# Aircraft Checklist

## USAF T-41C (Cessna 172E)

# A/C # N7752L


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# NORMAL PROCEDURES

**NOTE:** The inspections required by the pilot are the minimum requirement for safe flight. While making the exterior inspection, particular attention should be given to the following: check all surfaces for general condition, antennas and access plates secure; check for fuel, oil, and hydraulic leaks; all covers removed; all vents and openings clear; check tires, brakes, and brake lines; check strut for proper extension; and airplane properly chocked. Additional checks may be performed at the discretion of the pilot.

## INTERIOR INSPECTION

1. Certificates / Documents…….……...……CHECKED
2. Control Lock……...……REMOVED / STOWED
3. Hobbs / Tachometer…….CHECKED
4. Fuel Selector……..……...…BOTH
5. Mixture……...IDLE, CUT-OFF
6. Elevator Trim…….……..CHECK
7. Parking Brake…….…..……..RELEASED
8. Fuel Shutoff Knob……SAFETY WIRED IN
9. Auxiliary Fuel Pump Switch……...……GUARDED
10. Primer……...…..IN AND LOCKED
11. Ignition Switch……..….OFF
12. Fuel Strainer……..…….DRAIN, 4 Seconds
13. Master Switch……..……ON
14. Lights / Strobes……...……CHECK, then OFF
15. Fuel Quantity……...……..……..CHECK
16. Flaps……...…..……LOWER
17. Master Switch…….…OFF
18. Loose Articles…….....SECURE
19. Fuel Sample Cup……OBTAIN

# EXTERIOR INSPECTION

1. **LEFT WING**
   a. Tiedown, grounding wire, chock, pitot cover……..…REMOVE
   b. Landing Gear / Tire……...….CHECK
   **NOTE:** Check inflation, cuts, blisters, or cord showing.
   c. Brake Assembly…….…..CHECK
   **NOTE:** Check security, leakage, and brake pad thickness (3/32 inch minimum).
   d. Fuel Tank Drain……DRAIN
   e. Flap…..…….CHECK
   f. Aileron……..CHECK
   **WARNING:** Do not place any part of the hand between wing and aileron. Movement of the surface can cause injury.
   g. Wing tip / Strobe / Navigation light…...CHECK
   h. Landing / Taxi Light……..CHECK
   i. Leading Edge……CHECK

   **CAUTION:** Inspect pitot tube visually only. Check inlet and drain hole for obstructions. Improper handling can misalign the pitot head, causing inaccurate airspeed indications.

   j. Stall Warning……CHECK
   k. Fuel Tank Vent……..CHECK
   l. Pitot Tube……..CHECK
   m. Wing Strut……CHECK
   n. Fuel Tank.....CHECK VISUALLY / CAP SECURE
   o. Top of Wing……..…CHECK

## 2. ENGINE / COWLING

a. Cowling……SECURE
b. External Power Access Door……SECURE
c. Oil Quantity……....CHECK

| | |
|---|---|
| 6 Quarts | Minimum |
| 7 Quarts | Normal |
| 8 Quarts | Maximum |

d. Oil Cap……SECURE
e. Fuel Strainer **(52L Only)**…….DRAIN, 4 Seconds
f. Oil Access Door……..SECURE
g. Propeller / Propeller Seal Plug……..CHECK
h. Nose Gear Assembly / Tire / Shimmy Damper….
……..…CHECK
i. Nose Strut (Strut 1 – 3 inches)……..CHECK
j. Windscreen……CLEAN
k. Fuel Drain (2 places)…….……DRAIN

## 3. RIGHT WING

a. Fuel Tank….....CHECK VISUALLY / CAP SECURE
b. Top of Wing……CHECK
c. Wing Strut…….……..CHECK
d. Leading Edge……...CHECK
e. Wing Tip / Strobe / Navigation Light…….
……CHECK
f. Aileron……CHECK
g. Flap……..CHECK
h. Fuel Tank Drain……DRAIN
i. Landing Gear / Tire……CHECK

**NOTE:** Roll aircraft to check all tires.

j. Brake Assembly……...CHECK
**NOTE:** Check security, leakage, and brake pad thickness (3/32 inch minimum).
k. Tiedown, Grounding Wire, Chock….REMOVE

**4. FUSELAGE – RIGHT SIDE**

a. Visually Check Condition……..….CHECK
b. Static Port……CHECK
c. Antennas…….CHECK

**5. EMPENNAGE**

a. Vertical Stabilizer and Rudder……CHECK
b. Horizontal Stabilizer and Rudder……CHECK
c. Anti-Collision Light……CHECK
d. Navigation Light…….CHECK
e. Stabilizer and Trim Tab……..CHECK
f. Tie down and Ground Wire…….REMOVE

**6. FUSELAGE LEFT SIDE**

a. Antennas……CHECK
b. Static Port……..CHECK
c. Baggage Door……..CLOSED

**BEFORE STARTING ENGINE**

1. Seatbelt and Shoulder Harness.....ADJUSTED / LOCKED
2. Passenger Briefing…….COMPLETE
3. Radios……..…OFF
4. Circuit Breakers……CHECKED

5. Pitot Heat……OFF
6. Flight Controls…….FREE AND CORRECT

## STARTING ENGINE

1. Mixture……..……RICH
2. Throttle……..……..CLOSED
3. Propeller……....VISUALLY CLEAR
4. Master Switch……...ON
5. Primer……..……IN AND LOCKED
6. Anti-Collision Lights / Strobes……ON
7. Propeller…VERBALLY AND VISUALLY CLEAR
8. Brakes……..……CHECKED SET
9. Throttle…..……..…FULL OPEN
10. Auxiliary Fuel Pump……HIGH

