

# Welcome to Flying Idaho

Important tips and information for pilots flying to Idaho



Idaho Division of Aeronautics  
1390 W Gowen Road  
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[itd.idaho.gov/aero](http://itd.idaho.gov/aero)

# NOTES



## **IDAHO TRANSPORTATION DEPARTMENT**

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1390 W Gowen Road, Boise ID 83705

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Fellow Aviators:

Welcome to flying in Idaho!

Idaho's vast natural resources, unique recreational opportunities and diverse communities provide incredible experiences for thousands of visiting pilots every year.

Our State's unique landscape ranges from remote mountains to densely forested lake regions to the high desert including Craters of the Moon. These varied landscapes include nearly 100 backcountry airstrips and immense uncontrolled airspace providing the ideal environment to discover our rich aviation history. Nearly 100 years ago, miners, loggers, homesteaders and forest managers recognized the importance of aviation in Idaho leading to the opportunities we have today.

We encourage you to discover some of our 32 state owned and operated airstrips, four of which are so popular we hire seasonal caretakers to maintain the facilities and greet our visiting pilots. Those airstrips include Garden Valley, Smiley Creek, Johnson Creek and Cavanagh Bay. While we want our visitors to enjoy all that Idaho aviation has to offer, safety is our foremost concern. Therefore, we have published standard operating procedures for each of our state operated airstrips and an Idaho Airport Facilities Guide for those airstrips and many more.

In addition, within this pamphlet are other items to help make your flying experience as safe as possible. We have included a quick reference sectional chart, density altitude chart, mountain flying tips and an "Important Links" page for additional resources.

Our dedicated team at the Idaho Division of Aeronautics is here to help make your flying experience in Idaho safe and a positive memory that lasts forever.

Fly safe and welcome to Idaho!

Sincerely,

Thomas "Tom" Mahoney  
Administrator  
Idaho Division of Aeronautics

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# MOUNTAIN FLYING TIPS

Prior to flying into the backcountry, consider the following:

## GENERAL

1. Do not consider flying the mountain country until you are proficient in slow flight. **Instruction from an experienced mountain flying instructor is strongly recommended.**
2. Before flying into mountainous areas, practice short field landings; power-on, upwind, downwind and crosswind. Be sure you can land within a fifty foot spot every time.
3. Know your aircraft. Most airports in the Idaho Mountains are substandard in length and width and have an associated high density altitude. It takes considerable experience to handle an aircraft in the mountain environment.
4. Keep your aircraft weight as light as possible.
5. Know your destination and alternate airports. Consult with experienced mountain pilots for specifics such as altitude, length, conditions and approach and departure procedures for your intended airport. At many of the airports a go-around is not possible once you have committed to land.
6. Check the weather frequently and stay out of marginal or bad weather. Mountain weather changes rapidly and unexpectedly.
7. Plan your flight to arrive in the early morning hours. As a rule, the air begins to deteriorate around 10:00 a.m., grows steadily worse until about 4:00 p.m., and then gradually improves until dark.
8. Stay out of the mountains if the wind is over 25 knots.
9. Route your trip over valleys whenever possible and study your charts thoroughly. Watch your compass heading to avoid getting lost.
10. Know your position and announce frequently on 122.9 MHz to let other pilots in the area know your position and your intentions. Example: "9438M over Warm Lake at 9500 for Johnson Creek."
11. Fly to the right side of the canyon if possible.
12. Turn on your landing lights during arrival and departure.
13. Maintain a minimum of 2000' AGL while flying over the backcountry. Remember: others are in the mountains to enjoy a wilderness experience.
14. Approach all ridges at an angle so that you can turn away if you encounter a downdraft. After crossing the ridge, head directly away from it.
15. Expect the wind to be changing constantly in the mountains. Do not rely on the cloud shadows for wind direction. If you are unable to gain altitude on one side of the canyon, try the other side. If there is no improvement there, fly the center. **But do not, under any circumstance, fly up a canyon or valley without sufficient altitude and room to turn around.** The grade of the canyon may climb faster than your aircraft.
16. Maintain flying speed in downdrafts.
17. Remember you will not have a horizon to check your aircraft attitude during descent in the mountains. Watch your airspeed and cross-check your instruments.
18. Caution: traffic pattern terrain clearance is not standard at many mountain airports.
19. Remember that mountain airports are subject to ongoing damage by weather, livestock, wild animals, and aircraft operations. Most of them are unfenced and wild animals and livestock may be on runways.
20. Above all, FLY THE AIRCRAFT EVERY SECOND, DO NOT LET IT "FLY YOU."

