Flying The Idaho Back Country

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T-Craft Safety/Membership Director

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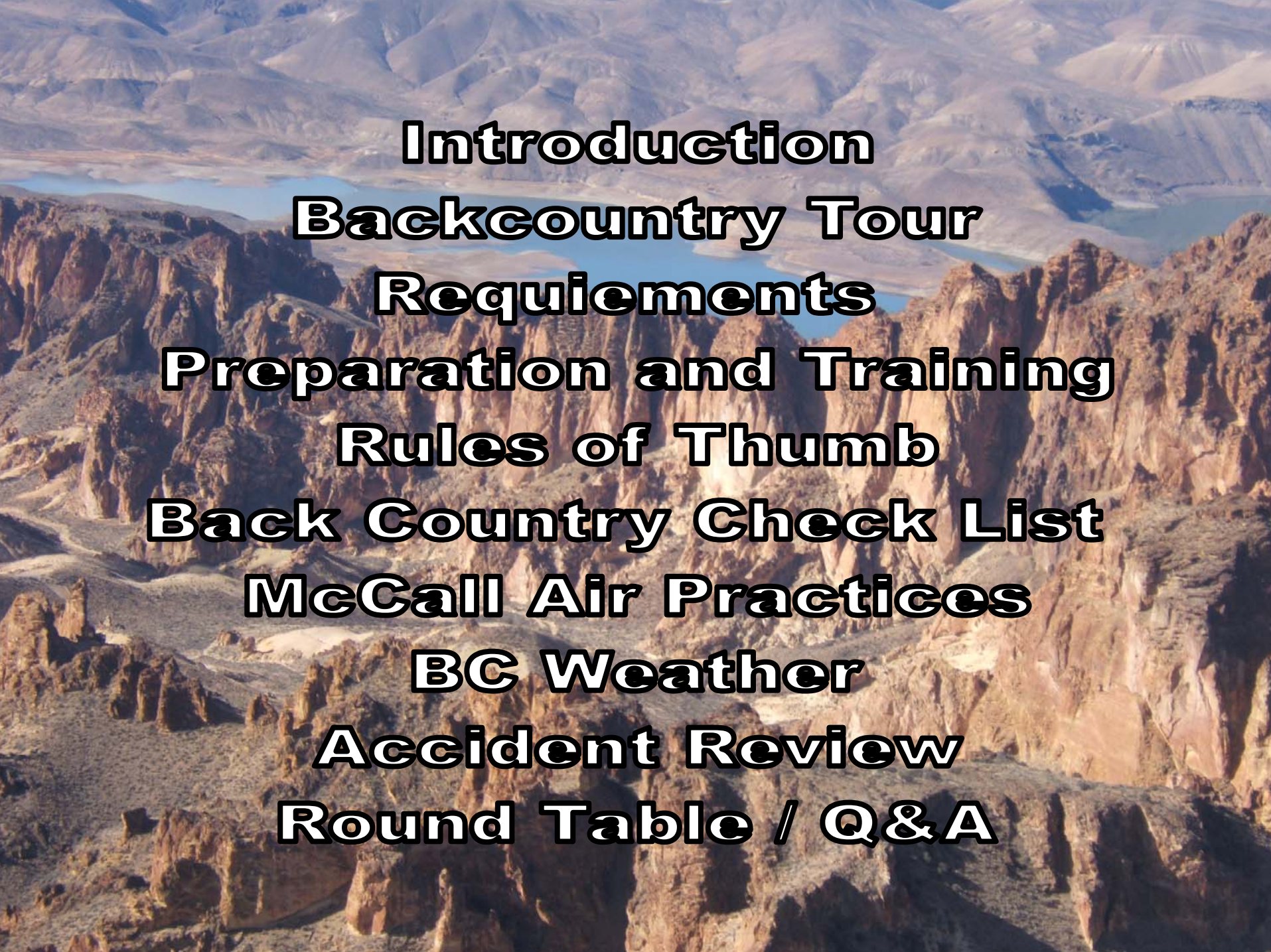

Introduction
Backcountry Tour
Requiements
Preparation and Training
Rules of Thumb
Back Country Check List
McCall Air Practices
BC Weather
Accident Review
Round Table / Q&A

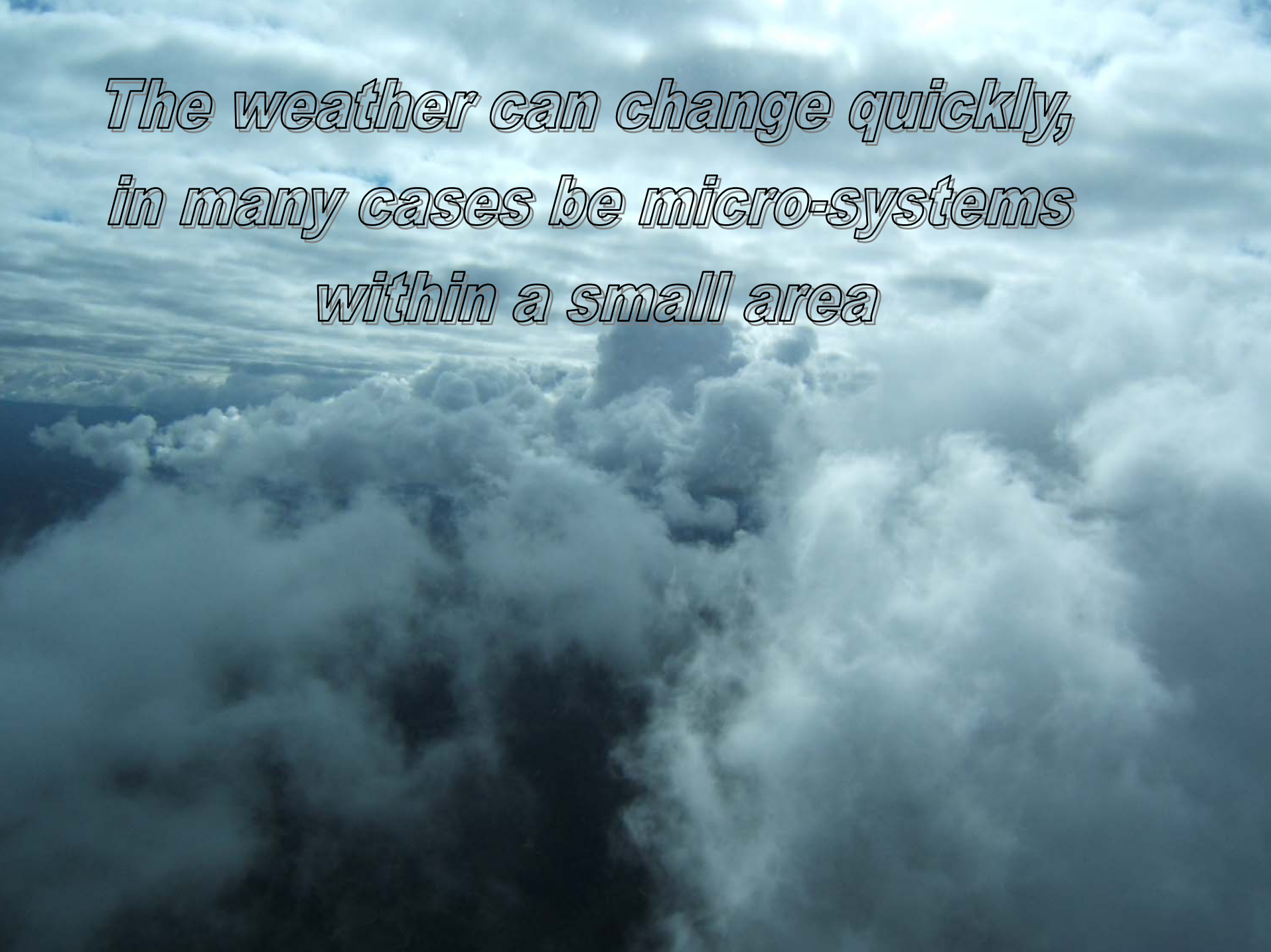

What is Backcountry
- Mountain Flying ?

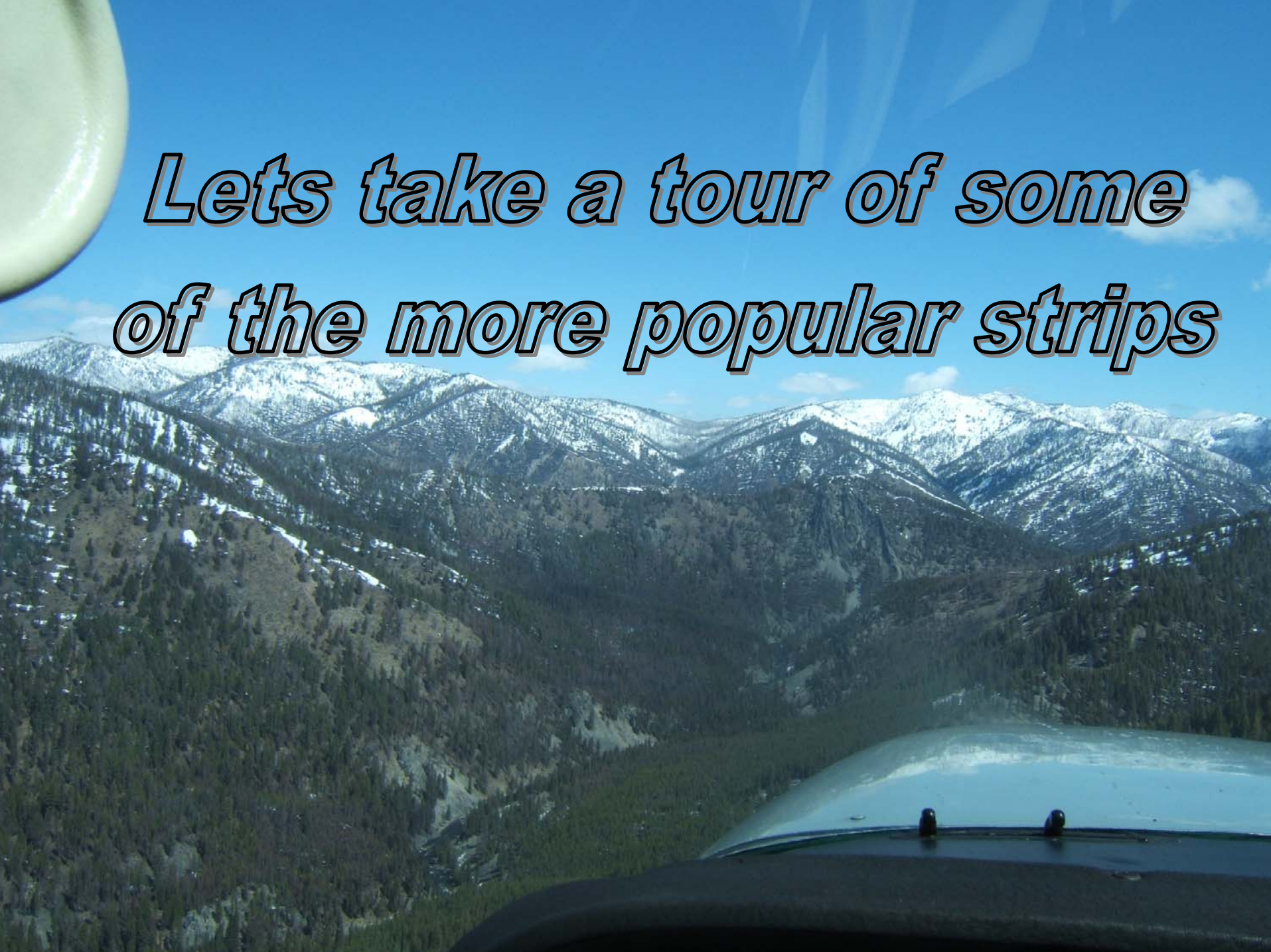

Flying over or in beautiful
but rugged mountainous terrain,

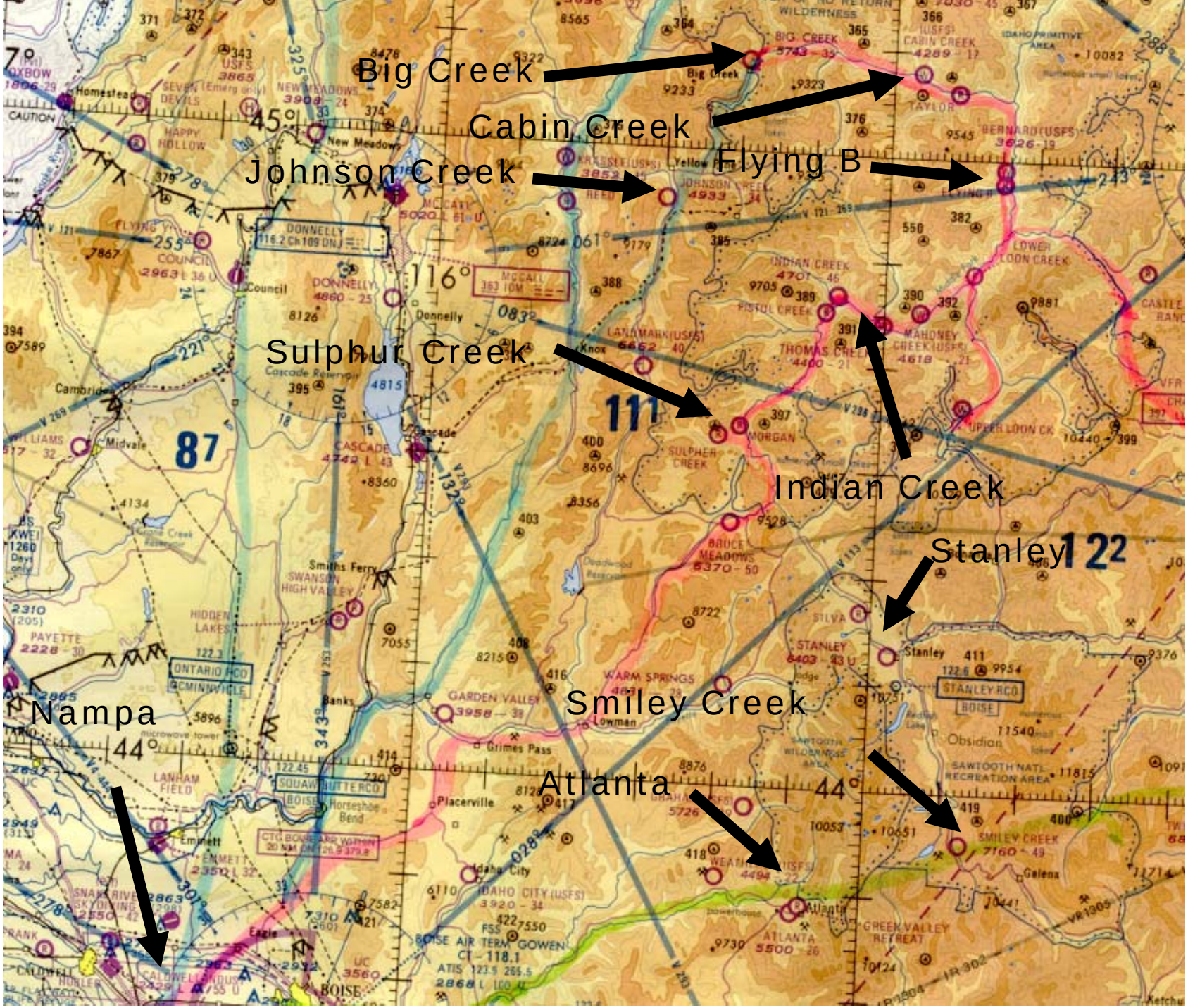

or in deep canyons.