    **NOTE:** Cold – Greater than 10 PSI for 3 seconds
    Hot – Greater than 10 PSI for 1 second

11. Auxiliary Fuel Pump…….OFF AND GUARDED
12. Throttle……..……..OPEN 1/4 to 1/2 INCH
13. Ignition……..…START

**NOTE:** Release ignition when engine starts or 30 seconds maximum continuous operation.

14. Throttle……1000 RPM
15. Oil Pressure and Ammeter……..…….CHECK
16. Flaps……..UP

## BEFORE TAXI

1. Radios……..ON / SET
2. Transponder……STANDBY
3. Clock……...SET
4. Attitude and Heading Indicator……..CHECK / SET
5. Clearance…….……..OBATIN / ANNOUNCE
6. Transponder……SET / ALT

## TAXI

1. Aircraft Area……CLEAR
2. Flight Controls…….POSITION FOR WIND
3. Gyros……CHECK

## ENGINE RUN-UP

1. Nose Wheel……..CENTERED
2. Parking Brake……SET
3. Mixture……...RICH
4. Throttle……1800 RPM
5. Engine Instruments / Suction Gage……CHECK
6. Magnetos……CHECK
   **NOTE:** Maximum drop – 150 RPM. Maximum difference – 50 RPM.
7. Throttle…….IDLE (Watch for engine stop)
8. Throttle……1000 RPM

## BEFORE TAKE-OFF

1. Trim……CHECK
2. Fuel Selector……..BOTH
3. Flight and Engine Instruments……CHECK
4. Mixture……..….RICH
5. Radio……SET
6. Clearance……OBTAIN / ANNOUNCE
7. Doors / Windows……..CLOSED and LOCKED
8. Safety Belt / Shoulder Harness……SECURE
9. Strobes……...ON
10. Landing Light……AS REQUIRED

## NORMAL TAKE-OFF

1. Flaps……..UP
2. Align Aircraft With Runway Centerline
3. Heading Indicator……CHECK / SET

4. Advance Throttle……FULL POWER
   **NOTE:** Minimum 2270 RPM
5. Fuel Flow……..….CHECK
6. Rotate..50 to 60 MPH (70MPH for Strong Crosswinds)
7. Climb……95 MPH

## SHORT FIELD TAKE-OFF

1. Flaps……$10^o$
2. Throttle……..…….FULL POWER
   **NOTE:** Minimum 2270 RPM
3. Best Angle of Climb ($V_X$) for obstacle clearance

| Weight | IAS |
|---|---|
| 2500 lbs | 70 MPH |
| 2200 lbs | 66 MPH |

4. Clear of Obstacles…..…ACCELERATE TO 95 MPH
5. Flaps (above 200 feet, 80 MPH)……RETRACT

## SOFT FIELD TAKE-OFF

1. Flaps……..$10^o$
2. Throttle……FULL-CHECK POWER
3. Lift Off……..……IN GROUND EFFECT
4. Accelerate to $V_X$…….…SEE CHART ABOVE
5. Flaps (above 200 feet, 80 MPH)…..…….RETRACT
6. Reaching Sufficient Altitude…….ACCELERATE
   ……..…..TO 95 MPH

## CLIMB

**NOTE:** Refer to table for climb speed vs. altitude.
Interpolate for correct speed vs. weight.

| | CLIMB SPEED (MPH) | |
|---|---|---|
| **Altitude (ft)** | **Utility – 2200 lbs** | **Normal – 2500 lbs** |
| Sea Level | 97 | 100 |
| 5,000 | 92 | 95 |
| 10,000 | 89 | 91 |
| 15,000 | 85 | 87 |

## CRUISE

1. Power (See Performance Section)...2300 – 2600 RPM
2. Mixture……..……..LEAN AS NECESSARY

   **CAUTION:** Improper leaning procedures will greatly reduce endurance.

3. Landing Light……OFF
4. Engine Gauges / Instruments…….….MONITOR

## DESCENT

1. Fuel Quantity……..CHECK
   **NOTE:** Select fullest tank or BOTH.

2. Mixture……..RICH
3. Flight Instruments……CHECK / SET
4. Compass heading, altimeter…….CHECKED

## BEFORE LANDING

1. Fuel Selector……BOTH
2. Mixture……..…RICH
3. Landing Light……...ON
4. Safety Belt / Shoulder Harness…….…SECURE

## NORMAL LANDING

1. Flaps UP…….85 MPH
2. Flaps DOWN……..70 MPH
   **CAUTION:** Do not slip when using over 30 degrees of flaps due to a possible downward pitch under certain combinations of airspeed and sideslip angle.

3. Touch Down…..……..BRAKE AS REQUIRED
   **CAUTION:** If landing on slippery runways, aerobrake as long as possible with back pressure until the nose gear can no longer be held off the runway. Then raise the flaps and brake lightly. If the brakes are applied suddenly or too hard, a skid will likely result.

## SHORT FIELD LANDING

1. Flaps……$40^{o}$
2. Airspeed:

| | |
|---|---|
| Normal Category (2500 lbs) | 75 MPH |
| Utility Category (2200 lbs) | 65 MPH |

3. Roll-out……BRAKES AS REQUIRED
4. Flaps (After Touch Down)……RETRACT

## GO AROUND

1. Throttle……FULL
2. Flaps……$20^{o}$
   **NOTE:** Raise the flaps to $20^{o}$ as soon as conditions permit. Raise the flaps to $0^{o}$ after attaining a speed of 80 MPH.

