T.O. 1C-7A-1CL-1

PILOTS' & CREW MEMBER'S

ABBREVIATED FLIGHT CREW CHECKLIST

USAF SERIES

C-7A

AIRCRAFT

Each transmittal of this document outside of the Department of Defense must have approval of the Technical Order Distribution Control Activity. Refer to T.O. 00-5-2.

This manual supersedes T.O. 1C-7A-1CL-1 dated 3 October 1967, changed 2 December 1969.

COMMANDERS ARE RESPONSIBLE FOR BRINGING THIS CHECKLIST TO THE ATTENTION OF ALL PERSONNEL CLEARED FOR OPERATION OF THE AIRCRAFT.

Published under authority of the Secretary of the Air Force.

AFLC RAFB, GA

1 OCTOBER 1970

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INSERT LATEST CHANGED PAGES, DESTROY SUPERSEDED PAGES.

LIST OF EFFECTIVE PAGES

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins of the page.

Dates of issue for original and changed pages are:

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 60 CONSISTING OF THE FOLLOWING:

Page No.	Change No.	Page No.	Change No.
Title	0		
A	0		
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Upon receipt of the second and subsequent changes to this technical order, personnel responsible for maintaining this publication in current status will ascertain that all previous changes have been received and incorporated. Action will be taken promptly if the publication is incomplete.

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USAF

A

FOREWORD

YOUR RESPONSIBILITY. In accordance with AFR 60-9, the flight crew is required to use this checklist when operating the C-7A aircraft.

HOW TO BE ASSURED OF HAVING LATEST DATA. Refer to T.O. 0-1-1-3 which is issued weekly and devoted solely to the listing of all current Flight Manuals, Safety Supplements, and checklists. Its frequency of issue and brevity assure an accurate, up-to-date listing of these publications.

TECHNICAL ORDER NUMBER. This checklist is identified by a T.O. number that is identical to that of the applicable Flight Manual except for the addition of the letters "CL" (checklist) and a suffix number indicating the crew member to which it applies.

CONTENTS. This checklist consists of three parts: normal procedures, emergency procedures, and performance data. The numbered items (line items) correspond to identically numbered items in the amplified procedures in Sections II and III of the Flight Manual. Emergency procedures are

identified by a black striped border. A Take-Off and Landing Data Card is included at the end of the normal procedures checklist, and a Ditching Chart for the pilot, copilot and flight engineer is included at the end of the emergency procedures checklist.

FLIGHT MANUAL. This checklist does not replace the amplified version of the procedures in the Flight Manual. To fly the aircraft safely and efficiently, you must read and thoroughly understand why each step is performed and why it occurs in a certain sequence.

CONCURRENCY. As changes are made to the amplified checklist in the Flight Manual, concurrent changes will be made to this checklist so that both will agree. However, a change to the Flight Manual may not affect the amplified procedures. Therefore, the Flight Manual date may not be the same as the checklist date. To determine the checklist applicable to a given Flight Manual issue, refer to the bottom of the Flight Manual "A" page under "Current Flight Crew Checklist." For purposes of determining the concurrency between the Flight Manual and this checklist, the latest date

of a Safety Supplement or Operational Supplement affecting this checklist will be considered to represent the latest change date of the Flight Manual.

SAFETY SUPPLEMENTS. Whenever you receive a supplement affecting your checklist, write in the appropriate information. Printed replacement checklist pages will be made available to you as quickly as possible through the "quick change" checklist program. A notation on the bottom inside corner of these pages will indicate that they reflect certain Safety Supplements. Note that there is no action in the checklist program that constitutes authority for discarding a Safety Supplement. Such action is authorized only through the title page of the Flight Manual, another Safety Supplement, or T.O. 0-1-1-3.

OPERATIONAL SUPPLEMENTS. Whenever you receive a supplement affecting your checklist, write in the appropriate information. Printed replacement checklist pages will be made available to you as quickly as possible through the "quick change" checklist

program. A notation on the bottom inside corner of these pages will indicate that they reflect certain Operational Supplements. Note that there is no action in the checklist program that constitutes authority for discarding an Operational Supplement. Such action is authorized only through the title page of the Flight Manual, another Operational Supplement, or T.O. 0-1-1-3.

CHANGES AND REVISIONS. Whenever you receive a normal change or revision to your checklist, check to ascertain that it reflects all outstanding Safety Supplements or Operational Supplements that affect the checklist. If it does not, add in the required information by hand (sometimes you will be able to accomplish this end simply by retaining the appropriate quick change page which references the outstanding supplement).

BINDERS. Binders containing plastic envelopes, to hold and protect the checklist pages, are available through normal AF supply channels. The binders are available with either 15, 25, or 40 envelopes. The Federal Stock numbers for these binders are: 7510-766-4268, 7510-766-4269, and 7510-766-4270

respectively. Be sure to order enough binders - if you have a large checklist you may want to carry it in two small binders instead of a single large one.

COMMENTS AND QUESTIONS. Any comments and questions should be directed through your Command Headquarters to Warner Robins Air Materiel Area, Robins AFB, Georgia, ATTN: WRAMA/MMEAH.

