

N557TB TB20 TRINIDAD NORMAL PROCEDURES

PREFLIGHT (CABIN)

Inspections.....CURRENT
 AROWS documents...ON BOARD
 Compass corr. card.....LEGIBLE
 Hobbs.....RECORD
 Fuel selector.....LEFT or RIGHT
 Rudder trim.....TAKE-OFF
 Pitch trim.....TAKE-OFF
 Mixture.....IDLE CUT-OFF
 Electrical switches.....OFF
 Landing gear lever.....DOWN
 Control lock.....REMOVE
 Flight controlsFREE & CORRECT
 Parking brake.....SET
 Ignition.....OFF
 Circuit breakers.....IN
 Fire ext.....CHECK PRESSURE
 Windows.....CLEAN
 Main switch.....ON
 Electric fuel pump.....CHECK
 Landing gear pos. ind.....CHECK
 Advisory panel.....TEST
 Engine monitor cluster.....TEST
 Fuel quantity gauges.....CHECK
 External lights.....CHECK
 Stall warning.....CHECK
 Pitot heat.....CHECK
 Flaps.....LDG
 Electrical switches (ex. Main)OFF
 Main switch.....OFF

PREFLIGHT (EXTERIOR)

Left flap, aileron, wing.....CHECK
 Tie-down & chocks.....REMOVE
 Pitot head.....CHECK
 Left fuel tank sump.....DRAIN
 Fuel quantity.....CHECK
 Fuel tank vent.....CHECK
 Left main gear/tire..64psi/CHECK
 Left main gear strut.....CHECK
 Gear door/m.switches.....CHECK
 Left air inlet.....CLEAR
 Windshield.....CLEAN
 Oil level.....9 QTS.
 Oil pump breather.....CLEAR
 Propeller & spinner.....CHECK
 Air inlets/Filter.....CHECK
 Nose wheel tire/gear57psi/CHECK
 Nose gear strut.....CHECK
 Gear door/m.switches.....CHECK
 Exhaust pipe.....CHECK
 Right air inlet.....CHECK
 Fuel filter sump.....DRAIN
 Right fuel tank sump.....DRAIN
 Fuel quantity.....CHECK
 Fuel tank vent.....CHECK
 Right main gear/tire64psi/CHECK

Right main gear strut.....CHECK
 Gear door/m.switches.....CHECK
 Tie-down & chocks.....REMOVE
 Right flap, aileron, wing.....CHECK
 Right side of fuselage.....CHECK
 Air conditioner vent.....CLEAR
 Right static port.....CLEAR
 Antennae.....SECURE
 Empennage.....CHECK
 Tail tie-down.....REMOVE
 Left side of fuselage.....CHECK
 Left static port.....CLEAR
 Baggage.....SECURED
 Baggage door.....LOCKED
 General insp.WALK AROUND

BEFORE ENGINE START

Crew & passengers.....BRIEF
 Seats.....ADJUST & LOCK
 Seat belts & harnesses..FASTEN
 Doors.....CLOSED & LATCHED
 Fuel selector.....DESIRED TANK
 Air conditioning.....OFF
 Radio master.....OFF
 Alternate air.....PUSHED
 Parking brake.....SET
 Alternate static source..PUSHED
 Emerg. Idg. gear control PUSHED
 Circuit breakers.....IN

STARTING ENGINE

Propeller.....FULL INCREASE
 Throttle.....1/4 OPEN
 (FLOODED START.....CLOSED)

Main switch.....ON
 Tail strobe.....ON
 Electric fuel pump.....ON
 (FLOODED START.....OFF)

Mixture...RICH (3-5 sec) then ICO
 (HOT START RICH 1 sec then ICO)
 (FLOODED START.....ICO)

Electric fuel pump.....OFF
 Propeller area.....CLEAR
 Starter.....ENGAGE
 Mixture.....RICH

AFTER ENGINE START

Throttle.....1100 RPM
 Oil pressure.....CHECK
 "ALTr" warning light.....ON
 Voltmeter.....>24
 Alternator.....ON
 "ALTr" warning light.....OFF
 Voltmeter.....24 < V < 29
 Flaps.....RETRACT
 Air conditioning...AS REQUIRED
 Mixture.....AS REQUIRED