3. Accelerate……..…85 MPH
4. Flaps (above 200 ft)……..RETRACT

## TOUCH AND GO (Private Pilots or Higher)

1. Throttle……..…FULL
2. Flaps……..…$20^{o}$
3. Flaps (above 80)……RETRACT

## AFTER LANDING (Clear of Runway)

1. Strobe Lights……AS REQUIRED
2. Pitot Heat……OFF
3. Landing Light……..AS REQUIRED
4. Flaps……UP
5. Transponder……AS REQUIRED
6. Radio……...…AS REQUIRED

## ENGINE SHUTDOWN

1. Nosewheel…….……CENTERED
2. Communication / Navigation Radios……..OFF
3. Throttle…….....IDLE
4. Magnetos……..GROUNDING CHECK
5. Throttle…..……1000 – 1200 RPM
6. Mixture……IDLE CUT-OFF
7. Navigation Lights……OFF
8. Strobe Light……..ON
9. Master Switch…….OFF
10. Ignition Switch……..……OFF
11. Fuel Selector……..……LEFT or RIGHT

## REFUELING

1. Aircraft…….CHOCK AND GROUND
2. Fuel Counter……..……..…RESET
3. Fuel…….AS REQUIRED / CAPS SECURE
4. Windscreen……CLEAN
5. Chocks / Ground Wire……REMOVED / STOWED
6. Fuel Counter……..RESET
7. Tow / Taxi aircraft to parking

## SECURING

1. Tach / Hobbs time, Fuel, Oil……....RECORDED
2. Discrepancies……...RECORDED
3. Personal Belongings and Trash…….……REMOVED
4. Control Lock……INSTALLED
5. Seatbelts……..……FASTENED
6. Sunvisor……INSTALLED
7. Brakes……..……RELEASED
8. Windows / Doors……..CLOSED / LOCKED
9. Pitot Cover……..…..INSTALLED
10. Chocks, Tiedowns, Ground Wire…..…INSTALLED

# EMERGENCY PPROCEDURES

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## NON-CRITICAL ACTIONS

1. Maintain Aircraft Control.
2. Analyze the Situation and Take Proper Action.
3. Land As Soon As Practicable.

# GROUND EMERGENCIES

## EMERGENCY ENGINE SHUTDOWN

**NOTE:** If an immediate engine shutdown becomes necessary while on the ground, proceed as follows.

1. Mixture……IDLE CUT-OFF
2. Fuel Shutoff Knob……...PULL OUT
3. Ignition Switch……OFF
4. Master Switch……OFF

# TAKEOFF EMERGENCIES

## ABORTED TAKEOFF

**NOTE:** If an abort is necessary for any reason, accomplish the following.

1. Throttle……..IDLE
2. Brake…….....AS REQUIRED

## ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. Glide……...ESTABLISH
2. Flaps……..AS REQUIRED

| | |
|---|---|
| FLAPS UP | 85 MPH |
| FLAPS 20$^{o}$ | 80 MPH |
| FLAPS OVER 20$^{o}$ | 75 MPH |

3. Land Straight Ahead.

### If Time Permits

4. Mixture…….……..FULL LEAN
5. Fuel Shutoff Knob……..…..PULL OUT
6. Ignition Switch…….OFF
7. Master Switch……..OFF
8. Cabin Doors……UNLOCKED / OPEN

## IN-FLIGHT EMERGENCIES

## ENGINE RESTART DURING FLIGHT

**NOTE:** If a restart is to be attempted, accomplish the following.

1. Glide……ESTABLISH

| | |
|---|---|
| FLAPS UP | 85 MPH |
| FLAPS 20$^{o}$ | 80 MPH |
| FLAPS OVER 20$^{o}$ | 75 MPH |

2. Mixture……..RICH

3. Throttle……IN HALF-WAY
4. Fuel Selector……BOTH
5. Fuel Shutoff Knob……..IN
6. Ignition Switch…….BOTH
7. Master Switch……ON
8. Aux Fuel Pump Switch……..LOW
9. If Propeller is stopped……..ENGAGE STARTER
10. Mixture……ADJUST
11. If Restart Is Unsuccessful, Refer to Forced Landing Checklist

**PARTIAL ENGINE FAILURE DURING FLIGHT**

1. Mixture……RICH
2. Fuel Selector……...BOTH
3. Fuel Shutoff Knob……IN
4. Manual Primer……IN AND LOCKED
5. Master Switch……..ON
6. Ignition Switch……..…ON
7. Auxiliary Fuel Pump Switch……...AS REQUIRED
8. Mixture……...ADJUST
9. Land As Soon As Practical

**ENGINE FIRE DURING FLIGHT**

Apply the following procedures in the event of an engine fire during flight.

1. Mixture……FULL LEAN
2. Fuel Shutoff Knob…….PULL OUT
3. Ignition Switch……..OFF
4. Glide……...ESTABLISH
5. Flaps……..AS REQUIRED
6. Master Switch……..OFF
7. Refer To Forced Landing Checklist

## ELECTRICAL FIRE / HIGH AMMETER

1. Master Switch…….OFF
2. Land As Soon As Practical

## SMOKE AND FUMES ELIMINATION

1. Cabin Heat Knob……..IN
2. Cabin Air Knob……IN
3. Upper Air Vents…….OPEN
4. Pilot's Window……...AS REQUIRED
   **NOTE:** If necessary, the window may be opened to assist in clearing the smoke or fumes from the cabin.