NORMAL PROCEDURES

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BEFORE INTERIOR INSPECTION

1. External power unit - In place
2. Fire extinguisher - In place
3. Wheel chocks - In place
4. Gear down locks - Installed

5. Static ground wire - In place
6. Pitot/canopy covers - Removed
7. Before interior inspection checklist - Complete

INTERIOR INSPECTION

1. Forms 781 - Checked

   a. Status of aircraft - Checked
   b. Fuel, oil, deicing fluid, and oxygen service - Checked

2. Form 365F and load adjuster - Checked
3. Navigation publications - Checked
4. Hydraulic panel - Checked

   a. Hand pump selector - NORMAL
   b. Emergency landing gear down selector - OFF
   c. Nosewheel down selector - OFF
   d. Brake accumulator charging selector - OFF
   e. Nosegear air bottle selector - IN

5. Cockpit air handles - As required
6. Nosewheel steering switch - ON
7. Brake emergency lever - IN/Secure
8. Autofeather switch - OFF

9. Emergency panel - Checked

    a. Engine fire extinguisher handles - IN/Horizontal
    b. Fuel emergency shutoff switches - DOWN/Guarded
    c. Oil emergency shutoff switches - DOWN/Guarded
    d. Cockpit heater fire extinguisher switch - DOWN/Guarded
    e. Cargo compartment heater fire extinguisher switch - DOWN/Guarded

10. Gyro compass switch - SLAVE
11. Copilot's attitude indicator - CAGED
12. Free stream pressure selector - NORMAL
13. Engine switch panel - Checked

    a. Oil dilution switches - OFF
    b. Vent door switch - As desired
    c. Hot fuel prime switch - OFF
    d. Battery switch - OFF

14. Windscreen panel - Set

    a. Windshield wiper switch - OFF
    b. Windshield heat switch - OFF

15. Flaps - 40 degrees
16. Ignition switches - OFF
17. Landing gear selector lever - DOWN
18. Gust lock - LOCKED
19. Circuit breaker panel - Checked

    a. Circuit breakers - CLOSED
    b. Emergency bus switch - NORMAL
    c. Secondary bus switch (battery preflight only) - UP
    d. FM power switch - OFF
    e. Instrument transformer - MAIN
    f. Fuse caps - Secure

20. Emergency exit lights - Checked/OFF
21. Seat belt/smoking sign switches - ON
22. Cargo door master switch - ON
23. Main gear emergency handle - Checked/Secure
24. Emergency slide - Checked
25. Heater and ventilation panel - Checked

    a. Master switches - OFF
    b. Fuel switch - OFF
    c. Ignition switches - NORMAL
    d. Anti-icing switches - OFF

26. Hydraulic pressure shutoff valve - ON
27. First aid kit - Checked

28. Hydraulic reservoir - Checked
29. Emergency exit jettison handle - Safetied
30. Emergency escape exit - Checked

    a. Inverter and battery access panels - Secure
    b. Escape hatch release handle - Locked

31. Power - ON

    a. Battery voltage - Checked/OFF
    b. External power - ON

32. DC warning, indicating, and press to test lights - Checked

    a. Propeller reverse/autofeather (3)
    b. Emergency panel (6)
    c. Doors unlocked (1)
    d. Marker beacon (1)
    e. Fuel low level/pressure (4)
    f. Windshield anti-icing (2)
    g. Landing gear (3)
    h. Oil low level/pressure (4)
    i. Generator/inverter failure (4)
    j. 26 volt ac failure (1)
    k. Ramp 15° (1)
    l. Heater control panel (3)
    m. Hydraulic low pressure lights (2)

33. Pitot heat - Checked
34. Propeller anti-icing - Checked (when use is anticipated)
35. Windshield anti-icing - Checked (when use is anticipated)

    a. Windshield heat switch - NORMAL
    b. Failure lights - Out
    c. Windshield heat switch - OFF

36. Landing gear warning switch - TEST
37. Alarm bell - Checked
38. Troop jump lights - Checked
39. Inverters - Checked

    a. Turn switch to MAIN and check both inverter lights are out
    b. Turn switch to STANDBY and check the standby inverter light illuminates
    c. Leave the inverter switch on STANDBY

40. Engine fire detector system - Checked
41. Fuel system - Checked

    a. Quantity and distribution - Checked
    b. Indicating system - Checked

        (1) Press the fuel quantity test button and note a decrease on the fuel gages

(2) Release the buttons and note the gages return to original settings

c. Crossfeed - Checked

(1) Turn the left boost pump to NORMAL and check left fuel pressure increases
(2) Turn the fuel selector to BOTH ON LH TANK and check right fuel pressure increases
(3) Turn the left-boost pump to HIGH and note pressure increases
(4) Turn the fuel selector to NORMAL and check right fuel pressure decreases
(5) Turn the left boost pump OFF and check left fuel pressure decreases
(6) Repeat the procedure with the right boost pump and fuel selector

42. Inverter - OFF
43. Secondary bus switch - DOWN/Guarded
44. Power - As required
45. Interior inspection checklist - Complete

TOP OF AIRCRAFT CHECK

1. Fuselage general condition - Checked

   a. Antennas
   b. Cargo compartment heater ducts

2. Left wing - Checked

   a. Oil cooler
   b. Top accessory vent door
   c. Oil quantity
   d. Oil tank filler cap dipstick and access cover panel
   e. Propeller deicing quantity, filler cap and access panel
   f. Fuel tank filler cap and access cover panel
   g. Wing skin and control surface general condition

3. Right wing - Checked

   a. Oil cooler
   b. Top accessory vent door
   c. Oil quantity
   d. Oil tank filler cap dipstick and access cover panel

e. Propeller deicing quantity, filler cap and access panel
f. Fuel tank filler cap and access cover panel
g. Wing skin and control surface general condition

