

# 2022 PPC AirVenture Clinic Lesson Plan

*Provide educational resources and opportunities to develop better, safer pilots.*

## Backcountry Awareness

**Subtitle:** Noting the Differences

### Clinic Overview

**Date:** Friday, July 29, 2022 from 8:00 - 12:00 & Saturday, July 31, 2022 from 12:00 - 17:00

**Description:** The popularity of backcountry flying has increased dramatically over the past several years but so have the number of accidents. This clinic provides pilots with a detailed review of flight fundamentals that are critical to safe flying in the backcountry. Topics include density altitude, canyon turns, abort points, energy management, and short field operations. Breakout sessions include a series of flight simulation exercises designed to extend the knowledge-based discussions a hands-on grasp of procedures.

Friday Morning Schedule

Daily Schedule	AM	Duration
Check/Breakfast	07:30	30
Keynote	08:00	
	08:45	45
	Break	5
Breakout 1	08:50	
	09:35	45
	Break	5
Breakout 2	09:40	
	10:25	45
	Break	5
Breakout 3	10:30	
Flight Simulation	11:15	45
Debriefing	11:20	
Check Out	12:00	40

Saturday Afternoon Schedule

Daily Schedule	AM	Duration
Check/Breakfast	12:30	30
Keynote	13:00	
	13:45	45
	Break	5
Breakout 1	13:50	
	14:35	45
	Break	5
Breakout 2	14:40	
	15:25	45
	Break	5
Breakout 3	15:30	
Flight Simulation	16:15	45
Debriefing	16:20	
Check Out	17:00	40

**Clinic Objectives:** The joy and freedom of backcountry flying is an alluring prospect for pilots. However, many pilots are unfamiliar and inexperienced with its environmental threats. Most backcountry airports are unmarked, unimproved and not level. Animals roam freely on landing areas. Weather can change dramatically over a short period of time. The effects of density altitude are extreme and can be underestimated. Mountain and canyon flying can be dangerous and pilots would do well to seek instruction before venturing out on their own.

**Clinic Program:** The clinic consists of a keynote and three breakout sessions, including a flight simulation component with four backcountry exercises.

## Knowledge

John McKenna

**Keynote - "The Magic of the Backcountry"**

Amy Hoover / Bill McGlynn

**Breakout Session - "The Unique Environment of the Backcountry".**

John "JC" Carroll

**Breakout Session "Skills & Tips to Operate Safely in the Backcountry".**

## Flight Simulation

### **"Welcome to Landmark USFS"**

Arrivals and Departures at Landmark USFS / Canyon Turns. Four (4) flight simulation missions, exercises, that focus on arrival and departure procedures at a backcountry airport - Landmark USFS (0U0). All flown with stock Redbird C172.

### **Exercise 1: Approach and landing at Landmark USFS (0U0).**

Noting the differences between approaching a backcountry vs a frontcountry airport. The airplane is positioned approximately 4 miles south of 0U0 at 7700' (approximately 1,000' AGL) inbound for landing. The weather is clear and the wind is calm. Sim instructors should encourage shop the field looking for, 1. the slope of the field to determine the landing direction, ID an abort point for a safe go-around and get a picture of the best departure corridor and procedure. Land and use technique best etiquette for taxi to parking.

### **Exercises 2 & 3: Departures from Landmark USFS (0U0) - Morning vs Afternoon**

Flight 1 - Early morning, temperature; 65° - no wind and CAVU. Flight 2 - Mid afternoon, temperature 90° - no wind and CAVU. Opportunity for demonstration of reduced performance due

to density altitude. Instructors could be encouraged to have trainee vary the distances and direction of departures; i.e., uphill, downhill, obstacles, emergency landing spots, etc.

#### Exercise 4: “Landmark Short Cut”

Afternoon conditions favor a southerly departure from Landmark USFS (ØUØ) and the destination is McCall (KMYL) where you plan to get fuel. You see a pass to the west and decide to take it. The temperature is 85°, some light wind from the south and although there are just a few clouds there is a smell of smoke in the area. You successfully depart the field and enter the pass but you see that the a thick layer of smoke has created a ceiling towards the end, creating a virtual box canyon. You need to turn back. Opportunity for demonstration of reduced performance with density altitude, procedures for entering and flying down a pass and making turns in a narrow space.