## NEGATIVE AMMETER READING

1. Electrical Load……..REDUCE
2. Land As Soon As Practical

## OIL SYSTEM MALFUNCTION

1. Throttle……AS REQUIRED
   **NOTE:** If possible, adjust the throttle to maintain the oil pressure within limits.

2. Mixture……RICH
   **NOTE:** A rich running engine runs cooler than a lean running engine.

3. Land As Soon As Practical

## STRUCTURAL DAMAGE / CONTROLABILITY CHECK

**CAUTION:** Do not reset the flaps if significant structural damage is located in the wings.

1. Climb to at least 1500' AGL (if practical) at a controllable airspeed.

2. Simulate landing approach and determine the airspeed at which the aircraft becomes difficult to control (minimum controllable airspeed).

3. Plan to fly a straight-in approach. Fly normal approach airspeed for your flap setting, or 5 to 10 MPH above the minimum controllable airspeed, whichever is higher. For asymmetrical flaps, use your minimum flap setting for approach airspeed.

4. Plan to touch down at no less than minimum controllable airspeed. Do not begin to reduce to final airspeed until the aircraft is very close to the ground.

## PITOT STATIC MALFUNCTION

1. If icing is suspected, turn on the pitot heat.

2. If the airspeed indicator proves unreliable, advise ATC if appropriate.

3. Fly a wider than normal pattern maintaining 2400 RPM on the downwind, maintain 1700 RPM on base and final. Close the throttle in the round-out.

4. Do not exceed 20 degrees of bank.

5. If you receive a stall warning indication prior to round-out, go around.

# LANDING EMERGENCIES

## FORCED LANDING

1. Glide……..ESTABLISH
2. Mixture……IDLE CUT-OFF
3. Fuel Shutoff Knob……...PULL OUT
4. Ignition Switch……OFF
5. Flaps……AS REQUIRED
6. Master Switch……OFF
7. Seatbelts……FASTENED
8. Shoulder Harness……..LOCKED
9. Cabin Doors……UNLOCKED / OPEN

## LANDING WITH A FLAT TIRE

1. Main Gear: Land on the side of the runway corresponding to the good tire.

2. Nose Gear: Land in the center of the runway, hold nose wheel off the ground as long as possible.

3. Stop the aircraft on the runway. Shut down the aircraft and call for assistance.

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## TAKE-OFF DATA
### HARD SURFACE RUNWAY, FLAPS 10°

| GROSS WEIGHT LBS | IAS AT 50 FT MPH | HEAD WIND KNOTS | @ S.L. & 59°F | | @ 2,500 ft & 50°F | | @ 5,000 ft & 41°F | | @ 7,500 ft & 32°F | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | GROUND RUN | TOTAL TO CLEAR 50' OBS | GROUND RUN | TOTAL TO CLEAR 50'OBS | GROUND RUN | TOTAL TO CLEAR 50'OBS | GROUND RUN | TOTAL TO CLEAR 50'OBS |
| 2500 | 70 | 0 | 860 | 1360 | 1000 | 1555 | 1135 | 1765 | 1435 | 2225 |
| | | 10 | 605 | 1020 | 710 | 1175 | 820 | 1350 | 1050 | 1730 |
| | | 20 | 390 | 720 | 470 | 840 | 550 | 980 | 730 | 1270 |
| 2200 | 66 | 0 | 645 | 1055 | 750 | 1200 | 845 | 1340 | 1070 | 1670 |
| | | 10 | 440 | 780 | 520 | 890 | 595 | 1005 | 785 | 1265 |
| | | 20 | 275 | 535 | 330 | 620 | 385 | 715 | 570 | 910 |
| 1900 | 61 | 0 | 470 | 805 | 540 | 905 | 610 | 1000 | 770 | 1230 |
| | | 10 | 310 | 580 | 365 | 860 | 415 | 740 | 535 | 915 |
| | | 20 | 180 | 390 | 220 | 445 | 260 | 510 | 340 | 640 |

NOTES:
1. Increase distance 10% for each 25°F above standard temperature for particular altitude.
2. For operation on a dry, grass runway, increase distance (both "ground run" and "total to clear 50 ft obstacle") by 7% of the "total to clear 50 ft obstacle" figure.

## LANDING DISTANCE TABLE
### LANDING DISTANCE WITH FULL FLAPS, POWER OFF, AND NO WIND ON HARD SURFACE RUNWAY

| GROSS WEIGHT LBS | APPROACH IAS MPH | @ S.L. & 59°F | | @ 2,500 ft & 50°F | | @ 5,000 ft & 41°F | | @ 7,500 ft & 32°F | |
|---|---|---|---|---|---|---|---|---|---|
| | | GROUND RUN | TOTAL TO CLEAR 50' OBS | GROUND RUN | TOTAL TO CLEAR 50' OBS | GROUND RUN | TOTAL TO CLEAR 50' OBS | GROUND RUN | TOTAL TO CLEAR 50' OBS |
| 2500 | 75 | 610 | 1320 | 650 | 1390 | 685 | 1470 | 725 | 1560 |

NOTES:
1. Reduce landing distance 10% for each 5 knots of headwind.
2. For operation on a dry, grass runway, increase distance (both "ground roll" and "total to clear 50 ft. obstacle") by 20% of the "total to clear 50 ft obstacle" figure.