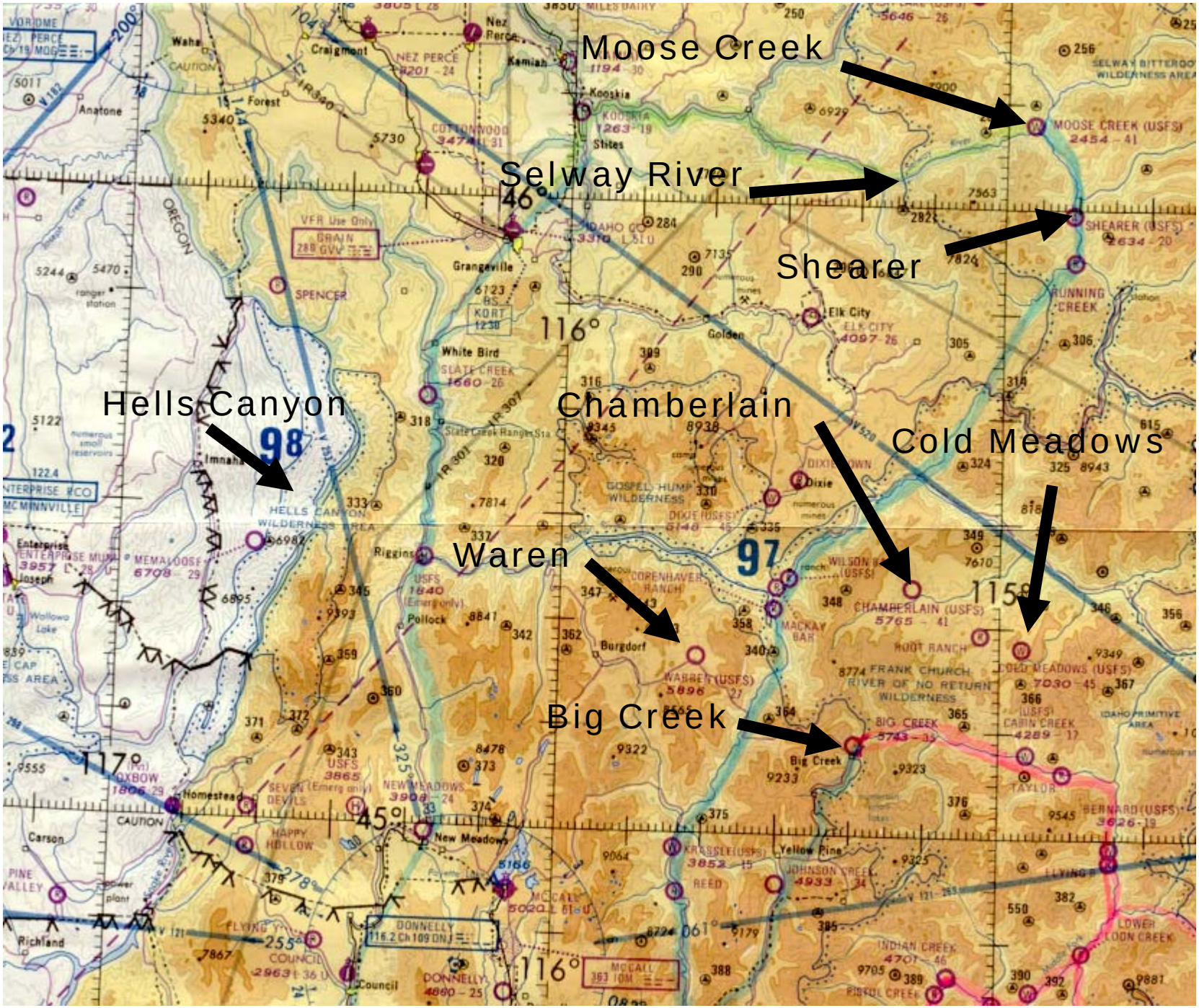

Mountain flying is very unforgiving to
poor planning and training.
There is a very narrow margin for error.


Landing strips are typically
narrow, short, and at high elevation


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


Lets take a tour of some
of the more popular strips


Big Creek
Cabin Creek
Johnson Creek
Flying B
Sulphur Creek
Indian Creek
Stanley
Smiley Creek
Atlanta
Nampa


Moose Creek
Selway River
Shearer
Hells Canyon
Chamberlain
Cold Meadows
Waren
Big Creek

T-Craft BC Policy
Classification of Air Strips
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)	18 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)		


Smith's Prairie
Level 1


Garden Valley
Level 1


Jeff Cook
N4464R

Jim Schiers


Smiley Creek
Level 1

Paul Chase


Redfish Lake - Mt Heybern

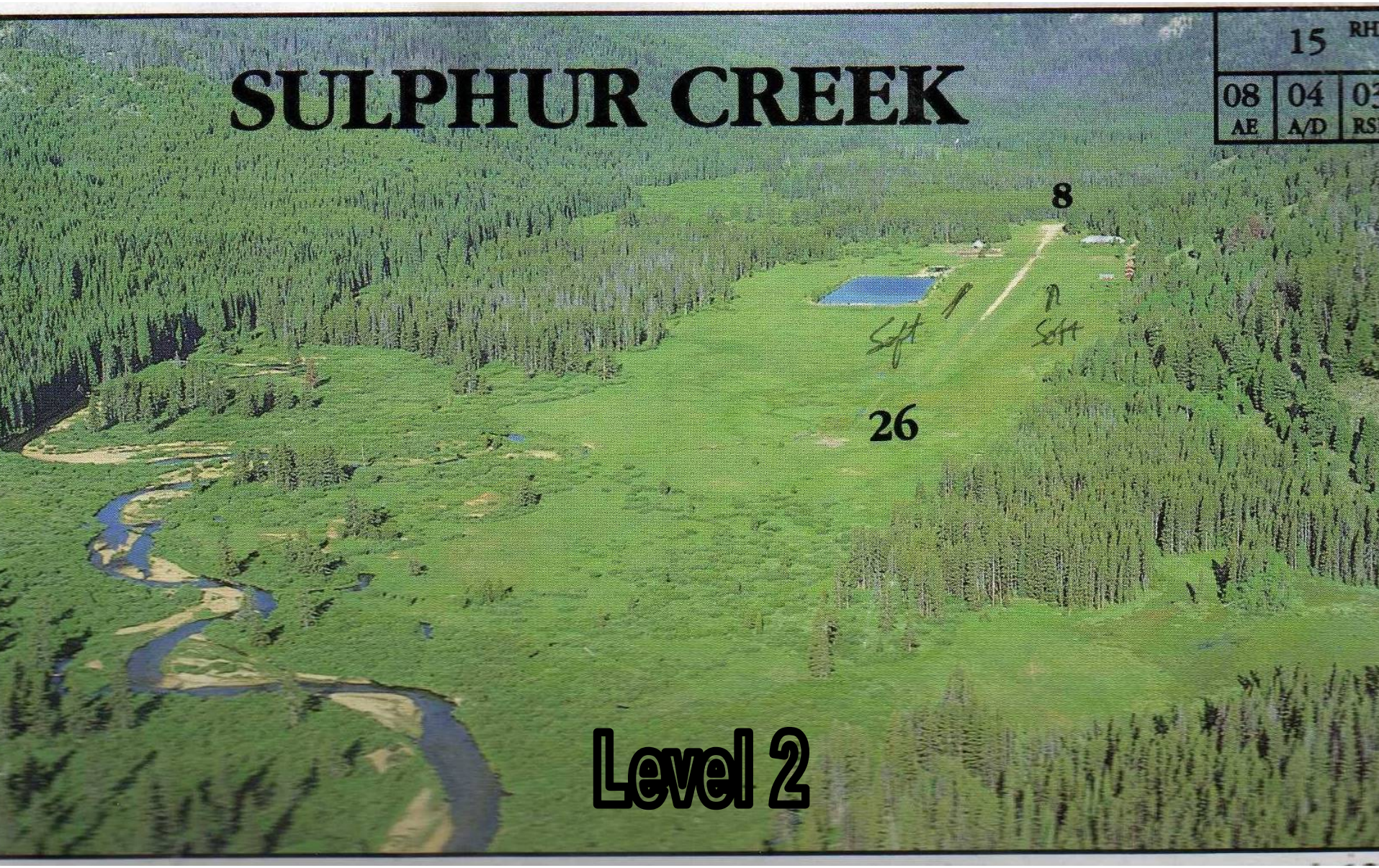

Stanley


Short Final Stanley

Jared Martens

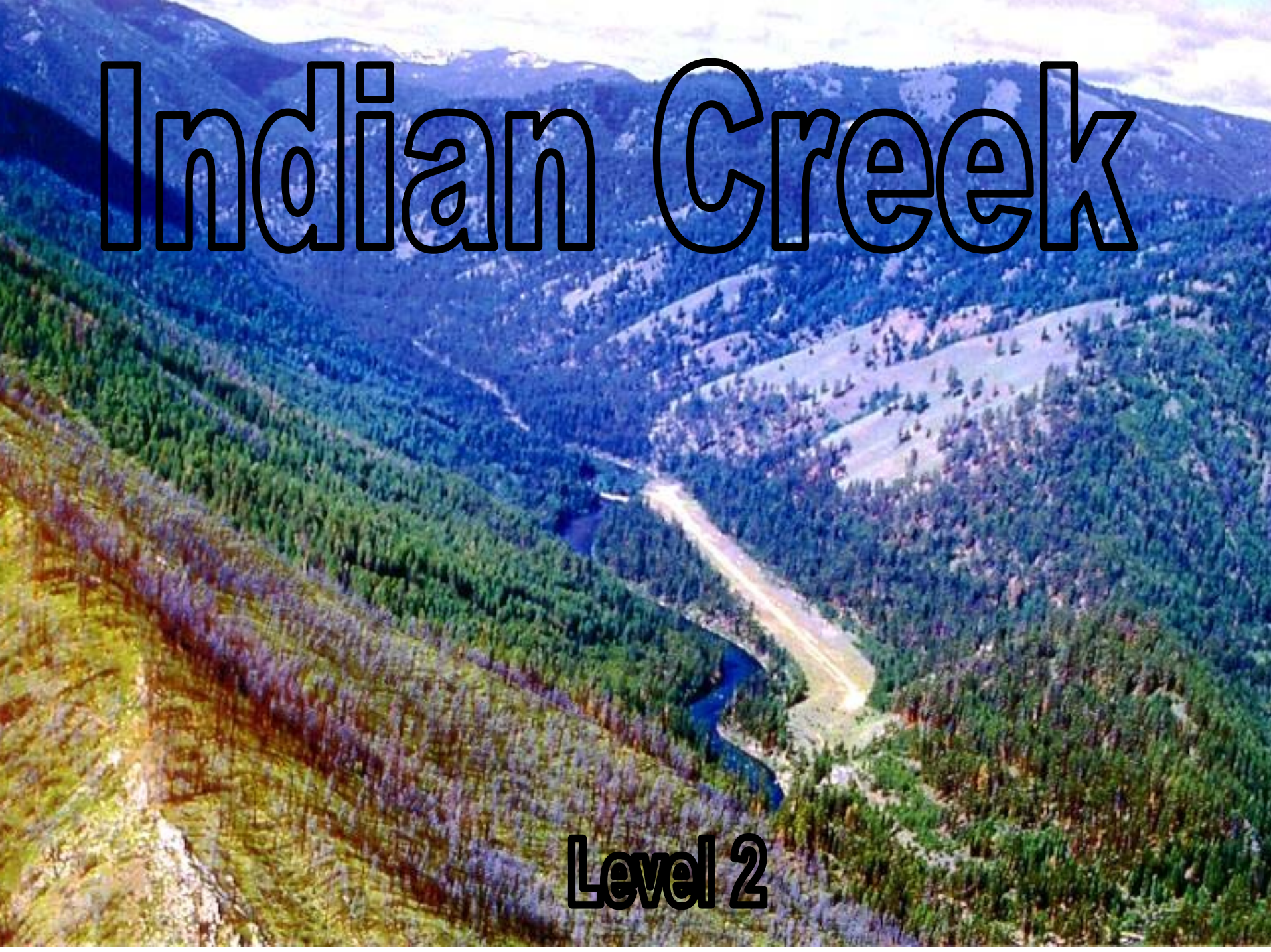
Warm Springs

Warm Springs


SULPHUR CREEK
15
RH
08
AE
04
A/D
8
26
Level 2


"Don"