4. Top of aircraft checklist - Complete

CARGO COMPARTMENT CHECK

1. Oxygen compartment - Checked

   a. Pressure - Checked
   b. Filler valve - Closed

2. Static line retriever - As required
3. Forward portable fire extinguisher - Checked
4. Crash axe - Checked
5. Preheat outlet cover - Secure
6. Pendulum release handle - Checked

   a. Cable - Recessed
   b. Handle - Secure

7. Storage compartments - Checked
8. Tiedown devices - Checked
9. Seat and seat belts - Checked
10. Cargo floor/rollers - Checked

11. Ventilation levers - As desired
12. Emergency exit - Checked
13. First aid kits - Checked
14. Anchor lines and attachments - Checked
15. Door emergency exit - Checked
16. Ramp extensions - Stowed
17. Ramp door - Checked
18. Cargo door jettison handle - Safetied
19. Steady strut and steady strut attachment pin - Stowed
20. Ramp and cargo door control handles - Checked
21. Cargo loading light - Checked
22. Left troop door - Checked
23. Rear portable fire extinguisher - Checked
24. Cargo compartment checklist - Complete

EXTERIOR INSPECTION

1. Left aft fuselage - Checked

    a. Condition of skin
    b. Passenger door
    c. Windows
    d. Emergency exit

2. Left inboard wing - Checked

    a. Flaps and flap well
    b. Condition of skin

c. Engine fire extinguisher discs
d. Fluid leaks

3. Left wheel well - Checked

a. Gear doors
b. Fluid leaks
c. Drag strut and linkage
d. Uplocks
e. Electrical installations

4. Left main gear - Checked

a. Strut (7-1/2 to 9-1/2 inch extension)
b. Tires and wheels
c. Brake assembly
d. Weight switch
e. Pneudraulic lines

5. Left outboard wing - Checked

a. Augmentor tubes
b. Fluid leaks
c. Flaps and flap wells
d. Control surfaces
e. Control hinges
f. Navigation light
g. Access panels
h. Deicing boots

i. Stall transducer
j. Landing light

6. Left engine - Checked

a. Vent doors
b. Fluid leaks
c. Cowling
d. Engine intakes
e. Propeller assembly

(1) Check dome plug and retainer nut are safetied
(2) Check dome, hub, and control unit for leaks and security
(3) Check condition of blades

7. Thrust indicator pitot heads - Checked
8. Left inboard wing leading edge - Checked

a. General condition
b. Heater intake

9. Left forward fuselage - Checked

a. Skin and antennas
b. Brake accumulator pressure (800 to 850 psi)

c. Brake emergency air pressure (1500 to 1600 psi)
d. Hydraulic leaks
e. Nose access door - Closed/Secure
f. Static ports
g. Cockpit heater fire extinguisher discs
h. Top access panel
i. Cockpit heater ducts

10. Pitot tube - Checked
11. Nose gear - Checked

a. Door safety pins
b. Nose gear doors
c. Nose steering limit blocks
d. Steering disconnect pins
e. Weight switch
f. Tires and wheels
g. Strut (8 1/2 to 10 1/2 inch extention)
h. Taxi light

12. Pitot tube - Checked
13. Right forward fuselage - Checked

a. Radome
b. Cockpit heater duct
c. Top access panel
d. Static ports
e. Hydraulic lines

f. Emergency air bottle (1200 to 1300 psi)
g. Oxygen system pressure (1800 ± 50 psi)
h. Nose access door - Closed/Secure
i. Bottom escape hatch
j. Antennas
k. Cargo compartment heater fire extinguisher discs

14. Right inboard wing leading edge - Checked

a. Ram air intake duct
b. General condition

15. Thrust indicator pitot heads - Checked
16. Right engine - Checked

a. Propeller assembly

(1) Check dome plug and retainer nut are safetied
(2) Check dome, hub, and control unit for leaks and security
(3) Check condition of blades

b. Engine intakes
c. Cowling
d. Fluid leaks
e. Vent doors

17. Right outboard wing - Checked

    a. Landing light
    b. Stall transducer
    c. Deicing boots
    d. Access panels
    e. Navigation light
    f. Control hinges
    g. Control surfaces
    h. Flaps and flap wells
    i. Fluid leaks
    j. Augmentor tubes

18. Right main gear - Checked

    a. Pneudraulic lines
    b. Weight switch
    c. Brake assembly
    d. Tires and wheels
    e. Strut (7 1/2 to 9 1/2 inch extension)

19. Right wheel well - Checked

    a. Gear doors
    b. Fluid leaks
    c. Drag strut and linkage
    d. Uplocks
    e. Electrical installations

20. Right inboard wing - Checked

    a. Fluid leaks
    b. Engine fire extinguisher discs
    c. Condition of skin
    d. Flaps and flap well

21. Right aft fuselage - Checked

    a. Condition of skin
    b. Passenger door
    c. Cargo door jettison handle

22. Empennage - Checked

    a. Vertical stabilizer, rudder, and trim tabs
    b. Horizontal stabilizer, fairings, elevator, and trim tabs
    c. Cargo door
    d. Steady strut - As required