## STALLING SPEEDS

POWER OFF MPH, CAS

2200 POUNDS GROSS WEIGHT

| Condition | Angle of Bank | | | |
|---|---|---|---|---|
| | 0° | 20° | 40° | 60° |
| Flaps Up | 60 | 61 | 68 | 80 |
| Flaps 20° | 55 | 57 | 63 | 78 |
| Flaps 40° | 49 | 51 | 56 | 70 |

Figure 6-1

## STALLING SPEEDS

POWER OFF MPH, CAS

2500 POUNDS GROSS WEIGHT

| Condition | Angle of Bank | | | |
|---|---|---|---|---|
| | 0° | 20° | 40° | 60° |
| Flaps Up | 64 | 66 | 73 | 90 |
| Flaps 20° | 58 | 60 | 67 | 83 |
| Flaps 40° | 53 | 55 | 60 | 75 |

## MAXIMUM RATE-OF-CLIMB DATA

| GROSS WEIGHT LBS | IAS MPH | @ S.L. & 59°F | | @ 5,000 ft & 41°F | | | @ 10,000 ft & 23°F | | | @ 15,000 ft & 5°F | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RATE OF CLIMB FT/MIN | GAL OF FUEL USED | IAS MPH | RATE OF CLIMB FT/MIN | FROM S.L. FUEL USED | IAS MPH | RATE OF CLIMB FT/MIN | FROM S.L. FUEL USED | IAS MPH | RATE OF CLIMB FT/MIN | FROM S.L. FUEL USED |
| 2500 | 100 | 880 | 1.3 | 95 | 620 | 2.9 | 91 | 395 | 4.8 | 87 | 150 | 8.2 |
| 2200 | 97 | 1070 | 1.3 | 92 | 800 | 2.6 | 89 | 530 | 4.0 | 85 | 260 | 6.3 |
| 1900 | 94 | 1310 | 1.3 | 89 | 1000 | 2.3 | 87 | 695 | 3.5 | 83 | 390 | 5.1 |

NOTES: 1. Flaps up, full throttle, and mixture at recommended leaning schedule.
2. Fuel used includes warm-up and take-off allowance.

# CRUISE & RANGE PERFORMANCE

Gross Weight - 2,500 Lbs
Standard Conditions
Zero Wind
46 Gal of Fuel (No Reserve)

| ALT. | RPM | % BHP | TAS MPH | GAL/ HOUR | ENDR. HOURS | RANGE MILES |
|---|---|---|---|---|---|---|
| 2500 | 2600 | 67 | 128 | 10.3 | 4.5 | 575 |
| | 2500 | 61 | 123 | 9.3 | 4.9 | 610 |
| | 2400 | 55 | 118 | 8.5 | 5.4 | 640 |
| | 2300 | 60 | 111 | 7.7 | 6.0 | 670 |
| | 2200 | 44 | 103 | 6.9 | 6.6 | 680 |
| 5000 | 2700 | 70 | 133 | 10.6 | 4.5 | 575 |
| | 2600 | 64 | 128 | 9.7 | 4.7 | 610 |
| | 2500 | 58 | 123 | 8.8 | 5.2 | 640 |
| | 2400 | 52 | 116 | 8.0 | 5.7 | 665 |
| | 2300 | 47 | 108 | 7.3 | 6.9 | 685 |
| | 2200 | 41 | 96 | 6.6 | 7.0 | 675 |
| 7500 | 2800 | 72 | 138 | 11.0 | 4.2 | 580 |
| | 2700 | 66 | 133 | 10.0 | 4.6 | 610 |
| | 2600 | 60 | 128 | 9.2 | 5.0 | 640 |
| | 2500 | 54 | 121 | 8.4 | 5.5 | 670 |
| | 2400 | 49 | 113 | 7.6 | 6.1 | 685 |
| | 2300 | 44 | 102 | 5.9 | 6.7 | 680 |
| 10000 | 2800 | 68 | 138 | 10.4 | 4.4 | 615 |
| | 2700 | 62 | 133 | 9.5 | 4.8 | 640 |
| | 2600 | 57 | 126 | 8.7 | 5.3 | 670 |
| | 2500 | 51 | 118 | 7.8 | 6.3 | 690 |
| | 2400 | 46 | 107 | 7.2 | 6.4 | 690 |
| | 2300 | 41 | 90 | 6.5 | 7.1 | 635 |

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# MISCELLANEOUS INFORMATION

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## GROUND HANDLING

**CAUTION:** Treat the propeller with extreme caution. Always assume the ignition switch is on. If ignition switch is on, the propeller can move unexpectedly with sufficient force to inflict **FATAL** injury.

- Do not push or pull the aircraft by the propeller.
- Do not push on the empennage to turn the aircraft.
- Do not exceed the nose gear steering unit.

## MANUAL / TUG TOWING

1. Ignition Switch……..OFF
2. Groundwire, Tiedowns, Chocks.....REMOVED / ……....STOWED
3. Parking Brake……...RELEASED
4. Towbar……....ATTACHED
   **CAUTION:** In congested areas, obtain assistance to assure adequate aircraft clearance. Brief helpers on the NO PUSH points prior to aircraft movement.

