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## CALENDAR OF EVENTS

November 3rd - Free seminar on "Radio Communications" sponsored by the Air Safety Institute along with the FAA and AOPA. Red Lion Hotel, 1555 Pocatello Creek Road, 7-9 pm. No RSVP required. Very important info so hope you will try to get down there for this free information seminar.

November 19th - Our EAA Chapter 407 will start at 3:00 pm by meeting at the Museum of Idaho in downtown IF. We will have a "Chapter Tour" of the current display at the museum on World War II.
November 19th - After the tour, we will head to Aeromark at 5:00 pm for Natalie's homemade "Chili Supper". Please bring a dish to share along with her chili (salsa, chips \& dip, cornbread, etc..). After eating, we will have our meeting. PROGRAM: Richard Floyd was a "controller in Afghanistan". He will be sharing stories of his experiences while over there. Come join us for a great afternoon and fascinating evening.
November 19th - At our meeting, we will be voting to elect officers. We encourage you to please be there to cast your vote. Offices being filled include Vice President and Secretary. Write-ins are also accepted.
Steve, our treasurer, will also start accepting our 2012 Chapter dues. Cash or checks are accepted and it is \$24 per year.

Where We Meet

> We rotate between the ISU hanger at Pocatello Airport, Aeromark at Idaho Falls Airport, \& Blackfoot FBO on the 3rd Saturday of the month at 6 pm from September through May. No meetings during June, July, or August - but we do have fun activities going on...so check out our schedule!

Chapter 407 is your chapter! PLEASE do your part and volunteer. Help is always needed.

REMINDER: The INL has a network of weather reporting stations in East Idaho. This link gives an excellent view of the winds throughout our area: http://www.noaa.inel.gov/windv/ windv.asp?WCI=Vector

Learn about the history of aviation in the Pocatello Area. Read about it in "FROM JENNIES TO JETS". This book is available to our membership through the chapter for a $\$ 2$ donation. Check with Pete Stewart or Natalie about getting the book. Great Read!!!

Please send any newsletter articles and pictures to: carjanst@gmail.com

We want to hear about your FLYING, your HANGAR TIME, your
LESSONS with students, anything you are BUILDING, or what your FLYING DREAMS are about..

## PUBLIC COMMENTS WANTED

NOTICE: The public comment period is open to you on this FAA ruling. You can Google on this: FAA-2011-0138, go to the AOPA page that comes up, and go directly to the comment input link. The issue is self-explanatory as you can read the comment I submitted to them below:
"As a recently certified flight instructor with light sport privileges, I want to voice my opinion on the FAA ruling that prevents my students from applying their light sport training toward a private license. I teach the same skills to the same standards as regular private instruction with a few exceptions. Those additional items could easily be covered in the additional training that would be required to get a private license. The basic flight skills are the same. The existing ruling is overly restrictive without a purpose and puts me at a tremendous disadvantage in recruiting students. It is also an unfair and unnecessary burden to sport pilots to require them to start over should they want to go on. I urge you to reverse this inexplicable ruling and allow sport pilots to count their dual instruction toward additional ratings."
.....Dale Cresap

## President's Message:

This has been a fall to remember! The weather has been unbelievable so if you have had an airplane to fly, you could not have asked for anything better.

We have also had a great fall in the chapter. Our August trip up by Island Park at Henry's Lake Airport was perfect and our chapter over-night stay was so much fun. (especially when Tim Kaser flew in at dusk with his very BRIGHT new LED landing lights!). This event seems to be growing each year.

The Young Eagle Rally started out questionable (weather-wise), but turned out to be the perfect day. We only flew about 18 kids, but it was good getting the chapter together flying and visiting.

A big THANK YOU to the members who stepped up to help with our September meeting and the information about becoming a sport pilot instructor was very informative.

Our October meeting in Pocatello was great and everyone enjoyed soldering and crimping electrical wires.

Next month we will be voting for a couple of officer positions: Vice President
and Secretary. I have enjoyed working with Pete and Kenny and am looking forward to working with our new elected officers. Be sure to come support your chapter in November and vote.

We have a trip to the Idaho Falls Museum planned to look at the WWII exhibit with a "Chili Dinner and meeting" afterwards. And as always, we are planning our wonderful annual Christmas party for December 3rd.

So thanks for a great year and thanks for all the things you do to make our chapter so great! .....Natalie

## DON'T FORGET

Logan, Utah Breakfast! FREE Breakfast, Logan's Monthly Customer Appreciation Breakfast! Make it a point to fly down to Logan on the second Saturday of each month for a fantastic FREE breakfast! It happens from 8am-10am and is absolutely awesome! The FBO also gives a fuel discount for fly-ins, but many people also drive in as well. Great times!

Please share your newsletter with your spouse, your family, and your flying friends!!