23. Static ground wire - Removed
24. Exterior inspection checklist - Complete

BEFORE STARTING ENGINES

1.	Forms 781 and 365F and navigation publications - "Checked"	P
2.	Pilot's briefing - "Complete"	P
*3.	Passenger briefing - "Complete"	P
*4.	Seats, rudder pedals, safety belt, shoulder harness - "Adjusted"	P,CP
*5.	Command radio - ON	CP
*6.	Parking brakes - "Set"	P
7.	Oxygen regulators - "As required"	All
8.	Electrical power panel - Set	CP
9.	Instruments - "Checked"	P,CP
*10.	Carburetor air - "COLD/RAM"	P
*11.	Flaps selector - "40°"	P
*12.	Ignition switches - "OFF"	P
13.	Mixtures - "IDLE CUTOFF"	P
14.	Propellers - "FULL INCREASE"	P
15.	Throttles - "Set"	P
*16.	Landing gear selector - "DOWN"	P
*17.	Down locks/steady strut/doors - "Aboard/Closed"	FM
*18.	Before starting engine checklist - "Complete"	CP

STARTING ENGINES

*1.	Propellers/Fireguard - "Clear/ Clear posted"	P,CP
*2.	Power - "ON"	P
*3.	Navigation lights - ON	CP
*4.	Right boost pump - "NORMAL"	P
*5.	Right engine - Start	P,CP
*6.	Pressures/rpm - "Checked"	P
*7.	External power - "As required"	P
*8.	Battery switch - "ON"	P
*9.	Left boost pump - "NORMAL"	P
*10.	Left engine - Start	P,CP
*11.	Pressures/rpm - "Checked"	P
*12.	Flaps - UP	CP
*13.	Carburetor air switches - As required	CP
*14.	Starting engines checklist - "Complete"	CP

BEFORE TAXIING

*1.	Inverters/radio console - "As required"	P,CP
*2.	Alarm bell - Checked	CP
*3.	Ignition switch safety check - "Checked"	CP
4.	Stall warning and flap check - "Checked"	P
5.	Generators - Checked	CP
6.	Wing and tail deicing - "Checked"	P,CP,FM
7.	Flight controls - "Checked"	P,FM
8.	Gust lock - "LOCKED"	P
*9.	Altimeters - "Set"	P,CP
*10.	Chocks/Cargo compartment - "Removed/Secure"	FM
*11.	Before taxiing checklist - Complete	CP

TAXIING

*1.	Brakes - "Checked'	P,CP
*2.	Flight instruments - Checked/Set	P,CP
3.	Propeller reversing - "Checked"	P,CP
*4.	Taxi checklist - "Complete"	CP

ENGINE RUN UP

*1.	Nosewheel, parking brakes - "Centered/Set"	P
*2.	Engine instruments - "Checked"	P,CP
3.	Feathering system - "Checked"	P,CP
4.	Propeller operation - "Checked"	P,CP
5.	Carburetor heat - Checked	CP
*6.	Power and ignition system - "Checked"	P,CP
*7.	Gust lock - "LOCKED"	P
8.	Radios and navigation equipment - "Checked"	P,CP
*9.	Engine runup checklist - "Complete"	CP

BEFORE TAKE-OFF

1.	Mixtures - "AUTO RICH"	CP
2.	Propellers - "Full increase"	CP
3.	Hydraulic pressure - "Checked"	CP
4.	Autofeather switch - "As required"	P
5.	Fuel panel - "Set"	P
6.	Crew briefing - "Complete"	P
7.	Trim - "Set"	P
8.	Flaps - "Set"	P,CP
9.	Instruments/Warning lights - "Checked"	P,CP
10.	Roof hatch - "Secure"	FM
11.	Cargo compartment and engines - "Checked"	FM
12.	Anti-icing switches - As required	CP
13.	Carburetor air - As required	CP
14.	Lights - As required	CP
15.	Before take-off checklist - "Complete"	CP

LINE UP

1.	RMI's/magnetic compass - "Checked"	P,CP
2.	IFF - As required	CP
3.	Flight controls - "Checked"	P
4.	Line up checklist - "Complete"	CP

AFTER TAKE-OFF/CLIMB

1. Gear - "UP"	P
2. Flaps - "UP"	CP
3. METO power - "Set"	P,CP
4. Climb power - "Set"	P,CP
5. Autofeather switch - OFF	CP
6. Landing and taxi lights - As required	CP
7. Cargo compartment and engines - "Checked"	FM
8. After take-off/climb checklist - "Complete"	CP

CRUISE

1. Cruise power - "Set"	P,CP
2. Boost pumps - "OFF"	P
3. Mixtures - "As required"	CP
4. Cargo compartment and engines - "Checked"	FM
5. Cruise checklist - "Complete"	CP

DESCENT

1. Nosewheel steering switch - "ON"	P
2. Windshield heat/Anti-icing - "As required"	P
3. Prop reverse circuit breaker - CLOSED	CP
4. Fuel panel - "Set"	P
5. FASTEN SEAT BELT/NO SMOKING sign - "ON"	FM
6. Crew briefing - "Complete"	P
7. Altimeters - "Set"	P,CP
8. Descent checklist - "Complete"	CP

BEFORE LANDING

1. Carburetor air - As required	CP
2. Landing/Taxi lights - As required	CP
3. Mixtures - "Auto Rich"	CP
4. Propellers - "2250 rpm"	CP
5. Gear - "DOWN"	P
6. Flaps - "As required"	CP
7. Hydraulic pressure/gear - "Checked/down"	CP
8. Propellers - "Full increase"	CP
9. Before landing checklist - "Complete"	CP