5. Aircraft……TOW AS REQUIRED
   **NOTE:** If a tug us used – tow at a speed consistent with safety.

6. Towbar…….DISCONNECTED
7. Complete Aircraft Securing Checklist

| ATC LIGHT SIGNALS | | |
|---|---|---|
| **Color and Type** | **Viewed on the Surface** | **Viewed in Flight** |
| Steady Green | Cleared for Takeoff | Cleared to Land |
| Flashing Green | Cleared to Taxi | Return for Landing |
| Steady Red | STOP | Give way to other aircraft, continue circling |
| Flashing Red | Taxi clear of runway in use | Airport unsafe – do not land |
| Flashing White | Return to starting point on airport | N/A |
| Alternating Red and Green | Exercise Extreme Caution | Exercise Extreme Caution |

## LOST COMMUNICATION PROCEDURES

### Albuquerque Area

1. If you are **WITHIN** 50 miles of Albuquerque and are not able to contact Albuquerque Approach, land at a non-towered airport (Belen, Socorro) and call Kirtland Flight Center.
2. If you are **NOT WITHIN** 50 miles of Albuquerque, land at the nearest unrestricted, hard-surfaced, non-towered airport and call the Kirtand Flight Center.
3. If you have lost communications after contact with Albuquerque Approach Control, continue according to the last instructions for landing.

**CAUTION:** Carefully evaluate the situation. It may be safer to exit the Class C Airspace and recover at Belen than to continue towards Albuquerque. Once safely on the ground, you can coordinate a no-radio return to Albuquerque. Approach and tower will give you a discrete transponder code and specific landing instructions.

4. In not cleared to land and entering the traffic area:

   **FROM THE NORTH:** Circle above the I-40 and I-25 intersection and hold for a green light from the tower, then follow light signal messages.

   **FROM THE SOUTH:** Circle above the Isleta Pueblo (use casino as a landmark) until you receive a light signal for the tower.

5. Proceed with caution if cleared to land. Clear the runway to the nearest general aviation area or the Flight Center and park. Call for assistance if necessary.

## LOST PROCEDURES

1. Attempt to tune in any VOR in your area. When you have positively identified a VOR, rotate the OMNI bearing selector until the needle centers with a **TO** indication. Check the compass and adjust the DG heading indicator as necessary.
2. Turn to the **TO** heading and track to the station. When over the station, evaluate the situation and decide

whether to proceed to your original destination, or land at the nearest suitable airport.

3. If you are unable to determine your position using the VOR, try the 5 C's below:

    a. **CLIMB** – Altitude enables you to see farther and improves radio communication and reception.
    b. **COMMUNICATE** – Transmit on 121.5 and request assistance.
    c. **CONFESS –** Admit to yourself and the ground station that you have a problem.
    d. **COMPLY –** Follow the instructions you receive unless they compromise safety.
    e. **CONSERVE** – Conserve your fuel as much as possible.

4. If lost and darkness is approaching, or you are low in fuel, **LAND** on the best available surface. It is better to land with some light and fuel than to perform a forced landing at night over unfamiliar terrain.

## SEVERE WEATHER RECALL

**AUTHORITY:** The Aero Club Manager, Chief Flight Instructor, Supervisor of Flying, or any instructor may institute this procedure.

1. In the local area, all aircraft will monitor 122.8 or remain with approach control on the appropriate frequency.

2. When a recall is started, the initiator will broadcast a recall announcement on 122.8 using the Flight Center's portable radio or a radio in a Flight Center aircraft on the ramp.
3. The initiator will also notify Albuquerque Approach Control and request they broadcast the recall on their frequencies.
4. If the weather precludes a safe recovery at Albuquerque (i.e. severe thunderstorms or high winds), the pilot will land at the nearest safe airport and secure the aircraft as appropriate.
5. Pilots should not attempt to refuel the aircraft if weather conditions are deteriorating and / or thunderstorms are observed / reported within 5 nm of the airport.

## REMAIN-OVER-NIGHT (RON) PROCEDURES

1. Pilots will follow this guide when RONing at other than Albuquerque.
2. If the RON is part of a scheduled cross-country, the aircraft will be serviced and secured as appropriate. The pilot is responsible for parking and hangar fees. The pilot will let airport personnel know where he / she can be reached.
3. If the RON is unscheduled, comply with Paragraph 2 and then notify the Flight Center as soon as possible.
4. If your flight itinerary must be changed significantly, contact the Flight Center at DSN 246-1072 or Commercial (505) 846-1072. Commercial calls may be made collect if necessary.

## ALTERNATE AIRFIELD PROCEDURES

1. When landing at an alternate field, use standard procedures as published in the AIM for controlled or uncontrolled airports.
2. The chart below contains information on the local airports.
3. See aircraft binder for local area chart showing the alternate airports.

**ALTERNATE AIRPORT INFORMATION**

| Airport | Dist from ABQ | TWR | GND | Clearance | CTAF | Weather Info | FSS | Pattern Alt |
|---|---|---|---|---|---|---|---|---|
| Albuquerque | | 120.3 | 121.9 | 119.2 | | 118.00 | 122.55 | 6500 |
| Double Eagle | 293°@ 11 nm | 120.15 | 121.625 | | 120.15 | 119.02 | 122.55 | 6800 |
| Belen | 193°@ 26 nm | | | | 122.8 | 118.55 | 122.55 | 6200 |
| Santa Fe | 025°@ 42.9nm | 119.5 | 121.7 | 121.7 | 122.95 | 128.55 | 122.2 | 7400 |
| Moriarty | 100°@ 33nm | | | | 122.9 | 118.05 | 122.3 | 7200 |
| Grants* | 265°@ 64nm | | | | 122.8 | 118.3 | 122.3 | 7600 |
| Socorro* | 181°@ 63nm | | | | 122.8 | 118.32 | 122.1T 116.8R | 5800 |

*Grants and Socorro Approach and Departure service provided by Albuquerque ARTCC on frequency 124.32.

