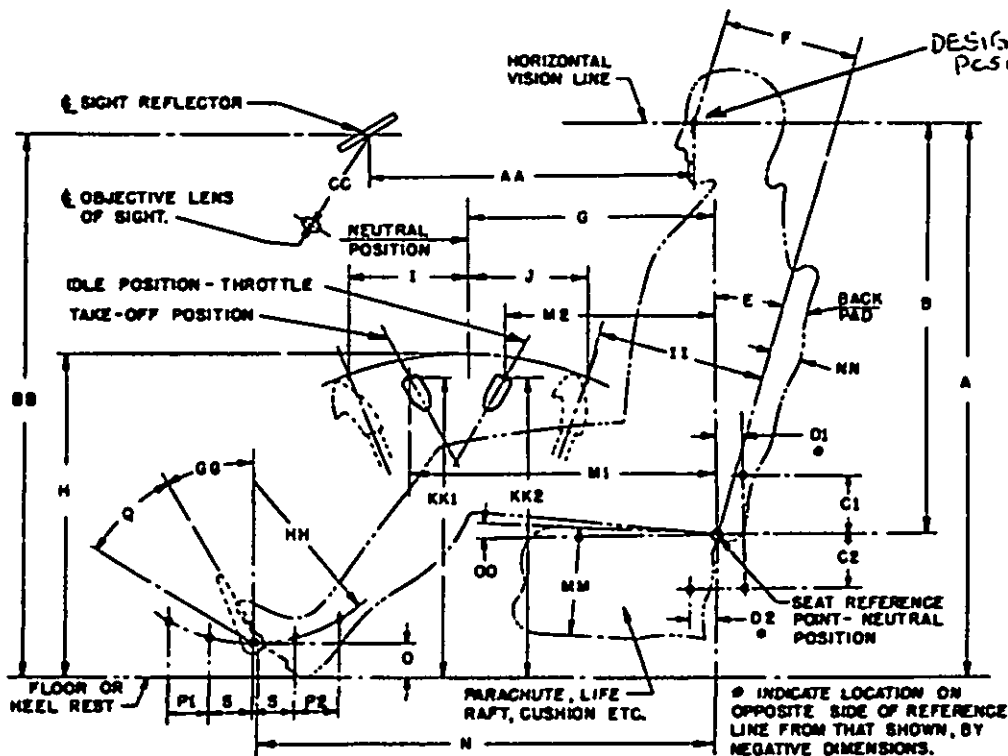
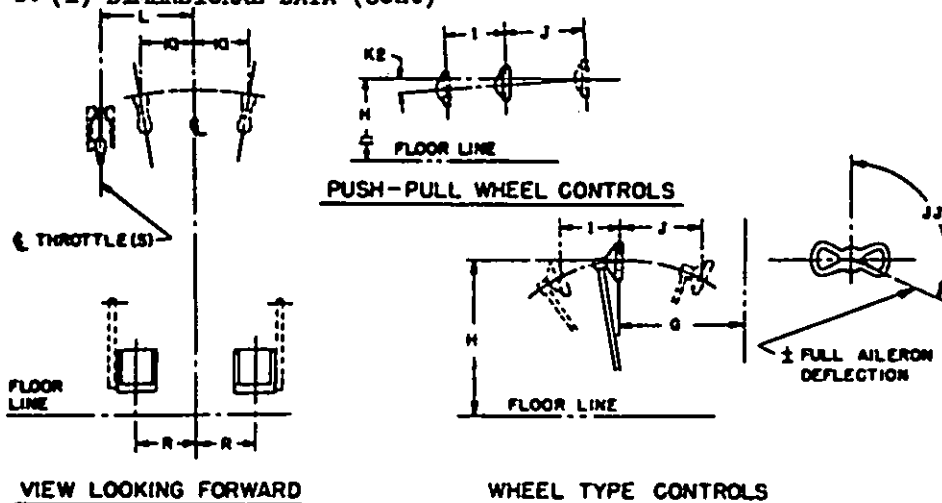
b. DIMENSIONAL DATA

(1) LIST THE BASIC COCKPIT DIMENSIONS AS REQUIRED BY FIGURE 1, SHEETS 1 AND 3.
(PAGES A-11, A-13)(2) LIST THE COCKPIT CLEARANCE DIMENSIONS AS REQUIRED BY FIGURE 1, SHEETS 2
AND 3. (PAGES A-12, A-13)

1. GENERAL (Cont)

A. COCKPIT (Cont)

b. (1) DIMENSIONAL DATA (Cont)



⊙ INDICATE LOCATION ON OPPOSITE SIDE OF REFERENCE LINE FROM THAT SHOWN, BY NEGATIVE DIMENSIONS.

FIGURE 1 (SHEET 1)

BASIC COCKPIT DIMENSIONS

(SPECIFY DIMENSION VALUES ON SHEET-3)

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

b. (2) CLEARANCE DATA (Cont)

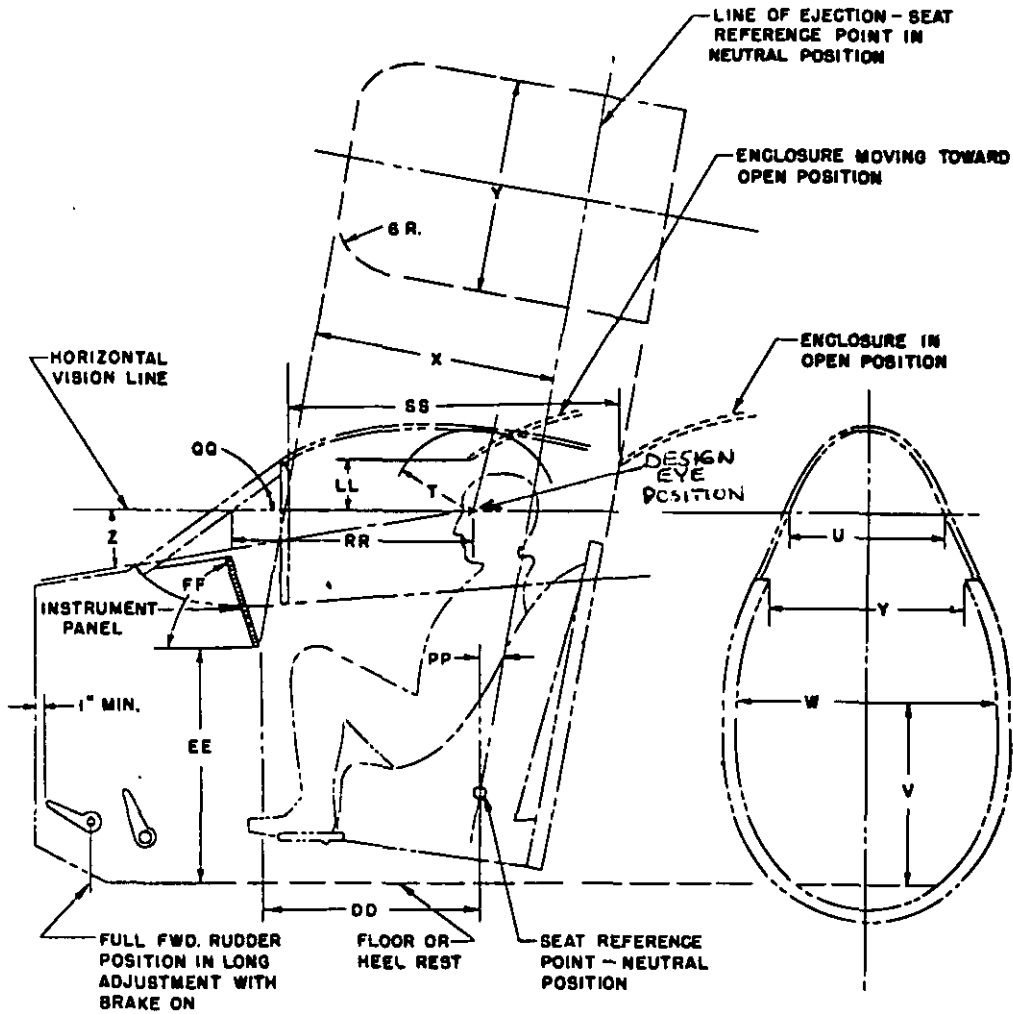


FIGURE - 1 (SHEET 2)

COCKPIT CLEARANCE DIMENSIONS(SPECIFY DIMENSION VALUES ON SHEET 3)

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

b. DIMENSIONAL DATA (Cont)

<u>DIMENSION NAME</u>	<u>SYMBOL</u>	<u>DIM.</u>	<u>DIMENSION NAME</u>	<u>SYMBOL</u>	<u>DIM.</u>
COCKPIT SIZE (FLOOR LINE TO EYE)	A	___	ELBOW HEIGHT	V	___
SEAT REF. POINT TO EYE	B	___	ELBOW CLEARANCE (LAT.)	W	___
SEAT ADJUSTMENT (VERT.)	C1	___	SEAT EJECTION CLEARANCE(FWD.)	X	___
SEAT ADJUSTMENT (VERT.)	C2	___	SEAT EJECTION CLEARANCE(LAT.)	Y	___
SEAT ADJUSTMENT(HORIZ.)	D1	___	DOWNWARD VISION ANGLE	Z	___
SEAT ADJUSTMENT(HORIZ.)	D2	___	SIGHT REFLECTOR POSITION	AA	___
SEAT BACK ANGLE	E	___	SIGHT REFLECTOR HEIGHT	BB	___
PILOT DESIGN EYE POSITION	F	___	SIGHT LENS LOCATION	CC	___
STICK (WHEEL) LOCATION	G	___	INSTRUMENT PANEL POSITION	DD	___
STICK (WHEEL) HEIGHT	H	___	INSTRUMENT PANEL HEIGHT	EE	___
STICK (WHEEL) THROW (FWD.)	I	___	INSTRUMENT PANEL ANGLE	FF	___
STICK (WHEEL) THROW (AFT.)	J	___	BRAKE PEDAL ANGLE	GG	___
STICK THROW: (LAT.)	K1	___	RUDDER PEDAL RADIUS	HH	___
WHEEL ANGLE	K2	___	AFT STICK(WHEEL) LOCATION	II	___
THROTTLE POSITION (LAT.)	L	___	WHEEL THROW (LAT.)	JJ	___
THROTTLE POSITION(TAKE-OFF)	M1	___	THROTTLE HEIGHT(TAKE-OFF)	KK1	___
THROTTLE POSITION(IDLE)	M2	___	THROTTLE HEIGHT(IDLE)	KK2	___
RUDDER PEDAL POSITION	N	___	HEAD CLEARANCE FROM MOVING ENCL.	LL	___
RUDDER PEDAL HEIGHT	O	___	PARACHUTE, LIFE RAFT, CUSHION, ETC., THICKNESS	MM	___
RUDDER PEDAL ADJUSTMENT(FWD.)	P1	___	BACK PAD THICKNESS	NN	___
RUDDER PEDAL ADJUSTMENT(AFT.)	P2	___	SEAT BOTTOM ANGLE	OO	___
BRAKE PEDAL THROW	Q	___	SEAT EJECTION ANGLE	PP	___
RUDDER PEDAL SPACING	R	___	WINDSHIELD ANGLE	QQ	___
RUDDER PEDAL TRAVEL	S	___	WINDSHIELD POSITION	RR	___
HEAD CLEARANCE RADIUS	T	___	LONGITUDINAL OPEN ENCL.SPACE	SS	___
HEAD CLEARANCE (LAT.)	U	___			

Figure I (Sheet 3)
COCKPIT DIMENSIONS

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

1. GENERAL (Cont)

c. VISION

- (1) WHAT IS ANGLE OF PILOT'S DOWN VISION OVER THE NOSE? _____
- (2) IS PILOT'S VISION SATISFACTORY FOR TAXIING, TAKEOFF, IN FLIGHT, AND LANDING? _____
- (3) IS VISION IN CARRIER APPROACH CONDITION SATISFACTORY? _____
- (4) WHAT IS FORWARD VISION LIMITED BY? _____
- (5) WHAT IS THE MAXIMUM ANGLE, MEASURED AFT IN A HORIZONTAL PLANE FROM DEAD AHEAD, THROUGH WHICH VISION IS POSSIBLE WITH SHOULDER HARNESS IN PLACE BUT NOT NECESSARILY LOCKED? _____
- (6) WHAT IS AFT VISION LIMITED BY? _____

d. CONTROLS

- (1) DOES ACTUATION OF ALL CONTROLS FORWARD, UPWARD, OR CLOCKWISE, RESULT IN INCREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
- (2) DOES ACTUATION OF ALL CONTROLS AFT, DOWNWARD, OR COUNTERCLOCKWISE, RESULT IN DECREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
- (3) ARE CONTROLS OF VARIABLE NATURE, INDUCED BY A ROTARY MOTION, ACTUATED CLOCKWISE FROM THE "OFF" POSITION THROUGH "LOW" OR "DIM" TO "HIGH" OR "BRIGHT"? _____
- (4) ARE THOSE CONTROLS WHICH THE PILOT MAY BE REQUIRED TO OPERATE DURING LANDING AND TAKEOFF MANEUVERS OR DURING INFLIGHT EMERGENCIES OPERABLE WITH THE SHOULDER HARNESS LOCKED? _____
- (5) ARE ALL OTHER CONTROLS WITHIN NORMAL REACH OF THE PILOT(S) WHEN SEATED WITH SEAT BELT FASTENED AND SHOULDER HARNESS IN PLACE BUT NOT NECESSARILY LOCKED? _____
- (6) DOES LOCATION, ARRANGEMENT, AND CLEARANCE OF ALL CONTROLS PRECLUDE INADVERTENT SELECTION AND OPERATION? _____
- (7) CAN ANY CONTROLS BE COMBINED? _____
- (8) CAN ANY CONTROLS BE MADE AUTOMATIC? _____
- (9) ARE CONTROLS AND SWITCHES SO SPACED AS TO PERMIT EASY AND ACCURATE OPERATION WITH HEAVILY GLOVED HANDS? _____
- (10) DO CONTROL KNOB SHAPES CONFORM TO THE APPLICABLE SPECIFICATION OR STANDARD? _____
- (11) SKETCH CONSOLE LAYOUT AND IDENTIFY ALL CONTROLS, ETC. BY NAME. _____

A. COCKPIT (Cont)

1. GENERAL (Cont)

e. COCKPIT INSTRUCTIONS

- (1) ARE PRINTED INSTRUCTIONS HELD TO A MINIMUM? _____
- (2) ARE ALL INSTRUCTIONS AND NAMEPLATES LEGIBLE AND READILY VISIBLE TO THE PILOT(S)? _____
- (3) HAS PROVISION BEEN MADE TO ILLUMINATE ALL INSTRUCTIONS AND NAMEPLATES?

- (4) ARE SEPARATE TAKEOFF AND LANDING CHECKOFF LISTS PROVIDED? _____
- (5) ARE CHECKOFF LISTS LEGIBLE? _____
- (6) ARE CHECKOFF LIST ITEMS LISTED IN ORDER OF NORMAL OPERATION. _____
- (7) ARE ONLY THOSE ITEMS INCLUDED ON THE CHECKOFF LISTS WHICH MUST BE CHECKED FOR SAFETY-OF-FLIGHT REASONS DURING TAKEOFF AND LANDING? _____

f. REVIEWS. -

Checked by: _____

Date: _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

2. FLIGHT AND GROUND CONTROLS

a. PRIMARY FLIGHT CONTROLS

(1) LIST THE FOLLOWING INFORMATION FOR PRIMARY FLIGHT CONTROLS:

	<u>LATERAL</u>	<u>DIRECTIONAL</u>	<u>LONGITUDINAL</u>
TYPE	_____	_____	_____
TRAVEL	_____	_____	_____
LOCATION OF STOPS	_____	_____	_____

(2) WHAT TYPE PEDAL ADJUSTMENT IS PROVIDED? _____

(3) IF PEDALS ARE SEPARATELY ADJUSTABLE, HAVE MEANS BEEN PROVIDED TO INDICATE RELATIVE POSITION TO THE PILOT? _____

(4) HOW MUCH PEDAL ADJUSTMENT IS AVAILABLE FORWARD? _____ AFT? _____

(5) IS PEDAL ADJUSTMENT SUFFICIENT? _____

(6) DOES TILT OF PEDALS PERMIT COMFORTABLE APPLICATION OF BRAKES AT ANY PEDAL POSITION? _____

(7) LIST THE BUTTONS OR SWITCHES LOCATED ON THE GRIPS OF THE PRIMARY FLIGHT CONTROLS. _____

(8) CAN THESE BUTTONS OR SWITCHES BE OPERATED EASILY WHILE MAINTAINING PRESSURE ON THE PRIMARY FLIGHT CONTROL? _____

(9) WHAT TYPE OF CONTROL BOOST IS PROVIDED? _____

(10) BY WHAT MEANS IS PILOT WARNED THAT NORMAL BOOST HAS FAILED? _____
_____(11) HOW DOES THE PILOT ACTUATE THE EMERGENCY BOOST SYSTEM: _____

A. COCKPIT (Cont)

2. FLIGHT AND GROUND CONTROLS (Cont)

b. TRIM CONTROLS

(1) LIST THE FOLLOWING INFORMATION FOR TRIM CONTROLS:

	<u>LATERAL</u>	<u>DIRECTIONAL</u>	<u>LONGITUDINAL</u>
TYPE	_____	_____	_____
TRAVEL	_____	_____	_____
TYPE OF INDICATOR	_____	_____	_____
LOCATION OF CONTROL	_____	_____	_____
LOCATION OF INDICATOR	_____	_____	_____

(2) WHERE ARE STANDBY TRIM TAB ACTUATING CONTROLS LOCATED? _____

c. HIGH LIFT DEVICES

(1) WHAT TYPE OF CONTROL IS PROVIDED? _____

(2) WHERE IS CONTROL LOCATED? _____

(3) HOW INDICATION OF HIGH LIFT DEVICE POSITION IS PROVIDED? _____

(4) WHERE IS INDICATOR LOCATED? _____

d. SPEED BRAKES

(1) WHAT TYPE OF CONTROL IS PROVIDED? _____

(2) WHERE IS IT LOCATED? _____

(3) CAN INTERMEDIATE POSITIONS BETWEEN "FULL OUT" AND "FULL IN" BE SELECTED?
_____(4) WHERE IS POSITION INDICATOR LOCATED? _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

2. FLIGHT AND GROUND CONTROLS (Cont)

e. AUTO PILOTS

(1) WHAT TYPE OF CONTROL IS PROVIDED? _____

(2) WHERE IS IT LOCATED? _____

(3) WHERE IS ELECTRICAL DISCONNECT LOCATED? _____

f. LANDING GEAR

(1) WHAT TYPE OF CONTROL IS PROVIDED? _____

(2) WHERE IS CONTROL LOCATED? _____

(3) WHAT MEANS ARE PROVIDED TO PREVENT INADVERTENT OPERATION ON THE GROUND?
_____(4) WHAT TYPE OF OVERRIDE CONTROL IS PROVIDED FOR THE ABOVE? _____

(5) IS THIS OVERRIDE CONTROL READILY ACCESSIBLE? _____

(6) DESCRIBE LOCATION AND ACTUATION OF EMERGENCY LANDING GEAR EXTENSION CONTROL.

(7) WHERE IS THE INDICATOR LOCATED? _____

g. LIST ACTUATION AND LOCATION OF THE FOLLOWING CONTROLS:

<u>CONTROL</u>	<u>ACTUATION</u>	<u>LOCATION</u>
FLIGHT CONTROL LOCK	_____	_____
TAIL WHEEL LOCK	_____	_____
ARRESTING HOOK CONTROL	_____	_____
WING SWEEP CONTROL	_____	_____
WING FOLDING CONTROL	_____	_____
WING LOCKING CONTROL	_____	_____
EMERGENCY BRAKE CONTROL	_____	_____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

2. FLIGHT AND GROUND CONTROLS (Cont)

g. (Cont)

<u>CONTROL</u>	<u>ACTUATION</u>	<u>LOCATION</u>
PARKING BRAKE CONTROL	_____	_____
CANOPY CONTROL	_____	_____
JETTISONING CONTROL	_____	_____
NOSEWHEEL STEERING CONTROL	_____	_____
EMERGENCY ESCAPE CONTROL	_____	_____
_____	_____	_____
_____	_____	_____

(1) WHERE IS ARRESTING HOOK POSITION INDICATOR LOCATED? _____

(2) WHERE IS WING LOCKED INDICATOR LOCATED? _____

h. DOES THE LOCATION AND ACTUATION OF FLIGHT AND GROUND CONTROLS CONFORM TO THE APPLICABLE SPECIFICATION OR STANDARD? _____ IF NOT, DESCRIBE DIFFERENCES AND STATE REASON THEREFOR: _____

1. REMARKS. -

Checked by: _____

Date: _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

3. PROPULSION SYSTEM CONTROLS

a. LIST THE FOLLOWING INFORMATION FOR PROPULSION SYSTEM CONTROLS:

<u>CONTROL</u>	<u>TYPE</u>	<u>LOCATION</u>
REVERSE THRUST CONTROL	_____	_____
EXHAUST NOZZLE CONTROL	_____	_____
PROPELLER CONTROL	_____	_____
PROPELLER FEATHERING CONTROL	_____	_____
REVERSE THRUST CONTROL	_____	_____
MIXTURE CONTROL	_____	_____
SUPERCHARGER CONTROL	_____	_____
STARTING CONTROL		
AIR START	_____	_____
GROUND START	_____	_____
_____	_____	_____
IGNITION CONTROL	_____	_____
PRIMER CONTROL	_____	_____
OIL DILUTION CONTROL	_____	_____
FLUID INJECTION CONTROL	_____	_____
COOLING CONTROLS		
COIL FLAP	_____	_____
INTERCOOLERS	_____	_____
OIL COOLERS	_____	_____
_____	_____	_____
INDUCTION AIR CONTROL		
ANTI-ICING	_____	_____
ALTERNATE AIR	_____	_____
_____	_____	_____

A. COCKPIT (Cont)

3. PROPULSION SYSTEM CONTROLS (Cont)

a. (Cont)

<u>CONTROL</u>	<u>TYPE</u>	<u>LOCATION</u>
FUEL CONTROLS		
TANK SELECTOR	_____	_____
CROSS FEED	_____	_____
BOOST PUMP	_____	_____
FUEL JETTISON	_____	_____
_____	_____	_____
REFUELING CONTROL		
_____	_____	_____
_____	_____	_____
AUX. POWER PLANT		
_____	_____	_____
b. ARE CONTROL FRICTION DEVICES EASILY OPERABLE? _____		
c. HOW IS UNEXPECTED CLOSING OF THE THROTTLE UNDER CATAPULT ACCELERATIONS PREVENTED? _____		
d. HAS A DIAGNOSTIC FUEL SYSTEM BEEN PAINTED AROUND THE FUEL SELECTOR? _____		
e. DOES THIS PROVIDE A POSITIVE INDICATION OF EXISTING FUEL FLOW? _____		
f. HOW IS INADEQUATE POSITIONING OF THE FUEL TANK SELECTOR TO THE "OFF" POSITION DETECTED? _____		
g. DOES REVERSE THRUST CONTROL INCORPORATE A "LIFT-TO-REVERSE" TYPE OF MECHANISM? _____		
h. HOW IS AFTERBURST ACTUATED? _____		
i. DOES THE LOCATION AND ACTUATION OF PROPULSION SYSTEM CONTROLS CONFORM TO THE APPLICABLE SPECIFICATION OR STANDARD? _____ IF NOT, DESCRIBE DIFFERENCES AND STATE REASONS THEREFOR: _____		

j. REMARKS. -		

Checked by: _____

Date: _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

4. ARMAMENT

a. LIST THE FOLLOWING INFORMATION FOR ARMAMENT CONTROLS:

<u>CONTROL</u>	<u>TYPE</u>	<u>LOCATION</u>
MASTER ARMING CONTROL	_____	_____
GUN CONTROLS		
CHARGING	_____	_____
FIRING	_____	_____
SIGHT	_____	_____
SIGHT RHEOSTAT	_____	_____
HEATER	_____	_____
_____	_____	_____
_____	_____	_____
BOMB CONTROLS		
ARMING	_____	_____
RELEASE	_____	_____
MANUAL RELEASE	_____	_____
_____	_____	_____
_____	_____	_____
ROCKET CONTROLS		
ARMING	_____	_____
FIRING	_____	_____
SELECTOR	_____	_____
FLOAT LIGHT RELEASE	_____	_____
SONOBUOY RELEASE	_____	_____
_____	_____	_____
_____	_____	_____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

4. ARMAMENT (Cont)

- b. MUST EYE POSITION BE SHIFTED FROM NORMAL FLYING POSITION IN ORDER TO GET PROPER RETICLE VISION FOR GUNS, ROCKETS, AND BOMBING? _____
- c. WHEN EYE POSITION IS SATISFACTORY FOR RETICLE VISION, WHAT INSTRUMENTS OR CONTROLS THAT MUST BE USED DURING ATTACK MANEUVERS ARE HIDDEN? _____

- d. CAN GUNSIGHT BULB BE READILY REPLACED WITH SPARE BULB? _____
- e. CAN GUNSIGHT DEHYDRATING COMPOUND BE READILY SEEN AND REPLACED? _____
- f. IS CLEARANCE BETWEEN GUNSIGHT AND SEAT EJECTION PATH SATISFACTORY? _____
- g. HAS UNNECESSARY SIMILARITY BETWEEN ARMAMENT CONTROLS AND OTHER CONTROLS BEEN AVOIDED? _____
- h. IS LOCATION OF ARMAMENT CONTROLS SUCH THAT INADVERTENT OPERATION DURING TAKEOFF, LANDING, CRUISE, ENTRANCE TO THE COCKPIT, ETC., WILL BE UNLAWFUL? _____

- i. CAN PILOT MANUALLY RELEASE INTERNAL STORES WHILE MAINTAINING NORMAL FORWARD VISIBILITY OUT OF THE AIRPLANE? _____
- j. DOES THE LOCATION AND ACTUATION OF ARMAMENT CONTROLS CONFORM TO THE APPLICABLE SPECIFICATION OR STANDARD? _____ IF NOT, DESCRIBE DIFFERENCES AND STATE REASONS THEREFOR: _____

- k. REMARKS. -

Checked by: _____

Date: _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

5. ELECTRICAL AND ELECTRONICS

a. ELECTRICAL

(1) SPECIFY LOCATION OF THE FOLLOWING ELECTRICAL CONTROLS

CONTROLLOCATION

BATTERY _____

GENERATOR _____

EXTERIOR LIGHTING _____

MASTER SWITCH _____

INTERIOR LIGHTING _____

LANDING LIGHTS _____

CIRCUIT BREAKER PANELS _____

(2) IS MASTER EXTERNAL LIGHT SWITCH EASILY ACCESSIBLE FOR CARRIER TAKEOFF AND LANDING? _____

(3) ARE THE FILAMENTS AND POSITION OF THE LANDING LIGHTS CONTROLLED BY SEPARATE SWITCHES? _____

(4) ARE THE "ON" AND "EXTEND" POSITIONS OF THE LANDING LIGHT SWITCHES REACHED BY MOVEMENT IN THE SAME DIRECTION? _____

(5) ARE THOSE CIRCUIT BREAKERS WHICH ARE ESSENTIAL TO SAFETY-OF-FLIGHT INSTALLED SO THAT THEY ARE READILY IDENTIFIABLE BY THE PILOT? _____

(6) WHERE ARE ADDITIONAL CIRCUIT BREAKERS LOCATED? _____

(7) HAVE THE CIRCUIT BREAKERS BEEN ARRANGED ON A SYSTEMS BASIS? _____

b. COMMUNICATION

(1) WHERE IS PRIMARY COMMUNICATION CONTROL BOX (UHF OR VHF) LOCATED? _____

A. COCKPIT (Cont)

5. ELECTRICAL AND ELECTRONICS (Cont)

b. COMMUNICATION (Cont)

- (2) DOES THIS LOCATION PERMIT THE PILOT TO OPERATE THE CONTROL SAFELY DURING A CRITICAL TIME OR DURING FINAL APPROACH? _____
- (3) CAN THE PILOT READ THE CONTROL BOX DIAL EASILY? _____
- (4) ARE INTER-PHONE PROVISIONS ADEQUATE? _____
- (5) IN CASE OF POWER FAILURE, WHAT OTHER MEANS ARE AVAILABLE TO THE PILOT FOR ATTRACTING THE ATTENTION OF ALL CREW MEMBERS? _____

- (6) ARE PROVISIONS MADE FOR THE STOWAGE OF HEADSETS AND MICROPHONES? _____

c. NAVIGATION

- (1) WHERE IS PRIMARY NAVIGATION CONTROL BOX LOCATED? _____
- (2) DOES THIS LOCATION PERMIT PILOT TO SELECT STATIONS OR CHANNELS RAPIDLY? _____

- (3) SPECIFY LOCATION OF OTHER NAVIGATION CONTROL BOXES. _____

d. RADAR

- (1) WHERE IS CONTROL BOX LOCATED? _____
- (2) DOES THIS LOCATION PERMIT PILOT TO CHECK KNOB POSITION EASILY BOTH VISUALLY AND TACTUALLY? _____
- (3) WHERE IS THE "RADAR-OUT" OR "GATES-OUT" SWITCH LOCATED? _____

- (4) MAY SCOPE BRIGHTNESS AND FOCUS BE ADJUSTED BY THE PILOT? _____
- (5) IS ADEQUATE SHADING PROVIDED FOR RADAR SCOPES? _____
- (6) IS PROVISION MADE FOR STOWAGE OF VISORS? _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

5. ELECTRICAL AND ELECTRONICS (Cont)

e. DOES THE LOCATION AND ACTUATION OF ELECTRICAL AND ELECTRONICS CONTROLS CONFORM TO THE APPLICABLE SPECIFICATION OR STANDARD? _____ IF NOT, DESCRIBE DIFFERENCES AND STATE REASONS THEREFOR: _____

f. REMARKS. -

Checked by: _____

Date: _____

A. COCKPIT (Cont)

6. INSTRUMENT PANEL

a. ARE ALL INSTRUMENTS AND MARKINGS THEREON VISIBLE AND READABLE FROM ALL NORMAL SEAT POSITIONS? _____

(1) DOES CONTROL STICK OR WHEEL INTERFERE WITH VIEW OF INSTRUMENTS? _____

(2) ARE ANY OF THE INSTRUMENTS REQUIRED FOR LANDING OBSCURED WHEN SEAT IS RAISED TO FULL UP POSITION? _____ IF SO, LIST ALL OBSTRUCTIONS, AND THE INSTRUMENTS OBSCURED? _____

b. LIST AND DESCRIBE LOCATION OF ALL WARNING LIGHTS (WARNING LIGHTS ARE DEFINED AS THOSE LIGHTS WHICH INDICATE THE EXISTENCE OF A HAZARDOUS CONDITION REQUIRING IMMEDIATE CORRECTION ACTION).

<u>WARNING LIGHTS</u>	<u>LOCATION</u>
_____	_____
_____	_____
_____	_____
_____	_____

c. LIST AND DESCRIBE LOCATION OF ALL CAUTION LIGHTS (CAUTION LIGHTS ARE DEFINED AS THOSE LIGHTS WHICH SERVE TO ALERT THE OPERATOR TO AN IMPENDING DANGEROUS CONDITION REQUIRING ATTENTION BUT NOT NECESSARILY IMMEDIATE ACTION).

MASTER CAUTION LIGHT LOCATION _____

CAUTION LIGHTS SUB-PANEL LOCATION _____

CAUTION SUB-PANEL LEGENDS:

- | | | |
|----------|-----------|-----------|
| 1. _____ | 6. _____ | 11. _____ |
| 2. _____ | 7. _____ | 12. _____ |
| 3. _____ | 8. _____ | 13. _____ |
| 4. _____ | 9. _____ | 14. _____ |
| 5. _____ | 10. _____ | 15. _____ |

d. ARE WARNING AND CAUTION LIGHTS THE DIRECT READING TYPE? _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

6. INSTRUMENT PANEL (Cont)

- e. LIST AND DESCRIBE LOCATION OF ALL INDICATOR LIGHTS INCLUDING ANGLE OF ATTACK INDEXER (INDICATOR LIGHTS ARE DEFINED AS THOSE LIGHTS WHICH SERVE TO SHOW THE STATUS OF SOME EQUIPMENT, OPERATION, OR FUNCTION).

INDICATOR LIGHTSLOCATION

<u>INDICATOR LIGHTS</u>	<u>LOCATION</u>
_____	_____
_____	_____
_____	_____

- f. LIST AND DESCRIBE LOCATION OF ALL VISUAL INDICATORS OTHER THAN LIGHTS.

VISUAL INDICATORSLOCATION

<u>VISUAL INDICATORS</u>	<u>LOCATION</u>
_____	_____
_____	_____
_____	_____

- g. DOES THE LAYOUT OF THE INSTRUMENT PANEL CONFORM TO THE APPLICABLE SPECIFICATION OR STANDARD? _____ IF NOT, DESCRIBE DIFFERENCES AND STATE REASONS THEREFORE BELOW: _____

- h. SKETCH INSTRUMENT PANEL LAYOUT AND IDENTIFY INSTRUMENTS BY NAME AND STOCK NUMBER. _____

- i. REMARKS. -

Checked by: _____

Date: _____

A. COCKPIT (Cont)

7. MISCELLANEOUS CONTROLS AND EQUIPMENT

a. OXYGEN SYSTEM CONTROLS

- (1) WHERE ARE OXYGEN SYSTEM CONTROLS LOCATED? _____
- (2) IS THE OXYGEN FLOW INDICATOR READILY VISIBLE TO THE PILOT? _____
- (3) IS IT POSSIBLE TO MOVE A CONTROL OR TO ADJUST THE SEAT TO SUCH A POSITION THAT THE OXYGEN FLOW INDICATOR IS OBSCURED? _____
- (4) ARE OXYGEN SYSTEM CONTROLS AND FLOW INDICATOR ILLUMINATED? _____

b. FIRE EXTINGUISHER SYSTEM CONTROLS:

- (1) WHAT TYPE OF CONTROLS ARE PROVIDED? _____
- (2) WHERE ARE THEY LOCATED? _____
- (3) DO THE CONTROL KNOBS INCORPORATE A LIGHT WHICH IS ILLUMINATED WHEN THE FIRE WARNING SYSTEM FOR THE AREA IS ACTUATED? _____
- (4) ARE FIRE WARNING INDICATORS AND DETECTOR TEST SWITCHES LOCATED NEAR THE CONTROL? _____

c. COMPOSITE QUICK DISCONNECT

- (1) WHERE IS COMPOSITE QUICK DISCONNECT RECEPTACLE LOCATED? _____

- (2) LIST ATTACHMENTS TO THE COMPOSITE QUICK DISCONNECT RECEPTACLE _____

d. REAR VIEW MIRROR:

- (1) IS MIRROR READILY ADJUSTABLE? _____
- (2) WHAT ANGLE OF VISION WILL ADJUSTMENT PROVIDE IN HORIZONTAL FIELD? _____
IN VERTICAL FIELD? _____ DOWN FROM THRUST LINE? _____
- (3) DOES THE MIRROR INTERFERE WITH PERSONNEL DURING INGRESS OR EGRESS? _____

Appendix 2 to MIL-M-8650B(AS)

A. COCKPIT (Cont)

7. MISCELLANEOUS CONTROLS AND EQUIPMENT (Cont)

e. STATE THE LOCATION OF THE FOLLOWING CONTROLS AND EQUIPMENT:

<u>CONTROL OR EQUIPMENT</u>	<u>LOCATION</u>
CABIN AIR CONDITIONING	_____
CABIN PRESSURIZATION	_____
CABIN ALTIMETER	_____
SHOULDER HARNESS LOCK	_____
SEAT ADJUSTMENT	_____
DE-ICING	_____
ANTI-ICING	_____
PITOT HEAT	_____
ANTI-G SUIT CONTROL	_____
FIRST AID KIT	_____
MAP CASE	_____
RELIEF TUBE	_____
CHART BOARD	_____
PRESSURE SUIT/ANTI- EXPOSURE SUIT VENTILATION	_____
_____	_____

f. DOES THE LOCATION AND ACTUATION OF MISCELLANEOUS CONTROLS CONFORM TO THE APPLICABLE SPECIFICATION OR STANDARD? _____ IF NOT, DESCRIBE DIFFERENCES AND STATE REASONS THEREFORE BELOW: _____

g. REMARKS. -

Checked by: _____

Date: _____

B. SAFETY OF CREW

1. LIST EACH CREW MEMBER'S STATION FOR THE FOLLOWING CONDITIONS:

CREW MEMBER	CREW MEMBER'S STATION		
	TAKEOFF	NORMAL LANDING	DITCHING

2. DESCRIBE MEANS OF EMERGENCY EGRESS FOR EACH CREW MEMBER UNDER THE FOLLOWING CONDITIONS:

CREW MEMBER	MEANS OF EGRESS	
	IN FLIGHT	AFTER DITCHING OR ON GROUND

3. DESCRIBE ANY CHARACTERISTICS OF THE AIRCRAFT OR INSTALLATIONS THAT MAY ENDANGER THE CREW:

4. REMARKS.-

Checked by: _____

Date: _____

C. ACCESS

1. ENTRANCE DOORS

(a) LIST EACH ENTRANCE DOOR AS FOLLOWS:

LOCATION	SIZE	JETTISONABLE

(b) WHAT MEANS ARE PROVIDED FOR REACHING ENTRANCE DOORS FROM OUTSIDE (OR FOR BOARDING SEAPLANES)? _____

(c) CAN ALL OF THE ABOVE DOORS BE READILY LATCHED AND UNLATCHED FROM INSIDE THE AIRCRAFT?