TOUCH AND GO LANDING

ON THE RUNWAY

1.	Flaps - "As required"	CP
2.	Carburetor air - As required	CP
3.	Trim tabs - "Set for take-off"	CP

AFTER TAKE - OFF/GO - AROUND

4.	Gear and flaps - "UP"	P,CP
5.	METO power - "Set"	P,CP
6.	Climb power - "Set"	P,CP
7.	Landing/taxi lights - As required	CP

BEFORE LANDING

8.	Crew briefing - "Complete"	P
9.	Gear - "DOWN"	P
10.	Landing/taxi lights - As required	CP
11.	Flaps - "As desired"	CP
12.	Hydraulic pressure/gear - "Checked/Down"	CP
13.	Propellers - "Full increase"	CP
14.	Before landing checklist - "Complete"	CP

AFTER LANDING

1. Gust lock - "LOCKED"	P
2. Carburetor heat/air - As required	CP
3. Flaps - As required	CP
4. Windshield heat switch - OFF	CP
5. Anti-icing/deicing switches - OFF	CP
6. Landing/taxi/anti-collision lights - As required	CP
7. Radio console - As required	CP
8. After landing checklist - "Complete"	CP

POST FLIGHT ENGINE CHECKS

1. Nosewheel, parking brake - "Centered/Set"	P
2. Ignition switch safety check - Checked	CP
3. Carburetor air - Set	CP
4. Power and ignition system - "Checked"	P,CP
5. Gust lock - "LOCKED"	P
6. Idle speed and mixture check - "Complete"	P,CP
7. Post flight engine checklist - "Complete"	CP

ENGINE SHUTDOWN

1.	Nosewheel, parking brake - "Centered/Set"	P
2.	Trim tabs - Centered	CP
3.	Copilot's attitude indicator - Caged	CP
4.	Heater switches - "OFF"	P
5.	TACAN, radar inverters - OFF	CP
6.	Boost pumps - "OFF"	P
7.	Right engine mixture - "IDLE CUT-OFF"	CP
8.	Flaps - "As desired"	CP
9.	Hydraulic pressure/suction - Checked	CP
10.	Left engine mixture - "IDLE CUT-OFF"	CP
11.	Ignition switches - "OFF"	CP
12.	Radio - OFF	CP
13.	Inverter switch - OFF	CP
14.	Lights - "OFF"	ALL
15.	Battery switch - "OFF"	P
16.	Wheel chocks - "In place"	FM
17.	Parking brake - "Released"	P
18.	IFF/SIF Codes - "Removed"	P
19.	Engine shutdown checklist - "Complete"	CP

BEFORE LEAVING THE AIRCRAFT

1.	Landing gear ground locks - Installed	FM
2.	Covers/dust excluders - Installed	FM
3.	Servicing/securing - As required	FM
4.	Equipment - Stowed	FM
5.	Cargo compartment - Cleaned	FM
6.	Before leaving the aircraft checklist - "Complete"	FM

TAKE-OFF AND LANDING DATA CARD
TAKE-OFF CONDITIONS

PRESS ALT__ DENSITY ALT__ TEMP__ °C SPEC HUMID__
DEWPOINT__ WIND/RCR__/ RUNWAY__ SLOPE__ GW__

TAKE-OFF DATA

TAKE-OFF FACTOR_____

MANIFOLD PRESSURE_____

FLAP SETTING_____

TAKE-OFF AIRSPEED_____

TAKE-OFF GW LIMITATIONS_____

CRITICAL FIELD LENGTH_____

GROUND ROLL_____

REFUSAL SPEED_____

LANDING IMMEDIATELY AFTER TAKE-OFF

FLAP SETTING_____

THRESHOLD SPEED_____

GROUND ROLL_____

LANDING AT DESTINATION

GROSS WT/FLAP SETTING_____/_____

THRESHOLD SPEED_____

GROUND ROLL_____

Single Engine Service Ceiling Meto Power_____

Single Engine Absolute Ceiling Meto Power_____

EMERGENCY PROCEDURES

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GROUND ENGINE FIRE SHUTDOWN

1.	MIXTURES - IDLE CUT-OFF	CP
2.	FUEL SHUTOFF - UP	P
3.	OIL SHUTOFF - UP	P
4.	BOOST PUMPS - OFF	P
5.	FIRE EXTINGUISHER - AS REQUIRED	CP
6.	Ignition switches - OFF	CP
7.	Electrical power - OFF	P
8.	Fight the fire	FM

INFLIGHT ENGINE SHUTDOWN

1.	GEAR - UP	P
2.	FLAPS - UP	CP
3.	THROTTLE - CLOSED	P
4.	PROPELLER - FEATHER	CP
5.	MIXTURE - IDLE CUT-OFF	CP
6.	FUEL SHUTOFF - UP	CP
7.	OIL SHUTOFF - UP	CP
8.	FIRE EXTINGUISHER - AS REQUIRED	CP

APPLY POWER TO GOOD ENGINE

9.	Mixture - AUTO RICH	CP
10.	Propeller - As required	CP
11.	Throttle - As required	P
12.	Boost pump switch - NORMAL	P

CLEAN UP

13. Propeller - Full DECREASE	CP
14. Autofeather switch - OFF	CP
15. Boost pump switch - OFF	P
16. Ignition switch - OFF	CP
17. Generator switch - OFF	CP
18. Nonessential electrical equipment - OFF	CP
19. Secondary bus reset switch - UP	CP
20. Fuel tank selector - As required	P