## ALBUQUERQUE APPROACH CONTROL

Northeast – 127.4
Southeast – 123.9

These frequencies are often combined.

### IMPORTANT TELEPHONE NUMBERS

Kirtland Flight Center Manager – Joanna Erni: Cell (505) 220-5250
Kirtland AFB Operations – (505) 846-8335
Chief Flight Instructor – Larry Goodwin: Cell (505) 715-1012

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

**FLIGHT PLAN**

(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER | TIME STARTED | SPECIALIST INITIALS

| 1. TYPE | 2. AIRCRAFT IDENTIFICATION | 3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT | 4. TRUE AIRSPEED | 5. DEPARTURE POINT | 6. DEPARTURE TIME | | 7. CRUISING ALTITUDE |
|---|---|---|---|---|---|---|---|
| VFR / IFR / DVFR | | | KTS | | PROPOSED (Z) | ACTUAL (Z) | |

**8. ROUTE OF FLIGHT**

| 9. DESTINATION (Name of airport and city) | 10. EST. TIME ENROUTE HOURS | MINUTES | 11. REMARKS |
|---|---|---|---|
| | | | |

| 12. FUEL ON BOARD HOURS | MINUTES | 13. ALTERNATE AIRPORT(S) | 14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE | 15. NUMBER ABOARD |
|---|---|---|---|---|
| | | | 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL) | |

| 16. COLOR OF AIRCRAFT | CIVIL AIRCRAFT PILOTS, FAR 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans. |
|---|---|

FAA Form 7233-1 (8-82) CLOSE VFR FLIGHT PLAN WITH _____ FSS ON ARRIVAL

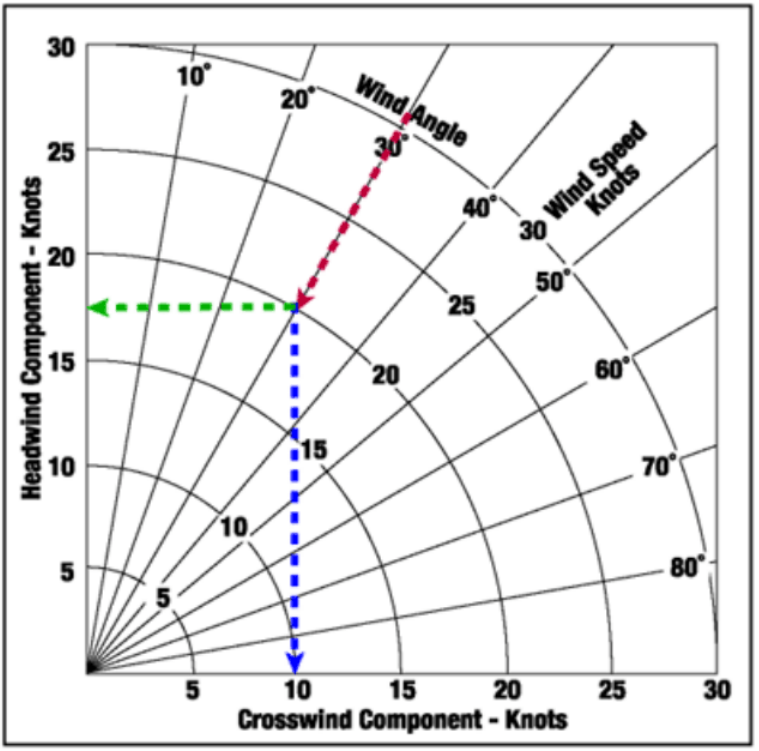
**Block 1.** Check the type flight plan. Check both the VFR and IFR blocks if composite VFR/IFR.
**Block 2.** Enter your complete aircraft identification including the prefix "N" if applicable.
**Block 3.** Enter the designator for the aircraft, or if unknown, consult an FSS briefer.
**Block 4.** Enter your true airspeed (TAS).
**Block 5.** Enter the departure airport identifier code, or if unknown, the name of the airport.
**Block 6.** Enter the proposed departure time in Coordinated Universal Time (UTC) (Z). If airborne, specify the actual or proposed departure time as appropriate.
**Block 7.** Enter the appropriate VFR altitude (to assist the briefer in providing weather and wind information).
**Block 8.** Define the route of flight by using NAVAID identifier codes and airways.
**Block 9.** Enter the destination airport identifier code, or if unknown, the airport name.
***NOTE-***
*Include the city name (or even the state name) if needed for clarity.*
**10. Block 10.** Enter your estimated time en route in hours and minutes.
**11. Block 11.** Enter only those remarks pertinent to ATC or to the clarification of other flight plan information, such as the appropriate radiotelephony (call sign) associated with the designator filed in Block 2. Items of a personal nature are not accepted.
**12. Block 12.** Specify the fuel on board in hours and minutes.
**13. Block 13.** Specify an alternate airport if desired.
**14. Block 14.** Enter your complete name, address, and telephone number. Enter sufficient information to identify home base, airport, or operator.
***NOTE-***
*This information is essential in the event of search and rescue operations.*
**15. Block 15.** Enter total number of persons on board (POB) including crew.