(d) CAN THE MAIN ENTRANCE DOOR BE LOCKED WITH A KEY FROM THE OUTSIDE? _____

(e) WHAT MEANS ARE USED FOR JETTISONING THE DOORS? _____

(f) ARE JETTISONING CONTROLS READILY OPERATED AND SATISFACTORILY PLACARDED? _____

(g) IS THERE ANY DANGER OF FOULING GEAR OR CLOTHING DURING ESCAPE OR PARATROOP OPERATIONS? _____

2. HATCHES

(a) LIST EACH PERSONNEL HATCH AS FOLLOWS:

LOCATION	SIZE	JETTISONABLE

(b) CAN ALL OF THE ABOVE HATCHES BE READILY LATCHED AND UNLATCHED FROM INSIDE THE AIRPLANE? _____

(c) WHAT MEANS ARE USED FOR JETTISONING THE HATCHES? _____

Appendix 2 to MIL-M-8650B(AS)

C. ACCESS (Cont)

2. HATCHES (Cont)

- (d) ARE JETTISONING CONTROLS READILY OPERATED AND SATISFACTORILY PLACARDED? _____
- (e) IS THERE ANY DANGER OF FOULING GEAR OR CLOTHING DURING ESCAPE? _____

3. STEPS

- (a) ARE STEPS ADEQUATE FOR LARGE FOUL WEATHER BOOTS? _____
- (b) LIST EACH STEP ON SIDE OF FUSELAGE (OR HULL) AS FOLLOWS:

LOCATION	TYPE	ACCESS TO

4. HANDGRIPS

- (a) ARE HANDGRIPS ADEQUATE FOR LARGE GLOVES? _____
- (b) LIST EACH HANDGRIP ON SIDE OF FUSELAGE (OR HULL) AS FOLLOWS:

LOCATION	TYPE	ACCESS TO

5. WALKWAYS

- (a) LIST WALKWAYS AS FOLLOWS:

LOCATION	TYPE	ACCESS TO

6. PORTABLE LADDERS

- (a) WHAT PORTABLE LADDERS ARE REQUIRED? _____
- _____
- (b) IS STOWAGE PROVIDED IN THE AIRCRAFT? _____

7. REMARKS.-

Checked by: _____

Date: _____

D. ATMOSPHERIC PROTECTION SYSTEM

1. GENERAL

- a. WHAT TYPE OXYGEN SYSTEM IS PROVIDED? _____
- b. IS ANY PART OF THE SYSTEM IN CLOSE PROXIMITY TO FUEL, OIL OR HYDRAULIC SYSTEMS OR SUBJECT TO DRIPPING OIL, WATER, ETC? _____
- c. IS FILLER CONNECTION CONVENIENTLY LOCATED? _____
- d. ARE CONTAINERS PROVIDED FOR STOWING OXYGEN MASKS? _____

2. CYLINDERS/CONVERTERS

- a. LIST THE FOLLOWING INFORMATION:

<u>QUANTITY</u>	<u>SIZE</u>	<u>LOCATION</u>	<u>PROTECTION</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- b. IF CYLINDERS ARE UNPROTECTED, ARE THEY MOUNTED WITH THE LONGITUDINAL AXIS APPROXIMATELY PARALLEL TO CENTERLINE OF AIRCRAFT? _____
- (1) ARE PERSONNEL AND ESSENTIAL EQUIPMENT PROTECTED FROM FLASH DUE TO CYLINDERS BEING HIT BY GUNFIRE? _____
- c. ARE ALL CYLINDERS/CONVERTERS READILY ACCESSIBLE? _____
- d. CAN EACH CYLINDER/CONVERTER BE REPLACED IN SPECIFIED TIME? _____
- e. HOW IS EACH CYLINDER VALVE OPERATED? _____
- f. WHERE ARE CONVERTER VENT OUTLETS LOCATED? _____
- (1) IF MANUAL, CAN EACH BE READILY OPERATED BY PERSONNEL DURING FLIGHT? _____

3. DILUTER DEMAND REGULATORS

- a. WHERE ARE REGULATORS INSTALLED? _____
- b. CAN REGULATORS AND FLOW INDICATORS BE CONVENIENTLY SEEN AND OPERATED? _____
- c. IS ANY REGULATOR SUBJECT TO ACCIDENTAL DAMAGE OR OPERATION? _____
- d. IN A-2 SYSTEMS, IS THE HIGH PRESSURE GAGE REMOVED FROM EACH REGULATOR? _____

4. REMARKS. -

Checked by: _____

D-1

Date: _____

E. RADIO OPERATOR'S STATION

1. SEAT

2. CONTROLS

- a. DOES ACTUATION OF ALL CONTROLS FORWARD, UPWARD, OR CLOCKWISE WITH REFERENCE TO OPERATOR, RESULT IN INCREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
- b. DOES ACTUATION OF ALL CONTROLS AFT, DOWNWARD, OR COUNTERCLOCKWISE WITH REFERENCE TO OPERATOR, RESULT IN DECREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
- c. ARE CONTROLS OF A VARIABLE NATURE, INDUCED BY A ROTORY MOTION, ACTUATED CLOCKWISE FROM THE "OFF" POSITION THROUGH "LOW" OR "DIM" TO "HIGH" OR "BRIGHT"? _____
- d. ARE ALL CONTROLS WITHIN NORMAL REACH OF THE RADIO OPERATOR WHEN SEATED WITH SEAT BELT FASTENED? _____
- e. DOES LOCATION, ARRANGEMENT, AND CLEARANCE OF ALL CONTROLS PRECLUDE INADVERTENT SELECTION AND OPERATION? _____
- f. ARE CONTROLS AND SWITCHES SPACED TO PERMIT EASY AND ACCURATE OPERATION WITH HEAVILY GLOVED HANDS? _____
- g. ARE ADEQUATE INSTRUCTIONS AND NAMEPLATES PROVIDED ON OR ADJACENT TO ALL CONTROLS REQUIRING THEM? _____
- h. ARE ALL INSTRUCTIONS AND NAMEPLATES LEGIBLE AND READILY VISIBLE TO THE RADIO OPERATOR IN DAYLIGHT? _____
- i. CAN ANY CONTROLS BE COMBINED? _____
- j. CAN ANY CONTROLS BE MADE AUTOMATIC? _____
- k. SKETCH CONSOLE LAYOUTS AND IDENTIFY ALL CONTROLS, ETC. BY NAME.
- l. REMARKS. -

Appendix 2 to MIL-M-8650B(AS)

E. RADIO OPERATOR'S STATION (Cont)

3. INSTRUMENTS

- a. WHERE ARE INSTRUMENTS LOCATED? _____
- b. ARE ALL INSTRUMENTS AND MARKINGS THEREON VISIBLE AND READABLE FROM THE NORMALLY OCCUPIED POSITION? _____
- c. SKETCH INSTRUMENT PANEL AND IDENTIFY INSTRUMENTS BY NAME AND STOCK NUMBERS.
- d. REMARKS. -

4. MISCELLANEOUS

- a. IS PROVISION MADE FOR STOWAGE OF HEADPHONES? _____
- b. IS LOCATION OF KEY CONVENIENT TO RADIO OPERATOR? _____
- c. ARE SUFFICIENT RECEPTACLES PROVIDED? _____
- d. ARE LOCATIONS OF RECEPTACLES SATISFACTORY? _____
- e. ARE INTERPHONE PROVISIONS ADEQUATE? _____
- f. REMARKS. -

- 5. IS GENERAL ARRANGEMENT, LOCATION, ETC. OF THE RADIO OPERATOR'S STATION CONSIDERED ADEQUATE? _____

Checked by: _____

Date: _____

F. RADAR OPERATOR'S STATION

1. SEAT
2. CONTROLS
 - a. DOES ACTUATION OF ALL CONTROLS FORWARD, UPWARD, OR CLOCKWISE WITH REFERENCE TO OPERATOR, RESULT IN INCREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
 - b. DOES ACTUATION OF ALL CONTROLS AFT, DOWNWARD, OR COUNTERCLOCKWISE WITH REFERENCE TO OPERATOR, RESULT IN DECREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
 - c. ARE CONTROLS OF A VARIABLE NATURE, INDUCED BY A ROTORY MOTION, ACTUATED CLOCKWISE FROM THE "OFF" POSITION THROUGH "LOW" OR "DIM" TO "HIGH" OR "BRIGHT"? _____
 - d. ARE ALL CONTROLS WITHIN NORMAL REACH OF THE RADAR OPERATOR WHEN SEATED WITH SEAT BELT PASTERED? _____
 - e. DOES LOCATION, ARRANGEMENT, AND CLEARANCE OF ALL CONTROLS PRECLUDE INADVERTENT SELECTION AND OPERATION? _____
 - f. ARE CONTROLS AND SWITCHES SPACED TO PERMIT EASY AND ACCURATE OPERATION WITH HEAVILY GLOVED HANDS? _____
 - g. ARE ADEQUATE INSTRUCTIONS AND NAMEPLATES PROVIDED ON OR ADJACENT TO ALL CONTROLS REQUIRING IT? _____
 - h. ARE ALL INSTRUCTIONS AND NAMEPLATES LEGIBLE AND READILY VISIBLE TO THE RADAR OPERATOR IN DAYLIGHT? _____
 - i. CAN ANY CONTROLS BE COMBINED? _____
 - j. CAN ANY CONTROLS BE MADE AUTOMATIC? _____
 - k. SKETCH CONSOLE LAYOUT AND IDENTIFY ALL CONTROLS, ETC. BY NAME.
 - l. REMARKS. -

Appendix 2 to MIL-M-8650B(AS)

F. RADAR OPERATOR'S STATION (Cont)

3. INSTRUMENTS

- a. WHERE ARE INSTRUMENTS LOCATED? _____
- b. ARE ALL INSTRUMENTS AND MARKINGS THEREON VISIBLE AND READABLE FROM THE NORMALLY OCCUPIED POSITION? _____
- c. SKETCH INSTRUMENT PANEL AND IDENTIFY INSTRUMENTS BY NAME AND STOCK NUMBER.
- d. REMARKS. -

4. MISCELLANEOUS

- a. IS PROVISION MADE FOR STOWAGE OF HEADPHONES? _____
- b. IS LOCATION OF KEY CONVENIENT TO RADAR OPERATOR? _____
- c. ARE SUFFICIENT RECEPTACLES PROVIDED? _____
- d. ARE LOCATIONS OF RECEPTACLES SATISFACTORY? _____
- e. ARE INTERPHONE PROVISIONS ADEQUATE? _____
- f. REMARKS. -

5. IS GENERAL ARRANGEMENT, LOCATION, ETC. OF THE RADAR OPERATOR'S STATION CONSIDERED ADEQUATE? _____

Checked by: _____

Date: _____

G. NAVIGATOR'S STATION

1. SEAT
2. INSTRUMENTS
 - a. WHERE ARE INSTRUMENTS LOCATED? _____
 - b. ARE ALL INSTRUMENTS AND MARKINGS THEREON VISIBLE AND READABLE FROM THE NORMALLY OCCUPIED POSITION? _____
 - c. SKETCH INSTRUMENT PANEL AND IDENTIFY INSTRUMENTS BY NAME AND STOCK NUMBER.
 - d. REMARKS. -
3. NAVIGATION EQUIPMENT
 - a. IS ADEQUATE STOWAGE PROVIDED FOR NAVIGATION EQUIPMENT? _____
 - b. REMARKS. -
4. COMMUNICATION
 - a. WHAT COMMUNICATION IS PROVIDED BETWEEN THE NAVIGATOR AND THE FOLLOWING CREW MEMBERS?
 - PILOT _____
 - CO-PILOT/NFO _____
 - MAD OPERATOR _____
 - ECM OPERATOR _____
 - RADAR OPERATOR _____
 - SONOBOUY OPERATOR _____
 - CIC OPERATOR _____
 - b. WILL COMMUNICATION WITH MAD OPERATOR, ECM OPERATOR, AND RADAR OPERATOR PERMIT THE NAVIGATOR TO MAINTAIN HIS ASW PLOT WITH MINIMUM DELAY? _____
 - c. ARE INTERPHONE PROVISIONS ADEQUATE? _____
 - d. REMARKS. -
5. IS GENERAL ARRANGEMENT, LOCATION, ETC. OF NAVIGATOR'S STATION CONSIDERED ADEQUATE? _____

Checked by: _____

G-1

Date: _____

Appendix 2 to MIL-M-8650B(AS)

H. FLIGHT ENGINEER'S STATION

1. SEAT

2. CONTROLS

a. WHAT PROPULSION SYSTEM CONTROLS ARE PROVIDED?

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

b. DOES ACTUATION OF ALL CONTROLS FORWARD, UPWARD, OR CLOCKWISE WITH REFERENCE TO OPERATOR, RESULT IN INCREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____

c. DOES ACTUATION OF ALL CONTROLS AFT, DOWNWARD, OR COUNTERCLOCKWISE WITH REFERENCE TO OPERATOR, RESULT IN DECREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____

d. ARE CONTROLS OF A VARIABLE NATURE, INDUCED BY A ROTORY MOTION, ACTUATED CLOCKWISE FROM THE "OFF" POSITION THROUGH "LOW" OR "DIM" TO "HIGH" OR "BRIGHT"? _____

e. ARE ALL CONTROLS WITHIN NORMAL REACH OF THE FLIGHT ENGINEER WHEN SEATED WITH SEAT BELT FASTENED? _____

f. DOES LOCATION, ARRANGEMENT, AND CLEARANCE OF ALL CONTROLS PRECLUDE INADVERTENT SELECTION AND OPERATION? _____

g. ARE CONTROLS AND SWITCHES SPACED TO PERMIT EASY AND ACCURATE OPERATION WITH HEAVILY GLOVED HANDS? _____

h. ARE ADEQUATE INSTRUCTIONS AND NAMEPLATES PROVIDED ON OR ADJACENT TO ALL CONTROLS REQUIRING IT? _____

i. ARE ALL INSTRUCTIONS AND NAMEPLATES LEGIBLE AND READILY VISIBLE TO THE FLIGHT ENGINEER IN DAYLIGHT? _____

j. CAN ANY CONTROLS BE COMBINED? _____

k. CAN ANY CONTROLS BE MADE AUTOMATIC? _____

l. SKETCH CONSOLE LAYOUT AND IDENTIFY ALL CONTROLS, ETC. BY NAME.

m. REMARKS. -

Appendix 2 to MIL-M-8650B(AS)

H. FLIGHT ENGINEER'S STATION (Cont)

3. INSTRUMENTS

- a. WHERE ARE INSTRUMENTS LOCATED? _____
- b. IS THERE A CONSISTENCY OF POSITION OF INDICATING INSTRUMENTS? _____
- c. ARE ALL INSTRUMENTS AND MARKINGS THEREON VISIBLE AND READABLE FROM THE NORMALLY OCCUPIED POSITION? _____
- d. SKETCH INSTRUMENT PANEL AND IDENTIFY INSTRUMENTS BY NAME AND STOCK NUMBER.
- e. REMARKS. -

4. MISCELLANEOUS

- a. ARE INTERPHONE PROVISIONS ADEQUATE? _____
- b. ARE CHECKOFF LISTS PROVIDED FOR STARTING, TAKEOFF AND LANDING? _____
- c. ARE STARTING PROVISIONS FOR THE AUXILIARY POWER PLANT ADEQUATE? _____
- d. REMARKS. -

5. IS GENERAL ARRANGEMENT, LOCATION, ETC. OF THE FLIGHT ENGINEER'S STATION CONSIDERED ADEQUATE? _____

Checked by: _____

Date: _____

I. CIC OPERATOR'S STATION

1. SEAT
2. CONTROLS
 - a. DOES ACTUATION OF ALL CONTROLS FORWARD, UPWARD, OR CLOCKWISE WITH REFERENCE TO THE OPERATOR, RESULT IN INCREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
 - b. DOES ACTUATION OF ALL CONTROLS AFT, DOWNWARD, OR COUNTERCLOCKWISE WITH REFERENCE TO THE OPERATOR, RESULT IN DECREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
 - c. ARE CONTROLS OF A VARIABLE NATURE, INDUCED BY A ROTORY MOTION, ACTUATED CLOCKWISE FROM THE "OFF" POSITION THROUGH "LOW" OR "DIM" TO "HIGH" OR "BRIGHT"? _____
 - d. ARE ALL CONTROLS WITHIN NORMAL REACH OF THE CIC OPERATOR WHEN SEATED WITH BELT FASTENED? _____
 - e. DOES LOCATION, ARRANGEMENT, AND CLEARANCE OF ALL CONTROLS PRECLUDE INADVERTENT SELECTION AND OPERATION? _____
 - f. ARE CONTROLS AND SWITCHES SPACED TO PERMIT EASY AND ACCURATE OPERATION WITH HEAVILY GLOVED HANDS? _____
 - g. ARE ADEQUATE INSTRUCTIONS AND NAMEPLATES PROVIDED ON OR ADJACENT TO ALL CONTROLS REQUIRING IT? _____
 - h. ARE ALL INSTRUCTIONS AND NAMEPLATES LEGIBLE AND READILY VISIBLE TO THE CIC OPERATOR IN DAYLIGHT? _____
 - i. CAN ANY CONTROLS BE COMBINED? _____
 - j. CAN ANY CONTROLS BE MADE AUTOMATIC? _____
 - k. SKETCH CONSOLE LAYOUT AND IDENTIFY ALL CONTROLS, ETC. BY NAME.
 - l. REMARKS. -

Appendix 2 to MIL-M-8650B(AS)

I. CIC OPERATOR'S STATION (Cont)

3. INSTRUMENTS

- a. WHERE ARE INSTRUMENTS LOCATED? _____
- b. ARE ALL INSTRUMENTS AND MARKINGS THEREON VISIBLE AND READABLE FROM THE NORMALLY OCCUPIED POSITION? _____
- c. SKETCH INSTRUMENT PANEL AND IDENTIFY INSTRUMENTS BY NAME AND STOCK NUMBER.
- d. REMARKS. -

4. MISCELLANEOUS

- a. IS PROVISION MADE FOR STOWAGE OF HEADPHONES? _____
- b. IS LOCATION OF KEY CONVENIENT TO CIC OPERATOR? _____
- c. ARE SUFFICIENT RECEPTACLES PROVIDED? _____
- d. ARE LOCATIONS OF RECEPTACLES SATISFACTORY? _____
- e. ARE INTERPHONE PROVISIONS ADEQUATE? _____
- f. REMARKS. -

- 5. IS GENERAL ARRANGEMENT, LOCATION, ETC. OF CIC OPERATOR'S STATION CONSIDERED ADEQUATE? _____

Checked by: _____

Date: _____

J. FURNISHINGS AND EQUIPMENT

1. LITTERS

- a. WHAT TYPE LITTERS ARE PROVIDED? _____
- b. IS VERTICAL DISTANCE BETWEEN LITTERS AT LEAST 17 INCHES? _____
- c. DOES HIGHEST LITTER EXCEED 78 INCHES ABOVE AN INFLIGHT STABLE SURFACE? _____
- d. IS AISLE SPACE BETWEEN LITTERS AT LEAST 24 INCHES WIDE? _____
- e. DOES INSTALLATION PERMIT MAXIMUM FLEXIBILITY IN CARRYING LITTER PATIENTS?

- f. DO LITTER STRAPS AND FITTINGS CONFORM WITH USAF DWG. AD-13? _____
- g. WHERE ARE LITTER STRAPS STOWED? _____

2. PERSONNEL EQUIPMENT

- a. WHAT STOWAGE IS PROVIDED FOR DETACHABLE PARACHUTES? _____
- b. WHAT TOILET FACILITIES ARE PROVIDED? _____
- c. WHAT LOCKERS FOR FOOD ARE PROVIDED? _____
- d. WHAT DRINKING WATER CONTAINERS ARE PROVIDED? _____
- e. WHAT COOKING FACILITIES ARE PROVIDED? _____
- f. IS A REFRIGERATOR PROVIDED? _____
- g. ARE LOCKERS OR COMPARTMENTS PROVIDED FOR PERSONAL EFFECTS? _____

3. LIFE RAFTS

- a. LIST THE FOLLOWING INFORMATION:

<u>SIZE</u>	<u>LOCATION</u>	<u>LOCATION OF SUBMERSION ACTUATOR</u>	<u>LOCATION OF MANUAL CONTROL</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- b. CAN THE RAFT AND EMERGENCY EQUIPMENT BE REMOVED FROM AT LEAST ONE COMPARTMENT TO THE INSIDE OF THE AIRCRAFT FOR DROPPING? _____
- c. WHAT MEANS ARE PROVIDED FOR INSPECTING THE RAFT AND EMERGENCY EQUIPMENT PRIOR TO EACH FLIGHT? _____

Appendix 2 to MIL-M-8650B(AS)

J. FURNISHINGS AND EQUIPMENT (Cont)

3. LIFE RAFTS (Cont)

- d. WHAT TYPE OF LATCH IS INCORPORATED ON EACH COMPARTMENT HATCH? _____
- e. HOW IS SECURITY OF EACH HATCH ASCERTAINED PRIOR TO FLIGHT? _____
- f. ARE MANUAL CONTROLS PROPERLY GUARDED AND IDENTIFIED? _____

4. CREW SEATS(OTHER THAN SEATS IN COCKPIT), PASSENGER SEATS, TROOP BENCHES AND BUNKS

- a. LIST THE FOLLOWING APPLICABLE INFORMATION:

	<u>CREW SEATS</u>	<u>PASSENGER SEATS</u>	<u>TROOP BENCHES</u>	<u>BUNKS</u>
TYPE	_____	_____	_____	_____
METHOD OF ATTACH.	_____	_____	_____	_____
ADJUSTMENT	_____	_____	_____	_____
METHOD OF STOWING	_____	_____	_____	_____
TYPE SAFETY BELT	_____	_____	_____	_____

- b. DO CREW SEATS HAVE SHOULDER HARNESS, HEAD REST, AND INERTIA REEL? _____
- c. WHAT EQUIPMENT ARE CREW SEATS DESIGNED FOR? _____
- _____

5. REMARKS. -

Checked by: _____

Date: _____

K. STATION

1. SEAT
2. CONTROLS
 - a. DOES ACTUATION OF ALL CONTROLS FORWARD, UPWARD, OR CLOCKWISE WITH REFERENCE TO OPERATOR, RESULT IN INCREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
 - b. DOES ACTUATION OF ALL CONTROLS AFT, DOWNWARD, OR COUNTERCLOCKWISE WITH REFERENCE TO OPERATOR RESULT IN DECREASED PERFORMANCE OF THE COMPONENT OR THE AIRCRAFT? _____
 - c. ARE CONTROLS OF A VARIABLE NATURE, INDUCED BY A ROTORY MOTION, ACTUATED CLOCKWISE FROM THE "OFF" POSITION THROUGH "LOW" OR "DIM" TO "HIGH" OR "BRIGHT"? _____
 - d. ARE ALL CONTROLS WITHIN NORMAL REACH OF THE CREWMAN WHEN SEATED WITH SEAT BELT FASTENED? _____
 - e. DOES LOCATION, ARRANGEMENT, AND CLEARANCE OF ALL CONTROLS PRECLUDE INADVERTENT SELECTION AND OPERATION? _____
 - f. ARE CONTROLS AND SWITCHES SPACED TO PERMIT EASY AND ACCURATE OPERATION WITH HEAVILY GLOVED HANDS? _____
 - g. ARE ADEQUATE INSTRUCTIONS AND NAMEPLATES PROVIDED ON OR ADJACENT TO ALL CONTROLS REQUIRING THEM? _____
 - h. ARE ALL INSTRUCTIONS AND NAMEPLATES LEGIBLE AND READILY VISIBLE TO THE CREWMAN IN DAYLIGHT? _____
 - i. CAN ANY CONTROLS BE COMBINED? _____
 - j. CAN ANY CONTROLS BE MADE AUTOMATIC? _____
 - k. SKETCH CONSOLE LAYOUTS AND IDENTIFY ALL CONTROLS, ETC. BY NAME.
 - l. REMARKS. -

Appendix 2 to MIL-M-8650B(AS)

K. STATION (Cont)

3. INSTRUMENTS

- a. WHERE ARE INSTRUMENTS LOCATED? _____
- b. ARE ALL INSTRUMENTS AND MARKINGS THEREON VISIBLE AND READABLE FROM THE NORMALLY OCCUPIED POSITION? _____
- c. SKETCH INSTRUMENT PANEL AND IDENTIFY INSTRUMENTS BY NAME AND STOCK NUMBERS.
- d. REMARKS. -

4. MISCELLANEOUS

- a. ARE SUFFICIENT RECEPTACLES PROVIDED? _____
- b. ARE LOCATIONS OF RECEPTACLES SATISFACTORY? _____
- c. ARE INTERPHONE PROVISIONS ADEQUATE? _____
- d. REMARKS. -

5. IS GENERAL ARRANGEMENT, LOCATION, ETC. OF THE STATION CONSIDERED ADEQUATE?

Checked by: _____

Date: _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

13 May 1969

Superseding Appendix: 2 of
1 April 1960

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360

APPENDIX 3 (PART I AIRPLANE)

PROPULSION SYSTEM - AIRPLANE MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ AIRPLANE

CONTRACT NO. _____ FY _____

This PROPULSION SYSTEM checkoff list for airplanes consist of the following sections (cross out those sections listed below that are not applicable and omit from list):

PART I (AIRPLANES)

- | | |
|---|---|
| A. ENGINE SECTION OR MACELE GROUP
(PAGES A-1 TO A-6) | H. INDUCTION SYSTEM (RECIP. ENG.)
(PAGES H-1 TO H-2) |
| B. EXHAUST SYSTEM (RECIP. ENG.)
(PAGE B-1) | I. INDUCTION SYSTEM (TURBO ENG.)
(PAGE I-1) |
| C. EXHAUST SYSTEM (TURBO ENG.)
(PAGES C-1 TO C-2) | J. LUBRICATING SYSTEM
(PAGES J-1 TO J-3) |
| D. PROPULSION SYSTEM CONTROLS
(PAGES D-1 TO D-2) | K. FUEL SYSTEM
(PAGES K-1 TO K-7) |
| E. PROPELLER AND ACCESSORIES
(PAGE E-1) | L. AUXILIARY POWER PLANT
(PAGE L-1) |
| F. STARTING SYSTEM
(PAGES F-1 TO F-2) | M. ROCKET ENGINES
(PAGES M-1 TO M-3) |
| G. COOLING SYSTEM
(PAGES G-1 TO G-2) | N. ELECTRIC POWER SYSTEM
(PAGES N-1 TO N-2) |

FSC 6910

Prepared by: _____

Date: _____

- NOTE: 1. The abbreviation "N.A." used herein denotes "Not Applicable".
NOTE: 2. For Helicopters See Part II of Appendix: 3

PART I AIRPLANEA. ENGINE SECTION OR NACELLE GROUPNOTE: Repeat This Section For Each Engine

1. ENGINES

- (a) CAN THE ENGINE BE READILY REMOVED AS A UNIT INCLUDING ENGINE MOUNT, ENGINE ACCESSORIES, ETC.? _____ IF NOT, WHY? _____

- (b) DOES THE AIRCRAFT REMAIN IN STATIC BALANCE ON THE LANDING GEAR WITH ENGINE UNITS REMOVED? _____
- (1) IF NOT, WHAT MEANS ARE PROVIDED FOR MAINTAINING THE AIRCRAFT IN NORMAL GROUND POSITION? _____

- (c) ARE HOISTING PROVISIONS ADEQUATE FOR ENGINE UNITS? _____
IF NOT, WHY? _____

- (d) ARE SPECIAL ADAPTERS OR SPECIAL EQUIPMENTS AND/OR HOISTS REQUIRED? _____
IF YES, DESCRIBE? _____

- (e) DO ENGINE MOUNT BULKHEAD FITTINGS PERMIT EASY AND RAPID ALIGNMENT AND ATTACHMENT OF ENGINE UNITS TO THE AIRCRAFT STRUCTURE? _____
IF NO, TELL WHY? _____

- (f) HOW MANY CONNECTIONS BETWEEN ENGINE AND AIRFRAME? _____
LIST THEM: _____

PART I (Cont)

A. ENGINE SECTION OR NACELLE GROUP (Cont)

(g) IS FIREWALL PROVIDED? _____ DESCRIBE? _____

(h) FOR MULTI-ENGINE AIRCRAFT, HAS A NEUTRAL ENGINE INSTALLATION BEEN ACHIEVED? _____

(1) IF NOT, WHAT IS EXTENT OF DIFFERENCES? _____

2. BREATHERS AND DRAINS

(a) DO DRAINS, BREATHERS, ETC. DISCHARGE FREE OF EXHAUST OUTLETS, CAMERA WINDOWS
AND WINDSHIELDS? _____ IF NOT, DESCRIBE? _____

(b) WHAT DRAINS ARE COMBINED INTO A COMMON LINE? _____
_____ DESCRIBE? _____

(1) ARE COMBINATIONS SATISFACTORY? _____ IF NOT, DESCRIBE PROBLEMS? _____

3. COWLING

(a) IS ALL ENGINE COWLING EASILY REMOVABLE FROM THE GROUND? _____ IF NOT,
DESCRIBE? _____

(b) IS ALL ENGINE COWLING EASILY REMOVABLE USING WORK PLATFORMS? _____
IF NOT, DESCRIBE? _____

(c) WHAT IS SIZE OF PLATFORM? _____

PART I (Cont)A. ENGINE SECTION OR NACELLE GROUP (Cont)

- (d) ARE REMOVABLE OR HINGED COWL SECTIONS OF CONVENIENT SIZE AND WEIGHT FOR HANDLING? _____

- (e) WHAT PROVISION IS MADE TO PREVENT LOSS OR DAMAGE TO REMOVED COWL SECTIONS OF CARRIER AIRCRAFT? _____

- (f) WHAT PROVISION IS MADE IN COWLING TO PREVENT ACCUMULATION OF OIL, WATER, ETC.? _____

- (g) HOW IS ENGINE COWLING REMOVED? _____

- (h) IS ANY COWLING USED AS A WORK PLATFORM? _____

- (i) ARE OTHER PLATFORMS NECESSARY? _____

4. ACCESS

- (a) HAS SATISFACTORY ACCESS BEEN PROVIDED FOR SERVICING, ADJUSTMENT (WHERE APPLICABLE) AND RAPID REMOVAL AND REPLACEMENT OF THE FOLLOWING? _____

	<u>Access</u>	<u>Service or Adjustment Time</u>	<u>Removal Time</u>
(1) MAGNETO _____			
(2) DISTRIBUTOR _____			
(3) CARBURETOR _____			
(4) CARBURETOR AIR CLEANER _____			
(5) VACUUM PUMP _____			
(6) INTER COOLER _____			
(7) SPARK PLUGS _____			
(8) TURBO SUPERCHARGER _____			

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)PART I (Cont)A. ENGINE SECTION OR NACELLE GROUP (Cont)

4. (Cont)

	<u>Access</u>	<u>Service or Adjustment Time</u>	<u>Removal Time</u>
(9) CABIN SUPERCHARGER _____			
(10) ADI SYSTEM _____			
(11) OIL DILUTION SOLENOID _____			
(12) STARTER _____			
(13) STARTER CONTROLS _____			
(14) IGNITION ALTERNATOR _____			
(15) ALTERNATOR/GENERATOR _____			
(16) CSD/VSCF _____			
(17) CSD/VSCF FILLER _____			
(18) CSD/VSCF FILTER _____			
(19) CSD/VSCF SIGHT GAGE _____			
(20) HYDRAULIC PUMP(S) _____			
(21) MAIN FUEL FILTER _____			
(22) OTHER FILTERS _____			
(23) FUEL PUMP (ENGINE SUPPLIED) _____			
(24) FUEL PUMP (AIRFRAME SUPPLIED) _____			
(25) FUEL FLOW METER _____			
(26) FUEL FLOW DIVIDER _____			
(27) FUEL FLOW DIVIDER FILTER _____			
(28) FUEL/OIL COOLER _____			
(29) AIR/OIL COOLER _____			
(30) FUEL CONTROL _____			
(31) FUEL CONTROL FILTER _____			
(32) A/B FUEL CONTROL _____			

PART I (Cont)A. ENGINE SECTION OR NACELLE GROUP (Cont)

4. (Cont)

	<u>Access</u>	<u>Service or Adjustment Time</u>	<u>Removal Time</u>
(33) A/B FUEL CONTROL FILTER _____			
(34) AIR BLEED VALVES _____			
(35) VARIABLE GEOMETRY ADJUSTMENT _____			
(36) EXHAUST NOZZLE ADJUSTMENT (IF ANY) _____			
(37) POWER MANAGEMENT CONTROL _____			
(38) MAIN FUEL SHUT OFF VALVE _____			
(39) HI SPEED SWITCH _____			
(40) THROTTLE DISCONNECTS _____			
(41) OIL PUMP _____			
(42) COMB. CHAMBER DRAIN VALVE _____			
(43) COMB. CHAMBERS _____			
(44) THERMOCOUPLES _____			
(45) OIL TANK _____			
(46) OIL TANK FILLER _____			
(47) OIL TANK DIP STICK _____			
(48) OIL PRESSURE RELIEF _____			
(49) OIL PRESSURE TRANSMITTER _____			
(50) OIL FILTER _____			
(51) OIL LEVEL INDICATOR (VISUAL BULLS EYE) _____			
(52) FUEL MANIFOLD DUMP VALVE _____			
(53) OIL DRAIN PLUG _____			
(54) INLET AIR FILTERS/SEPARATOR _____			
(55) BEARING AIR FILTER _____			

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)PART I (Cont)A. ENGINE SECTION OR NACELLE GROUP (Cont)

4. (Cont)

	<u>Access</u>	<u>Service or Adjustment Time</u>	<u>Removal Time</u>
(56) FUEL DRAINS _____			
(57) ENGINE QUICK DISCONNECT FITTINGS _____			
(58) IGNITERS _____			
(59) IGNITION ALTERNATOR _____			
(60) N1 SPEED SWITCH _____			
(61) N2 SPEED SWITCH _____			

(b) ARE ALL ITEMS INSTALLED WHICH AFFECT ACCESSIBILITY OF VARIOUS PARTS OF THE PROPULSION SYSTEM INSTALLATION? _____ IF NOT, EXPLAIN? _____

(c) CAN THE FOLLOWING ITEMS BE REMOVED SEPARATELY?

ENGINE _____ TIME FOR REMOVAL _____

ENGINE MOUNTSWHERE LOCATEDTYPE

1. FORWARD

2. AFT

5. REMARKS

Checked by: _____

Date: _____

PART I (Cont)

B. EXHAUST SYSTEM (RECIP ENG)

1. EXHAUST OUTLETS

(a) ARE EXHAUST OUTLETS CONSIDERED SATISFACTORY IN REGARD TO THE FOLLOWING?

(1) CONTAMINATION OF CREW SPACES? _____

(2) PILOTS NIGHT VISION? _____

(3) WILL GLARE SHIELDS BE REQUIRED? _____

(4) WILL EXHAUST IMPINGE ON THE AIRCRAFT? _____ IF SO, WITHIN 4 FEET OF
EXHAUST OPENING? _____

(5) PROVISION FOR DRAINAGE OR LEAKAGE TO BE CONDUCTED OUTSIDE OF AIRCRAFT
STRUCTURE? _____

(6) IS THERMAL EXPANSION ADEQUATELY PROVIDED FOR? _____

(7) IS EXHAUST SYSTEM EASILY REMOVABLE? _____

(8) IS OPEN END OF EXHAUST A MINIMUM OF 5 INCHES FROM INFLAMMABLE PORTIONS OF
AIRCRAFT? _____

(9) INFRARED PROTECTION? _____

2. FLAME DAMPING

(a) WHAT TYPE OF FLAME DAMPING IS REQUIRED? _____

(b) ARE FLAME DAMPING PROVISIONS READILY DETACHABLE? _____

3. REMARKS

Checked by: _____

Date: _____

PART I (Cont)C. EXHAUST SYSTEM (TURBO ENGINES)

1. TAILPIPE

- (a) WHAT IS TAILPIPE LENGTH? _____
DIAMETER? _____ MATERIAL? _____
- (b) HOW IS TAILPIPE ATTACHED TO ENGINE? _____

- (c) HOW IS TAILPIPE SUPPORTED IN AIRCRAFT? _____

- (d) HOW IS TAILPIPE REMOVED? _____

2. INSULATION

- (a) WHAT TYPE EXHAUST SYSTEM INSULATION IS PROVIDED? _____

- (b) HOW MUCH OF EXHAUST SYSTEM IS COVERED BY INSULATION? _____

3. EXHAUST OUTLETS

- (a) HOW ARE EXHAUST OUTLETS CONSIDERED IN REGARD TO THE FOLLOWING?
- (1) CONTAMINATION OF CREW SPACES? _____

- (2) POSSIBILITY OF OVERHEATING OR CORROSION DUE TO DISCHARGE ON PARTS OF AIRCRAFT? _____
- (3) THERMAL EXPANSION IN THE AIRCRAFT? _____

- (4) EXHAUST IMPINGEMENT ON THE AIRCRAFT? _____

- (5) PROVISIONS FOR DRAINAGE OR LEAKAGE TO BE CONDUCTED OUTSIDE OF AIRCRAFT STRUCTURE? _____

PART I (Cont)C. EXHAUST SYSTEM (TURBO ENGINES) (Cont)

4. EXHAUST NOZZLE

(a) DOES EXHAUST NOZZLE PROVIDE FOR THE FOLLOWING?

A/B EJECTORPRIMARY

- (1) FIXED AREA, NO ADJUSTMENT
- (2) VARIABLE AREA, GROUND ADJUSTMENT
- (3) VARIABLE AREA, FLIGHT ADJUSTMENT
- (4) THRUST VARIATION
- (5) THRUST REVERSAL
- (6) INFRA-RED PROTECTION

5. AREA CONTROL

(a) DESCRIBE METHOD OF AREA CONTROL IN REGARD TO THE FOLLOWING:

A/B EJECTORPRIMARY

- (1) MECHANICAL OR AERODYNAMIC MEANS OF CHANGING AREA.
- (2) ACTUATOR: HYDRAULIC, MECHANICAL, ELECTRICAL, ETC.
- (3) INFINITELY VARIABLE.

