

# T-41C Checklist

## Preflight Checklist

### INTERIOR

Required Documents ..... Check (ARROW)  
Hobbs & Tach Time ..... Check & Record Times  
Flight Control Lock ..... Remove  
Radios & Electrical Equipment ..... **OFF**  
Circuit Breakers ..... Check  
Magneto Switch ..... **OFF**  
Master Switch ..... **OFF**  
Aux Fuel Pump Switch ..... Guarded  
Primer ..... Locked  
Fuel Shut-Off Knob ..... In  
Fuel Selector ..... Both  
Master Switch ..... **ON**  
    Fuel Gauges ..... Check quantity  
    Flaps ..... Lower to down position  
    Lights (Landing, Nav, Strokes) ..... Check - then **OFF**  
Master Switch ..... **OFF**  
Trim ..... Set for takeoff  
Loose Articles ..... Secure

### EXTERIOR

Left Wing Fuel Quick Drain Sump ..... Drain & Sample  
Baggage Door ..... Locked  
Left Fuselage ..... Check  
Static Port ..... Check  
Battery Drain ..... Check  
Stabilizer, Elevator & Rudder ..... Check  
Tail Tie Down ..... Remove  
Right Fuselage ..... Check  
    Static Port ..... Check

### Right Wing

Flap & Aileron ..... Check (rollers, hinges, weights)  
Wing Tip, Nav Light & Leading Edge ..... Check  
Tie Down ..... Remove  
Tire, Brake, & Gear ..... Check - inflation/wear  
Tire Chock ..... Remove  
Fuel Quick Drain Sump ..... Drain & Sample  
Fuel Tank Quantity ..... Check - Secure fuel cap

## Preflight Checklist (cont)

Windshield ..... Clean  
Fuel Main Sumps ..... Sample both under engine  
Right Side Nose Strut & Tire ..... Check - inflation/wear  
Cowling, Intakes, Prop & Spinner ..... Check  
Left Nose Strut & Tire ..... Check - inflation/wear  
Engine Compartment ..... Check  
Oil Level ..... 6 - 8 qts  
Oil Cap & Access Door ..... Secured

### Left Wing

Fuel Tank Quantity ..... Check - Secure fuel cap  
Pitot Tube ..... Check  
Stall Warning ..... Check  
Fuel Vent ..... Check  
Taxi/Landing Light ..... Check  
Tie Down ..... Remove  
Leading Edge, Wing Tip & Nav Light ..... Check  
Aileron & Flap ..... Check (rollers, hinges, weights)  
Tire, Brake, & Gear ..... Check - inflation/wear  
Tire Chock ..... Remove  
Interior Fuel Strainer ..... Pull - check / 3 sec  
Walk Around Airplane as Final Check

### Before Starting Engine

Seats Belts & Shoulder Harness ..... Fasten & Adjusted  
Doors ..... Closed & Latched  
Radios & Electrical Equipment ..... **OFF**  
Parking Brake ..... Set (if desired)

## Starting Engine

Mixture .....	Full Rich
Primer .....	Locked
Navigation Lights .....	<b>ON</b>
Master Switch .....	<b>ON</b>
Aux Fuel Pump Switch.....	<b>ON</b> High to 8 - 10 gal/hr
Aux Fuel Pump Switch.....	Guarded
Throttle .....	Open 1/4 - 1/2 inch
Propeller Area.....	<b>"CLEAR"</b>
Brakes.....	Hold
Magneto Switch.....	Start
Throttle .....	1000 - 1200 RPM
Oil Pressure.....	Check
Ammeter .....	Check
Flaps .....	Up - Visually check
Radios & Electrical Equipment .....	<b>ON</b> & Set
Transponder.....	Standby
Altimeter .....	Set
Heading Indicator .....	Set
Artificial Horizon.....	Set
Magnetic Compass.....	Check

## Taxi Checks

Radio .....	Transmit for Operation
Flight Controls.....	Position for wind
Brakes.....	Test on initial taxi
Instruments .....	Check for correct movement

