

AC NO: 123-1

DATE: 10/17/68



ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

SUBJECT: AIR TRAVEL CLUBS

-
1. **PURPOSE.** This advisory circular sets forth guidelines and procedures to assist air travel clubs using large aircraft in meeting safety requirements of Federal Aviation Regulations Part 123.
 2. **REFERENCES.** Federal Aviation Regulations Parts 43, 65, 121, 123, and 145.
 3. **BACKGROUND.** New Part 123 is designed to provide a higher safety standard in the operation of large airplanes by air travel clubs since the typical travel club operation is, except for a few unique characteristics, no different from a charter flight conducted by a commercial operator.
 4. **COMPLIANCE DATES.** Air travel clubs existing on September 5, 1968, should make application for a Part 123 certificate and operations specifications in the prescribed manner and form before December 1, 1968.
 - a. An applicant must conduct air travel club operations in accordance with current rules and certain other specified regulations (§§91.116, 121.117, 121.119, 121.121 and 121.549) until February 1, 1969, or until a certificate is issued or denied, whichever occurs first. Thereafter all the requirements of Part 123 must be met. (Every effort should be made to take action before February 1, 1969).
 - b. Air travel clubs organized after September 5, 1968, should apply for certification at least 60 days prior to the date of intended operations.

- c. All air travel clubs issued an operating certificate should be capable of complying with all the provisions of Part 123 and the operations specifications on the effective date of the operating certificate. Air travel club certificates are effective for one year from the date of issuance and applications for renewal should be made at least 60 days prior to the expiration of such certificates.
5. APPLICATION FOR CERTIFICATE. Each applicant for an air travel club certificate should submit a formal application as provided in §123.11 to the FAA Flight Standards District Office, General Aviation District Office, or Air Carrier District Office which is nearest to its proposed principal base of operations. The application will be in letter form and will include the following:
 - a. The name and address of each director and each officer of the air travel club, and each person employed or who will be employed in a management position described in §123.13.
 - b. A list of flight crewmembers with the type of airman certificate held, including ratings and certificate numbers.
 6. PRELIMINARY DISCUSSIONS. Preliminary discussions between the applicant and the assigned Flight Standards inspector should be held for the purpose of resolving any items which might be reason for delay or possible disapproval of the formal application. During the course of these informal discussions, a mutually convenient time and date should be established for the physical inspection of the airplane, aircraft equipment, facilities, and manual.
 7. OPERATIONS SPECIFICATIONS. Operations specifications issued to air travel clubs contain specific authorizations and limitations in connection with flight operations. Their approval by the assigned Flight Standards inspectors and acceptance by the authorized representative of the air travel club is part of the formal certification. The maintenance inspection requirements should be prepared from the standard specification format as shown in Appendix 3.
 8. CERTIFICATION PROCEDURES. FAA personnel will be guided in the certification of air travel clubs by the guidelines contained in Handbook 8430.6 as applicable to commercial operations except as specifically provided for in Part 123, and Handbook 8310.4, Chapter 8.
 - a. Since air travel clubs will not normally have a large pilot group in its organization, some of the training requirements may be met through training contracts with established flight schools or other approved organizations, such as air carriers. When training is accomplished through a contract agency, FAA surveillance will be conducted to the degree necessary to ensure that the training of air travel club crewmembers is in accordance with the certificate holders' training program and that such training meets the regulatory requirements of §123.41.

- b. Initial and recurrent proficiency checks required by §121.441(b) may be conducted by an FAA inspector or an approved check pilot of the air travel club. Initial TYPE RATINGS for pilots qualifying in propeller airplanes will be conducted by inspectors who are rated in that particular type airplane or comparable type airplane. Initial TYPE RATINGS in turbojet aircraft must be conducted by currently qualified airman certification inspectors. Initial and recurrent proficiency checks in turbojet aircraft may be conducted by an FAA inspector or an approved check pilot of the air travel club. Check pilots or examiners of certain FAA-approved flight schools may also be authorized by the Administrator to conduct proficiency checks. Initial flight assignments (§121.425) are not required; however, an en route inspection by an FAA inspector should be conducted on the inaugural flight of a newly certificated air travel club.
- c. Specialized navigation as required by §121.389 will be specified in the operations specifications for all routes or areas where a flight navigator is required. In this regard, the flight navigator must meet current requirements, and the aircraft must be adequately equipped with appropriate navigation equipment along with a suitable working space for the navigator. Appropriate navigational procedures must be included in the operator's manual.
- d. Special airport authorizations and limitations provided in §123.21(b)(4) are intended to permit operations into suitable safe landing fields which might be used to serve certain hunting and fishing areas, and shore resorts, etc. Approvals of this type may be based on a showing by the applicant that the airplane performance limitations can be complied with by gross weight adjustments as well as the assignments of VFR minimums as appropriate to such operations.
- e. Duty time limitations specified in Part 123 provide rest periods for crewmembers appropriate to the type of flight operations conducted by air travel clubs. Duty time normally begins at the time the crew reports for duty and includes such items as flight planning, preflight of aircraft, duty aloft, time spent on the ground during refueling, or other stops, and ends after completion of post flight duties such as arrangements for refueling, parking, maintenance fees, and maintenance. The time a crewmember is required to be available at a telephone (telephone standby) is considered as duty time.
- f. Exclusive use of aircraft is provided for in Part 123 by incorporation of §121.155 and the applicant must show ownership, lease, or other contractual agreement that provides exclusive use of at least one aircraft for a minimum period of six (6) months. Dual applicability and conflict in operations under Parts 121, 135, and 123 are prevented by the provisions of §123.1(c).