Jeff Vanhoozer

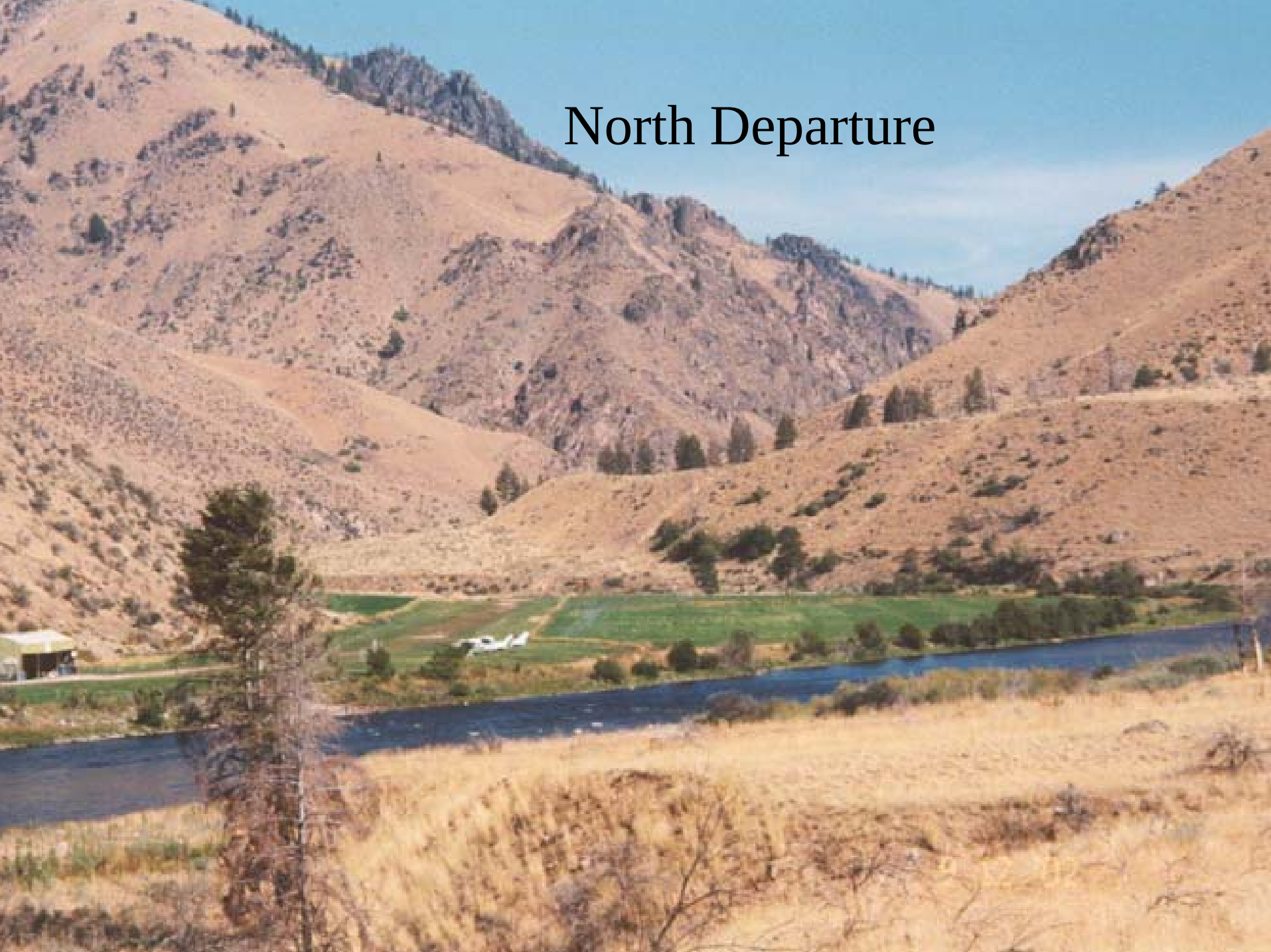

Indian Creek
Level 2


Charles Merrell Dan Johnson

Flying B Ranch

Level 2


Jeff Vanhoozer Jim Hudson John Baglien
N800YD


North Departure

Big Creek

Level 2


Bill Zerfas
BIG CREEK LODGE

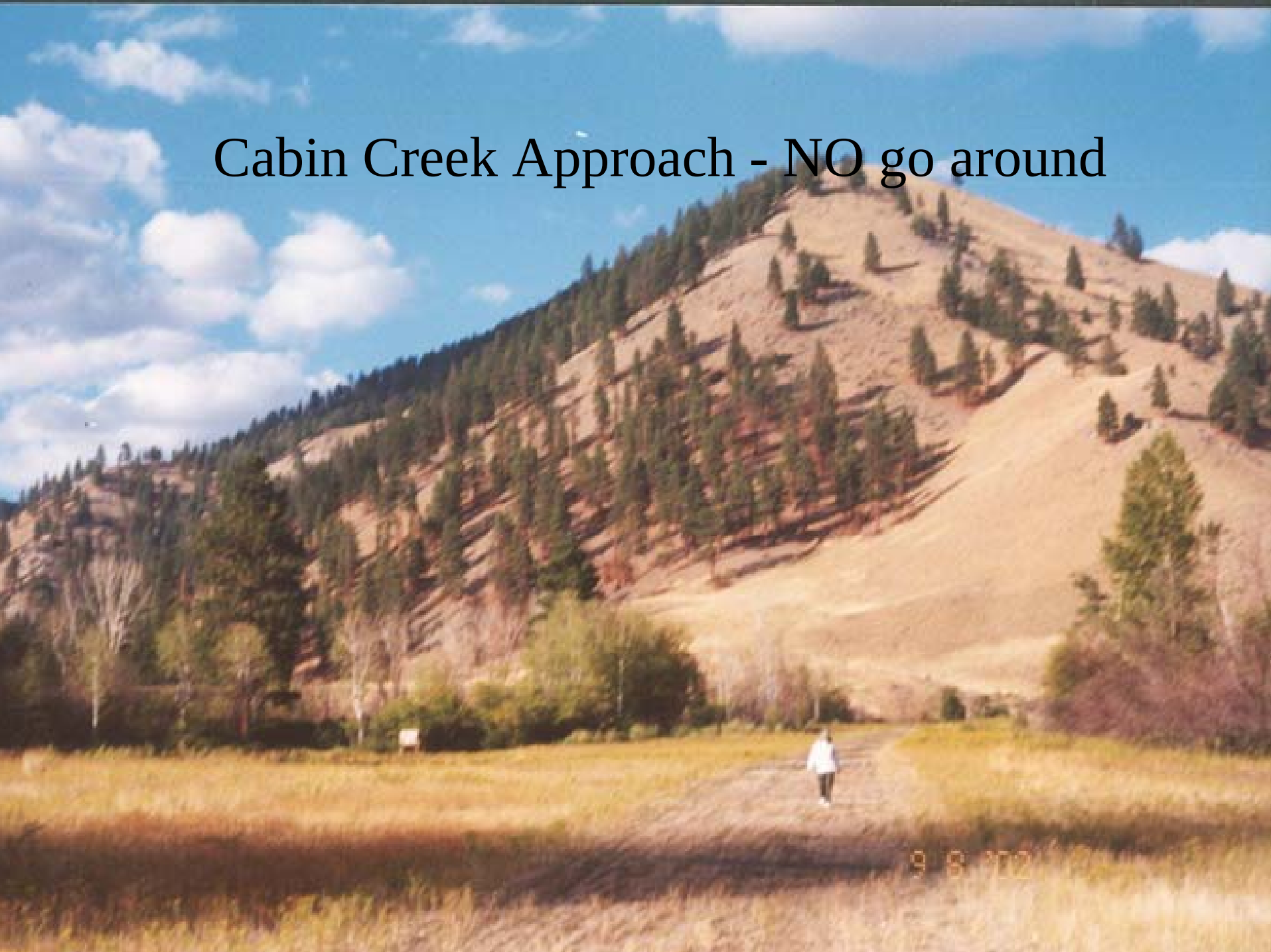
Big Creek Lodge 2008 Fire


Chamberlain Airstrip, field elevation 5,765 feet. These runways may be soft in the Spring. You can anticipate downdrafts over Chamberlain Creek in the early morning and late afternoon. (John Plummer photo)
Chamberlin
Level 2


Chamberlin
Steve Fickes
N7593S

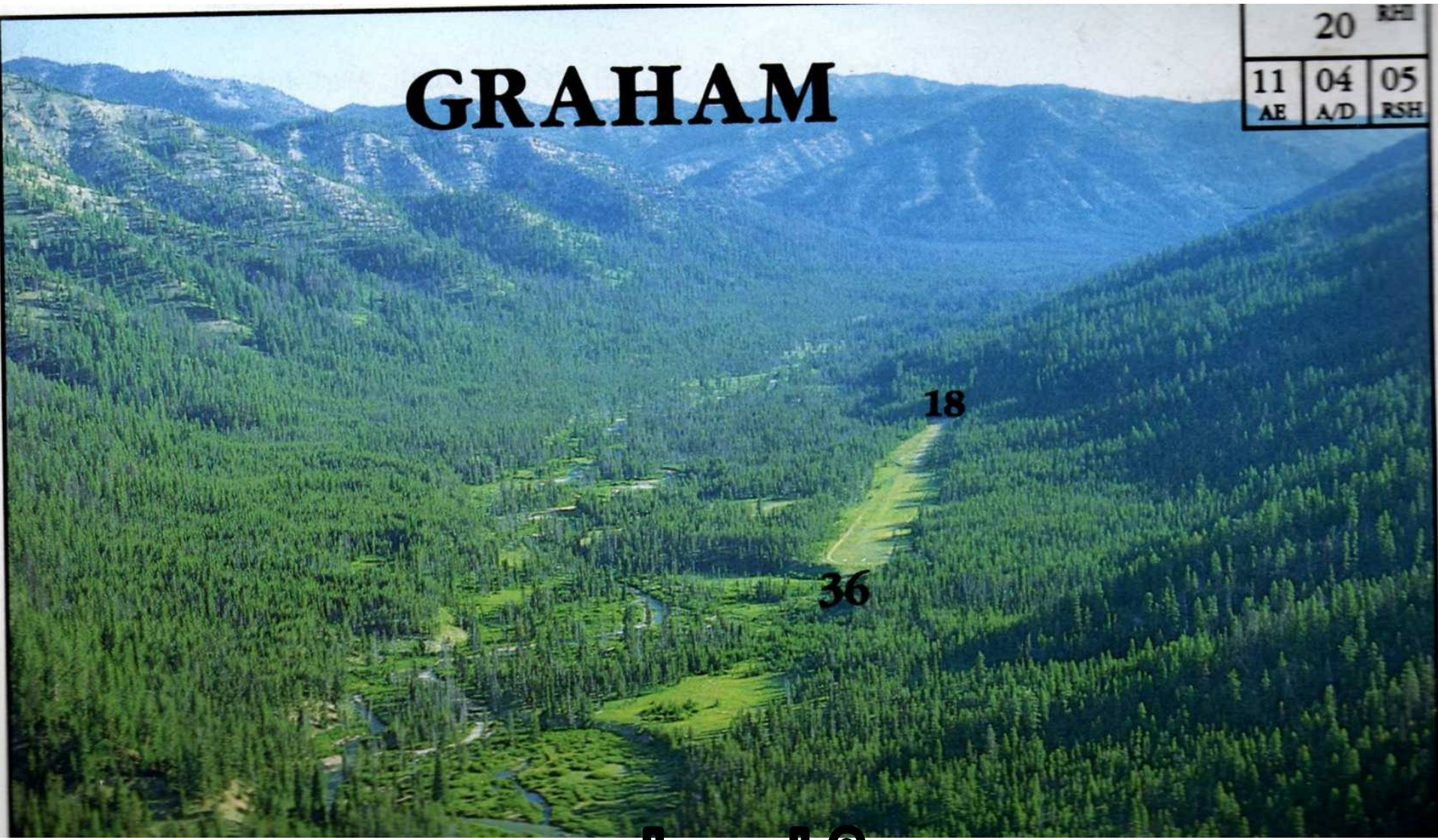

Cabin Creek
The air strip
Level 3
(John Plummer photo)

Cabin Creek Approach - NO go around




Upper Loon Creek
Level 3

Bill McGlynn



Level 3

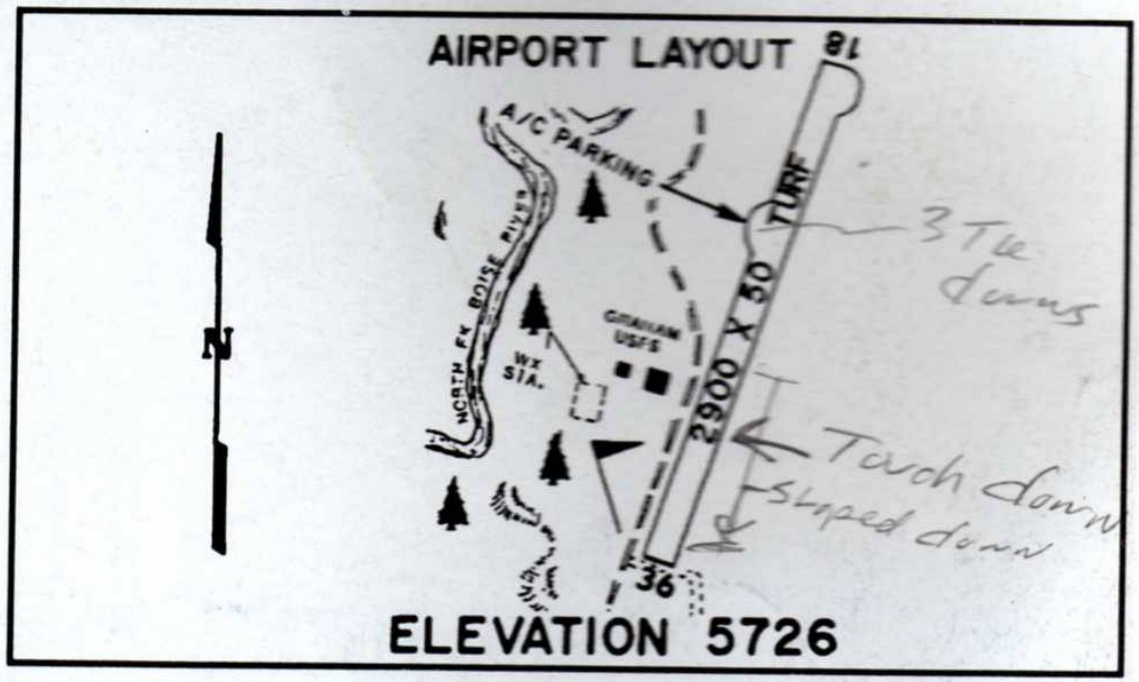
GRAHAM

U45

CTAF: 122.9
FSS: 122.6

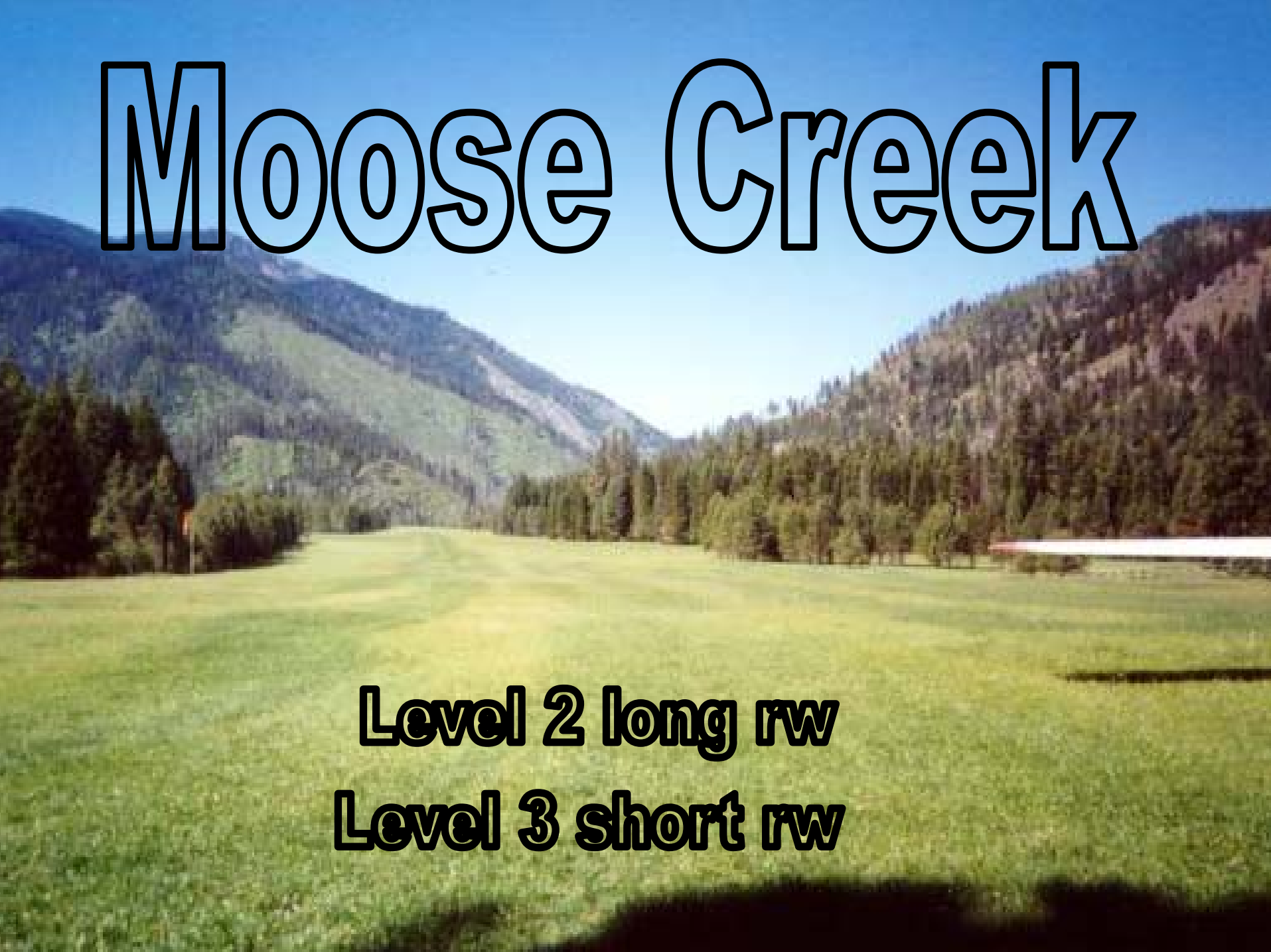
Lat: N43-57.31
Long: W115-16.36

Class: USFS REC
Chart: Salt Lake



AIRPORT CAUTION • The IAFD recommends **"landing RWY 36; depart RWY 18** when wind conditions allow. No line of sight between RWY ends. First 500' of RWY 36 is rough. • Close flight plan prior to landing. • No winter maintenance." • Info: (208)373-4100 Boise Forest Air Officer.


Graham


Moose Creek
Level 2 long rw
Level 3 short rw


Allison Ranch
Level 3 +

Getting Started

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 instruction within 60 days in Make & Model.

Level 1 150 Hrs total, 50 PIC make and model

Level 2 250 Hrs total 75 PIC make and model

Level 3 325 Hrs total 125 PIC make and model

Also an annual refresher ground class and min of 1 hr mtn flying practice prior to heading into the BC.

THE BASICS

JUDGEMENT – KNOWLEDGE – SKILL

- KNOW YOURSELF
- KNOW THE AIRCRAFT
- KNOW THE ENVIRONMENT

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

KNOW THYSELF

Currency – Tune up skills prior to flying the Backcountry

GOOD JUDGEMENT COMES FROM EXPERIENCE – EXPERIENCE USUALLY COMES BAD JUDGEMENT (YOUR'S OR PREFERABLY SOME ELSES)

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

This is risky flying; the techniques may be entirely different than what you learned in basic flight training.

NEVER BECOME COMPLACENT – OR OVER CONFIDENT

Part Time Pilots - Full Time Mountains.