## Engine Runup

Nose Wheel .....	Face wind & center nose wheel
Brakes.....	Hold
Doors & Windows.....	Closed & Latched
Trim.....	Takeoff position
Fuel Selector.....	Both
Throttle .....	1800 RPM
Magnetos .....	150 RPM - Max magneto drop
.....	50 RPM - Max differential drop
Mixture .....	Lean then Full Rich
Suction .....	Check (4.6 - 5.4 inches)
Ammeter .....	Check
Engine Instruments.....	Check (Oil Pressure/Temp)
Throttle .....	Idle - then 1000 - 1200 RPM
Flight Controls.....	Freedom of movement
Flight Instruments.....	Re-check & set
Attitude Indicator .....	Check
Heading Indicator .....	Check
Altimeter .....	Check
Radios & Nav Aids .....	Set & Checked

## Before Takeoff

Throttle Friction.....	Adjust
Seat belts & Harness .....	Check
Doors & Windows.....	Closed and Latched
Flaps.....	Up (or as required - 10°)
Fuel Selector.....	Both
Mixture .....	Full Rich
Transponder.....	Set to (Alt)
Landing Light .....	<b>ON</b> (if desired)
Strobe Light.....	<b>ON</b>
Radio .....	Broadcast Intentions
Heading Indicator .....	Runway heading
Flight Controls.....	Position for wind
Takeoff Time .....	Note & Log

### **Normal Takeoff & Climb**

Trim..... Takeoff position  
Flaps.....Up (or as required - 10°)  
Mixture ..... Full Rich  
Throttle ..... Full Open  
Elevator Control..... Lift Nose @ 50 - 60 mph  
Climb Airspeed ..... 95 - 100 mph

### **Short Field Takeoff**

Flaps.....10 degrees  
Brakes..... Apply  
Mixture ..... Full Rich  
Throttle ..... Full Open  
Brakes..... Release  
Elevator Control..... Lift Nose @ 50 - 60 mph  
Climb Airspeed .....70 mph until obstacle cleared  
..... then accelerate to 85 mph  
..... to normal climb airspeed  
Flaps..... Retract slowly

### **Soft Field Takeoff**

Flaps.....10 degrees  
Mixture ..... Full Rich  
Elevator.....Full back position  
Brakes..... None - rolling from taxi  
Throttle ..... Full Open  
Ground Roll .....Hold nose wheel off runway  
Elevator Control..... Remain in ground effect until V<sub>x</sub>  
Climb Airspeed ..... (70 mph) until obstacle cleared  
..... then V<sub>y</sub> (100 mph) or Normal climb  
Flaps..... Retract slowly

### **Enroute Climb**

Airspeed ..... 100 mph  
Throttle ..... Full Open  
Landing Light.....OFF

### **Cruise Checklist**

Fuel Selector ..... Both or on fullest tank  
Engine Instruments ..... Check  
Throttle ..... 2400 - 2500 RPM  
Mixture ..... Rich below 3000 ft  
..... Lean above 3000 f  
Elevator Trim ..... Adjust

### **Descent Checklist**

Fuel Selector ..... Both  
Engine Instruments ..... Check  
Mixture ..... Full Rich  
Throttle ..... 2000 - 2200 RPM

### **Landing Checklist**

Seats, Belts & Harness ..... Fasten & Adjusted  
Landing Light ..... **ON**  
Fuel Selector ..... Both  
Mixture ..... Full Rich  
Flaps ..... As required  
Airspeed  
    Flaps Up ..... 80 - 85 mph  
    Flaps 40 Degrees ..... 65 - 70 mph  
Touchdown ..... Main wheels first  
Brakes ..... Minimum required

### **Short Field Landing**

Final Approach Airspeed .....  
    Utility Category ..... 65 mph  
    Normal Category ..... 75 mph  
Flaps ..... 40 Degrees  
Power ..... Idle after over obstacle  
Touchdown ..... Main wheels first  
Brakes ..... Apply heavily  
Flaps ..... Retract immediately

### **Soft Field Landing**

Final Approach Airspeed.....  
Utility category..... 65 mph  
Normal category ..... 75 mph  
Flaps..... Full Down  
Power ..... 1200 -1500 RPM  
Touchdown..... Smoothly at minimum descent rate  
Landing Ground Roll ..... Hold nose wheel off runway  
Taxi ..... Power and full back elevator

