Cancelled AC 00-2M

Federal Aviation Agency

ADVISORY CIRCULAR

CHANGE

AC NO: AC 121-2 CH 1

AIR CARRIER AND COMMERCIAL OPERATIONS

EFFECTIVE: 5/20/63

SUBJECT: CHANGE 1 TO CIRCULAR NO. AC 121-2, SUBJECT: FAA AIRBORNE VIBRATION MONITORING PROGRAM FOR TURBINE ENGINES

1. PURPOSE. This advisory circular change supplements Advisory Circular No. AC 121-2 and provides guidance material for Federal Aviation Agency Air Carrier Operations Inspectors and air carriers with respect to flight crewmember training in the use of airborne vibration monitoring equipment on turbine engines.

2. EXPLANATION. Advisory Circular No. 121-2, dated January 15, 1963, describes conditions whereby air carriers utilizing AVM equipment could apply for and obtain additional engine overhaul time limitations on turbine-powered aircraft. It also suggests conditions relating to the approval of an AVM program with guidance material directed to the maintenance program only.

   Accordingly, this supplement is issued to outline a training curriculum recommended for flight crewmembers pertaining to the operation of AVM equipment.

3. REFERENCE. Material referred to in this circular is related to Advisory Circular No. AC 121-2.

PAGE CONTROL CHART

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None		Attachment 1, Page 1	5/20/63

George S. Moore
Director
Flight Standards Service

See 2H.1

Federal Aviation Agency

ADVISORY CIRCULAR

AC NO: AC 121-2	AIR CARRIER AND COMMERCIAL OPERATIONS
EFFECTIVE: 1/15/63	

SUBJECT: FAA AIRBORNE VIBRATION MONITORING PROGRAM FOR TURBINE ENGINES

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1. PURPOSE. This circular describes conditions under which air carrier operators of turbine-powered aircraft may apply for and obtain approval for operation of engines and specific accessories, equipment and components beyond their currently approved overhaul time limitations when airborne vibration monitoring equipment is used.

2. GENERAL. The Federal Aviation Agency has determined that airborne vibration monitoring (AVM) equipment installed on turbine-powered aircraft may detect certain types of engine malfunctions in their early state of development; also, that such equipment can be a useful maintenance tool for evaluating engine conditions during flight. When properly used, this equipment may serve to reduce the number of in-flight critical engine failures that usually result in major engine or aircraft damage, thus enhancing safety and reliability.

   Several air carrier operators are now starting to utilize airborne vibration monitoring equipment. Their accumulated operational experience has shown that AVM equipment has aided them in the early detection of mechanical discrepancies thereby averting possible major engine or aircraft damage.

   The Federal Aviation Agency recognizes the need for the accumulation and evaluation of extensive operational experience as a necessary part of the process required to further develop the AVM equipment and expand its use for promotion of in-flight safety.

   Air carriers who wish to participate in the FAA Airborne Vibration Monitoring Program may, upon compliance with the conditions for approval, apply for and be authorized a 100-hour increase of their currently approved overhaul time limitations for those turbine engines and accessories essential for engine operation, which are installed in AVM equipped aircraft. When an engine accessory overhaul time is a multiple of basic engine overhaul time, it may be increased in time in the amount necessary to retain the multiple overhaul time factor. Accessories which are

considered essential for engine operation are those listed in chapter 71 through 83 of the Air Transport Association Specification 100.

The increased engine and accessory overhaul time limitations should not conflict with any other program currently in effect, proposed, devised or used for the improvement of in-flight performance reliability, nor cause any time-related engine deterioration that could result in an unsatisfactory engine condition.

It is assumed that each participant in the AVM program shall make a conscientious effort to maintain the AVM equipment at a high level of in-service performance.