SET AND ADHERE TO PERSONAL LIMITS

KNOW YOUR AIRPLANE & YOUR SKILLS

The three most important things:

Slow Flight, Slow Flight **SLOW FLIGHT!!**

(helps you become one with your aircraft)

Know your aircraft performance and your ability to perform

- Takeoff, climb, cruise, and landing performance
- Airspeed settings in different weight/bal configurations
- Fuel consumption and range
- Weight and balance limits
- And most importantly: **Effects of Density altitude**

KNOW THE ENVIRONMENT

Study and learn as much as possible in the following areas. An experienced BC pilot can help.

Learn the geography and major landmarks
(peaks and drainage's) of the area in which
you are flying. Google Map/ Earth can help.

Be familiar with local mountain & Canyon weather

General Circulation Patterns, thermal & turbulence,

Local Canyon Windflow Patterns

Know specific details of airstrips you are using

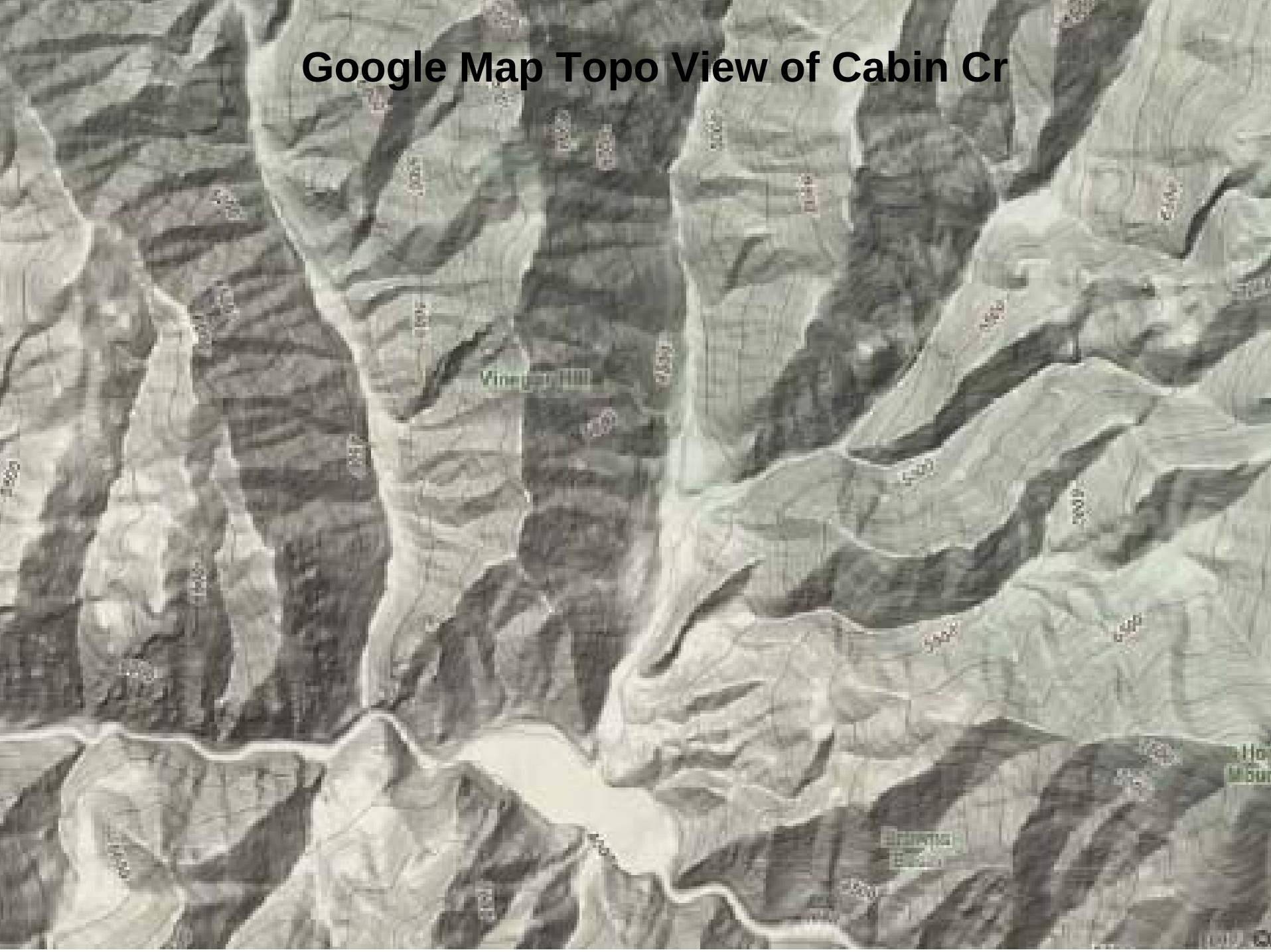
Approach and departure routes, Unique Hazards,

Lighting conditions.

IAA web page www.idahoaviation.com – Idaho Airstrip Network. www.shortfield.com Airport Explorer. Both have airport directory's with google maps/satellite and topo views, descriptions ans in some cases pilot reports, photos, and video's

Google Map Satellite View of Cabin Cr

Google Map Topo View of Cabin Cr



Preparation and Training

PREPARATION - SKILLS

KNOWLEDGE

- REVIEW – KNOW POH; PERFORMANCE CHARTS, RECCOMENDED SHORT/SOFT FIELD PROCEDURES, Vx, Vy, Va, Best Glide.
- DO DA, PERFORMANCE CALCULATIONS FOR AIR STRIP YOU WILL BE USING FOR PRACTICE.
- AIR STRIP RESEARCH – AFD / CHARTS / TOPO MAPS / WEB / ASK
- FLIGHT PLANNING – FUEL/WEIGHT TRADE OFF'S/ROUTE
- REVIEW WEATHER, SOURCES OF INFORMATION, 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 LANDINGS (HIT TARGET WITHIN 100' - <u>CONSISTANTLY)</u>
- CANYON 180 TURN (MODIFIED CHANDELL)
- EMERG PROCEDURE – BEST GLIDE
- DETIRMINE AIRSPEED CONFIG, STALL SPEEDS – NEXT SLIDES

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

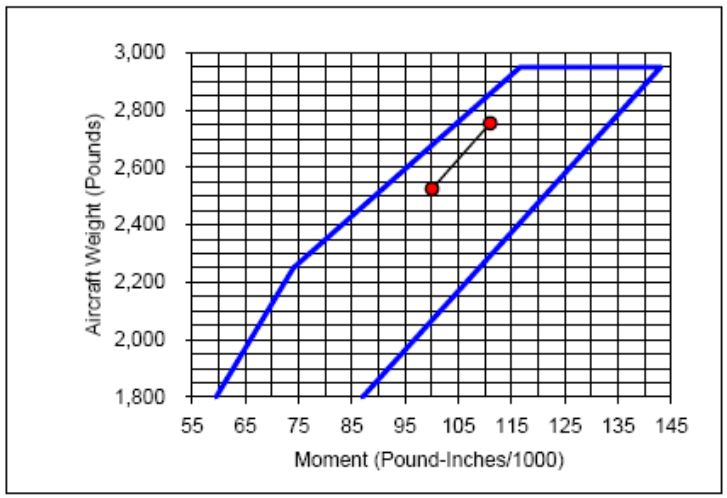
Fuel - 75 Gallons MAX Useable	65.0	
Planned Trip Time	3.0	Hrs.
Payload (Pax & Baggage)	550.0	
* Range @ 74% PWR =12.7 GPH	5.0	Hrs.
Fuel Reserve Time	2.0	Hrs.

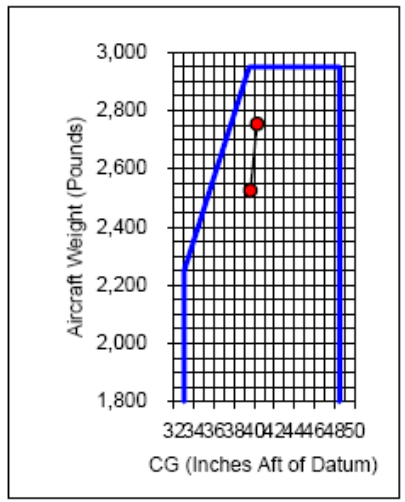
Enter data in highlighted blocks			
Max Gross Weight	2950		
Take-Off Weight	2754	93%	of Gross
Over/Under weight	**196**		

* 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	37.0	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	18.2
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)	Mome /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	47.8	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 S0	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	10,0
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	

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_____

	Flaps	Airspeed	Power
Cruse	____	____	____
Slow Cruse Va	____	____	____
Canyon Speed:	____	____	____
Landing - Downwind	____	____	____
Landing - Final	____	____	____
Takeoff Vx	____	____	____
Takeoff Vy	____	____	____

KNOW YOUR AIR SPEEDS - MCA / STALL

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

Test altitude:_____ / DA_____ Weight_____

Flaps	Vso	MCA	Power MP/RPM
0	____	____	__/____
20	____	____	__/____
40	____	____	__/____

RULES OF THUMB

- Do not fly in the Mountains with winds aloft in excess of 30 Knots - less with less experience.
- Plan to arrive / depart by 10 AM or late evening when winds are calm and temperature is cooler.
- Always have an out
  - Be able to turn to lowering terrain.
  - 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 45^0 angle before crossing.
- In Canyons - always keep river under your arm pit.
- Life is Good – so is Lift – Look for it
- Land Up River – Take Off Down River
- **WIND AND HEAT ARE NOT YOUR FRIENDS**

BACK COUNTRY CHECK LIST

PREFLIGNT PLANNING

GENERAL

☐ **Aircraft –** Extra attention to brakes, wheels, tires. Remove wheel farings prior to flying into backcountry. Bring tie down ropes, stakes, tow bar, extra oil, window cleaner, towels, survival and 1st aid kit, fuel measuring stick.

☐ **Pilot** – Competent in slow flight, short/soft field operations. Be familiar with POH: performance charts; take-off, rate of climb, landing, weight & balance, D.A. calculations, short/soft take-off landing procedure. Know critical V speeds for anticipated weight and altitudes. Vx ,Vy, Vfe, Va, Vso, approach and final speeds.

ROUTE PLANNING

☐ Select destinations capable of plane performance, weight, and pilot skill.

☐ Plan route – fly roads, rivers, valleys, meadows, airstrips – maximize emerg. landing possibilities.

☐ Choose Altitude – VFR alt. when possible, at least 1000’ over peaks, passes.

☐ Plan alternate routes (low level) for weather, low ceilings.

☐ Estimate flight times, fuel burn (1 hr. min reserve to refueling locations)

WEATHER BRIEFING – FLIGHT PLAN - Do NOT go if winds aloft > 25 Kts

□ Standard weather briefing and get forecast for duration of trip. Use closest weather reporting stations – McCall, Salmon, Challis, Stanley, Grangeville, PIREPS. Call McCall Air or Arnold Aviation (Cascade) for Backcountry Pilot reports.
□ Special attention to: Winds Aloft, ceilings, temp-dew point (morning fog), anticipated surface temp winds at time of arrival. – TFR'S
□ Forecast may change drastically for long stays. Use best judgment, take-off and look, call flight watch 122.0 when able.
□ File flight plan with F.S.S. or make sure someone knows your plan and expected return date/time. Stick to the Plan.
□ Close flight plan when aloft before decent – nearest RCO's. (Stanley 122.6, Salmon 122.55, Cascade 122.35). Salmon has best reception in most middle fork areas.

PERFORMANCE – KNOW EFFECT OF DENSITY ALT. AND PERFORMANCE CHARTS

□ **DO** weight & balance; and expected % of gross weight at critical strips.
□ **Calculate** Take-off distances and climb out rate at anticipated temperature and DA. Know worst case Temp. Use POH (add 30% fudge factor), KOCH cart or take-off calculator (Sporty's TOC which I've found to be safe)

AIRSTRIP RESEARCH

- ☐ Useable length and width (often less than published)
- ☐ Location of wind sock(s) – often there are several.
- ☐ Altitude, slope (from topo map or experience if not given) and surface.
- ☐ Current Conditions – Ask, Reasearch web
- ☐ Arrival and approach pattern, touch-down point, take-off and departure plan. Most are non standard and many one way, often land upriver and take off downriver.
- ☐ Climb out requirements and go-around options – go-around decision point.
- ☐ Special considerations: Sunrise/set blinding, potential for sinkers, soft areas, turbulence and swirling wind.
- ☐ Tie down locations, trees, obstacles, potential for animals.

FLYING THE PLAN

ENROUTE - ALWAYS HAVE AN OUT - TO LOWERING TERRAIN

□ Fly the planned altitude and route (unless unable due to weather-report deviations)

□ Use Pilotage – know your location at all times -.magnetic heading to planned course.

□ Monitor 122.9 and give frequent position reports (location, altitude, and pressure setting if close traffic.

□ Ridge crossings at 45^0 – 90^0 turn to lowering terrain.

□ Anticipate updrafts, downdrafts, turbulence over peaks and ridges.

□ Slow to Va (according to weight) in turbulence.

CANYON FLYING - ALWAYS BE ABLE TO DO A 180^0

□ Fly the right side of the canyon (unless turbulence or downdrafts, dictate left), keep the river under your armpit.

□ Fly at slow cruise – minimum RPM for low noise.

□ Never turn up a drainage without a significant creek or at altitude to see it's not blind.

ARRIVAL – TAKE TIME FOR A GOOD CHECK-OUT

- ☐ Plan decent to avoid shock cooling. – Close Flight Plan before decent.
- ☐ Make radio call for fly-over.
- ☐ Slow down to Vfe or less for fly over. Start to get stabilized for approach.
- ☐ Circle strip, check and feel winds, **Know** what the wind is doing, look for traffic, obstacles, animals on runway.
- ☐ If turbulence or mild winds at pattern altitude, **Strongly** consider not landing.
- ☐ If wind socks blowing in opposite directions or gusting – **Do Not** land.
- ☐ Locate landing target (worn area) and runway markers (if any)

APPROACH – THE KEY TO A GREAT LANDING IS A STABILIZED APPROACH

Getting slow and set up early reduces the variables. Expect higher than normal ground speeds at high DA. **IAS** is the same.

- ☐ Make radio call on downwind (river). Typical call: Indian Creek traffic, Skylane 91X downriver (eastbound) for a upriver (westbound) landing, Indian Creek. Runway numbers are seldom used.
- ☐ Fly the downwind slower than normal ~ 0.8 Vfe with 20^0 of flaps.

LANDING – LAND AT MINIMUM AIR SPEED

- Base and final at 30^0 flaps with short field approach speed.
- Short approach, full flaps, with some power.
- Touchdown at MCA with stall horn blasting, land as soft and slow as possible.
- Keep nose up and maintain centerline – hard braking is seldom necessary.

TAXIING – PROTECT THE PROP

- Taxi with nose high – full up elevator.
- Watch for rocks, chuck holes, trees, sprinkler lines, rough spots, soft spots, etc. If you can't see what's ahead, pull off to the side, get out and check it out.
- Always tie down if expected to stay for a few hours.

TAKE-OFF – 71% OF TAKEOFF SPEED AT 50% OF RUNWAY – ELSE ABORT

- ☐ Check taxi – takeoff path for rocks, chuck-holes, dips, etc.
- ☐ Check P.A. Temp. winds - do take-off, rate of climb calculations if necessary.
- ☐ Locate 50% runway length mark and know 71% Vx.
- ☐ Mixture for best power – run-up on the back-taxi if no good location for run-up.
- ☐ Flaps at short/soft setting – usually flap parallel to down aileron (20^0 Cessna's)
- ☐ Trim set for Take-Off
- ☐ Review departure route and abort plan.
- ☐ Use **Extreme** caution if taking off in tailwind. – wait until it dies down.
- ☐ Communicate intensions.
- ☐ Keep feet off the brakes.
- ☐ Soft field take-off, but not too much backpressure. Keep on centerline.

John Baglion
McCall Air Pilot
McCall Air BC Policies

McCall Air Policies and Procedures

- Safety First.
- Dispatch and flight following is with McCAll Air.
- But the ultimate responsibility for each and every flight lies with the pilot.

Pilot's Responsibility to Check Weather, Aircraft and Load.

- Pilot makes go-no go decision.
- Know your aircraft performance. Turbo 206 approach 15" MP at gross; 12" MP light.
- Practice short and obstructed approaches at gross.
- Pilot certifies weight and balance every flight.

