

Mountain, Canyon and Backcountry Flying: Topics for Discussion

Mountain Meteorology

- General circulation patterns
- Orographic effects
- Solar influences
- Mountain Waves
- Pressure patterns
- Haystack effect
- Mesas and canyons

Canyon Meteorology

- Diurnal effect
- Convergence effect
- Venturi effect
- Winds and turbulence

Aircraft Performance

- Preflight preparation
- Fuel planning
- Leaning the mixture
- Weight & balance
- Density altitude considerations
- Aircraft loading
- Important airspeeds
- “Intimate knowledge”
- Takeoff and landing performance
- Climb and cruise performance

Forced landings

- Terrain
- Weather and wind
- Pilot capabilities
- Aircraft capabilities

Flight Planning

- Dispatching
- Precautionary landings
- Forced landings

Emergency Procedures

- ELT and PLB
- Survival kit and survival training

Landing Areas

- Unimproved strips
- Short, soft, and rough strips
- Humps, dips, doglegs and sidehills
- Grass, long grass, wet grass
- Wildlife
- Other aircraft

Aircraft Operations

- Pre-flight planning
- Loss of control prevention
- Moose stalls
- Terrain flying
- Non-standard traffic patterns
- Canyon turns
- Constricted approaches
- Pre-landing checklists
- Stabilized mountain approach
- Takeoff and landing uphill and downhill
- Takeoff and landing with surface winds
- When not to land
- When not to takeoff
- Go-arounds
- Sun angle in high relief terrain
- Ground effect
- Use of flaps
- Retractable gear operations
- Communications
- Minimizing impact
- Taxi and ground operations
- Pilot etiquette
- Parking tips

Navigation

- Maps and charts
- Flying drainages
- Ridges and passes
- Route planning
- GPS -advantages and hazards