

Western Rotorcraft



January/February 2015



Regional Organizations Meetings & Contacts

Arizona Rotorcraft Club (**PRA 15**)

Third Saturday, Oct-May, Various Locations
Carl Matter: keenuk@aol.com

Ken Brock Rotorcraft Assoc. (**PRA 1**)

Next meeting Feb 21, 11am PST
El Mirage Dry Lake, CA
Terry Smith: terry.smith@earthlink.net

San Diego County Rotorcraft Club (**PRA 31**)

Third Thursday, Various Times/Locations (CA)
Dave Bacon: davesconcretepumping@msn.com

Colorado Rotorcraft Assoc. (**PRA 38**)

Next activity: TBA
Meadow Lake Airport (CO) (**KFLY**)
Thomas Fernandez: ke5wv@comcast.net

Great NW Sport Rotorcraft Assoc. (**PRA 73**)

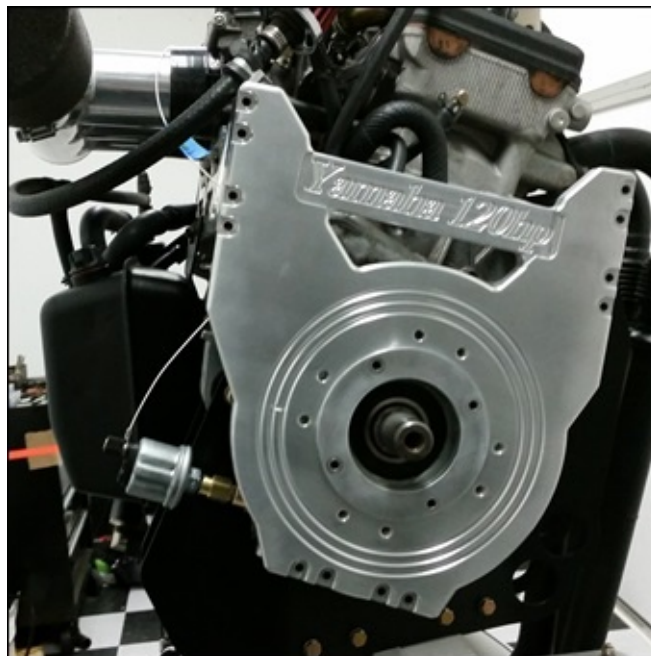
Second Saturday, 12 noon
Scappoose Industrial Airpark, OR (**KSPB**)
Gillan Bradley: pra73_contact@pra73.net

Bonneville GyroFlyers (**PRA 2**)

February 14, 10am
Brigham City Airport, UT
Doug Barker: president@utahrotorcraft.org

Utah Rotorcraft Association

Next Meeting TBA
Details to Members by E-mail
info@utahrotorcraft.org



2015 Event Calendar

Jun 9-13 - Rotors Over The Rockies
Brigham City Airport, UT

Jul 28-Aug 1 - PRA Convention
PRA Mentone Airport (IN)

Sep 5-7 - Glass Cockpit Open House
Mountain Home (ID)

Sep 25-27 - Ken Brock Freedom Fly-In
El Mirage Dry Lake (CA)

Oct 8-10 - Tour Utah Camp/Fly
Southern UT Airports (TBA)

On the cover: (L-R) Glenn Kerr of Chapter 2 and Todd Rieck of Chapter 38 prepare to hoist one of Todd's 120 HP Yamaha conversions (above) into place on Glenn's Butterfly Monarch. (See pages 5,6.)

In this issue: Western Rotorcraft Shifts Focus, General Aeronautics Corp Relocates, PRA Ground School Report, 3; Mike Burton Recovering, From the Rotary Wing Forum, 4; Butterfly/Yamaha Progress, 5; Losing Your History, 6; Classifieds, 8.

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From the Editor

I'm both sad and pleased to announce that Western Rotorcraft has begun a transition away from both its recent role and its magazine format. Sad because, while producing this regional newsletter has been hard work at times, it has been very rewarding to receive content from all over the west, mold it into shape, and see the impact WR has had in drawing our groups together and building friendships.



But I'm also pleased, because the changes to WR are necessitated by progress in our organization. When URA became a free-standing, 501(c)(3) non-profit, we had to focus first on tasks which would serve our mission, but which could be accomplished with our very limited resources. Fortifying Rotors Over The Rockies with gyroplane flight instruction, inspection services and educational forums was one thing we could do. This shared regional newsletter was another.