Pilot Determines Fuel Requirement and Measures Fuel

- Safe margins for flight duration and possible delays.
- Remember that tankering of extra fuel cuts into load and performance margins.

No criticism for cancelled flight or precautionary landing.

- Aborted flight from McCall to Sun Valley with passengers aboard after spending an hour trying to work around weather.
- Declined to follow owner under low clouds at Secesh Summit. (Went around via Little Salmon.)
- Landed at Cascade for fuel after weather avoidance extended flight.

No self-checkout at back-country strips.

- Prior experience or ride along minimum.
- More difficult strips require demonstrated proficiency with check-pilot.
- McCall Air maintains record of specific strips pilots are approved for.

Stable, power on, full flap approaches.

- Physical landmarks provide glide-path checks. (e.g. Cabin Creek, U. Loon)
- Stable approach allows early recognition of and correction for departures from norm.
- 15” MP (turbo 206) 12” MP C182 allows a smoother, more rapid power response to deal with unexpected downdrafts.

Landings

- All landings are spot landings, but if it is not necessary to hit the end of the strip, then don't try – it makes passengers nervous and reduces your margin of safety. (Also adds to taxi time.)
- Shoot for white 1/3 markers. (e.g. Big Creek, Indian Creek)

Temper takeoff calculations with local knowledge and conservative judgment.

- 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.


Weather

WEATHER SOURCES

FSS 1-800-WXBRIEF

ASOS / METARS – KSNT, KMYL, KLLJ, KSMN

AOPA/NOAA – Satellite, Radar, Surface, Winds, etc.

NIFC – TFR's

Noaa Automated Surface:METAR/ RAWS (Remote Automated WX Station)

BLM/USFS – ROMAN Real time Observat`ion and Monitoring and Analysis Network

Web Cam's: Johnson Cr. Flying B, Stanley, McCall, Bogus Basin,

Commercial Operators: McCall Air, Arnold Aviation

I have handouts, or email me and I'll send you the links.

GFS Model
Select Model Guidance, then GFS, then NAMER (for N. America), and finally 850mb, temp, MSLP, Precip. 850mb model shows precip for the previous 6 hours, (from the UTC time stamp at the top of the page), at ~ 5000 ft, the blue contour lines showing where freezing temps begin. The 850mb model shows the upper air ~ 18000 ft) shows where major systems will be.
http://mag.ncep.noaa.gov/NCOMAGWEB/appcontroller

NWS Area Forecast Discussion map page to validate your assessment of the GFS model,.
http://www.wrh.noaa.gov/zoa/cwa.php

Short-range tools
NCEP Short Range Forecast
http://www.hpc.ncep.noaa.gov/discussions/pmdspd.html

Lifted Index
Lifted Index maps will predict areas of unstable air.
http://www.emc.ncep.noaa.gov/mmb/namsvrfcst/

Idaho Forecast Tables http://www.wrh.noaa.gov/boi/forecast.php

NOAA Graphical Forecast
http://www.weather.gov/mdl/synop/gridded/sectors/conusWeek.php?expandweek=ON#tabs

Fog Sat for Western US (also shows cloud cover at METAR reporting stations)
http://adds.aviationweather.gov/satellite/ Choose "Western US" under second bullet

NavMonster: http://www.navmonster.com/ - Very friendly and easy to use. Presents WX along the route you designate, in plain English. Graphical Airmets/Sigmets/Prog Charts, NOTAM's, TFR's also airport directory's/ Goggle Earth maps, fuel, lodging.

Good visual tools, especially radar and satellite looping
NOAA ADDS Aviation Digital Data Service: http://adds.aviationweather.noaa.gov/
NOAA Std Briefing: http://aviationweather.gov/std_brief/ (a subset of ADDS)
http://www.eldoradocountyweather.com/current/usradar.html (Vivid Graphics)
http://weather.msfc.nasa.gov/GOES/goeswestpacusir.html (Infared/Visible/Water Vapor)
http://www.wrh.noaa.gov/zoa/mwmap3.php?map=usa (Entire US Metar/TAF status)

Direct User Access Terminal (DUAT) service for pilots. – Two service providers, also offers flight planning software and on-line filing of flight plans. Provides immediate on-line access to FAA approved information
DUAT: https://www.duat.com/
DUATS: http://www.duats.com/duats.cgi#weather
AOPA: http://www.aopa.org/members/wx/ Requires membership, links to DUAT(S) for filing flight plan.
Aviation WX links by Lester: http://metsun1.met.sjsu.edu/~lester/faq.html - Good FAQ's on weather
Scott Dennstaedt's Aviation Weather Workshop: http://avwxworkshops.com/ -
Charlie's Wx Site http://www.avweather.com/

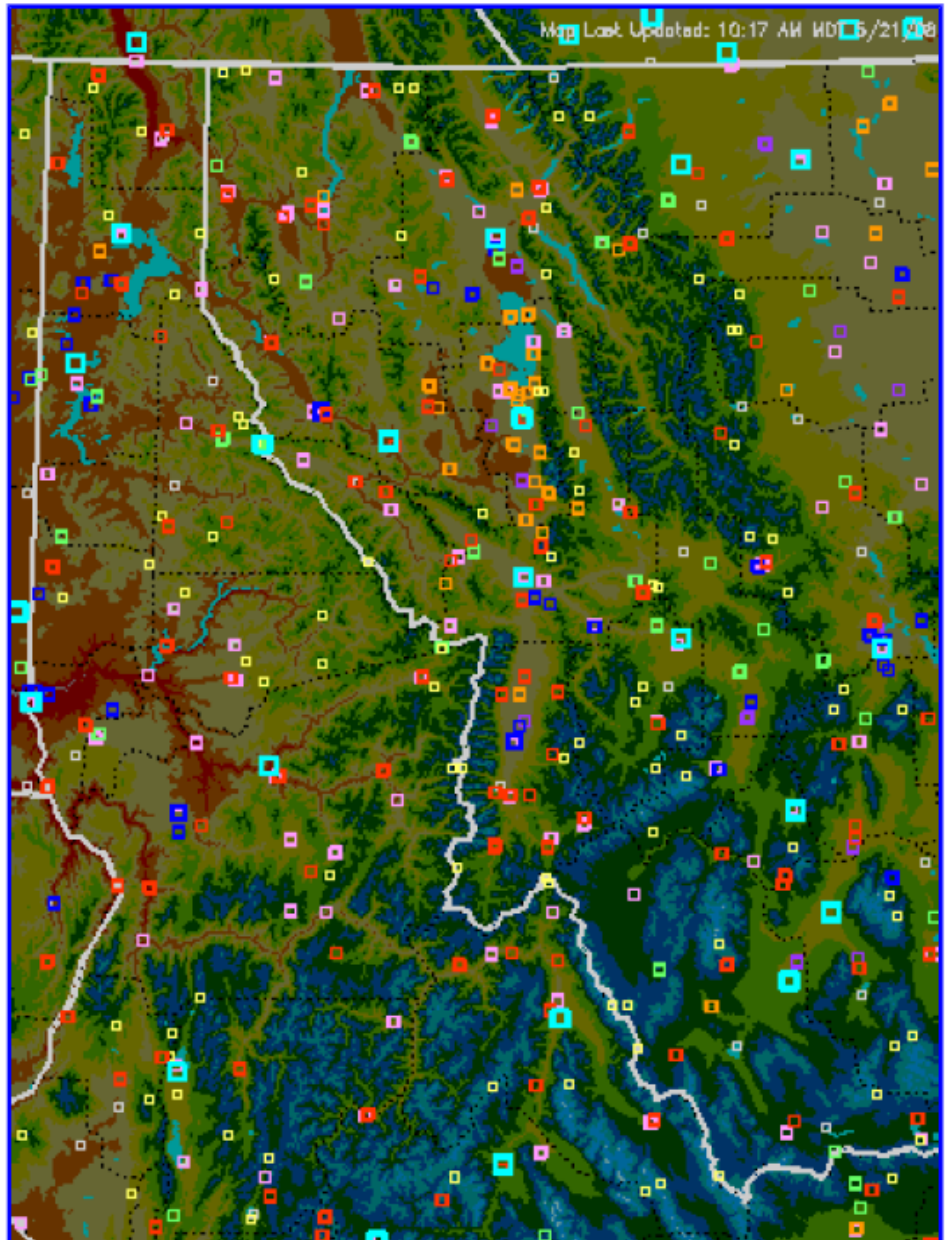
TFR-s NOTE: Flight service Briefer has the most current info – websites may not be up to date.
NIFC – TFR's: http://airspace.nifc.gov/mapping/nifc/index.cfm (Can print section of Sectional with TFR)
FAA – TFR: http://tfr.faa.gov/tfr_map_ims/html/index.html

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/%7Eyellowpinecm/
Flying B: http://www.flyingresortranches.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/

/www.wrh.noaa.gov/mso/newrgl.php Regonal Stations

(click on a site for latest observations)

METAR RAWS SNOTEL HANDAR MISC
DOT APRS/CWOP COOP AGRIMET HADS



Current Hazards
- Warnings
- Local Outlook
- NOAAWatch

Current Conditions
- Local
- Regional
- Satellite Imagery
- Radar Imagery
- Cameras
- Reports/Summaries
- Rivers & Lakes
  - AHPS
- Drought Info - MT

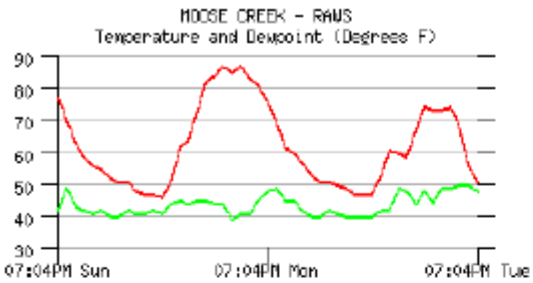
Forecasts
- Activity Planner
- Forecast Discussion
- Current Montana Text Bulletins
- Montana and Idaho
- Fire Weather
- Hydrology
- Avalanche
- Aviation
- Audio

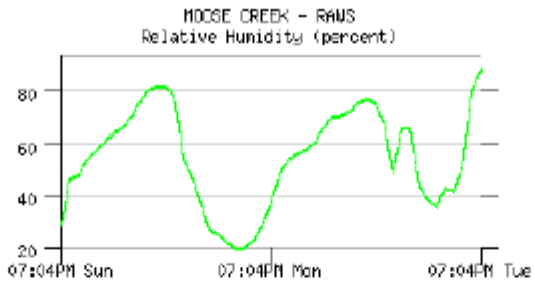
Climate
- Local
- National
- More...

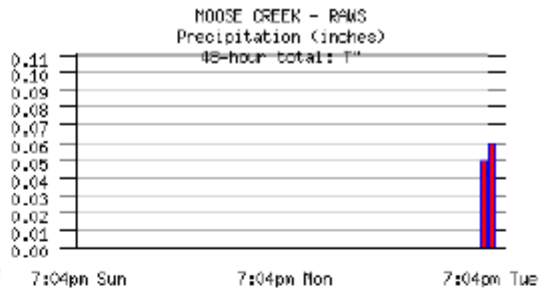
Weather Safety
- Preparedness
- StormReady
- Lightning

Moose Cr Raws Data

Show 7 Days For Information Regarding the Accuracy of This Data: MesoWest Disclaimer







Weather Conditions for:
MOOSE CREEK, ID (MOOI1)
Elev: 2460 ft; Latitude: 46.1283; Longitude: -114.9217

Current time: Tue, 20 May 20:01 pm (PDT)
Most Recent Observation: Tue, 20 May 7:04 pm (PDT)

Time (PDT)	Temp. (f)	Dew Point (f)	Relative Humidity (%)	Wind Direction	Wind Speed (mph)	Fuel Temp (f)	Solar Radiation (W/m*m)	Solar Pct of psbl	Precip Accumulated (inches)	Precip 1 hour (inches)	Precip 6 hour (inches)	Precip 24 hour (inches)	Quality Control
20 May 7:04 pm	51	48	89	NE	2G18	51	8	2%	10.65	0.06	0.11	0.11	OK
20 May 6:04 pm	56	50	80	NE	1G16	55	12	2%	10.59	0.05	0.05	0.05	OK
20 May 5:04 pm	68	50	52	S	5G18	66	257	28%	10.54				OK
20 May 4:04 pm	74	49	42	SSW	5G22	76	595	53%	10.54				OK
20 May 3:04 pm	73	49	43	S	7G16	76	468	37%	10.54				OK
20 May 2:04 pm	73	44	36	N	5G16	75	654	48%	10.54				OK
20 May 1:04 pm	74	48	39	N	G06	72	459	33%	10.54				OK
20 May 12:04 pm	67	44	44	N	1G06	70	419	31%	10.54				OK
20 May 11:04 am	59	48	66	SE	G05	60	109	9%	10.54				OK
20 May 10:04 am	60	49	66	NNE	1G08	60	115	11%	10.54				OK
20 May 9:04 am	61	42	49	N	3G05	66	269	31%	10.54				OK
20 May 8:04 am	53	42	67	N	G06	51	107	17%	10.54				OK
20 May 7:04 am	47	40	76	NNE	2G06	46	37	10%	10.54				OK
20 May 6:04 am	47	40	77	NNE	G05	44	14	14%	10.54				OK
20 May 5:04 am	47	40	76	NE	G04	44	0	--	10.54				OK

Johnson Creek Airport WebCam

Please note: This site is provided as a resource and for the viewing pleasure of our customers. It should not be used as the sole source of information when planning a flight into the Johnson Creek Airport.
Please verify the date and time stamp at the top of the photo.
Thank You RNS & MTE

NOTAMs - N/A at this time.

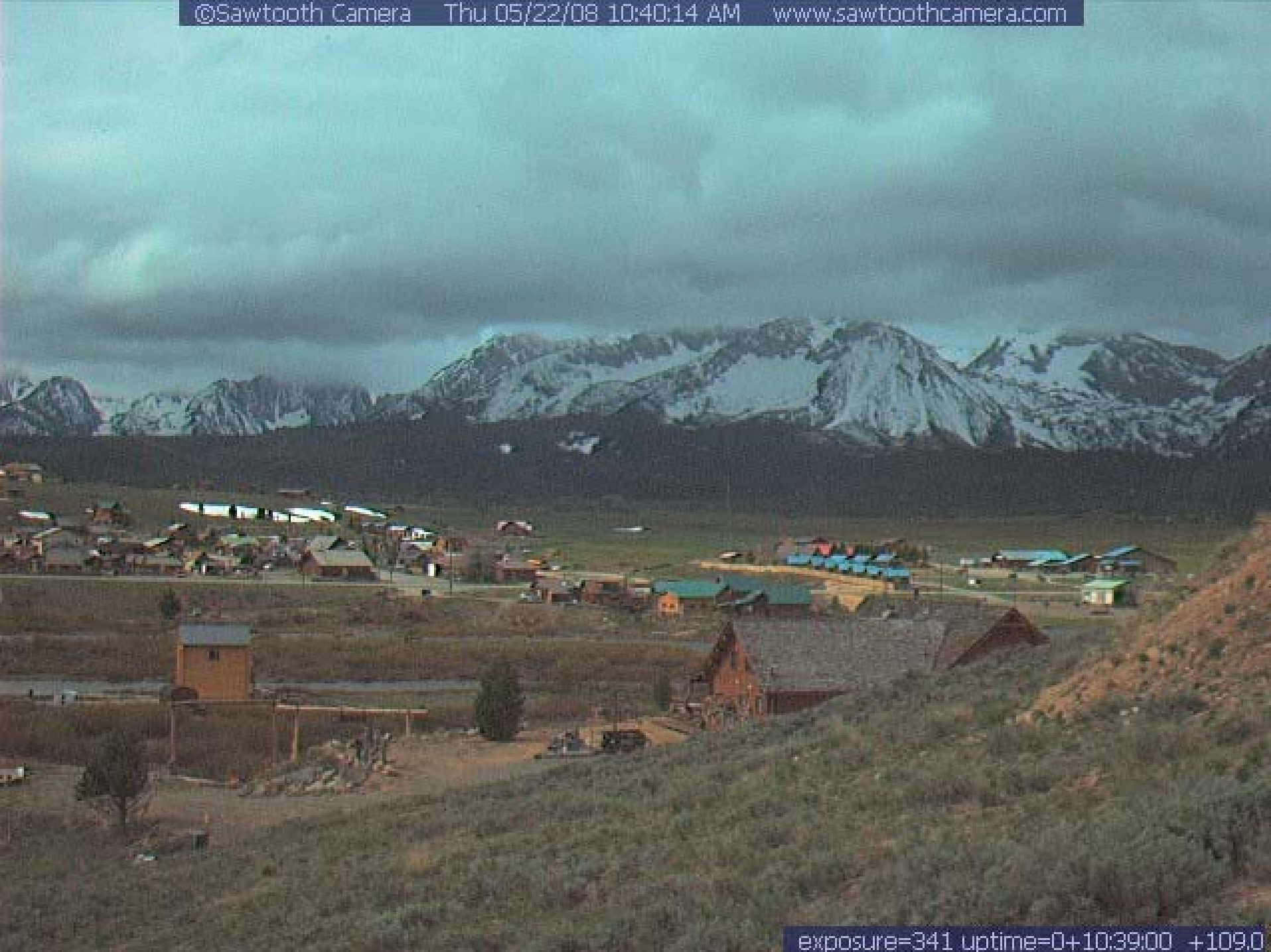
McCall Airport Webcam

(View from North ramp looking South/Southwest)