Under ordinary circumstances you can expect the wind to be blowing upstream in the late morning and afternoon as the air heats up, and downstream in the evening as it cools. The wind is affected by the topography. With a little analysis you can tell where the updrafts and downdrafts are likely to be. As a general rule, air follows the contour of the land it flows over. Use the updrafts to help you gain altitude.

Be sure to leave your itinerary and emergency contact phone numbers with someone. Instruct them to act IMMEDIATELY in the event you have not made contact by the identified time.

Always remember you are flying in a sparsely populated area. If you have an accident, it may be a long time before anyone knows about it.



You may be landing on airports where there is no one to help you in case of trouble, and it can be a long walk out. Do not take chances. Equip yourself with proper clothing and at least minimum survival equipment on any flight into mountainous areas.

Make sure your Emergency Locator Transmitter (ELT) is registered and operational and your Personal Locator Beacon (PLB) are in good working condition.

## **LANDINGS**

Safety of flight dictates that each pilot transmit in-the-blind on the appropriate frequency whenever approaching or departing a non-unicom equipped airport to advise other aircraft of your location and intentions.

You cannot maintain visual contact with the runway at many of the backcountry airports during the approach. This situation will make it mandatory that you know the location and intentions of all other airport traffic. These airports receive considerable use when forest fires or similar emergency conditions exist. Make periodic position reports on 122.9 while flying over the backcountry, giving your location, altitude and destination. This will keep other pilots advised of your intentions and will greatly aid in any rescue effort that may be necessary.

1. Terrain, runway gradient, and wind direction usually dictates landing direction. However, there are exceptions. Consult the airport directory for the preferred runway for landing. Maintain the recommended approach speed with power (see pilot's operating handbook). Retract the flaps immediately after touch down to permit the aircraft weight to settle on the gear and increase braking effectiveness.
2. If you find turbulent air when you descend into the canyons, return home. Turbulent air has no respect for you, regardless of your experience or ability.
3. After landing, park your aircraft well clear of the useable runway surface.
4. Check the ELT on 121.5 MHz before leaving aircraft.
5. Few backcountry airstrips have telephone or cellular phone service. Pilots must have other means such as satellite service to close or open flight plans.

## **TAKEOFFS**

1. Temperature increases density altitude (that altitude the aircraft "thinks" it is at) so a 5000' airport elevation can be well above 8000' density altitude on a hot day. You should compute your takeoff roll using your pilots operating handbook or other published guidelines. Also, compute your rate-of-climb to ensure you can achieve and maintain terrain clearance. If in doubt, do not take off (See Density Altitude Chart, page 6 and Koch chart, page 7).
2. Use common sense on takeoffs. If the air is turbulent, weather is marginal, or you have a tailwind, wait until conditions improve. Remember: most of these airports are not long enough to abort a takeoff attempt once airborne. Let the aircraft use as much runway as it needs, then it will be flying when it leaves the ground. Do not force the aircraft off the ground; be sure you gain adequate flying speed.
3. You may shorten the takeoff distance, and lessen propeller wear, by making your turn at the end of the runway at taxi speed. Open the throttle as the aircraft aligns with the runway. Practice the maneuver with an instructor on a standard airport.
4. If you have not attained 70% of your takeoff speed when passing the 50% mark on the runway, abort your takeoff.