6. REMARKS

Checked by: _____

Date: _____

PART I (Cont)

D. PROPULSION SYSTEM CONTROLS

1. GENERAL

(a) WHAT PROVISION IS MADE FOR FINE ADJUSTMENT OF CONTROLS REQUIRING THIS FEATURE?

(b) WHAT PROVISION IS MADE FOR ADJUSTING THE FRICTION OF THE PRIMARY ENGINE CONTROLS?

2. CONTROL LEADS

(a) WHAT TYPE CONTROL LEADS ARE PROVIDED? _____

(b) WHAT PROVISION IS MADE IN CONTROL LEADS TO WITHSTAND VIBRATION AND ENGINE MOVEMENT WITHOUT CHANGE IN SETTING? _____

(c) ARE CONTROL LEADS FREE FROM INTERFERENCE WITH EACH OTHER AND WITH OTHER PARTS OF THE AIRCRAFT UNDER CONDITIONS OF VIBRATION AND DEFLECTION? _____

IF NOT, DESCRIBE PROBLEM? _____

(d) ARE CONTROL LEADS, ESPECIALLY CABLE TYPE, ARRANGED FOR EASE OF INSPECTION AND REPAIR? _____ IF NOT, WHY? _____

3. WHAT MEANS ARE PROVIDED IN THE COCKPIT FOR CONTROL OF COOLING AIRFLOW? _____

4. WHAT MEANS ARE PROVIDED IN THE COCKPIT FOR CONTROL OF COOLING AIR THROUGH THE OIL COOLER? _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

PART I (Cont)

D. PROPULSION SYSTEM CONTROLS (Cont)

5. LIST COCKPIT ELECTRICAL SWITCHES AND MECHANICAL PUSH-PULLS, ETC. REQUIRED FOR ENGINE OPERATION? _____

6. REMARKS

Checked by: _____

Date: _____

PART I (Cont)E. PROPELLER AND ACCESSORIES

1. PROPELLER

(a) WHAT IS PROPELLER CLEARANCE FOR THE FOLLOWING?

<u>OVER</u> <u>GROUND</u>	<u>RADIAL</u> <u>CLEARANCE</u>	<u>FROM</u> <u>STRUCTURAL PARTS</u>	<u>OVER</u> <u>WATER</u>	<u>OVER</u> <u>HULL</u>
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(b) IS LOCATION OF PROPELLER PLANE SATISFACTORY WITH RESPECT TO LOCATION OF CREW MEMBER'S STATIONS? _____

(c) IN AUTOMATIC PROPELLERS OF THE HYDRAULIC TYPE, WHAT SPECIAL PROVISIONS ARE REQUIRED AND MADE TO PREVENT REDUCTION IN OIL PRESSURE DURING MANEUVERS? _____

(d) WHAT KIND OF EXTENSION SHAFTING OR GEARING IS EMPLOYED? _____

2. ACCESSORIES

(a) WHAT TYPE PROPELLER SPINNER IS USED? _____

(b) ARE PROPELLER CUFFS USED? _____

(c) IN MULTIENGINE AIRCRAFT, WHAT TYPE SYNCHRONIZER IS USED? _____

3. DEICING

(a) WHAT PROVISION IS MADE FOR DEICING THE PROPELLER? _____

(b) IF FLUID SYSTEM IS USED, WHAT IS TANK CAPACITY? _____

(1) WHAT IS PUMP CAPACITY? _____

4. REMARKS

Checked by: _____

Date: _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

PART I (Cont)

F. STARTING SYSTEM

1. WHAT TYPE STARTER IS USED? _____
- (a) WHAT MANUFACTURER? _____
2. ARE BOOSTER DEVICES PROPERLY MOUNTED? _____
3. WHAT TYPE PRIMING SYSTEM IS USED? _____
- (a) IS IT FURNISHED WITH THE ENGINE? _____
- (b) DOES ARRANGEMENT OF PRIMER AND STARTER SWITCHES PERMIT SIMULTANEOUS OPERATION WITH ONE HAND? _____ IF NOT, DESCRIBE WHAT IS REQUIRED ? _____
- _____
4. WHAT MEANS ARE PROVIDED FOR SUPPLYING HEAT FOR STARTING THE ENGINE? _____
- _____
5. AIR TURBINE STARTERS
- (a) DOES THE PNEUMATIC NIPPLE CONNECTION AT THE SKIN OF THE AIRPLANE CONFORM TO THE STANDARD NAVY-AIR FORCE REQUIREMENTS TYPE? _____
- (b) IS THE PNEUMATIC NIPPLE CONNECTION LOCATED IN SUCH A MANNER TO PROVIDE EASY ACCESS BY GROUND CREWS? _____
- (c) IS THE AIR DUCTING FROM THE PNEUMATIC NIPPLE CONNECTION TO THE STARTER INSTALLED WITH A MINIMUM LENGTH, AND A MINIMUM NUMBER OF BENDS IN ORDER TO AVOID EXCESSIVE PRESSURE DROPS THROUGHOUT THE SYSTEM? _____ DESCRIBE? _____
- _____
- (d) IS THE STARTER AIR INLET DUCTING INSTALLED IN SUCH A MANNER SO AS TO NOT EXERT EXCESSIVE LEADS AND MOMENTS ON THE STARTER INLET SCROLL WHEN THE STARTER SYSTEM IS ENERGIZED? _____ DESCRIBE? _____
- _____
- (e) IS THE REQUIRED ELECTRICAL CONNECTION FOR THE STARTING SYSTEM PROVIDED IN THE SAME AREA AS THE PNEUMATIC NIPPLE CONNECTION? _____ IF NOT, WHERE IS IT? _____
- _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

PART I (Cont)

F. STARTING SYSTEM (Cont)

- (f) IS A SATISFACTORY START SWITCH PROVIDED IN THE COCKPIT FOR COMPLETE CONTROL OF THE STARTING CYCLE BY THE PILOT? _____
DOES THE CIRCUIT PROVIDE FOR AUTOMATIC SHUTOFF OF THE AIR SUPPLY WHEN THE STARTER CENTRIFUGAL SWITCH IS ACTUATED? _____
CAN THE PILOT ABORT THE START AT HIS OPTION, DURING ANY PART OF THE START CYCLE? _____

6. HYDRAULIC STARTERS

- (a) ARE THE PRESSURE AND RETURN LINES CLEARLY MARKED OR SIZE CODED TO PREVENT IMPROPER CONNECTING? _____
- (b) ARE THE HYDRAULIC CONNECTIONS LOCATED IN SUCH A MANNER TO PROVIDE EASY ACCESS BY GROUND CREWS? _____
- (c) ARE DRAINS PROVIDED? _____
- (d) ARE OVERBOARD DRAINS PROVIDED? _____

- 7. IS SPACE PROVIDED FOR A GTS? _____
WHAT ARE THE FEATURES OF THIS INSTALLATION? _____

8. REMARKS

Checked by: _____

Date: _____

PART I (Cont)G. COOLING SYSTEM

1. AIR DUCTS

(a) WILL DUCTS AND CONNECTION PERMIT EASE OF INSPECTION, REPLACEMENT AND REPAIR?
DESCRIBE? _____

(b) WHAT MEANS ARE PROVIDED IN AIR DUCTS TO PREVENT ACCUMULATION OF WATER, ETC? _____

(c) LIST THE FOLLOWING INFORMATION FOR ENGINE COOLING AIR DUCTS?

<u>ITEM COOLED</u>	<u>SIZE</u>	<u>SHAPE</u>	<u>QUANTITY</u>	<u>LOCATION</u>
--------------------	-------------	--------------	-----------------	-----------------

(d) ARE COOLING AIR INLET DUCTS REQUIRED AND PROVIDED FOR OIL COOLERS? _____

(1) ARE COOLING AIR EXIT DUCTS REQUIRED AND PROVIDED FOR OIL COOLERS? _____

(2) IF EXIT DUCTS ARE NOT PROVIDED, WHAT PROVISION IS MADE FOR EXHAUSTING THE
COOLING AIR? _____

(c) ARE COOLING AIR INLET DUCTS REQUIRED AND PROVIDED FOR INTERCOOLERS? _____

(1) ARE COOLING AIR EXIT DUCTS REQUIRED AND PROVIDED FOR INTERCOOLERS? _____

(2) IF EXIT DUCTS ARE NOT PROVIDED, WHAT PROVISION IS MADE FOR EXHAUSTING THE
COOLING AIR? _____

2. WHAT MEANS ARE PROVIDED TO INSURE ADEQUATE COOLING OF ELECTRICAL GENERATORS,
MAGNETOES, SPARK PLUG ELBOWS, ETC? _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

PART I (Cont)

G. COOLING SYSTEM (Cont)

3. WHAT MEANS ARE PROVIDED TO COOL THE EXHAUST SYSTEM? _____

4. REMARKS

Checked by: _____

Date: _____

PART I (Cont)H. INDUCTION SYSTEM (RECIP. ENG.)

1. GENERAL

- (a) ATTACH PAGES OF DESCRIPTIVE MATERIAL AND SCHEMATIC FROM MOCKUP BROCHURE, NOTING CHANGES?
- (b) WHAT MEANS ARE PROVIDED TO PERMIT INDUCTION SYSTEM OPERATION UNDER ICING CONDITIONS? _____
- (c) IS SOURCE OF ALTERNATE AIR ADEQUATELY PROTECTED FROM ENTRANCE OF RAIN, SNOW, ETC.? _____
- (d) WHAT PROVISION IS MADE IN PREHEATER INSTALLATIONS FOR DISSIPATING HEAT WITH CONTROL IN FULL COLD POSITION? _____

2. INTAKE DUCTS

- (a) LIST FOLLOWING INFORMATION FOR INTAKE DUCT ENTRANCES?

<u>SIZE</u>	<u>SHAPE</u>	<u>QUANTITY</u>	<u>LOCATION</u>
-------------	--------------	-----------------	-----------------

- (b) WILL INTAKE DUCTS AND CONNECTIONS PERMIT EASE OF INSPECTION, REPLACEMENT, AND REPAIR? _____

3. INDUCTION AIR FILTERS

- (a) IS AN INDUCTION AIR FILTER REQUIRED AND PROVIDED? _____
- (b) WHAT IS ITS CAPACITY? _____
- (c) WHERE IS IT LOCATED? _____
- (d) ARE PROVISIONS (LESS FILTER ELEMENTS) INTEGRAL WITH THE AIRCRAFT? _____
- (1) IF NOT, DOES THE COMPLETE ALTERNATE INSTALLATION PERMIT EASY AND RAPID INCORPORATION? _____
- (e) WILL ALL INDUCTION AIR POSITIVELY PASS THROUGH THE FILTER DURING GROUND AND TAKE-OFF OPERATION? _____
- (f) HOW CAN THE INDUCTION AIR FILTER BE BYPASSED TO AVOID LOSS OF RAM IN FLIGHT? _____

PART I (Cont)

H. INDUCTION SYSTEM (RECIP. ENG.) (Cont)

4. INTERCOOLERS

(a) LIST THE FOLLOWING INFORMATION FOR INTERCOOLERS?

<u>TYPE</u>	<u>SIZE</u>	<u>QUANTITY</u>	<u>LOCATION</u>
-------------	-------------	-----------------	-----------------

5. TURBOSUPERCHARGERS

(a) WHAT TYPE TURBOSUPERCHARGER IS PROVIDED? _____

(b) WHAT TYPE AUTOMATIC CONTROL IS PROVIDED? _____

(1) DOES CONTROL GOVERN ALL SUPERCHARGER STAGES? _____

(c) WHERE IS TURBOSUPERCHARGER LOCATED? _____

6. REMARKS

Checked by: _____

Date: _____

PART I (Cont)

I. INDUCTION SYSTEM (TURBO ENG.)

1. GENERAL

- (a) ATTACH PAGES OF DESCRIPTIVE MATERIAL AND SCHEMATIC FROM MOCKUP BROCHURE, NOTING CHANGES?
- (b) WHAT MEANS ARE PROVIDED FOR ENGINE ICE PREVENTION? _____

2. INTAKE DUCTS

- (a) WHAT TYPE OF INLETS ARE PROVIDED (FUSELAGE NOSE, NACELLE NOSE, WING LEADING EDGE, SCOOP, OR SUBMERGED)? _____
- (b) ARE COVERS PROVIDED TO PREVENT FOREIGN OBJECTS FROM ENTERING INDUCTION SYSTEM WHEN THE AIRCRAFT IS ON THE GROUND? _____
- (c) IN MULTIENGINE AIRCRAFT, ARE MEANS FOR CLOSING INLET OF DUCTS FOR CRUISING CONDITION PROVIDED? _____
- (d) WHAT MEANS ARE PROVIDED FOR VARYING INLET AREA? _____

- (e) ARE ENGINE INLET SCREENS PROVIDED? _____ ARE THEY RETRACTABLE? _____
- (f) IS THERE AN ALTERNATE AIR SOURCE? _____
- (g) ARE THERE ANY PROVISIONS FOR LESSENING FOREIGN OBJECT DAMAGE TO THE ENGINE? _____

3. REMARKS

Checked by: _____

Date: _____

PART I (Cont)J. LUBRICATING SYSTEM

1. GENERAL

- (a) WHAT PROVISION IS MADE FOR PREVENTING OIL SEEPAGE INTO THE ENGINE DURING SHUT-DOWN? _____
- (b) IS AN OIL DILUTION SYSTEM PROVIDED? _____
- (c) IS TURBO SUPERCHARGER EQUIPPED WITH A SEPARATE OIL SYSTEM? _____
- (d) WHAT PROVISIONS ARE MADE FOR POSITIVE OIL SUPPLY TO ENGINES UNDER CONDITIONS OF NEGATIVE ACCELERATIONS/ZERO "G"? _____

- (e) WHAT MEANS ARE PROVIDED TO MAINTAIN OIL IN A FLUID STATE IF RESTARTS ARE REQUIRED UNDER CONDITIONS OF EXTREME COLD (HIGH ALTITUDE CRUISE, ETC.)? _____

- (f) WHAT MEANS ARE PROVIDED FOR SUPPLYING HEAT TO THE OIL TANKS? _____

- (g) IS THE OIL SYSTEM COMPATIBLE FOR 1100 AND 1065 OIL (RECIP. ENGINES ONLY)? _____
_____ FOR MIL-L-7808 AND MIL-L-23699 (TURBINES ONLY)? _____

- (h) ARE EMERGENCY SHUT OFF VALVES PROVIDED? _____
- (i) HOW ARE SHUTOFF VALVES INTERCONNECTED WITH OTHER SYSTEM SHUTOFFS? _____

- (j) IS PRESSURE OILING PROVIDED? _____
- (k) WHAT COUPLINGS ARE USED? _____
- (l) IS OIL LEVEL OR QUANTITY INDICATION PROVIDED? _____ DESCRIBE? _____

2. OIL TANKS

- (a) WHERE ARE OIL TANKS LOCATED? _____
- (1) IS LOCATION SATISFACTORY WITH REGARD TO OIL PUMP INLET? _____

PART I (Cont)J. LUBRICATING SYSTEM (Cont)

2. (Cont)

(b) WHAT TYPE FILLER UNITS ARE PROVIDED FOR THE TANKS? _____

(1) ARE PROVISIONS MADE TO INSURE FILLER UNIT CAPS ARE IN PLACE AND SECURE? _____

(2) ARE SCUPPERS AND DRAINS PROVIDED? _____

(c) IS OIL TANK SUMP DRAINABLE AND CLEANABLE? _____

(d) IS OIL TANK DESIGNED FOR QUICK WARMUP? _____

(e) ARE OIL LINE CONNECTIONS ON THE TANK LOCATED PROPERLY? _____

(f) HOW ARE OIL TANKS VENTED? _____

(g) HOW IS SERVICE OIL TANK CAPACITY INDICATED ON THE GROUND? _____

(1) HOW INDICATED IN FLIGHT (ESPECIALLY IMPORTANT IN OIL SYSTEM EMPLOYING
TRANSFER SYSTEMS)? _____

(h) IS AN AUXILIARY OIL TANK PROVIDED? _____

(1) WHAT MEANS ARE PROVIDED FOR MAINTAINING AUXILIARY OIL IN A FLUID STATE OF
TRANSFER? _____

(i) WHAT PROVISION IS MADE FOR ACCESS TO EACH TANK? _____

3. OIL SYSTEM DRAINS

(a) WHERE ARE OIL SYSTEM DRAINS LOCATED? _____

(b) WILL OIL DRAIN CLEAR OF AIRCRAFT STRUCTURE? _____

(c) IS MAIN DRAIN EQUIPPED FOR CONNECTION OF DRAIN HOSE? _____

4. OIL COOLERS

(a) LIST THE FOLLOWING INFORMATION FOR COOLERS?

TYPESIZEQUANTITYLOCATION_____

PART I (Cont)

J. LUBRICATING SYSTEM (Cont)

(b) WHAT OIL TEMPERATURE CONTROL IS PROVIDED? _____

(c) IS CONTROL AUTO OR MANUAL, OR DOES IT COMBINE THESE TWO FEATURES? _____

_____ DESCRIBE? _____

(d) IS OIL SYSTEM INTEGRAL WITH ENGINE? _____

5. MISCELLANEOUS

(a) ARE OIL LINES PROTECTED AND SUPPORTED TO PREVENT DAMAGE BY PERSONNEL DURING FLIGHT AND SERVICING OPERATIONS? _____

(b) IS CLEARANCE BETWEEN OIL LINE AND HOT DUCTS AT LEAST FOUR INCHES? _____

IF NOT, WHAT PROTECTION TO LINES IS PROVIDED? _____

(c) CAN ALL FITTINGS AND CONNECTIONS IN OIL LINES BE READILY INSPECTED? _____

6. REMARKS

Checked by: _____

Date: _____

PART I (Cont)K. FUEL SYSTEM

1. GENERAL

(a) ARE PROVISIONS REQUIRED AND PROVIDED TO INSURE PROPER FUEL SYSTEM OPERATION AT HIGH ALTITUDE? _____ WHAT ARE THEY? _____

(b) LIST THE FOLLOWING INFORMATION FOR THE FUEL FLOWMETERS?

<u>TYPE</u>	<u>CAPACITY</u>	<u>QUANTITY</u>	<u>LOCATION</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(c) WHAT MEANS ARE PROVIDED FOR SHUTTING OFF FUEL FROM THE ENGINE(S) IN CASE OF NACELLE FIRE? _____ WHERE LOCATED? _____

(d) IN TURBO ENGINES, IS THE ENGINE COMPRESSOR AIR UTILIZED TO TRANSFER FUEL? _____

_____ IS THE AIR REGULATED? _____ ARE ZERO LEAK CHECK VALVES

UTILIZED? _____

(e) ARE PROVISIONS MADE FOR INFLIGHT REFUELING? _____

(1) IS THE PROBE PROPERLY LOCATED? _____ WHERE? _____

(2) IS THE PROBE RETRACTABLE? _____

(3) IS ANTI-ICING PROVIDED? _____

(f) IS FUEL DUMPING SYSTEM PROVIDED? _____ WHAT TYPE? _____
WHERE ARE DUMP CHUTES? _____

(g) WHAT IS FUEL DUMPING RATE AND TIME TO DUMP? _____ WILL THE FUEL DUMPING
ON THE AIRCRAFT? _____ WHERE? _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

PART I (Cont)

K. FUEL SYSTEM (Cont)

2. FUEL TANKS

- (a) WHAT TYPE FILTER UNITS ARE PROVIDED FOR THE TANKS? _____
WHERE ARE THEY LOCATED? _____
ARE GROUNDING JACKS PROVIDED? _____
- (1) ARE PROVISIONS MADE TO INSURE THE PRESSURE AND/OR GRAVITY FILLER UNIT CAPS ARE IN PLACE AND SECURE? _____
- (2) ARE FILLER UNITS LOCATED TO PERMIT ALL TANKS TO BE COMPLETELY FILLED ON THE GROUND? _____
- (3) ARE FILLER UNITS LOCATED SO NO FIRE HAZARD EXISTS FROM SPILLAGE DURING FUELING WITH THE ENGINE(S) RUNNING? _____
- (4) ARE SCUPPERS AND DRAINS PROVIDED TO PREVENT FUEL SPILLED DURING FILLING OPERATIONS FROM DAMAGING SELF SEALING TANKS OR CAUSING A FIRE HAZARD? _____

- (5) ARE PRESSURE FUELING PRE-CHECKS PROVIDED? _____
- (a) HOW MANY? _____
- (b) WHERE? _____
- (c) IS MASS LOADING PROVIDED? _____
- (d) WHAT TYPE PRE-CHECKS (ELECTRIC, HYDRAULIC)? _____
- (b) HOW ARE FUEL TANKS VENTED? _____

- (1) ARE MEANS PROVIDED TO PREVENT FUEL SPILLAGE AND SYPHONING THROUGH THE VENTS? _____
- (2) ARE VENTS SIZED FOR MAX FUELING VALVE FLOW? _____
- (3) IS A VENT MONITOR GAGE PROVIDED ON THE GROUND FUELING PANEL? _____
- (c) WILL TANKS PERMIT PROPER FUEL AVAILABILITY WITHIN REQUIRED FLIGHT ATTITUDES? _____

- (d) WHAT TYPE PRESSURE FUELING CONNECTIONS ARE PROVIDED? _____
- (e) WHAT MEANS ARE PROVIDED FOR RAPID DEFUELING OF TOTAL FUEL? _____

PART I (Cont)K. FUEL SYSTEM (Cont)

(f) WHAT MEANS ARE PROVIDED FOR INDICATING THE QUANTITY OF FUEL IN EACH TANK IN FLIGHT? _____

(g) IS COUNTER-POINTER QUANTITY GAGE PROVIDED? _____

(h) DESCRIBE QUANTITY PRESENTATION IN COCKPIT? _____

3. FUEL SYSTEM DRAINS

(a) HOW MANY DRAINS? _____

(b) WHERE ARE FUEL SYSTEM DRAINS LOCATED? _____

(c) WHAT MEANS ARE PROVIDED FOR DRAINING FUEL LINE STRAINERS? _____

(d) WHAT IS MICRON SIZE OF STRAINER? _____

(e) IS ANTI-ICING PROVIDED FOR THE STRAINER? _____ IS DEPENDING BY-PASS INDICATION PROVIDED IN THE COCKPIT? _____ WHERE? _____

(f) WHERE IS FUEL LINE STRAINER LOCATED? _____

(g) IN TURBO ENGINES PROVIDED WITH A MANIFOLD SUMP VALVE AND COMBUSTION CHAMBER DRAIN VALVE. IS THE FUEL COLLECTED? _____ IF SO, HOW IS IT DRAINED FROM THE COLLECTOR? _____

(h) IS FUEL CONTROL DRAIN A SEPARATE OVERBOARD LINE? _____

ARE ANY DRAINS MANIFOLDED TOGETHER? _____ IF SO, WHICH ONE? _____

_____ IS THE MANIFOLD AT THE SKIN OR ELSEWHERE? _____

4. FUEL LINES

(a) ARE FUEL LINES ROUTED AS DIRECTLY AS PRACTICABLE? _____ IF NOT, DESCRIBE _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

PART I (Cont)

K. FUEL SYSTEM (Cont)

(b) IS GRADIENT SUCH THAT LOCALIZED HIGH SUCTION POINTS ARE AVOIDED AND VAPOR LOCKING TENDENCIES MINIMIZED? _____ DEFINE PROBLEM AREAS? _____

(c) ARE FUEL LINES SO LOCATED OR PROTECTED THAT DAMAGE DURING SERVICING OR OVERHAUL IS ELIMINATED? _____ DEFINE PROBLEM AREAS? _____

(d) ARE MAIN FEED LINES SELF SEALING? _____ IF NOT, ARE THEY PROTECTED BY THE AIRCRAFT STRUCTURE? _____

5. TRANSFER FUEL PUMPS

(a) WHAT TYPE AND HOW MANY FUEL PUMPS ARE PROVIDED? _____

(b) WHERE ARE THEY LOCATED? _____

(c) IS LOCATION SUCH THAT PUMPS WILL DRAW FUEL FROM ALL TANKS AND WITH MINIMUM INLET SUCTION AT THE PUMP? _____

6. FIXED FUEL TANKS

(a) ARE INTEGRAL TANKS USED? _____ HOW MANY ARE THERE? _____
WHERE LOCATED? _____

(b) ARE BLADDER CELLS EMPLOYED? _____ HOW MANY ARE THERE? _____
WHERE LOCATED? _____
HOW MANY SELF-SEALING? _____ WHERE LOCATED? _____

(c) WHAT PROVISION IS MADE FOR ACCESS TO EACH TANK? _____

(d) CAN EACH SELF SEALING OR FLEXIBLE TANK BE INSTALLED WITHOUT EXCESSIVE DEFORMATION? _____

(e) DOES TANK SUPPORT CAVITY HAVE ADEQUATE DRAINAGE PROVISIONS? _____

PART I (Cont)K. FUEL SYSTEM (Cont)

6. (Cont)

(f) CAN EACH TANK BE INSTALLED WITHOUT INTERFERING WITH OTHER TANKS? _____
_____(g) IS THERE AN INSPECTION DOOR ON TOP OF EACH SELF SEALING OR FLEXIBLE TANK? _____
_____(h) CAN ENTIRE INTERIOR OF EACH TANK BE READILY INSPECTED THRU TANK INSPECTION
DOORS WHEN TANKS ARE INSTALLED IN THE AIRCRAFT? _____
_____(i) ARE AS MANY TANK FITTINGS AS PRACTICABLE MOUNTED ON INSPECTION DOORS OF SELF
SEALING OR FLEXIBLE TANKS? _____
_____(j) WHAT ACCESS IS PROVIDED TO INSPECT TANK FITTINGS? _____

_____7. ARE EXTERNAL AUXILIARY FUEL TANKS USED? _____ WHERE MOUNTED? _____

8. MISCELLANEOUS

(a) ARE FUEL LINES PROTECTED AND SUPPORTED PROPERLY TO PREVENT DAMAGE BY PERSONNEL
DURING FLIGHT AND SERVICING OPERATIONS? _____ IF NOT, DESCRIBE PROBLEM
AREA? _____
_____(b) CAN ALL FITTINGS AND CONNECTIONS IN FUEL LINES BE READILY INSPECTED FOR
LEAKAGE? _____ IF NOT, GIVE DETAILS? _____
_____(c) IS CLEARANCE BETWEEN FUEL LINES AND HOT DUCTS AT LEAST FOUR INCHES? _____
_____ IF NOT, HOW ARE LINES PROTECTED FROM HEAT? _____

PART I (Cont)

K. FUEL SYSTEM (Cont)

9. AIR REFUELING SYSTEM

(a) INSTALLATION: CAN THE TANKER PACKAGE BE INSTALLED READILY? _____

10. VALVES AND SWITCHES

(a) HOW MANY LEVEL CONTROLS ARE USED? _____ WHAT MAKE? _____

(b) DO MOTOR OPERATED VALVES INCORPORATE STRAY ELECTRICAL VOLTAGE FIXES? _____

(c) ARE PRESSURE SWITCHES MOUNTED SO THAT THEY ARE NOT LOW POINTS TO CATCH AND
RETAIN MOISTURE? _____

(d) IS THE MAIN FUEL SHUT OFF VALVE MANUAL? _____
IF NOT, WHAT? _____

(e) ARE VALVES AND SWITCHES READILY ACCESSIBLE FOR MAINTENANCE? _____

11. COCKPIT CONTROLS

(a) WHAT FUEL SYSTEM CONTROLS ARE IN THE COCKPIT? _____

(b) ARE LEVER LOCK SWITCHES USED? _____
WHERE? _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

PART I (Cont)

K. FUEL SYSTEM (Cont)

12. REMARKS

Checked by: _____

Date: _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)PART I (Cont)L. AUXILIARY POWER PLANT

1. GENERAL

- (a) ARE ADEQUATE STARTING PROVISIONS MADE AT THE POWER UNIT? _____ AT ENGINEER'S STATION? _____
- (b) ARE OIL AND FUEL DRAINS PROVIDED? _____
- (1) ARE OVERBOARD DRAINS PROVIDED? _____
- (c) IS FUEL CUTOFF VALVE PROPERLY INSTALLED? _____
- (d) LIST THE FOLLOWING INFORMATION FOR INLET AND OUTLET DUCTS?

	<u>SIZE</u>	<u>LENGTH</u>	<u>LOCATION</u>
INLET DUCT	_____	_____	_____
OUTLET DUCT	_____	_____	_____

- (e) IS FIREPROOF ENCLOSURE PROVIDED? _____

2. POWER UNIT

- (a) LIST THE FOLLOWING INFORMATION FOR AUXILIARY POWER UNIT INCLUDING AIR AND GAS TURBINE MOTORS?

<u>TYPE</u>	<u>QUANTITY</u>	<u>LOCATION</u>

- (b) WHAT ACCESSORIES ARE DRIVEN BY THE AUXILIARY POWER UNIT (BY TYPE AND CAPACITY)?

- (c) WILL HOISTING PROVISIONS, HATCHES, ETC., PERMIT EASY AND RAPID INSTALLATION AND REMOVAL OF THE POWER UNIT? _____
- (d) IS ACCESS PROVIDED TO PERMIT SERVICING OF ALL NECESSARY PARTS OF THE UNIT? _____
- (e) CAN THE GENERATORS OR ALTERNATORS BE PARALLEL WITH THE ENGINE, THE ENGINE DRIVEN GENERATORS OR ALTERNATORS? _____

3. REMARKS

Checked by: _____

Date: _____

PART I (Cont)N. ROCKET ENGINES

1. GENERAL

- (a) CAN THE ENGINE BE READILY REMOVED AS A UNIT INCLUDING ENGINE, ENGINE MOUNT, ENGINE ACCESSORIES, ETC? _____
- (1) DOES THE AIRCRAFT REMAIN IN STATIC BALANCE ON THE LANDING GEAR WITH ENGINE UNITS REMOVED? _____ IF NOT, WHAT MEANS ARE PROVIDED FOR MAINTAINING THE AIRCRAFT IN NORMAL GROUND POSITION? _____
- (b) WHAT PROVISION IS MADE IN COWLING TO PREVENT ACCUMULATION OF OIL, WATER, PROPELLANTS, ETC? _____
- (1) ARE REMOVABLE COWL SECTIONS OF CONVENIENT SIZE FOR HANDLING? _____
- (c) HAS SATISFACTORY ACCESS BEEN PROVIDED FOR OPERATION OF THE FOLLOWING?
- | | |
|--|--|
| PROPELLANT FILLER CAPS? _____ | DEFUELING DRAINS? _____ |
| OIL FILLER CAPS ON TURBINE? _____ | PROPELLANT TANKAGE MEASURING DEVICE? _____ |
| PROPELLANT LINE STRAINER? _____ | PRESSURIZING GAS SYSTEM EQUIPMENT? _____ |
| PROPELLANT LINE STRAINER SCREEN? _____ | TURBINE HOUSING DRAIN? _____ |
- (d) HAS SATISFACTORY ACCESS BEEN PROVIDED FOR SERVICING, ADJUSTMENT (WHERE APPLICABLE), AND RAPID REMOVAL AND REPLACEMENT OF THE FOLLOWING?
- | | |
|---|--|
| MAIN PROPELLANT VALVES? _____ | CONTROL SYSTEM FOR PROPELLANT FEED SYSTEM? _____ |
| PROPELLANT CHECK VALVES? _____ | PROPELLANT LINE STRAINERS? _____ |
| MAIN CONTROL BOX? _____ | TURBINE OIL TANKS? _____ |
| GAS GENERATOR-TURBINE-PUMP ASSEM.? _____ | EXHAUST SYSTEM OR PROPELLANT PUMP TURBINE? _____ |
| PRESSURIZING GAS SYSTEM FOR GAS GENERATOR PROPELLANT TANKS? _____ | |
- (e) ARE ALL ITEMS INSTALLED WHICH MAY AFFECT ACCESSIBILITY OF THE VARIOUS PARTS OF THE PROPULSION SYSTEM INSTALLATION? _____
- (f) ARE HOISTING PROVISIONS SATISFACTORY FOR THE PROPULSION SYSTEM? _____
- (g) DO THE ENGINE-MOUNT-BULKHEAD FITTINGS PERMIT EASY AND RAPID ALIGNMENT AND ATTACHMENT OF THE PROPULSION SYSTEM TO THE AIRCRAFT STRUCTURE? _____
- (h) WHAT TYPE QUICK-DISCONNECT FITTINGS ARE PROVIDED FOR FLUID LINES WHICH REQUIRE DISCONNECTION FOR PROPULSION SYSTEM REMOVAL? _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)PART I (Cont)M. ROCKET ENGINES (Cont)

(i) IS PROPULSION SYSTEM SATISFACTORY AS TO LOCATION AND GENERAL PURPOSE? _____

(1) DOES ROCKET JET EXHAUST CLEAR ADJACENT AIRCRAFT STRUCTURE? _____

(j) DOES ENGINE MOUNT DESIGN APPEAR SATISFACTORY? _____

(k) WHAT TYPE VIBRATION ISOLATING DEVICES ARE PROVIDED? _____

(1) WHAT ARE THEY LOCATED BETWEEN? _____

(l) ARE ADEQUATE ENGINE AND ACCESSORY DRAINS PROVIDED? _____

(1) DO DRAINS, BREATHERS, ETC., DISCHARGE FREE OF EXHAUST OUTLETS, BOMBING WINDOWS AND WINDSHIELDS? _____

(m) WHAT DRAINS ARE COMBINED INTO A COMMON LINE? _____

(1) ARE COMBINATIONS SATISFACTORY? _____

2. PROPULSION SYSTEM CONTROLS

(a) WHAT TYPE CONTROL LEADS ARE PROVIDED? _____
IF FLEXIBLE PUSH-PULL LEADS, ARE THEY OF APPROVED TYPE? _____

(b) WHAT PROVISION IS MADE IN CONTROL LEADS TO WITHSTAND VIBRATION AND ENGINE MOVEMENT WITHOUT FAILURE OR CHANGE IN SETTING? _____

(c) ARE CONTROL LEADS FREE FROM INTERFERENCE WITH EACH OTHER AND WITH OTHER PARTS OF THE AIRCRAFT UNDER CONDITIONS OF VIBRATION AND DEFLECTION? _____

(d) ARE CONTROL LEADS, ESPECIALLY CABLE TYPE, ARRANGED FOR EASE OF INSPECTION AND REPAIR? _____

(e) ARE APPROVED TYPE QUICK DISCONNECT FITTINGS INSTALLED IN ALL PROPULSION SYSTEM CONTROLS AT THE PROPER POINTS? _____

(1) WHAT TYPE? _____

3. PROPELLANT SYSTEM

(a) PROPELLANT TANKAGE AND PIPING

(1) ARE PROPELLANT TANKS AND LINES INSTALLED SO THEY MAY BE READILY REMOVED? _____

(2) WHAT SAFETY DEVICES ARE PROVIDED ON PROPELLANT TANKS? _____

PART I (Cont)M. ROCKET ENGINES (Cont)

3. (cont)

- (3) ARE STOP VALVES INSTALLED WHERE NECESSARY? _____
- (4) ARE STRAINERS INSTALLED WHERE NECESSARY? _____
- (5) ARE PROPELLANT LINES AS DIRECT AS POSSIBLE? _____
- (6) ARE SHORT BENDS OR LOOPS WHICH MAY SERVE AS GAS POCKETS AVOIDED? _____
- (7) ARE PROPELLANT LINES PROPERLY SECURED? _____
- (8) ARE EXPANSION JOINTS PROVIDED WHERE NECESSARY? _____

(b) PRESSURIZING GAS SYSTEM

- (1) ARE GAS STORAGE TANKS EASILY ACCESSIBLE AND READILY REMOVABLE? _____
- (2) ARE STOP VALVES INSTALLED WHERE NECESSARY? _____
- (3) IS PRESSURE REDUCING SYSTEM SATISFACTORILY INSTALLED? _____
- (4) WHAT SAFETY DEVICES ARE PROVIDED? _____
- _____

(c) PROPELLANT FEED SYSTEM

- (1) IS GAS GENERATOR-TURBINE-PUMP ASSEMBLY MOUNTING SATISFACTORY? _____
- (2) CAN THE ASSEMBLY BE EASILY REMOVED? _____
- (3) WHAT PROVISION IS MADE TO PROPERLY INSULATE TURBINE HOUSING AND TURBINE EXCHANGES LINE TO PROTECT ADJACENT EQUIPMENT FROM DAMAGE DUE TO HEAT GENERATED IN TURBINE HOUSING AND EXHAUST LINE? _____
- (4) IS TURBINE EXHAUST LINE EASILY REMOVED? _____
- (5) IS DRAIN FOR TURBINE HOUSING PROVIDED? _____
- (6) WHAT OVERSPEED CONTROLS ARE PROVIDED ON TURBINE? _____
- _____

4. REMARKS

Checked by: _____

Date: _____

PART I (Cont)

N. ELECTRIC POWER SYSTEM

1. THE POWER SUPPLY, MAJOR ITEMS HAVE BEEN MOCKED UP AND CHECKED FOR, TYPE, MOUNTING, AND ADEQUACY AS FOLLOWS?

(a) GENERATOR(S) _____

(b) INVERTER(S) _____

(c) CONVERTER(S) _____

(d) BATTERY(IES) _____

(e) CONTROL PANEL(S) _____

(f) _____

2. ARE THE ABOVE ITEMS ACCESSIBLE FOR MAINTENANCE REPLACEMENT? _____

3. ARE THE ABOVE ITEMS PROVIDED ADEQUATE COOLING? _____

4. IS BATTERY QUICK DISCONNECTED AT GROUND LEVEL BY AVERAGE HEIGHT SERVICE PERSONNEL FOR AN EMERGENCY DISCONNECT? _____

5. WHAT TYPE BATTERY INTAKE AND EXHAUST VENTING USED? _____

6. IS GENERATOR INTAKE AND EXHAUST COOLING ADEQUATELY PROVIDED FOR? _____

7. WHAT MEANS IS PROVIDED FOR ADEQUATELY COOLING GENERATOR AND OTHER ELECTRIC POWER ACCESSORIES? _____

Appendix 3 (Part I Airplane)
to MIL-M-8650B(AS)

