

Flying The Idaho Back Country



JIM HUDSON

T-Craft Safety / Membership Director

April 26, 2016



Introduction
Backcountry Tour
Popular Strips & Resorts
Requirements,
Preparation and Training
Weather
Emergencies / Survival
Q & A

An aerial photograph of a mountain range. The foreground shows a valley with green forests and several small blue lakes. The middle ground features steep, rocky mountain slopes with patches of green vegetation. In the background, more mountain ranges are visible under a clear sky. The text is overlaid on the upper half of the image.

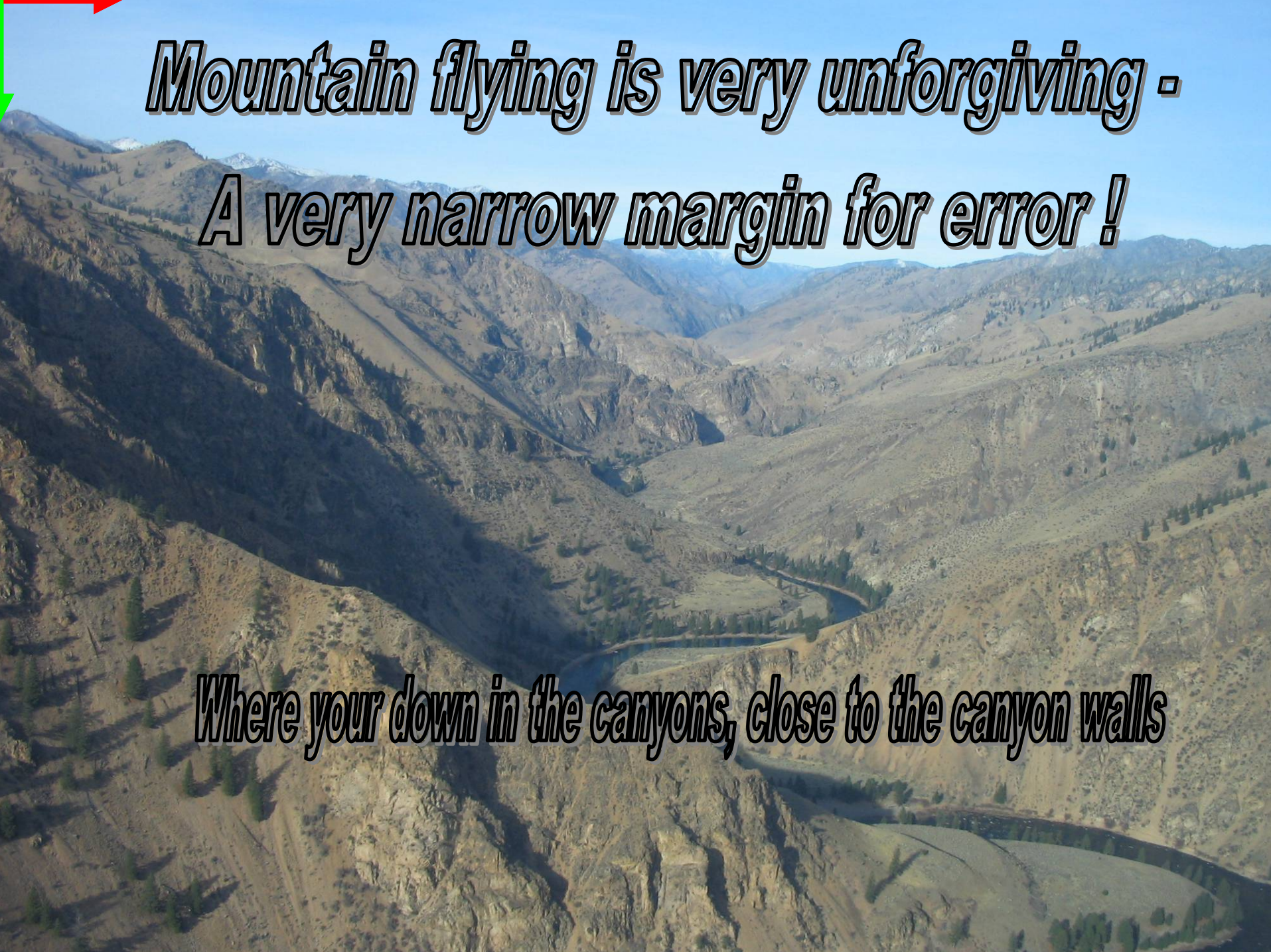
*What is Backcountry,
Mountain, Canyon Flying ?*

*Flying over or in beautiful
but rugged mountainous terrain*



or in deep canyons



An aerial photograph of a vast mountain canyon. A winding river flows through the center of the valley, surrounded by sparse vegetation and rocky terrain. The canyon walls are steep and rugged, with some snow-capped peaks visible in the distance under a clear blue sky.

Mountain flying is very unforgiving -

A very narrow margin for error !

Where your down in the canyons, close to the canyon walls

An aerial photograph of a mountain range. A narrow, rocky trail winds through a forested valley. The mountains are rugged and rocky, with some areas covered in green forest. The sky is blue with some clouds. The text is overlaid on the top half of the image.

*The more challenging strips are typically
narrow, short, and at high elevation*

Upper Loon Cr
5500' elevation
2500' length

An aerial photograph of a rugged mountain range with significant snow cover. The peaks are dark brown and jagged, contrasting with the white snow. The sky is clear and blue. The text is overlaid on the upper portion of the image.

Mountains don't need practice to bite you in the knickers

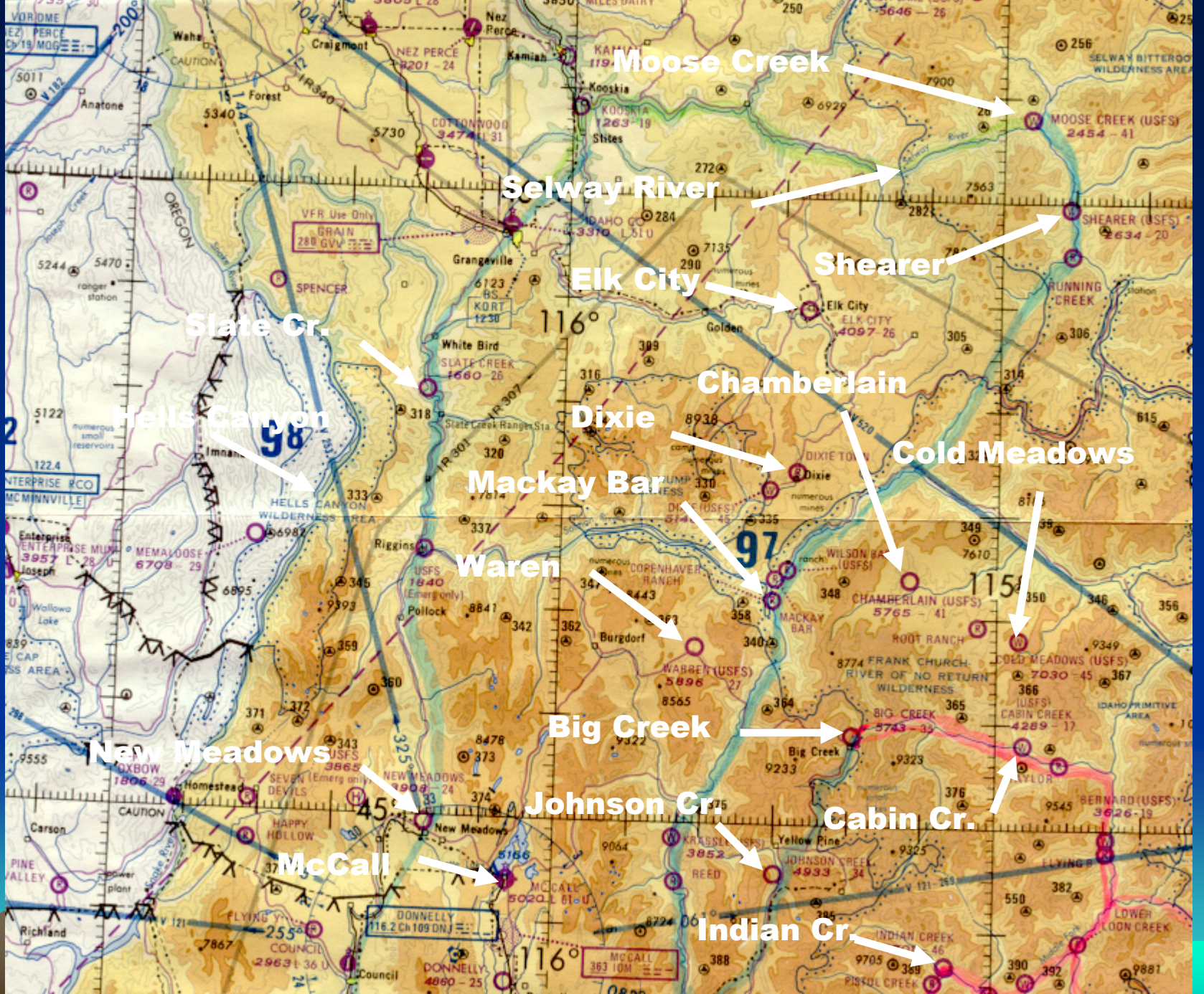
John Goostry, retired FAA Safety Specialist

*Part Time Pilots,
Full Time Mountains*



*Lets take a tour of some
of the more popular routes and strips*



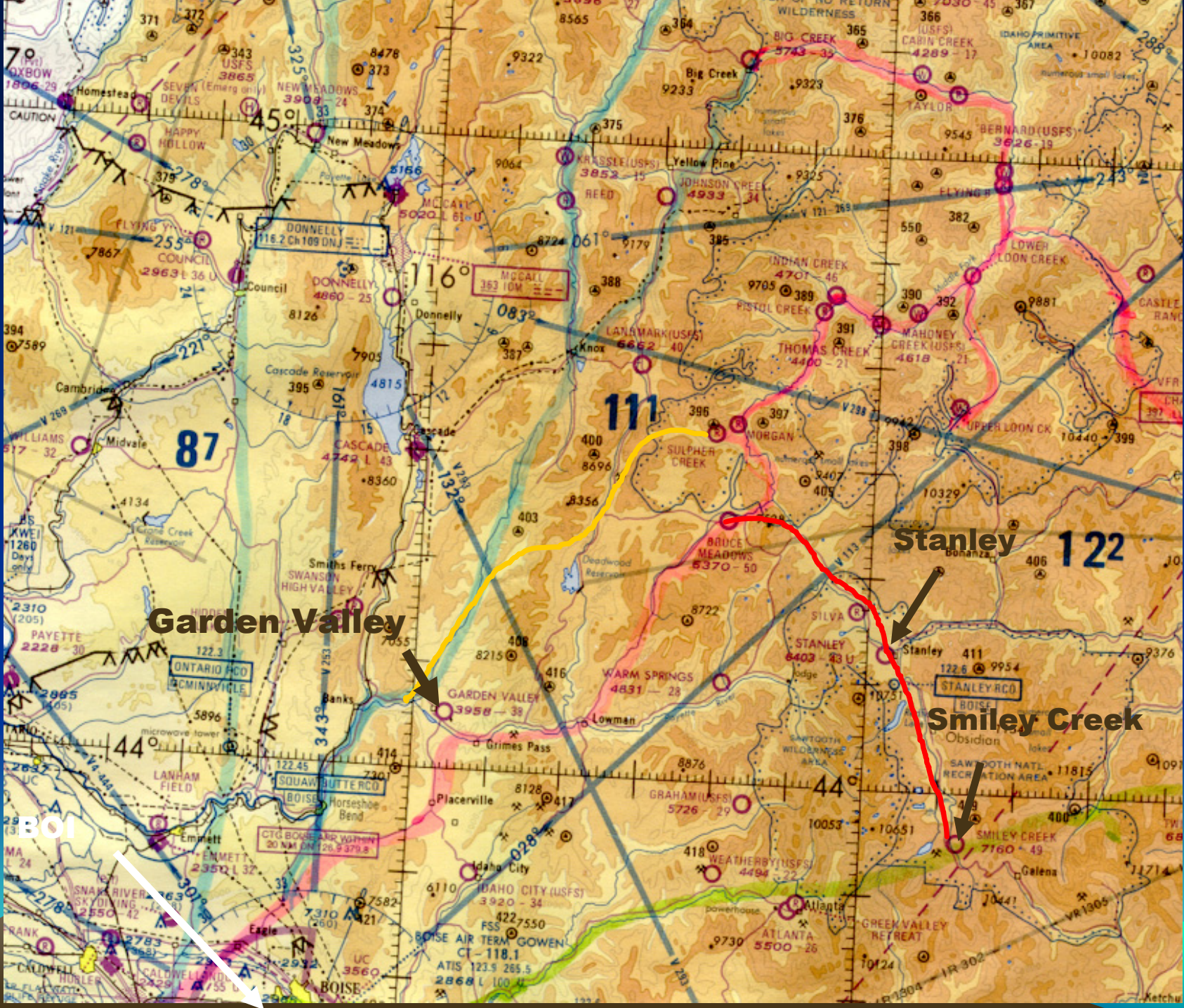


T-Craft BC Policy

Classification of Air Strips

Galen Hanselman's Fly Idaho Relative Hazard Index RHI

Level I Airports* RHI 1-9	Level II Airports* RHI 10-19	Level III Airports* RHI 20-28
3 Priest Lake (67S)	10 Slate Creek (1S7)	20 Weatherby (52U)
4 Smith's Prairie (2U0)	10 Memaloose (25U)	20 Graham (U45)
4 Murphy Hot Springs (3U0)	10 Landmark (0U0)	20 Cold Meadows (U81)
5 Cavanaugh Bay (66S)	11 Twin Bridges (U61)	21 Deadwood
5 Magic Reservoir (U93)	12 Chamberlain (U79)	22 Bernard (U54)
6 Elk River**	12 Magee (S77)	22 Krassel (24K)
6 Midway (U37)	12 Pine (1U9)	22 Upper Loon Creek (U72)
6 Bear Trap (1U0)	13 Elk City (S90)	23 Rogersburg
6 Fairfield (U86)	13 Flying B	24 Moose Creek (1U1)
7 Laidlaw Corrals (U99)	13 Greene Valley Ranch	24 Thomas Creek (2U8)
7 Grasmere (U91)	14 Big Creek (U60)	26 Dixie Town
7 Cox's Well (U48)	14 Johnson Creek (3U2)	26 Fish Lake (S92)
7 Big Southern Butte (U46)	15 Lord Flat	27 Dug Bar
7 Stanley (2U7)	15 Sulphur Creek	27 Pittsburg
7 Garden Valley (U88)	15 Indian Creek (S81)	27 Wilson Bar
7 Idaho City (U98)	17 Warren (3U1)	28 Shearer (2U5)
7 Smiley Creek (U87)	18 Orogrande	28 Big Bar
7 Antelope Valley (U92)	18 Cayuse Creek	28 Mahoney Creek (0U3)
8 Hollow Top (0U7)	19 Mackay Bar	28 Cabin Creek (I08)
8 Copper Basin (OU2)	19 Dixie USFS (ID05)	
9 Warm Springs (0U1)	19 Atlanta (55H)	
9 Henry's Lake (U53)		
9 Bruce Meadows (U63)		