3. CONDITIONS FOR APPROVAL. The air carrier's Airborne Vibration Monitoring Program may be approved when:

   a. The airborne vibration monitoring equipment is installed in the aircraft in accordance with FAA-approved data, and the engine/AVM manufacturers' specifications;

   b. The training of pertinent maintenance personnel and flight crews and issuance of manual information for the use and maintenance of the equipment have been completed;

   c. The air carrier provides a means for determining that the vibration level for each engine is within the limits specified by the engine manufacturer during test stand operation and is appropriately recorded;

   d. The air carrier provides means for establishing and recording the normal vibration index for each engine upon aircraft installation;

   e. The air carrier has provided a means for recording the normal in-flight vibration index for each engine, with provisions for recordation of subsequent in-flight engine vibration data. (The normal vibration index for each engine should be immediately available to the flight crew and the frequency for in-flight recordation should be at least that which is necessary to provide information for determining the vibration trend for each engine);

   f. The air carrier has included in its maintenance records system, provisions for accumulating AVM equipment performance data from which can be determined the reliability of the AVM system components; and

   g. The air carrier agrees to make available to the FAA, by the 25th of each month, the following information:

(1) The number of engine shutdowns initiating from AVM indication and confirmed by propulsion system malfunction. This information should include the make and type of the aircraft and AVM equipment.

(2) The number of engine shutdowns initiating from false AVM indication. This information should include the make and type of the aircraft and AVM equipment.

(3) The number of engine shutdowns, due to vibration, wherein the AVM equipment indication was considered erroneous.

(4) Comments on the effectiveness and reliability of the AVM equipment. If the air carrier has established reliability criteria and operation requirements, the FAA desires this information.

4. DOCUMENTATION. When an air carrier shows in its manual how it shall implement and follow this program in accordance with this circular, and the AVM equipment is installed in one or more of its aircraft, and the aircraft and the program is acceptable to the assigned FAA Maintenance Inspector, the following Operation Specification-Aircraft Maintenance will be issued:

OPERATION SPECIFICATION

PART D - AIRCRAFT MAINTENANCE - GENERAL

An aircraft engine, which has operated at least the last 20 percent of its approved overhaul time on the airborne vibration monitoring equipped aircraft, may be operated to a maximum of 100 hours over and above its currently approved overhaul time limitation shown in Operation Specification-Aircraft Maintenance, dated _____.

Accessories, equipment and components listed in Chapter 71 through Chapter 83 of Air Transport Association Specification No. 100, whose overhaul time limitation, shown in Operation Specification-Aircraft Maintenance dated _____, is twice that of the engine, may be operated a maximum of 200 hours in excess of that applicable overhaul time limitation shown in Operation Specification-Aircraft Maintenance dated _____.

Accessories, equipment and components listed in Chapter 71 through 83 of Air Transport Association Specification No. 100 whose overhaul time limitation, shown in Operation Specification-Aircraft Maintenance dated _____, is triple that of the engine, may be operated a maximum of 300 hours in excess of that applicable overhaul time limitation shown in Operation Specification-Aircraft Maintenance dated _____; provided:

a. The engine and its essential accessories are installed in an aircraft equipped with airborne vibration monitoring equipment;

b. The vibration level for the engine was established during test stand operation; and

c. The normal vibration level was established for the engine when installed in each aircraft equipped with airborne vibration monitoring equipment.

George C. Prill
Director
Flight Standards Service

ATTACHMENT 1. TRAINING RECOMMENDED FOR FLIGHT CREWMEMBERS IN THE USE OF AVM EQUIPMENT

1. TRAINING. The training of flight crewmembers in the operation and understanding of AVM equipment is an important element in the program whereby benefits derived from the installation of equipment depend upon the proper interpretations of the indications presented.

   Air carrier training programs should be modified to provide flight crewmembers the following training in the use of AVM equipment. The following curriculum is recommended:

   a. Classroom lectures and visual aids showing the locations, functions, description and operating instructions of AVM equipment;

   b. Charts showing limitations and diagrams of systems installed in aircraft utilized;

   c. Material showing interpretations of AVM indications as related to the rate and amount of vibration amplitude change from the established norm;

   d. Instructions showing how to record AVM system information;

   e. Normal and emergency conditions as related to AVM indications; and,

   f. Operation and recording of information on AVM equipment under flight conditions.

      NOTE: These publications contain information relative to AVM equipment:

      (1) P & W Aircraft Gas Turbine Operation Information Letter # 14; and,

      (2) P & W Flight Operations Report FLOE # 23, 24 and 25.