Natalie and Terry Bergevin watching Jim Wolper


Jim Wolper with his soldering iron.


Lisa Sauve, Steve Anspach
Pete Stewart, Nick Crookston


Nick Crookston talking to Steve Anspach \& Lisa Sauve, Natalie smiling.

Pictures from our October 2011 meeting in Pocatello show lots of soldering going on. Everyone had a chance to do some wiring/soldering.

## ST. Anthony Fly-in Report by Nola Orr

Sat. Sept. 24th, my husband Leigh and I flew to St. Anthony for a fly-in. We were very glad we went!

It was a community effort, organized and orchestrated by Jerry Cain. Myrna Cain was director of flights. Then Lorraine Crockett, Don Orem and all of their helpers served a delicious meal of corn on the cob and sloppy joes to every one. The food was provided by Broulems. Lorraine Crocket arranged for the vendors and the music. Travis Eva and Rod Wilmore took to the air and gave lots of folks free rides in Travis' Cessna 182 and Rod's light sport.

There was a great band playing so Leigh and I danced on the tarmac! People were selling crafts, cotton candy, and popcorn. And there were games for all the children.

Approximately 350 people showed up. Three war birds were flown to St. Anthony by John Bagley, Shawn Bagley, and Todd Throp. They included: a green O-1 Bird Dog which was flown in Korea; A gray O-1 bird dog which is similar to the planes flown in Viet Nam;
a North American T-6 trainer which was used to train pilots in WWII.
It was so much fun! We say...." well done, and thanks!"
.....Nola


Young Eagles Soar at Blackfoot Airport by Nola Orr

On October 8th at the Blackfoot Airport, 18 youngsters became Young Eagles and were given airplane rides. They were youngsters who had attended the 'Airport Appreciation Day' in the spring at the Pocatello Airport and had to be turned away. Our chapter President, Natalie, took their name and phone numbers and followed up with an opportunity to fly this time at Blackfoot! A Scout Troop \& others came as well, so we had a good turnout. At first, the weather looked bad, but around 9:30, the sky cleared and flights began with approval from Dale Cresap...

Pilots: Kenny Smith, Austin Moses, Tom Strong, Rob Wray, Dale Cresap, and Earl Spaulding. Thanks so much!


Jareth McDougal, a local expert in WWII fighter planes, and Dale Cresap, local EAA


Carol Strong, Margie Smith, and Natalie Bergiven preparing certificates for two Young Eagles!.


For Sale: 2007 Murphy Elite: Professionally built by 2 A\&P's. 100 Total, 100 SMOH on O360-A4A to certificated standards. Lycon flow matched cylinders ( $\sim 200+\mathrm{hp}$ ). New bearings, gears, flywheel and hardware. Oil pump AD c/w. Camshaft re-ground to new specs. Dual P-Mag electronic ignitions. Remote oil filter. New 60 amp alternator. Bracket filter. New Sensenich prop with 13" RV spinner. New aluminum oil cooler. Tuned crossover exhaust. Six pack instrument panel with 4 cylinder EGT and CHT Overhauled Apollo 2001 IFR GPS with 360 moving map and separate CDI. New GPS antenna. Overhauled MX11 com. Upgraded Sigtonics intercom. AT50A trans w/ mode C. 450 fuel flow meter. Vertical compass. Two place intercom with stereo adapter. Strobes. Swivel inside red/white lighting. Full length tail cone floor sleeping area with custom mattress. Murphy droop tips. Heated pitot. Electric trim. New 121.5 ELT. Extended fuel tanks ( $\mathbf{5 8}$ gal). Float fittings. 130 mph cruise at $8 \mathbf{G P H}$. Off the ground in 350 ft . Climbs at 1800 FPM. A very nice airplane. Lost medical. \$89,000 obo. Call Pete @ 208 3174101


## For Sale

The ISU Aircraft Maintenance School has some Stits products that they are giving away:

Polytone - Diana Cream, Juneau White, Eacle Red, Madrid Red, Insignia White, Bahama Blue, Santa Fe Red, Pontiac Red, Lemon Yellow, Dakota Black, True Blue?, Burmuda Tan Polyfiber reducer 8500 \& R65-75, Rejuvinator 1200, Paint Cleaning Solvent, Blush Retarder, Poly Brush, Poly Spray
Aerothane - Portland Green, Insignia White
Call Pete Stewart at 785-2441.