Garden Valley

Stanley

Smiley Creek



Garden Valley



Level 1

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GV Fly-in Breakfast

June 11th, 2016



Breakfast



Safety Briefing





Spot Landing



Garden Valley

Warm Springs

Stanley

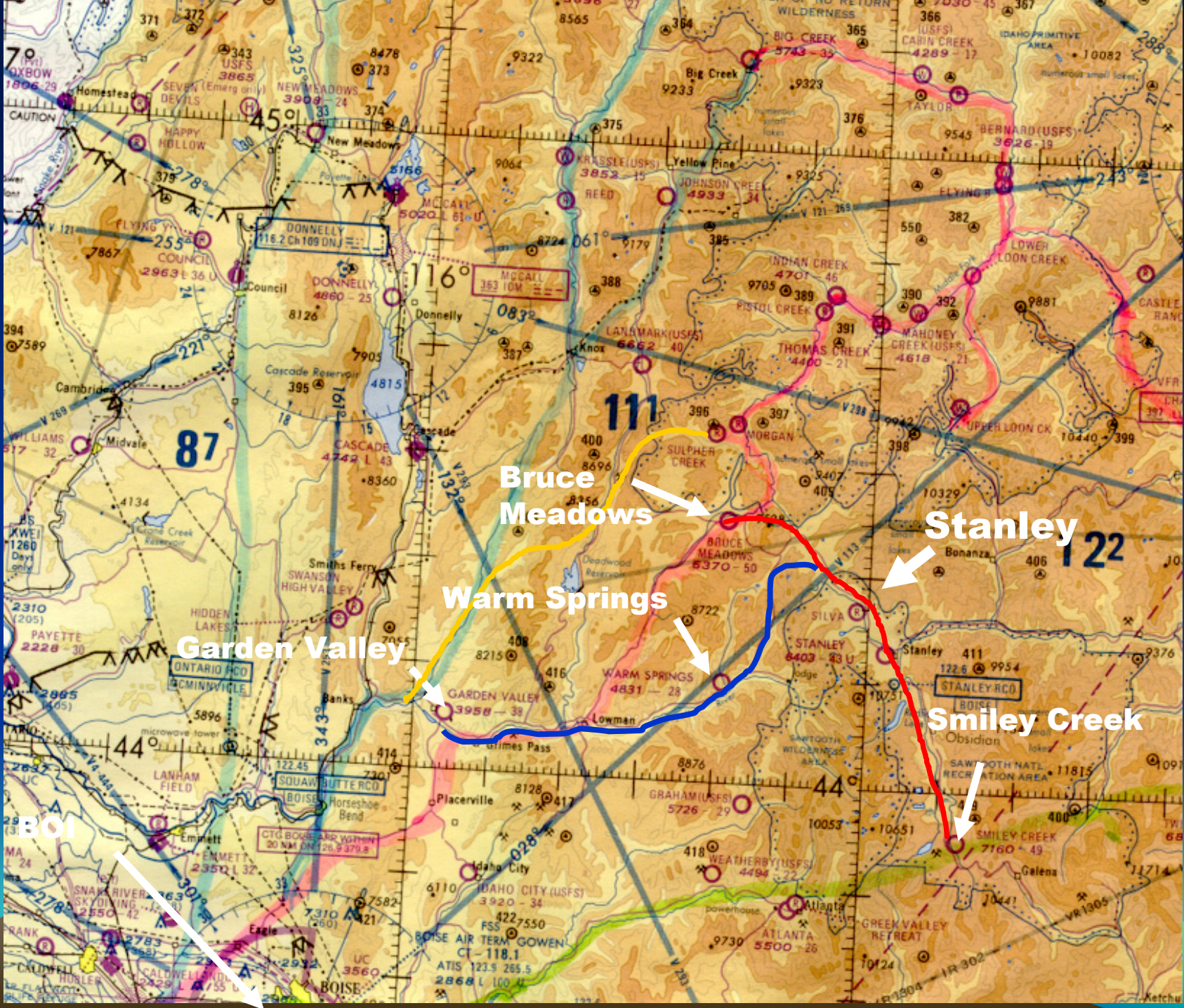
Smiley Creek



Warm Springs

Level 1

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Bruce Meadows

Stanley

Warm Springs

Garden Valley

Smiley Creek

BOI

Stanley

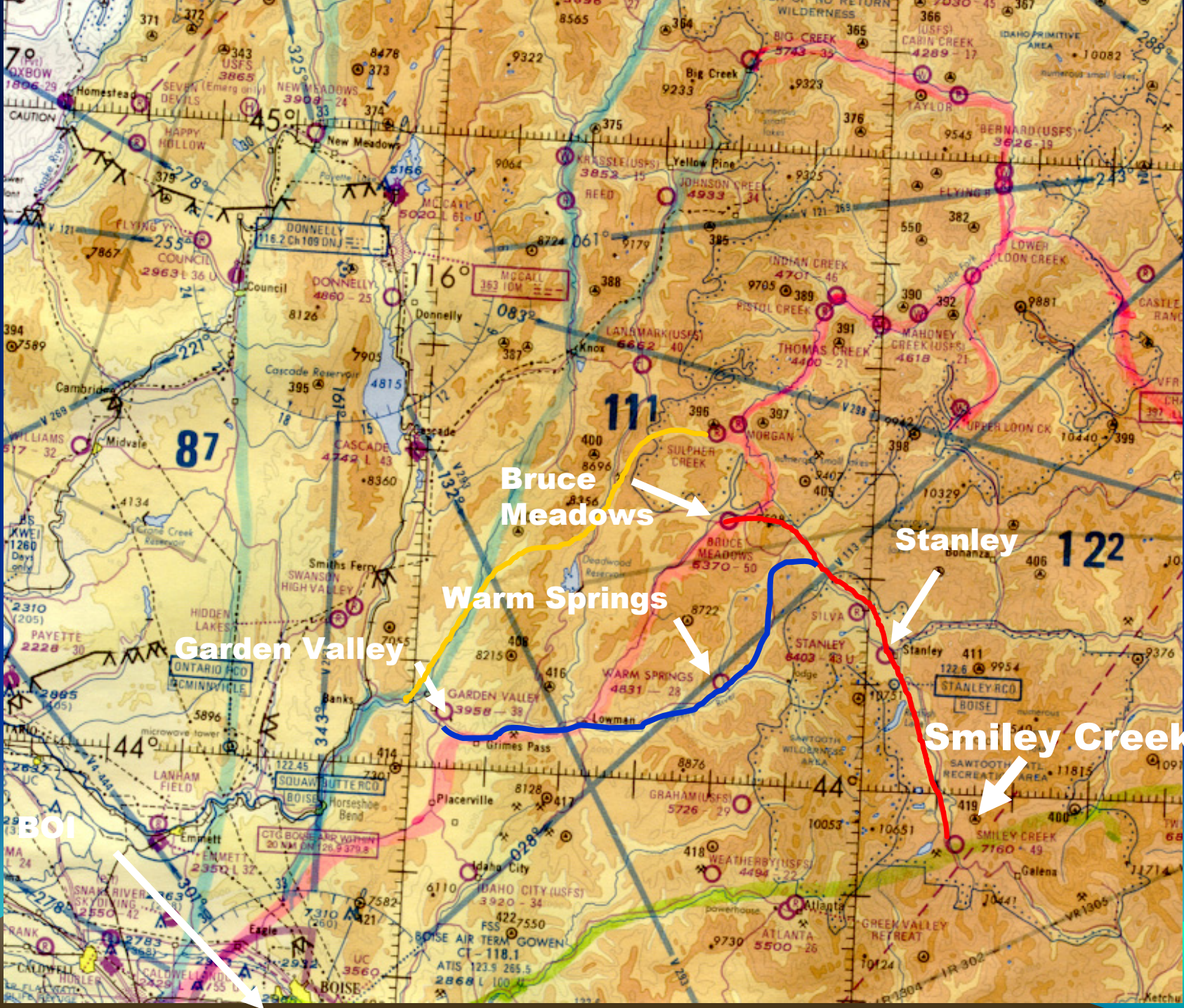






Redfish Lake - Mt Heybern





Bruce Meadows

Warm Springs

Garden Valley

Stanley

Smiley Creek

BOI

Smiley Creek

An aerial photograph of a valley. In the foreground, there are large green fields, some with dirt paths or roads. In the middle ground, a small town or village is visible, surrounded by trees and buildings. In the background, there are large, rugged mountains with some snow on their peaks under a blue sky with scattered white clouds.

Level 1

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Short Final Smiley Cr.



Sulphur Cr.

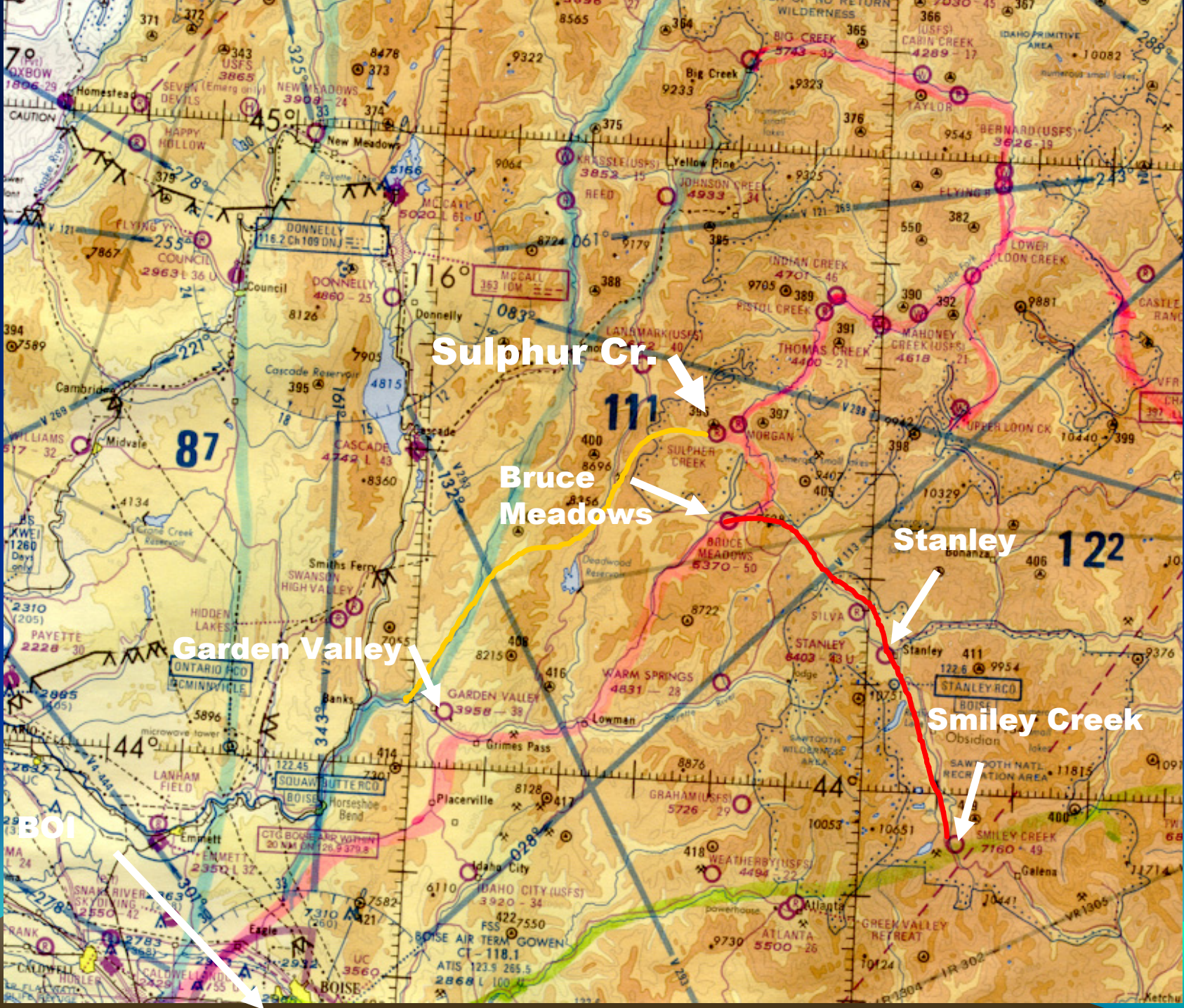
Bruce Meadows

Stanley

Garden Valley

Smiley Creek

BOI



Sulphur Creek

Level 2











Ben Brandt

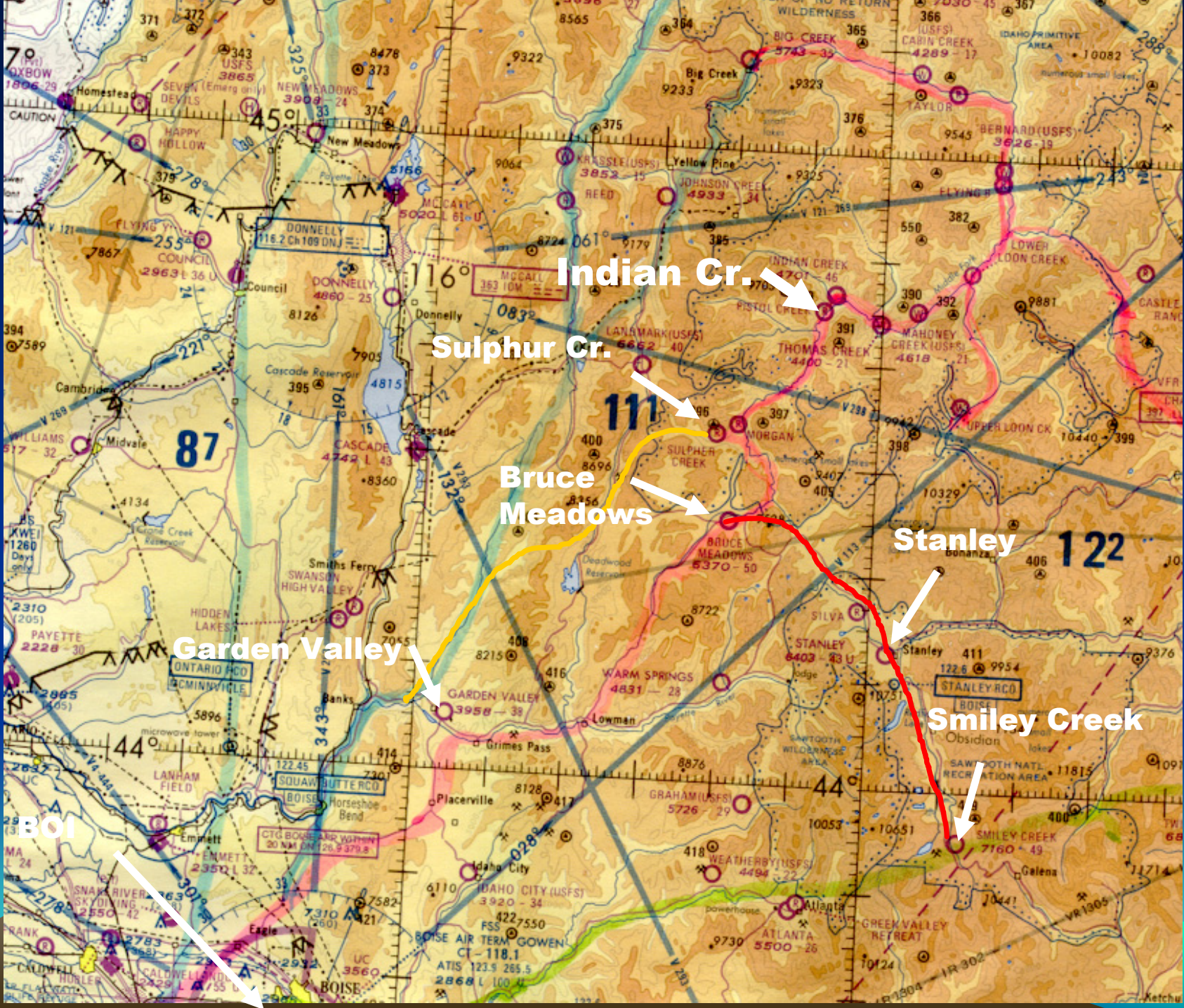


Scott Paul



Doug Becker - Jim Hudson





Indian Cr.