Now, "URA 2.0" is ready to burst out of the starting gate. We have a single-place training gyro which will be used to start a flying club, allowing students to complete their solo training and earn pilot certificates without first having to buy their own gyros. The work required to get this up and running will be significant. I've also accepted a more demanding day job, and something in my schedule has to give.

Western Rotorcraft will continue to be produced, but will no longer attempt to serve as an official newsletter for six chapters. We'll keep it going in a revised format to keep you informed on progress in URA programs and any PRA chapters which have news to share, and we'll keep making it available free of charge through our own website and others, including the PRA chapter news program. URA will help you get your own chapter newsletter into the PRA distribution system if needed. But the focus of our efforts will now be further developing the training and education programs our organization was founded to provide.

The official public launch of URA's single-seat trainer program is expected this year at Rotors Over The Rockies, June 9-13 at Brigham City, UT. If you can think of additional programs we might undertake to further education and training in the west, please let us know. It's a very exciting time!

Fly Safe!



General Aeronautics Relocates

General Aeronautics Corporation ([GAC](#)), which has acquired Groen Brothers Aviation (GBA), completed its exit from GBA's long-time facility on California Avenue in Salt Lake City in December. The company has moved into a new location at 1465 South 700 West, Salt Lake City, UT 84104. Hank Parry, who had been with GBA for over two decades, remains on the staff of GAC in a marketing liaison position. Hank can still be reached at (801) 973-0177.

PRA Ground School Attracts 23 Students

CFI Tim O'Connor (at right) reports 23 students enrolled in this year's online ground school for PRA members seeking preparation for the FAA's Gyroplane Sport Pilot knowledge test.



Tim says this class is a little different from past groups. "This year's crop of students have been very interactive in class and have been asking impressively insightful questions, which is great for me as that provides an opportunity for me to learn new material as well.

"One example is a question about how color blindness might affect a Sport Pilot when so many lights and signs are color-coded," says Tim. "The FAA allows Sport Pilots to be color-

blind with some restrictions on operating in Class B, C and D airspaces, but gives no further guidance. I think it would be interesting to track down some experienced pilots that are flying color blind with a medical exemption or experienced color blind Sport Pilots and see what advice and experiences they can share."

Another change is the number of students now taking class while on the go, traveling for work and even on cruise ships using bluetooth headsets with tablets. Tin adds, "We have at least 6 students I know of who will be traveling for work or pleasure during the 2015 sessions."



PRA's online ground school will run till mid-March, and the last session will include instruction on setting up WINGS profiles for each student to allow credit in the FAA's primary GA safety program. Tim reports, "The FAA

contact I work with has been very pleased with the fact we coordinate the PRA ground school with WINGS and FASTeam objectives."

Mike Burton Recovering



[CFI Mike Burton](#) (at left) of [Airgyro Aviation](#) says he's recovering from an accident in a Calidus in a remote area of Mesa County, Colorado on January 6. The flight of two gyros was returning to Spanish Fork, UT from Montrose, CO. Among details [Mike shared](#) on the Rotary Wing Forum:

"All systems were operating well and I thought it would be good to get the other aircraft with the turbo into Spanish Fork with more light so I told them to leave us and proceed home. We watched them fly on course for some time and made our last radio transmission to them as they crossed the ridge near Grand Junction, CO.

"As we approached the ridge I noted that we needed more altitude and turned left of course along the ridge while we climbed. Things were still going well but the climb rate had decreased somewhat. In looking back I should have expected the slight down draft from the wind coming over the ridge...we started to descend, I was at the best rate of climb speed of about 52 knots IAS, and I could see that we had descended lower than the trees at the edge of

the canyon. I asked Josh (a passenger) to say a prayer just prior to brushing the tops of the trees with the main wheels.

"When we hit the trees the gyro tipped forward and right. I saw a small clearing and did everything I could to keep us upright and get into the treeless area. There was a stand of oak brush that we hit just prior to reaching the ground and the small clear area. The rotor blades cut the trees and were wrecked. The cabin hit the ground with minimal forward speed but there was a short near vertical drop. We slid forward only a few yards and came to a stop upright.

"Josh got banged up but had no serious cuts or injuries. I sustained some minor cuts and a burst fracture of a thoracic vertebra. I will recover without surgery. It will be a few months of recovery."