**16. Block 16.** Enter the predominant colors.

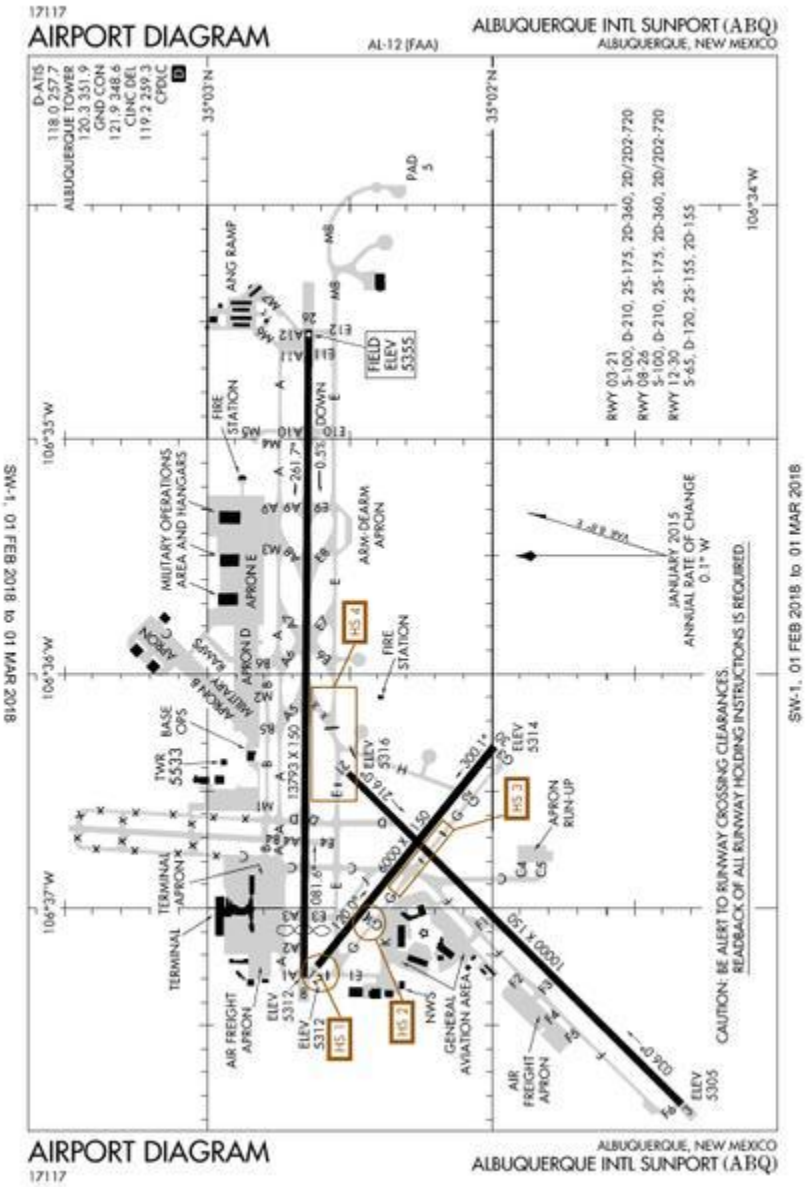
# PIREP FORMAT

| PIREP CODE | INFORMATION |
|---|---|
| OV = Location | |
| TM = Time (Z) | |
| FL = Altitude (MSL) | |
| TP = Type (aircraft) | |
| SK = Sky cover | |
| WX = Visibility, weather | |
| TA = Temperature (C) | |
| WV = Wind velocity | |
| TB = Turbulence | |
| IC = Icing | |
| RM = Remarks | |

# CROSSWIND COMPONENT CHART




**Kirtland Flight Center – Maximum headwind 25 knots; maximum crosswind 15 knots**


17117
AIRPORT DIAGRAM
ALBUQUERQUE INTL SUNPORT (ABQ)
ALBUQUERQUE, NEW MEXICO
AL-12 (FAA)
D-ATIS 118.0 257.7
ALBUQUERQUE TOWER 120.3 351.9
GND CON 121.9 348.6
CLNC DEL 119.2 259.3
CPDLC
35°03'N
35°02'N
106°35'W
106°36'W
106°37'W
106°34'W
RWY 03-21 S-100, D-210, 25-175, 2D-360, 2D/2D2-720
RWY 08-26 S-100, D-210, 25-175, 2D-360, 2D/2D2-720
RWY 12-30 S-65, D-120, 25-155, 2D-155
FIELD ELEV 5355
PAD 5
ANG RAMP
FIRE STATION
MILITARY OPERATIONS AREA AND HANGARS
APRON D
APRON E
ARM-DEARM APRON
APRON A
APRON B
MILITARY APRONS
TWR 5533
BASE OPS
TERMINAL
TERMINAL APRON
AIR FREIGHT APRON
ELEV 5312
ELEV 5316
ELEV 5314
ELEV 5305
13793 X 150
10001 X 150
6001 X 150
NWS
GENERAL AVIATION AREA
APRON RUN-UP
HS 1
HS 2
HS 3
HS 4
JANUARY 2015
ANNUAL RATE OF CHANGE 0.1° W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
SW-1, 01 FEB 2018 to 01 MAR 2018
SW-1, 01 FEB 2018 to 01 MAR 2018
AIRPORT DIAGRAM
17117
ALBUQUERQUE, NEW MEXICO
ALBUQUERQUE INTL SUNPORT (ABQ)