Sulphur Cr.

Bruce Meadows

Stanley

Smiley Creek

Garden Valley

Boise

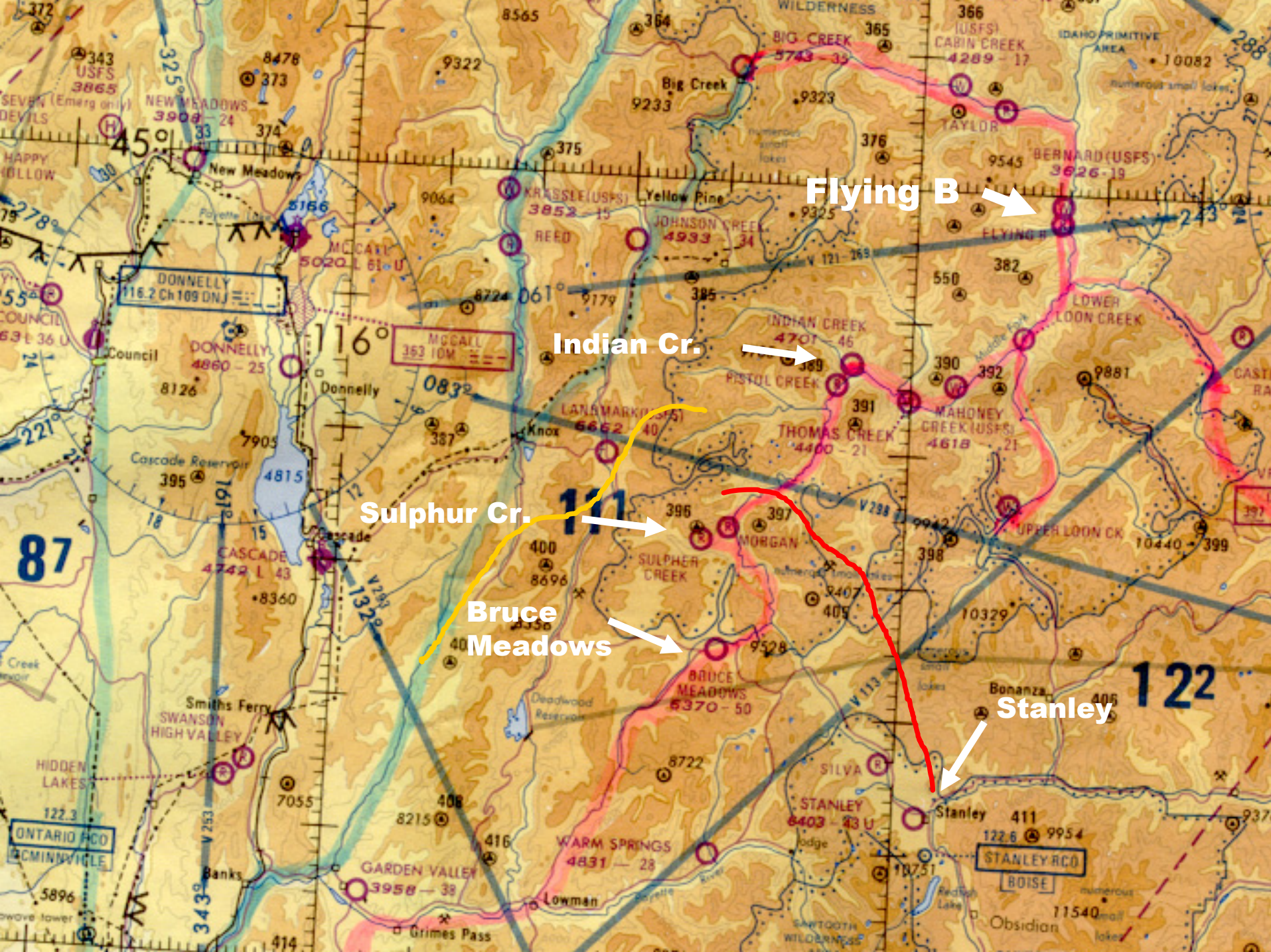
Indian Creek

An aerial photograph of a mountain valley. A winding river flows through the center of the valley, bordered by dense evergreen forests. A dirt road runs parallel to the river on the right side. The surrounding hills are covered in green grass and scattered trees. The sky is clear and blue.

Level 2

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Flying B →

Indian Cr. →

Sulphur Cr. →

Bruce Meadows →

Stanley →

Flying B Ranch

An aerial photograph of a river valley. The river flows through a valley with brown, rocky hillsides. In the distance, there are large, rugged mountains under a clear blue sky. The river has several bends, and there are some green fields and small structures along its banks.

Level 2

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Big Cr. →

Flying B →

Indian Cr. →

Sulphur Cr. →

Bruce Meadows →

Stanley →

Garden Valley →

Smiley Creek →

BOI

Big Creek

Level 2



Big Creek Lodge before the 2008 Fire

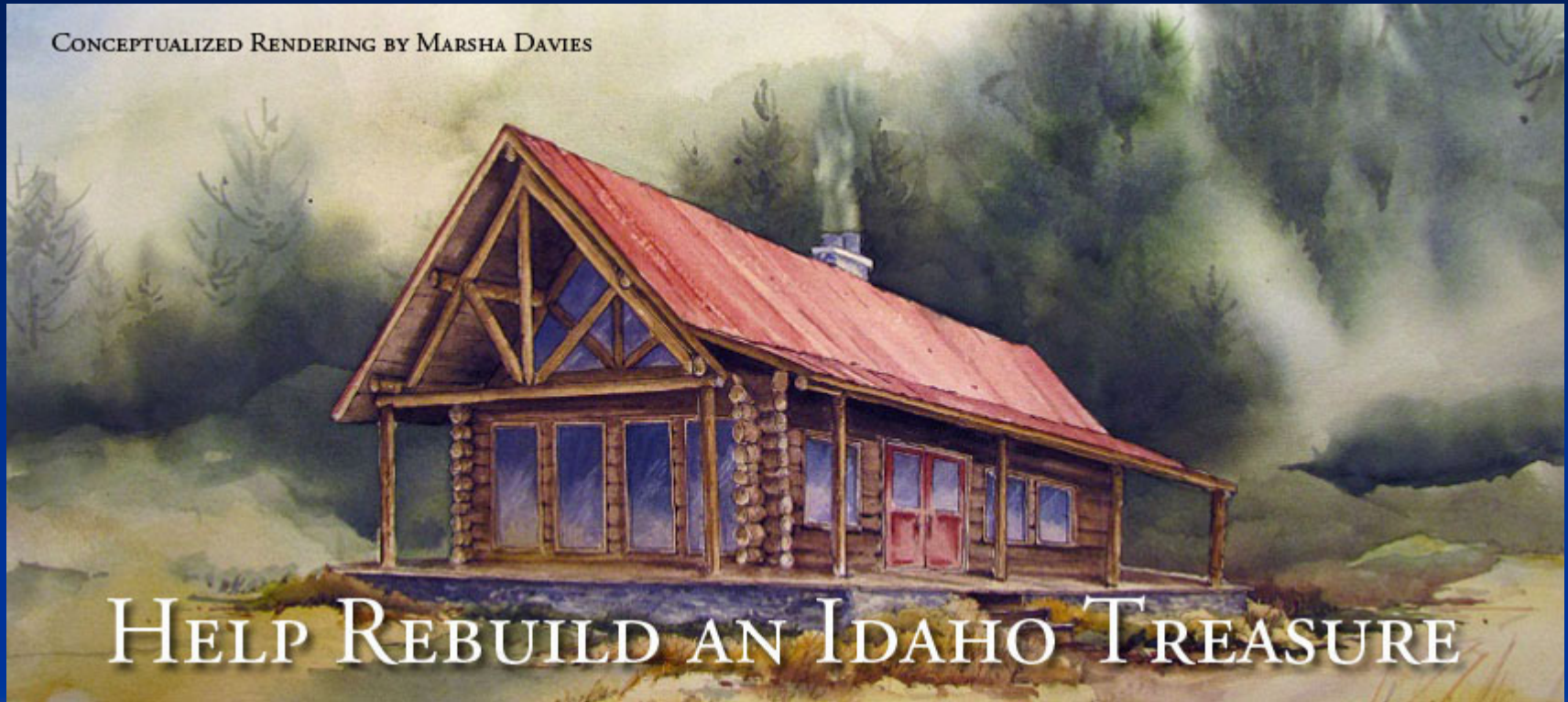


02 2 13

Idaho Aviation Foundation

<http://idahoaviationfoundation.org/>

To benefit general aviation in Idaho by supporting initiatives and projects designed to maintain, upgrade and develop airstrips, improve access, and promote safety at backcountry and recreational airports.



www.rebuildbigcreek.com

2016 BREAKFAST EVENTS:

June 18 (8-10am)

June 25 (8-10am)

July 16 (8-10am)



www.idahoaviationfoundation.org



IDAHO FLY-IN BACKCOUNTRY LODGE ESCAPES

A REFERENCE GUIDE FOR PILOTS & GUESTS (Feb 2014)

Compiled by: Idaho Aviation Foundation (www.idahoaviationfoundation.org)

This guide is available via email with ANY donation toward the Rebuild Big Creek Lodge project
www.rebuildbigcreek.com – info@rebuildbigcreek.com



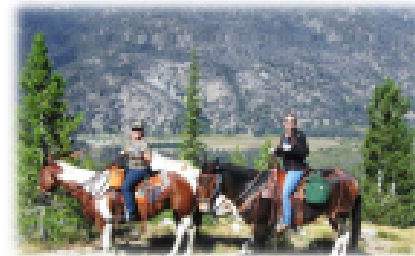
B – C Ranch



Diamond D Ranch



Diamond D Ranch View



Sulphur Creek Ranch



Middle Fork Lodge



Sulphur Creek Ranch

Other Backcountry Lodges

B-C Ranch (Silver Cr off Camas Cr)

Diamond D Ranch (U. Loon)

Greene Valley Retreat (Atlanta) ?? New Owners

Middle Fork Lodge (Thomas Cr.)

*Root Ranch (W of Cold Meadows) – Flying Resort Ranches
(Flying B)*

Silver Spur Lodge (Dixie Town)

Temperance Creek Ranch (OR side of Snake in Hells Canyon)

West Fork Lodge, (S of Hamilton, MT)

Minam River Lodge, OR (next to Red's Wallowa)

Other great getaways, near paved roads:

o *Cavanaugh Bay (Priest Lake)*

o *Smiley Creek Lodge/Redfish Lake Lodge*





Big Cr.

Johnson Cr.

Flying B

Indian Cr.

Sulphur Cr.

Bruce Meadows

Stanley

Smiley Creek

Garden Valley

BOI

Johnson Creek

Level 2





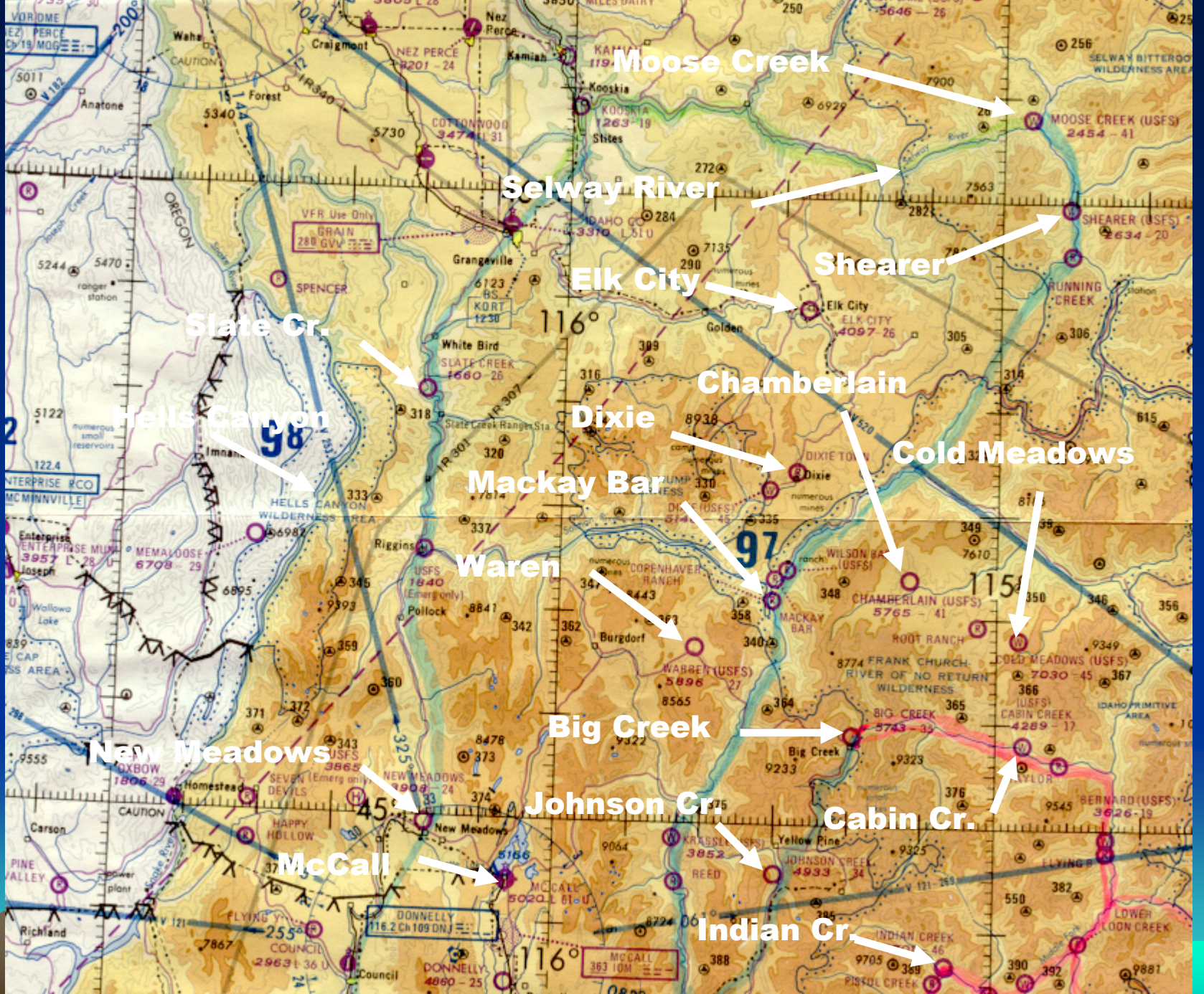
MacKay Bar

Level 2









Moose Creek

Selway River

Shearer

Elk City

Slate Cr.

Chamberlain

Hells Canyon

Dixie

Cold Meadows

Mackay Bar

Big Creek

New Meadows

Johnson Cr.

Cabin Cr.

McCall

Indian Cr.

Moose Creek

Level 2 long rw
Level 3 short rw

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N75835





Cabin Creek

The air strip



Level 3







Aviation in itself is not inherently dangerous. But to an even greater degree than the sea, it is terribly unforgiving of any carelessness, incapacity or neglect.

Getting Started

A framed photograph showing a biplane mounted on a tall wooden structure, possibly a tower or a landing gear assembly. The plane is positioned horizontally, and the background is a hazy, outdoor setting with some trees and a fence visible in the distance. The entire scene is enclosed in a dark wooden frame.

T-Craft BC Pilot Requirements

Generally accepted requirements: FAA / AOPA/ Mtn. Flying Clinics. At least 150 – 250 hrs of PIC with 50-100 hrs in M&M, 10 Hrs M&M within 90 days.