ENGINE RESTART IN FLIGHT

1.	Airspeed - 130 knots IAS maximum	P
2.	Throttle - Closed	CP
3.	Propeller - Full DECREASE	CP
4.	Mixture - IDLE CUT-OFF	CP
5.	Fuel emergency shutoff switch - DOWN and guarded	CP
6.	Oil emergency shutoff switch - DOWN and guarded	CP
7.	Secondary bus switch - DOWN and guarded	CP
8.	Propeller reverse circuit breaker - Closed	CP
9.	Starter switch - As required	P
10.	Boost pump - NORMAL	P
11.	Ignition switch - BOTH	CP
12.	Propeller feathering button - Pull	CP
13.	Oil pressure - Checked	CP
14.	Mixture - AUTO RICH	CP
15.	Engine instruments - Checked	CP
16.	Generator - ON	CP
17.	Electrical equipment - As required	CP
18.	Boost pump - OFF	P
19.	Power - As required	P

RUNAWAY PROPELLER

1.	THROTTLES - RETARD	P
2.	AIRSPEED - REDUCE	P
3.	PROPELLER - FEATHER	CP
4.	Employ INFLIGHT ENGINE SHUTDOWN PROCEDURE after propeller has feathered	P,CP

COMBUSTION HEATER FIRE

FLIGHT COMPARTMENT HEATER FIRE

1.	MASTER SWITCH - OFF	FM
2.	AIR CONTROL HANDLE - PULL	P
3.	FIRE EXTINGUISHER - UP	CP
4.	OXYGEN - 100%	ALL

CARGO COMPARTMENT HEATER FIRE

1.	MASTER SWITCH - OFF	FM
2.	AIR CONTROL HANDLE - PULL	FM
3.	FIRE EXTINGUISHER - UP	CP
4.	OXYGEN - 100%	ALL

ELECTRICAL FIRE

1.	**EMERGENCY BUS - EMERG**	**CP**
2.	**BATTERY - OFF**	**P**
3.	**GENERATORS - OFF**	**CP**
4.	**OXYGEN - 100%**	**ALL**
5.	Fight the fire	FM
6.	All electrical switches/circuits breakers (affected buses) - OFF/OPEN	ALL
7.	Generators and battery switches - ON	P,CP

FAILURE OF ONE GENERATOR

1.	Generator switch - RESET/ON	CP/FM
2.	Ammeter - Checked	CP
3.	All unnecessary electrical equipment - Off	ALL
4.	Generator switch - OFF	CP
5.	Secondary bus reset switch - UP	CP
6.	Ammeter - Checked	CP

FAILURE OF TWO GENERATORS

1.	Generators - OFF	CP
2.	Generator - RESET/ON	CP
3.	Emergency Bus - EMERG	CP
4.	Battery - OFF	P
5.	All unnecessary electrical equipment - OFF	P,CP
6.	Generator switch (select one) - ON	CP
7.	Manual reset lever - RESET	FM
8.	Ammeter - Checked	CP

Should a generator be restored employ FAILURE OF ONE GENERATOR procedure to restore remaining generator. If power is restored proceed as follows:

9.	Emergency bus switch - NORMAL	CP
10.	Battery switch - ON	P
11.	Electrical equipment - As required	CP

NOSE GEAR EXTENSION

1. Landing gear selector - DOWN	P
2. Hand pump selector - EMERGENCY SYSTEM	FM
3. Emergency landing gear down selector - ON	FM
4. Nosewheel down hand pump selector - ON	FM
5. Hand pump - Actuate	FM

If nosewheel fails to extend:

6. Nosewheel emergency down (air) - Pull	FM

MAIN GEAR EXTENSION

1. Landing gear selector - DOWN	P
2. Emergency landing gear down selector - ON	FM
3. Main gear emergency extension - Pull	FM

BRAKE SYSTEM FAILURE

1. Hand pump selector - As required	FM
2. Brake accumulator hand pump charging selector - ON, all other selectors OFF	FM
3. Hand pump - Actuate	FM

SINGLE ENGINE GO-AROUND

1. PROPELLER - FULL INCREASE	CP
2. THROTTLE - MAXIMUM POWER	P
3. FLAPS - UP	CP
4. GEAR - UP	P
5. Carburetor air - As required	CP

DITCHING CHART

CREW MEMBER	FIRST ACTION	DITCHING IMMINENT (10 MINUTES LEFT)	AFTER DITCHING
PILOT'S DUTIES	1. Order crew to prepare for ditching, giving approximate time remaining. Order crew to start emergency procedures. Each crew member will acknowledge 2. Transmit on VHF/UHF "Mayday" 3 times, and identification 3 times. Transmit tone for 20 seconds and request fix or bearing. 3. Obtain flashlight. 4. Don antiexposure suit and life vest. Fasten shoulder harness and safety belt.	1. Alert cargo compt personnel with interphone and six short rings on the alarm bell. 2. Order copilot to transmit final distress signal. 3. If applicable, order all crew members and passengers to turn on emergency flashlights connected to life vests. 4. Order all crew members and passengers to secure themselves in ditching position. 5. Lock shoulder harness. 6. Immediately before ditching, warn personnel over interphone to "Brace for impact", and order copilot to give one long ring on alarm bell.	1. Check flight station and cargo compt to insure that all personnel and emergency equipment have been evacuated. 2. Exit through flight station escape hatch or cargo door and inflate life vest. 3. Board liferaft and receive emergency equipment.