PART I (Cont)

N. ELECTRIC POWER SYSTEM (Cont)

8. IS AREA SURROUNDING GENERATOR TERMINALS AND COOLING DUCTS SUFFICIENTLY OPEN TO PREVENT DAMAGE TO THE TERMINALS AND DUCTS DURING REMOVAL AND SERVICING OF GENERATOR OR NEARBY ACCESSORIES? _____

LOCATION OF TERMINALS INTAKE AND EXHAUST DUCTS? _____

9. GENERATOR MOUNTING HOLES USED ROUND, KEYHOLE SLOTS OR QUICK DISCONNECT? _____

10. ROUTING OF GENERATOR FEEDERS? _____

11. ROUTING OF TUBING TO SUPPORT CSD'S AND LIQUID COOLED GENERATORS? _____

12. REMARKS

Checked by: _____

Date: _____

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)

13 May 1969

Superseding Appendix 2 of
1 April 1960

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360

APPENDIX 3 (PART II HELICOPTER)

PROPULSION SYSTEM - HELICOPTER MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ HELICOPTER

CONTRACT NO. _____ FY _____

This PROPULSION SYSTEM checkoff list for helicopters consists of the following sections (cross out those sections listed below that are not applicable and omit from list):

PART II (HELICOPTERS)

- | | |
|--|--|
| A. ENGINE SECTION OR NACELLE GROUP
(PAGES A-1 TO A-6) | H. INDUCTION SYSTEM (TURBO ENG.)
(PAGE H-1) |
| B. EXHAUST SYSTEM (RECIP. ENG.)
(PAGE B-1) | I. LUBRICATING SYSTEM
(PAGES I-1 TO I-3) |
| C. EXHAUST SYSTEM (TURBO ENG.)
(PAGES C-1 TO C-2) | J. FUEL SYSTEM
(PAGES J-1 TO J-7) |
| D. PROPULSION SYSTEM CONTROLS
(PAGES D-1 TO D-2) | K. AUXILIARY POWER PLANT
(PAGE K-1) |
| E. STARTING SYSTEM
(PAGES E-1 TO E-2) | L. ELECTRIC POWER SYSTEM
(PAGES L-1 TO L-2) |
| F. COOLING SYSTEM
(PAGES F-1 TO F-2) | M. TRANSMISSIONS
(PAGES M-1 TO M-8) |
| G. INDUCTION SYSTEM (RECIP. ENG.)
(PAGES G-1 TO G-2) | |

PSC 6910

Prepared by: _____

Date: _____

NOTE: 1. The abbreviation "N.A." used herein denotes "Not Applicable".
NOTE: 2. For Airplanes See Part I of Appendix 3

PART II HELICOPTER

A. ENGINE SECTION OR RECELLE GROUP

NOTE: Repeat This Section For Each Engine

1. ENGINES

(a) CAN THE ENGINE BE READILY REMOVED AS A UNIT INCLUDING ENGINE MOUNT, ENGINE ACCESSORIES, ETC? _____ IF NOT, WHY? _____

(b) DOES THE AIRCRAFT REMAIN IN STATIC BALANCE ON THE LANDING GEAR WITH ENGINE UNITS REMOVED? _____

(1) IF NOT, WHAT MEANS ARE PROVIDED FOR MAINTAINING THE AIRCRAFT IN NORMAL GROUND POSITION? _____

(c) ARE HOISTING PROVISIONS ADEQUATE FOR ENGINE UNITS? _____
IF NOT, WHY? _____

(d) ARE SPECIAL ADAPTERS OR SPECIAL EQUIPMENTS AND/OR HOISTS REQUIRED? _____
IF YES, DESCRIBE? _____

(e) DO ENGINE MOUNT BULKHEAD FITTINGS PERMIT EASY AND RAPID ALIGNMENT AND ATTACHMENT OF ENGINE UNITS TO THE AIRCRAFT STRUCTURE? _____
IF NO, TELL WHY? _____

(f) HOW MANY CONNECTIONS BETWEEN ENGINE AND AIRFRAME? _____
LIST THEM: _____

PART II (Cont)A. ENGINE SECTION OR NACELLE GROUP (Cont)(g) IS FIREWALL PROVIDED? _____ DESCRIBE? _____
_____(h) FOR MULTI-ENGINE AIRCRAFT, HAS A NEUTRAL ENGINE INSTALLATION BEEN ACHIEVED? ____

_____(1) IF NOT, WHAT IS EXTENT OF DIFFERENCES? _____

2. BREATHERS AND DRAINS

(a) DO DRAINS, BREATHERS, ETC. DISCHARGE FREE OF EXHAUST OUTLETS, CAMERA WINDOWS
AND WINDSHIELDS? _____ IF NOT, DESCRIBE? _____
_____(b) WHAT DRAINS ARE COMBINED INTO A COMMON LINE? _____
_____ DESCRIBE? _____

_____(1) ARE COMBINATIONS SATISFACTORY? _____ IF NOT, DESCRIBE PROBLEMS? ____

3. COWLING

(a) IS ALL ENGINE COWLING EASILY REMOVABLE FROM THE GROUND? _____ IF NOT,
DESCRIBE? _____(b) IS ALL ENGINE COWLING EASILY REMOVABLE USING WORK PLATFORMS? _____

IF NOT, DESCRIBE? _____

(c) WHAT IS SIZE OF PLATFORM? _____

PART II (Cont)A. ENGINE SECTION OR RACELLE GROUP (Cont)

3. (Cont)

(d) ARE REMOVABLE OR HINGED COWL SECTIONS OF CONVENIENT SIZE AND WEIGHT FOR HANDLING? _____
_____(e) WHAT PROVISION IS MADE TO PREVENT LOSS OR DAMAGE TO REMOVED COWL SECTIONS OF CARRIER AIRCRAFT? _____
_____(f) WHAT PROVISION IS MADE IN COOLING TO PREVENT ACCUMULATION OF OIL, WATER, ETC.? _____
_____(g) HOW IS ENGINE COOLING REMOVED? _____
_____(h) IS ANY COOLING USED AS A WORK PLATFORM? _____
_____(i) ARE OTHER PLATFORMS NECESSARY? _____

4. ACCESS

(a) HAS SATISFACTORY ACCESS BEEN PROVIDED FOR SERVICING, ADJUSTMENT (WHERE APPLICABLE) AND RAPID REMOVAL AND REPLACEMENT OF THE FOLLOWING? _____

	<u>Access</u>	<u>Service or Adjustment Time</u>	<u>Removal Time</u>
(1) MAGNETO _____			
(2) DISTRIBUTOR _____			
(3) CARBURETOR _____			
(4) CARBURETOR AIR CLEANER _____			
(5) VACUUM PUMP _____			
(6) INTER COOLER _____			
(7) SPARK PLUGS _____			
(8) TURBO SUPERCHARGER _____			

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)PART II (Cont)A. ENGINE SECTION OR NACELLE GROUP (Cont)

4. (Cont)

	<u>Access</u>	<u>Service or Adjustment Time</u>	<u>Removal Time</u>
(9) CABIN SUPERCHARGER _____			
(10) ADI SYSTEM _____			
(11) OIL DILUTION SOLENOID _____			
(12) STARTER _____			
(13) STARTER CONTROLS _____			
(14) IGNITION ALTERNATOR _____			
(15) ALTERNATOR/GENERATOR _____			
(16) CSD/VSCF _____			
(17) CSD/VSCF FILLER _____			
(18) CSD/VSCF FILTER _____			
(19) CSD/VSCF SIGHT GAGE _____			
(20) HYDRAULIC PUMP(S) _____			
(21) MAIN FUEL FILTER _____			
(22) OTHER FILTERS _____			
(23) FUEL PUMP (ENGINE SUPPLIED) _____			
(24) FUEL PUMP (AIRFRAME SUPPLIED) _____			
(25) FUEL FLOW METER _____			
(26) FUEL FLOW DIVIDER _____			
(27) FUEL FLOW DIVIDER FILTER _____			
(28) FUEL/OIL COOLER _____			
(29) AIR/OIL COOLER _____			
(30) FUEL CONTROL _____			
(31) FUEL CONTROL FILTER _____			
(32) AIR BLEED VALVES _____			

PART II (Cont)A. ENGINE SECTION OR NACELLE GROUP (Cont)

4. (Cont)

	<u>Access</u>	<u>Service or Adjustment Time</u>	<u>Removal Time</u>
(33) EXHAUST NOZZLE ADJUSTMENT (IF ANY)	_____	_____	_____
(34) POWER MANAGEMENT CONTROL	_____	_____	_____
(35) MAIN FUEL SHUT OFF VALVE	_____	_____	_____
(36) N1 SPEED SWITCH	_____	_____	_____
(37) THROTTLE DISCONNECTS	_____	_____	_____
(38) OIL PUMP	_____	_____	_____
(39) COMB. CHAMBER DRAIN VALVE	_____	_____	_____
(40) COMB. CHAMBERS	_____	_____	_____
(41) THERMOCOUPLES	_____	_____	_____
(42) OIL TANK	_____	_____	_____
(43) OIL TANK FILLER	_____	_____	_____
(44) OIL TANK DIP STICK	_____	_____	_____
(45) OIL PRESSURE RELIEF	_____	_____	_____
(46) OIL PRESSURE TRANSMITTER	_____	_____	_____
(47) OIL FILTER	_____	_____	_____
(48) OIL LEVEL INDICATOR(VISUAL BULL'S EYE)	_____	_____	_____
(49) FUEL MANIFOLD DUMP VALVE	_____	_____	_____
(50) OIL DRAIN PLUG	_____	_____	_____
(51) INLET AIR FILTERS/SEPARATORS	_____	_____	_____
(52) BEARING AIR FILTER	_____	_____	_____
(53) FUEL DRAINS	_____	_____	_____
(54) ENGINE QUICK DISCONNECT FITTINGS	_____	_____	_____
(55) IGNITERS	_____	_____	_____
(56) IGNITION ALTERNATOR	_____	_____	_____
(57) N2 SPEED SWITCH	_____	_____	_____

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)

PART II (Cont)

A. ENGINE SECTION OR NACELLE GROUP (Cont)

4. (Cont)

(b) ARE ALL ITEMS INSTALLED WHICH AFFECT ACCESSIBILITY OF VARIOUS PARTS OF THE PROPULSION SYSTEM INSTALLATION? _____ IF NOT, EXPLAIN? _____

(c) CAN THE FOLLOWING ITEMS BE REMOVED SEPARATELY?

ENGINE _____ TIME FOR REMOVAL _____

<u>ENGINE MOUNTS</u>	<u>WHERE LOCATED</u>	<u>TYPE</u>
----------------------	----------------------	-------------

1. FOWARD

2. AFT

ENGINE GEAR BOX _____ TIME FOR REMOVAL _____

<u>GEAR BOX (MOUNTS)</u>	<u>WHERE LOCATED</u>	<u>TYPE</u>
--------------------------	----------------------	-------------

1. FORWARD

2. AFT

TRANSMISSION _____ TIME FOR REMOVAL _____

5. REMARKS

Checked by: _____

Date: _____

PART II (Cont)B. EXHAUST SYSTEM (RECIP ENG)

1. EXHAUST OUTLETS

(a) ARE EXHAUST OUTLETS CONSIDERED SATISFACTORY IN REGARD TO THE FOLLOWING?

- (1) CONTAMINATION OF CREW SPACES? _____

- (2) PILOTS NIGHT VISION? _____
- (3) WILL GLASS SHIELDS BE REQUIRED? _____
- (4) WILL EXHAUST IMPINGE ON THE AIRCRAFT? _____ IF SO, WITHIN 4 FEET
OF EXHAUST OPENING? _____

- (5) PROVISION FOR DRAINAGE OR LEAKAGE TO BE CONDUCTED OUTSIDE OF AIRCRAFT
STRUCTURE? _____
- (6) IS THERMAL EXPANSION ADEQUATELY PROVIDED FOR? _____

- (7) IS EXHAUST SYSTEM EASILY REMOVABLE? _____

- (8) IS OPEN END OF EXHAUST A MINIMUM OF 5 INCHES FROM INFLAMMABLE PORTIONS OF
AIRCRAFT? _____
- (9) INFRARED PROTECTION? _____

2. FLAME DAMPING

- (a) WHAT TYPE OF FLAME DAMPING IS REQUIRED? _____

- (b) ARE FLAME DAMPING PROVISIONS READILY DETACHABLE? _____

3. REMARKS

Checked by: _____

Date: _____

PART II (Cont)C. EXHAUST SYSTEM (TURBO ENGINES)

1. TAILPIPE

- (a) WHAT IS TAILPIPE LENGTH? _____
DIAMETER? _____ MATERIAL? _____
- (b) HOW IS TAILPIPE ATTACHED TO ENGINE? _____

- (c) HOW IS TAILPIPE SUPPORTED IN AIRCRAFT? _____

- (d) HOW IS TAILPIPE REMOVED? _____

2. INSULATION

- (a) WHAT TYPE EXHAUST SYSTEM INSULATION IS PROVIDED? _____

- (b) HOW MUCH OF EXHAUST SYSTEM IS COVERED BY INSULATION? _____

3. EXHAUST OUTLETS

- (a) HOW ARE EXHAUST OUTLETS CONSIDERED IN REGARD TO THE FOLLOWING?
- (1) CONTAMINATION OF CREW SPACES? _____

- (2) POSSIBILITY OF OVERHEATING OR CORROSION DUE TO DISCHARGE ON PARTS OF AIRCRAFT? _____
- (3) THERMAL EXPANSION IN THE AIRCRAFT? _____

- (4) EXHAUST IMPINGEMENT ON THE AIRCRAFT? _____

- (5) PROVISIONS FOR DRAINAGE OR LEAKAGE TO BE CONDUCTED OUTSIDE OF AIRCRAFT STRUCTURE? _____

PART II (Cont)

C. EXHAUST SYSTEM (TURBO ENGINES) (Cont)

4. EXHAUST NOZZLE

(a) DOES EXHAUST NOZZLE PROVIDE FOR THE FOLLOWING?

- (1) FIXED AREA, NO ADJUSTMENT _____
- (2) VARIABLE AREA, GROUND ADJUSTMENT _____
- (3) VARIABLE AREA, FLIGHT ADJUSTMENT _____
- (4) THRUST VARIATION _____
- (5) INFRARED PROTECTION _____

5. AREA CONTROL

(a) DESCRIBE METHOD OF AREA CONTROL IN REGARD TO THE FOLLOWING:

- (1) MECHANICAL OR AERODYNAMIC MEANS OF CHANGING AREA. _____
- (2) ACTUATOR: HYDRAULIC, MECHANICAL, ELECTRICAL, ETC. _____
- (3) INFINITELY VARIABLE. _____

6. REMARKS

Checked by: _____

Date: _____

PART II (Cont)

D. PROPULSION SYSTEM CONTROLS

1. GENERAL

(a) WHAT PROVISION IS MADE FOR FINE ADJUSTMENT OF CONTROLS REQUIRING THIS FEATURE?

(b) WHAT PROVISION IS MADE FOR ADJUSTING THE FRICTION OF THE PRIMARY ENGINE CONTROLS?

2. CONTROL LEADS

(a) WHAT TYPE CONTROL LEADS ARE PROVIDED? _____

(b) WHAT PROVISION IS MADE IN CONTROL LEADS TO WITHSTAND VIBRATION AND ENGINE MOVEMENT WITHOUT CHANGE IN SETTING? _____

(c) ARE CONTROL LEADS FREE FROM INTERFERENCE WITH EACH OTHER AND WITH OTHER PARTS OF THE AIRCRAFT UNDER CONDITIONS OF VIBRATION AND DEFLECTION? _____

_____ IF NOT, DESCRIBE PROBLEM? _____

(d) ARE CONTROL LEADS, ESPECIALLY CABLE TYPE, ARRANGED FOR EASE OF INSPECTION AND REPAIR? _____ IF NOT, WHY? _____

3. WHAT MEANS ARE PROVIDED IN THE COCKPIT FOR CONTROL OF COOLING AIRFLOW? _____

4. WHAT MEANS ARE PROVIDED IN THE COCKPIT FOR CONTROL OF COOLING AIR THROUGH THE OIL COOLER? _____

PART II (Cont)

D. PROPULSION SYSTEM CONTROLS (Cont)

5. LIST COCKPIT ELECTRICAL SWITCHES AND MECHANICAL PUSH-PULLS, ETC. REQUIRED FOR ENGINE OPERATION? _____

6. REMARKS

Checked by: _____

Date: _____

PART II (Cont)E. STARTING SYSTEM

1. WHAT TYPE STARTER IS USED? _____
 - (a) WHAT MANUFACTURER? _____
2. ARE BOOSTER DEVICES PROPERLY MOUNTED? _____
3. WHAT TYPE PRIMING SYSTEM IS USED? _____
 - (a) IS IT FURNISHED WITH THE ENGINE? _____
 - (b) DOES ARRANGEMENT OF PRIMER AND STARTER SWITCHES PERMIT SIMULTANEOUS OPERATION WITH ONE HAND? _____ IF NOT, DESCRIBE WHAT IS REQUIRED ? _____

4. WHAT MEANS ARE PROVIDED FOR SUPPLYING HEAT FOR STARTING THE ENGINE? _____

5. AIR TURBINE STARTERS
 - (a) DOES THE PNEUMATIC NIPPLE CONNECTION AT THE SKIN OF THE AIRPLANE CONFORM TO THE STANDARD NAVY-AIR FORCE REQUIREMENTS TYPE? _____
 - (b) IS THE PNEUMATIC NIPPLE CONNECTION LOCATED IN SUCH A MANNER TO PROVIDE EASY ACCESS BY GROUND CREWS? _____
 - (c) IS THE AIR DUCTING FROM THE PNEUMATIC NIPPLE CONNECTION TO THE STARTER INSTALLED WITH A MINIMUM LENGTH, AND A MINIMUM NUMBER OF BENDS IN ORDER TO AVOID EXCESSIVE PRESSURE DROPS THROUGHOUT THE SYSTEM? _____ DESCRIBE? _____

 - (d) IS THE STARTER AIR INLET DUCTING INSTALLED IN SUCH A MANNER SO AS TO NOT EXERT EXCESSIVE LEADS AND MOMENTS ON THE STARTER INLET SCROLL WHEN THE STARTER SYSTEM IS ENERGIZED? _____ DESCRIBE? _____

 - (e) IS THE REQUIRED ELECTRICAL CONNECTION FOR THE STARTING SYSTEM PROVIDED IN THE SAME AREA AS THE PNEUMATIC NIPPLE CONNECTION? _____ IF NOT, WHERE IS IT? _____

PART II (Cont)

E. STARTING SYSTEM (Cont)

- (f) IS A SATISFACTORY START SWITCH PROVIDED IN THE COCKPIT FOR COMPLETE CONTROL OF THE STARTING CYCLE BY THE PILOT? _____
DOES THE CIRCUIT PROVIDE FOR AUTOMATIC SHUTOFF OF THE AIR SUPPLY WHEN THE STARTER CENTRIFUGAL SWITCH IS ACTUATED? _____
CAN THE PILOT ABORT THE START AT HIS OPTION, DURING ANY PART OF THE START CYCLE? _____

6. HYDRAULIC STARTERS

- (a) ARE THE PRESSURE AND RETURN LINES CLEARLY MARKED OR SIZE CODED TO PREVENT IMPROPER CONNECTING? _____
- (b) ARE THE HYDRAULIC CONNECTIONS LOCATED IN SUCH A MANNER TO PROVIDE EASY ACCESS BY GROUND CREWS? _____
- (c) ARE DRAINS PROVIDED? _____
- (d) ARE OVERBOARD DRAINS PROVIDED? _____

- 7. IS SPACE PROVIDED FOR A GTS? _____
WHAT ARE THE FEATURES OF THIS INSTALLATION? _____

8. REMARKS

Checked by: _____

Date: _____

PART II (Cont)F. COOLING SYSTEM

1. AIR DUCTS

(a) WILL DUCTS AND CONNECTION PERMIT EASE OF INSPECTION, REPLACEMENT AND REPAIR? DESCRIBE? _____

(b) WHAT MEANS ARE PROVIDED IN AIR DUCTS TO PREVENT ACCUMULATION OF WATER, ETC? _____

(c) LIST THE FOLLOWING INFORMATION FOR ENGINE COOLING AIR DUCTS?

<u>ITEM COOLED</u>	<u>SIZE</u>	<u>SHAPE</u>	<u>QUANTITY</u>	<u>LOCATION</u>
--------------------	-------------	--------------	-----------------	-----------------

(a) ARE COOLING AIR INLET DUCTS REQUIRED AND PROVIDED FOR OIL COOLERS? _____

(1) ARE COOLING AIR EXIT DUCTS REQUIRED AND PROVIDED FOR OIL COOLERS? _____

(2) IF EXIT DUCTS ARE NOT PROVIDED, WHAT PROVISION IS MADE FOR EXHAUSTING THE COOLING AIR? _____

(a) ARE COOLING AIR INLET DUCTS REQUIRED AND PROVIDED FOR INTERCOOLERS? _____

(1) ARE COOLING AIR EXIT DUCTS REQUIRED AND PROVIDED FOR INTERCOOLERS? _____

(2) IF EXIT DUCTS ARE NOT PROVIDED, WHAT PROVISION IS MADE FOR EXHAUSTING THE COOLING AIR? _____

2. WHAT MEANS ARE PROVIDED TO INSURE ADEQUATE COOLING OF ELECTRICAL GENERATORS, MAGNETOES, SPARK PLUG ELBOWS, ETC? _____

3. WHAT MEANS ARE PROVIDED TO COOL THE EXHAUST SYSTEM? _____

PART II (Cont)

F. COOLING SYSTEM (Cont)

4. STATE MAX CONTINUOUS AND MAX SHORT TERM COOLING TEMPERATURES FOR MAJOR ENGINE AND AIRFRAME SUPPLIED UNITS LOCATED IN THE NACELLE (SUCH AS ELECTRICAL POWER SOURCE STARTER, HYDRAULIC PUMPS, ETC.)? _____

5. REMARKS

Checked by: _____

Date: _____

PART II (Cont)G. INDUCTION SYSTEM (RECIP. ENG.)

1. GENERAL

- (a) ATTACH PAGES OF DESCRIPTIVE MATERIAL AND SCHEMATIC FROM MOCKUP BROCHURE, NOTING CHANGES? _____
- (b) WHAT MEANS ARE PROVIDED TO PERMIT INDUCTION SYSTEM OPERATION UNDER ICING CONDITIONS? _____
- (c) IS SOURCE OF ALTERNATE AIR ADEQUATELY PROTECTED FROM ENTRANCE OF RAIN, SNOW, ETC.? _____
- (d) WHAT PROVISION IS MADE IN PREHEATER INSTALLATIONS FOR DISSIPATING HEAT WITH CONTROL IN FULL COLD POSITION? _____

2. INTAKE DUCTS

- (a) LIST FOLLOWING INFORMATION FOR INTAKE DUCT ENTRANCES?

<u>SIZE</u>	<u>SHAPE</u>	<u>QUANTITY</u>	<u>LOCATION</u>
-------------	--------------	-----------------	-----------------

- (b) WILL INTAKE DUCTS AND CONNECTIONS PERMIT EASE OF INSPECTION, REPLACEMENT, AND REPAIR? _____

3. INDUCTION AIR FILTERS

- (a) IS AN INDUCTION AIR FILTER REQUIRED AND PROVIDED? _____
- (b) WHAT IS ITS CAPACITY? _____
- (c) WHERE IS IT LOCATED? _____
- (d) ARE PROVISIONS (LESS FILTER ELEMENTS) INTEGRAL WITH THE AIRCRAFT? _____
- (1) IF NOT, DOES THE COMPLETE ALTERNATE INSTALLATION PERMIT EASY AND RAPID INCORPORATION? _____
- (e) WILL ALL INDUCTION AIR POSITIVELY PASS THROUGH THE FILTER DURING GROUND AND TAKE-OFF OPERATION? _____
- (f) HOW CAN THE INDUCTION AIR FILTER BE BYPASSED TO AVOID LOSS OF RAM IN FLIGHT? _____

PART II (Cont)

G. INDUCTION SYSTEM (RECIP. ENG.) (Cont)

4. INTERCOOLERS

(a) LIST THE FOLLOWING INFORMATION FOR INTERCOOLERS?

<u>TYPE</u>	<u>SIZE</u>	<u>QUANTITY</u>	<u>LOCATION</u>
-------------	-------------	-----------------	-----------------

5. TURBOSUPERCHARGERS

(a) WHAT TYPE TURBOSUPERCHARGER IS PROVIDED? _____

(b) WHAT TYPE AUTOMATIC CONTROL IS PROVIDED? _____

(1) DOES CONTROL GOVERN ALL SUPERCHARGER STAGES? _____

(c) WHERE IS TURBOSUPERCHARGER LOCATED? _____

6. REMARKS

Checked by: _____

Date: _____

PART II (Cont)

H. INDUCTION SYSTEM (TURBO ENG.)

1. GENERAL

- (a) ATTACH PAGES OF DESCRIPTIVE MATERIAL AND SCHEMATIC FROM MOCKUP BROCHURE, NOTING CHANGES?
- (b) WHAT MEANS ARE PROVIDED FOR ENGINE ICE PREVENTION? _____

2. INTAKE DUCTS

- (a) WHAT TYPE OF INLETS ARE PROVIDED (FUSELAGE NOSE, NACELLE NOSE, WING LEADING EDGE, SCOOP, OR SUBMERGED)? _____
- (b) ARE COVERS PROVIDED TO PREVENT FOREIGN OBJECTS FROM ENTERING INDUCTION SYSTEM WHEN THE AIRCRAFT IS ON THE GROUND? _____
- (c) IN MULTIENGINE AIRCRAFT, ARE MEANS FOR CLOSING INLET OF DUCTS FOR CRUISING CONDITION PROVIDED? _____
- (d) WHAT MEANS ARE PROVIDED FOR VARYING INLET AREA? _____

- (e) ARE ENGINE INLET SCREENS PROVIDED? _____ ARE THEY RETRACTABLE? _____
- (f) IS THERE AN ALTERNATE AIR SOURCE? _____
- (g) ARE THERE ANY PROVISIONS FOR LESSENING FOREIGN OBJECT DAMAGE TO THE ENGINE? _____
_____ DESCRIBE? _____

3. REMARKS

Checked by: _____

Date: _____

PART II (Cont)I. LUBRICATING SYSTEM

1. GENERAL

- (a) WHAT PROVISION IS MADE FOR PREVENTING OIL SEEPAGE INTO THE ENGINE DURING SHUT-DOWN? _____
- (b) IS AN OIL DILUTION SYSTEM PROVIDED? _____
- (c) IS TURBO SUPERCHARGER EQUIPPED WITH A SEPARATE OIL SYSTEM? _____
- (d) WHAT PROVISIONS ARE MADE FOR POSITIVE OIL SUPPLY TO ENGINES UNDER CONDITIONS OF NEGATIVE ACCELERATIONS/ZERO "G"? _____

- (e) WHAT MEANS ARE PROVIDED TO MAINTAIN OIL IN A FLUID STATE IF RESTARTS ARE REQUIRED UNDER CONDITIONS OF EXTREME COLD (HIGH ALTITUDE CRUISE, ETC.)? _____

- (f) WHAT MEANS ARE PROVIDED FOR SUPPLYING HEAT TO THE OIL TANKS? _____

- (g) IS THE OIL SYSTEM COMPATIBLE FOR 1100 AND 1065 OIL (RECIP. ENGINES ONLY)? _____
_____ FOR MIL-L-7808 AND MIL-L-23699 (TURBINES ONLY)? _____

- (h) ARE EMERGENCY SHUT OFF VALVES PROVIDED? _____
- (i) HOW ARE SHUT OFF VALVES INTERCONNECTED WITH OTHER SYSTEM SHUT OFFS? _____

- (j) IS PRESSURE OILING PROVIDED? _____
- (k) WHAT COUPLINGS ARE USED? _____
- (l) IS OIL LEVEL OR QUANTITY INDICATION PROVIDED? _____ DESCRIBE? _____

2. OIL TANKS

- (a) WHERE ARE OIL TANKS LOCATED? _____
- (1) IS LOCATION SATISFACTORY WITH REGARD TO OIL PUMP INLET? _____

PART II (Cont)

I. LUBRICATING SYSTEM (Cont)

(b) WHAT TYPE FILLER UNITS ARE PROVIDED FOR THE TANKS? _____

(1) ARE PROVISIONS MADE TO INSURE FILLER UNIT CAPS ARE IN PLACE AND SECURE? _____

(2) ARE SCUPPERS AND DRAINS PROVIDED? _____

(c) IS OIL TANK SUMP DRAINABLE AND CLEANABLE? _____

(d) IS OIL TANK DESIGNED FOR QUICK WARMUP? _____

(e) ARE OIL LINE CONNECTIONS ON THE TANK LOCATED PROPERLY? _____

(f) HOW ARE OIL TANKS VENTED? _____

(g) HOW IS SERVICE OIL TANK CAPACITY INDICATED ON THE GROUND? _____

(1) HOW INDICATED IN FLIGHT (ESPECIALLY IMPORTANT IN OIL SYSTEM EMPLOYING
TRANSFER SYSTEMS)? _____

(h) IS AN AUXILIARY OIL TANK PROVIDED? _____

(1) WHAT MEANS ARE PROVIDED FOR MAINTAINING AUXILIARY OIL IN A FLUID STATE OF
TRANSFER? _____

(i) WHAT PROVISION IS MADE FOR ACCESS TO EACH TANK? _____

3. OIL SYSTEM DRAINS

(a) WHERE ARE OIL SYSTEM DRAINS LOCATED? _____

(b) WILL OIL DRAIN CLEAR OF AIRCRAFT STRUCTURE? _____

(c) IS MAIN DRAIN EQUIPPED FOR CONNECTION OF DRAIN HOSE? _____

4. OIL COOLERS

(a) LIST THE FOLLOWING INFORMATION FOR COOLERS?

<u>TYPE</u>	<u>SIZE</u>	<u>QUANTITY</u>	<u>LOCATION</u>

PART II (Cont)

I. LUBRICATING SYSTEM (Cont)

4. (Cont)

(b) WHAT OIL TEMPERATURE CONTROL IS PROVIDED? _____

(c) IS CONTROL AUTO OR MANUAL, OR DOES IT COMBINE THESE TWO FEATURES? _____

_____ DESCRIBE? _____

(d) IS OIL SYSTEM INTEGRAL WITH ENGINE? _____

5. MISCELLANEOUS

(a) ARE OIL LINES PROTECTED AND SUPPORTED TO PREVENT DAMAGE BY PERSONNEL DURING FLIGHT AND SERVICING OPERATIONS? _____

(b) IS CLEARANCE BETWEEN OIL LINE AND HOT DUCTS AT LEAST FOUR INCHES? _____

IF NOT, WHAT PROTECTION TO LINES IS PROVIDED? _____

(c) CAN ALL FITTINGS AND CONNECTIONS IN OIL LINES BE READILY INSPECTED? _____

6. REMARKS

Checked by: _____

Date: _____

PART II (Cont)J. FUEL SYSTEM

1. GENERAL

(a) ARE PROVISIONS REQUIRED AND PROVIDED TO INSURE PROPER FUEL SYSTEM OPERATION AT HIGH ALTITUDE? _____ WHAT ARE THEY? _____

(b) LIST THE FOLLOWING INFORMATION FOR THE FUEL FLOWMETERS?

<u>TYPE</u>	<u>CAPACITY</u>	<u>QUANTITY</u>	<u>LOCATION</u>
_____	_____	_____	_____
_____	_____	_____	_____

(c) WHAT MEANS ARE PROVIDED FOR SHUTTING OFF FUEL FROM THE ENGINE(S) IN CASE OF HAZARDOUS FIRE? _____ WHERE LOCATED? _____

(d) IN TURBO ENGINES, IS THE ENGINE COMPRESSOR AIR UTILIZED TO TRANSFER FUEL? _____
_____ IS THE AIR REGULATED? _____ ARE ZERO LEAK CHECK VALVES
UTILIZED? _____

(e) ARE PROVISIONS MADE FOR INFLIGHT REFUELING? _____

(1) IS THE PROBE PROPERLY LOCATED? _____ WHERE? _____

(2) IS THE PROBE RETRACTABLE? _____

(3) IS ANTI-ICING PROVIDED? _____

(f) IS FUEL DUMPING SYSTEM PROVIDED? _____ WHAT TYPE? _____
WHERE ARE DUMP CHUTES? _____

(g) WHAT IS FUEL DUMPING RATE AND TIME TO DUMP? _____ WILL THE FUEL DUMPING
ON THE AIRCRAFT? _____ WHERE? _____

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)PART II (Cont)J. FUEL SYSTEM (Cont)

2. FUEL TANKS

- (a) WHAT TYPE FILTER UNITS ARE PROVIDED FOR THE TANKS? _____
WHERE ARE THEY LOCATED? _____
ARE GROUNDING JACKS PROVIDED? _____
- (1) ARE PROVISIONS MADE TO INSURE THE PRESSURE AND/OR GRAVITY FILLER UNIT CAPS ARE IN PLACE AND SECURE? _____
- (2) ARE FILLER UNITS LOCATED TO PERMIT ALL TANKS TO BE COMPLETELY FILLED ON THE GROUND? _____
- (3) ARE FILLER UNITS LOCATED SO NO FIRE HAZARD EXISTS FROM SPILLAGE DURING FUELING WITH THE ENGINE(S) RUNNING? _____
- (4) ARE SCUPPERS AND DRAINS PROVIDED TO PREVENT FUEL SPILLED DURING FILLING OPERATIONS FROM DAMAGING SELF SEALING TANKS OR CAUSING A FIRE HAZARD? _____

- (5) ARE PRESSURE FUELING PRE-CHECKS PROVIDED? _____
- (a) HOW MANY? _____
- (b) WHERE? _____
- (c) IS MASS LOADING PROVIDED? _____
- (d) WHAT TYPE PRE-CHECKS (ELECTRIC, HYDRAULIC)? _____
- (b) HOW ARE FUEL TANKS VENTED? _____

- (1) ARE MEANS PROVIDED TO PREVENT FUEL SPILLAGE AND SYPHONING THROUGH THE VENTS? _____
- (2) ARE VENTS SIZED FOR MAX FUELING VALVE FLOW? _____
- (3) IS A VENT MONITOR GAGE PROVIDED ON THE GROUND FUELING PANEL? _____
- (c) WILL TANKS PERMIT PROPER FUEL AVAILABILITY WITHIN REQUIRED FLIGHT ATTITUDES? _____

- (d) WHAT TYPE PRESSURE FUELING CONNECTIONS ARE PROVIDED? _____
- (e) WHAT MEANS ARE PROVIDED FOR RAPID DEFUELING OF TOTAL FUEL? _____

PART II (Cont)J. FUEL SYSTEM (Cont)

- (f) WHAT MEANS ARE PROVIDED FOR INDICATING THE QUANTITY OF FUEL IN EACH TANK IN FLIGHT? _____
- (g) IS COUNTER-POINTER QUANTITY GAGE PROVIDED? _____
- (h) DESCRIBE QUANTITY PRESENTATION IN COCKPIT? _____

3. FUEL SYSTEM DRAINS
- (a) HOW MANY DRAINS? _____
- (b) WHERE ARE FUEL SYSTEM DRAINS LOCATED? _____

- (c) WHAT MEANS ARE PROVIDED FOR DRAINING FUEL LINE STRAINERS? _____

- (d) WHAT IS MICRON SIZE OF STRAINER? _____
- (e) IS ANTI-ICING PROVIDED FOR THE STRAINER? _____ IS IMPENDING BY-PASS INDICATION PROVIDED IN THE COCKPIT? _____ WHERE? _____

- (f) WHERE IS FUEL LINE STRAINER LOCATED? _____

- (g) IN TURBO ENGINES PROVIDED WITH A MANIFOLD SUMP VALVE AND COMBUSTION CHAMBER DRAIN VALVE. IS THE FUEL COLLECTED? _____ IF SO, HOW IS IT DRAINED FROM THE COLLECTOR? _____

- (h) IS FUEL CONTROL DRAIN A SEPARATE OVERBOARD LINE? _____ ARE ANY DRAINS MANIFOLDED TOGETHER? _____ IF SO, WHICH ONE? _____
_____ IS THE MANIFOLD AT THE SKIN OR ELSEWHERE? _____
4. FUEL LINES
- (a) ARE FUEL LINES ROUTED AS DIRECTLY AS PRACTICABLE? _____ IF NOT, DESCRIBE _____

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)

PART II (Cont)

J. FUEL SYSTEM (Cont)

(b) IS GRADIENT SUCH THAT LOCALIZED HIGH SUCTION POINTS ARE AVOIDED AND VAPOR LOCKING TENDENCIES MINIMIZED? _____ DEFINE PROBLEM AREAS? _____

(c) ARE FUEL LINES SO LOCATED OR PROTECTED THAT DAMAGE DURING SERVICING OR OVERHAUL IS ELIMINATED? _____ DEFINE PROBLEM AREAS? _____

(d) ARE MAIN FEED LINES SELF SEALING? _____ IF NOT, ARE THEY PROTECTED BY THE AIRCRAFT STRUCTURE? _____

5. TRANSFER FUEL PUMPS

(a) WHAT TYPE AND HOW MANY FUEL PUMPS ARE PROVIDED? _____

(b) WHERE ARE THEY LOCATED? _____

(c) IS LOCATION SUCH THAT PUMPS WILL DRAW FUEL FROM ALL TANKS AND WITH MINIMUM INLET SUCTION AT THE PUMP? _____

6. FIXED FUEL TANKS

(a) ARE INTEGRAL TANKS USED? _____ HOW MANY ARE THERE? _____
WHERE LOCATED? _____

(b) ARE BLADDER CELLS EMPLOYED? _____ HOW MANY ARE THERE? _____
WHERE LOCATED? _____
HOW MANY SELF-SEALING? _____ WHERE LOCATED? _____

(c) WHAT PROVISION IS MADE FOR ACCESS TO EACH TANK? _____

(d) CAN EACH SELF SEALING OR FLEXIBLE TANK BE INSTALLED WITHOUT EXCESSIVE DEFORMATION? _____

(e) DOES TANK SUPPORT CAVITY HAVE ADEQUATE DRAINAGE PROVISIONS? _____

PART II (Cont)J. FUEL SYSTEM (Cont)

- (f) CAN EACH TANK BE INSTALLED WITHOUT INTERFERING WITH OTHER TANKS? _____

- (g) IS THERE AN INSPECTION DOOR ON TOP OF EACH SELF SEALING OR FLEXIBLE TANK? _____

- (h) CAN ENTIRE INTERIOR OF EACH TANK BE READILY INSPECTED THRU TANK INSPECTION DOORS WHEN TANKS ARE INSTALLED IN THE AIRCRAFT? _____

- (i) ARE AS MANY TANK FITTINGS AS PRACTICABLE MOUNTED ON INSPECTION DOORS OF SELF SEALING OR FLEXIBLE TANKS? _____

- (j) WHAT ACCESS IS PROVIDED TO INSPECT TANK FITTINGS? _____

7. ARE EXTERNAL AUXILIARY FUEL TANKS USED? _____ WHERE MOUNTED? _____

8. MISCELLANEOUS
- (a) ARE FUEL LINES PROTECTED AND SUPPORTED PROPERLY TO PREVENT DAMAGE BY PERSONNEL DURING FLIGHT AND SERVICING OPERATIONS? _____ IF NOT, DESCRIBE PROBLEM AREA? _____

- (b) CAN ALL FITTINGS AND CONNECTIONS IN FUEL LINES BE READILY INSPECTED FOR LEAKAGE? _____ IF NOT, GIVE DETAILS? _____

- (c) IS CLEARANCE BETWEEN FUEL LINES AND HOT DUCTS AT LEAST FOUR INCHES? _____
_____ IF NOT, HOW ARE LINES PROTECTED FROM HEAT? _____

PART II (Cont)

J. FUEL SYSTEM (Cont)

9. AIR REFUELING SYSTEM

(a) INSTALLATION: CAN THE TANKER PACKAGE BE INSTALLED READILY? _____

10. VALVES AND SWITCHES

(a) HOW MANY LEVEL CONTROLS ARE USED? _____ WHAT MAKE? _____

(b) DO MOTOR OPERATED VALVES INCORPORATE STRAY ELECTRICAL VOLTAGE FIXES? _____

(c) ARE PRESSURE SWITCHES MOUNTED SO THAT THEY ARE NOT LOW POINTS TO CATCH AND
RETAIN MOISTURE? _____

(d) IS THE MAIN FUEL SHUT OFF VALVE MANUAL? _____
IF NOT, WHAT? _____

(e) ARE VALVES AND SWITCHES READILY ACCESSIBLE FOR MAINTENANCE? _____

11. COCKPIT CONTROLS

(a) WHAT FUEL SYSTEM CONTROLS ARE IN THE COCKPIT? _____

(b) ARE LEVER LOCK SWITCHES USED? _____
WHERE? _____

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)

PART II (Cont)

J. FUEL SYSTEM (Cont)

12. REMARKS

Checked by: _____

Date: _____

PART II (Cont)K. AUXILIARY POWER PLANT

1. GENERAL

- (a) ARE ADEQUATE STARTING PROVISIONS MADE AT THE POWER UNIT? _____ AT ENGINEER'S STATION? _____
- (b) ARE OIL AND FUEL DRAINS PROVIDED? _____
- (1) ARE OVERBOARD DRAINS PROVIDED? _____
- (c) IS FUEL CUTOFF VALVE PROPERLY INSTALLED? _____
- (d) LIST THE FOLLOWING INFORMATION FOR INLET AND OUTLET DUCTS?
- | | <u>SIZE</u> | <u>LENGTH</u> | <u>LOCATION</u> |
|-------------|-------------|---------------|-----------------|
| INLET DUCT | _____ | _____ | _____ |
| OUTLET DUCT | _____ | _____ | _____ |
- (e) IS FIREPROOF ENCLOSURE PROVIDED? _____

2. POWER UNIT

- (a) LIST THE FOLLOWING INFORMATION FOR AUXILIARY POWER UNIT INCLUDING AIR AND GAS TURBINE MOTORS?
- | <u>TYPE</u> | <u>QUANTITY</u> | <u>LOCATION</u> |
|-------------|-----------------|-----------------|
| | | |
- (b) WHAT ACCESSORIES ARE DRIVEN BY THE AUXILIARY POWER UNIT (BY TYPE AND CAPACITY)?