## For Sale

E.I. Inc R-1, 4 cylinder Tach/TT/Run time, new $\$ 450$, now $\$ 130$.
Apollo SL-40 comm, $\$ 1295$ new, now \$500. Bendix/King KMD-150 panel gps, >\$4000 newnow \$1200
Bendix/King SM-3C portable gps version of above, \$2500 new, now \$700 Pasco Vac Regulator with 1.25 " UMA panel meter, new \$210, now \$100
Varifocal mount for Lycoming to Rebel aircraft -\$200
Exhaust system for Lycoming 320 type engine - \$250
2 ea 21" long, large dia [MS24 connections] oil lines - $\$ 15$ ea
New Lamar DSX 1240 12v, 40 amp selfreg. alternator - \$80

Sennheiser HMEC 300 ANR headset, new > \$450, like new for $\$ 170$.
Call Tom Piper at 2085238132 or cell 2085206671.

For Sale
Cessna C-172 $\mathbf{\$ 3 9 , 5 0 0}$ or Make Offer


Total tach/airframe time 2200 hrs Flown regularly for the last 6 years -
Hours will change
Continental O-300-1000 HSMO
Logs since New
No corrosion or hail damage
Upgraded yokes - PTT on yoke New Wool Headliner
Cleveland Brakes - Auto gas STC
Four place intercom
Avionics: Bendix/King 135a GPS Com
Narco 120 TSO Com
Garmin GTX 320 Transponder
Garmin 196 Yoke-mounted GPS
Carb Ice detector - EGT/CHT
Call Kenny Smith 208-709-5064 or
Rob Wray 208-520-4258. The purchase of a share is also a possibility.

## BUSINESS CARDS



Box 869, Driggs-Reed Memorial Airport, Driggs, Idaho 83422


Recreational Aviation Foundation

> PROTECIING AVIATION IN AMERICA'S BACKCOUNTRY

## TIIE RECRRMATIONAL

 AVMATION FOUNDATION IS RBADY TO PRBSHRVE AND BNHANCE YOUR RBCRBATIONAL FHYNG BAYPBRIBNCCERecreational aviation offers unique opportunities for pilots and their passengers to access destinations featuring outdoor experiences such as camping, hiking, fishing, hunting and photography.

If you care to preserve this privilege, you will want to know more about the Recreational Aviation Foundation.

## Vision

Preserving the legacy and promoting the enjoyment of aviation in the backcountry of America.

## Mission

The mission of the Recreational Aviation Foundation (RAF) is to provide leadership, private financial support, and expertise for preserving and enhancing recreational aviation resources for public use on both public and private lands throughout the United States for present and future generations.

## History

The Recreational Aviation Foundation was founded in December 2003 by a dedicated group of pilots who recognized the need to take action to protect public recreational aviation opportunities. The RAF Auxiliary Foundation was formed to accept land donations and operates exclusively for the benefit of RAF's land programs.
The Recreational Aviation Foundation is the only nonprofit organization working across the US to benefit the recreational flying community. The RAF currently has members in 36 states.
Why act now?
Opportunities for recreational flying are threatened as airstrips close and replacement opportunities become limited. To ensure that aviation is recognized as a legitimate means of public access, and that recreational and backcountry airstrips are included as desirable trailheads, the Recreational Aviation Foundation regularly reviews and comments on public lands management plans primarily developed by the US Forest Service, Bureau of Land Management, National Park Service and Bureau of Reclamation. It is also becoming increasingly necessary to turn to private landowners for
recreational opportunities, and the RAF locates willing landowners and facilitates land transactions to secure existing airstrips or sites for future airstrips.

## How the Recreational Aviation

Foundation protects backcountry aviation
In cooperation with state aviation groups, the RAF creates, improves, and maintains facilities like airstrip campgrounds, shelters and airstrips. On public lands, the RAF enters into contracts with public land agencies for the maintenance of recreational airstrips.

What does the RAF do to achieve this?

- Participates in management plan reviews of public lands to keep airstrips open;
- Provides public access by working with willing private landowners for donated land or conservation easements, and purchases land, easements or development rights;
- Contributes to the purchase or lease of recreational-use airstrips;
- Builds partnerships with government and tribal agencies, other conservation organizations and private landowners;
- Promotes national and state legislation that limits recreational-use airstrip closures;
- Facilitates state recreational-use legislation to relieve landowners from liability throughout the United States.



## Accomplishing Airstrip Stewardship

 To improve and maintain recreational-use airstrips for public land access, the RAF:- Cooperated with Montana Department of Transportation to provide scheduled maintenance at backcountry strips, creating a template for other states;
- Secured an agreement with the National Park Service to ensure continued public use of three Death Valley airstrips in California: Chicken Strip, Stovepipe Wells, and Furnace Creek;
- Recruited qualified Liaisons to monitor opportunities for airstrip enhancement. Liaisons are being established throughout the US.
- Established a capital fund to purchase land for recreational-use airstrips.


