

WINFC T-34B Mentor N84639 Checklists

Preflight

COCKPIT

Control Lock	REMOVED
Gear Handle	DOWN
Aft Seat Restraints	SECURE(SOLO)
Throttle	CLOSED
Propeller Control	FULL FWD
Mixture	CUTOFF
Radio Master	OFF
Battery Switch	ON
Landing Gear Ind	DOWN/LOCKED
Fuel Quantity	CHKD
BCN	ON/CHKD
Flaps	EXTEND
Battery Switch	OFF
Fuel Shutoff Valve	ON

L WING

Flaps	CHKD
Control Surfaces	CHKD
Wing Tip/Surfaces	CHKD
Pitot Static Mast	CHKD
Stall Warning Vane	CHKD
Fuel Quant/Cap	CHK/SECURE
Main Gear/Strut	CHKD
Tie-Down/Chocks	REMOVED

BELLY

Sump Drain	SAMPLE/CLEAR
Filter Drain	CHECK
Augmenter Tubes	CHECK

NOSE

Windshield	CHKD
Oil Quant (10-11qts)	CHKD
Prop/Spinner	CHKD
Air Intake/Filter	CHKD
Engine Cowling	CHKD
Tire/Strut	CHKD

R WING

Cabin Air Intake	CLEAR
Main Gear/Strut	CHKD
Fuel Quant/Cap	CHK/SECURE
Tie-Down	REMOVED
Wing Tip/Surface	CHKD
Control Surfaces	CHKD
Flaps	CHKD

EMPENNAGE

BCN	CHKD
Control Surfaces	CHKD
Tie-Down	REMOVED

Before Start

Circuit Breakers	CHECK IN
Radio Master	OFF
Electrical Equip	OFF (BCN ON)
Passenger Brief	COMPLETE

Starting Engine

Seat/Rudder Pedals	ADJUSTED
Harnesses	FASTENED
Parking Brake	SET
Battery	ON
Mixture	IDLE CUTOFF
Magnetos	OFF
Throttle	OPEN 3/4" TO 1"
Prop Control	FULL FWD
Fuel Shutoff Valve	ON
Fuel Boost Pump	ON
Fuel Pressure	9 – 15 PSI
Prop Area	"CLEAR"
Starter	ENGAGE(15max)
Mags (aftr 4 blades)	BOTH
Mixture	FULL RICH
Throttle	1000 RPM MAX
Oil Pressure	30 – 80 PSI
Throttle	1400 RPM

Engine Fails to Start

Starter	DISENGAGE
Mixture	IDLE CUTOFF
Boost Pump	OFF
Throttle	FULL OPEN
Magnetos	OFF
Starter	ENGAGE for 5 SECS to CLEAR

Attempt Second Start

No Start After 15 Seconds

Starter	DISENGAGE
Mixture	IDLE CUTOFF
Boost Pump	OFF
Battery	OFF
Magnetos	OFF
Fuel Shutoff Valve	OFF
Restart	AFTER 5 MINUTES

ATIS 134.15 GND 121.75 TWR 127.9 App East 120.7/App West 118.2

Pre-Taxi	
Flaps	UP/OFF
Trim Tabs	SET 6R /3 UP/ 0
Transponder	STBY
Lndg Gear Warn Lt	CHECK
Inverters	CHKD/ON MAIN
Gyros	UNCAGED/SET
Radio Master/Radio	ON (copy ATIS)
Altimeter	SET
Fuel Caps	LATCHES AFT
Flight Controls	FREE/CORRECT
Oil Temperature	24 DEG MIN
Parking Brake	RELEASED

Engine Runup	
Brakes	APPLY
Engine Instruments	IN LIMITS
Oil Bypass	OFF
Throttle	2000 RPM
Mag Check	100max/ 50split
Alternate Air	1/2" DROP MAX
Mixture	CHECK (LEAN)
Propeller	Cycle 6cold/2hot
Prop Governor	1600-1650detent
Throttle	1700 RPM
Boost Pump	OFF(check fluct)
Boost Pump	ON(chk 9-15psi)
Throttle	IDLE (600-750)
Mixture Cutoff	CHECK
Generator Cut-Out	CHK LIGHT ON
Throttle	1400 RPM
Generator	27.7-28.5 volts

Before TakeOff Checklist	
Dep Brief/Rwy	Vr55Vy87Vg109
Vne152 MaxG2.5	Vso51Vs62Vx69
Flaps	SET(up or 50%)
Harness	LOCKED
Boost Pump	ON
Mixture	FULL FWD
Propeller	FULL FWD
Alternate Air	OFF
Ignition	BOTH
Fuel Quantity	CHECK
Canopies	CLOSED/LTCHD
Flight Instrument	SET
Enaine Instruments	IN I IMITS

Line-Up Checklist	
Transponder	ALT
External Lights	ON
Radio Volume	UP

	Power	Pitch	Airspeed	Gear/ Flaps	VSI
Climb	27" 2400	+5	90	Up	+500
Cruise	23" 2000	0	120	Up	0
Cruise Descent	20" 2000	-3	120	Up	-300
Approach	20" 2400	+1	100	Up	0
App Descent	16" FWD	-3	90	Dwn 50%	-500
NP App Descent	13" FWD	-5	90	Dwn 50%	-800

After TakeOff/Climb	
Throttle/Prop/Mix	FULL FWD
Landing Gear	UP
Flaps	UP/OFF
Fuel Caps	CHECK
Boost Pump	OFF (1000'AGL)
Airspeed	90 KIAS
Engine Instruments	CHECK (27"/24)