### **Balked Landing (go around)**

Throttle ..... Full Open  
Flaps..... Retract to 20 degrees  
Climb Airspeed ..... 70 mph (V<sub>x</sub>) or 100 mph (V<sub>y</sub>)  
Flaps..... Slowly retract after 85 mph airspeed

### **After Landing Checklist**

Flaps..... Up  
Nonessential Electrical Equip..... OFF  
Transponder..... OFF  
Landing Light..... OFF  
Trim..... Take-off Position  
Flight Controls..... Position for Wind

### **Shutdown Checklist**

Parking Brake ..... If required  
Throttle ..... Idle - Mag grounding check  
Throttle ..... 1200 RPM  
Electrical Equipment..... OFF (except Nav Lights)  
Mixture ..... Idle - Cut-off  
Magneto Switch ..... OFF  
Master Switch ..... OFF  
Fuel Selector..... Left or Right

## **Securing Aircraft**

Flight Control Lock.....	Installed
Main Wheels .....	Chocked
Wing & Tail Tie downs .....	Attached
Engine Plug Covers .....	Installed
Pitot Cover .....	Installed
Hobbs & Tach Times.....	Recorded
Fuel & Oil Servicing.....	Recorded
Seat belts & Harness .....	Stowed
Door & Window .....	Locked
Baggage Door .....	Locked

# T-41C Aircraft Information

(All speeds in MPH)

Rotate (Vr) .....	50-60
Best Rate of Climb (Vy).....	100
Best Angle of Climb (Vx)	
10 <sup>0</sup> Flaps .....	70
Flaps Up	85
Maneuvering Speed (Va)	
At 2500 lbs .....	129
Best Glide Speed .....	85
Stall Speed	
Power Off, Flaps Up (V <sub>st</sub> ).....	60-64
Power Off, Flaps 40 <sup>0</sup> (V <sub>so</sub> ).....	49-53
Approach Speed	
Flaps Up .....	85
Flaps 20 <sup>0</sup>	80
Flaps 40 <sup>0</sup> .....	75
Maximum Flaps Extended Speed (Vfe) .....	100
Maximum Structural Speed (Vno).....	145
Never Exceed Speed (Vne) .....	182
Maximum Takeoff Weight	
Normal Category .....	2500 lbs
Utility Category.....	2200 lbs
Full Oil .....	8 qts
Fuel	
Full .....	52 gal
Useable .....	46 gal
Maximum Gross Weight (MGW).....	2500 lbs
HP.....	210 HP
Maximum Crosswind .....	
15 kts .....	(flaps 0 <sup>0</sup> – 20 <sup>0</sup> )
10 kts .....	(flaps >30 <sup>0</sup> )



# T41C EMERGENCY PROCEDURES

## Engine Fire during Start on Ground

Cranking..... Continue to suck flames into engine

### **If engine starts:**

Power ..... 1700 RPM for a few minutes

Engine ..... Shutdown & inspect for damage

### **If engine fails to start:**

Cranking..... Continue effort to start

Mixture..... Idle – Cut-off

Engine ..... Secure

Master Switch ..... **OFF**

Magneto Switch ..... **OFF**

Fuel Selector ..... **OFF**

Fuel Shut-off ..... Pull out

Fire Extinguisher..... Use if necessary

Fire Damage ..... Inspect for damage

## Engine Fire in Flight

Mixture..... Idle – Cut-off

Fuel Shut-off Valve..... **OFF**

Master Switch ..... **OFF**

Cabin Heat & Air ..... **OFF** (except wing root vents)

Airspeed ..... 100 mph– increase if not extinguished

Forced Landing ..... As soon as possible

## Electrical Fire in Flight

Master Switch ..... **OFF**

Radios ..... **OFF**

Electrical Equipment/Switches ..... **OFF**

Magneto Switch ..... **ON**

Cabin Heat, Air, & Vents ..... Closed

Fire Extinguisher..... Activate (if available)