## Education

The Recreational Aviation Foundation educates the public about the benefits of rural and backcountry airstrips and backcountry flying etiquette and safety. To accomplish this, the RAF utilizes aviation publications and participates in aviation conferences, fly-ins and tourism meetings throughout the US. The RAF also serves as an informational hub for recreational aviators, monitors various state aviation issues, advises appropriate state aviation organizations and pilots, and provides guidance and expertise on airstrip issues on public lands.
In the interest of safety, the RAF contributes to backcountry flying guides and promotes air safety through support of flight training seminars.

Recreational Aviation

## Foundation

1711 W.College Ave. Bozeman, MT 59715

Count me in!
Here is my tax-deductible gift of: \$

- Donor Levels -

Donor: Up to $\$ 50$;
Supporting Member: \$50 - \$999;
Lifetime Member: \$1000 and above. __I would like to discuss land donation or estate planning.
I'm interested in volunteering for
$\qquad$ State Liaison duties
$\qquad$ Airstrip Maintenance

Other $\qquad$
Name
Address $\qquad$
City $\qquad$
State $\qquad$ Zip+4 $\qquad$
email
Phone $\qquad$
Aircraft type $\qquad$ N

Secure donation by credit card; Number:

Expiration date
Signature
The RAF has tax and legal assistance available to help you in planning other donations including life insurance, investment assets, wills and trusts, real estate and estate planning.

Donate conveniently online at: www.theraf.org
or call 406-362-4743
to make a credit card donation.


Supporting the Recreational Aviation Foundation
When you make a gift to the Recreational Aviation Foundation, you can feel confident that your support is helping to ensure a strong future for recreational aviation.

The RAF recognizes annual donations of $\$ 50$ and more as a Supporting Member. For $\$ 1,000$ or more we recognize your support as a Lifetime Supporting Member. Additional annual support is appreciated, as are major gifts for specific projects or programs.

Endowed gifts of $\$ 10,000$ or more will help ensure our work will continue to benefit future generations, as will inclusion of the Recreational Aviation Foundation in your estate plans.

The RAF is a non-profit corporation exempt from Federal income tax under IRS code 501(c)(3) and is classified as a Public Charity organization. Donations are taxdeductible. Our identification number is 42-1613294.



## Recreational Aviation FOUNDATION <br> 1711 West College

Bozeman, MT 59715 • 406-587-5166 www.theraf.org

Preserving recreational and backcountry aviation, the RAF successfully accomplished many goals, including:

- Evaluated recreational use statutes in all western states with the goal of amending any state's statutes that do not specifically provide liability protection to landowners with airstrips;
- Worked with US Forest Service in Washington, DC developing appropriate recreational use policy for use by managers of National forests;
- Participated in management plan reviews with US Forest Service, BLM and Bureau of Reclamation to keep airstrips open;
- Acquired acreage adjacent to Glacier Nat'l Park, including a recreational airstrip. A rustic pilot shelter, camping facilities, masonry barbecue and a courtesy van are on site;
- Constructed a camping shelter at Gallatin Field, Bozeman, Montana, modeling the way for other shelters at recreational airstrips around the country to provide convenient rest stops for general aviation;
- Established Russian Flat, a new 4,000-ft central Montana backcountry airstrip on USFS land - the first in 45 years - in cooperation with Montana Pilots Assoc.

With your help, the Recreational Aviation
Foundation can continue being an effective advocate for recreational flying.

If you have a personal or business card and would like me to scan it into the newsletter, please mail a card to me at 438 I Street in IF, 83402

## OIL PRESSURE <br> BY Jim Wolper

Dale starts every flight with a prayer, and yesterday morning he prayed for good judg-
 ment. We were headed out to explore the local grass strips in the Ercoup.

We flipped a coin to see who got the left seat, and I won. Last time we flew together he got the left seat, so I figure he'll get it for our next flight.

Our first stop was the beautiful Rainbow Ranch and its lovely turf. Dale did a nice landing and as we rolled out I scanned the obstacles to the West: the East is a small ridgeline, more than the 'Coupe can outclimb. I took the controls and we taxied back to the far end. "Tail in the Weeds!"

Throttle in and we're rolling. Airspeed alive. Check the engine gauges.

What?? Why is the oil pressure so low? I aborted. We taxied away from the owner's home so I could do a runup. We had oil

pressure but less than desired. The temperature was rock steady and not too high. What had we prayed for?

That killed the plan for exploring grass strips. We would either stay at Rainbow
Ranch, or fly home. Which? This was on the edge: we had oil pressure, it was steady, and the oil temperature wasn't rising. Perhaps a stuck relief valve? Grounding the airplane at RR was an unattractive option, but not doing so required judgment.

We had enough runway and were surrounded by excellent landing fields, so an engine failure on takeoff wasn't that big a deal. We would climb out at $V x$, watch the temp and pressure, and fly home a little higher to increase our landing options. We would not overfly the one town between the RR and home. There were dozens of fields in which to land, almost too many.