- g. Air travel clubs are required by §91.116 to utilize the instrument approach procedures and minimums prescribed in Part 97. The takeoff minimums of §91.116(c) are also applicable in that this section has been amended to include persons operating aircraft under Part 123. For operations outside the United States, the operations specifications require Part 123 operators to comply with the minimums specified by the foreign government or in the operations specifications.
9. INSPECTION FOR ISSUANCE OF CERTIFICATE. Upon receipt of formal application by the Flight Standards District Office, the assigned FAA personnel will commence the required inspections to determine compliance with the applicable regulations. This should be at the time and date previously agreed upon during the preliminary discussions. Management personnel or those responsible for operational direction of the air travel club should be available to FAA personnel during these inspections. The inspections will include at least the following:
- a. Review of the application.
 - b. Inspection of the flight equipment.
 - c. Inspection of the facilities.
 - d. Weight and balance procedures.
 - e. Review of personnel records and qualifications of those designated to exercise operational control or who serve in a management position.
 - f. In depth review of the operator's manual, including that portion devoted to inspection and reporting of mechanical irregularities, for conformity with the regulations and the compatibility of operations specifications with the nature or the type of operation proposed to be conducted (see Appendix 1).
 - g. Review of flight crewmember qualification including cabin attendants.
 - h. Review flight crew and crewmember training and proficiency check program including passenger briefing procedures. Particular emphasis will be placed upon instructions as to the use of the operator's manual, airplane performance operating limitations, special airworthiness requirements, the airplane instrument and equipment requirements (minimum equipment list) authorized by §121.627(c).
 - i. Review procedures for preparation of load manifest.
 - j. Review procedures and forms required and utilized for keeping records and making reports.

10. ISSUANCE OF CERTIFICATE. Upon satisfactory completion of the inspection and a review of the required documents, the inspector authorized to sign the certificate on behalf of the Administrator will approve the certificate by signature and issue it to the air travel club operator.
- a. The attached appendices provide additional information on means for applicants to meet initial certification requirements as air travel clubs.
11. PREPARATION OF INSPECTION INSTRUCTIONS AND SCHEDULES. The portions of the manual required by FAR Part 123 that relate to inspections (including checks and tests) will have to meet with FAA approval. The approval will be granted through the Operations Specifications issued by the FAA at the time of certification.
- a. The certificate holder is responsible for performance of the inspection in accordance with the detailed instructions, procedures, and schedules contained in the manual.
- b. In developing the inspection instructions including checks and tests, consider that the desired result is a cycle consisting of the following functions:
- (1) Inspections - Utilizing acceptable methods, techniques, and practices to determine physical condition and detect defects.
 - (2) Checks - Examinations in the form of comparisons with stated standards for the purpose of verifying condition, accuracy, and tolerances.
 - (3) Tests - Operation of aircraft components, appliances, or systems to evaluate functional performance.
- c. Alternates. There are various methods of meeting the inspection instructions, procedures, and schedules required by FAR Part 123. Among these are the following:
- (1) Utilization of those portions of the manufacturers' instructions which are necessary to accomplish the recommended inspection schedules.
 - (2) Utilization of those portions of the approved maintenance program of certificate holders under Part 121 as are necessary to accomplish the inspection schedules.
 - (3) Formulation of an inspection portion of the operator's manual specifically designed for the air travel club's operation.

- d. Discussion. Service and inspection periods are usually established initially on the basis of manufacturers' recommendations. This type of information is also usually available from operators with considerable service experience regarding problem areas and service and inspection periods. Since it is improbable that any two air travel clubs will have the same frequency or duration of flight, inspection schedules will vary. Most, however, will be based on the continuous inspection concept. Inspection frequencies may be based on hours flown, calendar time, cycles of operation, or various combinations of these.
- e. Typical Schedules. These schedules present, among other things, typical listings for various airplanes and engines (Appendices 2 and 3) illustrating the complexity of detail required to thoroughly inspect the airplane and its engines. The time or schedule of when the inspection will be performed and repeated is not illustrated for the reason that each operator has specific requirements particular to his own operational environment. One system is illustrated in Appendix 1, Figure 1. This appendix illustrates some of the provisions of a typical manual including one portion of a multi-pattern inspection system. The appendix should not be considered as a complete manual meeting the requirements of FAR Part 123.