- (c) WILL HOISTING PROVISIONS, HATCHES, ETC., PERMIT EASY AND RAPID INSTALLATION AND REMOVAL OF THE POWER UNIT? _____
- (d) IS ACCESS PROVIDED TO PERMIT SERVICING OF ALL NECESSARY PARTS OF THE UNIT? _____
- (e) CAN THE GENERATORS OR ALTERNATORS BE PARELLEL WITH THE ENGINE, THE ENGINE DRIVEN GENERATORS OR ALTERNATORS? _____

3. REMARKS

Checked by: _____

Date: _____

PART II (Cont)

L. ELECTRIC POWER SYSTEM

1. THE POWER SUPPLY, MAJOR ITEMS HAVE BEEN MOCKED UP AND CHECKED FOR, TYPE, MOUNTING, AND ADEQUACY AS FOLLOWS?

(a) GENERATOR(S) _____

(b) INVERTER(S) _____

(c) CONVERTER(S) _____

(d) BATTERY(IES) _____

(e) CONTROL PANEL(S) _____

(f) _____

2. ARE THE ABOVE ITEMS ACCESSIBLE FOR MAINTENANCE REPLACEMENT? _____

3. ARE THE ABOVE ITEMS PROVIDED ADEQUATE COOLING? _____

4. IS BATTERY QUICK DISCONNECTED AT GROUND LEVEL BY AVERAGE HEIGHT SERVICE PERSONNEL FOR AN EMERGENCY DISCONNECT? _____

5. HAS THE BATTERY INTAKE AND EXHAUST VENTING USED? _____

6. IS GENERATOR INTAKE AND EXHAUST COOLING ADEQUATELY PROVIDED FOR? _____

7. WHAT MEANS IS PROVIDED FOR ADEQUATELY COOLING GENERATOR AND OTHER ELECTRIC POWER ACCESSORIES? _____

PART II (Cont)

L. ELECTRIC POWER SYSTEM (Cont)

8. IS AREA SURROUNDING GENERATOR TERMINALS AND COOLING DUCTS SUFFICIENTLY OPEN TO PREVENT DAMAGE TO THE TERMINALS AND DUCTS DURING REMOVAL AND SERVICING OF GENERATOR OR NEARBY ACCESSORIES? _____

LOCATION OF TERMINALS INTAKE AND EXHAUST DUCTS? _____

9. GENERATOR MOUNTING HOLES USED ROUND, KEYHOLE SLOTS OR QUICK DISCONNECT? _____

10. ROUTING OF GENERATOR FEEDERS? _____

11. ROUTING OF TUBING TO SUPPORT CSD'S AND LIQUID COOLED GENERATORS? _____

12. REMARKS

Checked by: _____

Date: _____

PART II (Cont)M. TRANSMISSIONS

1. TRANSMISSION SYSTEM (CONVENTIONAL DESIGN EMPLOYING ANTI-TORQUE ROTOR)

(a) DESCRIPTION

- (1) ATTACH PAGES OF DESCRIPTIVE MATERIAL AND SCHEMATIC(S) FROM MOCKUP BROCHURE NOTING CHANGES?

(b) MAIN GEARBOX

- (1) CAN MAIN GEARBOX BE READILY REMOVED/INSTALLED AS A UNIT WITH ACCESSORIES IN PLACE? _____

- (2) ARE HOISTING PROVISIONS ADEQUATE? _____

- (3) ARE SPECIAL ADAPTERS, SLINGS, OR OTHER HANDLING EQUIPMENT REQUIRED? _____

- (4) DO AIRFRAME ATTACHMENT FITTINGS PERMIT RAPID REMOVAL/INSTALLATION? _____
-
- ARE ATTACHING BOLTS EASILY ACCESSIBLE FOR TORQUEING? _____
-
- AND INSPECTION? _____

- (5) HOW MANY DISCONNECTS?

AIRFRAME _____

DYNAMIC _____

FLUID _____

ELECTRICAL _____

- (6) IS A SUITABLE OIL QUANTITY INDICATOR PROVIDED? _____ TYPE? _____
-
- CAN IT BE READ FROM THE DECK? _____

- (7) CAN OIL QUANTITY INDICATOR BE MONITORED BY MECHANIC DURING SERVICING? _____

- (8) IS OIL FILLER READILY ACCESSIBLE AND PROPERLY PLACARDED? _____

- (9) IS OIL FILLER PROVIDED WITH A SUITABLE CLOSING DEVICE? _____
-
- (FINGER) STRAINER? _____

- (10) IS GEARBOX EQUIPPED WITH SUITABLE VENT? _____ VENT FILTER? _____

- (11) ARE REMOTE INDICATING CHIP DETECTORS EASILY ACCESSIBLE FOR REMOVAL AND INSPECTION? _____

- (12) ARE LUBE OIL STRAINERS EASILY ACCESSIBLE FOR REMOVAL AND INSPECTION? _____

- (13) ARE EXTERNAL LUBE OIL LINES AND COMPONENTS ADEQUATELY SUPPORTED AGAINST VIBRATION OR CHAFFING DURING OPERATION OR DAMAGE DURING MAINTENANCE AND SERVICING? _____

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)PART II (Cont)M. TRANSMISSIONS (Cont)

(b) (Cont)

- (14) ARE SUITABLE SCUPPERS AND DRAINS PROVIDED WHICH DRAIN CLEAR OF AIRCRAFT? _____
- (15) HAVE SATISFACTORY ACCESS PROVISIONS BEEN MADE TO FACILITATE COMPLIANCE WITH ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____
- (16) ARE PROVISIONS MADE FOR OIL DRAINING? _____ DRAIN HOSE CONNECTION? _____

(c) INTERMEDIATE GEARBOX

- (1) CAN INTERMEDIATE GEARBOX BE READILY REMOVED/INSTALLED? _____
- (2) ARE HOISTING PROVISIONS REQUIRED? _____ ADEQUATE? _____
- (3) ARE SPECIAL ADAPTERS, SLINGS, OR OTHER HANDLING EQUIPMENTS REQUIRED? _____
- (4) DO AIRFRAME ATTACHMENT FITTINGS PERMIT RAPID REMOVAL/INSTALLATION? _____
ARE ATTACHING BOLTS EASILY ACCESSIBLE FOR INSPECTION/TORQUEING? _____
- (5) IS A SUITABLE OIL QUANTITY INDICATOR PROVIDED? _____ TYPE? _____
CAN IT BE READ FROM THE DECK? _____
- (6) CAN OIL QUANTITY INDICATOR BE MONITORED BY MECHANIC DURING SERVICING? _____
- (7) IS OIL FILLER READILY ACCESSIBLE AND PROPERLY PLACARDED? _____
- (8) IS OIL FILLER PROVIDED WITH SUITABLE CLOSING DEVICE AND (FINGER) STRAINER?

- (9) IS GEARBOX EQUIPPED WITH SUITABLE VENT? _____ VENT FILTER? _____
- (10) ARE REMOTE INDICATING CHIP DETECTORS READILY ACCESSIBLE FOR INSPECTION? _____
- (11) ARE SUITABLE SCUPPERS AND DRAINS PROVIDED? _____
- (12) HAVE PROVISIONS BEEN MADE FOR DRAINING OIL? _____ DRAIN HOSE CONNECTIONS?

- (13) HAS SATISFACTORY ACCESS BEEN PROVIDED TO FACILITATE COMPLIANCE WITH ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____

(d) TAIL GEARBOX

- (1) CAN TAIL GEARBOX BE READILY REMOVED/INSTALLED? _____
- (2) ARE HOISTING PROVISIONS REQUIRED? _____ ADEQUATE? _____

PART II (Cont)M. TRANSMISSIONS (Cont)

(d) (Cont)

- (3) ARE SPECIAL ADAPTERS, SLINGS OR OTHER HANDLING EQUIPMENTS REQUIRED? _____
- (4) DO AIRFRAME ATTACHMENT FITTINGS PERMIT RAPID REMOVAL/INSTALLATION? _____
ARE ATTACHING BOLTS EASILY ACCESSIBLE FOR INSPECTION/TORQUEING? _____
- (5) IS A SUITABLE OIL QUANTITY INDICATOR PROVIDED? _____ TYPE? _____
CAN IT BE READ FROM THE DECK? _____
- (6) CAN OIL QUANTITY INDICATOR BE MONITORED BY MECHANIC DURING SERVICING? _____
- (7) IS OIL FILLER READILY ACCESSIBLE AND PROPERLY PLACARDED? _____
- (8) IS OIL FILLER PROVIDED WITH SUITABLE CLOSING DEVICE AND (FINGER) STRAINER?

- (9) IS GEARBOX EQUIPPED WITH SUITABLE VENT? _____ VENT FILTER? _____
- (10) ARE REMOTE INDICATING CHIP DETECTORS READILY ACCESSIBLE FOR INSPECTION? _____
- (11) ARE SUITABLE SCUPPERS AND DRAINS PROVIDED? _____
- (12) HAVE PROVISIONS BEEN MADE FOR DRAINING OIL? _____ DRAIN HOSE
CORRECTION? _____
- (13) HAS SATISFACTORY ACCESS BEEN PROVIDED TO FACILITATE COMPLIANCE WITH
ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____

(e) COMBINING GEARBOX

- (1) IS COMBINING GEARSECTION INTEGRAL WITH MAIN GEARBOX OR IS IT A SEPARATE
REMOTE GEARBOX? INTEGRAL? _____ SEPARATE? _____ IF INTEGRAL,
DISREGARD ITEMS (2) THROUGH (17).
- (2) CAN COMBINING GEARBOX BE READILY REMOVED/INSTALLED AS A UNIT WITH ACCESSORIES
IN PLACE? _____
- (3) ARE HOISTING PROVISIONS ADEQUATE? _____
- (4) ARE SPECIAL ADAPTERS, SLINGS, OR OTHER HANDLING EQUIPMENT REQUIRED? _____
- (5) DO AIRFRAME ATTACHMENT FITTINGS PERMIT RAPID REMOVAL/INSTALLATION? _____
ARE ATTACHING BOLTS EASILY ACCESSIBLE FOR TORQUEING? _____
AND INSPECTION? _____

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)PART II (Cont)M. TRANSMISSIONS (Cont)

(e) (Cont)

(6) HOW MANY DISCONNECTS?

AIRFRAME _____

DYNAMIC _____

FLUID _____

ELECTRICAL _____

(7) IS A SUITABLE OIL QUANTITY INDICATOR PROVIDED? _____ TYPE? _____
CAN IT BE READ FROM THE DECK? _____

(8) CAN OIL QUANTITY INDICATOR BE MONITORED BY MECHANIC DURING SERVICING? _____

(9) IS OIL FILLER READILY ACCESSIBLE AND PROPERLY FLACARDED? _____

(10) IS OIL FILLER PROVIDED WITH A SUITABLE CLOSING DEVICE? _____

(11) IS GEARBOX EQUIPPED WITH SUITABLE VENT? _____ VENT FILTER? _____

(12) ARE REMOTE INDICATING CHIP DETECTORS EASILY ACCESSIBLE FOR REMOVAL AND
INSPECTION? _____

(13) ARE LUBE OIL STRAINERS EASILY ACCESSIBLE FOR REMOVAL AND INSPECTION? _____

(14) ARE EXTERNAL LUBE OIL LINES AND COMPONENTS ADEQUATELY SUPPORTED AGAINST
VIBRATION OR CHAFFING DURING OPERATION OR DAMAGE DURING MAINTENANCE AND
SERVICING? _____(15) ARE SUITABLE SCUPPERS AND DRAINS PROVIDED WHICH DRAIN CLEAR OF THE AIRCRAFT?
_____(16) HAVE SATISFACTORY ACCESS PROVISIONS BEEN MADE TO FACILITATE COMPLIANCE WITH
ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____(17) ARE PROVISIONS MADE FOR OIL DRAINING? _____ DRAIN HOSE
CONNECTIONS? _____

(f) ACCESSORY GEARBOX

(1) IS ACCESSORY GEARSECTION INTEGRAL WITH MAIN/COMBINING GEARBOX OR IS SEPARATE
ACCESSORY GEARBOX EMPLOYED? _____ IF INTEGRAL, DISREGARD ITEMS
(2) THROUGH (17).(2) CAN ACCESSORY GEARBOX BE READILY REMOVED/INSTALLED AS A UNIT WITH ACCESSORIES
IN PLACE? _____

PART II (Cont)M. TRANSMISSIONS (Cont)

(f) (Cont)

- (3) ARE HOISTING PROVISIONS ADEQUATE? _____
- (4) ARE SPECIAL ADAPTERS, SLINGS, OR OTHER HANDLING EQUIPMENT REQUIRED? _____
- (5) DO AIRFRAME ATTACHMENT FITTINGS PERMIT RAPID REMOVAL/INSTALLATION? _____
ARE ATTACHING BOLTS EASILY ACCESSIBLE FOR TORQUING? _____
AND INSPECTION? _____
- (6) HOW MANY DISCONNECTS?
- AIRFRAME _____
- DYNAMIC _____
- FLUID _____
- ELECTRICAL _____
- (7) IS A SUITABLE OIL QUANTITY INDICATOR PROVIDED? _____ TYPE? _____
CAN IT BE READ FROM THE DECK? _____
- (8) CAN OIL QUANTITY INDICATOR BE MONITORED BY MECHANIC DURING SERVICING? _____
- (9) IS OIL FILLER READILY ACCESSIBLE AND PROPERLY PLACARDED? _____
- (10) IS OIL FILLER PROVIDED WITH A SUITABLE CLOSING DEVICE? _____
- (11) IS GEARBOX EQUIPPED WITH SUITABLE VENT? _____ VENT FILTER? _____
- (12) ARE REMOTE INDICATING CHIP DETECTORS EASILY ACCESSIBLE FOR REMOVAL AND
INSPECTION? _____
- (13) ARE LUBE OIL STRAINERS EASILY ACCESSIBLE FOR REMOVAL AND INSPECTION? _____
- (14) ARE EXTERNAL LUBE OIL LINES AND COMPONENTS ADEQUATELY SUPPORTED AGAINST
VIBRATION OR CHAFFING DURING OPERATION OR DAMAGE DURING MAINTENANCE AND
SERVICING? _____
- (15) ARE SUITABLE SCUPLERS AND DRAINS PROVIDED WHICH DRAIN CLEAR OF THE
AIRCRAFT? _____
- (16) HAVE SATISFACTORY ACCESS PROVISIONS BEEN MADE TO FACILITATE COMPLIANCE WITH
ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____
- (17) ARE PROVISIONS MADE FOR OIL DRAINING? _____
DRAIN HOSE CONNECTIONS? _____

Appendix 3 (Part II Helicopter)
to MIL-M-8650B(AS)PART II (Cont)M. TRANSMISSIONS (Cont)

(g) INPUT GEARBOX(ES)

- (1) ARE SEPARATE GEARBOXES EMPLOYED TO CHANGE DIRECTION OF DRIVE AND/OR TO PROVIDE INITIAL STAGE(S) OF GEAR REDUCTION? _____
IF REMOTELY LOCATED INPUT GEARBOXES ARE NOT PROVIDED DISREGARD ITEMS (2) THROUGH (17).
- (2) CAN INPUT GEARBOXES BE READILY REMOVED/INSTALLED AS A UNIT WITH ACCESSORIES IN PLACE? _____
- (3) ARE HOISTING PROVISIONS ADEQUATE? _____
- (4) ARE SPECIAL ADAPTERS, SLINGS, OR OTHER HANDLING EQUIPMENT REQUIRED? _____
- (5) DO AIRFRAME ATTACHMENT FITTINGS PERMIT RAPID REMOVAL/INSTALLATION? _____
ARE ATTACHING BOLTS EASILY ACCESSIBLE FOR TORQUEING? _____
AND INSPECTION? _____
- (6) HOW MANY DISCONNECTS?
AIRFRAME _____
DYNAMIC _____
FLUID _____
ELECTRICAL _____
- (7) IS A SUITABLE OIL QUANTITY INDICATOR PROVIDED? _____ TYPE? _____
CAN IT BE READ FROM THE DECK? _____
- (8) CAN OIL QUANTITY INDICATOR BE MONITORED BY MECHANIC DURING SERVICING? _____
- (9) IS OIL FILLER READILY ACCESSIBLE AND PROPERLY PLACARDED? _____
- (10) IS OIL FILLER PROVIDED WITH A SUITABLE CLOSING DEVICE? _____
- (11) IS GEARBOX EQUIPPED WITH SUITABLE VENT? _____ VENT FILTER? _____
- (12) ARE REMOTE INDICATING CHIP DETECTORS EASILY ACCESSIBLE FOR REMOVAL AND INSPECTION? _____
- (13) ARE LUBE OIL STRAINERS EASILY ACCESSIBLE FOR REMOVAL AND INSPECTION? _____
- (14) ARE EXTERNAL LUBE OIL LINES AND COMPONENTS ADEQUATELY SUPPORTED AGAINST VIBRATION OR CHAFFING DURING OPERATION OR DAMAGE DURING MAINTENANCE AND SERVICING? _____
- (15) ARE SUITABLE SCUPPERS AND DRAINS PROVIDED WHICH DRAIN CLEAR OF THE AIRCRAFT? _____

PART II (Cont)M. TRANSMISSIONS (Cont)

(g) (Cont)

- (16) HAVE SATISFACTORY ACCESS PROVISIONS BEEN MADE TO FACILITATE COMPLIANCE WITH ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____
- (17) ARE PROVISIONS MADE FOR OIL DRAINING? _____
DRAIN HOSE CONNECTIONS? _____

(h) FREEWHEELING UNITS

- (1) ARE REMOTELY LOCATED FREE WHEELING UNITS EMPLOYED? _____
IF NOT, DISREGARD ITEMS (2) THROUGH (17).
- (2) CAN FREEWHEELING UNITS BE READILY REMOVED/INSTALLED AS A UNIT WITH ACCESSORIES IN PLACE? _____
- (3) ARE HOISTING PROVISIONS ADEQUATE? _____
- (4) ARE SPECIAL ADAPTERS, SLINGS, OR OTHER HANDLING EQUIPMENT REQUIRED? _____
- (5) DO AIRFRAME ATTACHMENT FITTINGS PERMIT RAPID REMOVAL/INSTALLATION? _____
ARE ATTACHING BOLTS EASILY ACCESSIBLE FOR TORQUING? _____
AND INSPECTION? _____
- (6) HOW MANY DISCONNECTS?
AIRFRAME _____
DYNAMIC _____
FLUID _____
ELECTRICAL _____
- (7) IS A SUITABLE OIL QUANTITY INDICATOR PROVIDED? _____ TYPE? _____
CAN IT BE READ FROM THE DEXK? _____
- (8) CAN OIL QUANTITY INDICATOR BE MONITORED BY MECHANIC DURING SERVICING? _____
- (9) IS OIL FILLER READILY ACCESSIBLE AND PROPERLY PLACARDED? _____
- (10) IS OIL FILLER PROVIDED WITH A SUITABLE CLOSING DEVICE? _____
- (11) IS GEARBOX EQUIPPED WITH SUITABLE VENT? _____ VENT FILTER? _____
- (12) ARE REMOTE INDICATING CHIP DETECTORS EASILY ACCESSIBLE FOR REMOVAL AND INSPECTION? _____
- (13) ARE LUBE OIL STRAINERS EASILY ACCESSIBLE FOR REMOVAL AND INSPECTION? _____

PART II (Cont)

M. TRANSMISSIONS (Cont)

(h) (Cont)

- (14) ARE EXTERNAL LUBE OIL LINES AND COMPONENTS ADEQUATELY SUPPORTED AGAINST VIBRATION OR CHAFFING DURING OPERATION OR DAMAGE DURING MAINTENANCE AND SERVICING? _____
- (15) ARE SUITABLE SCUPPERS AND DRAINS PROVIDED WHICH DRAIN CLEAR OF THE AIRCRAFT? _____
- (16) HAVE SATISFACTORY ACCESS PROVISIONS BEEN MADE TO FACILITATE COMPLIANCE WITH ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____
- (17) ARE PROVISIONS MADE FOR OIL DRAINING? _____
DRAIN HOSE CONNECTIONS? _____

(i) CLUTCH

- (1) IS AN AUXILIARY CLUTCH INSTALLED FOR CLUTCHING/DECLUTCHING APP? _____
- (2) IS CLUTCH READILY ACCESSIBLE FOR ADJUSTMENT AND ACCOMPLISHMENT OF ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____

(j) DRIVE SHAFTING

- (1) IS ALL DRIVE SHAFTING (OIL COOLER BLOWER, HIGH-SPEED INPUT, TAIL DRIVE, ETC.) READILY ACCESSIBLE FOR INSPECTION AND ACCOMPLISHMENT OF OTHER ANTICIPATED PERIODIC MAINTENANCE REQUIREMENTS? _____
- (2) IS DRIVE SHAFTING PROTECTED FROM DIRECT IMPINGEMENT OF MOISTURE, RAIN, SALT SPRAY, ETC.? _____
- (3) ARE DRIVE SHAFTING COMPONENTS (BEARINGS, COUPLINGS, ETC.) SHIELDED FROM EFFECTS OF HIGH TEMPERATURE, CORROSSIVE EXHAUST FUMES, ETC.? _____
- (4) IS DRIVE SHAFTING PROVIDED WITH ADEQUATE VENTILATION/COOLING AS REQUIRED? _____

2. REMARKS

Checked by: _____

Date: _____

Appendix 4 to MIL-M-8650B(AS)

13 May 1969

Superseding Appendix 4 of
1 April 1960

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360

APPENDIX 4

AVIONICS - AIRCRAFT MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ AIRCRAFT

CONTRACT NO. _____ /FY _____

This AVIONICS checkoff list consists of the following parts:

PART I - ELECTRONICS (PAGES A-1 TO I-1)

PART II - ELECTRICAL DISTRIBUTION AND CONTROL (PAGE A-1)

PART III - INSTRUMENTS (PAGES A-1 TO A-5)

PART IV - NAVIGATIONAL EQUIPMENT (PAGE A-1)

FSC 6910

Prepared by: _____

Date: _____

NOTE: The abbreviation "N.A." used herein denotes "Not Applicable".

PART I - ELECTRONICS

This ELECTRONICS checkoff list consists of the following sections (cross out those sections listed below that are not applicable and omit from list):

- | | |
|-----------------------------------|--|
| A. ANTENNAS | F. RADIO ALTIMETERS, ACCESSORIES, ETC. |
| B. COMMUNICATING EQUIPMENT | G. INTERPHONE SYSTEM |
| C. NAVIGATIONAL EQUIPMENT | H. COUNTERMEASURES EQUIPMENT |
| D. RADAR | I. SPECIAL ELECTRONIC EQUIPMENTS |
| E. RADAR IDENTIFICATION EQUIPMENT | |

Checked by: _____

Date: _____

Appendix 4 to MIL-M-8650B(AS)

PART I

A. ANTENNAS

1. THE ANTENNA SYSTEMS ARE AS SKETCHED BELOW, AND AS IDENTIFIED BY LETTER. ANTENNA SWITCHING HARDWARE AND ASSOCIATED INTERFERENCE FILTERS ARE ALSO IDENTIFIED. _____

2. THE ABOVE ANTENNAS ARE LOCATED AS FOLLOWS: _____

3. ACCESSIBILITY IS PROVIDED AS FOLLOWS: _____

4. ALL ANTENNAS ARE CONTRACTOR FURNISHED EXCEPT THOSE LISTED BELOW: _____

5. THE ASSOCIATED TRANSMISSION LINE LENGTH TO EACH ANTENNA MEETS SPECIFICATION LIMITS EXCEPT AS NOTED BELOW: _____

6. REMARKS. -

Checked by: _____

Date: _____

PART I (Cont)

B. COMMUNICATING EQUIPMENT

1. THE FOLLOWING COMMUNICATING EQUIPMENT HAS BEEN MOCKED UP: _____

2. THE ABOVE EQUIPMENTS ARE LOCATED AS FOLLOWS: _____

3. ACCESSIBILITY IS PROVIDED AS FOLLOWS: _____

4. ISOLATION OF EQUIPMENT FROM NOISE INDUCING EQUIPMENT HAS BEEN ACCOMPLISHED AS FOLLOWS: _____

5. CONTROL UNITS ARE ACCESSIBLE AND FREQUENCY OR CHANNEL-MARKINGS ARE CLEARLY VISIBLE TO THE PILOT AND/OR CREW MEMBERS. LOCATIONS ARE AS FOLLOWS: _____

6. REMARKS. -

Checked by: _____

Date: _____

PART I (Cont)

C. NAVIGATIONAL EQUIPMENT

1. THE FOLLOWING NAVIGATIONAL EQUIPMENT HAVE BEEN MOCKED UP: _____

2. THE ABOVE EQUIPMENTS ARE LOCATED AS FOLLOWS: _____

3. ACCESSIBILITY IS PROVIDED AS FOLLOWS: _____

4. EMERGENCY POWER IS PROVIDED UNDER THE FOLLOWING CONDITIONS: _____

5. CONTROL UNITS ARE ACCESSIBLE AND FREQUENCY OR CHANNEL MARKINGS ARE CLEARLY VISIBLE TO THE PILOT AND/OR CREW MEMBERS. LOCATIONS ARE AS FOLLOWS: _____

6. REMARKS. -

Checked by: _____

Date: _____

PART I (Cont)

D. RADAR

1. THE FOLLOWING RADAR EQUIPMENTS HAVE BEEN MOCKED UP: _____

2. THE ABOVE EQUIPMENTS ARE LOCATED AS FOLLOWS: _____

3. ACCESSIBILITY IS PROVIDED AS FOLLOWS: _____

4. CONTROL UNITS ARE ACCESSIBLE AND FREQUENCY OR CHANNEL MARKINGS ARE CLEARLY VISIBLE TO THE PILOT AND/OR CREW MEMBERS. LOCATIONS ARE AS FOLLOWS: _____

5. RADOMES ARE LOCATED AS FOLLOWS: _____

6. ISOLATION OF HIGH RADIATION COMPONENTS FROM SENSITIVE RECEIVING EQUIPMENTS HAS BEEN ACCOMPLISHED, EXCEPT AS FOLLOWS: _____

7. REMARKS. -

Checked by: _____

Date: _____

PART I (Cont)

E. RADAR IDENTIFICATION EQUIPMENT

1. THE FOLLOWING RADAR IDENTIFICATION EQUIPMENTS HAVE BEEN MOCKED UP: _____

2. THE ABOVE EQUIPMENTS ARE LOCATED AS FOLLOWS: _____

3. ACCESSIBILITY IS PROVIDED AS FOLLOWS: _____

4. CONTROL UNITS ARE ACCESSIBLE AND FREQUENCY OR CHANNEL MARKINGS ARE CLEARLY VISIBLE TO THE PILOT AND/OR CREW MEMBERS. LOCATIONS ARE AS FOLLOWS: _____

5. REMARKS. -

Checked by: _____

Date: _____

PART I (Cont)

F. RADIO ALTIMETERS, ACCESSORIES, ETC.

1. THE FOLLOWING ACCESSORIES HAVE BEEN MOCKED UP: _____

2. THE ABOVE ACCESSORIES ARE LOCATED AS FOLLOWS: _____

3. ACCESSIBILITY AND CONTROL ARE PROVIDED AS FOLLOWS: _____

4. REMARKS. -

Checked by: _____

Date: _____

PART I (Cont)

G. INTERPHONE SYSTEM

1. THE FOLLOWING INTERPHONE STATIONS HAVE BEEN MOCKED UP: _____

2. THE ABOVE STATIONS ARE LOCATED AS FOLLOWS: _____

3. REMOTE STATIONS THAT REQUIRE SERVICING AND MAINTENANCE ARE LOCATED AS FOLLOWS: _____

4. ADEQUATE AUDIO SWITCHES HAVE BEEN PROVIDED FOR RECEIVER SELECTION: _____

5. PRIVATE LINE COMMUNICATION BETWEEN ESSENTIAL CREW INTERPHONE STATIONS HAS BEEN PROVIDED: _____

6. POWER HAS BEEN PROVIDED TO THE SYSTEM UNDER EMERGENCY POWER CONDITIONS: _____

7. REMARKS. -

Checked by: _____

Date: _____

PART I (Cont)

H. COUNTERMEASURES EQUIPMENT

1. THE FOLLOWING COUNTERMEASURES EQUIPMENT HAVE BEEN MOCKED UP: _____

2. THE ABOVE EQUIPMENTS ARE LOCATED AS FOLLOWS: _____

3. ACCESSIBILITY AND CONTROL ARE PROVIDED AS FOLLOWS: _____

4. ISOLATION OF SENSITIVE RECEIVING COMPONENTS FROM HIGH RADIATION SOURCES HAS BEEN ACCOMPLISHED, EXCEPT AS FOLLOWS: _____

5. REMARKS. -

Checked by: _____

Date: _____

PART I (Cont)

I. SPECIAL ELECTRONIC EQUIPMENTS

1. THE FOLLOWING SPECIAL EQUIPMENTS HAVE BEEN MOCKED UP: _____

2. THE ABOVE SPECIAL EQUIPMENTS ARE LOCATED AS FOLLOWS: _____

3. ACCESSIBILITY AND CONTROL ARE PROVIDED AS FOLLOWS: _____

4. REMARKS. -

Checked by: _____

Date: _____

PART II

A. ELECTRICAL DISTRIBUTION AND CONTROL

1. ELECTRICAL DISTRIBUTION

- (a) ELECTRICAL DISTRIBUTION CONTROLS HAVE BEEN MOCKED-UP? _____
- (b) PROTECTIVE DEVICES (CIRCUIT BREAKERS) ARE ACCESSIBLE? _____
- (c) JUNCTION BOXES, TERMINAL STRIPS, FEEDER WIRE, AND OTHER ELECTRICAL POWER DISTRIBUTION EQUIPMENTS HAVE OPTIMUM, MOUNTING, ACCESSIBILITY, AND PROTECTION? _____

- (d) ELECTRICAL DISTRIBUTION EQUIPMENTS HAVE BEEN LOCATED WITH CONSIDERATION FOR ADEQUATE AIR VENTS AND MOISTURE PROTECTION? _____

- (e) GROUND SUPPORT CONNECTOR(S) AND ACCESS PLATES HAVE BEEN MOCKED-UP AND ARE ADEQUATE? _____

2. REMARKS. -

Checked by: _____

Date: _____

PART IIIA. INSTRUMENTS

1. WHAT INSTRUMENT PANELS ARE INSTALLED? _____

- (a) WHICH ARE SHOCK MOUNTED? _____
- (b) HOW ARE PANELS SHOCK MOUNTED? _____
- (c) IS PILOT(S) PANEL TILTED FROM VERTICAL? _____
- (d) IF PANEL IS TILTED FROM VERTICAL, ARE GYRO INDICATORS MOUNTED SO AS TO COMPENSATE FOR THIS AND INDICATE PROPERLY IN FLIGHT? _____
2. WHAT IS PRIMARY POWER SUPPLY FOR BASIC FLIGHT INSTRUMENTS? _____

- (a) WHAT IS ALTERNATE OR EMERGENCY POWER SUPPLY? _____
3. ARE THE FOLLOWING INSTRUMENTS INSTALLED FOR GCA OR CCA LANDINGS?
- | | |
|--------------------------|---|
| RATE OF CLIMB _____ | WHEEL POSITION INDICATOR _____ |
| ALTIMETER _____ | ENGINE INSTRUMENTS _____ |
| AIRSPEED INDICATOR _____ | RADIO ALTIMETER INDICATOR _____ |
| HORIZON INDICATOR _____ | HOOK POSITION INDICATOR(CCA ONLY) _____ |
| COMPASS INDICATOR _____ | |
4. WHAT AUTOPILOT IS INSTALLED? _____
- (a) WHAT OTHER EQUIPMENT IS TIED-IN? _____
- (b) IS ROLL, PITCH OR YAW STABILIZER INSTALLED? _____
5. WHAT MASTER COMPASS IS INSTALLED? _____
- (a) WHICH INDICATOR IS USED? _____
- (b) WHERE ARE THE FOLLOWING ITEMS LOCATED? _____
- CONTROL PANEL _____
- COMPENSATOR _____
- MAGNETIC TRANSMITTER _____

PART III (Cont)

A. INSTRUMENTS (Cont)

- 6. WHERE IS LANDING GEAR INDICATOR LOCATED? _____
- 7. IS A THRUSTMETER OR ENGINE PRESSURE RATIO INDICATOR INSTALLED? _____
- 8. IS THE ACCELEROMETER MOUNTED FOR CONVENIENT RESETTING BY HAND? _____
 - (a) IF TILTED, IS THE DIAL FACE WITHIN THE 10° OF THE VERTICAL IN NORMAL FLIGHT ATTITUDE? _____
- 9. IS THE CFE/GFE FUEL QUANTITY PRESENTATION SATISFACTORY? _____
 - (a) IS A SEPARATE DIAL PROVIDED FOR EACH TANK? _____
 - (b) IS A FUEL TOTALIZER DIAL PROVIDED? _____
 - (c) IF SEVERAL TANKS ARE ON ONE DIAL, IS THE SWITCH SATISFACTORY? _____
- 10. WHAT IS THE POWER SOURCE FOR OPERATING AIR-DRIVEN GYRO INSTRUMENTS?