It was my takeoff and we launched. The pressure held steady and we climbed to altitude. The air was so smooth that I flew hands off, but more so I could focus on the terrain around us.

Quite soon home was in sight. The wind was calm, so we could choose the better way to land. If the engine quit landing north, we
would be in the Walmart parking lot, but if it quit landing south we would be on the empty golf course. An easy choice.

I entered the pattern high to double check the sock. The pressure held steady. I flew a close-in downwind and announced a landing point about $1 / 3$ of the way down the runway, aiming a little long on purpose.

We landed on the spot.
Now to figure out what's wrong. ......Jim

## SMILEY CREEK WITH LARRY

9-30-11: Larry Hobbs has the bright idea for a fun

"wienie roast" at Smiley Creek. The weather is perfect, and he sends out the notice to the usual suspects. Errol Spaulding is the only one to respond, and then later, he cancels. So it is just Larry and me heading out.

I arrive at the airport in Rigby before 7 am . Soon we have the plane warming up and are up in the sky by 0720 . The sun rises while we climb and fortunately, it is behind us as we head west over the desert. Our route to Smiley Creek is direct and into a headwind, and then we climb to 11,000 feet to clear the
mountainous terrain. A band of smoke over the desert gives way to clear air in the mountains, and the first beautiful traces of fall colors. Soon the terrain comes up nearly to our level in jagged peaks.

The air has been completely smooth up to this point in spite of the headwind, but among the peaks, we encounter some turbulence. I'm flying at this point....and Larry instinctively grabs at the controls. But he checks himself and then apologizes. "That's OK Larry, no offense taken".

We steer around tall peaks and ridges and descend north of Galena Summit to land at Smiley Creek. The strip is deserted with one other plane tied down. The weather is mild and calm and we wander around searching for firewood and the right pienic shelter. A 172 arrives from Caldwell and we chat with the $\mathbf{3}$ men who get out, who are properly impressed and admiring Larry's plane. They stroll over to the lodge for breakfast while we start our fire [on the first attempt] and cook our Polish and Italian sausages. After a tasty and leisurely lunch, we put out our fire with creek water and it is time to go. The flight over Alturus Lake and Camp Perkins brings back memories of church camps there decades ago. We take a less direct route home, aiming first for Fairfield and then for Picabo, intending to get fuel there, but we have enough to get back so we set course for Rigby which takes us over Sun Valley. We don't have to climb as high this time and notice fire retardant on some
roads at the site. Larry has me do some Dutch rolls and then descend to run the river when we get back to Roberts. I'm getting better but still tend to cut the turns early. Larry takes over to land at Rigby to conclude this delightful adventure. .......Dale


## THE FINAL SPACE SHUTTLE

 by JIM WOLPEREarly this summer I got a tweet (that is to say.....a twitter message) announcing a chance to attend the final space shuttle launch. I registered on the website. NASA took 150 of the rumored 5000 applicants to the launch.

Not me.
NASA opened a few slots for the landing, and this time I got picked! I hesitated a little: it would be expensive, tiring, and tough on my family to have me away again so soon. But I have been following the space program since my first grade class gathered to watch Alan Shepard's Freedom 7 Flight in 1961, so I had to go!

So that Tuesday, I drove down to Salt Lake and flew to Florida. Wednesday, I toured the Kennedy Space Center Visitor Complex,
spending hours studying a Saturn V rocket, the one that took Americans to the Moon.

Everyone involved was in contact through twitter, and three of us met for dinner that evening. The landing would be at sunrise the next morning, and we made plans to be there early. Six of us met in front of the closed hotel lobby at 0245 and carpooled to Kennedy. We left early, expecting traffic, and arrived at our badging spot long before the NASA folks.

Our bus showed up and we boarded, every seat full. People were bristling with camera gear, but the NASA reps, Stephanie and Beth, suggested that we not take pictures because the whole thing would happen so fast. NASA has better photographers than me, anyway.

NASA also provided an orbiter processing engineer named Chris (didn't catch his last name) who described the landing process, between-launch activities, plans for the decommissioned orbiters, and the like. I was familiar with a lot of this due to my voracious reading, but it was great to hear it from someone who had done it.

As you know, I have mixed feelings about simulations, but I can't access the shuttle or the Shuttle Training Aircraft, so I had been simulating the approach and landing using F-SIM, an iPad app that is reputed to be quite accurate. Atlantis would approach from the southwest and fly a Heading Align-
ment Cone, a left-turning circling approach to land on runway 15, and F-SIM allows a similar approach, complete with recordings of the dialog between the crew and Johnson Space Center ("Houston"). I know from watching the camera view through the HUD during landings that the final portion of the simulation is very realistic.