Director,
Flight Standards Service

APPENDIX 1. SAMPLE SCHEDULE I

1. PROVISIONS. A system of this type should be designed to provide for the complete inspection of the aircraft, its components and systems within a twelve to fifteen-month cycle; a twelve-month cycle being the most common. To preclude compromising the margins of safety, this program provides and permits an essential and reasonable degree of flexibility for operational contingencies. The system establishes requirements for completing inspection areas within a quarterly time frame rather than on an operational basis. With respect to work accomplished within a specified time frame, a buffer against lead time requirements to locate and acquire certain critical items is provided. This buffer may extend the time frame for completion of an inspection area up to two weeks. However, should the critical item found to be discrepant have a bearing on the continued airworthiness of the aircraft, the aircraft may not be operated until the part is procured and installed. A program of Turn Around and Service Checks (see Figures 2 and 3, pages 17-19) is incorporated in the overall aircraft inspection program to preclude undetected discrepancies from going without correction between pattern check periods.

2. COMPONENT REMOVAL. All parts and/or components removed from the aircraft or its systems for cause, will be replaced with units, properly overhauled. All maintenance performed on the aircraft will be accomplished by:
 - a. Approved repair stations.
 - b. Properly certificated mechanics.
 - c. Persons under the direct supervision of a properly certificated mechanic.

3. CONTINUING ANALYSIS AND SURVEILLANCE. A continuing analysis and surveillance program on the aircraft and maintenance performed thereon will consist of a continuing review of work accomplished with emphasis on any area in which recurrent discrepancies occur. In addition, inflight analysis of the performance and functioning of the systems and components is accomplished on a continuing basis as a means of verifying the continuing effectiveness of repairs when the equipment is operated in its intended operational environment.

Some deficiencies noted in either of the above conditions may be corrected by appropriate adjustments to inspection schedules. All applicable Airworthiness Directives, Maintenance Bulletins, and manufacturer's service bulletins will be reviewed on a continuing basis, and compliance with those of a mandatory nature will be effected within the time frame set forth in the respective document. Nonmandatory material will be analyzed to ascertain applicability, and when found appropriate, will be included in the system for accomplishment within a reasonable time frame.

FIGURE 1

PATTERN A
AIRFRAME

N-		STATION	
Aircraft Total Time		Date	
Inspection Item	Mechanic	Inspector	
CABIN SEATS & SAFETY BELTS Row 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - Lounge			
MAIN CABIN - LOUNGES - LAVATORIES			
1. Buffets			
2. Buffets Electrical			
3. Entrance Door			
4. Windows			
5. Emergency Equipment			
6. Lighting			
7. Hat Rack			
8. Walls and Ceiling			
9. Water Tank (Supply & Storage)			
10. Lounge to Cockpit Door			
11. Forward Lounge Tables			
12. Lavatory Doors and Locks			
13. Emergency Windows			

PATTERN A

AIRFRAME

N-		STATION	
Aircraft Total Time		Date	
Inspection Item	Mechanic	Inspector	
CABLES			
1. Raise Rugs and Floor Boards for Cable Inspection			
2. Inspect all Cables Under Floor			
3. Install Rugs and Floor Boards After Cable Inspection			
4. Inspect Floor Boards and Rugs for Security			
5. Inspect Under All Floor Boards for General Condition of Structures, Pulleys, Pulley Brackets, Bell Cranks, etc. prior to re-installing floorboards.			

Fig. 1

PATTERN A.
AIRFRAME

N- STATION

Aircraft Total Time

Inspection Item	Mechanic	Inspector
FLIGHT COMPARTMENT		
1. Windshield and Windows		
2. Cockpit Area		
3. Additional Crew Member's Seat		
4. Crew Seats		
5. Radio Controls and Panels		
6. Headphones and Microphones		
7. Fuselage Door		
8. Radio Rack Shelves		
9. Radio Rack Cables		
10. Cargo Area		
11. Emergency Equipment		
12. Foreign Material		
SERVICE ITEMS		
1. Check Applicable A. D. Notes	X X X	
2. Check Applicable Newsletters	X X X	
3. Lavatories and Cans (also drains)		
4. Turbines		
5. Hydraulic & Anti-icing Fluids		
6. Accumulator Pressure Systems		
7. Air Brake Cylinder		
8. Cabin Seats, Rugs, Buffet (cleanliness)		
9. Oxygen & Fire Bottles		
10. Visual Inspection		