 - (a) WHAT AIR FILTERS ARE INCORPORATED? _____
- 11. WHERE IS PITOT (-STATIC) TUBE MOUNTED? _____
 - (a) WILL IT BE A PERSONNEL HAZARD OR INTERFERE WITH PLANE HANDLING? _____
 - (b) WHERE ARE STATIC VENTS LOCATED? _____
 - (c) ARE TRAPS AND DRAINS PROVIDED TO REMOVE WATER FROM PITOT AND STATIC TUBE SYSTEMS? _____
- 12. LIST THE FOLLOWING INFORMATION FOR CFE PRESSURE SWITCHES.

<u>USE</u>	<u>NAVAIR APPROVED</u>	<u>LOCATION</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

PART III (Cont)A. INSTRUMENTS (Cont)

13. LIST FOLLOWING INFORMATION FOR ANGLE OF ATTACK SYSTEM.

- (a) NAME OR DESCRIPTION _____
- (b) ARE LANDING SIGNAL LIGHTS TIED-IN? _____
- (c) IS STALL WARNING TIED-IN? _____
- (d) IS FIRE CONTROL TIED-IN? _____

14. ARE ALL INSTRUMENTS AND COMPONENTS ACCESSIBLE FOR ADJUSTMENT AND EASY REMOVAL? _____

15. LIST THE FOLLOWING INFORMATION ON THE HEAD-UP DISPLAY(HUD)SYSTEM:

- (a) NAME, ALIENOMINATION AND DESCRIPTION: _____

- (b) ARE DAY AND NIGHT (R.D.) FILTERS PROVIDED? _____
- (c) (1) ARE THERE ANY CONTROLS FOR THE HUD LOCATED ON CONTROL PANELS THAT ARE REMOTE FROM THE UNIT ITSELF? _____
- (2) IF SO, WHERE ARE THEY LOCATED? _____
- (3) ARE THEY EASILY REACHED BY THE PILOT IN ALL SEATING POSITIONS? _____
- (d) IS THE MANUAL BRIGHTNESS CONTROL READILY ACCESSIBLE TO THE PILOT IN ALL SEATING POSITIONS? _____
- (e) IS THE MANUAL DEPRESSION CONTROL FOR THE BACKUP RETICLE EASILY CONTROLLED BY THE PILOT IN ALL SEATING POSITIONS? _____
- (f) IS DESICCANT INSPECTION AND CHANGING WINDOW LOCATED SO THAT DESICCANT CAN BE CHANGED WITHOUT REMOVING THE DISPLAY UNIT FROM ITS MOUNT? _____

- (g) ARE ALL FUNCTION SWITCHES AND KNOBS ADEQUATELY LABELED? _____
- (h) IS LIGHTING OF ALL CONTROL PANELS ADEQUATE? _____

Appendix 4 to MIL-M-8650B(AS)

PART III (Cont)A. INSTRUMENTS (Cont)

16. LIST THE FOLLOWING INFORMATION FOR ALTIMETRY SYSTEM.

- (a) ALTIMETER TYPE(S)? _____
- (b) IF THERE IS AN AIR DATA COMPUTER, A ALTITUDE COMPUTER? _____
- (1) IS ALTIMETER CONNECTED TO COMPUTER? _____
- (2) IS COMPUTER TIED INTO IFF FOR MODE C INFORMATION? _____
- (3) IS AIR DATA COMPUTER TIED INTO WEAPONS SYSTEM? NAVIGATION SYSTEM? AUTOPILOT SYSTEM? ETC.? _____
- _____
- _____
- _____
- (c) IS ALTIMETER VIBRATOR ENERGIZED? _____
- (d) IS ALTIMETER LIGHTING ENERGIZED? _____

17. VERTICAL DISPLAY.

- (a) NAME OR DESCRIPTION? _____
- (b) ARE DAY AND/OR NIGHT FILTERS PROVIDED? _____
- (c) IS A CONTROL PANEL PROVIDED? _____
- (d) IS A BRIGHTNESS CONTROL PROVIDED? _____
- (e) IF BAROMETRIC ALTITUDE IS DISPLAYED, IS BAROMETRIC SETTING CONTROL PROVIDED? _____

18. MAP DISPLAY.

- (a) NAME OR DESCRIPTION? _____
- (b) IS A BRIGHTNESS CONTROL PROVIDED? _____
- (c) IS A MAP SCALE SELECTOR SWITCH PROVIDED? _____

PART III (Cont)

A. INSTRUMENTS (Cont)

18. (Cont)

(d) IS A SLEWING CONTROL PROVIDED? _____

IF MAP DISPLAY IS AN OPTICAL PROJECTION SYSTEM:

(a) IS A NORTH-UP-TRACK-UP SWITCH PROVIDED? _____

(b) IS A SPARE PROJECTION LAMP SWITCH PROVIDED? _____

(c) IS A DATA SWITCH PROVIDED? _____

19. REMARKS. -

Checked by: _____

Date: _____

PART IV

A. NAVIGATIONAL EQUIPMENT

1. WHAT NAVIGATION EQUIPMENT IS PROVIDED?

2. IS A NAVIGATIONAL RADAR OR RADAR INDICATOR PROVIDED? _____
3. ARE INTEGRATED NAVIGATION SYSTEM CONTROLS PROVIDED? _____
4. WHERE ARE THE CONTROLS LOCATED? _____
5. IS THE CONTROL PANEL SITUATED SO THAT THE OPERATOR CAN SEE IT AND OPERATE IT CONVIENTLY FROM HIS NORMAL WORK POSITION? _____
6. WHAT TYPE OF READ-OUT IS/ARE PROVIDED FOR NAVIGATION DATA? _____
7. WHERE IS/ARE THE READ-OUT(S) LOCATED? _____
8. IS IT PROPERLY LIGHTED? _____
9. IS IT VISIBLE TO THE READER FROM HIS USUAL WORKING POSITION? _____
10. ARE DIALS, SWITCH POSITIONS, ETC., PROPERLY, CLEARLY, LEGIBLY LABELED?

11. ARE OPERATING INSTRUCTION CHECK LISTS PROVIDED? _____
12. REMARKS. -

Checked by: _____

Date: _____

Appendix 5 to MIL-M-8650B(AS)

13 May 1969

Superseding PART II of Appendix 4 of
1 April 1960

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360

APPENDIX 5

ARMAMENT - AIRCRAFT MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ AIRCRAFT

CONTRACT NO. _____/FY _____

This ARMAMENT checkoff list consists of the following sections (cross out those sections listed below that are not applicable and omit from list):

- | | |
|---|--|
| A. FIXED GUNS
(PAGES A-1 TO A-3) | E. FIRE CONTROL SYSTEM
(PAGES E-1 TO E-2) |
| B. GUIDED MISSILES AND UNGUIDED
ROCKETS (PAGES B-1 TO B-4) | F. PASSIVE DEFENSE
(PAGE F-1) |
| C. FLEXIBLE WEAPONS
(PAGES C-1 TO C-2) | G. PYROTECHNICS
(PAGES G-1 TO G-2) |
| D. DROPPABLE STORES
(PAGES D-1 TO D-3) | H. MISCELLANEOUS
(PAGE H-1) |

FSC 6910

Prepared by: _____

Date: _____

NOTE: The abbreviation "N.A." used herein denotes "Not Applicable".

A. FIXED GUNS

1. GUN INSTALLATION

- (a) WHERE ARE THE GUNS LOCATED? _____
- (1) IS LOCATION SATISFACTORY IN REGARD TO FLASH? _____ GASES? _____
- (2) WHAT IS VERTICAL ANGLE BETWEEN THE MEAN BORESIGHT ALIGNMENT AND THE LOW MACH NUMBER ZERO LIFT LINE? _____
- (3) WHAT IS THE MINIMUM DISTANCE BETWEEN GUN MUZZLES AND AIR INTAKE DUCTS? _____
- (b) WHERE ARE GUNS SEIZED BY MOUNTS TO ATTACH TO THE AIRCRAFT? _____
- (c) WHAT GUN SELECTIVITY IS PROVIDED? _____
- (d) CAN GUNS BE READILY BORESIGHTED THROUGHOUT REQUIRED RANGES WITH NO INTERFERENCE? _____
- (1) CAN BORESIGHT BE RETAINED WHEN GUNS ARE REMOVED FOR CLEANING? _____

2. GUN CHARGING

- (a) WHAT TYPE OF GUN CHARGING IS PROVIDED? _____
- (b) ARE REMOTE CONTROL VALVES LOCATED FOR EASY ADJUSTMENT? _____
- (c) WHAT TYPE OF CHARGER SAFETY IS EMPLOYED? _____
- (d) IS ELECTRIC POWER REQUIRED TO SAFETY GUNS? _____

3. AMMUNITION PROVISION

- (a) WHAT IS CAPACITY OF AMMUNITION BOXES OR COMPARTMENTS? _____
- (1) IS EACH AMMUNITION BOX OR COMPARTMENT READILY ACCESSIBLE? _____
- (2) IF AMMUNITION BOXES ARE OVERWEIGHT FOR EASY HANDLING, ARE HOISTING MEANS PROVIDED? _____
- (b) WHAT TYPE OF AMMUNITION BELT BOOSTERS ARE PROVIDED? _____
- (1) ARE THEY LOCATED TO POSITIVELY PROVIDE ALL GUNS WITH AMMUNITION? _____
- (c) ARE FEED ROLLERS USED? _____
- (1) DO THEY FIT LINKS PROPERLY? _____
- (d) ARE THERE ANY PROJECTIONS WHICH CATCH AMMUNITION BELTS CAUSING FEED MALFUNCTIONS? _____

Appendix 5 to MIL-M-8650B(AS)

A. FIXED GUNS (Cont)

4. FEED AND EJECTION PROVISIONS

- (a) ARE FEED AND EJECTION CHUTES SATISFACTORY FOR ALL GUN ADJUSTMENTS? _____
- (b) ARE CHUTE BENDS OF SUFFICIENTLY LARGE RADIUS TO PREVENT JAMS? _____
- (c) CAN FEED CHUTES BE READILY ATTACHED AND REMOVED? _____
- (d) ARE EJECTION CHUTES ACCESSIBLE AND REMOVABLE? _____
- (e) WHAT PROVISION IS MADE TO PREVENT DAMAGE TO THE AIRCRAFT BY EJECTED CASES AND LINKS? _____

- (f) WHAT IS LOCATION OF CASE AND LINK OPENINGS WITH RESPECT TO RAM AIR DUCTS? _____

- (g) IF CASES AND LINKS ARE RETAINED, IS THE RETENTION COMPARTMENT ADEQUATELY VENTILATED TO PREVENT THE ACCUMULATION OF EXPLOSIVE GASES? _____
- (1) WILL THE COMPARTMENT CONTAIN THE REQUIRED AMOUNT OF CASES AND LINKS INTRODUCED AT RANDOM? _____

5. BLAST TUBES

- (a) HOW ARE BLAST TUBES ATTACHED? _____

- (b) CAN GUNS BE BORESIGHTED THROUGHOUT THE REQUIRED RANGE WITH BLAST TUBES ATTACHED? _____
- (c) WHAT IS MINIMUM CLEARANCE BETWEEN CENTERLINE OF GUN BARREL AND BLAST TUBE WALL? _____

6. GUN COOLING

- (a) WHAT PROVISION IS MADE FOR COOLING THE GUNS? _____

7. GUN HEATING

- (a) WHAT TYPE OF GUN HEATING IS PROVIDED? _____

A. FIXED GUNS (Cont)

8. GUN ACCESSIBILITY

(a) CAN GUNS BE EASILY REMOVED AND REPLACED? _____

(b) IS ACCESSIBILITY SATISFACTORY FOR THE FOLLOWING:

(1) INSPECTION? _____

(3) CLEARING JAMS? _____

(2) ADJUSTMENT? _____

(4) CHANGING OR ADJUSTING
ACCESSORIES? _____
(TRIGGER CONTROLS, FEEDERS,
BOOSTERS CHARGERS, ETC.)

(c) DESCRIBE INSPECTION, SERVICING AND REARMING FACILITIES? _____

9. REMARKS.-

Checked by: _____

Date: _____

B. GUIDED MISSILES AND UNGUIDED ROCKETS

1. GUIDED MISSILE AND ROCKET INSTALLATION (FOR EACH ITEM)

- (a) RAIL OR EJECTION LAUNCHED? _____
- (b) LOCATION STATION ON FUSELAGE, WING, ETC.? _____
- (c) MINIMUM DISTANCE FROM AIR INTAKE DUCTS OF ENGINE FOR EACH LOCATION? _____
- (d) WHAT IS ROCKET OR MISSILE CARRYING ANGLE? _____
- (e) WHAT IS CLEARANCE FROM THE DECK? _____
- (f) CAN ALL ELECTRICAL AND MECHANICAL CONNECTIONS BE ACCOMPLISHED? _____
- (g) WHAT IS CLEARANCE DISTANCE OF MISSILE OR ROCKET NOZZLE FROM FUSELAGE, WING OR TAIL COMPONENTS? _____
- (h) DO ALL PARTS OF MISSILE OR ROCKET CLEAR ALL STATIONARY AND MOVABLE AIRCRAFT PARTS? _____
- (i) WHAT IS MAXIMUM TEMPERATURE OF THE EXHAUST GASES (EXPANDING FROM THE NOZZLE) THAT WILL INTERSECT ANY PART OF THE AIRCRAFT OVER THE OPERATIONAL ALTITUDE OF SERVICE USE AS REQUIRED BY THE AIRCRAFT SPECIFICATION? _____
- (j) WILL THE AIRCRAFT LOCATION AND/OR STORE STATION OF THE MISSILE OR ROCKET BE SUBJECT TO EXCESSIVE, TEMPERATURE, VIBRATION AND FLUTTER, SHOCK, RF OR OTHER EXTREME ENVIRONMENT? _____
- (k) WHAT IS CLEARANCE DISTANCE FROM ANY SECTION OF JET ENGINE HEAT? _____
- (l) ARE SAFETY AND ARMING DEVICES OF GUIDED MISSILE PROPULSION UNITS AND UNGUIDED ROCKETS ACCESSIBLE? _____
- (m) ARE INSTRUCTION DECALS ON MISSILES AND ROCKETS ACCESSIBLE TO READ? _____
- (n) WHAT PROVISIONS ARE MADE FOR BORESIGHTING ALIGNMENT OF GUIDED MISSILES AND UNGUIDED ROCKETS? _____
- (o) IS BOUNDARY LAYER CONTROL USED AND DOES HOT AIR IMPINGE ON ANY MISSILE OR ROCKET COMPONENT? _____
- (p) WHAT EFFECT WILL MISSILE OR ROCKET IGNITION BLAST PRESSURE AND EXHAUST TEMPERATURE HAVE ON ANY PART OF THE AIRCRAFT?
- (1) FINISH? _____
- (2) SKIN? _____
- (3) STRUCTURE? _____
- (4) INTERNAL AIRCRAFT COMPONENTS SUCH AS WIRING, FUEL, ELECTRONICS, ENGINE FLAME OUT, ETC.? _____

Appendix 5 to MIL-M-8650B(AS)

B. GUIDED MISSILES AND UNGUIDED ROCKETS (Cont)

1. (Cont)

(q) WHAT EFFECT OF MISSILE OR ROCKET EJECTA HAVE ON ENGINE AND AIRCRAFT? _____

2. CIRCUITRY AND WIRING

(a) IS SEPARATE CIRCUIT USED FOR EACH MISSILE, ROCKET OR ROCKET POD AT EACH STATION?

(b) ARE SHIELDED WIRES AND ONLY RF RESISTANT CONNECTORS USED? _____

(c) ARE CIRCUITS LOCATED TO ELIMINATE INDUCED VOLTAGES AND LEAKAGE FROM OTHER CIRCUITS?
 _____ HAVE RADHAZ PROVISIONS BEEN INCORPORATED? _____

(d) ARE ALL COMPONENT PARTS OF EACH CIRCUIT SEALED HEAVY DUTY COMPONENTS? _____

(e) ARE ALL COMPONENT PARTS AND OVERALL CIRCUIT SEALED FROM EFFECTS OF MOISTURE, SALT
 AND CORROSION? _____

(f) WHAT SAFETY FEATURES ARE PROVIDED IN CIRCUIT? _____

(g) WHAT PROVISIONS ARE MADE FOR BREAKING ELECTRIC FIRING CIRCUITS? _____

(h) WHAT PROVISIONS ARE MADE FOR STRAY VOLTAGE CHECKING AT EACH STATION? _____

(i) IS STANDARD CIRCUIT TESTER PROPOSED, WHICH ONE? _____

(j) WHAT PROVISIONS ARE MADE FOR GROUNDING THE AIRCRAFT AND EACH MISSILE AND EACH
 ROCKET STATION? _____

(k) WHAT TYPE OF CIRCUIT CHECKOUT SYSTEM IS PROVIDED BEFORE MISSILE AND ROCKET LOADING
 AND BEFORE ELECTRICAL HOOKUP? _____
 WHAT LAST MOMENT CHECKS ARE REQUIRED? _____
 ARE THEY SAFE? _____

(l) WHAT PROVISIONS ARE MADE FOR ACCESSIBILITY AND MAINTAINANCE OF COMPONENTS OF
 CIRCUIT? _____

(m) WHAT IS MINIMUM AVAILABLE AMPERAGE PER WEAPON STATION FOR ORDNANCE FIRING? _____

3. WHAT GUIDED MISSILE AND ROCKET LAUNCHERS ARE INSTALLED FOR EACH MISSILE OR ROCKET ITEM

(a) ARE LAUNCHERS EASILY REMOVABLE? _____

B. GUIDED MISSILES AND UNGUIDED ROCKETS (Cont)

3. (Cont)

- (b) ARE LAUNCHERS JETTISONABLE? _____
- (c) WHAT TYPE OF POWER IS USED TO OPERATE LAUNCHERS? _____
- (d) WHAT SELECTIVITY FOR FIRING IS PROVIDED? _____
- (1) TYPE OF INTERVALOMETER OR PROGRAMMER IN COCKPIT AND RANGE OF FIRING TIMES? _____
- (2) CAPABILITY FOR SINGLE AND MULTIPLE FIRINGS? _____
- (e) INTERFACE RELATIONSHIPS - WHAT ARE THE CLEARANCES OF LAUNCHERS WITH AIRCRAFT STATIONARY AND MOVABLE PARTS? _____
- (f) ARE ALL MISSILES AND ROCKETS FIRED THRU UMBILICAL PLUGS? _____
STANDARD DESIGN? _____

4. GUIDED MISSILE AND ROCKET LOADING

- (a) HOW ARE ITEMS LOADED, MANUALLY OR HOIST, FROM DOLLY, ETC.? _____
- (b) WHAT ARE THE ACCESSIBILITY AND CLEARANCES TO LOAD? _____
- (c) IS POWER NECESSARY FOR LOADING OPERATIONS? _____
- (d) HOW IS POWER SUPPLIED? _____
- (e) CAN MISSILES AND ROCKETS BE LOADED WITH WINGS FOLDED AND UNFOLDED? _____
SWEEP/UNSWEEP? _____
- (f) WHAT IS LOADING TIME FOR MISSILES AND ROCKETS WITH WINGS UNFOLDED, WINGS FOLDED, SWEEP/UNSWEEP? _____

5. GUIDED MISSILE AND ROCKET LAUNCHING AND JETTISONING

- (a) DO MISSILES AND UNGUIDED ROCKETS CLEAR THE AIRCRAFT UNDER ALL LAUNCHING CONDITIONS I.E., UNDER MAXIMUM G CONDITIONS, POSITIVE AND NEGATIVE? _____
- (b) DO MISSILES AND UNGUIDED ROCKETS CLEAR THE AIRCRAFT UNDER ALL JETTISONING CONDITIONS, I.E., UNDER MAXIMUM G CONDITIONS, POSITIVE AND NEGATIVE? _____
ANY SPEED OR OTHER RESTRICTIONS? _____
- (c) DO EMPTY AND FULL ROCKET PODS, JETTISONABLE PYLONS CLEAR THE AIRCRAFT UNDER ALL JETTISONING CONDITIONS, POSITIVE AND NEGATIVE? _____
ANY SPEED OR OTHER RESTRICTIONS? _____
- (d) ARE MEANS PROVIDED FOR JETTISONING THE ENTIRE LOAD OR INDIVIDUAL ITEMS? _____
HOW WILL JETTISONING BE ACCOMPLISHED, BY FIRING, BY EXPLOSIVE BOLTS, BY POWER ACTUATION, OR MANUALLY? _____

B. GUIDED MISSILES AND UNGUIDED ROCKETS (Cont)

5. (Cont)

(e) WHAT PROVISIONS ARE MADE TO INSURE RETENTION OF LAUNCHERS, GUIDED MISSILES AND ROCKETS DURING CATAPULT TAKE-OFF, ARRESTED LANDING AND BOLTERS (LAND AND TAKE-OFF)?

(f) WHAT ARE THE MAXIMUM TEMPERATURES OF MISSILE OR ROCKET UNDER AEROHEAT CONDITIONS CONSIDERING ALL INSTALLATION CONDITIONS AND AIRCRAFT HEAT SOURCES? _____

WHAT IS BEING DONE TO PREVENT OVERHEAT EFFECTS? _____

(g) WHAT IS THE EFFECT OF LAUNCHED MISSILES OR ROCKETS ON MISSILES OR ROCKETS REMAINING ON THE AIRCRAFT? _____
IF EFFECT IS HARMFUL, WHAT IS BEING DONE TO CORRECT IT? _____

(h) ARE THERE ANY PRECAUTIONS AGAINST COOKED-OFF DUDS? _____

(i) REMARKS. -

Checked by: _____

Date: _____

C. FLEXIBLE WEAPONS

1. FLEXIBLE WEAPONS SYSTEM

- (a) WHAT SYSTEMS ARE INSTALLED? _____

- (b) ARE SYSTEMS OPERABLE UNDER ALL FLIGHT CONDITIONS? _____
- (c) IS WEAPONS PLATFORM LOCATION REALISTIC CONSIDERING AIRCRAFT ENVIRONMENT? _____
- (d) HOW MANY MAN HOURS WILL BE REQUIRED TO REMOVE OR INSTALL THE WEAPONS PLATFORM ASSEMBLY? _____
- (1) WHAT SPECIAL EQUIPMENT IS REQUIRED? _____

- (2) IS IT PROVIDED? _____
- (e) ARE SYSTEM COMPONENTS EASILY ACCESSIBLE? _____
- (f) DO SYSTEM COMPONENTS INTERFERE WITH AIRCRAFT OPERATION? _____
- (g) CAN ANY SYSTEM COMPONENTS BE JETTISONED? _____
- (h) ARE SYSTEM COMPONENTS READILY ACCESSIBLE FOR MAINTENANCE FROM THE GROUND OR WATER? _____
- (i) IF RADAR COMPONENTS ARE INSTALLED, CAN THEY BE READILY REMOVED? _____
- (j) WHAT COMPONENTS REQUIRE SPECIAL SHOCK MOUNTING DUE TO UNUSUAL FLIGHT OR LANDING LOADS? _____

- (k) WHAT STOWAGE IS PROVIDED FOR ACCESSORY EQUIPMENT? _____

2. WEAPONS INSTALLATION

- (a) WHAT WEAPONS ARE INSTALLED? _____
- (b) ARE WEAPONS INSTALLED TO PROVIDE MAXIMUM FIRE COVERAGE? _____
- (c) ARE WEAPONS INSTALLED TO PREVENT BLAST DAMAGE TO THE AIRCRAFT? _____
- (d) ARE WEAPONS EASILY ACCESSIBLE? _____
- (e) WHAT IS MINIMUM DISTANCE BETWEEN WEAPONS AND AIR INTAKE DUCTS? _____
- (f) ARE SATISFACTORY FIRE INTERRUPTERS PROVIDED? _____

Appendix 5 to MIL-M-8650B(AS)

C. FLEXIBLE WEAPONS (Cont)

2. WEAPONS INSTALLATION (Cont)

- (g) WILL MUZZLE FLASH IMPAIR THE VISION, OR OTHERWISE ANNOY THE PILOT, COPILOT, NFO, OR OTHER CREW MEMBER? _____
- (h) WHAT PROVISION IS MADE FOR MANUAL STOWAGE OF THE WEAPONS IN THE EVENT OF POWER FAILURE? _____

3. AMMUNITION PROVISION

- (a) WHAT IS CAPACITY OF AMMUNITION BOXES? _____
- (b) ARE AMMUNITION BOXES READILY ACCESSIBLE? _____
- (c) ARE FEED AND EJECTION CHUTES SATISFACTORY FOR ALL WEAPON ANGLES? _____
- (d) ARE EMPTY CASES AND LINKS EJECTED OVERBOARD? _____
- (1) WHAT PROVISIONS ARE MADE TO PREVENT DAMAGE TO THE AIRCRAFT BY EJECTED CASES AND LINKS? _____
- (e) IF EMPTY CASES AND LINKS ARE RETAINED, HOW ARE THEY COLLECTED? _____
- (1) WHAT IS CAPACITY OF CONTAINERS? _____
- (2) CAN EMPTY CASES AND LINKS BE EASILY REMOVED? _____
- (f) ARE CHUTE BENDS OF SUFFICIENTLY LARGE RADIUS TO PREVENT JAMS? _____
- (g) ARE THERE ANY PROJECTIONS IN THE AMMUNITION BELT SYSTEM THAT WILL INTERFERE WITH THE AMMUNITION FLOW? _____

4. GENERAL

- (a) WHAT PROVISIONS HAVE BEEN MADE FOR CLEANING AND DEICING SIGHTING AREAS AND WORKING SURFACES? _____
- (b) HAVE LIGHTING AND VENTILATION PROVISIONS BEEN MADE FOR CLEANING AND DEICING SIGHTING AREAS AND WORKING SURFACES? _____
- (c) WHAT RADOME OR ENCLOSURE IS LIKELY TO BE DAMAGED DURING GROUND OR FLIGHT OPERATION? _____
- (d) WHERE ARE SYSTEM QUICK-DISCONNECTS LOCATED? _____
- (e) WHERE ARE GROUND OR AFLOAT AUXILIARY POWER CONNECTIONS LOCATED? _____
- (f) WHERE ARE TEST EQUIPMENT RECEPTACLES LOCATED? _____

5. REMARKS.-

Checked by: _____

C-2

Date: _____

D. DROPPABLE STORES

1. STORES INSTALLATION

- (a) WHERE ARE STORES LOCATED? _____
- (b) WHAT IS PITCH PLANE ANGLE BETWEEN STORE CENTERLINE AND THE FLIGHT PATH OF AIRCRAFT IN AVERAGE CRUISE CONDITION? _____
- (c) LIST CRITICAL CLEARANCE OF ALL STORE COMBINATIONS WITH ITEMS SPECIFIED BELOW:
- | <u>STORE COMBINATION</u> | <u>LANDING GEAR</u> | <u>FLAPS</u> | <u>DECKS</u> |
|--------------------------|---------------------|--------------|--------------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
- (d) ARE ALL NECESSARY RECEPTACLES PROVIDED WITHIN REACH OF THE STORE MATING PLUGS? _____
- (e) CAN SWAY BRACES BE EASILY ADJUSTED? _____
- (1) ARE SPECIAL TOOLS REQUIRED? _____
- (2) DO SWAY BRACES HAVE SUFFICIENT ADJUSTMENT TO ACCOMMODATE ALL SPECIFIED STORES? _____
- (f) CAN CARTRIDGES IN EJECTOR BOMB RACK BE READILY REPLACED? _____
- (1) DOES EJECTOR BOMB RACK INSURE THAT ALL TYPES OF STORES TO BE CARRIED WILL CLEAR THE AIRCRAFT? _____
- (2) HOW IS EJECTOR BOMB RACK OPERATED? _____
- (3) CAN EJECTOR BOMB RACK BE READILY SERVICED IN THE AIRCRAFT WITHOUT COMPLETE DISASSEMBLY OF THE PYLON? _____
- (g) HOW ARE TORPEDOES ATTACHED? _____
- (1) WHAT SPECIAL BEAMS, SLINGS, OR BANDS ARE REQUIRED? _____
- _____
- (2) HOW IS STOP BOLT ATTACHED? _____

Appendix 5 to MIL-M-8650B(AS)

D. DROPPABLE STORES (Cont)

1. STORES INSTALLATION (Cont)

(g) (Cont)

- (3) WHAT IS TORPEDO CARRYING ANGLE? _____
- (4) IS THE TORPEDO NOSE CAP RELEASE AND TORPEDO DEPTH SETTING CONTROL READILY ACCESSIBLE FOR SERVICING? _____
- (5) CAN THE TORPEDO STOP VALVE BE OPERATED WHILE THE TORPEDO IS ON THE AIRCRAFT? _____
- (h) ARE SHACKLES, RACKS, RELEASES, AND EJECTOR OR DISPLACING GEAR READILY ACCESSIBLE FOR SERVICING AND REPLACEMENT? _____

2. BOMB BAY

- (a) IS BOMB BAY LIGHTING ADEQUATE? _____
- (b) IS THERE ANY POSSIBLE INTERFERENCE BETWEEN STORES AND CONTROL CABLES, ELECTRIC CABLES, AND HYDRAULIC LINES? _____
- (c) IS VENTILATION SUFFICIENT TO INSURE THAT STORES REMAIN WITHIN SPECIFIED TEMPERATURE LIMITATIONS? _____

3. LOADING OF STORES

- (a) HOW ARE STORES LOADED? _____

- (b) CAN ALL STORE LOADS BE HOISTED BY STANDARD EQUIPMENT? _____
- (c) ARE PROVISIONS MADE FOR PORTABLE BOMB HOIST? _____
- (d) ARE CLEARANCES SUFFICIENT FOR USE OF STANDARD SKIDS AND DOLLIES? _____
- (e) ARE HOIST CABLES TO RACKS CONVENIENT? _____
- (f) IS FUZE INSTALLATION POSSIBLE WITH STORES LOADED? _____
- (g) CAN LOADING OPERATION BE CONTROLLED BY VISUAL SIGNALS OF THE ORDNANCE GROUND CREW? _____
- (h) CAN STORES BE LOADED WITH WINGS FOLDED AND UNFOLDED? _____ SWEPT? _____ UNSWEPT? _____
- (i) IS THE ACTUAL LOADING TIME SATISFACTORY FOR ALL STORE COMBINATIONS WITH WINGS FOLDED AND UNFOLDED? _____ SWEPT? _____ UNSWEPT? _____

4. CONTROL SYSTEM

- (a) WHAT TYPE OF CONTROL SYSTEM IS PROVIDED? _____

D. DROPPABLE STORES (Cont)

4. CONTROL SYSTEM (Cont)

- (b) ARE ARMING CONTROLS PROVIDED FOR: ELECTRICAL FUSING? _____ MECHANICAL FUSING? _____
- (1) CAN VISUAL CHECKS BE MADE FOR ARMED AND UNARMED STORES? _____
- (c) HAS PROVISION BEEN MADE FOR DROPPING STORES ARMED, UNARMED, SALVO, RIPPLE, PAIRS AND SINGLY? _____
- (1) ARE THE LOCATIONS OF INTERVAL CONTROLS READILY ACCESSIBLE FOR SERVICING AND REPLACEMENT? _____
- (d) WHAT TYPE OF EMERGENCY RELEASE AND JETTISONING CONTROL ARE PROVIDED? _____
- (1) IS THE EMERGENCY SYSTEM INDEPENDENT OF THE MAIN SYSTEM? _____
- (e) HAVE PROVISIONS BEEN MADE TO DROP STORES WITHOUT THE USE OF THE CONTROL SYSTEM? _____
- (f) HAVE PROVISIONS BEEN MADE TO PREVENT UNDESIRABLE ELECTRICAL FEEDBACK FROM ARMAMENT CIRCUITS INTO THE CONTROL SYSTEM WHEN OTHER MODES OF OPERATION ARE DESIRED? _____
- (g) CAN CONTINUITY OF ELECTRICAL SYSTEM TO THE EJECTOR BOMBRACK BE READILY CHECKED? _____
- (h) WHAT TYPE SECONDARY RELEASE SYSTEM IS INCORPORATED? _____
- (1) HOW ARE BOMB BAY DOORS ACTUATED? _____
- (1) HOW ARE DOORS CLOSED AFTER RELEASE OF STORES? _____
- (2) WHAT PROVISION IS MADE TO INDICATE BOMB DOOR POSITION? _____
- (3) WHAT PROVISION IS MADE TO PREVENT BOMB BAY DOORS FROM CLOSING ON ANY PROJECTING PART OF STORES (TORPEDO LANYARD, ROCKET LANYARD, CHEMICAL TANK EXHAUST PIPE, AND DISPLACING GEAR)? _____
- (4) CAN STORES BE RELEASED WITH BOMB BAY DOORS CLOSED? _____
- (5) CAN STORES BE DROPPED IN AN EMERGENCY BY OPERATION OF A SINGLE CONTROL TO OPEN BOMB BAY DOORS AND DROP STORES? _____
- (6) ARE ADEQUATE CONTROLS PROVIDED TO ASSURE SAFETY OF PERSONNEL WORKING IN AND AROUND THE BOMB BAY? _____

5. REMARKS.-

Checked by: _____

D-3 Date: _____

E. FIRE CONTROL SYSTEM

1. PILOT OPERATION SECTION

- (a) WHAT TYPE OF SIGHT UNIT IS INSTALLED? _____
- (1) WHERE IS SIGHT UNIT LOCATED? _____
- (2) CAN SIGHT UNIT BE READILY BORESIGHTED? _____
- (3) WILL SIGHT UNIT HOLD BORESIGHT UNDER VIBRATION? _____
- (4) IS SIGHT UNIT ACCESSIBLE FOR CLEANING? _____ IS IT EASILY REMOVABLE? _____
- (5) CAN SPARE BULBS BE EASILY RELOADED? _____
- (b) WHAT IS DISTANCE FROM PILOT'S EYE TO SIGHT HEAD REFLECTOR GLASS (OR WINDSHIELD IF IT IS USED AS REFLECTOR)? _____
- (1) IS PILOT'S EYE FREEDOM SUFFICIENT FOR COMFORT? _____
- (2) CAN PILOT SEE ALL LEAD ANGLES WHICH WILL BE GENERATED WITHOUT UNDUE HEAD MOTION? _____
- (c) WHAT IS DOWN ANGLE OVER THE NOSE? _____
- (1) IS ENTIRE FIELD OF VIEW UNOBSTRUCTED EXCEPT FOR THE COWL? _____
- (2) AT WHAT ANGLE IN MILS DOES COWL INTERFERE? _____
- (3) IS THE ZERO LEAD POSITION LOCATED SO THAT THE PILOT HAS GOOD AROUND THE CLOCK VISIBILITY WHEN VIEWING THE ZERO LEAD BUNDLE? _____

2. GUNNER OPERATED SECTION

- (a) WHAT TYPE OF SIGHT UNIT IS INSTALLED? _____
- (1) WHERE IS SIGHT UNIT LOCATED? _____
- (2) IS LOCATION FREE OF VISUAL OBSTRUCTION THROUGH ALL FIRING ANGLES? _____
- (3) CAN SIGHT UNIT BE READILY BORESIGHTED? _____
- (4) IS SIGHT UNIT ACCESSIBLE FOR CLEANING? _____ IS IT EASILY REMOVABLE? _____
- (5) CAN SPARE BULBS BE EASILY RELOADED? _____
- (b) IS RELATIONSHIP BETWEEN SIGHT UNIT AND GUNNER FIXED THROUGH ALL ANGLES OF FIRE? _____
- (1) IF NOT, ARE ALL POSITIONS REQUIRED OF THE GUNNER SATISFACTORY? _____

Appendix 5 to MIL-M-8650B(AS)

E. FIRE CONTROL SYSTEM (Cont)

3. BOMBER OPERATED SECTION

- (a) WHAT TYPE OF BOMSIGHT AND/OR INDICATOR IS INSTALLED? _____

- (1) WHERE IS BOMSIGHT AND/OR INDICATOR LOCATED? _____

- (2) IS THE BOMSIGHT AND/OR INDICATOR EASILY VISIBLE FOR THE ATTACK MODE
 REQUIRED? _____
- (3) ARE REQUIRED SIGHTING ANGLES PROVIDED? _____
- (b) IS THE OPTICAL SYSTEM (PERISCOPE OR OTHERWISE) SATISFACTORY THROUGHOUT ITS
 REQUIRED RANGE? _____
- (1) IS EXPOSED PORTION OF OPTICAL SYSTEM LOCATED TO AVOID OIL OR RESIDUE DEPOSIT
 FOGGING THE LINE OF SIGHT? _____

4. COMPONENTS

- (a) ARE ALL REMOTE COMPONENTS PROPERLY LOCATED AS TO ORIENTATION OF AXES SHOCK
 MOUNTING, TEMPERATURE EXTREMES, VENTILATION REQUIREMENTS AND TEMPERATURE
 REQUIREMENTS? _____
- (b) ARE COMPONENTS ACCESSIBLE FOR IN-PLACE TESTS, REPLACEMENT, OTHER NECESSARY
 SERVICING, ETC. BY GROUND CREWS? _____
- (c) ARE MECHANICAL COUPLINGS BETWEEN COMPONENTS (FLEXIBLE SHAFTING AND THE LIKE)
 OR MINIMUM LENGTH CONSISTENT WITH REASONABLE COMPROMISES TO OTHER IMPORTANT
 EQUIPMENTS? _____
- (d) ARE COMPONENTS MOUNTED ON A SINGLE PLATE INSTALLATION WHERE POSSIBLE? _____
- (e) ARE ALIGNMENT INSTRUCTIONS PROVIDED? _____
- (f) ARE THESE PROVISIONS FOR BORESIGHTING RADAR ANTENNAS, ANGLE OF ATTACK
 SENSORS, ETC.? _____

5. REMARKS.-

Checked by: _____

Date: _____

F. PASSIVE DEFENSE

1. ARMOR

(a) LIST THE FOLLOWING INFORMATION FOR THE ARMOR INSTALLATION:

CONE OF PROTECTION (INCLUDED ANGLE) (DEGREES)	LOCATION OF ARMOR	PLATE THICKNESS (INCHES) PROTECTION		WEIGHT SHOWN ON MOCKUP (ROUNDS)
		.50 Cal.	20mm frag.	