MAY.22,08 09:14:00AM


©Sawtooth Camera Thu 05/22/08 08:40:07 AM www.saw


©Sawtooth Camera Thu 05/22/08 09:00:08 AM www.sawtoothcamera.com
exposure=672 uptime=0+08:58:54 +109.0


©Sawtooth Camera Thu 05/22/08 10:40:14 AM www.sawtoothcamera.com
exposure=341 uptime=0+10:39:00 +109.0

Mountain / Canyon Weather

Lift

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

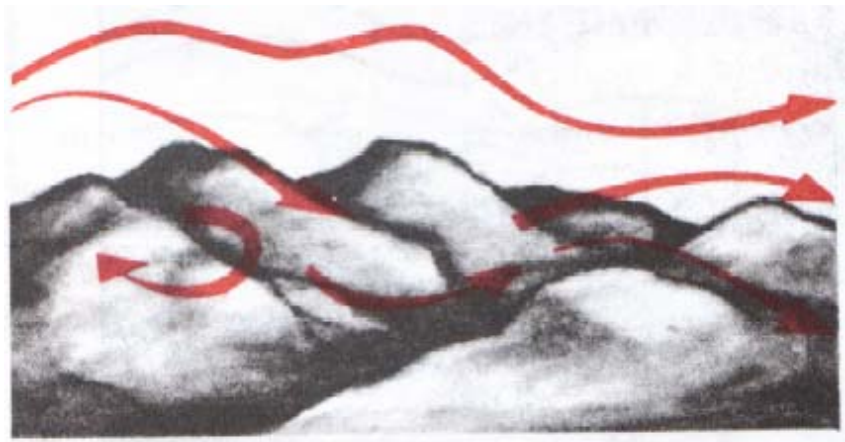
Canyon Meteorology - Winds

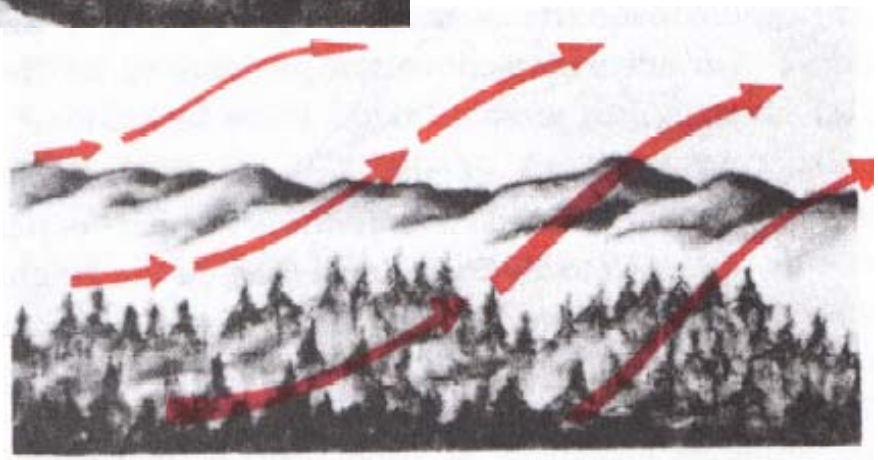
- **Diurnal Effect - Flows Up in Day / Down in Evening (some exceptions)**
- **Convergence Effect – areas of confluence**
- **Venturi Effect**
- **Turbulence**

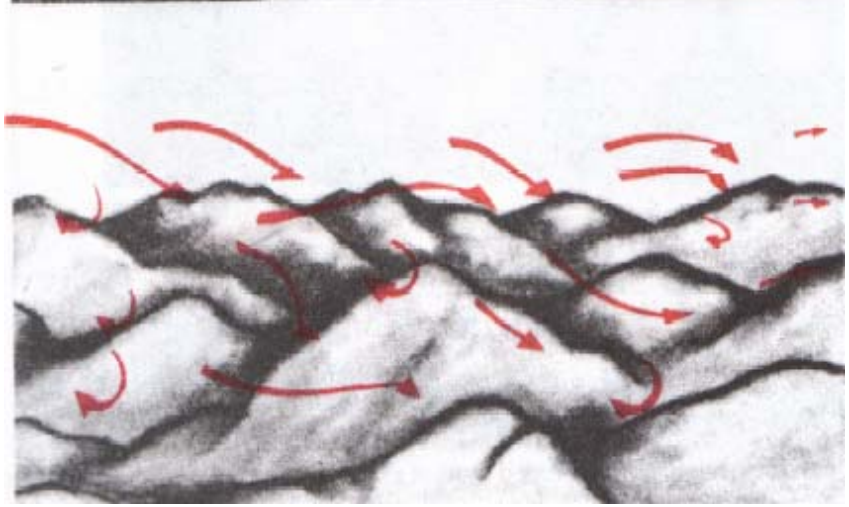
Fog (morning canyon fog common after a storm)

Smoke

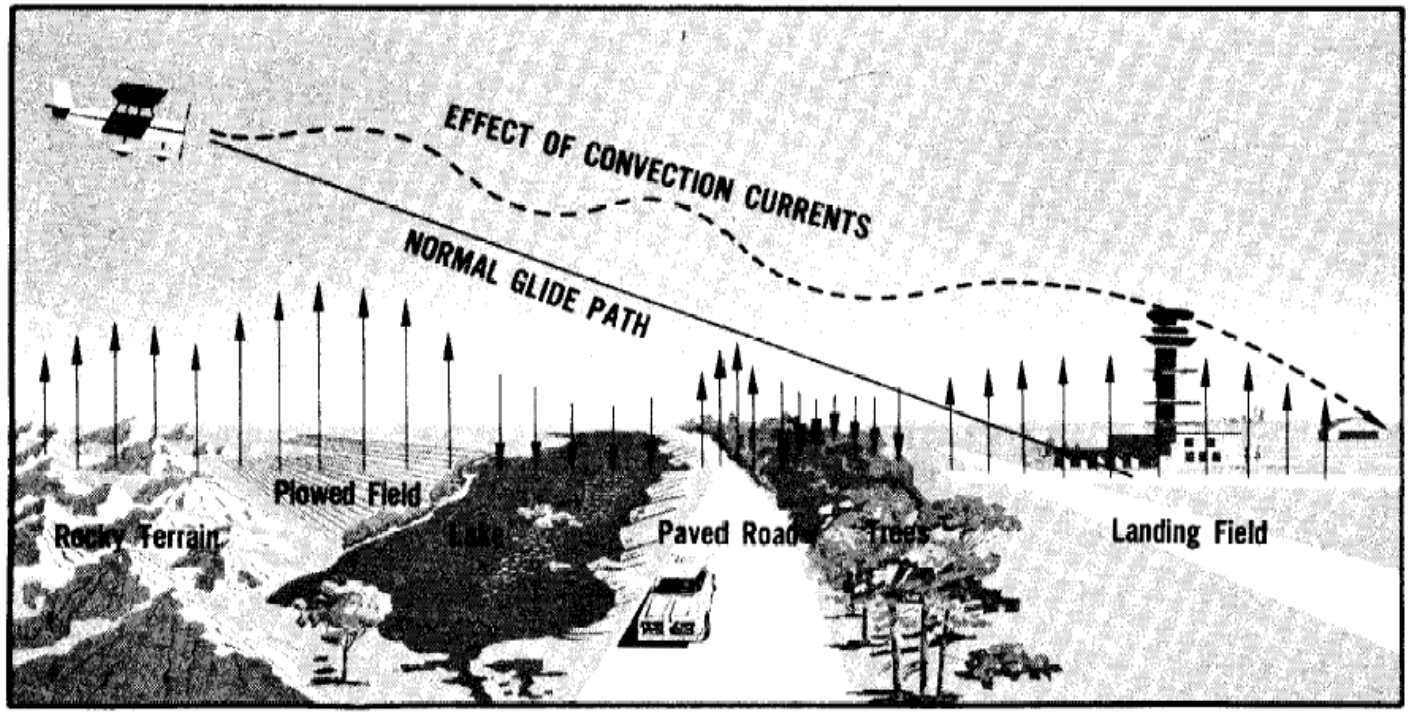
Orographic Lift over Mountains/Canyons







Thermal Lift over varying terrain



Thermal and Orographic Collide

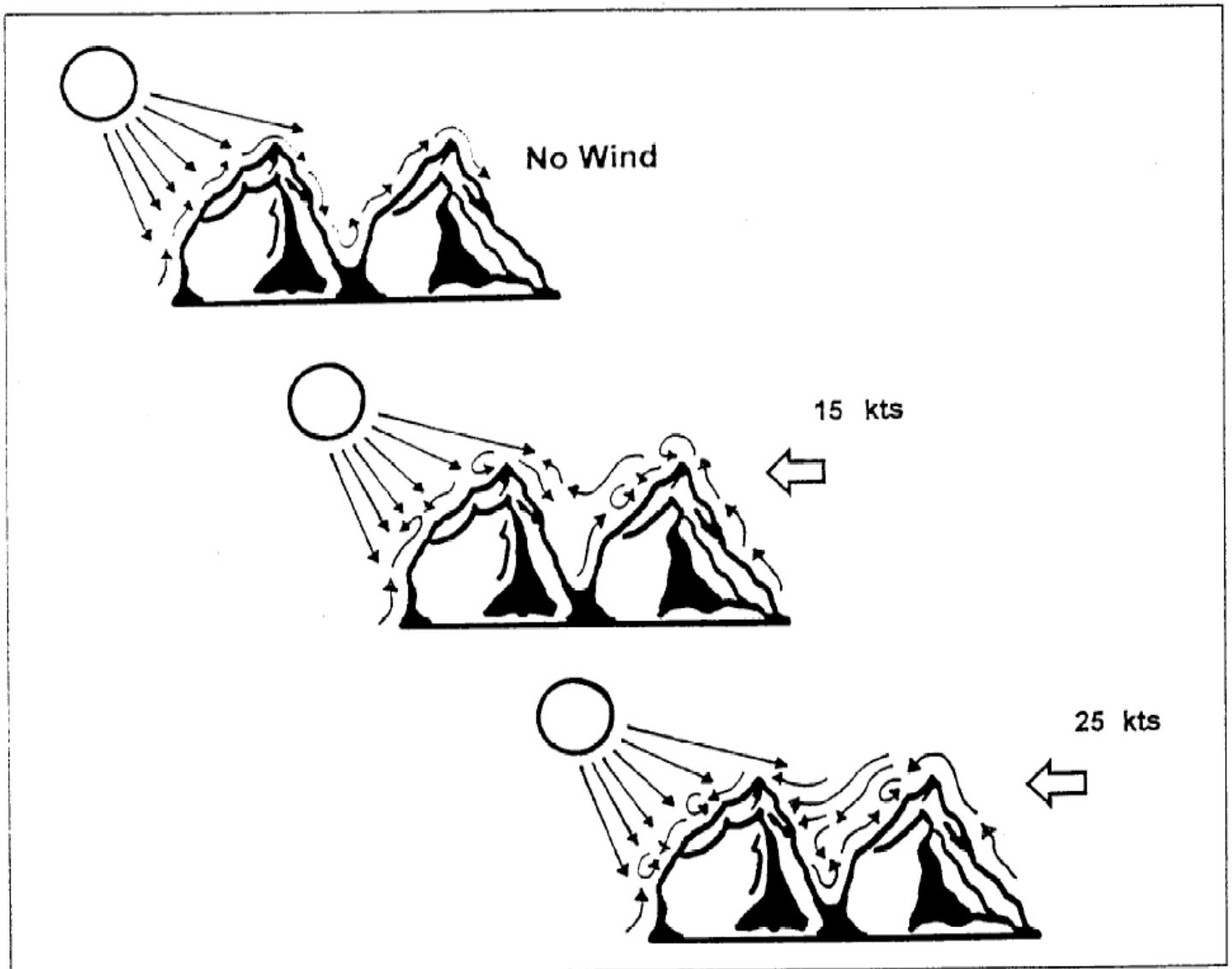
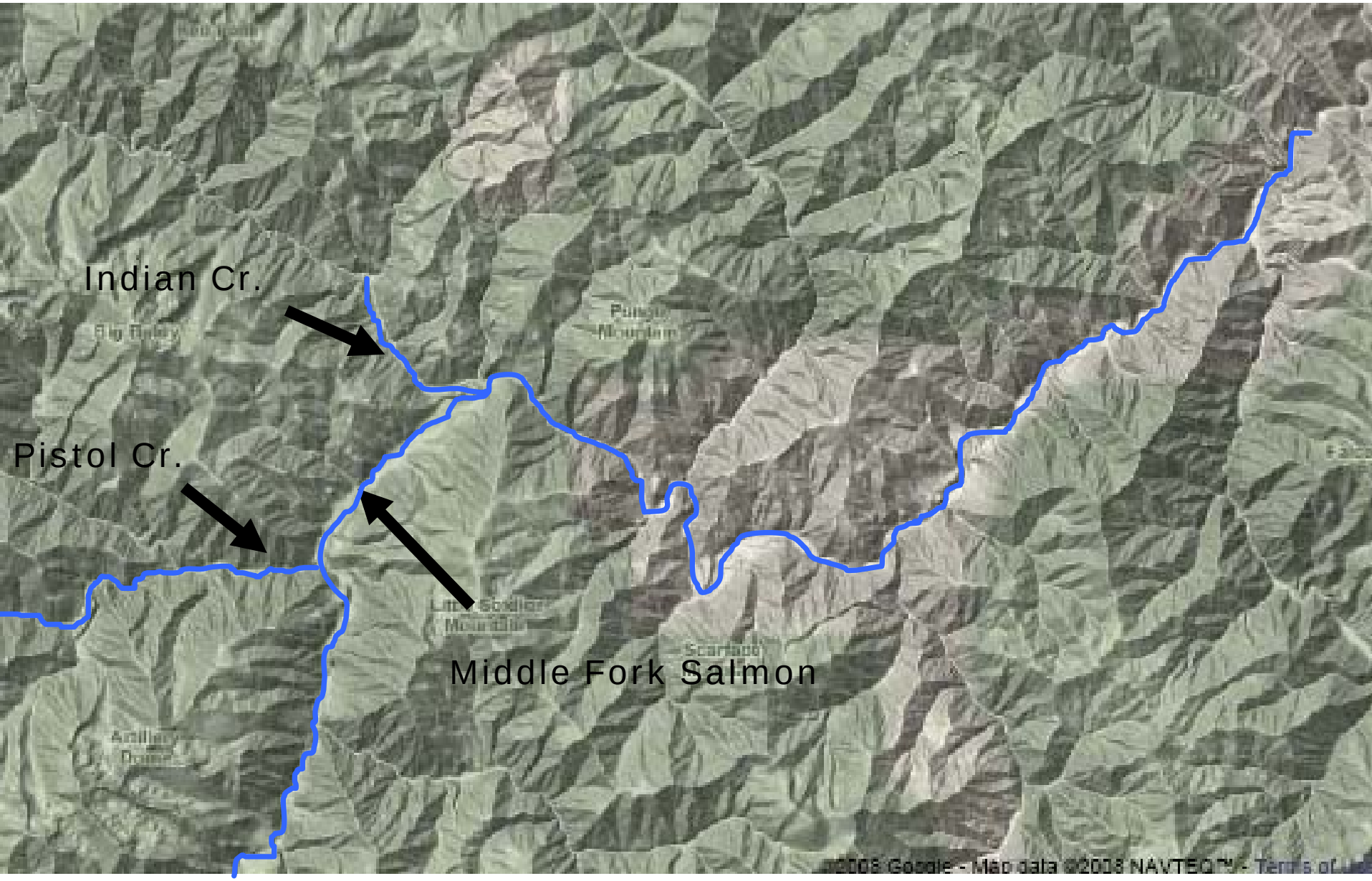
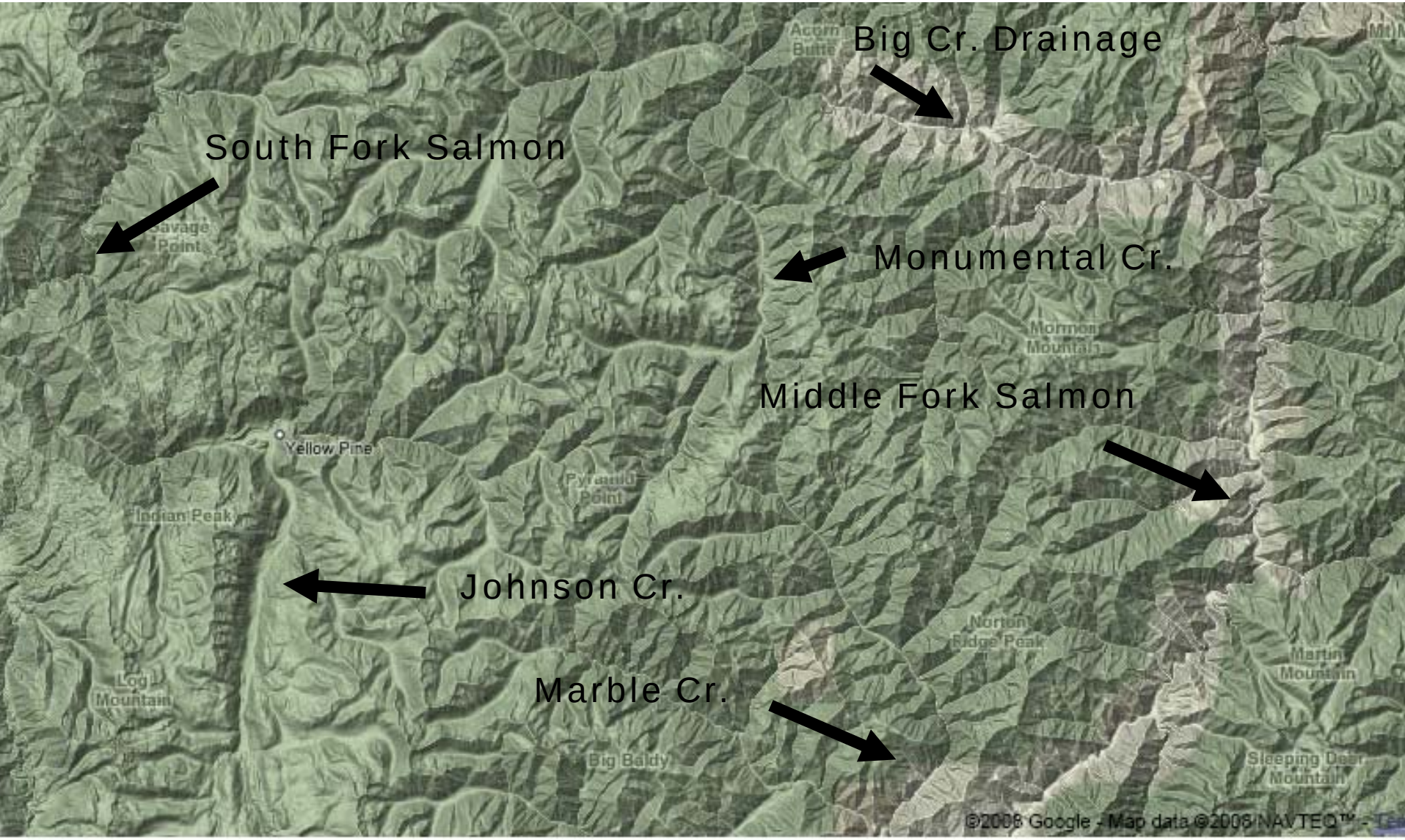