Fig. 1

PATTERN A
AIRFRAME

N-

Date

RADIO CHECK

Inspection Item	Capt.	F/O	F/E
<u>FUNCTIONALLY CHECK:</u>			
1. VHF Transmitter			
2. VHF Receiver			
3. H F Transceiver			
4. #1 ADF (Audio and Homing)			
5. #2 ADF (Audio and Homing)			
6. #1 VOR			
7. #2 VOR			
8. #1 Glideslope Rec.			
9. #2 Glideslope Rec.			
10. VOR Access Unit			
11. Marker Rec. (Aural and Lights)			
12. Loran			
13. P. A. Amplifier			
14. Interphone Amplifier			
15. Presto Music Recorder			
16. Radar			
17. Auto Pilot			
18. Service Interphone			
19. Captain's Headset & Microphone			
20. F/O Headset & Microphone			
21. Engineer's Headset & Microphone			

NOTE: Enter discrepancies in Aircraft Log Book

PATTERN A
ENGINE NO. 1

N-	Station		
Engine T.S.O.	Date	Mechanic	Inspector
<u>Inspection Item</u>			
1. Uncowl Engine			
2. Drain Oil Tank and Refill with New Oil			
3. Check Main Oil Screen			
4. Reinstall Main Oil Screen			
5. Remove Spark Plugs			
6. Compression Check Cyls.			
7. Injection Check Engine			
8. Install Spark Plugs (New or Reconditioned)			
<u>ACCESSORY SECTION</u>			
1. Pres. Check Engine Fuel System			
2. Rear Section and Accessories			
3. Accessory Section and Components			
4. Engine Mount and Components			
<u>COWLING AND CARBURETOR AIRSCOOP</u>			
1. Assembly and Attachments			
2. Airscoop			
<u>EXHAUST SYSTEM</u>			
1. P. R. T.'s			
2. Ex. Stacks and Attachments			
3. Ex. Clamps and Bolts			
<u>POWER SECTION</u>			
1. Cylinders and Attaching Units			
2. Cases and Engine Sumps			
3. Cowl Flaps and Units			
4. Intake Pipes			
5. Ignition System Complete			
<u>NOSE SECTION</u>			
1. Front Case and Units			
2. Propeller Assembly			
<u>ELECTRICAL</u>			
1. Fire Wall Terminals			
2. Fire Warning Units			

PATTERN A

AIRFRAME

CABIN SEATS AND SAFETY BELTS

1. Check seats for security to floor.
2. Seat operation.
 - a. Slipping back rests.
 - b. Slipping brake.
 - c. Broken brake cable.
3. Cleanliness of seat cushion and back cover.
4. Broken or loose, missing seat pocket bungee.
5. Seat cushion snaps secured to seat frame.
6. Arm rests for condition and security.
 - a. Torn leather.
 - b. Cleanliness.
 - c. Ash trays for operation and condition.
7. Pockets for life vest for condition and security.
8. Life vests for condition and check CO² in pockets, handles, safety. cocked for operation, check dates for leakage tests.
9. Check seat cushion bottoms, bungee missing and broken.
10. Check seat belts for operation security.
11. Check female end for spring tension.
12. Check male and female end for frayed metal tips or plastic ends in good condition.
13. Check metal tag date for load test.
14. Check and install sickness cups or bags.

PATTERN A
AIRFRAME

MAIN CABIN LOUNGES AND LAVATORIES

1. BUFFETS

- a. For cleanness.
- b. Operation of doors.
- c. Check for sharp edges, cracks and security.
- d. Drains to be opened.

2. BUFFETS ELECTRICAL

- a. Check operation of ovens, coffee containers, hot cups.
- b. Check plugs wiring circuit breakers.
- c. Check lighting.

3. ENTRANCE DOOR

- a. Check operation.
- b. Check seal for condition and security.
- c. Check for leakage around seal, (staining of seal and adjacent areas indication of leak).
- d. Check condition of door itself, such as: trim windows locking fingers to be in positive position when door is locked; check through windows marks line up when locked.
- e. Check door warning light for operation.

4. WINDOWS

- a. Check for cracks around outer edge at thru bolts.
- b. Check crazing--small dots like stars anywhere on window.
- c. Scratches - write up only scratches that can be felt by finger nail.
- d. Check trim, seal and cleanness.

5. EMERGENCY EQUIPMENT

- a. Life rafts and containers condition and security.
- b. Life vests and containers.
- c. Proper amount of different size life vests (infant).
- d. Destruction knife.
- e. Oxygen bottles full to 1100 p.s.i.; dust covers over heads operation and security; proper number of oxygen masks.
- f. Escape chute--condition and security, color code markings.
- g. Escape rope--condition and security.
- h. Axe--condition and security.
- i. Fire bottles--weight, condition and security and seal.
- j. Crash light operation and condition, proper location and security.
- k. Hostess P. A. system---to pilot, to passenger.
- l. Emergency procedure cards behind each seat pocket.
- m. First-aid kit, condition - proper quantities of materials.