T-Craft BC Policy Brief

To start, each level requires minimum of 5 hrs of within 60 days in Make & Model. Your check-out with BC CFI can be included in this time.

Level 1 150 Hrs total, 50 PIC make and model

Level 2 250 Hrs total 75 PIC make and model, minimum of 20 take-off landings at minimum of 8 different Level 1 strips

Level 3 325 Hrs total 125 PIC make and model, minimum of 50 take-off landings at minimum of 8 different Level 2 strips

After checked out: Annual refresher ground class and min of 1 hr mtn flying practice in M&M within 30 days prior to heading into the BC.

NEW Garden Valley Exemption – Two separate trips, total of 10 take-off/landings. Details in club policy.



THE BASICS

- KNOW THYSELF
- KNOW THE AIRCRAFT
- KNOW THE ENVIRONMENT

Get instruction from approved backcountry CFI or take one of the BC clinics.



KNOW THYSELF

YOUR ATTITUDE!! – Knowledge and Skill don't make up for BAD Judgment.

"Truly superior pilots are those who use their superior judgment to avoid those situations where they might have to use their superior skills."

Good judgment comes from experience, experience usually comes from mistakes or BAD judgment (Preferably someone else's)

NEVER BECOME COMPLACENT – OR OVER CONFIDENT

Remember: Part Time Pilots - Full Time Mountains.

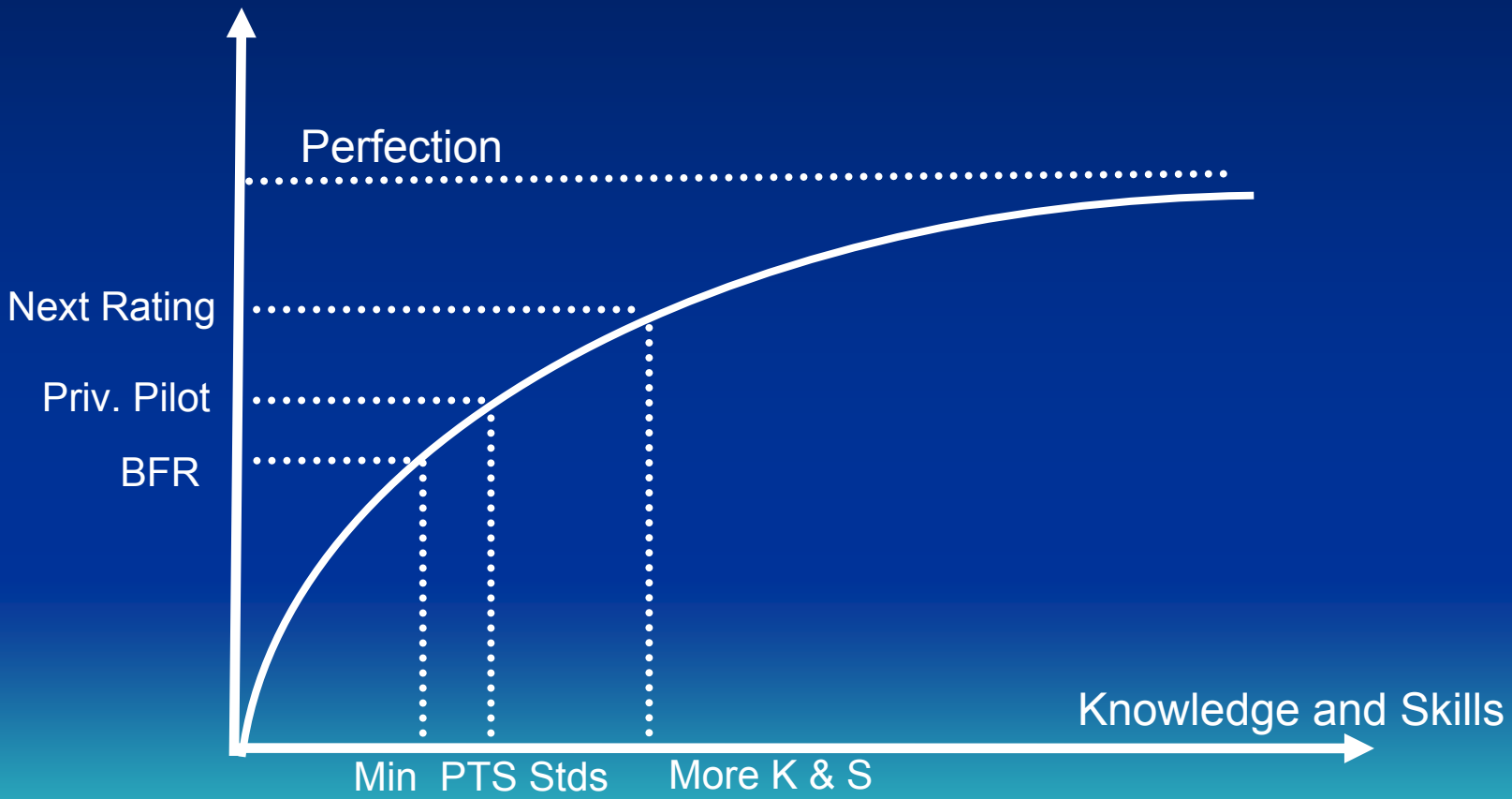
SET AND ADHERE TO PERSONAL LIMITS

- Winds, Weather Forecasts, Health, D.A., Smoke



Peak Performance

- Practice – Practice – Practice
- Learn new Skills



KNOW YOUR AIRPLANE & YOUR SKILLS

The three most important things:
Slow Flight, Slow Flight **SLOW FLIGHT!!**

(helps you become one with your aircraft and comfortable if you need to get slow as in a canyon turn)

**Know your aircraft performance
and your ability to perform**

**Feel the Effects of Density altitude – Practice at an altitude
and WEIGHT that will simulate the altitude you will be flying
in the specific aircraft you will be flying**

(not just make & model)



KNOW YOUR AIR SPEEDS

At 8000 - 10,000 DA, determine Power (MP/RPM) setting with respective flap settings at Mountain flying air speeds:

Test altitude: _____ / DA _____ Weight _____

	<u>Flaps</u>	<u>Airspeed</u>	<u>Power</u>
Cruse	_____	_____	_____
Slow Cruse Va	_____	_____	_____
Canyon Speed:	_____	_____	_____
Landing - Downwind	_____	_____	_____
Landing - Final	_____	_____	_____
Takeoff Vx	_____	_____	_____
Takeoff Vy	_____	_____	_____

KNOW YOUR STALL / MCA SPEEDS

At 8000 - 10,000 DA, determine Power (MP/RPM) setting at MCA and stall with flap configurations and typical weight.

Test altitude: _____ / DA _____ Weight _____

<u>Flaps</u>	<u>MCA</u>	<u>Stall</u>	<u>Power</u> MP/RPM
<u>0</u>	_____	_____	_____/_____
<u>20</u>	_____	_____	_____/_____
<u>40</u>	_____	_____	_____/_____

MCA – Minimum Control Airspeed ~ stall horn starts sounding



Basic Information

Aircraft Ident: N7593S	Aircraft Type: C-182Q	Departure Date: 12/18/2007	Departure Time: 9:00	Arrival Time: 12:00
------------------------	-----------------------	----------------------------	----------------------	---------------------

Fuel - 75 Gallons MAX Useable	65.0	
Planned Trip Time	3.0	Hrs.
Payload (Pax & Baggage)	550.0	
* Range @ 74% PWR = 12.7 GPH	5.0	Hrs.
Fuel Reserve Time	2.0	Hrs.

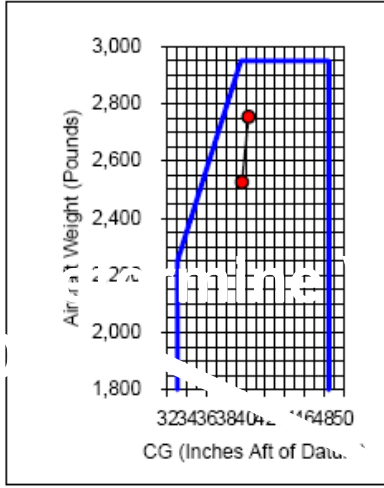
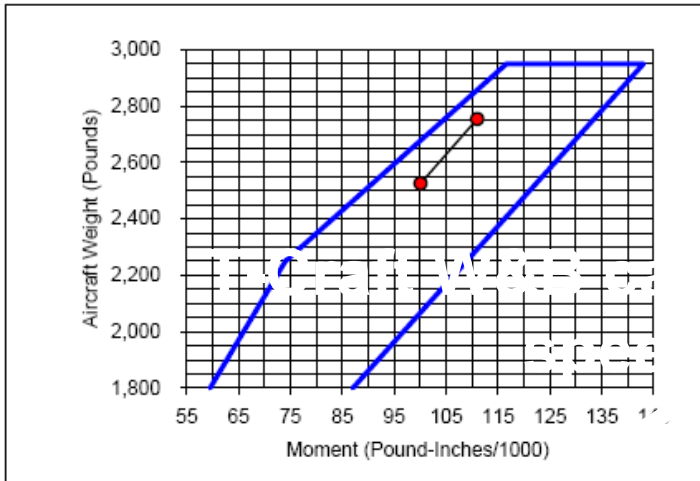
Enter data in highlighted blocks	
Max Gross Weight	2950
Take-Off Weight	2754
Over/Under weight	196

93% of Gross

* Range based on POH Fuel Burn @ 74% power, 8,000' Std Conditions - may be more or less depending on leaning, DA, other factors.

Weight and Balance at Departure			
Loads	Weight (Pounds)	Arm (Inches)	Moment /1000
Empty Aircraft:	1823.3	36.78	67.07
Front Passengers:	220.0	250.0	17.4
Rear Passengers:		74.0	
Area 1 Baggage 120# Max:	50.0	97.0	4.9
Area 2 Baggage 80# Max:	30.0	115.0	3.5
Departing Fuel :	63.5	381.0	47.8
Grnd Ops (Gal):	1.5		
Totals:	2754.3	40.3	111.0
CG = Total Moment / Total Weight:			40.3

Weight and Balance at Arrival			
Loads	Weight (Pounds)	Arm (Inches)	Moment /100
Empty Aircraft:	1823.3	36.78	67.0
Front Passengers:	470.0	37.0	17
Rear Passengers:		74.0	
Baggage (Area 1):	50.0	97.0	4
Baggage (Area 2):	30.0	115.0	3
Arrival Fuel (Gal)	25.4	152.4	7
Totals:	2525.7	39.6	100
CG = Total Moment / Total Weight:			39



	At Gross Wt	At Take Off Wt	At Land Wt.
Va	111	107	103
V BG	70	68	65
V SO	45	43	42
VS1	48	46	44
Landing @ 1.3 Vso	59	57	54

	At Take Off Weight					
	Sea @ GW	Sea	2,500	5,000	7,500	10,000
Vx	57	55	56	57	58	
Vy	78	75	74	73	71	
At Landing Weight						
Vx	57	53	54	55	56	
Vy	78	72	71	70	68	

Graphic illustration of not knowing Self / Aircraft / Limitations And/or Complacency

Excerpt from NTSB Report: On June 30, 2012, about 1405 Mt DT, a Stinson 108-3, was substantially damaged after impacting terrain during initial climb near the Bruce Meadows Airport (U63). The certified commercial pilot sustained serious injuries, and the three passengers sustained minor injuries.

MYL ASOS at 19:51Z was 27 C (81F), BP 30.00, wind 160@8. U63 is 6370', DA = 9,050' !!



Not knowing Your Limitations



KNOW THE ENVIRONMENT


Study and learn as much as possible in the following areas.

- Learn the geography and major landmarks,
- Plan your route through drainages, meadows –Don't go GPS direct point A to point B.
- Know specific details of airstrips you'll be going into.
- Approach and departure routes, Unique Hazards, Wind patterns, Lighting conditions. Ground Hazards – trees, gopher holes, soft spots, rough spots.




KNOW THE ENVIRONMENT


Standard Operating Procedures for some of the State owned and operated airstrips.




Big Creek (UGO)
Recommended Standard Operating Procedures
Produced by the Idaho Division of Aeronautics November 14-01




Cavanaugh Bay (66S)
Recommended Standard Operating Procedures
Produced by the Idaho Division of Aeronautics November 14-01



Garden Valley (U88)
Recommended Standard Operating Procedures
Produced by the Idaho Division of Aeronautics November 14-01



Johnson Creek (3U2)
Recommended Standard Operating Procedures
Produced by the Idaho Division of Aeronautics November 14-01



Smiley Creek (U87)
Recommended Standard Operating Procedures
Produced by the Idaho Division of Aeronautics November 14-01

: <http://www.itd.idaho.gov/aero/Technical/AirportStatus.htm>

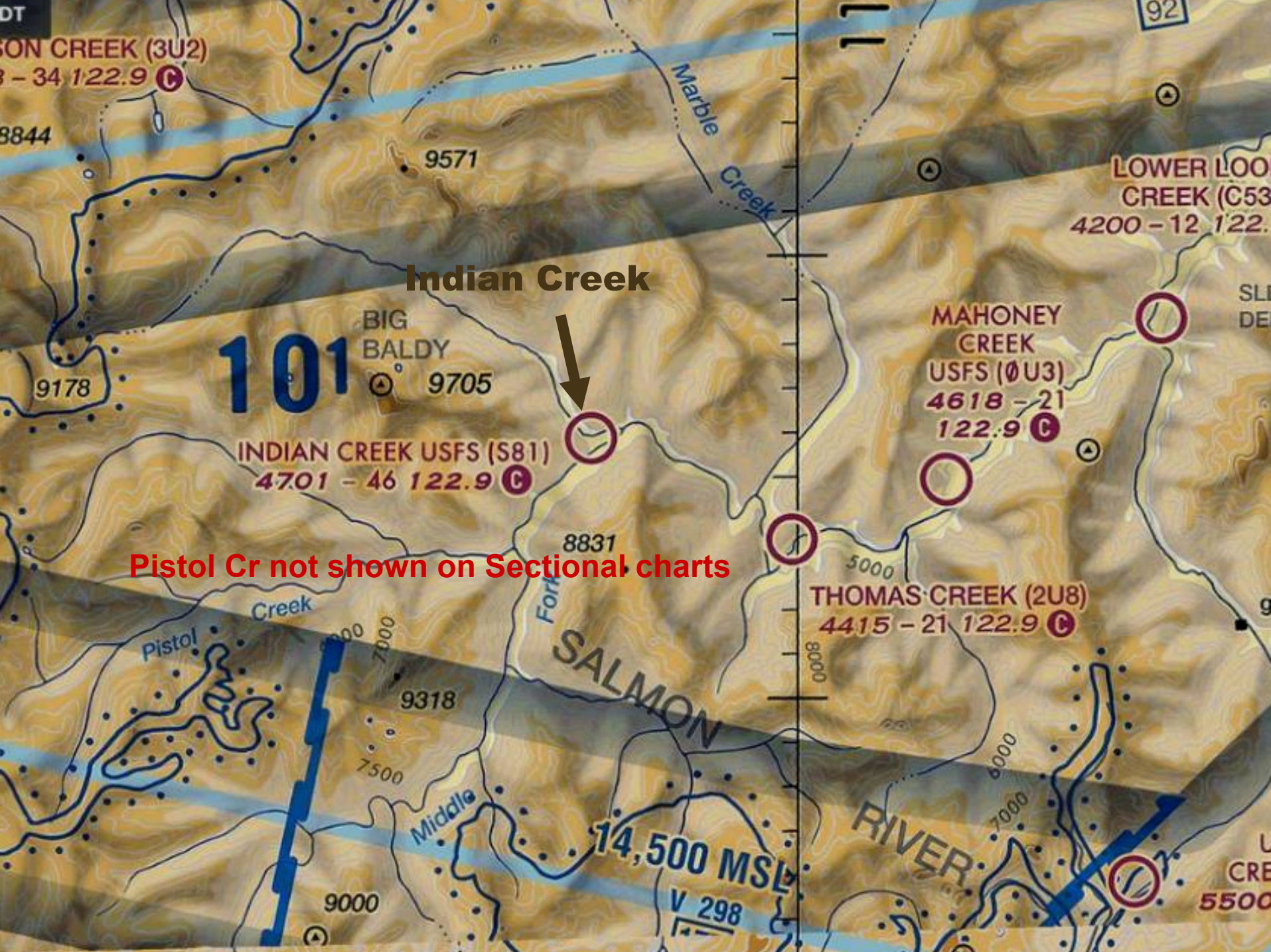
IAA web page www.idahoaviation.com – Idaho Airstrip Network.
www.shortfield.com Airport Explorer.