After Atlantis's de-orbit burn someplace over the Pacific, the bus took us to the airfield (you can look it up as KTTS). There was a little bit of a traffic jam but we got to the field in plenty of time. We were near midfield, and I had to make a quick choice about where to stand, closer to the runway or higher, in the bleachers? I chose close and stood at the rope.

Large screens were set up showing NASATV and we could hear the dialog between Atlantis and Houston. (This isn't special, I do this at home. But I wasn't at home, was I?)

It was before dawn, which was a good thing and a bad thing. Since Atlantis and the International Space Station were in the same orbit, the station passed overhead about 9 minutes before the landing. I've watched the ISS dozens of times, but somehow this view was special. Everyone clapped as the station flew by.

The voice from Atlantis was calm. "It looks like we just passed over the Yucatan Peninsula," it said, "We wish more of you could
see this."
"Atlantis, Houston," came the calm voice of the CapCom, "We show you crossing the West Coast of Florida."

Even astronauts get lost.

## B-BOOM!

The double sonic boom announced that Atlantis had decelerated below Mach 1. It wasn't as loud as I had expected, but it was sharper, more like a pair of cannon blasts. We all strained our eyes to see it passing overhead in the night sky.

This is where the sim came into play. "Atlantis, Houston, you're on at the 180." Just like the simulator app! This meant that Atlantis was on downwind, at proper altitude and airspeed, a few miles north of KTTS. I knew where to look. Nothing.
"Atlantis, Houston, you are on at the 90." OK, they're descending through $\mathbf{1 6 , 0 0 0}$. I know what they see.

## "Field in sight, Houston."

What? What? The crowd around me didn't get this, and I explained.

Now they were at about 13,000 and turning final. The HUD was showing them an extended centerline, and they were steering off

PAPIs calibrated to their steep glide slope.
We saw nothing. Everyone seemed to lean toward the final approach course. It was like the final seconds of a tied NBA final.
"Pre-flare." OK, they're passing 2000 AGL. Still nothing.

Suddenly a shadow passed through the floodlights illuminating the runway. I shouted something incomprehensible, and felt the electricity passing through the crowd.
"Main gear touchdown."
Still nothing in sight! The crowd was cheering.

The drag chute appeared above the bushes, and all of a sudden THERE IT WAS, still moving fast. As it passed out of sight the drag chute stayed attached, and by the sim that means that they were still moving at more than 100 knots.

It's a cliché, but the sight was awe-inspiring.
We, the final handful of people to see a Space Shuttle in action, reluctantly drifted back onto the bus as dawn broke, people stopping on the stair for a last look at the tower and the airfield. The orbiter was out of sight. We rode back to our cars. Everyone was bittersweet: we had seen an amazing thing, but a magical era had ended on
our watch. We lingered in the parking lot, took pictures of our new friends, and headed back to the hotel to try to get some sleep.

I don't know about the others, but I couldn't sleep.

But the shuttles will.

## FIRST TRIP TO SHANGRI-LA by Tom Strong

This past August, I volunteered to be on a work party with The Recrea-
 tional Aviation Foundation to help with improvements at Russian Flat (M42), a new backcountry airstrip in Montana. The work was scheduled for Saturday and I planned to leave Rigby on Friday and spend the night at Moose Creek, then do the short hop over to M42 on Saturday morning.

The forecast for Friday indicated a weather system lingering over the Bitterroots just east of Moose Creek (1U1) and down toward Salmon, so a direct flight wasn't looking too good. Instead, I flew via Challis and then on to Grangeville for a quick pit stop and to take on some fuel. From Grangeville,
it is only another 79 miles to Moose Creek. One reason I liked this approach is from information I had read in a report about landing at 1U1. The article indicated that flying up the Selway made for an easy transition to final for runway 4. However, as is my mode when flying to a new backcountry strip, I first had to overfly the field before committing to this approach. The view from 6000 feet made the airstrip $\mathbf{3 6 0 0}$ feet below look small and deeply tucked in the canyon between the Selway River and Moose Creek. This was going to be interesting.


Runway is in center of picture in clearing.
The runway looked to be free of animals and other airplanes, and the winds were light. At this point, I did a 180 and began a descent that would set me up for landing to the east on runway 4 . I dropped into a side canyon of the Selway, skirting the $\mathbf{6 0 0 0}$ foot mountain northwest of Moose Creek and descending to 3400 feet as the walls of the

Selway canyon closed in. At 2 miles and 2800 feet, my speed was down and the canyon walls were closer as the runway was just coming into sight. At 1 mile, I eased to the right and then set up for a short final to runway 4 (runway 4 looked more than adequate in length and width). Touchdown was smooth and the $E$ end of 4 has a slight uphill to the ranger station.


See slight uphill at end of runway 4 by the ranger station

A volunteer ranger in the historic 1922 ranger cabin came out to greet me and give me the important information about the location of water and the best camping spots.


