Back Country Training – Homework Assignment

This year I would like to have the training more interactive, so I thought I would give you a Back Country trip to plan. To get the most of the training session, work through the following flight planning exercise. We will review the results and go over considerations, assumptions that you made to come up with your results. Whether or not you plan to fly the backcountry, this should still be a good review of flight planning/ performance considerations. I have attached the C182 performance charts, DA calc sheet, Airport Info out of Fly Idaho. All you should need is a St. Lake Sectional, and maybe dust off some books.

The Trip – 1st leg – Nampa to Sulphur Creek for Breakfast
2nd Leg – Sulphur Creek to Graham for a day of fishing/hikeing/ whatever – on the way, over fly Stanley and Smiley Cr. For a scenic view of the Sawtooth's
3rd Leg – Graham return to Nampa.

Conditions:
The Bird – C182, -91X or 29Q Payload – 750# (includes pilot)
Weather Forecast Mid Summer; Severe Clear and Hot, calm winds
Recent temp history in Stanley 60 @ 6 am, 80 @ 10 am, 96 @ 2 pm, 85 @ 6 pm, 65@ 10 pm
Winds Aloft : 6.000' 2707+16 9'000' 1811+10; 12,000' 1915+06
Pressure 30.02

Determine the following:
Route, Altitude, and expected time in route, fuel burn for each leg.
Amount of fuel to leave with (with min 1 hr. Reserve for planned flight)
Preferred landing and take-off directions.
Planned Arrival / Departure times & estimated temperatures.
Landing distance required at each airstrip – to clear 50' obstacle.
Density Alt. at 80 deg F at each BC airport.
Take off distance, distance to clear 50', and rate of climb out of each BC airstrip – will rate of climb be safe. Use POH, KOCH Chart or take-off calculator.
(List your assumptions – temperature, considerations for grass/gravel, slope, useable runway, safety factors)
Do a worse case scenario – maximum temp that you can safely take off and climb out of Sulphur Cr, with a 5 MPH tail wind (see performance chart for tailwind de-rating)
Fuel left at arrival back in Nampa.

Other things to consider.
Extra things you might check in the pre flight.
Survival Gear – What if you have to spend the night or make an emergency landing – it still gets cold in the Mountains – even in summer.
Airport geography, special considerations, hazards, can you go around, or if not, where could you make a safe abort.

During the session we'll discuss the trip plan, our answers and how we arrived at them. I also have short video that some of you have seen before, but I think its worth reviewing. Of course,

there are many more considerations for flying in the mountains. These are some of the important things to consider during the planning phase. For a bonus (and also qualifies for the knowledge portion of wings) take the on-line Mountain Flying training session from AOPA Flight Safety. http://www.aopa.org/asf/online_courses/

Have Fun,

Jim Hudson

Attachments: in Flight Plan Info file
C182 POH Performance Tables
DA Sheet
KOCH Chart
Airport Diagrams