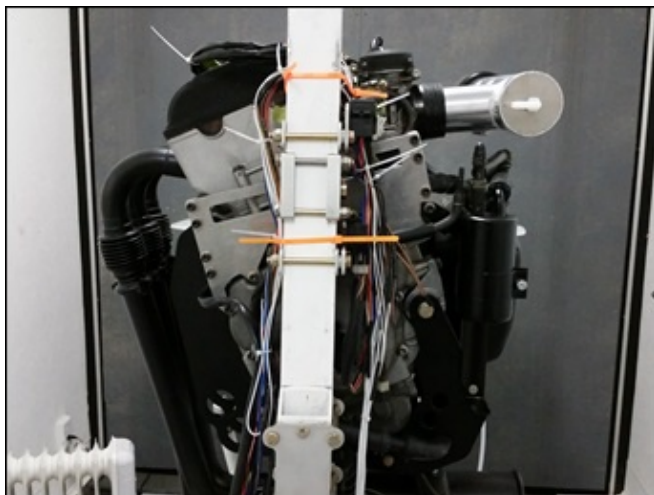
From the Rotary Wing Forum

[CFI Cammie Patch](#) (in front seat, above) of [Glass Cockpit Aviation](#) in Idaho recently started a thought-provoking thread titled, "It's Time to Think Differently." In her opening post, Cammie suggested that the expanded capabilities of new gyroplanes requires adjustments in our training and attitudes:

"Twenty years ago gyroplanes would almost exclusively be something flown locally. In fact, we may have rarely even left the boundaries of the airport, and not even change our altitude by more than 500' total. The new generation gyroplanes have introduced us to a whole new set of capabilities and risks, and I think for the

most part we are failing to recognize this. We can go higher, faster, and further now."

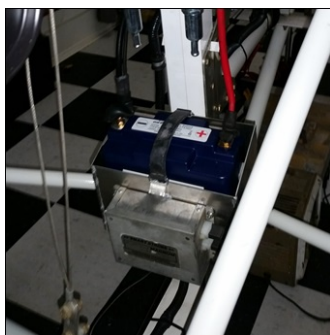
Read Cammie's full post, and the conversation which resulted, at [this link](#).



Butterfly/Yamaha Conversion Progress

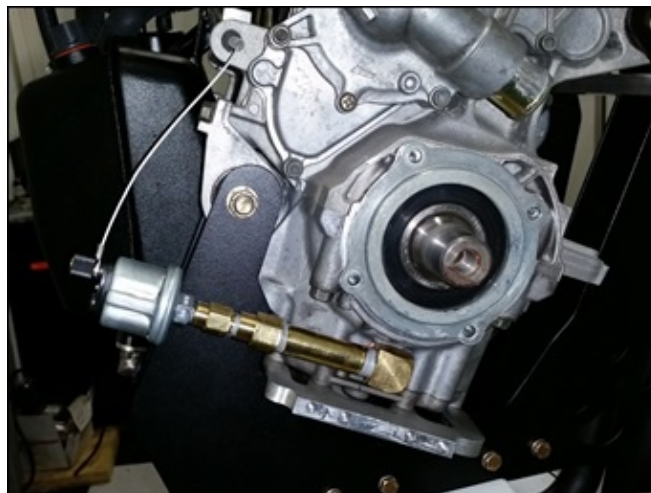
Chapter 2's Glenn Kerr reports progress with his conversion of a Butterfly Monarch to Yamaha four-stroke power. Here's what's happened since the last update in WR.- Ed.

With the wiring all but finished, I got my custom intake plenum from Rick Hawkenberry and installed it temporarily to see what color to powder coat it. There isn't any color that I feel would look good, so I'm having it polished instead. I'm really happy with the dimensions. As you can see from the head-on picture (above), it's nearly a perfect balance to the exhaust on the opposing (left) side.



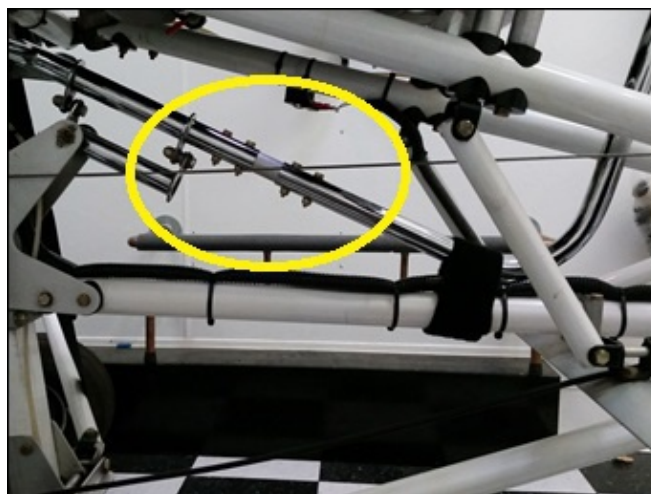
I got the custom battery box I ordered and got it installed. The battery I chose is a very small and light weight lithium battery with integral protection circuitry, so I don't need a special charger and it can be safely connected to a

standard 12V charging system. It has more than enough cranking capacity and only weighs slightly over three pounds. It was a bit pricey,



