FOR USE WITH

N7744S

PREFLIGHT C – 172S

1. Aircraft Documents - CK.
2. Weather - Suitable.
3. Baggage - Weighed, stowed, secured.
4. Weight and C.G. - CK.
5. Navigation - Planned.
6. Charts and Navaids -CK.
7. Performance - Determined
8. VOR Log (IFR) - CK.

INTERIOR

1. Hobbs / Tach time - CK.
2. P.O.H. - On board.
3. Control Lock - Remove.
4. Avionics - Off.
5. Electrical Switches - Off.
6. Mixture - I.C.O.
7. Master Switch -On/Call.
8. Fuel Quantity - CK.
9. Lights (Night) - CK.
10. Flaps - Down / CK.
11. Master Switch - Off.
12. Flight Controls - CK.
13. Fuel Shutoff - In
14. Fuel Selector - Both.
15. Trim - Neutral.
16. Windows - CK Clean.

EXTERIOR

AS PER MANUAL

BEFORE START

1. Preflight - Complete.
2. Passenger Briefing - Complete.
3. Cabin Doors - Closed.
4. Seats - Adjusted / Locked.
5. Belts / Harnesses - Secure
6. Circuit Breakers - CK In.
7. All Switches - Off.
8. Brakes - Set and Test.

START

1. Throttle - Full
2. Mixture - Rich
3. Master switch - On/Call
4. Flaps - Up
5. Beacon – on
6. Nav Lights – As Req.
7. Boost Pump-on 3 secs
8. Throttle - in 1/4"
9. Mixture - ICO
10. Starter - Engage
11. Mixture – rich when running
12. Throttle – 700 RPM
13. Oil Pressure – CK
14. Mixture - Lean for taxi

HOT START

1. Throttle in 1/4 "
2. Mixture - ICO
3. Master - on
4. Flaps - up
5. Beacon - on
6. Mixture - rich when running
7. Oil Pressure - CK
8. Mixture - Lean for taxi

PRE - TAXI

1. Radios - On / Set.
2. Transponder - Sby.
3. Flaps - Up.
4. Radio Calls - As Req.
5. Taxi Area - Clear.
6. Throttle - Apply Smoothly
7. Brakes - CK.

TAXI

Controls - Position for wind
Instruments - Ck on taxi

RUN - UP

1. Brakes - Set.
2. Fuel Selector - Both.
3. Mixture - Rich.
4. Throttle - 1800 RPM.
5. Magnetos –
   Max Drop 150
   Max Diff 50
6. Engine Instruments - CK.
7. Suction Gauge - CK.
8. Ammeter - CK.
9. Engine Idle - CK
10. Throttle - 700 RPM
11. Mixture – Lean for taxi

BEFORE TAKEOFF

1. Flight Instruments - Set.
2. Radios / Avionics - Set.
3. Engine Gauges - CK.
4. Mixture – Set for Takeoff
5. Belts / Harnesses - CK.
6. Flaps - As Req.
7. Trim - Set for takeoff.
8. Controls - CK.
9. Doors / Windows - Latch.
10. Brakes - Recheck.

CROSSING HOLD LINE

Strobes - On
Transponder – Altitude
Mixture – Set for Takeoff

TAKEOFF

Normal Vr - 55 KTS
Short / Soft - Per Manual

CLIMB

Vx - 62 KTS
Vy - 74 KTS
Cruise Climb - 85 KTS.

CRUISE

1. Power - Per Manual.
2. Trim - Adjust.
3. Mixture - Set.
4. Landing Light - Off.
5. Engine Instruments - CK.
6. Flight Instruments - Set.

PRE - DESCENT

1. Fuel Selector - Both.
2. Power - As Req.
3. Mixture - Enrichen.
4. Flight Instruments - Set.
5. Engine Gauges - Monitor.

45 ENTRY / DOWNWIND CK

Fuel Selector - Both.
Mixture - Full Rich.
Throttle - As Req (85 KTS).
Landing Lts / Strobes-As Req.
Ignition - Both
Master Switch - On.
Belts / Harnesses - CK.

LANDING

Normal, Short, and Soft field
As per manual.
Normal Final - 65 KTS.

ON FINAL

G. U. M.P.S.

AFTER LANDING

1. Throttle - 700 RPM.
2. Mixture - Lean for Taxi.
3. Flaps - Up.
4. Trim - Neutral.
5. Landing / Strobes - As req.
6. Transponder - Sby / Off.
7. Unnecessary Avionics - Off.
8. Radio Calls - As Req.

SHUTDOWN / SECURING

1. Avionics / Electrical - Off.
2. Throttle – Idle
3. P-Lead - CK
4. Mixture - I.C.O.
5. Ignition - Off / Key on dash.
6. Master - Off.
7. All Switches - Off.
8. Windows - Close/Latch.
9. Seatbelts - Stow.
10. Control Lock - Install.
11. Fuel Selector – Left or Right
12. Name, Date, Hobbs, Tach times - Record
13. Aircraft - Properly Secure.
14. Discrepancies - Write Up.