He was also a pilot, so he told me the standard approaches and departures he uses. He likes landing 19 or taking off 1 in the morning when the winds are usually light (on my next trip, I landed 19 which is straight forward with a 2 or 3 mile final in a open valley to touchdown). I also learned from the ranger that one can often fly into Moose Creek as early as April. But up until June, runway $19 / 1$ is closed because of some soggy spots.


The ranger station is situated among tall pines and is an idyllic location. The dozen buildings house the Ranger and other forestry workers, a horse wrangler and the volunteer ranger. In the Rangers office are maps, brochures and books. The door is always open.

The camping is on the west side of $19 / 1$ and near the intersection of the two runways. No water or tables here, but there is a pit toilet and some portable fire pits. If you really need a table, you can sign out a (heavy) portable table from the Ranger Station. My tent was located in the trees on a
bed of pine needles. Since this is the heart of the Selway-Bitterroot Wilderness, the only engines allowed within 25 miles of Moose Creek are airplane engines thus the nights are VERY quiet.


If you like to hike or fish or lay under the trees and read a good book you have come to the right place. The 1 mile hike to the rivers puts you in prime fishing country. I am told the Selway is barbless catch and release and Moose Creek has a two a day limit. When it comes to hiking, the possibilities are spectacular.


The easiest is a two mile hike up the west side of Moose Creek to a former backcountry ranch that has since been bought out by the forest service and its fate is still to be decided. There are some interesting buildings and old saw mill run by a ford engine and a 1000 foot runway with a big white $X$.

The second hike is 5 miles (one way) and a 3000 foot climb to the Shissler Lookout with great views in all directions. This hike can be combined with another trail near the Lookout and descends another stream to the west and then back to camp following the Selway. The complete list includes 4 other trails for day hikes or multiday backcountry trips.


Leaving Moose Creek you can takeoff using runway 22 if you are headed west or runway 1 if you are headed $E$. In the afternoon, the winds tend to be blowing up the Selway or from the $S W$. If going $E$, you have to climb up to $\mathbf{1 2 , 0 0 0}$ or so to clear the Bitterroots and 35 miles later you are over Hamilton, MT.

I have flown into Moose Creek three times now (my 4th will hopefully be in October). The route I like best from IF to Moose Creek is via West Fork (4U7) because from West Fork, it is only 33 more miles to Moose Creek. Be sure to say hi to Tex as you fly over West Fork.

Next summer I plan to make at least 2 trips back to Shangri-La. I will send out an email notice to the membership if others are interested in coming along for this beautiful trip. .....Tom

The weekend of August 20th, Leigh and Nola Orr went to West Yellowstone - just parked the plane at the airport. The FBO people drove us into town. We ate breakfast and strolled around town for a window shopping tour, then called the FBO and they came back and got us. They had fueled the plane while we were gone. Why not take the wife or friend over - this made a great "date" for the day!

## Henry's Fork Chpt. Fly-in a Success!

On August 19th-20th, we had several chapter folks show up for a great pot luck supper and campout at the Henry's Fork Airstrip. The chapter provided BBQ meat and everyone brought food to share. A roaring fire throughout the evening and airplane talk
kept us warm and happy all evening. Tim Kaser came flying in at dusk shining his new LED landing lights - he looked like a semitruck skimming across the lake with two of the brightest headlights you ever saw!

Our community breakfast was hosted by the Chapter 407 and prepared by Terry and Natalie Bergevin. Then everyone headed out to the windsock to clean out the weeds and repaint the rock circle. This is turning out to be a really fun annual event so hope more of you join us next year!
...Carol


Leigh setting up their tent.


Breakfast for the crew!


Henry's Lake Line-up

The High School Airplane Factory by James Jackson (this is Part 2 of 5)

## Building Project 1/ EAA Acro Sport II biplane:

The Acro Sport biplane was designed by the EAA founder Paul Pobernezny. Actually, he was given permission from designer Curtis Pitts to modify his single place Pitts Special into a two place homebuilt aircraft. At that time (1980), the organization had a educational division called 'project school flight'. Director Ben Owen was very excited about Mundelein High School's intentions and gave our vocational education department a free set of plans. The plans' book consisted of 27 pages of blueprints. There were no components to possibly purchase at that time. Everything had to be made from scratch and with 16 year old kids, I had my work cut out for me.


The owner of a skydiving business where I spent my weekends was willing to sponsor the project. He would of course take ownership once it was finished and proven airworthy. This was to be a five year project with over 5,000 hours of documented work.
The acro sport incorporated a fuselage of chromemoly tubing, spruce wood wing components and a stiff poly-fiber fabric covering on the outside. The students (after a little brushup with their math skills) made a full size drawing of the fuselage side on plywood sheets. They then learned about metallurgy and aircraft designs. Electrical conduit was used to authenticate the chrome tubing to be cut as practice pieces in fitting the parts for tight fits for welding. This saved a lot of cost in making mistakes while learning the processes involved.