2. INFORMATION. Air carriers should coordinate the intended AVM program with their FAA-assigned principal maintenance and operations inspectors whereby the carrier's program outline can be evaluated for adequacy prior to its implementation into the approved training program.

Federal Aviation Agency

ADVISORY CIRCULAR

AC NO: AC 121-2
AIR CARRIER AND COMMERCIAL OPERATIONS
EFFECTIVE: 1/15/63

SUBJECT: FAA AIRBORNE VIBRATION MONITORING PROGRAM FOR TURBINE ENGINES

1. PURPOSE. This circular describes conditions under which air carrier operators of turbine-powered aircraft may apply for and obtain approval for operation of engines and specific accessories, equipment and components beyond their currently approved overhaul time limitations when airborne vibration monitoring equipment is used.

2. GENERAL. The Federal Aviation Agency has determined that airborne vibration monitoring (AVM) equipment installed on turbine-powered aircraft may detect certain types of engine malfunctions in their early state of development; also, that such equipment can be a useful maintenance tool for evaluating engine conditions during flight. When properly used, this equipment may serve to reduce the number of in-flight critical engine failures that usually result in major engine or aircraft damage, thus enhancing safety and reliability.

Several air carrier operators are now starting to utilize airborne vibration monitoring equipment. Their accumulated operational experience has shown that AVM equipment has aided them in the early detection of mechanical discrepancies thereby averting possible major engine or aircraft damage.

The Federal Aviation Agency recognizes the need for the accumulation and evaluation of extensive operational experience as a necessary part of the process required to further develop the AVM equipment and expand its use for promotion of in-flight safety.

Air carriers who wish to participate in the FAA Airborne Vibration Monitoring Program may, upon compliance with the conditions for approval, apply for and be authorized a 100-hour increase of their currently approved overhaul time limitations for those turbine engines and accessories essential for engine operation, which are installed in AVM equipped aircraft. When an engine accessory overhaul time is a multiple of basic engine overhaul time, it may be increased in time in the amount necessary to retain the multiple overhaul time factor. Accessories which are

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The increased engine and accessory overhaul time limitations should not conflict with any other program currently in effect, proposed, devised or used for the improvement of in-flight performance reliability, nor cause any time-related engine deterioration that could result in an unsatisfactory engine condition.

It is assumed that each participant in the AVM program shall make a conscientious effort to maintain the AVM equipment at a high level of in-service performance.

3. CONDITIONS FOR APPROVAL. The air carrier's Airborne Vibration Monitoring Program may be approved when:

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c. The normal vibration level was established for the engine when installed in each aircraft equipped with airborne vibration monitoring equipment.

George C. Prill
Director
Flight Standards Service

Federal Aviation Agency

ADVISORY CIRCULAR CHANGE

AC NO:	AC 121-2 CH 1
	AIR CARRIER AND COMMERCIAL OPERATIONS
EFFECTIVE:	5/20/63

SUBJECT: CHANGE 1 TO CIRCULAR NO. AC 121-2, SUBJECT: FAA AIRBORNE VIBRATION MONITORING PROGRAM FOR TURBINE ENGINES

1. PURPOSE. This advisory circular change supplements Advisory Circular No. AC 121-2 and provides guidance material for Federal Aviation Agency Air Carrier Operations Inspectors and air carriers with respect to flight crewmember training in the use of airborne vibration monitoring equipment on turbine engines.

2. EXPLANATION. Advisory Circular No. 121-2, dated January 15, 1963, describes conditions whereby air carriers utilizing AVM equipment could apply for and obtain additional engine overhaul time limitations on turbine-powered aircraft. It also suggests conditions relating to the approval of an AVM program with guidance material directed to the maintenance program only.

   Accordingly, this supplement is issued to outline a training curriculum recommended for flight crewmembers pertaining to the operation of AVM equipment.