## **COMMON COURTESY**

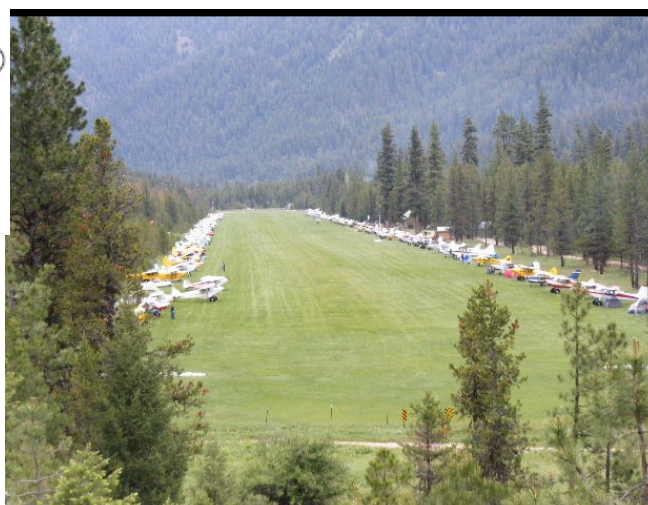
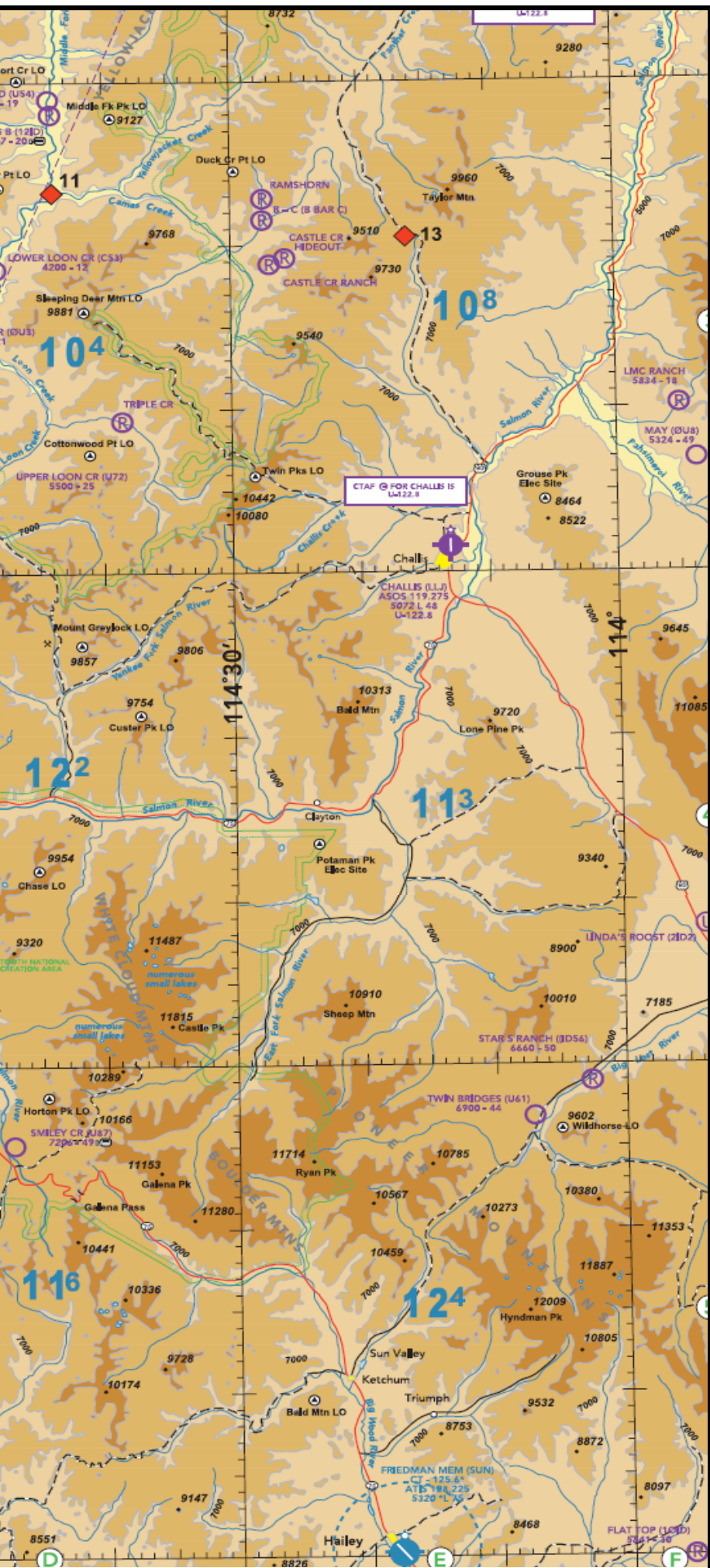
Wilderness areas and backcountry airstrips are particularly sensitive to human impact. Wilderness airports serve as access portals for wilderness-dependent activities such as hunting, fishing, rafting, backpacking, etc.