DITCHING CHART (CONT)			
CREW MEMBER	FIRST ACTION	DITCHING IMMINENT (10 MINUTES LEFT)	AFTER DITCHING
COPILOT'S DUTIES	1. Acknowledge pilot's order to prepare for ditching. 2. IFF/SIF to emergency. Transmit emergency signal on HF radio followed as soon as possible by emergency message. 3. Obtain D/F service, bearings, fixes, etc. 4. Obtain flashlight. 5. Don antiexposure suit, and life vest, fasten shoulder harness and safety belt. 6. Continue transmitting outlined emergency message as required.	1. Transmit final distress signal and intentions of pilot as to ditching. 2. Lock shoulder harness. 3. On orders from pilot, give one long ring on alarm bell.	1. Exit through flight station emergency escape hatch, or cargo door. 2. Inflate life vest and board liferaft.

DITCHING CHART (CONT)			
CREW MEMBER	FIRST ACTION	DITCHING IMMINENT (10 MINUTES LEFT)	AFTER DITCHING
FLIGHT MECHANIC'S DUTIES	1. Acknowledge pilot's order to prepare for ditching. 2. Obtain drinking water container and flashlight. 3. Open cargo door. Check ramp fully closed and draft proof door up and secure. 4. Don antiexposure suit and life vest.	1. Secure loose articles in flight compartment. 2. Select a seat in cargo compartment and fasten safety belt.	1. Assist in launching liferafts. 2. Exit through cargo door with container of water. 3. Inflate life vest, and board liferaft.

PERFORMANCE DATA
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POWER CHART

MAXIMUM AND METO POWER

AUTO-RICH MIXTURE

Engine: R-2000 Fuel Grade: 115/145

Power	Altitude -Feet	RPM	Man. Press. -In. Hg	Fuel Consumption -Lb/Hr/Eng.
Maximum	Sea Level	2700	50.0	1117
	2000	2700	49.5	1113
	4000	2700	F.T.	1013
	6000	2700	F.T.	920
	8000	2700	F.T.	825
	10,000	2700	F.T.	752
Meto	Sea Level	2550	42.5	860
	5000	2550	41.6	856
	10,000	2550	F.T.	752
	15,000	2500	F.T.	554
	20,000	2550	F.T.	394
	25,000	2550	F.T.	280

F.T. - Full Throttle

TAKE-OFF DISTANCE TO CLEAR 50 FT

ICAO STANDARD ATMOSPHERE, DRY AIR

MAXIMUM POWER

GROSS WEIGHT POUNDS	FLAPS	PRESSURE ALTITUDE - FEET	ZERO WIND CLEAR 50 FT - FEET	20-KNOT WIND CLEAR 50 FT - FEET
FERRY CONFIGURATION				
31,000	0°	Sea Level	2560	1870
		5000	4220	3220
NORMAL TECHNIQUE				
28,500	0°	Sea Level	2010	1460
		5000	3070	2290
28,500	7°	Sea Level	1780	1280
		5000	2630	1950
28,500	15°	Sea Level	1500	1040
		5000	2110	1460
26,000	15°	Sea Level	1260	870
		5000	1730	1190
SHORT FIELD TECHNIQUE				
28,500	25°	Sea Level	1330	890
		5000	1960	1310
26,000	25°	Sea Level	1040	680
		5000	1540	1030
23,000	25°	Sea Level	770	530
		5000	1100	750

LANDING DISTANCE TO CLEAR 50 FT

ICAO STANDARD ATMOSPHERE, DRY AIR

MAXIMUM POWER

GROSS WEIGHT POUNDS	FLAPS	PRESSURE ALTITUDE - FEET	ZERO WIND CLEAR 50 FT - FEET	30-KNOT WIND CLEAR 50 FT - FEET
FERRY CONFIGURATION				
31,000	0°	Sea Level	3025	1875
		5000	3455	2245
NORMAL TECHNIQUE				
28,500	0°	Sea Level	2815	1750
		5000	3180	1965
28,500	15°	Sea Level	2195	1280
		5000	2490	1480
28,500	20°	Sea Level	1975	1125
		5000	2230	1305
26,000	20°	Sea Level	1835	1050
		5000	2075	1185
28,500	30°	Sea Level	1515	775
		5000	1710	935
26,000	30°	Sea Level	1485	760
		5000	1665	900
28,500	40°	Sea Level	1460	785
		5000	1640	915

