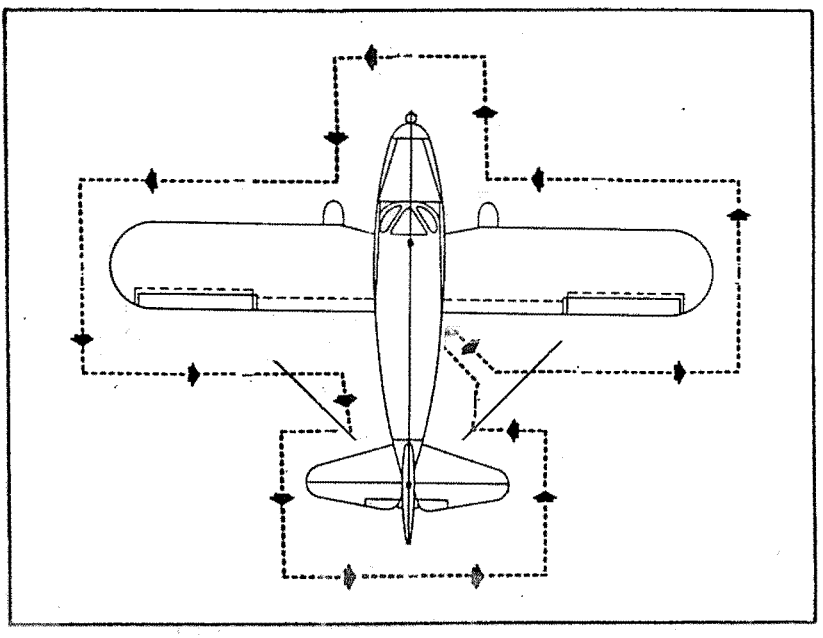
FAIRCHILD 24R-46
CHECK LIST
NORMAL PROCEDURES

AIRSPEEDS FOR SAFE OPERATION

	MPH
Never Exceed (Glide or dive)	185
Maximum Structural Cruising (Level flight or climb)	137
Design Maneuvering	145
Maximum Flaps Extended	94
Maximum Landing Light	135
Climb Speeds	
At sea level to 3,000 feet	
2882 lbs. gross weight	75
2550 lbs. gross weight	72
2300 lbs. gross weight	70
At 6,000 feet	
2882 lbs. gross weight	75
2550 lbs. gross weight	72
2300 lbs. gross weight	70
Operating Speed 75% power	118
Approach Speed – full flaps	80
Landing Speed – no flaps	57



PREFLIGHT

1. Master Switch.....ON
2. Fuel Quantity Indicators.....check
3. Fuel Valve.....ON one tank
   OFF second tank
4. Control Lock.....disengage
5. Master Switch.....OFF
6. Tail Tiedown.....remove
7. Main Wheel Tires.....check
   proper inflation
8. Oil Level.....check
   4 qt. capacity
9. Propeller and Spinner.....check
   for nicks & security
10. Fuel Tank Selectors.....ON
11. Pull To Drain Control.....pull to drain
    approx. 5 seconds
12. Right Wing Tiedown.....remove
13. Left Wing Tiedown.....remove
14. REMOVE any accumulation of snow, ice, and frost from the aircraft before attempting flight.
15. All Surfaces.....CHECKED
    for damage & freedom of movement

BEFORE STARTING THE ENGINE

1. Seats-Seat Belts.....adjust & lock
2. Brakes.....test
2A. Parking Brake.....set
3. Fuel Valves.....both ON
4. Pull To Drain Knob.....pull for 5 seconds
   to drain
5. Fuel Valves.....one ON
   one OFF

STARTING THE ENGINE
WARNER ENGINE

1. Carburetor Heat.....cold
2. Mixture.....full rich
3. Spark.....retard ½ to 2/3 of the max. of spark control
4. Throttle.....pump 2 or 3 sharp strokes then close

COLD WEATHER-pump throttle approximately four stroke and primer three strokes.