3. REFERENCE. Material referred to in this circular is related to Advisory Circular No. AC 121-2.

PAGE CONTROL CHART

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None		Attachment 1, Page 1	5/20/63

George S. Moore
Director
Flight Standards Service

ATTACHMENT 1. TRAINING RECOMMENDED FOR FLIGHT CREWMEMBERS IN THE USE OF AVM EQUIPMENT

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   Air carrier training programs should be modified to provide flight crewmembers the following training in the use of AVM equipment. The following curriculum is recommended:

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   b. Charts showing limitations and diagrams of systems installed in aircraft utilized;

   c. Material showing interpretations of AVM indications as related to the rate and amount of vibration amplitude change from the established norm;

   d. Instructions showing how to record AVM system information;

   e. Normal and emergency conditions as related to AVM indications; and,

   f. Operation and recording of information on AVM equipment under flight conditions.

      NOTE: These publications contain information relative to AVM equipment:

      (1) P & W Aircraft Gas Turbine Operation Information Letter # 14; and,

      (2) P & W Flight Operations Report FLOE # 23, 24 and 25.

2. INFORMATION. Air carriers should coordinate the intended AVM program with their FAA-assigned principal maintenance and operations inspectors whereby the carrier's program outline can be evaluated for adequacy prior to its implementation into the approved training program.

Federal Aviation Agency

ADVISORY CIRCULAR CHANGE

AC NO:	AC 121-1 CH 2
	AIR CARRIER AND COMMERCIAL OPERATIONS
EFFECTIVE:	6/16/64

SUBJECT: STANDARD MAINTENANCE SPECIFICATIONS HANDBOOK

1. PURPOSE. This advisory circular transmits revisions to the subject handbook.

2. PRINCIPAL CHANGES. New sample Operations Specifications, Aircraft Maintenance for the Lockheed L-188 A & C aircraft are added to Appendix 2. This material supersedes the Maintenance Review Board Report on Lockheed L-188 Maintenance Program.

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-	-	51 thru 55 (and 56)	
-	-	57 and 58	

George S. Moore
Director
Flight Standards Service

FIGURE 19. OPERATIONS SPECIFICATIONS AIRCRAFT MAINTENANCE - LOCKHEED L-188 A & C

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FEDERAL AVIATION AGENCY
WASHINGTON

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Budget Bureau No. 04-R065

OPERATIONS SPECIFICATIONS

PART D

OPERATIONS SPECIFICATIONS
AIRCRAFT MAINTENANCE
LOCKHEED L-188 A & C

	Overhaul Period	Inspection & Check Period
Air Conditioning System, Chapter 21	12,000	
Air Cycle By-Pass Valve	4,000	
Air Cycle Cooling Air Exit Door Actuator	4,000	
Air Cycle Heat Exchange	O.C.	
Air Cycle Cooling Turbine	4,000	
Altimeter, Cabin	7,000	
Cabin Air Compressor	2,000	
Cabin Air Flow Control Valve	2,000	
Cabin Pressure Reg. Outflow Valve	5,000	BC 2500
Cabin Pressure Safety Valve	12,000	BC 4000
Cabin Air Duct Shut-Off Valve	O.C.	
Cabin Air Duct Check Valve	O.C.	
Cabin Air Pressure Outflow Valve Control	3,500	
Cabin Air Pressure Outflow Valve Control Filter	1,500	
Cabin Freon Evaporator	O.C.	
Cabin Aux. Vent Inlet Valve & System	O.C.	
Cabin Air Warmup Valve Actuator	O.C.	
Cabin Air Filter	O.C.	
Cabin Duct Heater	O.C.	
Cabin Recirculating Fan	4,000	
Cooling Air Exit Door Actuator (tunnel)	4,000	
Cooling Air Inlet Door Actuator (tunnel)	4,000	
Flight Station Recirculating Fan	4,000	
Flight Station Freon Evaporator	O.C.	
Flight Station Duct Heater	O.C.	
Flight Station Aux. Vent Inlet Valve	O.C.	
Flight Station Air Filter	O.C.	
Freon Suction Pressure Throttling Valve	4,000	
Freon Condenser Fan	4,000	
Freon Condenser	O.C.	
Freon Compressor	3,000	
Lavatory Exhaust Fan	O.C.	
Manual Control Valve	5,000	
Negative Pressure Relief Valve	O.C.	
Radio Rack Exhaust Fan	1,400	
Rate Of Climb	7,000	
Radiant Heating Panel (floor and wall)	O.C.	
Radiant Heating Panel (cargo compt.)	O.C.	
Surge Control Valve	2,000	
Temperature Control Box	2,500	