Figure 7: Effects of opposing thermal and orographic influence. When rising thermals created by solar heating encounter orographically produced downdrafts on the lee side of a ridge or in a canyon, expect to encounter a lot of turbulence. As the velocity of the wind increases, the turbulence increases.

Diurnal Effect, Venturi, and Convergence





Thermal, Orographic and Diurnal Effect effects combine and are different depending on direction of drainages

We have a mixture N/S – E/W and combinations of major drainages

Turbulence

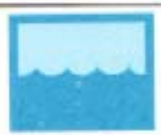
Slow Down to at or below Va

Remember it's less with less weight – Rule of Thumb ½ of % less gross weight). If at 10% less of max. gross weight, reduce Va 5%.

Where to Expect it –

- **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**

Different ways of measuring wind

Beaufort number	Wind speed (mph)	Seaman's term	Effects at sea	Effects on land
0	Under 1	Calm	 Sea like mirror.	 Calm; smoke rises vertically.
1	1-3	Light air	 Ripples with appearance of "fish scales"; no foam crests.	 Smoke drift indicates wind direction; vanes do not move.
2	4-7	Light breeze	 Small wavelets; crests of glassy appearance not breaking.	 Wind felt on face; leaves rustle; vanes begin to move.
3	8-12	Gentle breeze	 Large wavelets; crests begin to break; scattered whitecaps.	 Leaves, small twigs in constant motion; light flags extended.
4	13-18	Moderate breeze	 Small waves; becoming longer; numerous whitecaps.	 Dust, leaves and loose paper raised up; small branches move.
5	19-24	Fresh breeze	 Moderate waves; becoming longer; many whitecaps; some spray.	 Small trees in leaf begin to sway.
6	25-31	Strong breeze	 Larger waves forming; whitecaps everywhere; more spray.	 Large branches of trees in motion; whistling heard in wires.

Morning Fog


Valley / Canyon Fog
Middle Fork Salmon


Smoke

8 7 '03


9 2 '03

Accidents / Fatalities

NTSB Data (as of 5/17/2011)

YEAR	Total State / BC	FATAL STATE/BC
2000	34 / 8	13 / 1
2001	24 / 3	7 / 4
2002	48 / 13	17/ 6
2003	52 / 15	21/ 11
2004	41/ 6	8/ 2
2005	38/ 7	12/ 4
2006	31/ 6 4 killed in forest service Helicopter, Yellowpine.	6 / 0 (2 killed in one plane VFR in IFR conditions out of Couer d'lane
2007	41/10 (Nampa had 4) 5 Helicopter	4(6) / 1(1) accidents (fatalities)
2008	34 / 8	3 (5) 3 in McCall C172's/ 0 BC (2 very serious)
2009	38 /10	6 (7) / 2 (3)
2010	38 / 12	5 (8) / 2 (3)
2011	5 / 0	1 (2) Mtns SSE of TWF / 0

BC Accident Summary - 2007

- Lava Hot Springs-On 10:30 September 14, 2007, A light sport Skykits Savannah ADV airplane, came to rest inverted after landing.
- Big Creek – 11:00 August 4, 2007 Piper PA-34-200T Landed on wrong runway 01, landed hot – ran off the end of the runway – no injuries
- Elk River – 08:05 August 3,2007 Grumman American AA5A The pilot landed long on the unimproved runway, porpoised, and veered into a building.
- Johnson Cr. – 19:00 July 23, 2007 Beech V35B The airplane landed long pilot intentionally ground looped the aircraft to avoid overrunning the runway end.
- Leadore – 12:30 July 15, 2007 C182 The pilot reported that the airplane was about 20 feet above ground level during the initial takeoff climb when a "heavy wind started. resulted in a loss of control and collision with terrain during the takeoff initial climb.
- Stanley – 17:00 July 15,2007 Britten-Norman / BN-2A-20 Pilot placed a fuel order, but did not verify that the twin-engine airplane was refueled before departing with 8 passengers for a cross country flight. This flight reached its destination without incident, and the pilot then departed as the sole occupant of the airplane. Shortly after takeoff, at an altitude of about 400 feet agl, the left engine "started to sputter." Ran out of fuel
- Johnson Cr. 08:30 June 14, 2007 Cessna 172 **impacted mountainous terrain** while maneuvering near Yellow Pine, Idaho. The flight departed Johnson Creek Airport and the intended destination was Big Creek. The private pilot received **fatal injuries**, and the passenger received serious injuries
- Shearer 16:30 May 30, 2007 C185 The left main landing gear separated above the left wheel axle, through the upper two bolt holes during the landing roll. Post accident metallurgical examination showed that the fracture occurred due to fatigue cracks Injuries: 1 Serious, 1 Minor, 1 Uninjured Part 135 Operator
- Fairfield 11:30 May 17, 2007 C170 he pilot set the airplane up for landing with two notches of flaps, and while turning from base to final, the airspeed got low and the airplane stalled. the aircraft impacted a field adjacent to the airport 2 uninjured
- Cottonwood – 700' Grass Strip 12:00 April 22, 2007 C206 The airplane overran the landing strip, encountered deep sand and nosed over. As the airplane approached the destination, the pilot performed three passes over the airstrip and noted that the windsock indicated light winds (about 5 knots). In light of the airstrip having a slope, the pilot opted to land in an upslope direction with a tailwind.

BC Accident Summary - 2008

- Wilson Bar 10:30 5/3/2008 C172. During the takeoff ground roll, maneuvered right in order to miss some rocks. In the initial climb, the outboard portion of the right wing then collided with brush-like vegetation. The pilot then flew the airplane to an airport where maintenance personnel examined. The Federal Aviation Administration inspector reported structural damage to the right wing. .

- Atlanta – 5/4/2008 Grumman AA-DA The runway had softened due to snow and water runoff and the pilot said he experienced slight sinking conditions, but it was not muddy or sloppy. The pilot elected to depart to the south in order to takeoff on a downhill slope. The pilot performed a soft field takeoff by pulling the yoke back to reduce friction from the nose wheel. About 40 miles per hour (mph), the airplane hit several ruts and slowed down. He initiated rotation at 60 mph, but could not gain sufficient altitude prior to hitting a tree at the departure end of the runway, causing substantial damage.

- Graham – 6/15/2008 C180 The plot landed on the last half of the 2,900-foot-long grass runway and was unable to bring the airplane to a stop before it ran off the end of the runway and into trees. Prior to going to the airport, the pilot had spoken with local area pilots who indicated that he should not use the first half of the runway because it was muddy and soft. Dennis and Steve F. witnessed this. Alaska pilot overconfident – DA surprise.
- Johnson Cr. – 9:30AM 6/26/2008 C182 , Lebon, OR. The airplane was high and fast on the approach to the runway. When the pilot flared for landing, the airplane floated and he tried to force it on the ground. The airplane began to porpoise, contacting the ground twice before settling onto the runway for the third and final time. The pilot thought that the nose wheel was damaged when the airplane contacted the runway the second time, so he decided not to go around. The airplane sustained structural damage to the firewall. .

- Elk River –10:30 AM 6/29/2008 Aeronca 7DC Chattaroy, WA Attempting to take off from a gravel runway that was lined on both sides with tall grass. During the takeoff roll, the airplane drifted to the left into the grass, and the pilot corrected his course back toward the runway. The airplane then drifted into the grass on the right side, hit a wire fence and a dirt berm, and nosed over

- Big Creek – 11:15 AM 7/7/2008 Money M20E San Diego Injuries: 2 Serious. While landing on a 3,550-foot long runway, the pilot added power to abort the landing and go-around. The airplane failed to gain sufficient altitude and impacted a parked vehicle about 75 feet beyond the departure end of the runway. Witnesses adjacent to the accident site reported observing the airplane land about three quarters down the runway prior to the pilot aborting the landing. The density altitude was calculated to be 7,383 feet MSL.

- Big Creek. 2:30 PM 7/26/2008 Cessna 182 The airplane encountered a downdraft while on short final, which resulted in a sudden drop from about 15 feet, and subsequent hard landing. The landing bent the nose gear forward and damaged the firewall. The pilot made a field repair to hold the nose wheel in place by lashing the nose wheel strut back using rope and a come-along attached to the main landing gear. The pilot then proceeded to fly the airplane to an airport about 30 minutes away, where a mechanic assessed the damage and advised the pilot not to continue the flight. The pilot decided to continue the flight to his home base home base, Minden-Tahoe Airport, Nevada approximately 454 miles to the southwest. The elevation of the accident airport is 5,720 feet mean sea level (msl). The outside air temperature at the time of the accident was 80 degrees Fahrenheit. The calculated density altitude was 8,238 feet msl at the accident airport.

- Warm Springs 10:30 AM 8/16/2008 C140 Nampa ID, Low time pilot 180Tot/ 32 hr M&M. After touching down on the grass/turf airstrip in a tailwheel equipped airplane, the pilot failed to maintain directional control. it ground looped, resulting in the collapse of one of the main landing gear legs. In addition to the collapse of the landing gear leg, the accident sequence resulted in the bending of internal structure of the right wing.