KNOW THE ENVIRONMENT

EXAMPLE – INDIAN CREEK

- **Sectional Chart – Overview**
- **Idaho State Aeronautics Chart – Smart phone/iPad apps**
- **Fly Idaho Book**
- **Shortfield.com – Topo/Goggle Maps / photo's/ video's / comments**
- **Idaho Aviation Association – Air Strip Network – Pilot reports, photo's**
- **YouTube – some good/bad and ugly**





Indian Creek

Pistol Cr not shown on Sectional charts

101

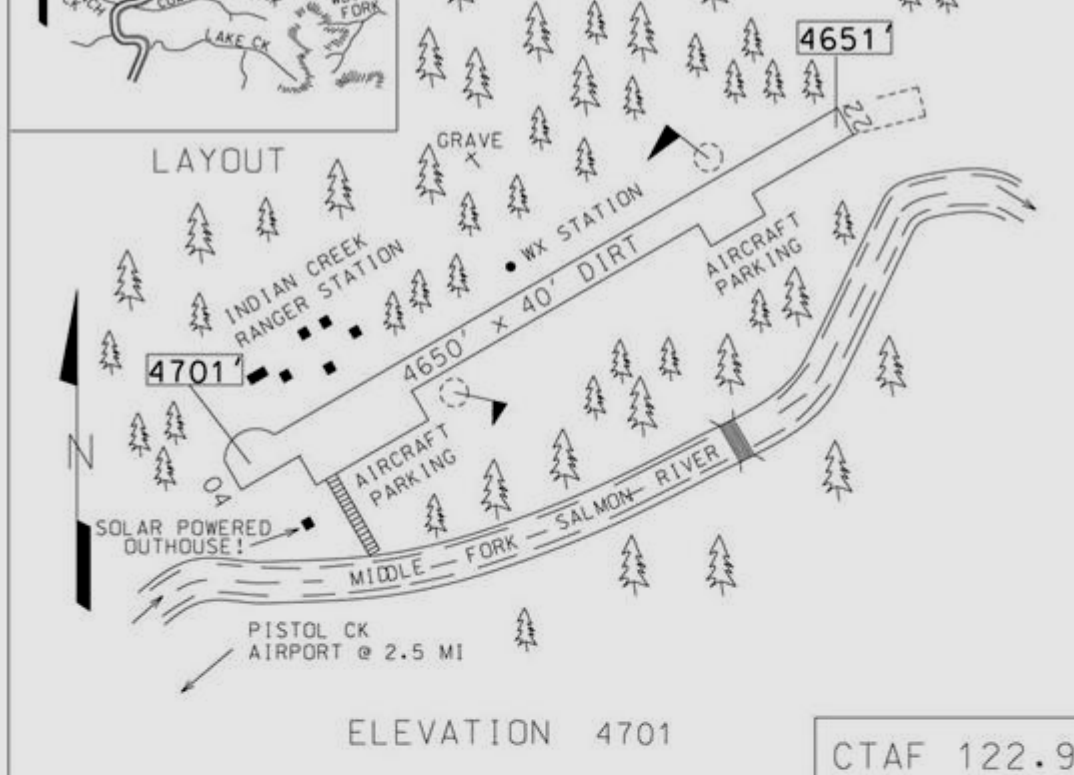
INDIAN CREEK USFS (S81)
4701 - 46 122.9

MAHONEY CREEK
USFS (0U3)
4618 - 21
122.9

THOMAS CREEK (2U8)
4415 - 21 122.9

SALMON RIVER

14,500 MSL
V 298



LOCATION
ADJACENT SE OF RANGER STN

<u>VOR</u>	<u>FREQ</u>	<u>RAD</u>	<u>NM</u>
LKT	113.5	231°	50.0

COMMUNICATIONS CTAF 122.9

NAV AIDS NO

LIGHTS NO

ATTENDED NO

FUEL NO

SERVICES
TIEDOWNS

MANAGER 208-879-4101

FBO(s) NO

REMARKS NORMALLY LAND RUNWAY 22. TAKEOFF RUNWAY 04. CHECK AIRCRAFT PERFORMANCE FOR HIGH DENSITY ALTITUDE. STEEP ENCLOSING TERRAIN. NO WINTER MAINTENANCE.

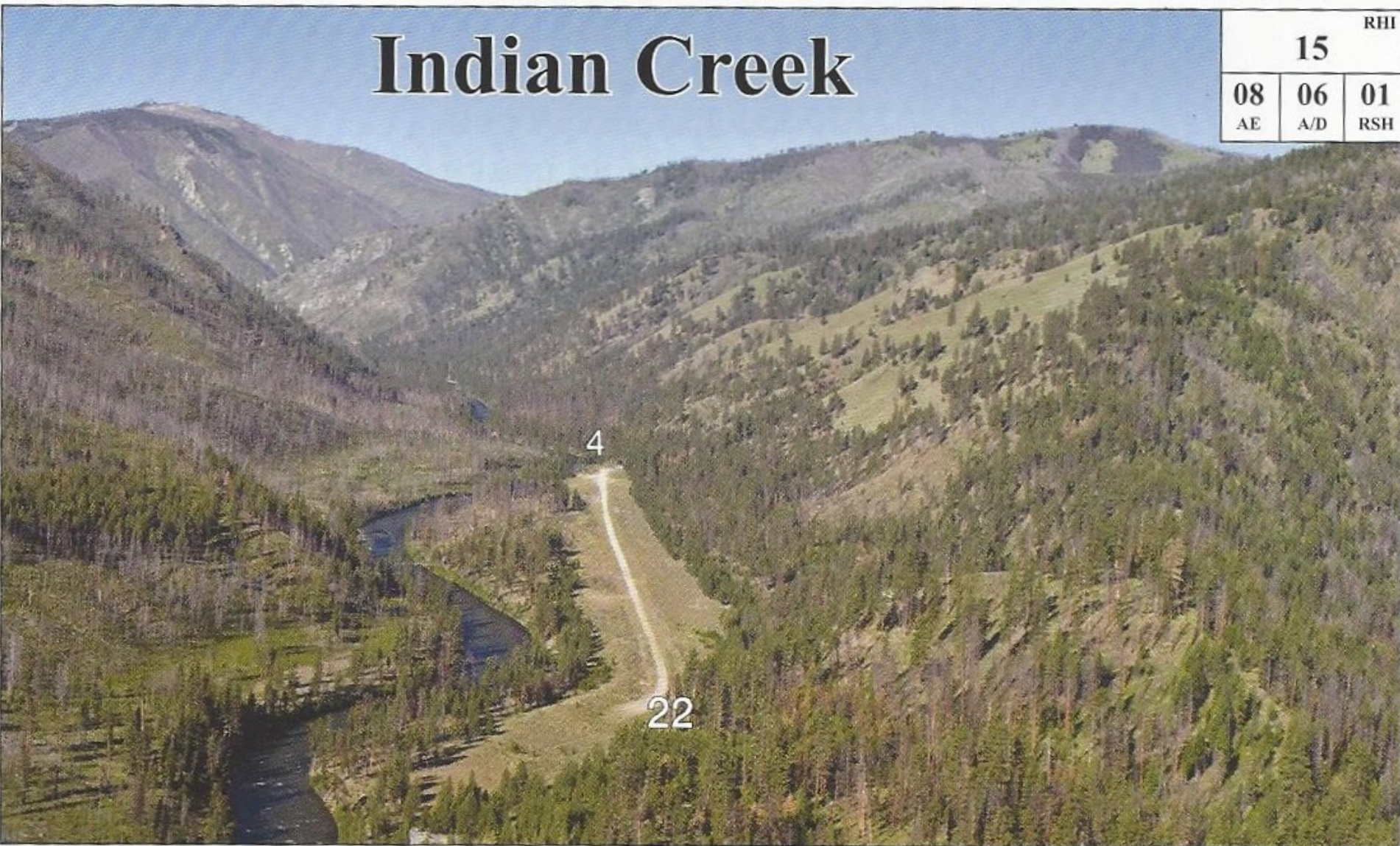
11/09

Indian Creek

		RHI
	15	
08 AE	06 A/D	01 RSH

4

22



Indian Creek

Identifier: S81

CTAF: 122.9
AvGas: No

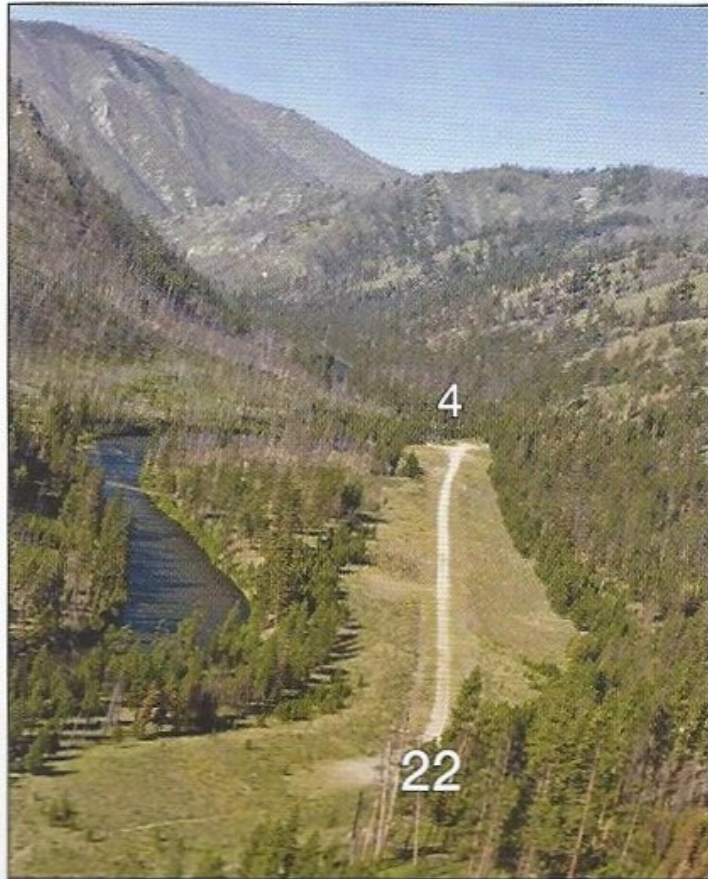
Lat: 44° 45.668' N
Long: 115° 06.442' W

Class: Primitive
Chart: Idaho

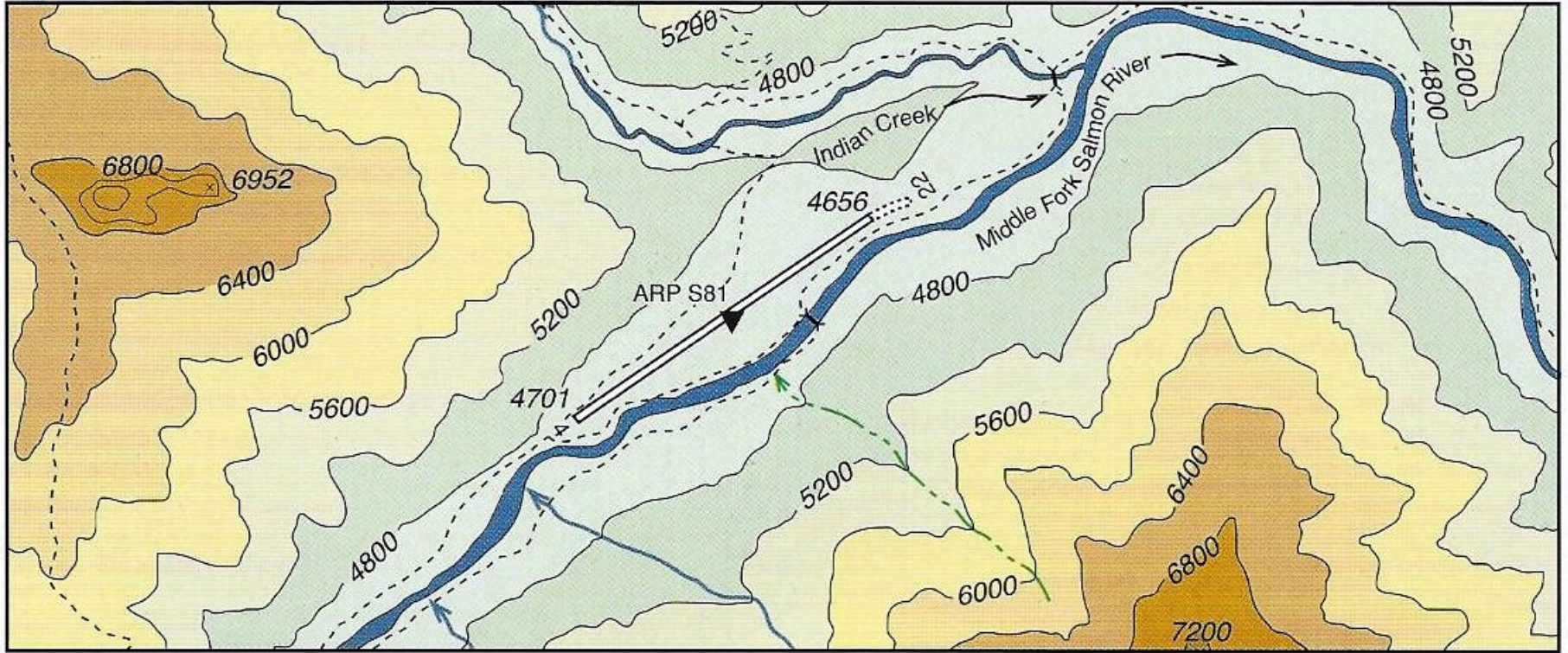
Caution: Rcmd land RWY 22; depart RWY 4. Narrow canyon with steep enclosing terrain. Pistol Cr airport 2.5 miles upstream.



RWY: 4/22
LENGTH: 4600' X 40'
ELEVATION: 4701'



AIRPORT REMARKS • Rcmd Lnd Rwy 22; Dep Rwy 4. • Airport located in steep enclosing terrain. • On takeoff, stay in canyon to gain altitude before turning on course. • Heavy traffic during summer montsh. • Use caution for numerous river rafters, deer and bears on and in vicinity of airport. • Refer to Pg. G-223.