V - SPEEDS C – 172S	
Vso	40 KTS
Vs	48 KTS
Vr	55 KTS
Vx	62 KTS
Vy	74 KTS
Va (2550)	105 KTS
Vfe	85 KTS
Vno	129 KTS
Vne	163 KTS
Final Approach	65 KTS
Final (short field)	62 KTS
Best Glide	65 KTS

ENGINE FAILURES

TAKEOFF RUN

1. Throttle - Idle.
2. Brakes - Apply.
3. Flaps - Retract.
4. Mixture - I.C.O..
5. Ignition - Off.
6. Master Switch - Off.

AFTER TAKEOFF

1. Airspeed - 65 KTS.
2. Mixture - I.C.O..
3. Fuel Shutoff - In.
4. Ignition Switch - Off.
5. Flaps - As Required.
6. Master Switch - Off.

DURING FLIGHT

1. Airspeed - 65 KTS.
2. Fuel Shutoff - In.
4. Fuel Selector - Both.
5. Boost Pump - On
6. Mixture - Rich.
7. Ignition Switch - Both.

FORCED LANDINGS

WITHOUT POWER

1. Airspeed
   65 KTS (flaps up)
   60 KTS (flaps dn)
2. Mixture - I.C.O..
3. Fuel Shutoff - Off.
4. Ignition Switch - Off.
5. Flaps - As Required.
6. Master Switch - Off.
7. Doors - Unlatch.
8. Touchdown - Tail Low.
9. Brakes - Apply Heavily.

WITH POWER

1. Airspeed - 60 KTS
2. Flaps - 20 Deg.
3. Field – Overfly / Inspect
   Retract Flaps at safe altitude and airspeed.
4. Avionics / Electrical-Off.
5. Flaps - 30 Deg. (final)
6. Airspeed - 60 KTS.
7. Master Switch - Off.
8. Doors - Unlatch.
9. Touchdown - Tail Low.
10. Ignition Switch - Off.
11. Brakes - Apply Heavily.

DITCHING

1. Radio – Transmit Mayday.
2. Heavy Objects
   Secure/Toss
3. Approach
   Into High Winds.
   Parallel to Swells in light winds.
4. Flaps - 20 to 30 Deg.
5. Power - 300'/min @ 55 KTS.
6. Doors - Unlatch.
7. Touchdown - Level attitude @ 300'/min.
8. Face - Cushion at Impact.
9. Aircraft - Evacuate.
   Flood Cabin if necessary.
10. Life Vests / Rafts - Inflate.

FIRES

DURING START

1. Cranking – Continue.

If Engine Starts

2. Power - 1700 RPM (few min)
3. Engine - Shutdown
   Inspect for damage.

If Engine Fails to Start

2. Throttle - Full
3. Mixture I.C.O.
4. Cranking - Continue.
5. Fire Extinguisher - Obtain.
6. Engine - SECURE.
   A. Master - Off.
   B. Ignition - Off.
   C. Fuel Shutoff - Pull.
7. Fire - Extinguish.
8. Fire Damage - Inspect.

ENGINE FIRE IN FLIGHT

1. Mixture - I.C.O.
2. Fuel Selector - Pull.
3. Boost Pump - Off
3. Master Switch - Off.
4. Cabin Heat and Air - Off. (except wing root vents)
5. Airspeed - 100 KTS. (faster if needed)
6. Forced Landing- execute

ELECTRICAL FIRE IN FLIGHT

1. Master Switch - Off.
2. All Other Switches - Off. (except ignition switch)
3. All Vents - Closed.
4. Fire Extinguisher - Activate.
5. Cabin - Ventilate.

If fire appears Out.

6. Master Switch - On.
7. Circuit Breakers - Check for faulty circuit, don't reset.
8. Electrical Switches - On one at a time with delay until short circuit is localized.
9. Vents - Open as reqiured.

CABIN FIRE

1. Master Switch - Off.
2. Vents - Close.
3. Fire Extinguisher - Activate.
4. Cabin - Ventilate.
5. Land Aircraft as soon as possible to inspect for damage.

WING FIRE

1. Nav Lights - Off.
2. Strobes - Off.
3. Pitot Heat - Off.
4. Side slip away from flames.

LANDING WITH A FLAT MAIN TIRE

1. Wing Flaps - As desired.
2. Approach - Normal.
3. Touchdown - Good tire first.

ELECTRICAL MALFUNCTIONS

OVER VOLTAGE LIGHT ON

1. Master Switch - Off
2. Master Switch - On.
3. Over Voltage Light - Off.

If over voltage light remains on.

4. Flight - Terminate as soon as practical.

AMMETER SHOWS DISCHARGE

1. Avionics switch - Off
2. Alternator switch - Cycle.
3. Electrical Load- Reduce.
4. Flight - Terminate as soon as practical.

SPIN RECOVERY

1. Power - Idle.
2. Ailerons - Neutral.
3. Rudder - Opposite.
4. Elevator - Forward.
5. Recover from dive.

C-172S CHECKLIST
CONSULT P.O.H. FOR DETAILED INFORMATION ABOUT THIS AIRCRAFT AND ITS PROCEDURES.