#### Landmark USFS

All of the missions take place at Landmark USFS located in the central Idaho backcountry along Johnson Creek. The airstrip elevation is approximately 6700' and it is over 4100' in length; long by backcountry standards. The runway is a combination of grass and dirt. There is a windsock located midfield.



#### Landmark

Identifier: ØUØ

CTAF: 122.9

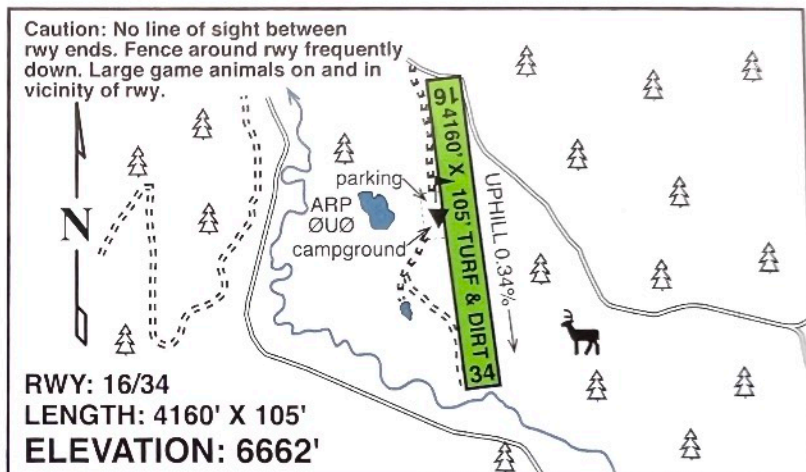
Lat: 44° 38.527' N

Class: Pimitive

AvGas: No

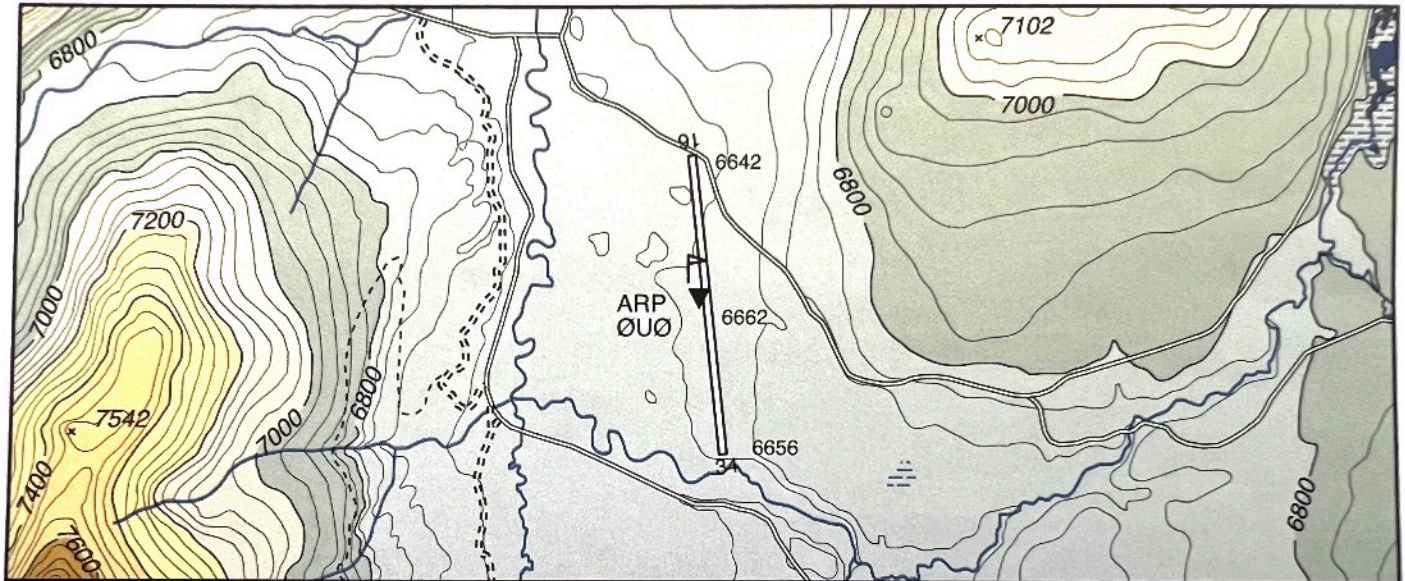
Long: 115° 32.003' W

Chart: Idaho

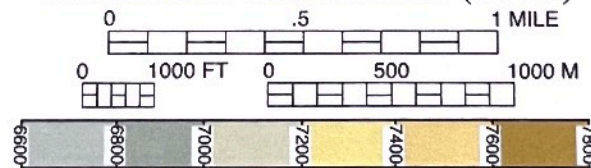


**AIRPORT REMARKS** • No line of sight between rwy ends. • Fence around rwy frequently down. • Large game animals on and in vicinity of rwy. • Use caution for ground vehicle on road crossing apr end of Rwy 16. • Refer to Pg. G-245.