Landing 'BCGUMPS'	
Boost Pump	ON
Carb Heat	ALT AIR OFF
Gas	CHECK SPLIT
Undercarriage (<109)	DOWN/LCKD
Mixture	FULL RICH
Propeller Control	FULL FWD
Spotlight	LND LT ON
Harnesses	LOCKED
Flaps	SET/OFF
Trim	SET
Brakes/ParkingBrake	FIRM/OFF
Engine Instruments	CHECKED

After Landing	
Landing/Passing Lts	AS REQ/OFF
Transponder	STBY
Flaps	UP/OFF

Shutdown 'MMM'	
Throttle	1500 RPM
External Lights	OFF(anti-coll on)
Radio Master	OFF
Boost Pump	OFF
Inverters	OFF
Throttle	CLOSED
Mixture	OFF
Ignition	OFF
Battery	OFF
Fuel Shutoff Valve	OFF

T-34B N84639 Emergency Procedures

Engine Failure in Flight

Assume a safe	Gliding Attitude
Landing Site	LOC/TURN TO
Airspeed	TRIM to 90KIAS

Altitude Permitting

Fuel Boost Pump	ON
Fuel Shutoff Valve	ON
Mixture	RICH
Ignition	BOTH
Alternate Air	ON
Transponder	7700
Radio Call	"MAYDAY"

If Eng Fails to Start

Gear	AS DESIRED
Flaps	AS DESIRED
Fuel Shutoff Valve	OFF
Battery	OFF
Canopy	OPEN
Harnesses	LOCKED

Maximum Glide:

Gear	UP
Flaps	UP
Canopies	CLOSED
Propeller	FULL AFT
Airspeed	90 KIAS

Engine Fire During Start

Mixture	IDLE CUTOFF
Fuel Shutoff Valve	OFF
Throttle	FULL FWD
Starter	CONTINUE CRANKING

Engine Fire After Start

Mixture	OFF
Fuel Shutoff Valve	OFF
Throttle	PULL
Ignition	OFF
Battery	OFF
ABANDON AIRCRAFT	

Engine Fire in Flight

Mixture	IDLE CUTOFF
Fuel Shutoff Valve	OFF
Throttle	CLOSED
Ignition	OFF
Battery	OFF
Generator	OFF
Engine	Do Not Restart
Transponder	7700
Radio Call	"MAYDAY"
MAKE FORCED LANDING or DITCH	

Electrical Fire in Flight

Battery Switch	OFF
Generator	OFF
ALL Circuit Breakers	PULL
Radio/Electric Equip	OFF

Wing Fire

Battery Switch	OFF
Generator	OFF
Slip Away From Fire	
<i>If fire does not go out:</i>	
Emergency Descent	PERFORM

Icing Encounter

Change Direction/Alt.	
Pitot Heat	ON
Alternate Air	ON
Cabin Heat/Defrost	ON
Power	INCR
<i>Land ASAP</i>	
Flaps	UP
Approach Airspeed	FAST > 90 KIAS

Spin Recovery

Throttle	IDLE
Ailerons	NEUTRAL
Rudder	FULL OPP TN
Stick	FWD
<i>When Rotation Stops:</i>	
Rudder	NEUTRAL
Return to Level Flight	

Engine Roughness

Alternate Air	ON
Mixture	ADJ
Fuel Pump	ON
Engine Instruments	CHK
Ignition	L/R/BOTH

High Oil Temp

Note Oil Pressure
Oil Cooler Bypass Check Off
Land ASAP

Low Oil Pressure

Land ASAP
If Rise In Temp:
Power REDUCE
Execute Force Landing
Anticipate Eng Failure

Emergency Descent

Throttle	IDLE
Prop Control	FULL FWD
Mixture	RICH
Angle of Bank	45 DEG
Airspeed	152 KIAS

Propeller Overspeed

Throttle	ADJUST
Climb	TO LOAD PROP
Manipulate Prop Cnt	To Restore Govn

LAND ASAP

Electrical Failure

Generator Switch	OFF
Non Ess Elec Equip	OFF
Landing Gear	CRANK DOWN

MAKE NO-FLAP
LANDING

Turbulence Encounter

Airspeed	< 148 KIAS
Seat Belts/Harn	TIGHTEN
Loose Items	SECURE

Gear Unsafe-Handle Down

DO NOT CYCLE
Use Emergency Ext Procedures
Emerg Extension;
Lndg Gear Ckt Bkr PULL OUT
Gear Handle DOWN
Clutch Knob Lock UNLOCK
Clutch Knob PUSH DOWN
CRANK GEAR DOWN SLOWLY
UNTIL HANDLE CANNOT BE
MOVED ANY FURTHER AND
LANDING GEAR INDICATES DOWN

One Main Gear Unsafe

Obtain Visual Check	Fm tower/plane
Gear Checked Down	LAND
If Gear Not Down	
Gear Handle	CYCLE UP/DN
Gear Still Not Down	
Gear Handle	UP
Gear Verified Up	Fm tower/plane

MAKE GEAR UP LANDING

If you still have gear not down or not all three up;

Canopy	OPEN
Harnesses	LOCKED

MAKE SOFT FIELD LANDING

Flaps	FULL
Power	ON
Airspeed	NORMAL

Carry wing slightly lower on the down and locked side. Touchdown on locked gear. Hold opposite wing up with aileron. When wingtip strikes ground, apply maximum opposite brake. When stopped, secure then abandon aircraft.

Nose Gear Unsafe

All step of above list THRU Airspeed
LAND ON MAINS, HOLD NOSE OFF
DECK.

Mixture	CUTOFF
Ignition	OFF
Fuel Shutoff	OFF
Battery	OFF

After the nose strikes the ground, apply maximum braking. When stopped, secure then abandon the aircraft.