Effective date April 1, 1964

Form FAA-1011 (5-62)

FIGURE 19. OPERATIONS SPECIFICATIONS AIRCRAFT MAINTENANCE - LOCKHEED L-188 A & C

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OPERATIONS SPECIFICATIONS

PART D — Page 2 of 5 pages

OPERATIONS SPECIFICATIONS
AIRCRAFT MAINTENANCE
LOCKHEED L-188 A & C

	Overhaul Period	Inspection & Check Period
Auto Pilot System, Chapter 22		
May be determined by the assigned inspector.		
Communications System, Chapter 23		
May be determined by the assigned inspector.		
Electrical Power, Chapter 24	O.C.	
Battery	O.C.	
Flight Station Electrical & Instrument Panels	O.C.	
Generator, AC	2,000	
Generator Control and Protection Components	2,000	
Inverter	2,000	
Main & Flight Station Distribution Centers, including Wiring, Terminals, Relays, Circuit Breakers, etc.	O.C.	
Power Contactors and Reverse Current Relays	2,000	
Secondary Electrical Centers, including Wiring, Terminals, Relays, Circuit Breakers, & etc.	O.C.	
Transformer Rectifiers	2,000	
Voltage Regulators	2,000	
Equipment and Furnishings, Chapter 25		
May be determined by the assigned inspector.		
Fire Protection, Chapter 26	O.C.	
Cylinder	5 yrs.	
Discharge Valve Cartridges	3 yrs.	
Transfer Valve	8,000	
Valve, Drain	3,500	
Flight Controls, Chapter 27	O.C.	
Aileron Trim Tab Control Unit	12,000	
Aileron Trim Tab Actuator Unit	12,000	
Aileron Push-Pull Tubes, Bell cranks Fittings, etc.	8,000	
Asymetry Detector Shut-Off Valve	6,000	
Asymetry Detector Actuated Flap Actuator Brake	12,000	

Effective date April 1, 1964

FORM FAA-1011 (3-63)

FIGURE 19. OPERATIONS SPECIFICATIONS AIRCRAFT MAINTENANCE - LOCKHEED L-188 A & C

UNITED STATES OF AMERICA
FEDERAL AVIATION AGENCY
WASHINGTON

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OPERATIONS SPECIFICATIONS

PART D

Page 3 of 5 pages

OPERATIONS SPECIFICATIONS
AIRCRAFT MAINTENANCE
LOCKHEED L-188 A & C

	Overhaul Period	Inspection & Check Period
Flight Controls, Chapter 27, continued		
Booster Actuators	8,000	
Booster Valve Cluster	8,000	
Booster Frame Disconnect Mechanism	8,000	
Control Column	12,000	
Control Cables, Pulleys, Fairleads, etc.	O.C.	
Elevator Trim Tab Control Unit	12,000	
Elevator Trim Tab Actuator Unit	12,000	
Elevator Push-Pull and Torque Tube	8,000	
Flap Control System	5,000	
Hydraulic Load Sensors	8,000	
Rudder Pedals	12,000	
Rudder Trim Tab Control Unit	12,000	
Rudder Trim Tab Actuator & Linkage	12,000	
Rudder Push-Pull and Torque Tube Installation	8,000	
Wing Flap Main Drive Hydraulic Motor	12,000	
Wing Flap Main Drive Gear Box	12,000	
Wing Flap Actuators, Linkages, Tracks and Carriages	4,000	
Fuel System, Chapter 28		
Boost Pump, Main	5,000	
Boost Pump, Scavange	5,000	
Fuel Valves (Crossfeed-Elect.; Shut-Off-Manual)	8,000	
Fuel Dump Valves	8,000	
Fueling Valve	8,000	
Fuel Quantity Tank Units	O.C.	
Fuel Quantity Indicators	5,000	
Fuel Pressure Warning System	O.C.	
Misc. Valves, Pilot & Vent.	10,000	
Overflow Valve	8,000	
Transmitter, Fuel Crossfeed	8,000	
Hydraulic System, Chapter 29	O.C.	
Aux. Pump (DC)	4,000	
Hydraulic Motor Pump (AC)	2,000	
Heat Exchanger	O.C.	
Relief Valve, Main System	12,000	
Reservoir	12,000	
Pressure Switches	O.C.	