- **Be considerate of other users at our public lands and wilderness areas.**
- **No noisy activities.**
- **Minimize practice landings and takeoffs.**
- **Practice "Leave no Trace" principles.**
- **Respect land owner wishes**









# Important Links & Phone #s

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## ***Flight Planning Tools***

Interactive Density Altitude Chart      [e6bx.com/density-altitude](http://e6bx.com/density-altitude)



Interactive Koch (Performance) Chart      [www.takeofflanding.com](http://www.takeofflanding.com)



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## ***ITD Division of Aeronautics***

Calendar of Events, Staff Contacts,  
Aircraft & Dealer Registration,  
FAQs, Facility Directory,  
Backcountry Airstrips      [itd.idaho.gov/aero](http://itd.idaho.gov/aero)  
208 - 334 - 8775



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## ***Idaho Aviation Association (IAA)***

Backcountry Instructors,  
Membership, News & Events,  
Airstrip Cams, Scholarships, Store      [idahoaviation.com](http://idahoaviation.com)  
208 - 803 - 5722



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## ***Idaho Airstrip Network (IAN)***

Airstrip owners      [idahoaviation.com/resources/idaho-airstrip-network/](http://idahoaviation.com/resources/idaho-airstrip-network/)



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## ***Webcams & Maps***

FAA Webcams      [weathercams.faa.gov/](http://weathercams.faa.gov/)





IAA Webcams

[idahoaviation.com/iaa-webcams-page/](http://idahoaviation.com/iaa-webcams-page/)



Aeronautical Charts for Purchase

[idaho-aviation-association.myshopify.com/](http://idaho-aviation-association.myshopify.com/)



Idaho 511 Map (Highway & Airport Webcams)

[511.idaho.gov](http://511.idaho.gov)



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### ***Emergency Contacts***

Report Missing or Overdue Aircraft

Idaho State Communications:  
208 - 846 - 7600 or  
800 - 632 - 8000

FAA Operations (Seattle Office)