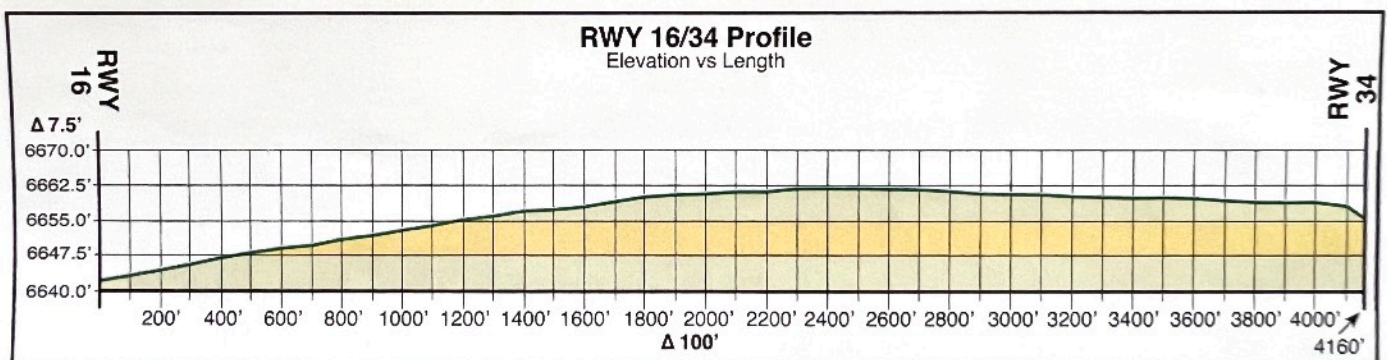


**Landmark**  
Terrain Elevation Model (TEM)



**Landmark**  
Runway Elevation Profile (REP)

ARP: ØUØ	RWY 16 Elev: 6642'	Length: 4160'	Elevation Gain: 14'	Survey Date: 06/13/10
ARP Elev: 6662'	RWY 34 Elev: 6656'	Width: 105'	RWY 16 Uphill: 0.34%	Surveyors: glh



## **Biographies:**

### **John McKenna**

Aloft above the Mining City of Butte, a kid seeing the grandeur of Montana's Rockies for the first time is destined to become passionate about aviation. Those early flights in a neighbor's Bonanza motivated young John McKenna to obtain his private pilot license at the age of 16.

For forty years, he's rarely traveled any other way, accumulating over five thousand hours, many in his Cessna 185. An IFR rating is attached to his ticket, but looking out the window at the mountainous west is John's favorite method of navigation.

### **Amy Hoover**

Dr. Hoover has over 7000 flight hours, including 3500 hours giving flight instruction. She has logged over 1200 hours of instruction time in flight simulators. Her journey into Aviation started in the early 1980s when her work as a geologist and white water river guide entailed flights into the remote river canyons in central Idaho; she has been hooked ever since. Hoover obtained her private license in 1989 in Salmon, Idaho, and bought a 1947 Cessna 120, which she flew from Idaho to Florida and back, stopping over for the winter to obtain her instrument rating, commercial pilot license, and flight instructor rating. In 1992, she landed a job as a backcountry Air Taxi pilot and began teaching mountain flying for the FAA. She is the FAA's 2022 National Certified Flight Instructor of the Year.

### **Bill McGlynn**

Bill McGlynn became a pilot in 1995 and currently flies a backcountry 182. He and his wife Julie live in Leavenworth, Washington where they enjoy being near their grandkids.

### **John "JC" Carroll**

JC is from Fort Wayne, Indiana, and he currently owns a 1973 Cessna 185. JC learned to fly at the Air Force Academy in the Aero Club where his passion for GA began in 1987. He went on to serve for 25 years between active duty and the Air National Guard. He spent his time flying both the A-10 and the F-16. JC is currently a captain at a major airline where he has been since 2001. He is married with three grown children.