(b) IS ARMOR REMOVABLE? _____

(c) IS ARMOR USED STRUCTURALLY? _____

(d) WHAT EQUIPMENT IS PROTECTED BY ARMOR? _____

(e) ARE SPLASH STRIPS PROVIDED? _____

(f) DOES ARMOR INTERFERE WITH FIELD OF SEARCH? _____

(1) DOES ARMOR INTERFERE WITH MOTION OF SERVICING OF GUNS? _____

2. BULLET RESISTANT GLASS

(a) WHERE IS BULLET RESISTANT GLASS PROVIDED? _____

(1) WHAT IS THICKNESS OF GLASS? _____

3. VULNERABILITY ASPECTS

(a) ARE VITAL COMPONENTS LOCATED TO TAKE FULL ADVANTAGE OF THE PROTECTION APPORDED BY THE ARMOR PLATE AND HEAVY STRUCTURE DESIGNED INTO THE AIRPLANE? _____

(b) ARE COMPONENTS GROUPED TO PROVIDE MAXIMUM MUTUAL SCREENING AGAINST ATTACK? _____

4. REMARKS.-

Checked by: _____

F-1

Date: _____

G. PYROTECHNICS

1. PYROTECHNIC PISTOL

- (a) WHAT TYPE PYROTECHNIC PISTOL IS INSTALLED? _____
 (1) WHERE IS PISTOL LOCATED? _____
 (2) IS IT CONVENIENT TO A CREW MEMBER? _____
- (b) WHAT TYPE MOUNT IS PROVIDED? _____
- (c) WHERE IS SIGNAL CARTRIDGE CONTAINER LOCATED? _____
 (1) WHAT IS CAPACITY OF CARTRIDGE CONTAINER? _____
- (d) ARE PISTOL AND CARTRIDGES IN CLOSE PROXIMITY? _____

2. PARACHUTE FLARES

- (a) WHAT PROVISIONS ARE MADE FOR LAUNCHING THE FLARES? _____

- (1) WHERE ARE LAUNCHING PROVISIONS LOCATED? _____

- (2) WHERE ARE CONTROLS LOCATED? _____
- (3) WILL FLARES LAUNCH SATISFACTORILY AT DESIGNED SPEED OF THE AIRCRAFT? _____
- (4) WHAT PROVISION IS MADE FOR CLEARING JAMS IN FLIGHT? _____

- (b) IS ACCESSIBILITY FOR LOADING AND UNLOADING IN FLIGHT SATISFACTORY? _____
- (c) WHERE ARE PARACHUTE FLARES STOWED? _____

- (1) IS LOCATION EASILY ACCESSIBLE? _____

3. NIGHT DRIFT SIGNALS AND MARINE MARKERS

- (a) WHERE ARE NIGHT DRIFT SIGNALS AND/OR MARINE MARKERS STOWED? _____

- (b) ARE PROVISIONS MADE FOR MECHANICAL LAUNCHING? _____
- (c) IS LAUNCHER IN CLOSE PROXIMITY TO STOWAGE? _____
- (d) DOES LAUNCHER INSURE POSITIVE LAUNCHING? _____

G. PYROTECHNICS (Cont)

4. FLOAT LIGHTS

- (a) WHAT TYPE FLOAT LIGHT DISPENSER IS PROVIDED? _____
- (b) WHERE IS IT LOCATED? _____
- (c) HOW IS IT CONTROLLED? _____
- (d) WILL IT OPERATE AT DESIGNED SPEEDS OF THE AIRCRAFT? _____
- (e) IS HAND LAUNCHING REQUIRED? _____
- (1) IF SO, DOES THE DESIGNATED CREW MEMBER HAVE EASY ACCESS TO FLOAT LIGHTS AND TO LAUNCHING CHUTES? _____

5. REMARKS.-

Checked by: _____

Date: _____

H. MISCELLANEOUS

1. CHEMICAL DISSEMINATION EQUIPMENT

- (a) WHAT TYPE CHEMICAL TANKS ARE CARRIED? _____
- (b) HOW ARE THEY CARRIED? _____
- (c) HOW IS DISCHARGE CONTROLLED? _____
- (d) WHAT TYPE CONTROL IS PROVIDED? _____
- (e) WHERE IS CONTROL LOCATED? _____

2. SONOBUOYS

- (a) LIST THE FOLLOWING INFORMATION FOR SONOBUOYS:

<u>TYPE</u>	<u>QUANTITY</u>	<u>WHERE CARRIED</u>
-------------	-----------------	----------------------

- (b) WHAT TYPE DISPENSER IS PROVIDED? _____
- (c) WHERE IS IT LOCATED? _____
- (d) HOW IS IT CONTROLLED? _____
- (e) WHERE IS CONTROL LOCATED? _____
- (f) WILL DISPENSER OPERATE AT DESIGNED SPEEDS OF THE AIRCRAFT? _____

3. ARE ALL GUN, BOMB DAMAGE ASSESSMENT, AND TORPEDO TRAINING CAMERA INSTALLATIONS SATISFACTORY FROM AN ARMAMENT STANDPOINT? _____

4. CAN PLANE BE REARMED WITH FUEL, DROPPABLE STORES, ROCKETS AND AMMUNITION SIMULTANEOUSLY? _____

- (1) IF NOT, DESCRIBE ARRANGEMENT. _____

5. ARE ALL MOCKED-UP PIECES OF ORDINANCE GEAR EXACT DUPLICATES OF ITEMS THEY REPRESENT INCLUDING KNOBS, CONTROLS, LEVERS, ETC.

- (1) IF NOT, HAS MOCKUP BEEN CHECKED TO ASSURE THAT NO COMPLICATIONS WILL ARISE WHEN DESIGNATED EQUIPMENT IS INSTALLED? _____

6. REMARKS.-

Checked by: _____

Date: _____

Appendix 6 to MIL-M-8650B(AS)

13 May 1969

Superseding Appendix 5 of
1 April 1960

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D. C. 20360

APPENDIX 6

SHIP INSTALLATIONS - AIRCRAFT MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ AIRCRAFT

CONTRACT NO. _____ /FY _____

This SHIP INSTALLATIONS checkoff list consists of the following sections
(cross out those sections listed below that are not applicable and omit from list):

- | | |
|---|---|
| A. GENERAL (PAGES A-1 TO A-3) | C. ARRESTING PROVISIONS (PAGES C-1 TO C-3) |
| B. CATAPULTING PROVISIONS
(PAGES B-1 TO B-7) | D. DECK HANDLING PROVISIONS
(PAGES D-1 TO D-2) |

FSC 6510

Prepared by: _____

Date: _____

NOTE: The abbreviation "N.A." used herein denotes "Not applicable".

A. GENERAL

1. LIST CRITICAL CLEARANCES OVER DECK FOR THE FOLLOWING:

	<u>ARRESTED LANDING</u>	<u>CATAPULTING (INCLUDING ICCS)</u>	<u>ADEQUATE?</u>
EXTERNAL AUXILIARY TANKS	_____	_____	_____
EXTERNAL ARMAMENTS	_____	_____	_____
HIGH LIFT DEVICE	_____	_____	_____
HIGH DRAG DEVICE	_____	_____	_____
STABILITY DEVICE	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

2. ARE AIRCRAFT ENGINE STARTING, ELECTRICAL POWER, FUELING AND DEFUELING, NITROGEN, OXYGEN, HYDRAULIC, AND ENGINE OIL RECEPTICLES AND SERVICING PROVISIONS COMPATIBLE WITH THE CARRIER EQUIPMENT FOR WHICH IT WAS DESIGNED? _____

(a) WHERE IS EXTERNAL POWER RECEPTACLE FOR STARTING ENGINE(S) LOCATED? _____

3. DOES AIRCRAFT HAVE DUAL SINGLE POINT FUELING PROVISIONS? _____

(a) CAN BOTH BE UTILIZED SIMULTANEOUSLY WITHOUT INTERFERENCE WITH EACH OTHER OR ADJACENT AIRCRAFT STRUCTURE? _____

(b) WHERE IS FUEL FILLING STATION LOCATED? _____

(c) HOW IS ACCESS OBTAINED? _____

(d) WHAT IS FUEL FILLING TIME WITH PRESENT CARRIER EQUIPMENT? _____

(e) CAN WING FUEL TANKS BE FILLED WITH THE WINGS FOLDED/SWEPT? _____

(f) DOES SYSTEM PROVIDE FUEL QUANTITY GAGES ADJACENT TO FUELING STATIONS TO MONITOR FUEL QUANTITY FROM THE DECK? _____

A. GENERAL (cont.)

(g) CAN AIRCRAFT BE REFUELED THROUGH IN-FLIGHT REFUELING PROBE ON THE DECK?

4. CAN STORES BE LOADED AND GUNS AND OTHER EQUIPMENT BE SERVICED WITH THE WINGS FOLDED/SWEPT? _____

5. CAN FULL POWER ENGINE RUN-UPS BE DONE WITH WINGS FOLDED/SWEPT? _____

6. HOW IS WING FOLDING SECURING STRUT ARRANGED? _____

(a) CAN IT BE EASILY INSTALLED BY ONE MEMBER OF CREW? _____

7. LIST THE FOLLOWING INFORMATION FOR THE AIRCRAFT:

<u>CONFIGURATION</u>	<u>OVERALL DIMENSIONS</u>	<u>EFFICIENT SPOTTING?</u>	<u>SATISFACTORY MOVEMENT ON ELEVATORS?</u>	<u>SATISFACTORY MOVEMENT ON HANGAR DECK?</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

8. WHAT IS MINIMUM ENGINE NOZZLE TO JET BLAST DEFLECTOR (JBD) DISTANCE? _____

(a) DESCRIBE **IMPINGEMENT** ON JBD _____

Appendix 6 to MIL-M-8650B (AS)

A. GENERAL (Cont)

(b) WHAT WILL BE THE EFFECT OF JET BLAST ON THE DECK? _____

(c) WHAT WILL BE EFFECT OF JET BLAST ON TAIL OF AIRCRAFT? _____

(d) WILL RECIRCULATION OF EXHAUST GASSES LIKELY BE A PROBLEM? _____

(e) WILL THE JET BLAST AFFECT OPERATION OF THE ARRESTING HOOK? _____

(f) WHAT WILL BE THE EFFECT OF THE JET BLAST ON SATS MATTING? _____

9. WILL STEAM INGESTION BE A PROBLEM DURING CATAPULTING? _____

(a) MINIMUM DISTANCE ENGINE INLET(S) TO DECK _____

(b) MINIMUM DISTANCE ENGINE INLET(S) FROM AIRCRAFT CENTER LINE _____

(c) ENGINE INLET(S) AHEAD OR AFT OF SHUTTLE END OF LAUNCH BAR (IN TENSIONED POSITION)? HOW FAR? _____

10. IS THERE ADEQUATE GROUND CLEARANCE FOR LANDING WITH SPEED BRAKES FULLY EXTENDED?

(a) IF NOT, IS THERE PROVISION TO AUTOMATICALLY RETRACT THE SPEED BRAKES TO A SAFE POSITION WHEN THE LANDING GEAR IS EXTENDED? _____

(b) CAN THE PILOT OVERRIDE THIS AUTOMATIC FEATURE IN AN EMERGENCY? _____

11. REMARKS

Checked by: _____

Date: _____

B. CATAPULTING PROVISIONS

1. GENERAL

- (a) WHAT MEANS ARE PROVIDED FOR ALL MEMBERS OF THE CREW TO BRACE THEMSELVES DURING LAUNCHING? _____

- (b) ARE HEADRESTS PROVIDED? _____
 FOR WHAT CREW STATIONS? _____

- (c) IS A CATAPULT THROTTLE GRIP PROVIDED WHICH WILL ALLOW THE PILOT TO HOLD THE THROTTLE(S)/POWER LEVER(S) STATIONARY DURING LAUNCHING WITH SHOULDER HARNESS LOCKED? _____
- (1) FOR MILITARY THRUST POSITION? _____
- (2) FOR MAXIMUM (AFTERBURNER) THRUST POSITION? _____
- (d) CAN ICCS LIGHTS BE SEEN FROM COCKPIT (WITH EXTENDED STRUT, IF APPLICABLE)? _____
- (e) IS NOSE GEAR STRUT DESIGN
- (1) STORED ENERGY TYPE _____
- (2) STIFF TYPE _____
- (3) EXTENDED FOR LAUNCH _____
- (4) OTHER _____
- (5) DESCRIBE BRIEFLY _____

2. NOSE GEAR LAUNCH

- (a) DESCRIBE OPERATION OF LAUNCH BAR MECHANISM _____

- (b) WILL LAUNCH BAR REACH 7/8" BELOW DECK TO BE COMPATIBLE WITH FLUSH DECK INSTALLATION? _____

Appendix 6 to MIL-M-8650B(AS)

B. CATAPULTING PROVISIONS (Cont.)

- (c) WILL LAUNCH BAR STEER NOSE GEAR DURING TRACKING? DESCRIBE _____

- (d) DOES LOWER END OF LAUNCH BAR CONFORM TO NAEL(SI) DRAWING 607770? _____
- (e) CAN LAUNCH BAR UPLOCK BE RELEASED BY:
- (1) PILOT? _____
- (2) DECK CREWMAN? _____
- (f) WITH LAUNCH BAR IN UP POSITION,
- (1) IS 360° NOSEWHEEL SWIVELING POSSIBLE? IF NOT, GIVE DETAILS

- (2) WHAT IS DECK CLEARANCE TO LAUNCH BAR? _____
- (g) CAN LAUNCH BAR BE RETRACTED WHILE AIRBORNE WITHOUT RETRACTING NOSEGEAR? _____

- (h) DOES HOLDBACK AND RELEASE INSTALLATION HAVE TWO AXES OF MOVEMENT (HORIZONTAL AND VERTICAL)? _____
- (i) WHERE IS AIRCRAFT HOLDBACK FITTING LOCATED? _____

- (j) DOES AIRCRAFT HOLDBACK FITTING MOVE AT LEAST 15° TO EACH SIDE? _____
- (1) HOW FAR? _____
- (2) ARE STOPS PROVIDED? _____
- (3) IS CENTERING PROVIDED? _____

B. CATAPULTING PROVISIONS (Cont.)

- (k) IS THE HOLDBACK BAR A REPEATABLE TYPE, OR DOES IT USE A RELEASE ELEMENT (TENSION BAR)? _____
- (l) DOES THE AIRCRAFT HOLDBACK FITTING EXCLUDE THE USE OF OTHER RELEASE ELEMENTS OR REPEATABLE HOLDBACK BARS? _____
- (m) DOES THE AIRCRAFT HOLDBACK FITTING HAVE A POSITIVE, INTEGRAL RETAINER FOR THE RUPTURED RELEASE ELEMENT? DESCRIBE _____
- (n) DOES THE AIRCRAFT HOLDBACK FITTING INCORPORATE AN INDICATOR DEVICE WHICH WILL SHOW THAT THE INSTALLED RELEASE ELEMENT OR REPEATABLE RELEASE TYPE HOLDBACK FITTING IS PROPERLY SEATED? DESCRIBE _____
- (o) IS THE RELEASE ELEMENT EASY TO INSERT (WITH GLOVES ON) INTO:
- (1) AIRCRAFT HOLDBACK FITTING? _____
- (2) HOLDBACK BAR? _____
- (p) ARE THE RUPTURED PORTIONS OF THE RELEASE ELEMENT EASY TO REMOVE (WITH GLOVES ON) FROM:
- (1) AIRCRAFT HOLDBACK FITTING? _____
- (2) HOLDBACK BAR? _____
- (q) DOES THE HOLDBACK BAR EXCLUDE THE USE OF RELEASE ELEMENTS NOT DESIGNED FOR IT? _____
- (r) DOES THE HOLDBACK BAR HAVE A POSITIVE, INTEGRAL RETAINER FOR THE RUPTURED RELEASE ELEMENT? DESCRIBE _____
- (s) DOES THE HOLDBACK BAR INCORPORATE AN INDICATOR DEVICE WHICH WILL SHOW THAT THE INSTALLED RELEASE ELEMENT IS PROPERLY SEATED? DESCRIBE _____

B. CATAPULTING PROVISIONS (Cont.)

(t) CAN THE REPEATABLE RELEASE TYPE HOLDBACK BAR BE INSTALLED EASILY IN THE AIRCRAFT HOLDBACK FITTING? _____

(u) DOES THE REPEATABLE RELEASE TYPE HOLDBACK BAR HAVE A QUICK RELEASE OPERABLE BY DECK CREWMEN? _____

(v) IS THERE ADEQUATE CLEARANCE BETWEEN THE HOLDBACK BAR AND THE AIRCRAFT (WITH STORES) TO PRECLUDE INTERFERENCE DURING RELEASE? _____

(w) IS HOLDBACK BAR AUTOMATICALLY ORIENTED WHEN INSTALLED SO THAT "TEE" WILL PROPERLY ENGAGE DECK HARDWARE? _____

(x) (1) WHERE IS THE COCKPIT CONTROL LOCATED? _____

(2) IS IT ACCESSABLE WITH SHOULDER HARNESS LOCKED? _____

(3) IS IT READILY VISIBLE WITH SHOULDER HARNESS LOCKED? _____

(4) DESCRIBE OPERATION _____

(y) IS A LAUNCH BAR RED WARNING LIGHT PROVIDED? DESCRIBE OPERATION _____

(z) IS WIDTH BETWEEN NOSE GEAR TIRES COMPATIBLE WITH NGL DECK RAMP? _____

B. CATAPULTING PROVISIONS (Cont.)

3. BRIDLE/PENDANT LAUNCH

- (a) WHERE ARE CATAPULT HOOKS LOCATED? _____

- (b) IS CONTOUR CONDUCTIVE TO POSITIVE SEATING OF LAUNCHING BRIDLE? _____
- (c) HOW ARE HOOKS RETRACTED (IF RETRACTABLE)? _____

- (d) ARE CLEARANCES FOR EXTENDING HOOKS AND ATTACHING BRIDLE ADEQUATE? _____
- (e) ARE CLEARANCES AROUND AND AFT OF HOOKS ADEQUATE FOR BRIDLE SHEDDING? _____
- (f) WHERE IS AIRCRAFT HOLDBACK FITTING LOCATED? _____

- (g) IF RETRACTABLE, HOW IS AIRCRAFT HOLDBACK FITTING OPERATED? _____

- (h) ARE CLEARANCES FOR ATTACHING HOLDBACK AND RELEASE ASSEMBLY ADEQUATE? _____
- (i) ARE CLEARANCES FOR SHEDDING HOLDBACK AND RELEASE ASSEMBLY ADEQUATE WITH AIRPLANE IN "RELEASE" ATTITUDE? _____
- (j) DOES THE AIRCRAFT HOLDBACK FITTING EXCLUDE THE USE OF OTHER RELEASE ELEMENTS OR REPEATABLE HOLDBACK BARS? _____
- (k) IS HOOK-UP OF BRIDLE/PENDANT VISIBLE FOR CHECK FROM REASONABLE DISTANCE AND POSITION? _____
- (l) DOES THE AIRCRAFT HOLDBACK FITTING HAVE A POSITIVE, INTEGRAL RETAINER FOR THE RUPTURED RELEASE ELEMENT? DESCRIBE _____

- (m) DOES THE AIRCRAFT HOLDBACK FITTING INCORPORATE AN INDICATOR DEVICE WHICH WILL SHOW THAT THE INSTALLED RELEASE ELEMENT OR REPEATABLE RELEASE TYPE HOLDBACK FITTING IS PROPERLY SEATED? DESCRIBE _____

B. CATAPULTING PROVISIONS (Cont.)

- (n) IS THE RELEASE ELEMENT EASY TO INSERT (WITH GLOVES ON) INTO:
- (1) AIRCRAFT HOLDBACK FITTING? _____
- (2) HOLDBACK AND RELEASE ASSEMBLY? _____
- (o) ARE THE RUPTURED PORTIONS OF THE RELEASE ELEMENT EASY TO REMOVE (WITH GLOVES ON) FROM:
- (1) AIRCRAFT HOLDBACK FITTING? _____
- (2) HOLDBACK AND RELEASE ASSEMBLY? _____
- (p) IS THE HOLDBACK AND RELEASE ASSEMBLY A REPEATABLE TYPE, OR DOES IT USE A RELEASE ELEMENT (TENSION BAR)? _____
-
- (q) DOES THE HOLDBACK AND RELEASE ASSEMBLY EXCLUDE THE USE OF OTHER RELEASE ELEMENTS? _____
- (r) DOES THE HOLDBACK AND RELEASE ASSEMBLY HAVE A POSITIVE, INTEGRAL RETAINER FOR THE RUPTURED RELEASE ELEMENT? DESCRIBE _____
-
-
-
- (s) DOES THE HOLDBACK AND RELEASE ASSEMBLY INCORPORATE AN INDICATOR DEVICE WHICH WILL SHOW THAT THE INSTALLED RELEASE ELEMENT IS PROPERLY SEATED? DESCRIBE _____
-
-
- (t) CAN THE REPEATABLE RELEASE TYPE HOLDBACK ASSEMBLY BE INSTALLED EASILY IN THE AIRCRAFT HOLDBACK FITTING? _____
- (u) DOES THE REPEATABLE RELEASE TYPE HOLDBACK ASSEMBLY HAVE A QUICK RELEASE OPERABLE BY DECK CREWMEN? _____

B. CATAPULTING PROVISIONS (Cont.)

4. SATS

- (a) IS LAUNCH BAR COMPATIBLE WITH SATS? _____
- (b) WHAT TYPE OF BRIDLE IS REQUIRED FOR SATS? _____
- (c) ARE BRIDLE/PENDANT CLEARANCES ADEQUATE? _____
- (d) IS AIRCRAFT FUSELAGE/STORES SUSCEPTABLE TO DAMAGE BY HOLDBACK ASSEMBLY AT RELEASE? _____

- (e) IS NOSE WHEEL TIRE WIDTH COMPATIBLE WITH SATS DOLLY? _____

5. REMARKS.

Checked by: _____

Date: _____

C. ARRESTING PROVISIONS

1. WHAT TYPE ARRESTING HOOK INSTALLATION IS PROVIDED? (STINGER, "V" OR "Y" TYPE)

- (a) IF "V" OR "Y" TYPE, ARE DUAL DASHPOTS PROVIDED? _____
2. WHERE IS HOOK LOCATED? _____

- (a) IS DECK PENDANT SLAP LIKELY ON AFT FUSELAGE OR TAIL SURFACES? _____

- (b) DOES RAISING, LOWERING, OR LATERAL MOVEMENT OF THE HOOK INTERFERE WITH TAILWHEEL OR OTHER PARTS OF THE AIRCRAFT? _____
3. WHAT TYPE GUARDS ARE PROVIDED TO PREVENT THE ARRESTING WIRE FROM ENGAGING OR DAMAGING PARTS OF THE AIRCRAFT DURING ALL REASONABLE POSITIONS OF THE AIRCRAFT EXPECTED IN AN ARRESTED LANDING? _____

4. WILL THE HOOK BUMPER PREVENT DAMAGE TO THE AIRCRAFT FOR ANY LATERAL POSITION OF THE HOOK? _____
5. WHAT TYPE GUARD IS PROVIDED ON TAILWHEEL FOR SHEDDING THE ARRESTING WIRE? _____

6. WHAT IS NOSEWHEEL FLAT-TIRE ROLLING RADIUS? _____
- (a) WILL NOSEWHEEL PASS OVER DECK PENDANT? _____
7. IS HOOK CENTERING INCORPORATED? DESCRIBE _____

8. DESCRIBE OPERATION OF ARRESTING HOOK INSTALLATION, INCLUDING RETRACT, RELEASE AND EMERGENCY RELEASE _____

C. ARRESTING PROVISIONS (Cont.)

9. DESCRIBE FAIRING ATTACHED TO OR NEAR ARRESTING HOOK _____

(a) ARE CLEARANCES ADEQUATE TO PREVENT DAMAGE FROM DECK PENDANT OR SHANK?

10. WHAT PROVISION IS MADE FOR SERVICING HOOK SHOCK ABSORBER? _____

(a) DOES INSTALLATION PROVIDE GAGES FOR READILY CHECKING FLUID-AIR PRESSURES?

(b) DOES INSTALLATION PROVIDE AMBIENT TEMPERATURE VS. PRESSURE SERVICING
DECAL (INSTRUCTIONS)? _____

(c) ARE FLUID AND AIR SERVICING POINTS READILY ACCESSIBLE TO GROUND CREW AND
ARE THEY LOCATED NEAR GAGES TO MONITOR PRESSURES? _____

11. IS A DETACHABLE HOOKPOINT PROVIDED? _____

(a) DESCRIBE ATTACHMENT JOINT _____

(b) WHAT PROVISIONS ARE THERE FOR PREVENTING INCORRECT INSTALLATION OF THE
HOOKPOINT? _____

12. IS AIRCRAFT COMPATIBLE WITH STANDARD BARRICADE (SIMULATED) SUCH THAT ONLY MINOR
STRUCTURAL DAMAGE WILL BE SUSTAINED? _____

C. ARRESTING PROVISIONS (Cont.)

(a) WILL INSTALLATIONS ON THE NOSE OR FUSELAGE FORWARD OF THE WING ACT AS BARRICADE ENGAGEMENT POINTS? _____

(b) DOES THE NOSEWHEEL PROVIDE A STRAP CUTTER INSTALLATION TO PREVENT INTERFERENCE WITH ARRESTMENT DUE TO STRAP ENTANGLEMENT BETWEEN THE WHEELS? _____

(c) ARE STRAP CUTTERS INSTALLED BETWEEN THE INLET SPLITTER PLATES AND THE FUSELAGE? _____

(d) ARE STRAP RETENTION DEVICES (DETENTS) INSTALLED ALONG LEADING EDGE OF WING? _____

(e) WILL AIRCRAFT BOMB RACKS AND EXTERNAL STORE INSTALLATIONS ACT AS STRAP ENGAGING POINTS? _____

(f) IS COMPOSITION OF SKIN MATERIAL ON LANDING GEAR DOORS, VERTICAL STABILIZER, AND WING LEADING EDGES SUFFICIENT TO AID ARRESTMENT RATHER THAN CUTTING STRAPS? _____

13. REMARKS.

Checked by: _____

Date: _____

D. DECK HANDLING PROVISIONS

1. WHAT TYPE TIEDOWN FITTINGS ARE PROVIDED? _____
- (a) WHERE ARE THEY LOCATED? _____
- _____
- (b) DOES THEIR LOCATION PROVIDE EFFICIENT ARRANGEMENT OF SECURING LINES? _____
- _____
- (c) WILL THEY PERMIT SECURING THE AIRCRAFT WITH WINGS FOLDED/SWEPT AND WINGS SPREAD? _____
- _____
- (d) ARE THE TIEDOWN FITTINGS SUITABLE FOR USE WITH STANDARD TIEDOWN EQUIPMENT PROVIDED ON CARRIERS? (MIL-T-81259) _____
- (e) CAN ALL TIEDOWN FITTINGS BE REACHED WITHOUT THE USE OF A LADDER? _____
- _____
- (f) WHAT PROVISIONS ARE MADE FOR SECURING THE AIRCRAFT DURING FULL POWER ENGINE RUNUPS? _____
- _____
2. WHAT PROVISIONS ARE MADE FOR ATTACHMENT OF STANDARD TOW BAR EQUIPMENT FURNISHED ON CARRIERS, INCLUDING AFT TOWING? _____
- _____
- (a) ARE SPECIAL TOW BARS REQUIRED? _____
- _____
- (b) ARE CLEARANCES ADEQUATE (INCLUDING TRACTOR WITH DRIVER UNDER AIRCRAFT). _____
- _____
3. IS THE AIRCRAFT COMPATIBLE WITH THE SD-1 SERIES SPOTTING DOLLIES? _____
- _____
- (a) CAN THE SPOTTING DOLLY BE ATTACHED FROM BEHIND THE NOSE GEAR? _____
- _____
- _____

Appendix 6 to MIL-M-8650B(AS)

D. DECK HANDLING PROVISIONS (Cont.)

4. DOES THE LAUNCH BAR INTERFERE WITH THE TOWBAR OR THE SPOTTING DOLLY?

5. JACKING

(a) ARE SPECIAL JACKS REQUIRED? _____

(b) LIST STANDARD JACKS THAT CAN BE USED TO:

(1) CHANGE NOSE WHEELS _____

(2) CHANGE MAIN WHEELS _____

(3) JACK ENTIRE AIRCRAFT _____

(c) ARE MAIN AND NOSE GEAR JACK PADS SUITABLE FOR CHANGING MAIN AND NOSE WHEELS ON FLIGHT DECK? _____

6. WHAT PROVISIONS ARE MADE FOR HOISTING? _____

7. REMARKS.

Checked by: _____

Date: _____

Appendix 7 to MIL-M-8650B(AS)
13 May 1969

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360

APPENDIX 7

SPECIAL EQUIPMENT AND SPECIAL SUPPORT EQUIPMENT -

AIRCRAFT MOCKUP CHECKOFF LIST

MODEL _____ AIRCRAFT

CONTRACT NO. _____ /FY _____

This SPECIAL EQUIPMENT AND SPECIAL SUPPORT EQUIPMENT checkoff list consists of the following sections (cross out those sections listed that are not applicable and omit from the list):

- | | |
|--------------------------|---------------------|
| A. HOISTING | I. HYDRAULICS |
| B. JACKING | J. LIQUID OXYGEN |
| C. STARTING AND BOARDING | K. PNEUMATIC SYSTEM |
| D. MOORING | L. AIR CONDITIONING |
| E. SECURING | M. AVIONICS |
| F. HANDLING | N. REARMING |
| G. FUEL | O. POWER PLANTS |
| H. ENGINE OIL | P. MISCELLANEOUS |

FSC 6910

Prepared by: _____

Date: _____

NOTE: The abbreviation "N.A." used herein denotes "Not applicable".

A. HOISTING

1. ARE FITTINGS PROVIDED FOR HOISTING SLINGS? _____
2. ARE SEPARATE ADAPTERS REQUIRED? _____
3. CAN AIRPLANE BE HOISTED WITH WINGS FOLDED/SWEPT? _____
 - (a) ARE AIRCRAFT HOIST FITTINGS AND HOISTING SLINGS ADEQUATE FOR AIRCRAFT HOISTING UNDER CRASH DAMAGE CONDITIONS RELATIVE TO HOISTING ANGLES, WEIGHT AND AIRCRAFT ATTITUDES AND ON BOARD SHIP? _____
4. WHAT ARE THE APPROXIMATE WEIGHTS AND WHAT PROVISIONS ARE MADE FOR HOISTING?
 - (a) OUTER WING PANELS? _____
 - (b) FIN? _____
 - (c) STABILIZERS? _____
 - (d) FLAPS? _____
 - (e) CANOPY? _____
 - (f) RADOME? _____

B. JACKING

1. WHAT NUMBER, HEIGHT AND CAPACITY OF JACKS ARE REQUIRED FOR AIRPLANE JACKING? _____
2. ARE JACK PADS REMOVABLE OR FIXED? _____
3. ARE JACK PADS PROVIDED ON EACH GEAR FOR TIRE CHANGING? _____
4. DO WHEEL JACK PADS PROVIDE CLEARANCE FOR STANDARD JACK UNDER FLAT TIRE CONDITIONS? _____
5. IF JACK PADS ARE REMOVABLE, ARE THEY INTERCHANGEABLE AT ALL LOCATIONS?

6. DOES THE NOSE WHEEL LOCK FORE AND AFT FOR SIDE MOUNT JACKING? _____

C. STARTING AND BOARDING

1. WHAT ARE STARTING AIR REQUIREMENTS? _____
2. CAN BOTH ENGINES START FROM A SINGLE AIR CONNECTION OR ARE THERE INDIVIDUAL CONNECTIONS AT EACH ENGINE? _____

Appendix 7 to MIL-M-8650B(AS)

C. STARTING AND BOARDING (Cont)

3. ARE CONNECTOR(S) CONVENIENTLY LOCATED? _____
4. WHAT ARE ELECTRICAL REQUIREMENTS FOR STARTING? _____
5. WHERE IS RECEPTACLE LOCATED? _____
6. IS A BOARDING LADDER REQUIRED FOR CREW ENTRY? _____
7. IF SO, ARE ATTACHMENTS PROVIDED ON THE AIRFRAME? _____
8. IS THE LADDER EASILY HANDLED AND SUITABLE FOR MAINTENANCE USE? _____

D. MOORING

1. ARE TIE-DOWN FITTINGS AT LEAST 3.2 SQ. INCHES OPENING AREA WITH A MINOR AXIS OF 1 INCH OR MORE? _____
2. CAN TIE-DOWN FITTINGS BE USED WITH WINGS FOLDED/SWEPT? _____
3. ARE FITTINGS PROVIDED FOR RESTRAINING THE AIRPLANE ON JACKS WITH LANDING GEAR CYCLED UP? _____
4. ARE FITTINGS ADEQUATE FOR HEAVY WEATHER SECURING? _____

E. SECURING

1. ARE LANDING GEAR DOWN LOCKS REQUIRED AND IF SO, EASY TO USE? _____
2. ARE INLET AND EXHAUST PLUGS INTERCHANGEABLE BETWEEN SIDES? _____
3. ARE PROVISIONS MADE AS REQUIRED FOR SECURING:
 - (a) INLET AND EXHAUST PLUGS? _____
 - (b) PROBE COVERS? _____
 - (c) VENT AND OTHER PLUGS? _____
4. IS A CANOPY COVER REQUIRED AND IF SO ARE SECURING ATTACHMENTS PROVIDED?

5. ARE CONTROL SURFACE BATTENS REQUIRED AND IF SO ARE ATTACHMENTS PROVIDED? _____
6. ARE WING JURY STRUTS REQUIRED? IF SO, ARE THEY EASILY ATTACHED UNDER WING LOADS? _____
7. IS SAFETYING PROVIDED FOR EJECTION SEATS AND CANOPY JETTISON DEVICES?

Appendix 7 to MIL-M-8650B(AS)

F. HANDLING

1. CAN STANDARD TOW BAR BE USED FOR FORWARD/AFT TOWING? _____
2. CAN BRAKES BE USED WITHOUT EXTERNAL POWER? _____
3. WHAT DEGREE OF SWIVEL DOES THE NOSE WHEEL HAVE FOR TOWING AND HANDLING?