6. LIGHTING

- a. Check ceiling lights - bright and night.
- b. Check reading lights.
- c. Check hostess call light.
- d. Lavatory lights and hostess call light in lavatories.

7. HAT RACK

- a. Condition security, check for pillows, blankets and cleanness.

8. WALLS AND CEILING

- a. Condition and security and cleanness.

9. WATER TANK

- a. Condition and security (supply and storage, leakage operation and drainage).

10. LOUNGE TO COCKPIT DOOR

- a. Condition and security.
- b. Door locking mechanism.

11. FORWARD LOUNGE - TABLES

- a. Check for integrity of mounting, table structure, etc.

12. LAVATORY DOORS AND LOCKS

- a. Check for proper lubrication and operation.

13. EMERGENCY WINDOWS

- a. Same as windows.
- b. Operation.
- c. Clearly marked.
- d. Check fingers for locking through locking windows marks lineup.
- e. Check handle for safety .032 wire brass.

CABLES

1. Raise rugs and floor boards for cable inspection.

2. Inspect all cables under floor.

- a. Check cables for rust, bird caging, fraying, pay attention around pulleys, loose and missing grommets and fair leads.
- b. Cables for being crossed.
- c. Cable tension.
- d. Check turnbuckles for safety (proper safety, proper wire, etc.).

3. Inspect under all floor boards for general condition of structures, pulleys, pulley brackets, bell cranks, etc. and corrosion.
4. Check floor boards for cracks corrosion for missing anchor nuts or any other locking device.
5. Install rugs and floor boards after inspection.
 - a. Check for condition and security.

FLIGHT COMPARTMENT

1. WINDSHIELD AND WINDOWS
 - a. Check delamination.
 - b. Check cracks.
 - c. Check fogging.
 - d. Check condition and security, wrench in place.
 - e. Operation of sliding windows - pilot and copilots.
 - f. Check condition and security of wiper blades and arms, proper blade tension and operation.
 - g. Check w/s defroster, de-icer, anti-icer, fluid outlets.
2. COCKPIT AREA
 - a. Cleanness.
 - b. Check condition and security of trim, panels, markings, placards, check list (pilots).
 - c. Check operation of flight controls, trim controls, engine controls, fuel tanks selector, X-feed, fuel dump controls, fuel shut-off, CO² selector.
3. ADDITIONAL CREW MEMBER SEAT
 - a. Check for condition and security and operation.
4. CREW SEATS
 - a. Check for condition and security and operation.
 - b. Check seat track for wear, check seat track stops.
 - c. Check seat cushions for condition, also arm rests and ash trays.
 - d. Check seat belts--condition and security.
5. RADIO CONTROLS AND PANELS
 - a. Check condition and security and operation.
6. HEADPHONES AND MICROPHONES
 - a. Check condition and security and operation.

7. FUSELAGE DOOR

- a. Check for condition and security and operation.
- b. Check door seal for tears, leaks and correct positioning.
- c. Check locking finger -- for going home check warning door light for correct position and operation.
- d. Check trim locking windows and scanning window for cracks, crazing, etc.; lining up of door fingers.

8. RADIO RACK SHELVES

- a. Check for condition and security (cracks, looseness, etc.).

9. RADIO RACK CABLES

- a. Check condition, security and freedom of movement.

10. CARGO AREA

- a. Check condition and security.
- b. Cargo post, webbing and locking of post, flooring for cracks, corrosion, loose screws, and maximum load factor.
- c. Cleanness of area.

11. EMERGENCY EQUIPMENT

- a. Condition and security of life rafts and vests.
- b. Correct amount of vests and rafts.
- c. Destruction knife.
- d. Crew Oxygen and smoke mask (for condition, security and supply).
- e. Fire bottle (weight, date and seal).
- f. Crash axe.
- g. Signal lamp.
- h. Very pistol (flares).
- i. Loran unit (extended overwater operations).

12. FOREIGN MATERIAL

- a. Remove and clean area of foreign material.

SERVICE ITEMS

1. Comply with any A. D. notes. (When applicable).
2. Comply with newsletters (when applicable).
3. Lavatories and cans (also drains).
4. Turbine both - check and fill.

5. Hyd. fluid, anti-icing fluid - check and fill.
6. Accumulator pressure system and nose - check and fill.
7. Air brake cylinder - check and fill.
8. Cabin seats, rugs, buffets - cleanliness.
9. Oxygen, fire bottles. Check and fill (NOTE: Date of last hydro. check and when appropriate have rechecked).
10. Visually inspect fuselage, tail surface, controls, wings, flaps main and nose gear tires for cuts, wear, proper pressure, lights landing and running, rotating beacon, wing icing, taxiing lights, etc.