800 - 231 - 2000

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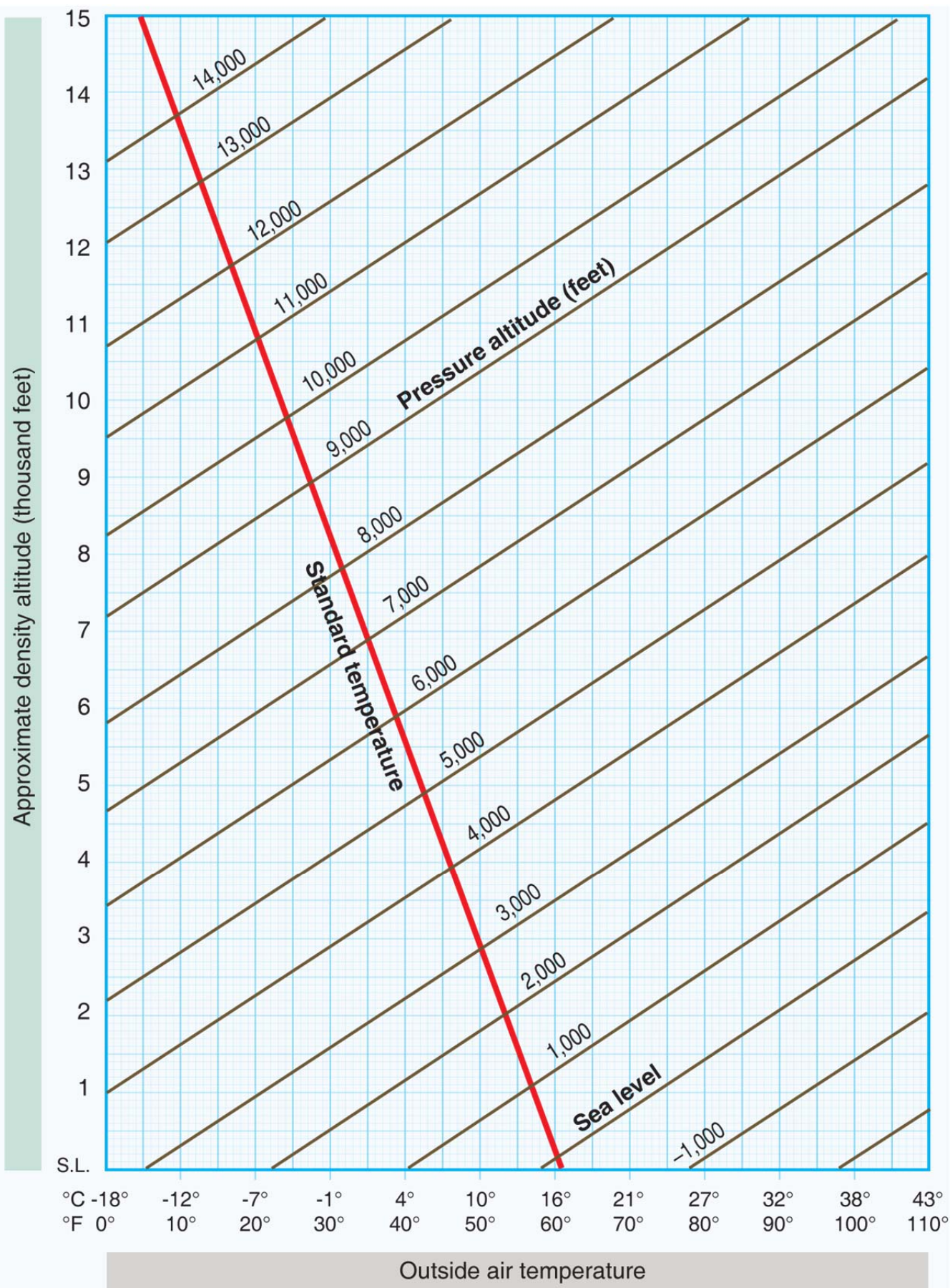
### ***UAS Pilot Resources***