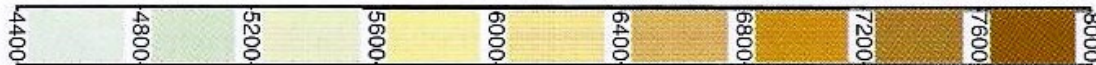


Indian Creek Terrain Elevation Model (TEM)

400' Elevation Contours

0 .5 1 MILE

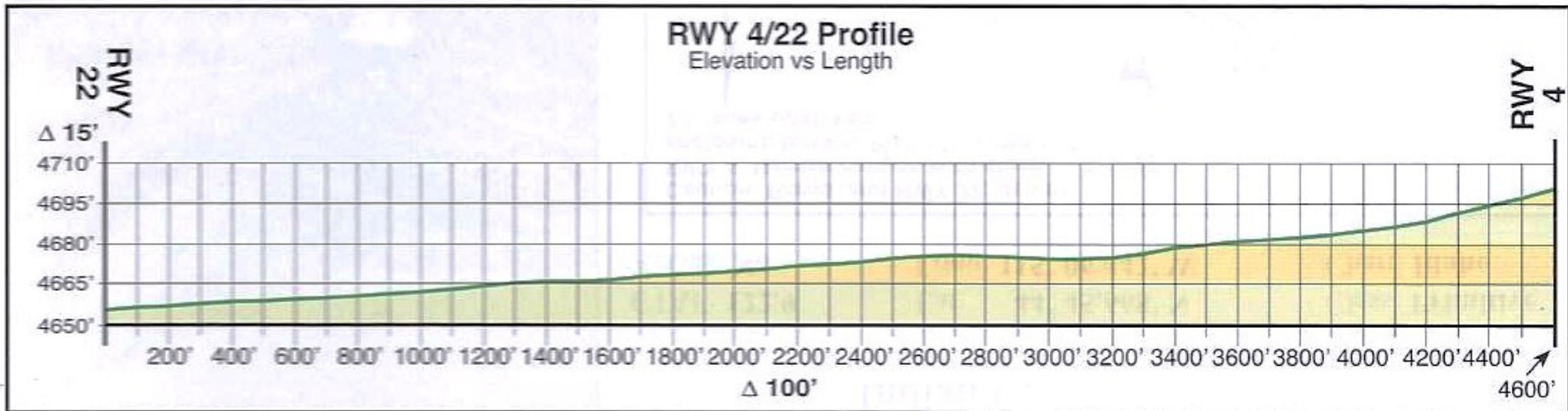
0 1000 FT 0 500 1000 M

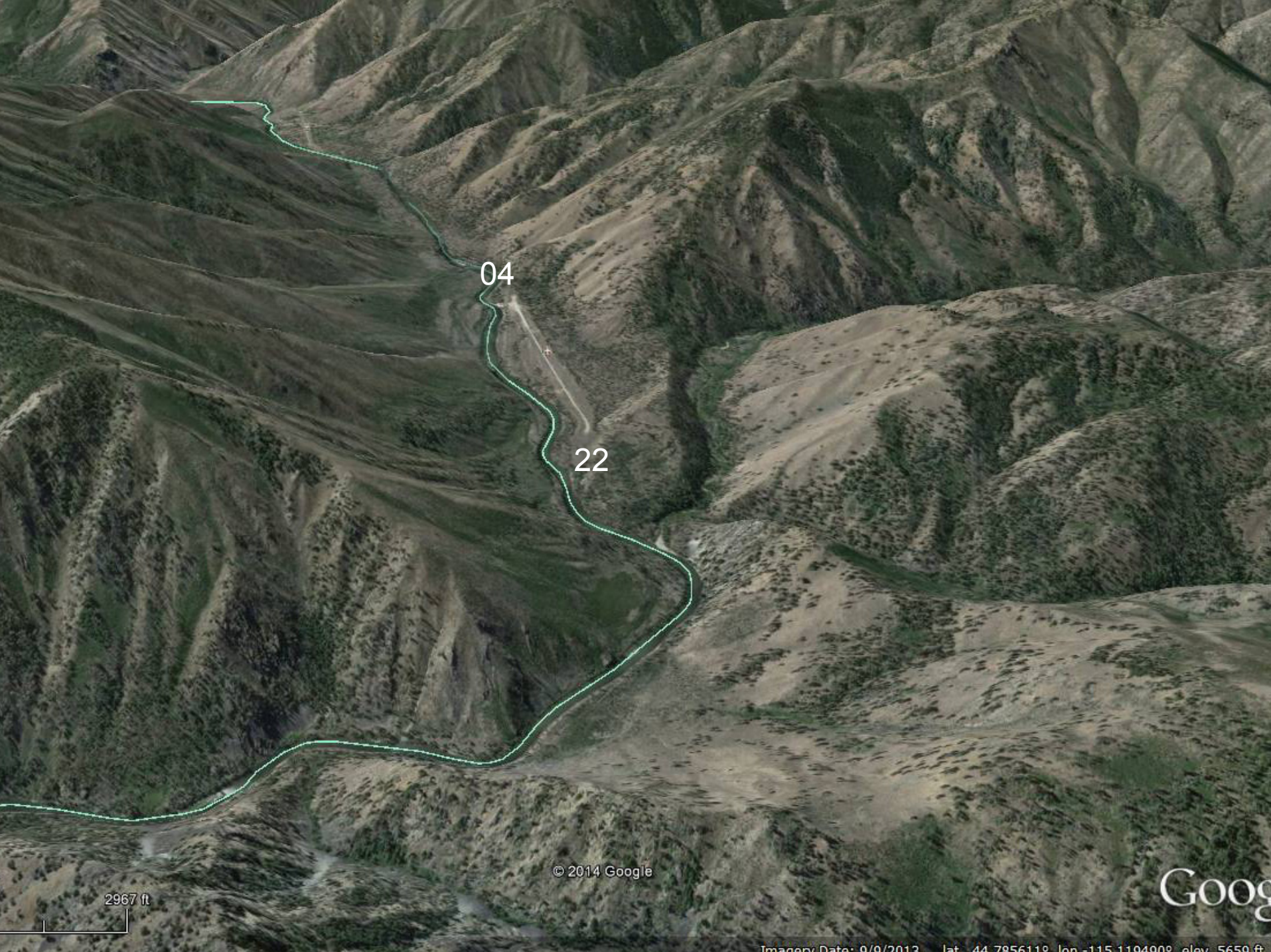


Indian Creek

Runway Elevation Profile (REP)

ARP: S81	RWY 4 Elev: 4701'	Length: 4600'	Elevation Gain: 45'	Survey Date: 07/19/10
ARP Elev: 4701'	RWY 22 Elev: 4656'	Width: 40'	RWY 7 Uphill: 0.98%	Surveyors: glh, abc





04

22

© 2014 Google

Goog

2967 ft

Imagery Date: 9/9/2013 lat: 44.7856118 lon: -115.1194908 elev: 5650 ft

✧ Flying is the ✧
2ND GREATEST thrill
KNOWN TO MAN.
LANDING is the 1st.

Handwritten text on a wooden object, possibly a bat or club, including "DET-NO 1916 71" and "Salem F. Brink".

Small white card with handwritten text, including "MILITARY" and "NOV 28 1908".

Partial view of a framed document or poster on the right side of the image.

PREPARATION – SKILLS

KNOWLEDGE


- REVIEW – KNOW POH; PERFORMANCE CHARTS, RECCOMENDED SHORT/SOFT FIELD PROCEDURES, V_x , V_y , V_a , Best Glide.
- DA, PERFORMANCE CALCULATIONS FOR AIR STRIP YOU WILL BE USING FOR PRACTICE.
- WEATHER, FORECASTS, TFR'S, WEB CAM'S

SKILL PRACTICE – TUNE UP

- SLOW FLIGHT, LEVEL, TURNS, CLIMBS, DECENTS IN SLOW FLIGHT
- SHORT/SOFT TAKE-OFF (COMPARE ACTUAL TO POH T/O & R.O.C)
- SHORT FIELD SPOT LANDINGS
- CANYON 180 TURN (MODIFIED CHANDELL)



RULES OF THUMB

- **WIND, HEAT and TURBULANCE ARE OUT TO GET YOU**
 - Do not fly in the Mountains with winds aloft in excess of 25 Knots - less with less experience.
 - In general, plan to arrive / depart by 10 AM or late evening when wind calms down and temperature is cooler.
 - Always have an OUT
 - Be able to turn to lowering terrain.
 - Have a emergency landing area in mind
 - Be able to turn 180 in Canyons.
 - 50% Runway Rule - if not at 70% rotate IAS at 50% of runway length - ABORT.
 - Approach ridges at 45° angle before crossing.
 - In Canyons – Fly the right side (unless in downdrafts), always keep river under your arm pit. Low noise.
 - Land Up River – Take Off Down River
- 

Approach / Landings

- ❑ SLOW down before approaching and entering the airstrip – avoid shock cooling and allows for a through runway check-out for: Winds, turbulence, runway condition, critters. Even if you have to make a couple loops in the pattern – do a through check out.
- ❑ Stable – Constant airspeed, Power on, Full flap approaches. Provides some margin from updrafts/downdrafts/sinkers over water/marsh
- ❑ All landings are spot landings to the target spot. In most cases it's not necessary to hit the end of the strip.
- ❑ Know the go-around point. On many, once on final you are committed –In most cases - DO NOT go around.
- ❑ Keep centered on narrow runways and stay on the runways, loose gravel, obstacles can grab you before you know it.
- ❑ Taxi with caution – if you can't see the terrain, get out and look for gopher holes, rocks, soft areas, trees.



Take Offs

- ❑ Check taxi – takeoff path for rocks, chuck-holes, dips, etc.
- ❑ Check Temp. winds - do take-off, rate of climb calculations if necessary.
- ❑ Locate 50% runway length mark and know 71% V_x .
- ❑ Mixture for best power – run-up on the back-taxi.
- ❑ Flaps at POH short/soft setting – flap parallel to down aileron (20° Cessna 182's)
- ❑ Review departure route and abort plan.
- ❑ Use Extreme caution if taking off in tailwind. – wait until it dies down.
- ❑ Keep feet off the brakes.
- ❑ Soft field take-off, but not too much backpressure. Keep on centerline.



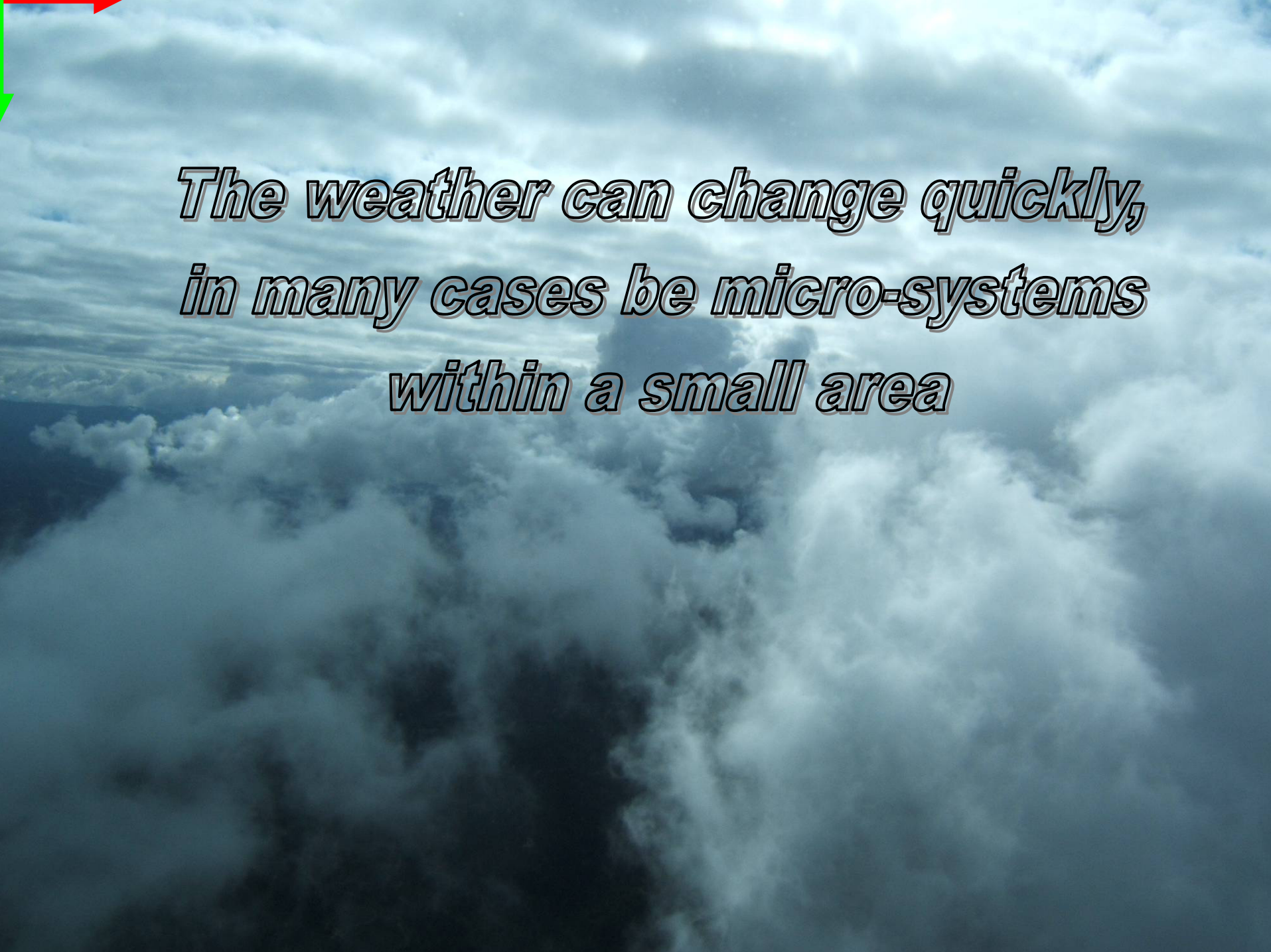
Takeoff Downhill / Down River, not always into a headwind.

- ❑ Takeoff into wind may produce rapid initial climb out, but leave you climbing into downdrafts.
- ❑ Downwind will degrade takeoff and climb out performance, but may allow you to climb into updrafts as you cross canyon.