PATTERN A. NO. 1 ENGINE

1. UNCOWL ENGINE
 - a. Mark cowling for easy installation.
 - b. Check for cracks, loose rivets or broken locking fingers.
 - c. Check for missing or broken cam locks.
2. DRAIN OIL TANK AND REFILL WITH NEW OIL
 - a. Drain oil at bottom at hopper at Y drain and close. (make sure you feel a positive snap).
3. CHECK MAIN OIL SCREEN
 - a. For foreign material, use magnet. Small particles of bronze are permissible.
4. REINSTALL MAIN OIL SCREEN
 - a. Replace O-ring gasket.
 - b. Double safety clamp.
 - c. Check for leaks.
5. REMOVE SPARK PLUGS
 - a. Check condition of plug. This can tell you if plugs were firing, condition of cyl. mixture of cyl. etc.
 - b. Peening of plug.
6. COMPRESSION CHECK CYLINDER
 - a. Check for very low compression or no compression at all.
 - b. Borescope cyl. to check for cracks, ring gland failure, etc., if compression is found in this condition, to be low or not at all.

7. INJECTION CHECK ENGINE

- a. Install power unit.
- b. Fuel aux. pumps on.
- c. Mixture control full rich.
- d. Spin prop.
- e. Check for leaks at all injection nozzles, at cyl. lines, and pump.

8. INSTALL SPARK PLUGS (New or Reconditioned)

- a. Check condition of plugs; if plugs were dropped, replace, new gasket and torque to pressurized valve.

ACCESSORY SECTION

1. PRESSURE CHECK ENGINE FUEL SYSTEM

- a. Check for leaks at all lines, pumps, fuel transmitter and carb. operate primer.
- b. Check for leaks at induction case.
- c. Check nozzles and lines.

2. REAR SECTION AND ACCESSORIES

- a. Rear section of engine for cracks, leaks both oil and fuel.
- b. Condition and secure.
- c. Check operation throttle mixture, carb. scoop, fire wall shutoff, check cables.

3. ACCESSORY SECTION AND COMPONENTS

- a. Check condition and security.

4. ENGINE MOUNT AND COMPONENTS

- a. Mount - cracks, oil leakage.
- b. Check engine bolts and trunion.

COWLING AND CARBURETOR AIRSCOOP

1. ASSEMBLY AND ATTACHMENTS

- a. Condition and secure.

2. AIRSCOOP

- a. Condition and secure, operation from cockpit.
- b. Check push rods, cables pulleys, etc.

EXHAUST SYSTEM

1. P.R.T.'s
 - a. Check for cracks on head, turbine blades, spin turbine check for freeness, check hold down bolts for hood.
2. EX. STACKS AND ATTACHMENTS
 - a. Cracks, worn spots, blow by, hot spots, clamp and bolts worn, broken, missing exhaust stacks.
3. EX. CLAMPS AND BOLTS
 - a. Condition and secure, worn or broken, loose check for secure at cyl. end.

POWER SECTION

1. CYLINDERS AND ATTACHING UNITS
 - a. Cracks around spark plugs, boss, heads, baffles for secured cracks, etc.
 - b. Check cyl. hold down bolts for tightness and sheared
 - c. Rocker covers for leaks, push rods for leak, cyl. drain lines.
2. CASES AND ENGINE SUMPS
 - a. Check case for condition and secure, cracks leaks at parting surface, sumps for cracks leaks and safety.
3. COWL FLAPS AND UNITS
 - a. Check cowl flap shingles for condition and security, cracks, mounts and drive units and motors.
4. INTAKE PIPES
 - a. Check condition and security at attach points at case end and at cyl. packing nut tight and safety, cracks hole in pipe, etc.
 - b. Check for distortion of pipe.
5. IGNITION SYSTEM COMPLETE
 - a. Check plugs for tightness.
 - b. Check H. T. coil and leads.
 - c. Check lead cigarettes.
 - d. Check P leads.
 - e. Check mag. and dist.
 - f. Harness for cracks and condition and security.
 - g. Check spark advance.

NOSE SECTION

1. FRONT CASE AND UNITS

- a. Case for cracks and oil leak.
- b. Check prop gov. and step relay for condition and security.
- c. Check conduits.

2. PROP. ASSEMBLY

- a. Prop blades for cracks, nicks, condition and security of chaffing strip at leading edge. De-icer boot for cuts tear and operation. Leaks at hub and at shank of blades.

ELECTRICAL

1. FIRE WALL TERMINALS

- a. Check for condition and security, dirty, worn, corrosion, and water.

2. FIRE WARNING UNITS

- a. Same as above plus---check operation by shorting each unit.

2-3-4-ENGINES

Remove cowl and visual inspect.