Vacuum.....CHECK
 Engine start time.....RECORD
 Radio master.....ON
 Autopilot master.....ON
 JPI 730 fuel quantity.....SET
 G500.....ERECT
 GTN750.....CHECK
 G500 Autopilot test.....FD OFF
 Autopilot test.....OK
 ATIS/Clearance.....RECORD
 Flight instruments...SET/CHECK

TAXIING

Parking brake.....RELEASE
 Brakes.....CHECK
 Flight instruments.....CHECK

ENGINE RUNUP

Parking brake.....SET
 Check area.....CLEAR
 Mixture.....RICH
 Propeller.....FULL INCREASE
 Fuel selector.....SWITCH TANK
 Throttle.....2000 RPM
 Magnetos...max 175 drop/50 diff.
 Engine gauges.....CHECK
 Vacuum.....CHECK
 Alternator.....CHECK
 Propeller.....EXERCISE
 (max drop 500 RPM)
 Governor.....CHECK
 Alternate air.....CHECK
 Throttle.....IDLE/CHECK
 Throttle.....1100 RPM

BEFORE TAKEOFF

Seat backs.....ADJUSTED
 Seat belts & harnesses..FASTEN
 Fuel selector.....PROPER TANK
 Rudder and pitch trim.....SET
 Mixture.....SET
 Propeller.....SET
 Flaps.....TAKEOFF
 Alternate air.....CLOSED
 Flight controlsFREE & CORRECT
 Magnetos.....BOTH
 Alternate static source..PUSHED
 Emerg. Idg. gear control PUSHED
 Circuit breakers.....IN
 Window.....CLOSED
 Advisory panel.....TEST/CHECK
 Engine gauges.....CHECK
 Flight instruments.....CHECK
 G500.....NO ALERTS
 Avionics / Transponder.....SET
 Autopilot.....SET
 Cabin doors.....LATCHED
 Takeoff briefing.....GIVEN

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HOLDING SHORT / LINEUP
 Mixture.....SET
 Flaps.....SET
 Fuel pump / lights.....ON
 Pitot heat.....AS REQUIRED
 Air conditioning.....OFF
 Transponder.....ALT
 Window/Doors.....CLOSED
 Takeoff Time.....NOTED

AFTER TAKEOFF / CLIMB

300 ft AGL
 Gear.....UP
 Flaps.....UP
 Engine gauges.....CHECK

1000 ft AGL

Fuel pump.....OFF
 Fuel pressure.....CHECK
 Lights.....AS REQUIRED
 Air conditioning...AS REQUIRED

CRUISE CHECK

Power.....SET
 Mixture.....ADJUST
 Landing light.....OFF
 Rudder trim.....SET

PRE-MANEUVER CHECK

Altitude.....CHECK
 Fuel pump / landing light.....ON
 Mixture.....RICH
 Magnetos.....BOTH
 Fuel selector.....PROPER TANK
 Seat belts & harnesses..FASTEN
 Cockpit area.....SECURED
 Clearing turns.....EXECUTE

POST-MANEUVER CHECK

Landing light.....OFF
 Fuel pump.....OFF
 Mixture.....SET

APPROACH & LANDING

ATIS.....RECORD
 Approach briefing.....GIVEN
 Seat backs.....ADJUSTED
 Fuel pump.....ON
 Landing light.....ON
 Air conditioning.....OFF
 (G)Fuel selector...PROPER TANK
 (U)Gear.....DOWN
 (M)Mixture.....SET
 (P)Propeller.....SET
 (S)Seat belts & harnessesFASTEN

AFTER LANDING

Flaps.....RETRACT
 Fuel pump / pitot heat.....OFF

EMERGENCY PROCEDURES

Lights.....AS REQUIRED
 Air conditioning...AS REQUIRED

ENGINE SHUTDOWN

Flight time (GTN 750).....NOTE
 Radio master.....OFF
 Autopilot master.....OFF
 Propeller.....FULL INCREASE
 Throttle.....CLOSED
 Mixture.....IDLE CUT-OFF
 All electrical switches.....OFF
 Magnetos.....OFF
 Engine stop time.....RECORD