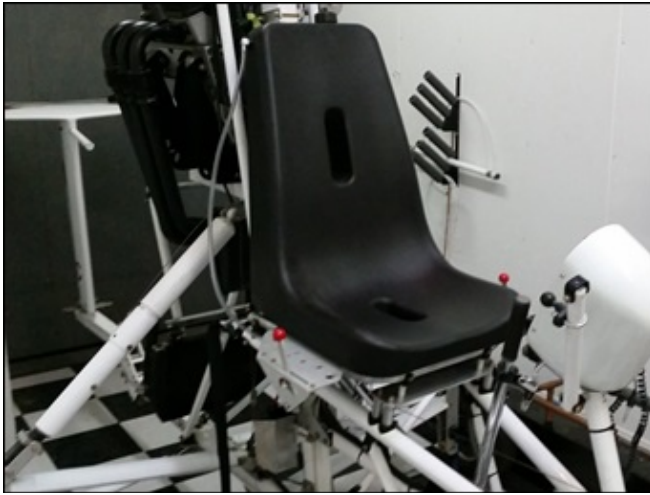
but I think it'll be well worth the money.

I was finally able to finish the oil pressure sender connection to the engine. With only 1.5" between the engine and the gearbox mount plate to make the 90-degree turn, it was a daunting task. I tried several ways, including plastic and copper tubing, to make the bend, but it was always too tight to make the turn properly. I was finally able to locate a 90 degree fitting (above). I had to cut it a little and rethread the 3/8" MIP threads. Then I just added the necessary fittings to adapt it to the VDO sender and VOILA'!



I finished the cyclic extension (in yellow circle, above) and got it installed. I used a piece of 6061-T6 solid round stock. The grip is now pretty close to the panel, but everything seems to be adjusted and working properly.

I was able to finally install the new seat (top of next page). Next will be the fuel system



connections to the engine and then I'll mount the C-Box. After that, I'll mount the prerotator pump so I can get the custom throttle and prerotator actuator cables ordered. After that, it will be cooling system connections and I'll be ready to start the motor.

This is one of those projects in which it seems it's "90 percent done, with only the other 90 percent to go!" We look forward to seeing Glenn's gyro fly at ROTR in June. - ED.

Bonneville GyroFlyers PRA Chapter 2 January Meeting Report

An informal meeting of Bonneville GyroFlyers (PRA 2) was held at the home of member Glenn Kerr in Kearns, UT on Saturday, January 10 at 10:00am. Attending were Glenn, President Doug Barker, Secretary Paul Plack, with Vice President Curtis Lund and member Charlie Wakamatsu participating by phone.

Glenn showed us the latest updates in his conversion of his Butterfly Monarch, originally powered by a Rotax two-stroke engine, to a 120-HP four-stroke Yamaha powerplant. Glenn is missing only a few parts to complete this project, and expects to be flying in the spring.

All present were concerned about the recent accident near Telluride, CO involving a Calidus flown by CFI Mike Burton and a passenger. Mike suffered a back injury, and was still hospitalized in Grand Junction, CPO as of the meeting, but is expected to make a full recovery. Few other details were available.

The next meeting of PRA 2 will be Saturday, February 14 at 10am, at the Brigham City Airport in northern Utah, where attendees will get their first look at URA's new Sport Copter Vortex single-seat training gyro. The business meeting will start at 10am in the pilots lounge. (Paul Plack, Secretary)



Are You Losing Your History? By Paul Plack

To anyone young reading this, let me apologize in advance. This is one of those topics you wouldn't normally think about until you're older, and it's too late to do much about it. I'm referring to the disconnect between what we think is important now, and what will be important to those who follow us in life. This is not some abstract, philosophical rant. I'm thinking specifically about how we record the meetings and events in our sport. The start of a new year seems like the perfect time to assess how we record what we do.

Allow me to digress to an analogy in Utah's Mormon culture. As the Mormon pioneers were crossing the plains to flee persecution, it would be understandable if the hardships of daily life pulling handcarts and finding enough to eat made keeping a diary a low priority. Many probably questioned who would ever care about their dull circumstances and daily routines. Yet, because they sought to be obedient to the instructions of Joseph Smith, Brigham Young

and others called to lead them, they made time to keep journals. Today, those journals are treasured for their rich historic detail on everyday life in the 1800s. It turns out a lot of people cared to read about the lives and times of those who went before, including many beyond the direct descendants of those pioneers.

