

Mountain Flying Checklist

IMPORTANT NOTE: Take the FIRST Step: Attend a comprehensive Mountain Flying Ground School before attempting a Mountain-Cross-Country Flight!

PREFLIGHT PLANNING

General – Make sure both you and your aircraft are mountain flight candidates.

- 1. Plan for DAY-ONLY VFR flying
- 2. Plan for ETA's NO LATER than 1300L to mountain destination

Preflight Weather Briefing

- Cloud Height and Ceilings must be known for mountain top conditions: 15 miles flight visibility as a minimum
- Winds aloft: Maximum of 30 knots at 6,000/9,000/12,000 MSL
- Temperatures: surface temps for density altitude calculation; temps aloft for route performance

Route Planning

- Plan accurate routes with magnetic course and wind correction angle calculated
- Know elevations and plan for at least 1,000 AGL

Weight and Balance

Preflight weight and balance with takeoff weight no more than 90% of FAA maximum gross weight in the pilot's operating handbook (POH).

Fuel on Board

Fuel on board = planned burn out plus 1 hour or more reserve.

File a VFR Flight Plan

- Only AFTER all limitations are met. If not, cancel, select an alternate route or rent a car
- This is your "Insurance Policy." Keep it up to date, with position reports.

Survival Kit: *Have a survival kit and have warm clothing for all occupants.*

PERFORMANCE PLANNING

Lean Mixture, as appropriate (EGT-Fuel Flow)

- a.) Set for taxi/run-up
- b.) Set for takeoff power
- c.) Set for Cruise
- d.) Set for approach

Takeoff Ground Roll / Rate of Climb

- Calculate for existing temperature. (See POH & Density altitude chart).
- Expect excessive ground roll and sub-standard Rate of Climb.
- Monitor VSI and airspeed during all climbs and descents.
- Know the ground track, for a safe departure. Check with FBO/CFI/other pilots

ENROUTE PROCEDURES

Communications Plan

- ACTIVATE THE VFR FLIGHT PLAN, make frequent position reports and PIREPS.
- Know FSS and other comm. frequencies for the entire route.

Navigation

On all Route Segments:

- Fly planned altitude.
- Maintain magnetic headings, corrected for drift, for *each* route segment

Mountain Technique

1. **Canyon & Drainage Routes**
 - a. Fly the windward side, never up the middle of a canyon.
 - b. Scan for Opposite Direction Traffic.
2. **Ridge / Pass Crossing**
 - a. Terrain Clearance: at least 1,000 Feet AGL.
 - b. Always identify your "escape" paths as early as possible.
 - c. Approach at 45 degrees; exit at 90 degrees.

DESCENT AND LANDING PROCEDURES

1. Know the pattern or approach track for the destination field
2. Determine a safe go-around track for the destination. Remember, a go-around may not be possible!
3. Fly a stabilized approach at appropriate IAS.
4. Plan the touchdown at 1,000 feet from the start of useable runway.
5. CLOSE YOUR FLIGHT PLAN (& give a final PIREP when you do!).

CALCULATING DENSITY ALTITUDE

Step 1: Find the pressure altitude by locating the altimeter setting of 29.70 in. Hg. and noting the pressure altitude conversion factor. The conversion factor is either added or subtracted from the airport elevation as indicated. In this case, the factor is 205 and should be added. The pressure altitude is 2,750 feet (2,545 + 205 = 2,750).

Step 2: Locate the outside air temperature of 70 degrees at the bottom of the chart and draw a vertical line until it intersects with the pressure altitude of 2,750 feet. (The pressure altitude of 2,750 feet is located about 3/4ths up between the 2,000 and 3,000-foot lines.)

Step 3: From where the temperature and pressure altitude lines intersect, draw line to the left to determine the density altitude. The density altitude is 4,000 feet.

If at any time the conditions for continued flight appear doubtful---- land at a suitable alternate airport---- which may well be your departure point.