FIGURE 2

Aircraft: N-

Date:

TURN AROUND INSPECTION

<u>ITEM</u>	<u>INSPECTOR</u>
1. Left Wing: Flap, Fluid Leaks, Landing and Navigation Lights, Aileron & Tab, Wing Surfaces	
2. Cabin Heater: CO ² Discharge Discs.	
Nos. 1 & 2 Engines: Nacelle Exterior, Oil Cooler, Cowl Flaps visible portion of engine thru Cowl Flaps Gap and Front Cowl.	
Nos. 1 & 2 Propellers: DeIcer Boots, Blades, Blade Angle, Wiring, Blade Switches, Brush Block Oil Leaks.	
Cabin Supercharger/Air Tail Heater Scoops	
Left Main Gear and Well: Tires, Brakes, Strut Extension, Wheel Well Doors, General Inspection of Well Interior.	
Cabin Heater Combustion Air Inlet.	
Radio Antennas	
Right Main Gear/Well: Tire, Strut Extension, Wheel Well Doors, CO ² Discharge Discs, General Inspection of Well Area.	
Right Main Gear Well, #3 & #4 Engines & Propellers: Right Wing, etc., Inspect in same manner as left side of aircraft.	
Wing Area: Stabilizer Surfaces, Flight Controls and Tabs, Navigation Lights.	
Cabin Door: Bayonets, etc.	
Wing Service Covers.	
Cockpit External Door Bayonets, etc.	
Starboard Emergency Exit Door, Right side of aircraft.	
Emergency Exit Windows	
Review and Correct Discrepancies Recorded in Aircraft Log.	

FIGURE 3. SERVICE CHECK

N-	SERVICE CHECK	Date
ITEM		INSPECTOR
1.	Left Gear: Tires, Brakes, Wheels, Strut Extension, Lockouts, Hydraulic and Air Lines Shuttle Valves	
2.	Right Gear: Repeat Left Gear Check and Check Air/Ground Transfer Micro Switch Assembly	
3.	Nose Gear: Static Ground Wire, Tire, Wheel Strut Extension, Steering Systems Components	
4.	Recirculating Blower Intake	
5.	Cabin Heater CO ² Discharge Discs	
6.	Cabin Heater Blower Intake	
7.	After Cooler Flap Door	
8.	Left Wing Lower Surface: Flaps, Inspection and Access Doors (NOTE: Tank Drain/Shutoff Valve door fit flush <u>only</u> when valve is correctly positioned) Dump Chutes, Landing Lights, Aileron and tab (alignment), Fuel Vent Drain Post, Fuel Leakage Stains, Integrity of Skin and rivets.	
9.	Left Navigation Light and Wing Tip	
10.	Wing Leading Edge	
11.	Airfoil Heater Exhaust	
12.	No. 1 Engine: Nacelle exterior, oil cooler scoop and door, cowl flaps, visible portions of engine through cowl flap gap and front cowl inlet.	
13.	No. 1 Propeller: Deicer Boots, Blades, Blade Angle (forward pitch) wiring, Blade Switches, Brush Block, Oil leaks.	
14.	Cabin Supercharger/Airfoil heater Airscoop	
15.	Left Main Gear Well: Doors, Wiring Plumbing Cables, Junction Box Covers, Firewall Shutoff Valves, Wheel well light gear lip latch, Fuel Strainers, Tank Selector, Boost Pumps, Gear Attach Fittings, Gear-up Micro Switch, Bungees, Gear Down Micro Switch	
16.	No. 2 Engine and Propeller: Inspect in same manner as No. 1	
17.	Cabin Heater Combustion Air Inlet	
18.	Lavatory Drain and fill access door	

SERVICE CHECK
(cont'd)

ITEM	INSPECTOR
19. All Antennas	
20. Static Pressure Vents	
21. Pitot Tubes	
22. Nose Gear Well: Doors CO ² Discharge Discs, Bottles and Plumbing, Gear Down Micro Switch, Gear Attach Fittings, Gear Up Micro Switch, Gear Brake Snubber, Shear Bolt Air/Ground Micro Switch Torque Link and Connector Pins, Hydraulic Lines Steering Components	
23. Forward Belly Compartment: Clean - Lights, CO ² Detectors, CO ² Outlets	
24. Hydraulic Compartment: Accumulator Pres. Gages, Hydraulic Fluid Quantity, General Inspection for Leaks, Cables, Pullies, Wiring, Wing Flap Selector Valve	
25. Right Main Gear Well - No.3 and No.4 Engines and Propellers, Right Wing, etc. Inspect in same manner as left side of airplane.	
26. Cabin Pressure Control Valve Outlet	
27. Alcohol Tank, Quantity	
28. Freon Condenser: Air Intake and Air Exhaust Flap	
29. After Cooler/Supercharger Oil Cooler Scoop	
30. Heater Compartment: Fire Detector Ducting, Back Fire warning Switch, Lines, Spark Plug leaks	
31. Rear Belly Compartment: Inspect same as Front Belly	
32. Ground Air Condition Intake	
33. All Windows and Emergency Exits	
34. Tail Heater Compartment Access Door	
35. Dorsal Fin Light	
36. Vertical and Horizontal Stabilizers	
37. Elevator (Check Tab Alignment)	
38. Navigation Lights	
39. Rudder (Trim Tab Alignment)	
40. Tail Heater Ground Blower Intake and Exhaust	
41. Cabin Pressure Relief Valves and Valve Atmospheric Pressure Vent	
42. Left Side of Fuselage: Inspect same as right side.	
43. Upper Wing Surfaces, Note Security of Fuel and Oil Covers	
44. Review Aircraft Log Items and Correct Discrepancies Recorded Therein	
45. Log Book Signed Releasing Aircraft for Flight	