Effective date April 1, 1964

Form FAA-1014 (5-47)

FIGURE 19. OPERATIONS SPECIFICATIONS AIRCRAFT MAINTENANCE - LOCKHEED L-188 A & C

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FEDERAL AVIATION AGENCY
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OPERATIONS SPECIFICATIONS

PART D — Page 4 of 5 pages

OPERATIONS SPECIFICATIONS
AIRCRAFT MAINTENANCE
LOCKHEED L-188 A & C

	Overhaul Period	Inspection & Check Period
Ice and Rain Protection, Chapter 30	O.C.	
Airfoil Temperature Sensor Amplifier	4,000	
Bleed Air Shut-Off Valve	3,000	
Control Unit, Temperature	8,000	
Fuselage Isolation Valve	8,000	
Indicator, Airfoil Temperature	8,000	
Indicator, Bleed Air Manifold	8,000	
Leakage Detector Valve	3,000	
Modulating Control Valves	8,000	
Switch Temperature Selector	8,000	
Transmitter, Bleed Air Manifold	8,000	
Thermostats	O.C.	
Universals	O.C.	
Firewall Bleed Air Shut-Off Valve	3,500	
Timer, Prop De-Ice	5,000	
Windshield De-Fog	8,000	
Windshield Wiper Accumulator	12,000	
Windshield Wiper Control Unit	4,000	
Window Units	12,000	
Landing Gear, Chapter 32		
Brake Accumulators	12,000	
Brake System	12,000	
Gear Up-and-Down Locks	10,000	
Lockout Cylinder	12,000	
Main and Nose Wheels	O.C.	* Tire Change
Main Gear	12,000	
Main Gear Door Actuating Cylinder	10,000	
Nose Gear	12,000	
Nose Gear Door Actuating Cylinder	10,000	
Nose Wheel Steering	12,000	
Valve, Shuttle	12,000	
Valve, Priority	12,000	
Lighting, Chapter 33		
May be determined by assigned inspector.		
Navigation, Chapter 34		
May be determined by assigned inspector.		
Oxygen System, Chapter 35		
May be determined by assigned inspector.		

Effective date April 1, 1964

Form FAA-1011 (5-6)

FIGURE 19. OPERATIONS SPECIFICATIONS AIRCRAFT MAINTENANCE - LOCKHEED L-188 A & C

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FEDERAL AVIATION AGENCY
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OPERATIONS SPECIFICATIONS

PART D — Page 5 of 5 pages

OPERATIONS SPECIFICATIONS
AIRCRAFT MAINTENANCE
LOCKHEED L-188 A & C

	Overhaul Period	Inspection & Check Period
Doors, Chapter 52		
Actuators	4,000	
Cylinder, Stair Actuating	4,000	
Doors and Emergency Exits	12,000	
Valve, Stair Selector	8,000	
Fuselage, Chapter 53		
Crew Seats and Attachments	8,000	
Exterior Covering	12,000	
Floor Support Members	12,000	
Interior	O.C.	
Nose Gear Well Area	12,000	
Passenger Seats and Attachments	12,000	
Structure Around Windows	12,000	
Nacelles, Chapter 54		
Attachments	12,000	4,000
Main Gear Support Structure	12,000	
Skin and Structure Beneath Tail Pipe Shroud	12,000	4,000
Tail Pipe and Shroud	12,000	2,000
Stabilizers, Chapter 55		
Attachments and Joints	6,000	
Exterior Covering	6,000	
Elevator and Tabs	12,000	* 500
Interior Structure	6,000	**2,000
Rudder and Tabs	12,000	
Vertical, Horizontal and Installation	6,000	
Windows, Chapter 56		
Cabin	12,000	
Windshield Structure	12,000	
Wings, Chapter 57		
Ailerons and Tabs	12,000	
Attach Joints	12,000	
Center Wing Section	8,000	
Flaps, Structure	12,000	
Interior Structure	12,000	
Wing to Fuselage Fillets	8,000	