(The density altitude chart is on next page)

DENSITY ALTITUDE CHART

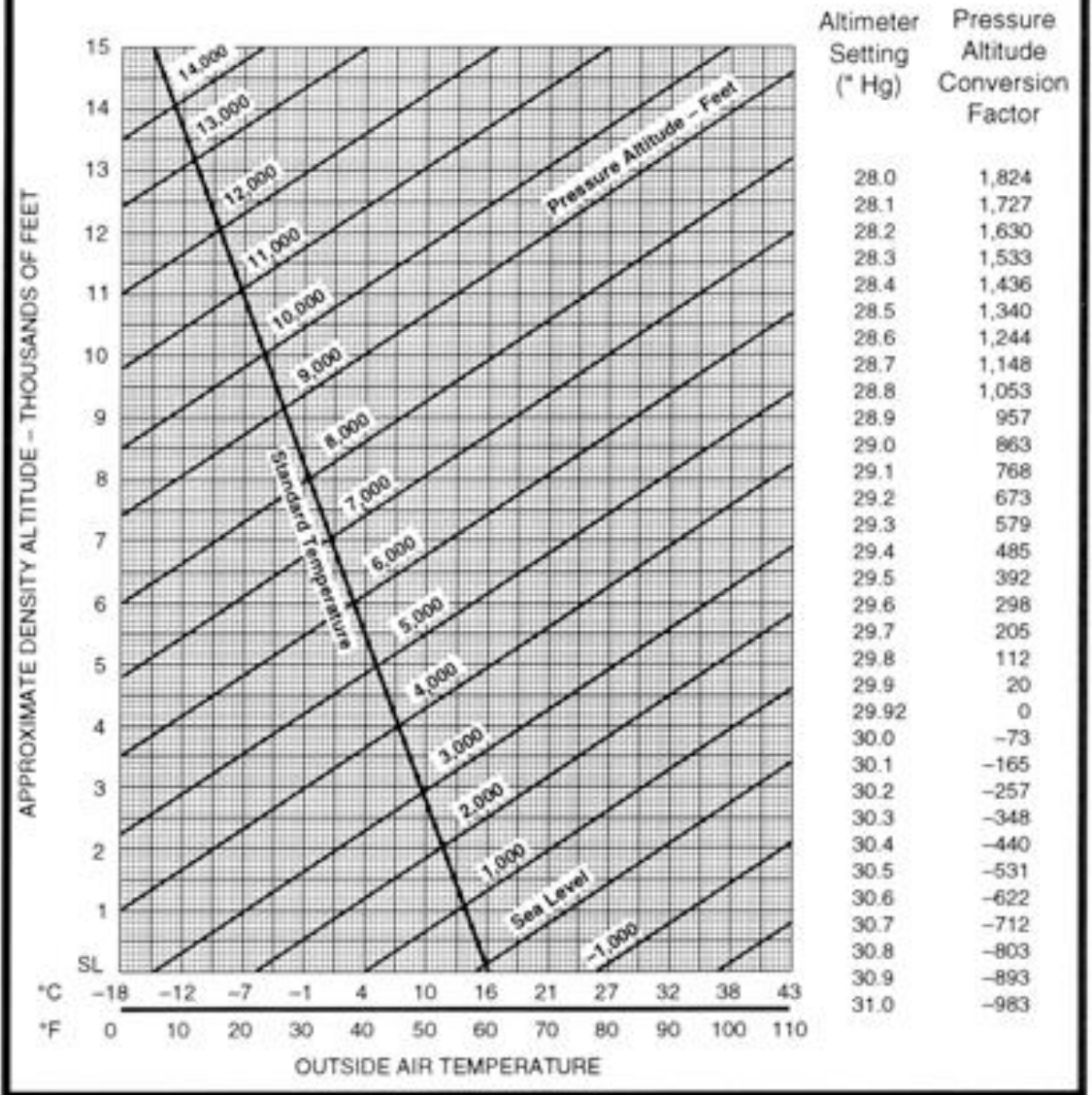


FIGURE 8.—Density Altitude Chart.