B C Weather



*The weather can change quickly,
in many cases be micro-systems
within a small area*

Mountain / Canyon Weather

Lift

- Orographic-Mechanical Lift as air flows over Mtns.
- Thermal Lift

Canyon Meteorology - Winds

- Diurnal Effect - Flows Up in Day / Down in Evening (some exceptions)
- Convergence Effect – areas of confluence
- Venturi Effect
- Turbulence

Fog (morning canyon fog common after a storm)

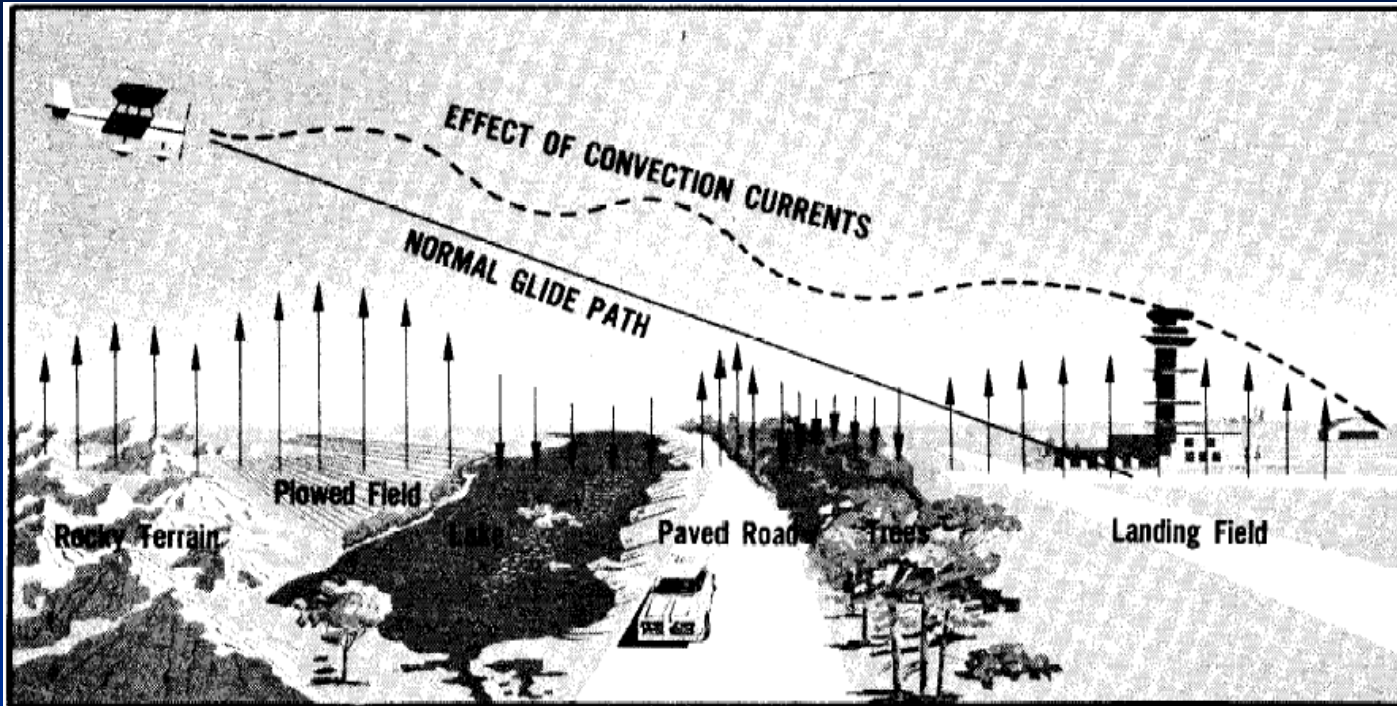
Smoke



Orographic Lift over Mountains/Canyons



Thermal Lift over varying terrain



Thermal and Orographic Collide

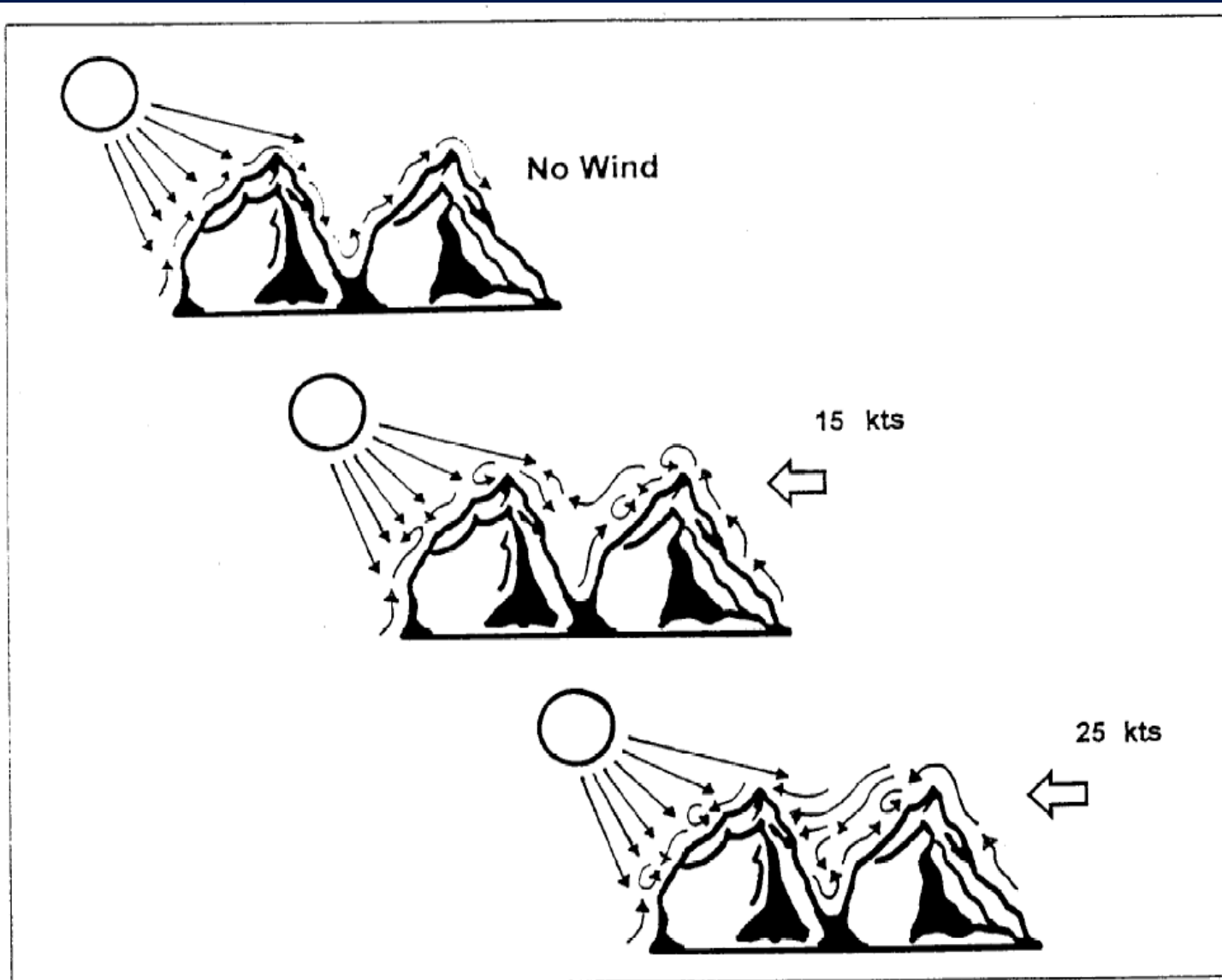
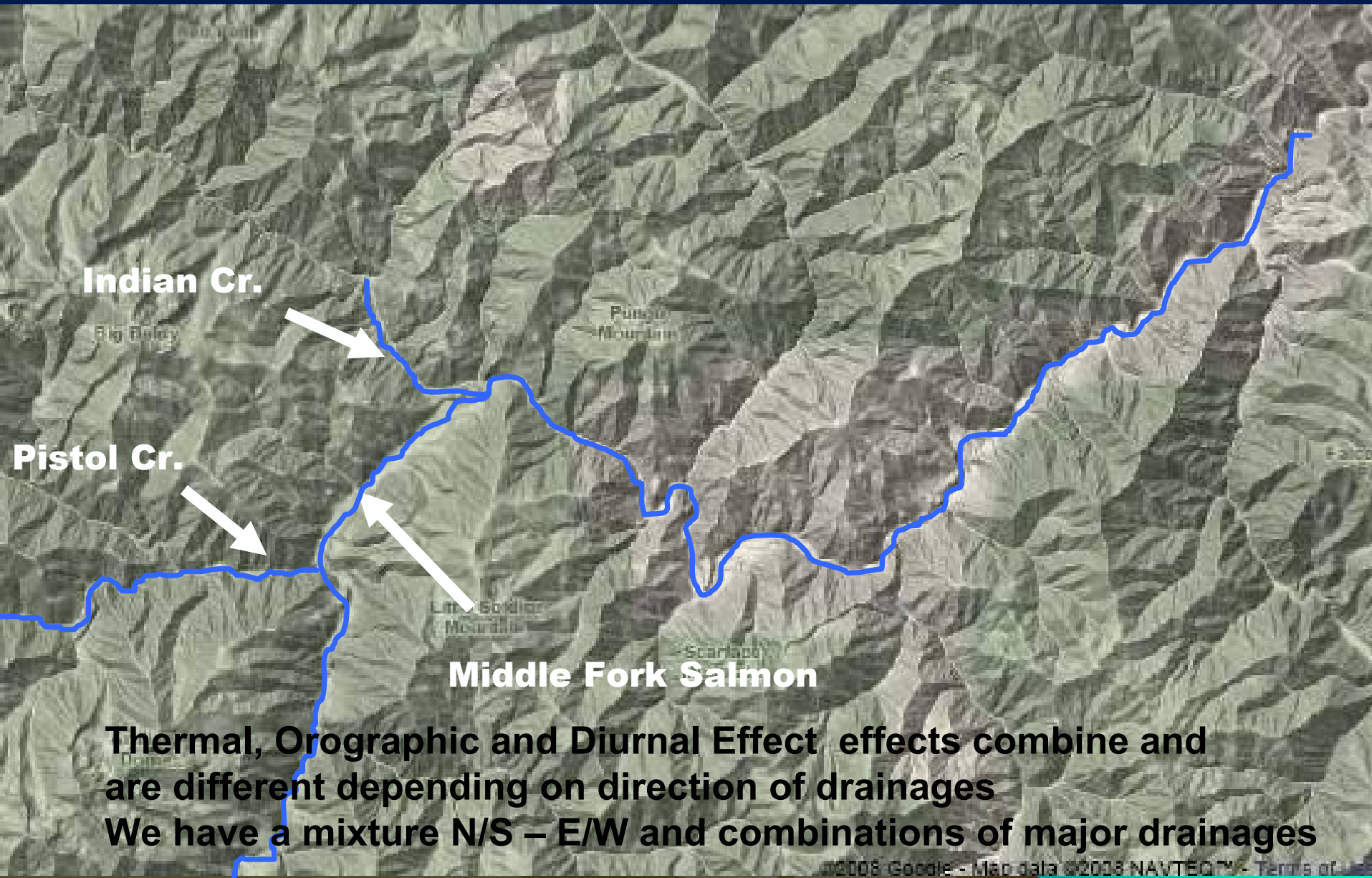
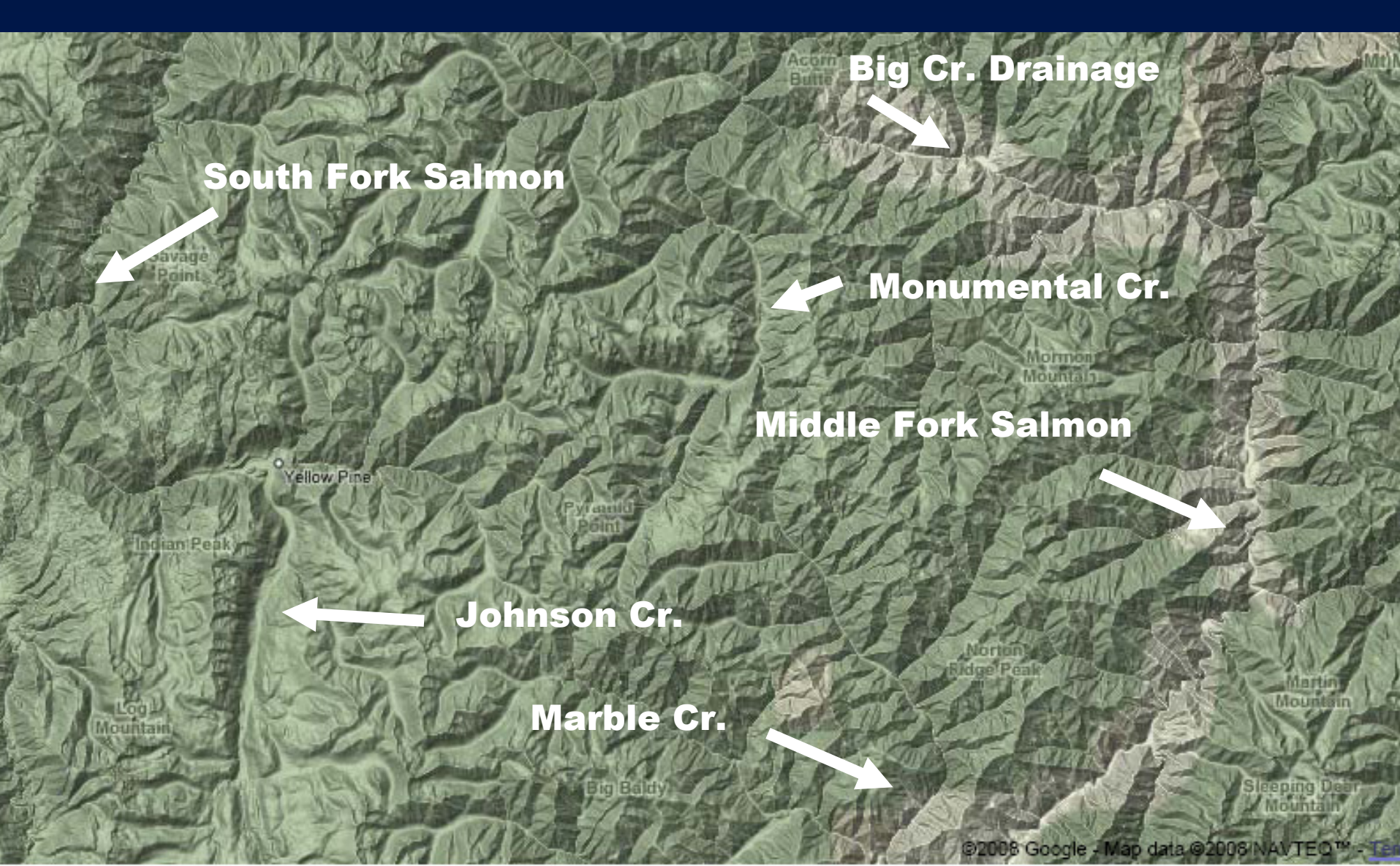


Figure 7: Effects of opposing thermal and orographic influence. When rising thermals created by solar heating encounter orographically produced downdrafts on the lee side of a ridge or in a canyon, expect to encounter a lot of turbulence. As the velocity of the wind increases, the turbulence increases.

Diurnal Effect, Venturi, and Convergence





South Fork Salmon

Big Cr. Drainage



Monumental Cr.



Middle Fork Salmon



Johnson Cr.



Marble Cr.



Turbulence

Slow Down to at or below V_a

Remember it's less with less weight – Rule of Thumb $\frac{1}{2}$ of % less gross weight). If at 10% less of max. gross weight, reduce V_a 5%.

Where to Expect it – Late Morning / Afternoons when it heats up.

- Lee side – down wind side of Ridges
- Convergence areas in canyons
- Venturi areas – wide to narrow canyon
- Over Area's of Thermal differences (shade/sun, trees/rock)
- Near Rotor, Lenticular, or Thunder Clouds
- Windy Conditions – Mountain wave over rugged mountains or canyons



Valley / Canyon Morning Fog

Middle Fork Salmon



An aerial photograph of a volcanic eruption. A large, billowing plume of white smoke or ash rises from a mountain range in the distance. The sky is a clear, bright blue. In the top left corner, the nose and wing of a white aircraft are visible, flying towards the right. The text "Fire, Smoke, and TFR's" is overlaid in a large, white, outlined font across the upper portion of the image.

