Agenda

Topic	*Start Time*	
Introduction ● This flight can be used to fulfill portions of complex check out / flight review ● Go over the agenda ● Ask everyone to introduce themselves and say something about their past flying experience ● Go over any up coming events/clinics ● Baker-Lamb Study	6:00	RA
Density Altitude ● Definition ● Factors Effecting ● How to calculate **True Airspeed** ● Factors Effecting ● Landing Faster ● Longer Runway Required ● How to calculate	6:10	AG
Weather ● Summer/winter differences ○ Thunderstorms ○ Be out of the mountains by 1:00pm ○ Icing during winter times ■ SLD ■ Caused by upslope cooling ■ Caused by mountain wave ● Virga ○ Expect Microbursts ● Gust Wave ○ Trying to land after a thunderstorm ● Conditions on two sides of the pass ● Moister entrapment in valleys ● Upslope Clouds ● Banner ● Lenticular Clouds ● Winds aloft	6:30	RA

Topic	*Start Time*	
○ Venturi Effect ■ Vertical Venturi ○ Down/Up Drafts Visualization ■ 1MPH = 88 FPM, 2MPH= 176FPM ■ In a valley, there may be rotor turbulence as well as downdrafts on the upwind side. ■ Good lift (>1000FPM) on the lee side means rough air on the upwind side. ○ Pass conditions ○ 20/20 rule ● Mountain AWOS ○ Frequencies ○ Phone numbers ○ Resort cameras ● Importance of PIREPS ● Flying into the setting/rising sun		
Break	7:30	

Topic	*Start Time*	
Mountain Flying Techniques ● Flight Planing ○ Always file a flight plan ● Preflight ○ Frost and wing ice ● Leaning ○ Before take off ○ Use EGT during flight and climb out ● Take off ○ Must have 70% of Takeoff airspeed half way down the runway ○ Runway Gradient ■ Take off distance -5%/degree for down slope, +10%/degree for upslope ■ Think about down slope air during uphill take offs ○ Frozen Landing Gear ○ Effects of Altitude on Vy and Vx ○ Sun Effect ● Climb ○ Reduce Climb Rate by 20FPM for every 10ºF above standard ○ Engine Cooling for turbocharged engines ■ Thinner air but same power output ● Cruise	7:40	AG
○ Oxygen requirement ■ How to use a continuous flow oxygen ■ Hydration ○ Monitoring weather conditions ○ Making PIREPS ○ Making position reports ○ Judging hight when approaching a ridge ○ Ridge approach ■ 45º approach ■ Always remain in a safe position ■ Fly as if you were actually turning around at the point you would have if you had to turn back. This will set you up for a 45º approach. ■ Have a plan ■ Anticipating Up/Down drafts ○ Anabatic Lift ○ Canyon flying	8:00	RA

Topic	*Start Time*	
■ Remain on the upwind side ■ Box Canyon turns ■ Traffic Avoidance ○ Horizon is at the base not the top of the mountain ○ Night and IFR flying in the mountains ○ Power lines across canyons ● Landing ○ Landing Fast ○ Upslope/downslope runways ■ Hard landings/shallow approach on up slope ■ Never touching down on down slope runways (Note: normal approach gradient is 3.0º) ○ Short field landing ■ Due to lack of engine performance, shallow, high power approaches are dangerous ■ Easy to fall on the backside of the power curve where recovery will require raising the flaps and/or lowering the nose. ○ Winds/ cross wind landings		
DUATS Filing Tips ● How to file mountain passes passes	8:20	AG
Miscellaneous ● Emergency Procedures ○ Engine failure after take off ■ Don't turn around if less than 800ft AGL ■ Think of terrain around you ● Survival Techniques ○ Don't panic ○ Stay with the airplane ○ Radio for help on 121.5 ● AOPA's Mountain Flying Course ○ http://flash.aopa.org/asf/mountainFlying	8:30	RA