RANGER ENGINE

1. Carburetor Heat.....cold
2. Mixture.....full rich
3. Ignition Switch.....ON bat
4. Starter Button.....pull out to engage starter
5. Ignition Switch.....turn to L- Left Magneto after starter gained proper momentum

AFTER ENGINE FIRES-turn ignition switch to both.

6. Oil Pressure.....check

WARM-UP

Turn aircraft into the wind for better cooling.

1. Warm up both Ranger and Warner engines at 800 to 1000 RPM.
2. Oil Pressure.....Ranger 50-60 lbs. Warner 90 lbs.

TAXIING

Parking Brake.....release
Fish tail aircraft while taxiing.

BEFORE TAKE-OFF

1. Throttle.....1500 RPM
2. Engine Instruments.....check
3. Magnetos.....check- max. drop 100 RPM
4. Carburetor Heat.....check operation
5. Suction Gauge.....check
6. Flight Controls.....check
7. Trim Tab.....take-off setting
8. Cabin Doors.....latched
9. Flight Instruments and Radios.....set

TAKE-OFF

1. Oil Temperatures.....check
   Ranger 35°C
   Warner 10°C
2. Altimeter.....set
3. Flaps.....Up
3A. Fuel Valve.....one tank on
4. Carburetor Heat.....cold
5. Mixture.....rich
6. Throttle.....full OPEN
7. Take-Off Speed.....80 MPH

CLIMB
NORMAL TAKE-OFF AND CLIMB

1. Wing Flaps.....Up
2. Carburetor Heat.....cold
3. Throttle.....full OPEN
4. Climb Speed.....80-85 MPH

MAXIMUM PERFORMANCE TAKE-OFF AND CLIMB

1. Wing Flaps.....halt position
2. Carburetor Heat.....cold
3. Brakes.....hold
4. Throttle.....full OPEN
5. Brakes.....release
6. Climb Speed.....80 MPH
   until obstacles cleared
   then accelerate to 85 MPH

CRUISING

1. Power.....Warner 1950 to 2000 RPM
   Ranger 2150 to 2250 RPM
2. Oil Temperature.....Warner 32° to 71°C
   Ranger 60° to 77°C
3. Mixture.....lean to best RPM
4. Elevator Trim.....adjust

BEFORE LANDING

1. Fuel Valve.....on fullest tank
2. Mixture.....rich
3. Carburetor Heat.....apply full before closing the throttle
4. Wing Flaps.....below 94 MPH
5. Airspeed.....80 MPH best gliding
6. Brakes.....check OFF

BALKED LANDING - GO AROUND

1. Carburetor Heat.....off
1A. Throttle.....full OPEN
2. Control Wheel.....forward pressure
3. Trim Tab.....adjust
4. Wing Flaps.....raise slowly safe altitude reached

NORMAL LANDING

1. Touchdown.....tail low
2. Landing Roll.....maintain directional control
3. Braking.....minimum required

AFTER LANDING

1. Wing Flaps.....up
2. Carburetor Heat.....off

SECURE AIRCRAFT

1. Mixture.....idle cut-off
2. Warner Engine.....retard spark

3. All Switches.....off
4. Full Tank Valves.....off
4A. Parking Brake.....set
5. Controls Lock.....engage

EMERGENCY PROCEDURES
CHECK LIST

ENGINE FAILURE ON TAKE-OFF ROLL

1. Throttle.....retard
2. Wing Flaps.....retract
3. Mixture Control.....idle cut-off
4. Ignition Switch.....off
5. Master Switch.....off
6. Brakes.....apply as required
7. Maintain directional control

ENGINE FAILURE AFTER TAKE-OFF

1. Airspeed-Best Glide.....80 MPH
2. Flaps.....full down
3. Master Switch.....off
4. Fuel Tank Valves.....both OFF
5. Ignition Switch.....OFF
6. Land straight ahead unless there is enough altitude to turn back to the field.