FAA UAS Guidelines

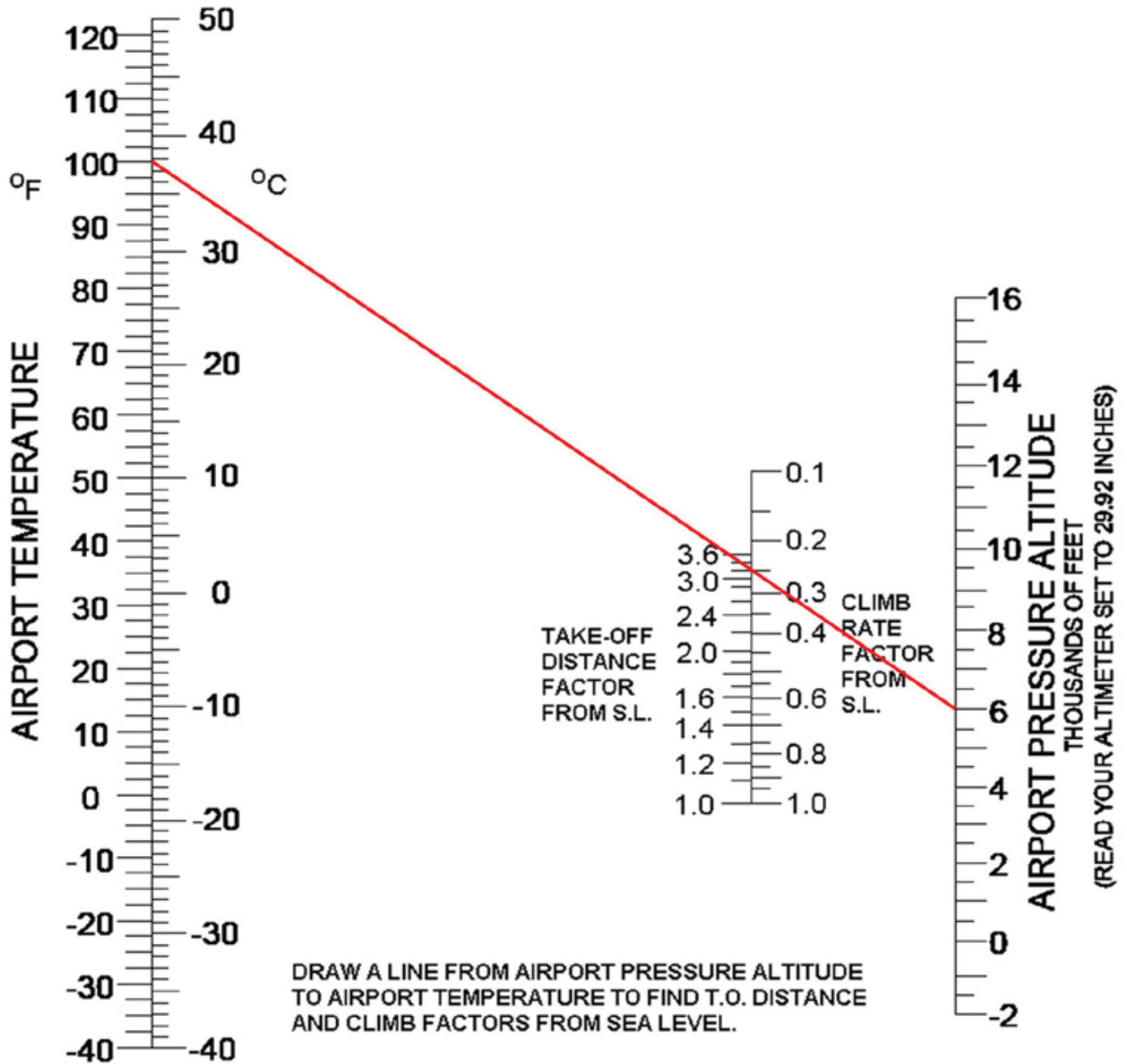
[www.faa.gov/uas](http://www.faa.gov/uas)



# Density Altitude Chart



# KOCH CHART



The Koch chart for calculating the take-off distance factor and the climb rate factor from the airport temperature and pressure altitude. The red line, connecting an airport temperature of 100°F with an airport pressure altitude of 6,000 feet, passes through a take-off distance factor of 3.2 and a climb rate factor of 0.25. This means that the takeoff roll will take 3.2 times the runway length that would be required at sea level, and the climb rate will be only 0.25 of that at sea level, given a standard atmosphere.



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