Fire, Smoke, and TFR's

SEP.16,12 11:15:00AM



SEP.16,12 06:00:00PM



SEP.17,12 01:15:00PM



SEP.17,12 05:30:00PM



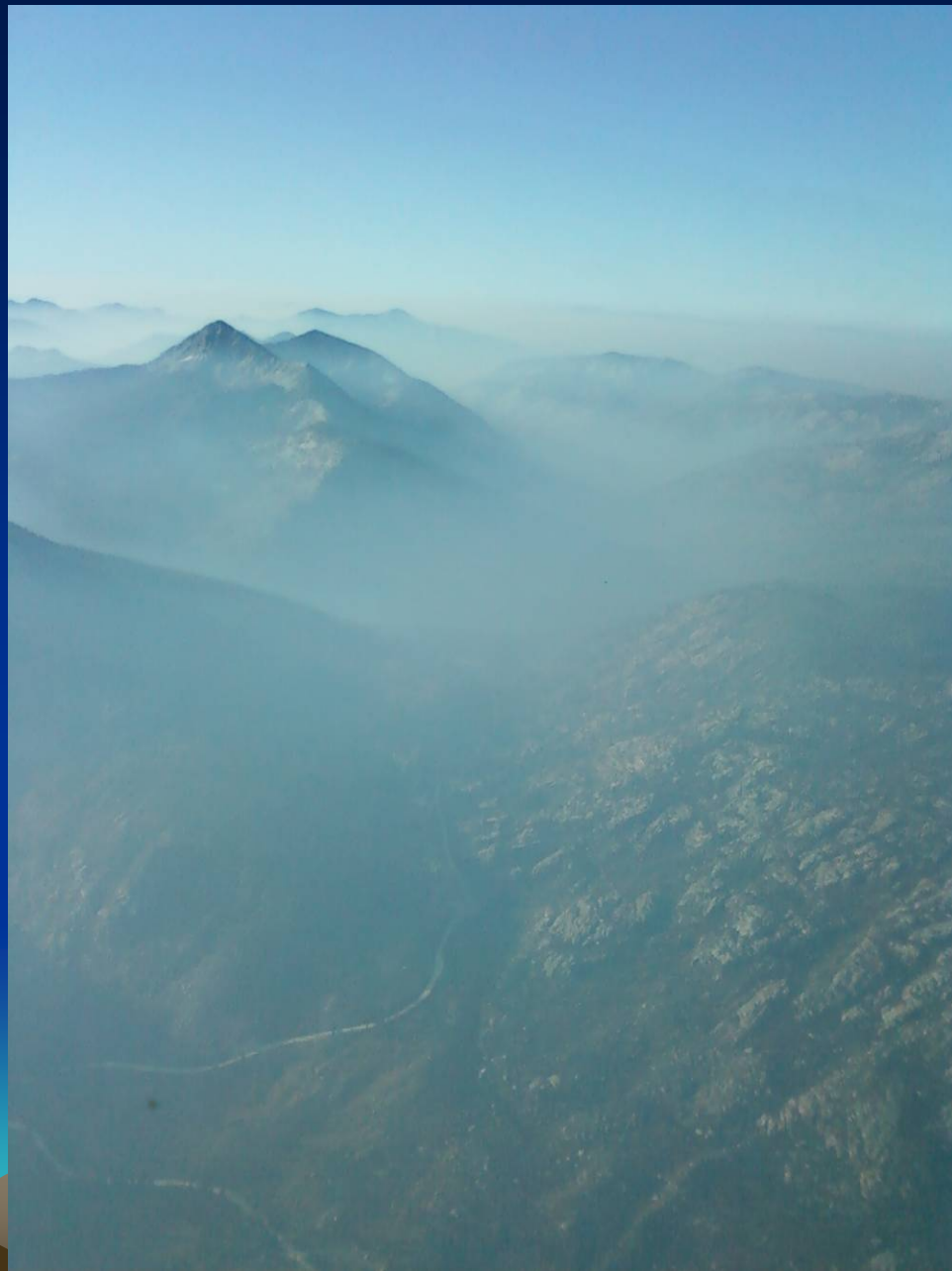
Chamberlain Basin about 2 miles out



Chamberlain
Basin
in pattern



Lick Creek Summit



Three miles
out, with
McCall ASOS
reporting 7
miles visibility



Smoke Flying Cautions

- VFR minimums can go to IFR w/o warning – when flying with 1 to 3 miles visibility, you will not be able to detect change in smoke density. Plumes or banks of smoke can be very localized and quite dense.
- One to three miles visibility may be legal VFR but w/o adequate ground reference for navigation. August 21, a California pilot accompanied by an experienced local back-country instructor crashed near War Eagle Mountain as they turned up wrong drainage climbing out of Mackay Bar in smoke.

Cautions (continued)

- You will lose forward visibility as you climb into or descend through a smoke layer. Circling climb-out or descent over known landmark is best for maintaining spatial awareness and to avoid getting lost.
- Smoke is always more opaque looking into the sun. Caution when approach or departure requires a turn toward rising or setting sun.



Emergencies

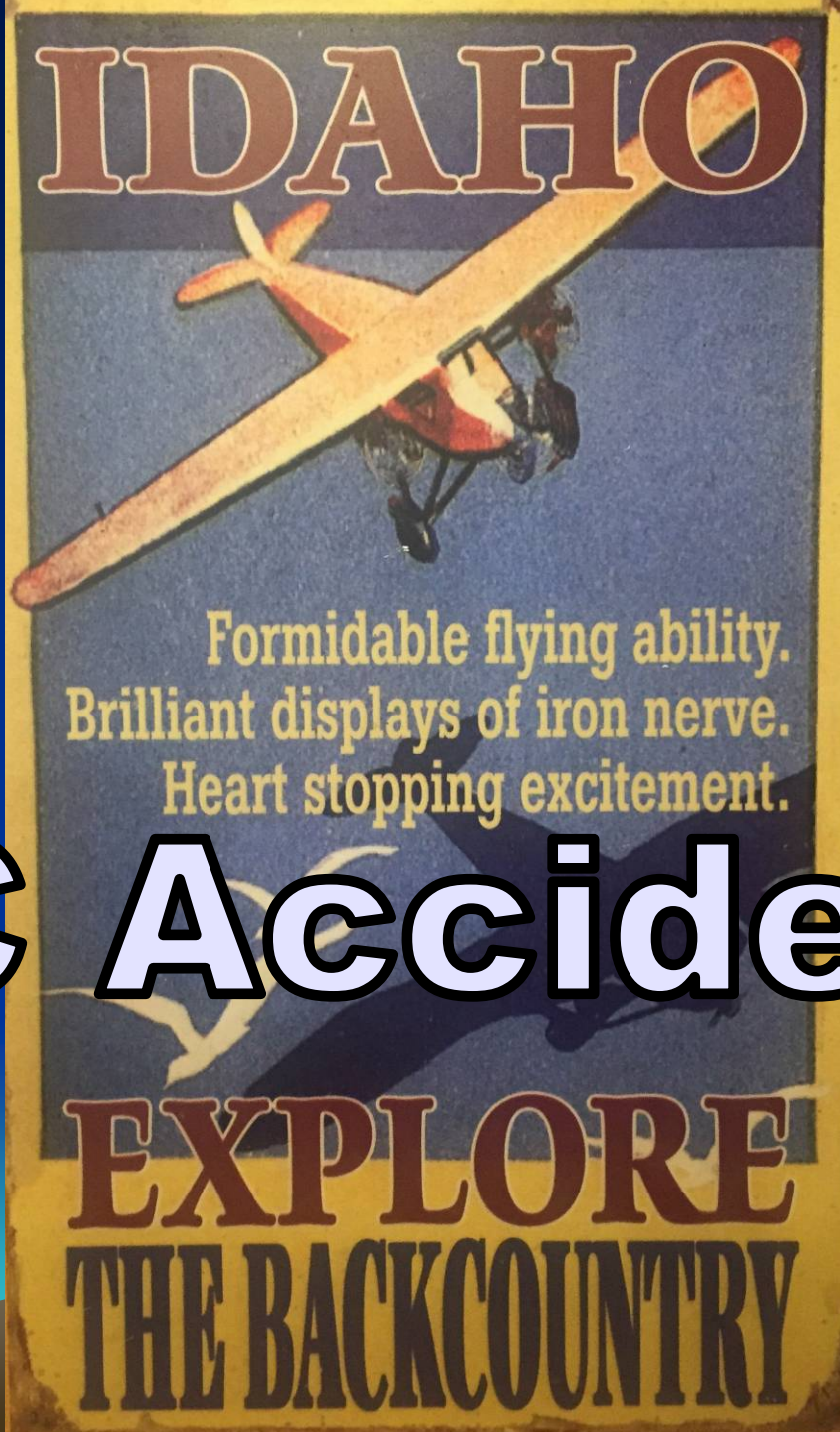
- Loss of Engine - Always have an OUT
 - Standard Procedure – Best Glide
 - Have a emergency landing area in mind
 - Be able to turn to lowering terrain.
 - Go for smaller trees / in steep canyon the river.
 - NEVER STALL
- Cannot out climb terrain
 - Always be able to turn 180.
- Deteriorating weather – Turn back, or find a place to land while you still can.



Survival

- Flight Plan – Let someone know where your going and when you expect to return.
- Carry Spot or PLB – be sure your passengers know how to use it.
- Portable Com / Satellite phone / Cell phone
- Carry a First Aid and Survival Kit.
- Dress appropriately or have warm clothes





Poster in
Fogglifter
Café
McCall

BC Accidents

Soilder Bar Accident - at Jonson Cr.

6-23-2012



Jonson Cr. Mid Air

6/28/2013



Moose Creek Accident

6-28-2012



Bruce Meadows Accident

6-30-2012



Warren Cr Drainage
After leaving MacKay
8-20-2012



Sulphur Cr
Landing went awry
6-2011





Sulphur Cr

Short field take-off



Soft in the middle of the runway

• New Meadows



Sulphur Cr. 8/5/2002

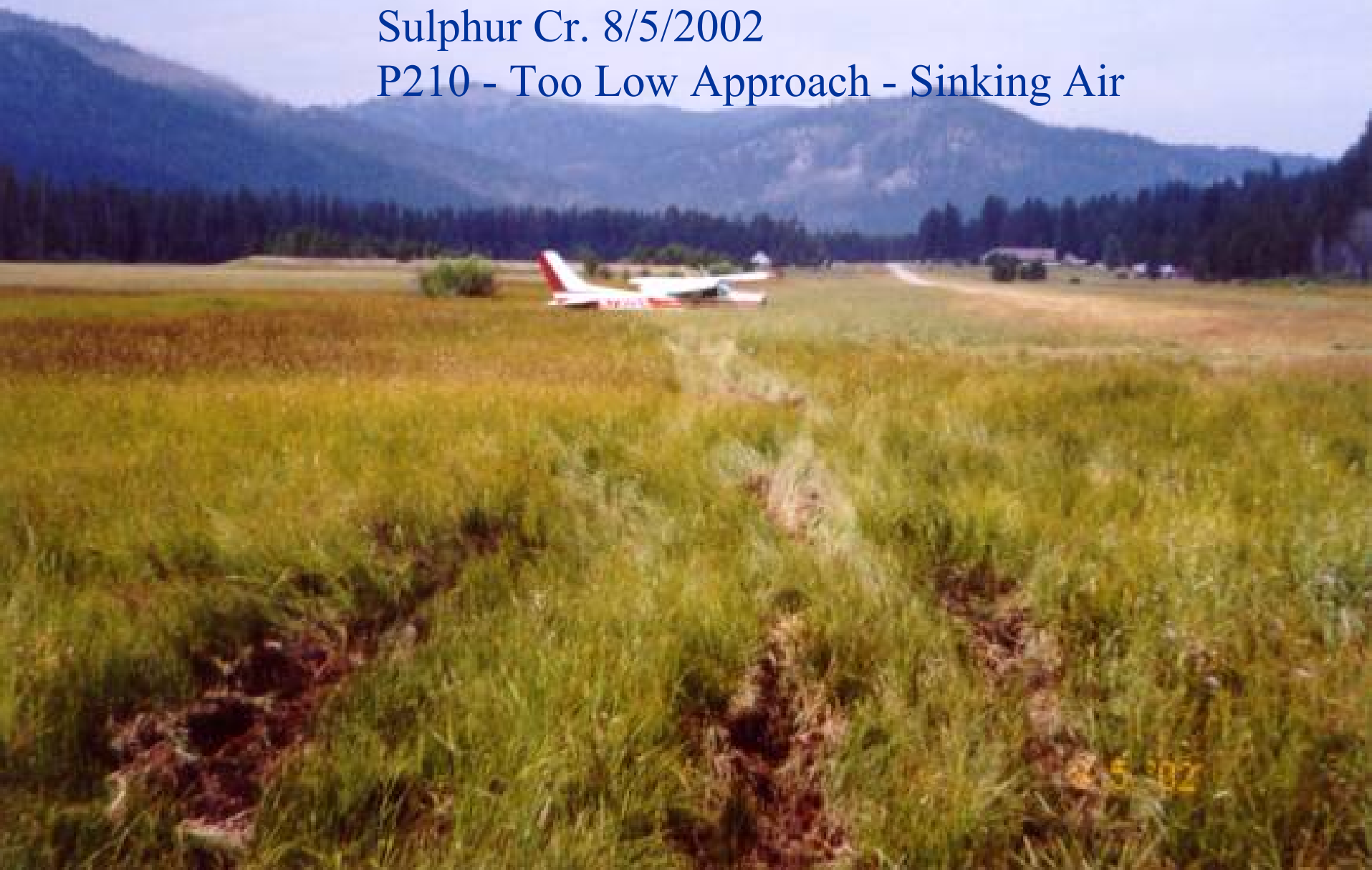
C182 - Overloaded -tailwind - take off stall



8 5 '02

Sulphur Cr. 8/5/2002

P210 - Too Low Approach - Sinking Air





Go Around Attempt 6/2002

Donnelly plane crash



Star-News Photo by Ben Salmons



SUMMARY

- Mountain/ Canyon flying is fun and exciting.
- Mountain / Canyon flying is different type of flying.
- Mountain / Canyon flying takes lots of work and effort.
- Get instruction from experienced backcountry pilots or take one of the Mountain Flying Clinics.
- Stay Current - Complacency Kills. Overconfidence Kills. Stupidity Kills
- Know your limits – Set you own personal limits
- Land Upstream – Take off Downstream
- Always have a Out
- Be Safe - Have Fun – And, Don't do anything Stupid



RESOURCES

- Lori MacNichol, McCall Mountain Flying, LLC: 208-634-1344
www.mountaincanyonflying.com
- River of No Return - Mountain Flying Clinic, Challis: 208-879-5900
- Idaho Aviation Association: www.idahoaviation.com
- Dick Williams – Mountain Flying Video (in club library)
- Galen Hanselman, Fly Idaho Guide Book 1-800-574-9702
- Sparky Imeson, Mountain Flying Bible and Flight Operations, 1-480-855-7444
or www.mountainflying.com
- Idaho Division of Aeronautics: Dan Etter - Safety/Education Coordinator,
334-8777, <http://www2.state.id.us/itd/aero/aerohome.htm>
- www.shortfield.com – Great website with airstrip views, pilot reports
- Back Country Gear – www.cubgerastore.com
- Back Country Forum – www.backcountrypilot.org

TFR-s NOTE: Flight service Briefer has the most current info – websites may not be up to date.

NIFC – TFR's: <http://airspace.nifc.gov/mapping/nifc/index.cfm> (Can print section of Sectional with TFR)

FAA – TFR: http://tfr.faa.gov/tfr_map_ims/html/index.html

Web Cam's:

ID State: Map with web cam links:

<http://511.idaho.gov/default.asp?display=cams&area=&textOnly=>

Johnson Cr: <http://www.ruralnetwork.net/%7Eyellowpinem/>

Flying B: <http://www.flyingresorttranches.com/>

Stanley: <http://www.sawtoothcamera.com/>

McCall: <http://www.mccall.id.us/government/departments/airport/airport.html>

Idaho Web Cams: <http://www.northwestwebcams.com/idaho-web-cams.shtm> - Also

Oregon/Wash/Mont

Smiley Cr.: http://birice.vaisala.com/photos/03778B5F_06013F28_cam1.jpg

Bogus Basin: <http://www.bogusbasin.org/web-cameras/index.aspx> (good view of Mtn's North of BOI)

Brundage Mtn: <http://www.brundage.com/the-mountain/live-web-cams/>

Teton Mtn-Driggs: <http://www.tetoncam.com/>



The End

PILOTS Lounge

Questions ?