BC Accident Summary - 2009

- Cox Well 5/1/2009 Rans S-7 the engine lost power about 250 feet above ground level (agl). The owner took control, turned back to the left, and tried to land on the end of the runway. He leveled off slightly about 20 feet agl, and then flared for landing. The airplane landed hard on the north side of the runway and the right wheel broke off. The landing gear dug into the turf, the airplane spun 180 degrees, and the right main landing gear collapsed. The airframe around the tailwheel and rudder sustained substantial damage.. He said that he probably let the fuel level get too low on this flight. During the climbout with the nose up, he surmised that the header tank fuel pick-up unported, resulting in the loss of power.
- Grangeville
- Atlanta 6/3/2009 C182. Boise, ID **FATALITY** The single engine airplane **impacted a vertical rock cliff face in mountainous** terrain about 500 feet below a mountain ridge line.. The GPS data track originated in the vicinity of the departure airport, and proceeded at 8,350 feet mean sea level (msl) northeast for 57 miles, and abruptly ends in the vicinity of the accident site. During the last 2 minutes of the flight, the track increased in altitude from 8,350 feet to 8,891 feet msl. The height of the mountain ridge line directly ahead of the airplanes' flight path was between 9,100 feet and 9,580 feet msl. The end of the GPS track did not exhibit any deviations that could be interpreted as an evasive maneuver. The cloud coverage in the vicinity of the accident location was between scattered and broken, with bases between 8,000 and 9,000 feet msl, cloud tops were about 15,000 feet msl, with visibility greater than 3 miles in cloud-free areas
- Dixie – 7:15 AM 6/18/2009 Piper PA-18-150 Ventura, CAThe pilot was making a landing on a dirt landing area that also doubled as the main road in the center of the remote mountain town. **He intentionally landed a little long** in order to miss the substantial puddle of water near the approach end of the landing area. He began applying brakes while the airplane was going about 20 miles per hour, but **his brake application was of sufficient force to result in the airplane nosing over** onto its back.
- Johnson Cr. 9:45 AM 6/22/2009 C172 INDEPENDENCE, ORThe pilot, who had flown into a backcountry airstrip with **minimal fuel** in order to reduce the airplane's takeoff weight, departed that airstrip for a destination that was reporting overcast clouds.. When the other pilots started their engines, the accident pilot realized that he had not yet dipped his fuel tanks to measure fuel quantity, so as not to get separated from the pilots he was going to follow en route, he elected to not sump the tanks. As he approached the destination airport, one fuel gauge read empty, and the other read one-quarter, but its needle had stopped moving/bouncing,." Soon thereafter the engine lost all power, he ultimately had to make a forced landing in what appeared to be an open field. During the landing roll, the airplane impacted some cement barrier blocks and collided with a steel fence gate. Post accident inspection found no usable fuel remaining in the airplane's fuel system.
- Wilson Bar 9:15 AM 6/25/2009 Maule M-5-235C Curtice, OH After surveying the landing area, the pilot stated that, as he neared the approach end of the runway, he was approximately **20 feet above ground level when the airplane dropped straight down**. The pilot indicated that his airspeed was slow and that he most likely encountered a downdraft. This resulted in the airplane landing hard on the runway surface, and the airplane **porpoised prior to impacting rising terrain and trees**
- Sulphur Creek 8:30 AM 7/10/2009 Flight Design CTS MCMINNVILLE, OR After touching down on the remote rough gravel airstrip, the pilot applied what he described as "hard braking" with the non-differential handbrake, while **attempting to maintain directional control** with the nose wheel steering. As the pilot continued the landing roll, the airplane began to skid/slip off to the left side of the convex shaped runway crown, and it eventually **exited the runway and impacted a large rock pile**. After hitting the rock pile, the airplane nosed over onto its back, resulting in damage to the wings, and the rudder separating from its hinges.
- Simonds 10:10 AM 7/14/2009 Cessna U206 **1 Serious Injury** A SPOT saved the instructors life. During a biennial flight review, at the suggestion of the evaluating instructor pilot, the Pilot-In-Command elected to land at a remote back-country airstrip where he had not made prior plans to land. After landing at the 800- to 900-foot-long strip, the pilot took off in the high-density-altitude environment without having first completed an aircraft performance calculation or checking his airplane's outside air temperature gauge. Although the pilot reported that there did not seem to be any issues with the engine producing full power, **soon after liftoff the airplane struck a number of pine trees** and descended into the terrain. A postaccident inspection of the airplane did not find any evidence of powerplant anomalies, but did reveal that the **elevator trim was set at a five degrees tap up (airplane nose down) position, and that the flaps were extended 25 degrees even though the cockpit indicator indicated that they were at 20 degrees**.
- St. Charles – Mtn Flying 8/7/2009 Piper PA-22-150 **2 FATAL**The private pilot was on a visual flight rules personal cross-country flight during day visual meteorological conditions near mountainous terrain. Witnesses along the route of flight reported observing the airplane overfly their position at a low altitude on a course towards the accident site. There were no known witnesses to the accident sequence. The accident site was in an open area surrounded by rising terrain in three of the four quadrants. Examination of the wreckage revealed that impact damage signatures on the wings were consistent with right wing low impact with terrain. The fuselage, wings, and most of the empennage were consumed by a post-impact fire. No evidence of any pre impact mechanical anomalies was discovered with the engine or airframe. Using reported weather conditions near the accident site and the accident site elevation, the density altitude was calculated to be about 10,706 feet mean sea level. Toxicology testing on the pilot was positive for an unspecified amount of Famotidine within the blood and urine. Famotidine is an acid-reducing medication, used to treat heartburn or ulcer disease and is available through prescription or over the counter. Famotidine is commonly known by the trade name Pepcid.
- Pitsburg Landing 9/24/2009 12:00 PM C182 Flt Inst 4718 ToT / 37 M&M: Hope, ID. When they arrived at the third airstrip, three airplanes made successful landings, but the accident pilot, who was in an airplane with slightly different performance characteristics than the other three, **was unable to stop before running off the end of the runway** and impacting a ditch. After the accident, the pilot, who had not been into the subject airstrip before, stated that he should have made a better decision, and not assumed that because the other three pilots made it successfully that he could too.
- Pistol Cr. 10/8/2009 C180 ATP 25,000 / 1,000 M&M Boise, ID. The pilot was landing at a remote dirt/grass airstrip where the winds were gusting and variable in direction. Although the touchdown was normal, as he made rudder and brake inputs to maintain directional control, the right main gear leg separated from its mounting structure, and the right wing sustained substantial damage when it contacted the terrain. An inspection of the gear leg attachment hardware determined that the nut on the gear leg attachment bolt had been stripped from the bolt, thus allowing the bolt to come out of the attachment structure. During the pilot's initial contact with the NTSB Investigator-In-Charge, the pilot stated that the airplane's right brake had failed during the landing roll, but in a follow-up interview the pilot stated that he believes that the brake was working fine until the moment the gear leg separated from its mount.

BC Accident Summary - 2010

- Dixie – 2/26/2010 C185 ATP 29,000 Hrs, MYL After arriving at the airport, the Cessna 185 pilot overflew the runway and requested that a friend on the ground check the condition of the snow-covered runway, which was reported as being in excellent condition, smooth and well-compacted. The Cessna 185 pilot landed and taxied to the end of the runway where he turned his airplane around and shut it down. The experimental FK1, which was equipped with skis instead of wheels, landed and was not slowing at the rate the pilot expected. The pilot said that, because of a lack of rudder effectiveness, the experimental **Kitfox veered uncontrollably to the left and struck the other airplane head on**. The Cessna 185 sustained structural damage to the firewall.
- Dixie – 2/26/2010 Kit Fox ATP 6,000 Hr. Alaska.
- Smiley Cr. 4/10/2010 C150 High Time Pilot 4900 Tot / 250 M&M. Boise, ID. The pilot reported that he intended to fly his airplane on a cross-country flight over high mountainous terrain. After takeoff, the pilot climbed to 9,500 feet mean sea level (msl) in order to fly over mountains. He subsequently descended to 8,500 feet msl, and then he attempted to climb back to 9,500 feet to clear additional mountains. This second climbing effort diminished his fuel reserve, so the pilot opted to divert to a 7,160-foot msl uncontrolled airport short of his destination. While flying over the airport to evaluate its runway's condition, the pilot noted that the runway was covered with snow. The pilot opined that because of the airplane's low fuel state, it was prudent for him to land. The pilot made a soft-field landing on the runway. During rollout, the airplane's wheels penetrated the snow-covered surface, the airplane nosed over, and both wings and the empennage broke
- Sulphur Creek 6/13/2010 C172 Low time 332 Tot / 56 M&M Garden Valley, ID The pilot reported that after an uneventful landing, **the airplane drifted approximately 20 feet to the left of the runway** centerline during the landing roll on the gravel and turf runway. The pilot corrected back to the runway centerline just as the **airplane's nose landing gear dropped into a large unnoticed hole**. The airplane came to an immediate stop and sustained substantial damage to the firewall. The C172 was air lifted out by Helecoptor.
- May 6/19/2010 RV-9A **FATALITY** 5700 HR TT / 170 M&M Onterio, OR On June 19, 2010, at 1103 mountain daylight time, an experimental Oliver RV-9A, N559B, **impacted the terrain** about one-quarter mile south of May Airport, May, Idaho. The pilot, who was the sole occupant, received fatal injuries, and the airplane, which was owned and operated by the pilot, sustained substantial damage. The 14 Code of Federal Regulations Part 91 personal flight, which departed Challis, Idaho, about 15 minutes prior to the accident, was being operated in visual meteorological conditions. **Antihistamine may have lead to drowsiness** and spatial disorientation.

BC Accident Summary - 2010

- Big Creek 6/21/2010 C180 10,000 Hr / 1200 ATP/Flt Inst. PLANO, TX while **taxiing a tail wheel airplane down a slope the airplane began to slide sideways** and the empennage turned downslope. Despite the pilot's control inputs, the empennage reached approximately a 90-degree angle to the desired direction and the airplane tipped to the left. During the accident sequence, damage was incurred to the left wing and left horizontal stabilizer. The pilot reported no mechanical failures or malfunctions with the airframe or engine prior to the accident. The pilot stated **the accident could have been prevented by obtaining more knowledge concerning the airstrip**.
- Smiley Creek 6/26/2010 8 P.M Glastar – 510 Hr Tot / 69 M&M AZTEC, NM The pilot reported that he had been landing and departing from the grass strip numerous times earlier in the day. For the accident flight, he was attempting to perform a **midfield takeoff**. During the departure roll, the airplane **momentarily became airborne** and then settled back into the wet grass and slowed. He opted to immediately abort the takeoff by retarding the throttle control and applying brakes. The airplane then slid off the end of the grass strip and collided with a ditch, incurring damage to the right wing and tail.
- Johnson Creek 7/12/2010 8:30 AM Piper PA-32RT-300 2650 Tot / 2450 M&M SANTA CRUZ, CAThe pilot requested that the airport manager delay turning on the sprinklers until he departed the airport; however, the sprinklers were turned on prior to departure. The pilot stated that he remained on the right half of the runway to keep clear of the sprinklers during the takeoff roll. As the airplane approached midfield during the takeoff roll, the **pilot determined that the airplane was not "moving fast enough"** to continue the take off. The pilot stated that he **aborted the takeoff** by pulling back on the throttle and applying the brakes. He added that during the aborted takeoff, the airplane began skidding on the wet grass and he shut the engine off. Subsequently, the **airplane exited the departure end of the runway and struck a sign and a boulder**, which resulted in substantial damage to the right and left wings. The pilot reported no mechanical malfunctions or failures with the airplane prior to the accident. According to the Northwest U.S. Airport/Facility Directory, runway 35, a grass runway, is 3,400 feet long and 150 feet wide. At the reported weight of the airplane, in the weather conditions of the airport at the time of the accident, the airplane had a calculated takeoff ground roll of about 2,000 feet, with a landing ground roll of 880 feet. These numbers are calculated for a dry, paved, level runway, with two notches of flaps used for the takeoff. The airplane took off on a wet, grass, down-slope airstrip, with only one notch of flaps. The Performance Section of the Pilot Operating Handbook for this airplane states that the "effects of conditions not considered on the charts must be evaluated by the pilot, such as the effect of soft or grass runway surface on takeoff or landing performance
- Pitsburg Landing 7/20/2010 9:20 AM Piper Cub Crafter PA-18-150 535 ToT / 140 M&M Anatone, WA The airplane touched down **about 200 feet from the approach end of the 900-foot-long** landing strip and bounced. The pilot maneuvered the airplane back down on the ruwnay, but then **decided to perform a go-around**. He applied full engine power but **collided with a fence** during the initial climb

BC Accident Summary - 2010

- Bernard 8/14/2010 4:45 PM Cessna T182T 612 TT 505 M&M SANTA ROSA, CA The pilot of the turbocharged airplane was executing a takeoff from a 1,900-foot-long grass/turf back country airstrip. The surface of the airstrip was rough, with occasional holes and soft spots, and areas of vegetation. The density altitude calculated by the pilot was 5,495 feet. Although he had determined that the airplane should be able to successfully complete the takeoff, during the latter part of the takeoff roll the **pilot became uncomfortable with the airplane's rate of acceleration**, and he therefore elected to **abort the takeoff**. After making the decision to abort the takeoff, the pilot was **unable to stop** the airplane before it **went off the end of the runway, rolled down a bank, and nosed over onto its back**, whereupon it sustained substantial damage to both its wings and its fuselage
- Wilson Bar 11/2/2010 2:00 PM C U206 2800 TT / 1700 M&M Boise, ID. The pilot, who was flying the second airplane in a flight of two, was maneuvering in the traffic pattern at a remote back-country airstrip. The approach to the airstrip required the pilots to make a precise base leg to final turn between two steep rock cliffs. During the accident pilot's turn to final approach, **he inadvertently made too wide of a turn, resulting in the airplane's nose and right main landing gear colliding with the cliff and becoming separated** from the airframe. After the pilot in the other airplane confirmed the extent of the damage, the pilot flying the accident airplane maneuvered to a town where emergency personnel could be available on the ground. Due to the damage, the pilot decided to land in the grass/turf area alongside the main runway. During the landing roll, the nose gear strut dug into the soft terrain and the airplane nosed over onto its back.

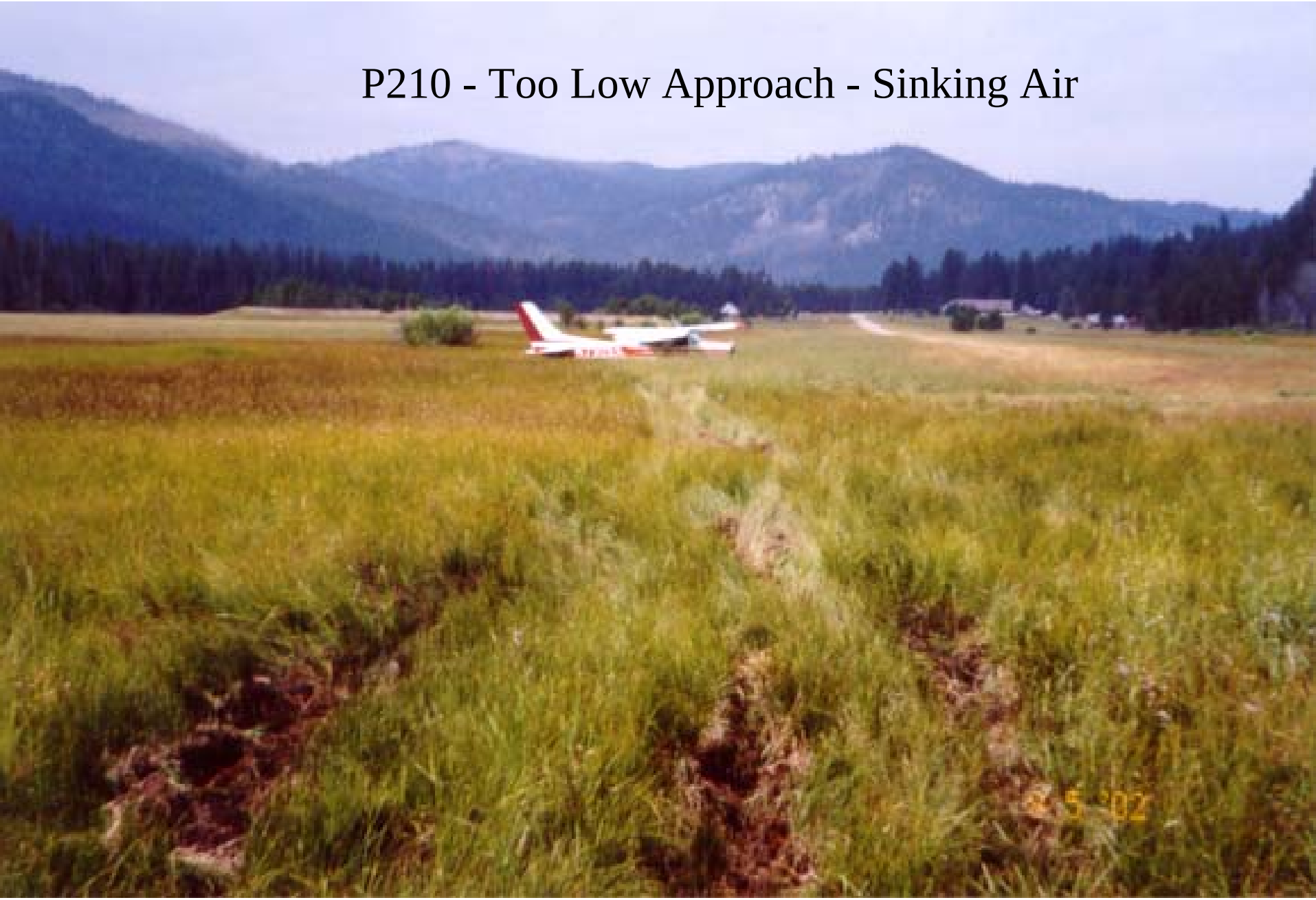
Dangers of Mountain Flying


N5720A


Slightly off track
- New Meadows
N737MY


C182 - Overloaded -tailwind - take off stall
8 5 '02

P210 - Too Low Approach - Sinking Air

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Star-News Photo by Ben Salmon

SUMMARY

- Mountain/ Canyon flying is fun and exciting.
- Mountain / Canyon is different type of flying.
- Mountain / Canyon takes lots of work and effort.
- Get instruction from experienced backcountry pilots or take one of the 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.

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: Frank Lester - Safety/Education Coordinator, 334-8780, 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


Questions ?
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