ENGINE FAILURE DURING FLIGHT (RESTART PROCEDURES)

1. Airspeed.....80 MPH
2. Carburator Heat.....on
3. Primer.....in-locked
4. Fuel Valve.....fullest tank
5. Mixture.....rich

REPEAT ENGINE START PROCEDURES.

FORCED LANDINGS
EMERGENCY LANDING-NO ENGINE POWER

1. Airspeed-Flaps down.....80 MPH
2. Mixture.....idle cut-off
3. Fuel Valves.....both off
4. Ignition Switch.....off
5. Master Switch.....off
6. Flaps.....down
7. Doors.....unlatched before touchdown
8. Touchdown.....three pt. full stall
9. Brakes.....as required

PRECAUTIONARY LANDING WITH ENGINE POWER

1. Airspeed.....85 MPH
2. Selected Field.....fly over-inspect
3. Radio-Electrical Switches.....off
4. Wing Flaps.....down
5. Airspeed.....80 MPH
6. Master Switch.....off
7. Doors.....unlatched before touchdown
8. Touchdown.....three pt.
9. Ignition Switch.....off
10. Brakes.....as required

FIRE DURING START ON GROUND
IF ENGINE STARTS:

1. Starter.....continue cranking till engine starts and sucks fire in
2. Power.....1500 RPM for several minutes
3. Engine.....shut down

IF ENGINE FAILS TO START:

1. Throttle.....full open
2. Mixture.....idle cut-off
3. Starter.....continue trying
4. Master Switch.....off
5. Ignition Switch.....off
6. Fuel Valves.....both off

IF ON FIRE - use fore extinguishers, wool blankets, or dirt.

ENGINE FIRE IN FLIGHT

1. Mixture.....idle cut-off
2. Fuel Valves.....both off
3. Master Switch.....off
4. Cabin Heat and Air.....off
5. Airspeed.....80 MPH

ELECTRICAL FIRE IN FLIGHT

1. Master Switch.....off
2. Vents-Cabin Air.....closed
3. Fire Extinguisher.....activate

WARNING: After Discharging fire extnguisher in a closed cabin, ventilate the cabin.

4. All Switches.....off
   Except Ignition

If fire appears to be out and electrical power needed to continue:

5. Master Switch.....on
6. Fuses.....check for faulty fuses and replace
7. Radio-Electrical Switches.....on one at a time with delay on each until short circuit localized

Vents-Cabin, Air, Heat.....open when fire extinguished

CABIN FIRE

1. Master Switch.....off
2. Vents-Cabin, Air, Heat.....closed
3. Fire Extinguisher.....activate

WARNING: After discharging extinguisher in closed cabin, ventilate the cabin.

WING FIRE

1. Navigation Light Switch.....off

NOTE: Side slip airplane to keep flames away from the fuel tank and cabin. Land as soon as possible.

2. Flaps.....retract

Pitot heat switch.....OFF

NOTE: Side slip aircraft to keep flames away from the fuel tank and cabin. Land as soon as possible.

Flaps.....retracted

LANDING WITH FLAT MAIN

Wing flaps.....as desired
Approach.....normal
Touchdown.....good tire first
-hold aircraft off flat tire with aileron control

ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTION

Ammeter shows excessive rate of charge - full scale needle deflection.
Alternator.....OFF
Alternator circuit breaker.....PULL
Nonessential electrical equipment.....OFF

Land as soon as possible!

AMMETER INDICATES DISCHARGE

Radios.....OFF
Alternator circuit breaker.....check in
Master switch.....OFF
Master switch.....ON
Radios.....ON

If ammeter shows discharge again:
Alternator.....OFF
Nonessential radio & electrical equipment.....OFF

Land as soon as possible.

LANDING WITH FLAT MAIN TIRE

1. Wing Flpas.....down
2. Approach.....normal
3. Touchdown.....good tire first, hold off flat tire with aileron/control