### **If fire appears out:**

Master Switch ..... **ON**

Circuit Breakers ..... Check for faulty circuit – do not reset

Radio ..... **ON** – one at a time

Electrical Equipment/Switches ..... **ON** – one at a time

Cabin Heat, Air, & Vents ..... Open if fire extinguished

# T41C EMERGENCY PROCEDURES

## **T41C EMERGENCY PROCEDURES**

### **Cabin Fire**

Master Switch ..... **OFF**  
Cabin Heat, Air & Vents ..... Closed  
Fire Extinguisher ..... Activate (if available)  
Land ..... As soon as possible

### **Wing Fire**

Navigation Light ..... **OFF**  
Strobe Light (if installed) ..... **OFF**  
Pitot Heat ..... **OFF**

### **If in flight:**

Side Slip ..... To keep flames from fuel tank  
Land ..... As soon as possible

### **Engine Failure during Takeoff Run**

Throttle ..... Idle  
Brakes ..... Apply  
Flaps ..... Retract  
Mixture ..... Idle – Cut-off  
Magneto Switch ..... **OFF**  
Master Switch ..... **OFF**

### **Engine Failure after Takeoff**

Airspeed (Best Glide) ..... 85 mph  
Mixture ..... Idle – Cut-off  
Fuel Selector ..... **OFF**  
Magneto Switch ..... **OFF**  
Flaps ..... As required  
Master Switch ..... **OFF**

### **Engine Failure during Flight**

Airspeed (Best Glide) ..... 85 mph  
Fuel Shut-off Knob ..... In  
Primer ..... In & Locked  
Aux Fuel Pump Switch ..... Low  
Mixture ..... Full Rich  
Fuel Selector ..... Both  
Magneto Switch ..... Both (Start if propeller is stopped)

## **T41C EMERGENCY PROCEDURES**

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### Emergency Landing without Power

Radio.....	Transmit MAYDAY (121.5)
Transponder .....	Squawk 7700
Airspeed .....	85 mph
Mixture .....	Idle – Cut-off
Fuel Selector .....	<b>OFF</b>
Magneto Switch .....	<b>OFF</b>
Flaps.....	As required
Master Switch .....	<b>OFF</b>
Seat Belts & Harness.....	Fasten & tighten
Doors.....	Unlatch prior to touchdown
Touchdown .....	Slightly tail low
Brakes .....	Apply Heavily

### Emergency Landing with Power

Airspeed (Best Guide).....	85 mph
Select Field.....	Fly over – note terrain / obstacles
Radio.....	Transmit MAYDAY (121.5)
Transponder .....	Squawk 7700
Flaps.....	As required

### **Prior to touchdown**

Radio/Electrical Equipment .....	<b>OFF</b>
Seat Belts & Harness.....	Fasten & tighten
Doors.....	Unlatch prior to touchdown
Master Switch .....	<b>OFF</b>
Airspeed .....	60 – 65 mph
Touchdown .....	Slightly tail low
Mixture.....	Idle – Cut-off
Fuel Shut-off Knob .....	Pull – <b>OFF</b>
Magneto Switch .....	<b>OFF</b>
Brakes .....	Apply Heavily

## T41C EMERGENCY PROCEDURES



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### Ditching

Radio..... Transmit MAYDAY (121.5)  
Transponder ..... Squawk 7700  
Heavy Objects ..... Secure or jettison  
Approach.....  
    High Winds, Heavy Seas..... Into the wind  
    Light Winds, Heavy Swells..... Parallel to swells  
Flaps..... 30°  
Airspeed / Power..... 85 mph – 300 ft/min descent  
Seat Belts & Harness..... Fasten & tighten  
Doors..... Unlatch  
Touchdown ..... Level attitude at 300 ft/min descent  
Face..... Cushion at touchdown  
Evacuate ..... As soon as possible

### Ammeter Shows Discharge

Radios ..... **OFF**  
Non-essential Electrical ..... **OFF**  
Alternator Circuit Breaker ..... Check in  
Master Switch ..... **OFF** (both sides)  
Master Switch ..... **ON**  
Radio..... **ON** (essential one only)  
Land ..... As soon as possible

### Landing with Flat Main Tire

Approach..... Normal  
Touchdown ..... Good tire offset on side of runway -  
..... hold off flat tire as long as possible

## T41C EMERGENCY PROCEDURES