* Counter weight bracket
** Inspection Rear Spar Web

Effective date April 1, 1964

Form FAA-1014 (5-63)

FIGURE 20. OPERATIONS SPECIFICATIONS AIRCRAFT MAINTENANCE - ALLISON 501-D13 ENGINE AEROPRODUCTS PROPELLER

UNITED STATES OF AMERICA
FEDERAL AVIATION AGENCY
WASHINGTON

Form Approved
Budget Bureau No. 04-R075.

PART D — PAGE 1 OF 2 PAGES

OPERATIONS SPECIFICATIONS
AIRCRAFT MAINTENANCE

ENGINE MAKE - ALLISON
ENGINE MODEL - 501-D13

PROPELLER MAKE - AEROPRODUCTS
PROPELLER MODEL - A6441FN606

	Overhaul Period	Inspection & Check Period
Propellers, Chapter 61		
Alternator	1500	
Regulator	1500	
Hub	2500	
Blades	2500	
Reservoir	2500	
Spinner	O.C.	
Power Plant General, Chapter 71		
Engine Mounting System	O.C.	
Vibration Isolators	O.C.	
Engine Cowling	O.C.	
Engine Fire Seal	O.C.	
Engine, Chapter 72		
Engine, Basic*	1500	
Reduction Gear Assembly	2000	
Torquemeter Assembly	2000	
Compressor Section	2000	
Combustion Section	1500	
Turbine Section	1500	
Engine Fuel and Control, Chapter 73		
Temperature Datum Control System	3000	
Fuel Control	3000	
Engine Fuel Pump	3000	
Fuel Flow Meter	3000	
Ignition System, Chapter 74		
Exciter and Relay	1500	
Ignitor	O.C.	
Engine Air, Chapter 75		
Ducts and Scoops	O.C.	
Anti-ice System	3000	
Speed-sensitive Control	3000	
Engine Controls, Chapter 76		
Power Lever System and Engine Coordinator Controls and Linkages	O.C.	

*Applicable where engine overhaul is not sectionalized.

Effective date _____

Form FAA-1014 (8-67)

FIGURE 20. OPERATIONS SPECIFICATIONS AIRCRAFT MAINTENANCE - ALLISON 501-D13 ENGINE AEROPRODUCTS PROPELLER

UNITED STATES OF AMERICA
FEDERAL AVIATION AGENCY
WASHINGTON

Form Approved
Budget Bureau No 04-R078.

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OPERATIONS SPECIFICATIONS

AIRCRAFT MAINTENANCE

ENGINE MAKE - ALLISON
ENGINE MODEL - 501-D13

	Overhaul Period	Inspection & Check Period
Engine Indicating, Chapter 77		
Tachometer Generator	3000	
Tachometer Indicator	5000	
T.I.T. Indicator	5000	
Torquemeter Indicator	5000	
Torquemeter Phase Detector	O.C.	
Indicator Oil Temperature	5000	
Indicator Oil Quantity	O.C.	
Indicator Oil Pressure Gearbox	5000	
Indicator Oil Pressure Engine	5000	
Engine Exhaust System, Chapter 78		
Engine Exhaust System	O.C.	
Engine Oil System, Chapter 79		
Engine Oil System	O.C.	
Actuator Oil Cooler Flap	3000	
Oil Quantity Transmitter	O.C.	
Oil Pressure Warning Switch	O.C.	
Oil Pressure Transmitters	5000	
Oil Cooler Flap Position Indicator	O.C.	
Fuel Oil Heat Exchanger	3000	
Starting, Chapter 80		
Engine Starter	1500	
Bleed Air Shutoff Valves	5000	
Isolation and Firewall Valves	5000	
Combustor Assembly	1500	
Air Storage Bottles	5 Years	
Air Bottle Cooling Valve	5000	
Air Compressor	O.C.	

Effective date _____

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4-4204