Skipping ahead to the sport we love, how many times have you seen fantastic old pictures from El Mirage or Bensen Days, and wished there were captions with the names of those in the photos? How often have you seen old photos of innovative experimental gyros, and wished for detail on how someone built a laminated wood keel, or how it held up in the long term? If you belong to a PRA chapter with a long history, how much of it can you actually look up?



Who are the pilots and others in that wonderful 8mm ["Viva Las Vegas" movie](#) made 40 years ago by members of Chapter 1 (above)? What year was it made? (I'm guessing 1964 based on the vehicles, but does anyone really know?)

Now - If you've ever been frustrated by those who let history slip away without writing it down, ask yourself honestly if you're letting the same thing happen. As a result of both my work and my volunteer activities, I've seen lots of meeting reports and formal meeting minutes from organizations large and small in the last few years. Especially as our world moves steadily away from paper and into digital archives, I see much being lost forever. Believe it or not, 40 years from now someone will crave

detail on the things we consider mundane. With that in mind, let me suggest some new years resolutions for all our organizations.

Take complete minutes. Your organization's minutes may be critical, even a few months from now, in resolving disputes about what was decided in formal business meetings. Was that expenditure authorized in a formal motion? Did you even have enough members present to constitute a quorum as required in your bylaws for the conduct of business? You may not choose to share all these details outside the actual membership of your group, but there should be internal records kept which document the following about each meeting:

- The date, location and time
- Who attended, including guests
- Approval of previous minutes
- Correspondence received
- The treasurer's report
- Member project updates
- New members accepted
- News shared with members
- Major issues discussed
- Any special recognition of members
- Nominations and elections
- Plans for the next meeting

In addition to helping resolve any awkward questions about group decisions which arise later, these details will help enthusiasts a generation from now connect the dots and learn from both our successes and our mistakes.

In our record-keeping in general:

Use complete names, first and last, and real ones! We're all guilty of missing this one sometimes. It wasn't until I met him at the Glass Cockpit Aviation open house in September that I found out Chapter 73's Bob Miller is the same guy they refer to only as "Crazy Bob" in some accounts. (I also learned the stories that led to the nickname!)

Record some info when you take pictures. We've all seen old photos with captions such as, "Pete and Sam at El Mirage." Pete and Sam who? Which year? Which of the five people in the frame are Pete and Sam? It's frustrating to have these details lost to time. Our cameras are

smart enough to record date, time, and even GPS coordinates of digital photos in the meta data if we don't turn those features off. Surely we can at least make a note of the names and the year.

Take photos of people, not just machines. After a while, gyros all start to look kinda the same. Its the interesting characters in our sport which form the best memories.

Resist the urge some of us have to duck for cover when someone is taking a group photo. Believe it or not, someone in the future will be excited to see you were there!

Finally, store your archives with some forethought. Unlike old photos and paper records, digital files don't require space to store, are not degraded by time, and are easily shared. But what about the obsolescence of storage media? My family had some old records which were scanned in the 1980s and stored on floppy discs. Floppy disc drives are getting hard to find, which risks making the discs useless. CD-ROMs can preserve files safely for 100 years or more if stored properly, but USB thumb drives, other memory-based storage and "the cloud" are quickly making CDs obsolete. Will there still be CD drives around to read those discs in 40 years? Probably not.

For this reason, paper still has a role in archives which will need to be accessed decades from now. For files stored digitally, at least revisit them every few years and make fresh digital copies on whatever new storage technology is current, and share them widely to improve their odds of long-term survival.

At this time of year I think about an old 8mm video I saw of a Chapter 1 Christmas party some time in the 1960s. Chapter members appear to have been gathered in the Brock home for a gift exchange, but we don't know who most of those people were. Wouldn't it be fun to know?

Let's make sure we capture enough detail in the records we keep today to let those who follow enjoy the heritage we're creating.



Classifieds – Gyros for Sale

Sport Copter Vortex M - Circumstances force sale. Completed in Aug. '13, fresh annual, newly out of phase one with 43 hour TT. Viking engine rated at 110 HP @ 5800 rpm, 118 HP @ 6600 redline. Fuel injection, custom cold air deflectors, 70" three-blade Warp Drive w/spinner. MGL full color readout EIS including fuel level gauge and fuel/air mixture. Sport Rotors are 8" X 27', four-way electric trim. Fuel capacity 18 gal. w/aux. tanks. Radio, transponder, encoder. Contact Mark at (303) 475-9156 and leave a call back number. Serious inquiries only. (Photos above, below.)



Classifieds are free to members of PRA chapters participating in Western Rotorcraft.