NOTE: These sheets will be used in conjunction with periodic inspection sheets when performing periodic inspection.

AC 123-1
10/17/68

APPENDIX 2. SAMPLE SCHEDULE II
Figure 1
OPERATIONS SPECIFICATIONS
AIRCRAFT MAINTENANCE
DOUGLAS DC-6, DC-7

Appendix 2
Page 1

Air Conditioning.

Accessory Containers
Expansion Turbine
Actuators and Valves
Heater Unit
Indicator, Cabin Altitude
Indicator, Cabin Rate of Change
Pump, Heater Fuel
Selector, Cabin Altitude
Selector, Cabin Rate of Change
Turbo-Compressor
Unit, Ignition
Valve, Auto-Emergency

Inspection &
Check Period

Auto-Pilot.

Amplifier (A-12)
Engaging Control
Gyro-Compass Control
Gyro-Compass, Repeater
Pedestal Controller
Servo, Controller
Servo, Unit
Vertical Gyro Control

Electrical.

Ammeter and Voltmeter
Generator
Inverter, Emergency
Inverter, Main
Regulator, Voltage
Relay, Battery

Equipment and Furnishings.

Chute, Evacuation
First-Aid Kit
Life Vest & Raft
Transmitter, Emergency

Fire Protection.

Cylinders, Weigh *
Panel, Fire Detector

Flight Instruments.

*Hydrostatic Test every 5 years.

Figure 2.
OPERATIONS SPECIFICATIONS
AIRCRAFT MAINTENANCE
LOCKHEED L-049/749/1049/1649

Inspection &
Check Period

Air Conditioning

Actuators and Valves
Blower, Flight Station
Expansion Turbine
Fan, Heat Exchanger Cooling
Heat Cycling and Overheat Assembly
Heater Unit
Ignition Unit
Indicator, Cabin Altitude
Indicator, Cabin Rate of Change
Pump, Cabin Supercharger Reactor
Pump, Heater Fuel
Selector, Cabin Altitude
Selector, Cabin Rate of Change
Separator, Water
Turbo-Compressor

Auto-Pilot.

Electrical.

Ammeter and Voltmeter
Generator
Invertor, Emergency
Inverter, Main
Regulator, Voltage
Relay, Battery

Equipment and Furnishings

Evacuation Chute
First-Aid Kit
Life Vests and Raft
Transmitter, Emergency

Fire Protection.

Cylinders, Weigh *

*Hydrostatic Test every 5 years.

Flight Controls.

Indicator, Wing Flap Position
Transmitter, Wing Flap Position

FIGURE 1. OPERATIONS SPECIFICATIONS

UNITED STATES OF AMERICA
FEDERAL AVIATION AGENCY
WASHINGTON

Form Approved.
Budget Bureau No. 04-R075.

OPERATIONS SPECIFICATIONS

AIRCRAFT INSPECTION - GENERAL

The airplanes listed in these Operations Specifications shall not be used in air travel club (identify the specific air travel club by name) operations unless:

- a. The airplane and its component parts, accessories, appliances are inspected in accordance with the schedule for inspections, including checks and tests, as set forth in the air travel club (identify the specific manual) manual.

Effective date _____

FIGURE 2. OPERATING CERTIFICATE

AC 123-1
10/17/68

FEDERAL AVIATION AGENCY
Washington, D. C.

Operating Certificate No.

..... hereby makes application for amendment
of the Operations Specifications appearing on the reverse side hereof, as follows:

Reasons and supporting data (if insufficient space attach additional page):

I CERTIFY that the statements submitted in connection herewith are true and that I am duly authorized
to make this application on behalf of the applicant.

.....
(Signature)
Date
.....
(Title)

INSPECTOR'S RECOMMENDATIONS:

.....
(Signature)
.....
(Title)

The Operations Specifications set forth on the reverse side hereof are

Amendment No. By direction of the Administrator:
Effective date
(Signature)
Supersedes specifications dated
(Title)

Received for the applicant by:

.....
(Signature)
Date
.....
(Title)