PARKING

Hobbs.....RECORD
 Control wheel.....SECURED
 Window.....CLOSED
 Master switch.....OFF
 Doors.....LOCKED
 Tie-downs/chocks.....SECURE

EMERGENCIES

FIRES

ENGINE FIRE - STARTING

Mixture.....IDLE CUT-OFF
 Starter.....CRANK (max 10 sec)
 Throttle.....FULL OPEN
 Fuel selector.....OFF

If fire goes on:

Main switch.....OFF
 Magnetos.....OFF
 Evacuate passengers and
 extinguish fire using all available
 means (fire extinguisher if
 installed)

ENGINE FIRE - FLIGHT

Fuel selector.....OFF
 Mixture.....IDLE CUT-OFF
 Throttle.....FULL OPEN
 Fuel pump.....CHECK OFF
 Cooling and demisting.....OFF

After engine has stopped:

Magneto selector.....OFF
 ALTr FLD switch-breaker.....OFF
 Forced landing.....EXECUTE
 DO NOT ATTEMPT TO RESTART
 THE ENGINE AFTER A FIRE

ELECTRICAL FIRE

IN ENGINE COMPARTMENT:
 Main switch.....OFF
 Cooling and demisting.....OFF
 Land as soon as possible.

IN CABIN:

Main switch.....OFF
 ALTr FLD switch-breaker.....OFF
 All electrical switches(ex Mag)OFF
 Cooling and demisting.....OFF
 Fire extinguisher.....ACTIVATE

If fire is out:

Main switch.....ON
 Circuit breakers.CHECK/DO NOT
RESET
 Radio/electrical switches.....ON
one at a time
 Cabin air cooling.....OPEN

CABIN FIRE

Main switch.....OFF
 Cooling and demisting.....OFF
 Fire extinguisher.....ACTIVATE
 Cabin.....VENTILATE

WING FIRE

Navigation lights.....OFF
 Taxi and landing lights.....OFF
 Wing strobe lights.....OFF
 Pitot heat.....OFF
 Land as soon as possible

EMERGENCY DESCENT

Throttle.....IDLE AS REQUIRED
 Airspeed.....129 KIAS
 Landing gear lever.....DOWN
 Descent at V_{LE}.....139 KIAS
 After a prolonged descent with
 reduced power, apply
 power with caution due to low
 cylinder head temperature.

RADIO MASTER SWITCH FAILURE

When radio navigation equipment
 cannot be set under voltage due to
 RADIO MASTER switch
 malfunction.
 R.M. SWITCH CB.....OPEN
 Radio navigation are supplied
 again and flight can go on
 normally.

PROPELLER GOVERNOR FAILURE

In case of oil pressure drop in the
 governor system or pitch control
 failure, the propeller moves to low
 pitch.

Oil pressure.....CHECKED
 Oil temperature.....CHECKED
 Throttle.....AS REQUIRED
 Airspeed.....REDUCED
 Avoid rapid application of power.
 CAUTION : MAX RPM : 2575

(CONTINUED)

Airspeeds	V _{BEST GLIDE}92	V _X (GEAR DOWN).....67	V _{FE} (T/O).....129	V _{ENRTE CLIMB}95	V _{APP} (NORM&SH.FIELD).....73
CIAS	V _{S0}59	V _X (GEAR UP).....81	V _{FE} (LDG).....103	V _A129	V _{APP} (FLAPS UP).....90
	V _{S1}70	V _Y (GEAR DOWN).....73	V _{LO}129	V _{NO}150	
	V _R68	V _Y (GEAR UP).....95	V _{LE}139	V _{NE}187	Max. crosswind: 25 kts

Usable Fuel:
 Full tanks: 2 x 43.1 gal = 86.2 gal
 Max. gross weight: 3,086 lbs
 Max. baggage weight: 143 lbs