I found that teaching MIG welding was a good start in developing skills with bonding metals together. The students were amazed at what strength could be developed with molten metal at 1200 degrees temperature. Everyone learned the skills in welding but only the advanced pupils were allowed to
actually weld a component on the project.
After fitting the fuselage tubing pieces together, we then 'tack' welded the structural parts together. Eventually, both sides with the top and bottom members were made.
The finished product actually looked like an airplane body!

The wing structure was then built. Se lected aircraft quality spruce wood was cut and fitted to the handmade rib building boards that held the pieces together. Over fifty of these were needed to shape the four biplane wing sections. As a means of proving the strength of a light structure (ribs) on the airplane, a test stand was made. Each student used one of their multiple ribs they made and applied fifty times the weight of the rib as in a positive $G$ test load. The 'ultimate' failure on a practice rib was 200 times the weight (a weightlifting 50 pound barbell hanging weight). Everyone was quite impressed to say the least!

Fabric work, electrical wiring basics and even painting concepts were taught and applied in learning how to built the class project over a five year period of time. All these technologies were part of the master plan in developing skills that could be used with a student's future. The ultimate test of their skill development was to see if their pride and joy project could really fly!
Finally the student built EAA Acro Sport Biplane was ready for it's maiden flight. All the FAA paperwork was completed. An FAA inspector came out after it was reassembled at a nearby airport and we went thru all the necessary steps required for
approval. It passed on it's first inspectionwow!

As the instructor of the class, it was only fitting that I did the test flying. This turned out to be quite an ordeal. Although I was a private pilot, I had never been in a biplane before, let alone fly one.

The first flight (1985) was planned for a fall Saturday when we had our school homecoming. Many of the five year project kids were there in attendance. I had an old skydiving parachute and tried to sit in the cockpit with it on -- too tight. Option number one went out the window. Option two was using a borrowed handheld radio for communication with a chase plane that one of my pilot alumnus students had there. Those people with the radio never showed updarn it.

After some preliminary taxi tests, I decided to go for it. I'll never forget that take off experience. The kids had lined up along the runway and were jumping up for joy as the Acro took to the sky. The wind coming in the open cockpit reminded me of my motorcycle days. It was very exhilarating to say the least.
The proof of a good flying airplane is testing it's static and dynamic flight characteristics. After the aircraft was trimmed for level flight, I slowly released my hand from the control stick to see if it would remain in it's position. It did exactly as I had hopedwow!
Sooner or later, whatever goes up has to come down. That meant that $I$ had to land our project plane. With a tail wheeled air-
craft, the pilot taxing has almost no forward visibility. Also, a biplane's wings hinder the views of surrounding hazards. These two factors really inhibit ones ability to land safely.
The runway was three thousand feet long but only twenty feet wide. 'Slipping' the plane helped my forward visibility until the last twenty feet above the runway. I remember hitting the ground on the tailwheel first then the main gear hit so hard that it pitched the tail high enough where I could see over the top wing at the ground. Finally, the tail settled down and we came to a stop with students, community, staff members and friends welcoming us. What a night of celebration that was!
The following summer, the Acro II was flown to Oshkosh for the 1986 EAA Aviation Convention and put on display at the 'Project School Flight' center area. Many of our community members were there to witness this moment in aviation education history. Little did everyone know that an even greater project was being planned for the near future- a seaplane (project \#2) that would eventually fly at a Canadian outdoor youth camp that would inspire many to fly! To be continued........ Jim


HAVE A WONDERFUL THANKSGIVING AND A MERRY CHRISTMAS

SEE YOU AT THE NOVEMBER AND DECEMBER MEETINGS

Know Yourself - "ONE"
Your general experience
Total hours and type of flying time
Types of aircraft flown
total time in make $\&$ model of aircraft Quality time in make $\&$ model of aircraft YOUR ATTITUDE!!

Know The Airplane - "TWO"
The three most important things: Slow Flight, Slow Flight... SLOW FLIGHT!!
... while straight and level and in turns
... while clean and dirty (flaps / gear)
... while climbing and descending
Know your aircraft performance
Takeoff, climb, cruise, and landing
Fuel consumption and range
Weight and balance limits
And most importantly:
Effects of Density altitude

Know The Environment - "THREE"
Know the geography and major landmarks (peaks and drainages) of the area in which you are flying
Navigation by pilotage along suitable routes
Be familiar with local mountain weather
General Circulation Patterns
Diurnal Effects
Local Canyon Windflow Patterns
Know specific details of airstrips you are using
Approach and departure routes
Lighting conditions