G. FUEL

1. IS REFUELING/DEFUELING SINGLE POINT? _____
2. IF MORE THAN ONE ADAPTER IS USED ARE THEY AT LEAST 10 INCHES APART ON CENTERS? _____
3. IS ELECTRICAL POWER REQUIRED FOR FUELING/DEFUELING? _____
4. IS FUELING ADAPTER(S) EASILY ACCESSIBLE TO A MAN STANDING ON DECK? _____
5. ARE FUEL CAPACITANCE TEST JACKS LOCATED CONVENIENTLY? _____

H. ENGINE OIL

1. IS PRESSURE OILING ADAPTER EASILY ACCESSIBLE FROM THE DECK? _____
2. WHAT TYPE OF OIL QUANTITY GAGING IS PROVIDED? _____

I. HYDRAULICS

1. WHAT TYPE OF FLUID IS USED? _____
2. WHAT ARE PRESSURE AND FLOW REQUIREMENTS FOR EXTERNAL POWER? _____
3. ARE EXTERNAL TEST CONNECTIONS CONVENIENTLY LOCATED? _____
4. IS CONNECTION AT MORE THAN ONE LOCATION REQUIRED FOR SYSTEM TEST? _____
5. IS ELECTRICAL POWER REQUIRED FOR SYSTEM TEST? _____
6. IS HYDRAULIC FLUID SERVICING CONNECTOR CONVENIENTLY LOCATED? _____
7. IS RESERVOIR QUANTITY GAGING PROVIDED IN A CONVENIENT LOCATION? _____
8. ARE HYDRAULIC ACCUMULATOR SERVICING CONNECTIONS PROVIDED IN A CONVENIENT LOCATION? _____
9. IS AIR OR NITROGEN USED FOR ACCUMULATOR SERVICING? WHAT PRESSURE? _____
10. ARE AIR ACCUMULATOR GAGES PROVIDED IN A CONVENIENT LOCATION? _____

Appendix 7 to MIL-M-8650B(AS)

J. LIQUID OXYGEN

1. HOW MANY CONVERTERS ARE REQUIRED? _____ WHAT SIZE? _____
2. ARE CONVERTERS REMOVED FOR SERVICING OR SERVICED IN PLACE? _____
3. IF SERVICED IN PLACE HOW IS FULL INDICATION PROVIDED? _____
4. IS OVERFLOW LOCATED SO AS TO PROTECT SERVICING PERSONNEL? _____

K. PNEUMATIC SYSTEM

1. IS SYSTEM AN AIRBORNE COMPRESSOR OR BOTTLES? _____
2. IF BOTTLES WHAT PRESSURE REQUIRED FOR SERVICING? _____
3. WHERE ARE THE SERVICING CONNECTIONS LOCATED? _____

L. AIR CONDITIONING SYSTEM

1. WHAT TYPE OF SYSTEM (LIQUID CYCLE, AIR CYCLE, WATER BOILER)? _____
2. IS SPECIAL TEST EQUIPMENT REQUIRED? _____
3. WHAT ARE GROUND COOLING REQUIREMENTS? _____
4. WHERE ARE GROUND COOLING CONNECTIONS LOCATED? _____

M. AVIONICS

1. WHAT QUANTITY, TYPE AND FREQUENCY OF GROUND POWER IS REQUIRED FOR AVIONICS SYSTEMS LINE CHECKOUT? _____
2. TO WHAT EXTENT IS BUILT-IN TEST EQUIPMENT PROVIDED:
 - (a) PERCENTAGE OF EQUIPMENT SELF CHECKED? _____
 - (b) WHAT DISPLAYS ARE PROVIDED? _____
 - (c) ARE HUMAN FACTORS CONSIDERED IN THE LOCATION OF DISPLAYS? _____
 - (d) TO WHAT LEVEL DOES IT TEST? _____
3. TO WHAT EXTENT IS EXTERNAL TEST EQUIPMENT REQUIRED FOR LINE CHECKOUT:
 - (a) WHAT PERCENTAGE OF EQUIPMENT REQUIRES EXTERNAL TEST EQUIPMENT? _____
 - (1) FULLY AUTOMATIC? _____
 - (2) SEMI-AUTOMATIC? _____
 - (3) MANUAL? _____

M. AVIONICS (Cont)

- (b) IS AIRPLANE CONFIGURATION COMPATIBLE WITH BACE? _____
- (1) IS HARNESS INTEGRAL WITH AIRPLANE? _____
- (2) WHAT IS VOLUME OF SPECIAL ADAPTERS REQUIRED? _____
- (3) HOW MANY SEPARATE TEST CONNECTIONS ARE REQUIRED AND WHERE ARE THEY LOCATED? _____
- (c) TO WHAT LEVEL DOES IT TEST? _____
- (d) HOW MANY SEPARATE PIECES OF EQUIPMENT ARE REQUIRED FOR STIMULI GENERATORS, PROGRAMMERS, COMPARATORS, ADAPTERS? _____
- (e) WHAT ARE THE COOLING REQUIREMENTS? _____
- (f) WHAT ARE THE SIZE, WEIGHT AND MOBILITY CHARACTERISTICS OF THE EQUIPMENT? _____
4. ARE COMPONENTS ACCESSIBLE FOR READY REMOVAL FOR BENCH TEST? _____
5. CAN TRANSMITTERS BE TESTED UNDER R.F. SILENCE CONDITIONS WITHOUT THE USE OF SPECIAL TEST EQUIPMENT? _____
- (a) WAVEGUIDE SWITCHES INTEGRAL? _____
- (b) DUMMY LOADS INTEGRAL? _____
- (c) COOLING INTEGRAL? _____

N. REARMING

1. IS ELECTRICAL OR HYDRAULIC POWER REQUIRED FOR REARMING? _____
2. WHAT IS THE VOLUME AND CONFIGURATION OF HANDLING EQUIPMENT REQUIRED FOR LOADING STORES? _____
- (a) GOVERNMENT FURNISHED? _____
- (b) CONTRACTOR FURNISHED? _____

O. POWER PLANTS

1. WHAT IS THE GENERAL ARRANGEMENT AND CONCEPT FOR ENGINE REMOVAL, INSTALLATION, TRANSPORTATION, MAINTENANCE? _____

Appendix 7 to MIL-M-8650B(AS)

O. POWER PLANTS (Cont)

2. WHAT SPECIAL EQUIPMENT IS REQUIRED FOR INSTALLATION AND REMOVAL:
- (a) GOVERNMENT FURNISHED? _____
- (b) CONTRACTOR FURNISHED? _____
3. IS INSTALLATION AND REMOVAL EQUIPMENT COMPATIBLE WITH TRANSPORTATION AND MAINTENANCE? _____
4. WHAT DEGREE OF ENGINE MAINTENANCE CAN BE PERFORMED WITHOUT SEPARATING THE ENGINES ENTIRELY FROM THE AIRPLANE AND AIRFRAME ATTACHED SUPPORT EQUIPMENT? _____
5. DOES THE C.G. CHANGE DURING ENGINE INSTALLATION AND REMOVAL REQUIRE THAT THE AIRPLANE BE SUPPORTED ON JACKS FOR THESE OPERATIONS? _____
6. IS ENGINE ACCESSIBLE FOR THE USE OF STANDARD TEST AND TRIM EQUIPMENT?
7. WILL OTHER THAN STANDARD EQUIPMENT BE REQUIRED FOR ENGINE TRIM? _____
8. IS POWERPLANT INSTALLATION AND CONFIGURATION COMPATIBLE WITH THE USE OF NOISE SUPPRESSION EQUIPMENT? _____

NOTE: ENGINE INSTALLATION AND REMOVAL MAY BE DEMONSTRATED ON THE LEFT ENGINE ONLY PROVIDED EQUIPMENT, CLEARANCES AND PROCEDURES ARE SYMMETRICAL. ASYMMETRIC CONDITIONS WITH RESPECT TO THE RIGHT ENGINE MAY BE MOCKED-UP SEPARATELY. CONTRACTOR FURNISHED EQUIPMENT FOR THIS DEMONSTRATION SHALL BE FURNISHED IN MOCKED-UP OR PROTOTYPE FORM WHICHEVER IS SUITABLE FOR THE PURPOSE.

P. MISCELLANEOUS

1. CAN BOARDING LADDER BE USED FOR MAINTENANCE? _____
2. ARE ATTACHMENTS PROVIDED WHERE REQUIRED? _____
3. IS HANDLING EQUIPMENT REQUIRED FOR SUCH HEAVY COMPONENTS AS RADOMES, ANTENNA, MODULATOR, ETC.? _____
4. ARE THESE COMPONENTS ACCESSIBLE FOR STANDARD HANDLING EQUIPMENT? _____
5. IS BORE-SIGHTING EQUIPMENT REQUIRED AND IF SO ARE ATTACHMENTS PROVIDED?

6. ARE PROVISIONS MADE FOR ADAPTING A STANDARD ENGINE RUN-UP HOLDBACK?

P. MISCELLANEOUS (Cont)

7. WHAT PROVISIONS ARE MADE FOR REMOVING AND INSTALLING EJECTION SEATS? _____
8. MUST THE CANOPY BE REMOVED TO INSTALL AND REMOVE SEATS? _____
9. ARE ENGINE RUN UP SCREEN ATTACHMENTS PROVIDED? _____
10. ARE THE SCREENS DESIGNED FOR COMPACT STOWAGE? _____
11. ARE ATTACHMENTS PROVIDED FOR A RAM AIR TURBINE WIND TUNNEL? _____

Checked by: _____

Date: _____

Appendix 8 to MIL-M-8650B(AS)

13 May 1969

Superseding Appendix 6 of

1 April 1960

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360

APPENDIX 8

PHOTOGRAPHIC EQUIPMENT - AIRCRAFT MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ AIRCRAFT _____

CONTRACT NO. _____/FY _____

This PHOTOGRAPHIC EQUIPMENT checkoff list consists of the following sections (cross out those sections listed below that are not applicable and omit from list):

- | | |
|---|--------------------------------------|
| A. GUN CAMERAS AND/OR GUNSIGHT CAMERAS (PAGE A-1) | E. FORWARD FIRING CAMERAS (PAGE E-1) |
| B. VERTICAL CAMERAS (PAGE B-1) | F. VIEW FINDERS (PAGE F-1) |
| C. OBLIQUE CAMERAS (PAGE C-1) | G. CAMERA CONTROL SYSTEM (G-1) |
| D. BOMB DAMAGE ASSESSMENT CAMERAS (PAGE D-1) | |

FSC 691G

Prepared by: _____

Date: _____

NOTE: The abbreviation "N.A." used herein denotes "Not applicable."

Appendix 8 to MIL-M-8650B(AS)

A. GUN CAMERAS/AND/OR GUNSIGHT CAMERAS

1. WHAT TYPE GUN CAMERA IS INSTALLED? _____
2. WHAT TYPE MOUNT IS INSTALLED? _____
3. WHERE IS GUN CAMERA LOCATED? _____

- (a) DOES THE LOCATION OF THE GUN CAMERA AFFORD AN UNOBSTRUCTED FIELD OF VIEW AT LEAST EQUAL TO THE LENS COVERAGE OF THE CAMERA ($8\frac{1}{2}^{\circ}$ FROM THE LENS AXIS, 17° TOTAL)? _____
- (b) IS THE LOCATION SUCH THAT DURING NORMAL OPERATION OF THE AIRCRAFT, THE GUN CAMERA WILL BE FREE OF DIRT, OIL, FOREIGN MATTER, AND EXCESS HEAT? _____
- (c) IS THE LOCATION SUCH THAT THE GUN CAMERA CAN BE READILY REMOVED, REPLACED, LOADED, SERVICED, AND BORESIGHTED? _____
4. WHAT PROVISION HAS BEEN MADE TO PREVENT EXCESSIVE VIBRATION OF THE GUN CAMERA DURING GUNFIRE? _____

5. HOW IS CAMERA LENS PROTECTED? _____

- (a) IS SPACE PROVIDED FOR INSTALLATION OF A CAMERA LENS HEATER? _____
6. WHAT AUTOMATIC CONTROLS ARE PROVIDED? _____

7. IN NIGHT FIGHTER AIRCRAFT, IS SPACE ALLOWED TO ACCOMMODATE THE NIGHT GUNNERY TRAINING LIGHT? _____
- (a) IS THE NIGHT GUNNERY TRAINING LIGHT AS CLOSE TO THE CAMERA LENS AS POSSIBLE (WITHIN ONE INCH)? _____
8. REMARKS. -

Checked by: _____

Date: _____

B. VERTICAL CAMERAS

1. WHAT TYPE VERTICAL CAMERAS ARE INSTALLED? _____

2. WHAT TYPE MOUNTS ARE INSTALLED? _____

3. WHERE ARE VERTICAL CAMERAS LOCATED? _____

- (a) IS LOCATION SUCH THAT THE CAMERA EQUIPMENT CAN BE READILY REMOVED, REPLACED, LOADED, AND SERVICED? _____
- (b) IS MAGAZINE INSTALLATION AND REMOVAL PROVISION ADEQUATE? _____
4. WHAT VISION IS PROVIDED? _____
5. WHAT RANGE OF ANGLES IS REQUIRED? _____
6. IS INSTALLATION SATISFACTORY REGARDING EASE OF OPERATION? _____
7. ARE REMOTE CONTROLS SATISFACTORY? _____
8. ARE CAMERA LATCHES OR DOORS READILY OPENED IN FLIGHT? _____
9. ARE VACUUM CONNECTIONS READILY ACCESSIBLE TO CAMERA STATION? _____
10. ARE ELECTRICAL CONNECTIONS READILY ACCESSIBLE TO CAMERA STATION? _____
11. IS SUITABLE STOWAGE PROVIDED FOR REQUIRED ITEMS? _____
12. REMARKS. -

Checked by: _____

Date: _____

C. OBLIQUE CAMERAS

1. WHAT TYPES OF OBLIQUE CAMERAS ARE INSTALLED? _____

2. WHAT TYPES OF MOUNTS ARE INSTALLED? _____

3. WHERE ARE OBLIQUE CAMERAS LOCATED? _____

- (a) IS LOCATION SUCH THAT THE CAMERA EQUIPMENT CAN BE READILY REMOVED,
REPLACED, LOADED, AND SERVICED? _____
- (b) IS MAGAZINE INSTALLATION AND REMOVAL PROVISION ADEQUATE? _____
4. WHAT VISION IS PROVIDED? _____
5. WHAT RANGE OF ANGLES IS REQUIRED? _____
6. IS INSTALLATION SATISFACTORY REGARDING EASE OF OPERATION? _____
7. ARE REMOTE CONTROLS SATISFACTORY? _____
8. ARE CAMERA LATCHES OR DOORS READILY OPENED IN FLIGHT? _____
9. ARE VACUUM CONNECTIONS READILY ACCESSIBLE TO CAMERA STATION? _____
10. ARE ELECTRICAL CONNECTIONS READILY ACCESSIBLE TO CAMERA STATION? _____
11. IS SUITABLE STOWAGE PROVIDED FOR REQUIRED ITEMS? _____
12. REMARKS. -

Checked by: _____

Date: _____

D. BOMB DAMAGE ASSESSMENT CAMERA

1. WHAT TYPE BOMB DAMAGE ASSESSMENT CAMERA IS INSTALLED? _____

2. WHAT TYPE MOUNT IS INSTALLED? _____
3. WHERE IS BOMB DAMAGE ASSESSMENT CAMERA LOCATED? _____
 - (a) IS LOCATION SUCH THAT THE CAMERA EQUIPMENT CAN BE READILY REMOVED, REPLACED, LOADED, AND SERVICED? _____
 - (b) IS MAGAZINE INSTALLATION AND REMOVAL PROVISION ADEQUATE? _____
4. WHAT VISION IS PROVIDED? _____
5. WHAT RANGE OF ANGLES IS REQUIRED? _____
6. IS INSTALLATION SATISFACTORY REGARDING EASE OF OPERATION? _____
7. ARE REMOTE CONTROLS SATISFACTORY? _____
8. ARE CAMERA LATCHES OR DOORS READILY OPENED IN FLIGHT? _____
9. ARE VACUUM CONNECTIONS READILY ACCESSIBLE TO CAMERA STATION? _____
10. ARE ELECTRICAL CONNECTIONS READILY ACCESSIBLE TO CAMERA STATION? _____
11. IS SUITABLE STOWAGE PROVIDED FOR REQUIRED ITEMS? _____
12. REMARKS. -

Checked by: _____

Date: _____

E. FORWARD FIRING CAMERAS

1. WHAT TYPE FORWARD FIRING CAMERA IS INSTALLED? _____
(a) WHAT OTHER TYPES CAN BE INSTALLED? _____

2. WHAT ARE CAMERA DEPRESSION ANGLES? _____
3. WHAT (IF ANY) VIGNETTING IS CAUSED BY CAMERA WINDOW? _____
4. IS CAMERA INSTALLATION AND REMOVAL PROVISION ADEQUATE? _____
5. IS MAGAZINE INSTALLATION AND REMOVAL PROVISION ADEQUATE? _____
6. DOES ACCESS DOOR FOR FORWARD FIRING CAMERA FAIL SAFE? _____
(a) HAS PROVISION BEEN MADE FOR HOLDING OPEN THE DOOR FOR SERVICING?

7. REMARKS. -

Checked by: _____

Date: _____

F. VIEW FINDERS

1. WHAT TYPE VIEW FINDER IS INSTALLED? _____
2. DOES VIEW FINDER AFFORD ENOUGH PILOT HEAD MOVEMENT? _____
3. IS EYE POSITION SATISFACTORY? _____
4. ARE GRID LINES SATISFACTORY? _____
5. IS THERE ANY NOTICEABLE DISTORTION? _____
6. IS LIGHT TRANSMISSION ADEQUATE? _____
7. DO VIEW FINDER CONTROLS OPERATE PROPERLY? _____
8. REMARKS. -

Checked by: _____

Date: _____

Appendix 8 to MIL-M-8650B(AS)

G. CAMERA CONTROL SYSTEM

1. ARE ALL CAMERA CONTROL SYSTEM COMPONENTS REQUIRING PREFLIGHT SETTING OF INPUT DATA READILY ACCESSIBLE TO GROUND CREW? _____

2. ARE ALL CAMERA CONTROL SYSTEM COMPONENTS REQUIRING INFLIGHT ADJUSTMENTS CONVENIENTLY LOCATED, READILY ACCESSIBLE AND OPERABLE BY THE CREW?

3. DOES ANY PARAMETER OF THE CONTROL SYSTEM U/H RANGE, IMC RATES, ETC. COMPROMISE THE PHOTOGRAPHIC CAPABILITY AS RELATED TO CAMERA AND AIRCRAFT PERFORMANCE? _____

4. REMARKS. -

Checked by: _____

Date: _____

Appendix 9 to MIL-M-8650B(AS)

13 May 1969

Superseding Appendix 7 of

1 April 1960

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20360

APPENDIX 9LIGHTING SYSTEMS MOCKUP - AIRCRAFT MOCKUP INSPECTION CHECKOFF LIST

MODEL _____ AIRCRAFT

CONTRACT NO. _____/FY _____

This LIGHTING SYSTEMS MOCKUP checkoff list consists of the following sections (cross out those sections listed below that are not applicable and omit from list):

- | | |
|--|---|
| A. COCKPIT (PILOT/CO-PILOT/INFO)
(PAGES A-1 TO A-2) | F. CIC OPERATOR'S STATION
(PAGES F-1 TO F-2) |
| B. RADIO OPERATOR'S STATION
(PAGES B-1 TO B-2) | G. EQUIPMENT COMPARTMENTS
(PAGE G-1) |
| C. RADAR OPERATOR'S STATION
(PAGES C-1 TO C-2) | H. PASSENGER COMPARTMENT
(PAGE H-1) |
| D. NAVIGATOR'S STATION
(PAGES D-1 TO D-2) | I. CARGO COMPARTMENT
(PAGE I-1) |
| E. FLIGHT ENGINEER'S STATION
(PAGES E-1 TO E-2) | J. EXTERIOR LIGHTING
(PAGE J-1) |

FSC 6910

Prepared by: _____

Date: .. _____

NOTE: The abbreviation "N.A." used herein denotes "Not applicable."

A. COCKPIT (PILOT/CO-PILOT/NFO)

1. ARE ALL INSTRUMENTS ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS OF INSTRUMENTS READABLE? _____
 - (d) MAY LAMPS IN THE INSTRUMENT PANEL BE QUICKLY AND EASILY REPLACED IN FLIGHT? _____

2. ARE ALL CONTROLS, INSTRUCTIONS, AND NAMEPLATES ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON CONTROLS, INSTRUCTIONS AND NAMEPLATES READABLE? _____
 - (d) DO ALL ILLUMINATED PUSH-BUTTON SWITCHES MEET BRIGHTNESS REQUIREMENTS OF MIL-STD-411 FOR BOTH DAY AND NIGHT CONDITIONS? _____

3. IS THE INTENSITY OF LIGHTING FOR SOME INSTRUMENTS AND CONTROLS CONTROLLED SEPARATELY? _____ STATE. _____

4. IS FLOOD LIGHTING PROVIDED? _____ IS THE LIGHT NAVY RED? _____
 - (a) IS THE POWER SOURCE INDEPENDENT OF NORMAL LIGHTING CIRCUIT? _____

5. ARE THERE ANY SOURCES OF LIGHT WHICH GIVE OTHER THAN NAVY RED LIGHT? _____

6. ARE THERE ANY REFLECTIONS IN THE WINDSHIELD, WINDOWS, CANOPY OR OTHER REFLECTING SURFACES WHICH INTERFERE WITH VISIBILITY INSIDE OR OUTSIDE THE COCKPIT? _____
 - (a) IS THERE LIGHT LEAKAGE INTO THE COCKPIT FROM OTHER COMPARTMENTS? _____

7. ARE SPARE LAMPS PROVIDED IN SUFFICIENT QUANTITY AND EASILY ACCESSIBLE? _____

Appendix 9 to MIL-M-8650B(AS)

A. COCKPIT (PILOT/CO-PILOT/NFO) (Cont)

8. ARE ALL INSTRUMENTS, INSTRUCTIONS, NAMEPLATES, AND CONTROL MARKINGS READABLE IN DAYLIGHT? _____
9. IS HIGH INTENSITY WHITE LIGHT PROVIDED FOR HIGH ALTITUDE OPERATIONS?

10. ARE PROVISIONS MADE FOR DIMMING ALL WARNING AND CAUTION LIGHTS? _____
- (a) CAN LIGHTS BE DIMMED SUFFICIENTLY FOR NIGHT OPERATIONS? _____
- (b) ARE WARNING AND CAUTION LIGHTS OF SUFFICIENT INTENSITY FOR DAYLIGHT USE? _____
- (c) LIST WARNING AND CAUTION LIGHTS NOT ON THE DIMMING CIRCUIT? _____
11. IS INDEPENDENT LIGHTING PROVIDED FOR ANGLE OF ATTACK INDEXER? _____
- (a) DOES INDEXER HAVE SEPARATE LIGHTING CONTROL? _____
- (b) IS INTENSITY CONTINUOUSLY VARIABLE? _____
- (c) IS SUFFICIENT RANGE OF INTENSITIES PROVIDED FOR BOTH DAY AND NIGHT?

- (d) IS COLOR SPECIFIED NAVY RED? _____
12. IS INDEPENDENT LIGHTING PROVIDED FOR STANDBY COMPASS? _____
- (a) DOES LIGHTING CONTROL HAVE THREE POSITIONS, OFF, DIM, BRIGHT? _____
- (b) IS LIGHTING UNIFORM? _____
- (c) IS COLOR SPECIFIED NAVY RED? _____
13. IS CHART PLOTTING BOARD ADEQUATELY ILLUMINATED? _____
14. IS LIGHTING PROVIDED IN ACCORDANCE WITH THE AIRCRAFT DETAIL SPECIFICATION? _____
15. REMARKS. -

Checked by: _____

Date: _____

B. RADIO OPERATOR'S STATION

1. ARE ALL INSTRUMENTS ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON INSTRUMENTS READABLE? _____
 - (d) MAY LAMPS IN THE INSTRUMENT PANEL BE QUICKLY AND EASILY REPLACED IN FLIGHT? _____

2. ARE ALL CONTROLS, INSTRUCTIONS, AND NAMEPLATES ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON CONTROLS, INSTRUCTIONS AND NAMEPLATES READABLE? _____
 - (d) DO ALL ILLUMINATED PUSH-BUTTON SWITCHES MEET BRIGHTNESS REQUIREMENTS OF MIL-STD-411 FOR BOTH DAY AND NIGHT CONDITIONS? _____

3. IS THE INTENSITY OF LIGHTING FOR SOME INSTRUMENTS AND CONTROLS CONTROLLED SEPARATELY? _____ STATE _____

4. IS FLOOD LIGHTING PROVIDED? _____ IS THE LIGHT NAVY RED? _____
 - (a) IS THE POWER SOURCE INDEPENDENT OF NORMAL LIGHTING CIRCUIT? _____

5. ARE THERE ANY SOURCES OF LIGHT WHICH GIVE OTHER THAN NAVY RED LIGHT? _____

6. ARE THERE ANY REFLECTIONS IN WINDOWS, OR OTHER REFLECTING SURFACES WHICH INTERFERE WITH VISIBILITY INSIDE OR OUTSIDE THE COMPARTMENT? _____
 - (a) IS THERE LIGHT LEAKAGE INTO THE COMPARTMENT FROM OTHER COMPARTMENTS? _____

7. ARE SPARE LAMPS PROVIDED IN SUFFICIENT QUANTITY AND EASILY ACCESSIBLE? _____

Appendix 9 to MIL-M-8650B(AS)

B. RADIO OPERATOR'S STATION (Cont)

8. ARE ALL INSTRUMENTS, INSTRUCTIONS, NAMEPLATES, AND CONTROL MARKINGS READABLE IN DAYLIGHT? _____
9. IS HIGH INTENSITY WHITE LIGHT PROVIDED FOR HIGH ALTITUDE OPERATIONS?

10. ARE PROVISIONS MADE FOR DIMMING ALL WARNING AND CAUTION LIGHT? _____
- (a) CAN LIGHTS BE DIMMED SUFFICIENTLY FOR NIGHT OPERATIONS? _____
- (b) ARE WARNING AND CAUTION LIGHTS OF SUFFICIENT INTENSITY FOR DAYLIGHT USE? _____
- (c) LIST WARNING AND CAUTION LIGHTS NOT ON THE DIMMING CIRCUIT? _____

11. IS LIGHTING PROVIDED IN ACCORDANCE WITH THE AIRCRAFT DETAIL SPECIFICATION? _____
12. REMARKS. -

Checked by: _____

Date: _____

C. RADAR OPERATOR'S STATION

1. ARE ALL INSTRUMENTS ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON INSTRUMENTS READABLE? _____
 - (d) MAY LAMPS IN THE INSTRUMENT PANEL BE QUICKLY AND EASILY REPLACED IN FLIGHT? _____

2. ARE ALL CONTROLS, INSTRUCTIONS, AND NAMEPLATES ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON CONTROLS, INSTRUCTIONS AND NAMEPLATES READABLE? _____
 - (d) DO ALL ILLUMINATED PUSH-BUTTON SWITCHES MEET BRIGHTNESS REQUIREMENTS OF MIL-STD-411 FOR BOTH DAY AND NIGHT CONDITIONS? _____

3. IS THE INTENSITY OF LIGHTING FOR SOME INSTRUMENTS AND CONTROLS CONTROLLED SEPARATELY? _____ STATE _____

4. IS FLOOD LIGHTING PROVIDED? _____ IS THE LIGHT NAVY RED? _____
 - (a) IS THE POWER SOURCE INDEPENDENT OF NORMAL LIGHTING CIRCUIT? _____

5. ARE THERE ANY SOURCES OF LIGHT WHICH GIVE OTHER THAN NAVY RED LIGHT? _____

6. ARE THERE ANY REFLECTIONS IN WINDOWS OR OTHER REFLECTING SURFACES WHICH INTERFERE WITH VISIBILITY INSIDE OR OUTSIDE THE COMPARTMENT? _____
 - (a) IS THERE LIGHT LEAKAGE INTO THE COMPARTMENT FROM OTHER COMPARTMENTS? _____

7. ARE SPARE LAMPS PROVIDED IN SUFFICIENT QUANTITY AND EASILY ACCESSIBLE? _____

Appendix 9 to MIL-M-8650B(AS)

C. RADAR OPERATOR'S STATION (Cont)

8. ARE ALL INSTRUMENTS, INSTRUCTIONS, NAMEPLATES, AND CONTROL MARKINGS READABLE IN DAYLIGHT? _____
9. IS HIGH INTENSITY WHITE LIGHT PROVIDED FOR HIGH ALTITUDE OPERATIONS?

10. ARE PROVISIONS MADE FOR DIMMING ALL WARNING AND CAUTION LIGHTS? _____
- (a) CAN LIGHTS BE DIMMED SUFFICIENTLY FOR NIGHT OPERATIONS? _____
- (b) ARE WARNING AND CAUTION LIGHTS OF SUFFICIENT INTENSITY FOR DAYLIGHT USE? _____
- (c) LIST WARNING AND CAUTION LIGHTS NOT ON THE DIMMING CIRCUIT? _____

11. IS LIGHTING PROVIDED IN ACCORDANCE WITH THE AIRCRAFT DETAIL SPECIFICATION? _____
12. REMARKS. -

Checked by: _____

Date: _____

D. NAVIGATOR'S STATION

1. ARE ALL INSTRUMENTS ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON INSTRUMENTS READABLE? _____
 - (d) MAY LAMPS IN THE INSTRUMENT PANEL BE QUICKLY AND EASILY REPLACED IN FLIGHT? _____

2. ARE ALL CONTROLS, INSTRUCTIONS, AND NAMEPLATES ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON CONTROLS, INSTRUCTIONS AND NAMEPLATES READABLE? _____
 - (d) DO ALL ILLUMINATED PUSH-BUTTON SWITCHES MEET BRIGHTNESS REQUIREMENTS OF MIL-STD-411 FOR BOTH DAY AND NIGHT CONDITIONS? _____

3. IS THE INTENSITY OF LIGHTING FOR SOME INSTRUMENTS AND CONTROLS CONTROLLED SEPARATELY? _____ STATE _____

4. IS FLOOD LIGHTING PROVIDED? _____ IS THE LIGHT NAVY RED? _____
 - (a) IS THE POWER SOURCE INDEPENDENT OF NORMAL LIGHTING CIRCUIT? _____

5. ARE THERE ANY SOURCES OF LIGHT WHICH GIVE OTHER THAN NAVY RED LIGHT? _____

6. ARE THERE ANY REFLECTIONS IN WINDOWS OR OTHER REFLECTING SURFACES WHICH INTERFERE WITH VISIBILITY INSIDE OR OUTSIDE THE COMPARTMENT? _____
 - (a) IS THERE LIGHT LEAKAGE INTO THE COMPARTMENT FROM OTHER COMPARTMENTS? _____

7. ARE SPARE LAMPS PROVIDED IN SUFFICIENT QUANTITY AND EASILY ACCESSIBLE? _____

Appendix 9 to MIL-M-8650B(AS)

D. NAVIGATOR'S STATION (Cont)

8. ARE ALL INSTRUMENTS, INSTRUCTIONS, NAMEPLATES, AND CONTROL MARKINGS READABLE IN DAYLIGHT? _____
9. IS HIGH INTENSITY WHITE LIGHT PROVIDED FOR HIGH ALTITUDE OPERATIONS?

10. ARE PROVISIONS MADE FOR DIMMING ALL WARNING AND CAUTION LIGHTS? _____
- (a) CAN LIGHTS BE DIMMED SUFFICIENTLY FOR NIGHT OPERATIONS? _____
- (b) ARE WARNING AND CAUTION LIGHTS OF SUFFICIENT INTENSITY FOR DAYLIGHT USE? _____
- (c) LIST WARNING AND CAUTION LIGHTS NOT ON THE DIMMING CIRCUIT? _____

11. IS CHART PLOTTING BOARD AND NAVIGATOR'S TABLE ADEQUATELY ILLUMINATED?

12. IS LIGHTING PROVIDED IN ACCORDANCE WITH THE AIRCRAFT DETAIL SPECIFICATION? _____
13. REMARKS. -

Checked by: _____

Date: _____

E. FLIGHT ENGINEER'S STATION

1. ARE ALL INSTRUMENTS ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON INSTRUMENTS READABLE? _____
 - (d) MAY LAMPS IN THE INSTRUMENT PANEL BE QUICKLY AND EASILY REPLACED IN FLIGHT? _____

2. ARE ALL CONTROLS, INSTRUCTIONS, AND NAMEPLATES ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON CONTROLS, INSTRUCTIONS AND NAMEPLATES READABLE? _____
 - (d) DO ALL ILLUMINATED PUSH-BUTTON SWITCHES MEET BRIGHTNESS REQUIREMENTS OF MIL-STD-411 FOR BOTH DAY AND NIGHT CONDITIONS? _____

3. IS THE INTENSITY OF LIGHTING FOR SOME INSTRUMENTS AND CONTROLS CONTROLLED SEPARATELY? _____ STATE: _____

4. IS FLOOD LIGHTING PROVIDED? _____ IS THE LIGHT NAVY RED? _____
 - (a) IS THE POWER SOURCE INDEPENDENT OF NORMAL LIGHTING CIRCUIT? _____

5. ARE THERE ANY SOURCES OF LIGHT WHICH GIVE OTHER THAN NAVY RED LIGHT? _____

6. ARE THERE ANY REFLECTIONS IN WINDOWS OR OTHER REFLECTING SURFACES WHICH INTERFERE WITH VISIBILITY INSIDE OR OUTSIDE THE COMPARTMENT? _____
 - (a) IS THERE LIGHT LEAKAGE INTO THE COMPARTMENT FROM OTHER COMPARTMENTS? _____

7. ARE SPARE LAMPS PROVIDED IN SUFFICIENT QUANTITY AND EASILY ACCESSIBLE? _____

Appendix 9 to MIL-M-8650B(AS)

E. FLIGHT ENGINEER'S STATION (Cont)

8. ARE ALL INSTRUMENTS, INSTRUCTIONS, NAMEPLATES, AND CONTROL MARKINGS READABLE IN DAYLIGHT? _____
9. IS HIGH INTENSITY WHITE LIGHT PROVIDED FOR HIGH ALTITUDE OPERATIONS?

10. ARE PROVISIONS MADE FOR DIMMING ALL WARNING AND CAUTION LIGHTS? _____
- (a) CAN LIGHTS BE DIMMED SUFFICIENTLY FOR NIGHT OPERATIONS? _____
- (b) ARE WARNING AND CAUTION LIGHTS OF SUFFICIENT INTENSITY FOR DAYLIGHT USE? _____
- (c) LIST WARNING AND CAUTION LIGHTS NOT ON THE DIMMING CIRCUIT? _____
11. IS LIGHTING PROVIDED IN ACCORDANCE WITH THE AIRCRAFT DETAIL SPECIFICATION? _____
12. REMARKS. -

Checked by: _____

Date: _____

F. CIC OPERATOR'S STATION

1. ARE ALL INSTRUMENTS ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON INSTRUMENTS READABLE? _____
 - (d) MAY LAMPS IN THE INSTRUMENT PANEL BE QUICKLY AND EASILY REPLACED IN FLIGHT? _____

2. ARE ALL CONTROLS, INSTRUCTIONS, AND NAMEPLATES ADEQUATELY ILLUMINATED? _____
 - (a) ARE THEY ILLUMINATED UNIFORMLY? _____ IS THERE SUFFICIENT INTENSITY? _____
 - (b) IS ILLUMINATION CONTROLLABLE TO VERY LOW INTENSITIES? _____
 - (c) ARE MARKINGS ON CONTROLS, INSTRUCTIONS AND NAMEPLATES READABLE? _____
 - (d) DO ALL ILLUMINATED PUSH-BUTTON SWITCHES MEET BRIGHTNESS REQUIREMENTS OF MIL-STD-411 FOR BOTH DAY AND NIGHT CONDITIONS? _____

3. IS THE INTENSITY OF LIGHTING FOR SOME INSTRUMENTS AND CONTROLS CONTROLLED SEPARATELY? _____ STATE: _____

4. IS FLOOD LIGHTING PROVIDED? _____ IS THE LIGHT NAVY RED? _____
 - (a) IS THE POWER SOURCE INDEPENDENT OF NORMAL LIGHTING CIRCUIT? _____

5. ARE THERE ANY SOURCES OF LIGHT WHICH GIVE OTHER THAN NAVY RED LIGHT? _____

6. ARE THERE ANY REFLECTIONS IN WINDOWS OR OTHER REFLECTING SURFACES WHICH INTERFERE WITH VISIBILITY INSIDE OR OUTSIDE THE COMPARTMENT? _____
 - (a) IS THERE LIGHT LEAKAGE INTO THE COMPARTMENT FROM OTHER COMPARTMENTS? _____

7. ARE SPARE LAMPS PROVIDED IN SUFFICIENT QUANTITY AND EASILY ACCESSIBLE? _____

Appendix 9 to MIL-M-8650B(AS)

F. CIC OPERATOR'S STATION (Cont)

8. ARE ALL INSTRUMENTS, INSTRUCTIONS, NAMEPLATES, AND CONTROL MARKINGS READABLE IN DAYLIGHT? _____
9. IS HIGH INTENSITY WHITE LIGHT PROVIDED FOR HIGH ALTITUDE OPERATIONS? _____
10. ARE PROVISIONS MADE FOR DIMMING ALL WARNING AND CAUTION LIGHTS? _____
- (a) CAN LIGHTS BE DIMMED SUFFICIENTLY FOR NIGHT OPERATIONS? _____
- (b) ARE WARNING AND CAUTION LIGHTS OF SUFFICIENT INTENSITY FOR DAYLIGHT USE? _____
- (c) LIST WARNING AND CAUTION LIGHTS NOT ON THE DIMMING CIRCUIT? _____
11. IS LIGHTING PROVIDED IN ACCORDANCE WITH THE AIRCRAFT DETAIL SPECIFICATION? _____
12. REMARKS. -

Checked by: _____

Date: _____

G. EQUIPMENT COMPARTMENTS

1. ARE ALL CONTROLS, INSTRUCTIONS, AND WARNING PLATES ADEQUATELY ILLUMINATED? _____
2. ARE INTENSITIES OF LIGHTED AREAS IN ACCORDANCE WITH THE AIRCRAFT DETAIL SPECIFICATION? _____
3. REMARKS. -

Checked by: _____

Date: _____

H. PASSENGER COMPARTMENT

1. IS THERE A SEPARATE READING LIGHT FOR EACH SEAT OR BERTH? _____
(a) IS THE LIGHT ADEQUATE FOR READING? _____
(b) DOES THE LIGHT CAUSE GLARE TO ADJACENT PASSENGERS? _____
2. IS THERE ADEQUATE GENERAL ILLUMINATION FOR THE COMPARTMENT? _____
(a) IS THIS LIGHT A SOURCE OF GLARE WHILE SITTING IN A SEAT OR WHILE WALKING ALONG THE AISLE? _____
3. IS THERE ADEQUATE EMERGENCY EXIT LIGHTING? _____
(a) IS THE EMERGENCY EXIT LIGHTING CRASH-OPERATED? _____
4. IS THERE ADEQUATE NIGHT LIGHTING FOR THE AISLE WHEN PASSENGERS ARE SLEEPING? _____
5. IS THERE ADEQUATE LIGHTING FOR THE GALLEY? _____
6. CAN THE "NO SMOKING" AND "FASTEN SEAT BELT" SIGNS BE SEEN FROM ALL SEATS WHEN LIGHTED? _____
7. IS THERE SUFFICIENT LIGHTING FOR THE WASHROOMS? _____
8. REMARKS. -

Checked by: _____

Date: _____

I. CARGO COMPARTMENT

1. IS ADEQUATE ILLUMINATION PROVIDED TO READILY PERMIT LOADING AND UNLOADING OF CARGO AND PERFORMING TIEDOWN OPERATIONS AT NIGHT? _____

2. WILL A FULLY LOADED COMPARTMENT INTERFERE WITH THE ILLUMINATION?

3. REMARKS. -

Checked by: _____

Date: _____

Appendix 9 to MIL-M-8650B(AS)

J. EXTERIOR LIGHTING

1. DO ANY OF THE EXTERIOR LIGHTS PROVIDE GLARE IN THE COCKPIT? _____
2. ARE THE POSITION LIGHTS AND APPROACH LIGHTS VISIBLE TO THE LANDING SIGNAL OFFICER? _____
3. IS EXTERIOR LIGHTING PROVIDED IN ACCORDANCE WITH THE AIRCRAFT DETAIL SPECIFICATION? _____
4. REMARKS. -

Checked by: _____

Date: _____