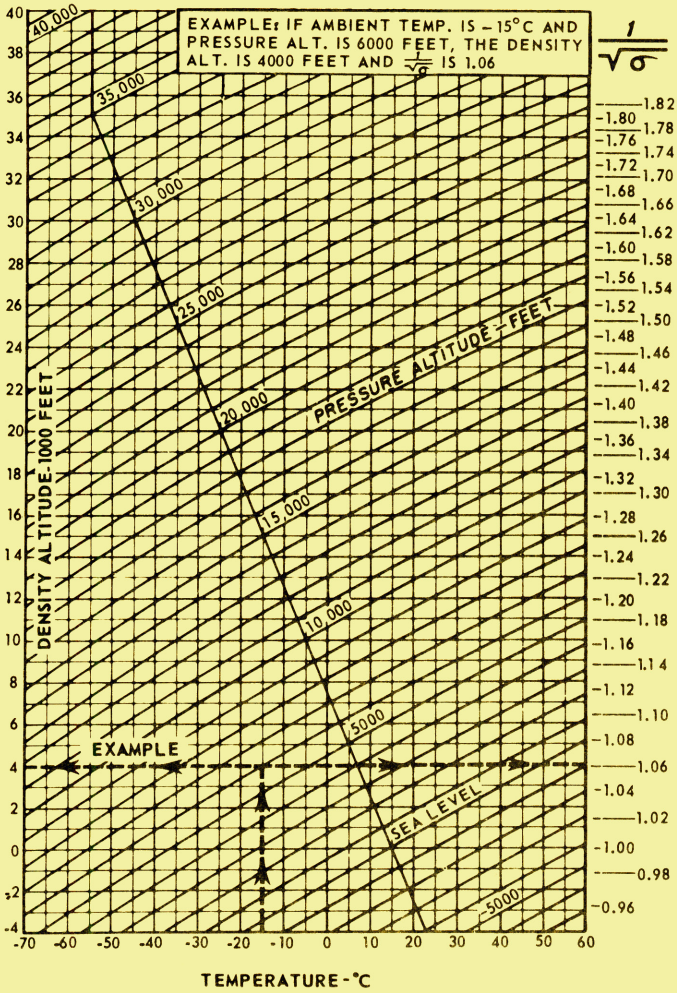
LANDING DISTANCE TO CLEAR 50 FT

ICAO STANDARD ATMOSPHERE, DRY AIR

MAXIMUM POWER

GROSS WEIGHT POUNDS	FLAPS	PRESSURE ALTITUDE - FEET	ZERO WIND CLEAR 50 FT - FEET	30-KNOT WIND CLEAR 50 FT - FEET
NORMAL TECHNIQUE (CONT)				
26,000	40°	Sea Level	1370	730
		5000	1550	855
23,000	40°	Sea Level	1265	710
		5000	1420	760
SHORT FIELD TECHNIQUE				
28,500	30°	Sea Level	1105	615
		5000	1235	750
23,000	30°	Sea Level	1005	535
		5000	1120	640
28,500	40°	Sea Level	1020	645
		5000	1140	705
23,000	40°	Sea Level	870	535
		5000	970	610

DENSITY ALTITUDE CHART



MAXIMUM ENDURANCE PERFORMANCE

BOTH ENGINES OPERATING

STANDARD DAY

FLAPS AND GEAR RETRACTED

PRESSURE ALTITUDE FEET	FUEL LB PER HOUR	MIX.	RPM	MP In. Hg.	IAS KNOTS
28,5000 LB					
SEA LEVEL	380	AL	1460	27.4	100
5000	400	AL	1570	26.8	100
10,000	440	AL	1700	26.5	100
26,000 LB					
SEA LEVEL	350	AL	1430	24.8	95
5000	390	AL	1530	24.0	95
10,000	410	AL	1650	23.4	95
23,000 LB					
SEA LEVEL	320	AL	1360	22.4	90
5000	350	AL	1460	21.8	90
10,000	380	AL	1570	20.8	90

MAXIMUM ENDURANCE PERFORMANCE

ONE ENGINE INOPERATIVE

PROPELLER FEATHERED

STANDARD DAY

FLAPS AND GEAR RETRACTED

PRESSURE ALTITUDE FEET	FUEL LB PER HOUR	MIX	RPM	MP In. Hg.	IAS KNOTS
28,500 LB					
SEA LEVEL	667	AR	2540	36.9	102
5000	734	AR	2540	38.3	102
10,000	812	AR	2540	40.1	102
26,000 LB					
SEA LEVEL	543	AR	2530	33.1	97
5000	603	AR	2530	34.2	97
10,000	692	AR	2530	34.5	97
23,000 LB					
SEA LEVEL	310	AL	1980	31.4	92
5000	344	AL	2060	31.7	92
10,000	510	AR	2300	31.7	92

LONG RANGE PERFORMANCE

BOTH ENGINES OPERATING

STANDARD DAY

FLAPS AND GEAR RETRACTED

PRESSURE ALTITUDE FEET	FUEL LB PER HOUR	MIX.	RPM	MP In. Hg.	IAS KNOTS
28,500 LB					
SEA LEVEL	450	AL	1500	30.8	120
5000	500	AL	1670	29.7	120
10,000	510	AL	1760	28.9	120
26,000 LB					
SEA LEVEL	410	AL	1420	28.9	115
5000	430	AL	1590	27.5	115
10,000	460	AL	1720	27.1	115
23,000 LB					
SEA LEVEL	400	AL	1410	25.6	110
5000	380	AL	1540	24.8	110
10,000	400	AL	1680	24.5	110

THRESHOLD AIRSPEED - IAS, KNOTS

GROSS WEIGHT	NORMAL TECHNIQUE FLAPS					SHORT-FIELD TECHNIQUE FLAPS	
	0°	15°	20°	30°	40°	30°	40°
20,000	82	73	70	62	66	61	58
21,000	84	74	72	63	67	63	59
22,000	86	76	73	65	68	64	60
23,000	88	77	74	66	69	64	62
24,000	89	79	76	67	70	65	62
25,000	91	80	77	68	70	66	63
26,000	93	81	78	70	71	66	64
27,000	94	83	79	71	71	67	65
28,000	96	84	80	73	72	67	66
29,000	97	85	82	74	72	68	67
30,000	98	87	84	76	73	69	69
31,000	100	89	85	78	75	71	70
32,000	102	90	87	79	76	72	72
33,000	104	92	88	81	78	73	73
34,000	105	93	89	82	79	74	74