Utah Rotorcraft Association

April 2010

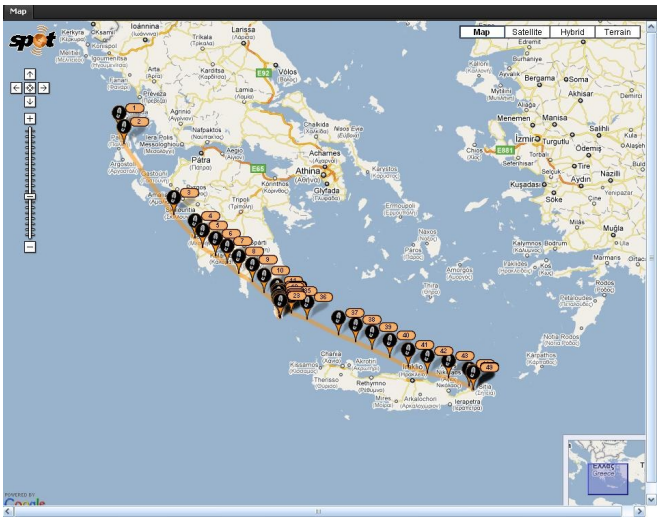
Around the World in an MT03!

Norman Surplus is an Irish cancer survivor and energy company exec who has decided its time to show others with cancer that there can be much more to life than giving in. He's also a gyroplane enthusiast, and decided to demonstrate his optimism by being the first to circumnavigate the globe in an autogyro. He notes that it's the only powered aircraft class that's never been around the world.

Following his March 22 departure from Larne, Antrim, he's pursuing a route across Europe, the Middle East, India, Thailand, Malaysia, Russia, Japan, the US, Canada, Greenland and Iceland. There will be some unique challenges along the way - he's had to plan a route which entirely bypasses China, where the military dominates the airspace. While in Russia, he's required to carry an official guide in the rear seat of his bright yellow MT03, a location normally reserved for his collapsible ferry tank. With the tank full, Norman says he can do 900 miles unrefueled.

The adventurer is putting considerable trust in his MT03, but especially in its Rotax 914 engine. Of his 27,000-mile route, 4,400 miles will be over water. On the Spot tracking map at right, the April 2 leg of his trip which ended on the eastern end of the Greek island of Crete shows how much of the day was spent outside gliding distance from shore.

Of those water crossings, experienced aviators say the North Atlantic will present the most danger, even in the summer, when Surplus plans to make that leg. He says he's prepared. "The most dangerous moment is when you hit cold water, because it is liable to be debilitating...I have extensive training, because I am a part-time lifeboat cox." (*See "GYROX," page 2.*)



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GYROX *(from page 1)*

He's carrying an inflatable life raft, but perhaps just as helpful, he's carrying the confidence of a cancer survivor. Perhaps last week's flight over the Mediterranean Sea doesn't look so scary after that.

The map (*page 1*) suggests the only major metro areas Surplus will cross in the west are Seattle and Portland, but his media contacts say the route is tentative, and subject to revision based on a number of factors. We're in touch, and hopeful we can convince him to join us at Rotors Over The Rockies, if timing permits.

PRA has a notice on its website soliciting support along the trip from enthusiasts. Needed items include hangar space, advice or updates on regional conditions and amenities, emergency contacts, and warm welcomes when he arrives. Several chapters and individuals have already offered fuel and other support. Find out what you can do at www.pra.org.

The complete trip is expected to take four months, so while we've all been beaten to the achievement of circumnavigating the globe in a gyroplane, at least Norm is leaving the speed record well within reach for the rest of us! (www.gyroxgoesglobal.com)

PRA Regional Report

NW/Mtn Rep Paul Plack

The first meeting of the PRA board with Regional Representatives will be April 22. If there are any issues your chapter would like brought to the board, please let me know: secretary@utahrotorcraft.org.

Powered Sport Flying Magazine Technical Editor Roy Beisswenger welcomes submissions, and suggests announcements be 400-800 words; columns and stories 600-850 words; and features 850-1,500 words. Photos are usable in JPG, TIFF, or PSD formats. Contact Roy for more info, or to submit material: roy@easyflight.com.

The Arizona Rotorcraft Club is holding its first fly-in April 17 & 18 at the San Manuel Airport (E77). Camping, (but not hook-ups,) rest rooms and water are available on the field. A hot dog & apple pie cookout is planned for Saturday night. For more information, contact ARC Secretary Mark Rhoades: markrhoads2585@yahoo.com.

Webinars Conclude

Our final webinar offered an intriguing look into a beautiful homebuilt helicopter and, unfortunately, a demonstration of the limits of consumer-level internet video technology. PRA Director and Secretary Stan Foster joined us via Skype video from Paxton, IL to show us around his Helicycle kit helicopter. The demands of attempting live video on Skype and Dimdim simultaneously while running a screen capture recorder proved too much for the computer, so we had to drop the Dimdim feed. For those of us at Airgyro, the session then proceeded without issue.

We learned some useful lessons. Transmitting session audio over the internet to participants, rather than using a separate telephone connection, greatly simplifies the technology required at our meeting place, and is also popular with remote attendees. We need to stick with presentations based on still frames, or video browsed from a website, rather than transmitting it through our webmeeting system.

One very positive outcome of the experiment has been the development of a simple technical setup for conducting our monthly meetings online. We'll make this a regular plan whenever circumstances permit.

March 13 Minutes

The meeting was called to order in the Airgyro classroom at 10:15am by President Doug Barker, with five members present and two more attending remotely via the Dimdim webmeeting platform. The minutes of the March meeting were approved as published in the newsletter.

Treasurer Nate Oldham was not present, but submitted a financial report through Doug. URA has $592.98 on hand in the America First accounts, and $39.58 waiting to be transferred from PayPal, for a total of $632.56. There is an outstanding check for postage in the amount of $176, leaving a net balance of $456.56. The report was approved by members.

The membership of John Adair, of Rock Springs, WY was accepted. Under Member Updates, Paul Plack read an e-mail from Heath Lowry, a founding URA member, announcing the formation of a new foundation to fund law gyroplane flight operations in support of Utah law enforcement. CFI Mike Burton announced that Airgyro has acquired Heath's SparrowHawk gyroplane kit, and intends to have it available as a trainer this summer.

Doug conveyed an announcement from Whirlybird Helicopters that an open house will be held March 27 & 28 at the Ogden Airport, with helicopter introductory rides available for $35.

In a discussion of progress on Rotors Over The Rockies, Doug offered a list of forums and services expected to be available at the event. After a question for remote attendees on the internet regarding the usefulness of the meeting system, the meeting was adjourned at 10:58am.

Following the meeting, Stan Foster joined us online via Skype video from Paxton, IL to show us details of his Helicycle build, and answer questions.

Tim Chick Vortex Build

Tim Chick of Panama City, FL has worked for years to get introductory gyro videos to newcomers. He even maintains his own gyroplane video website, which he calls "GyroTV."

Tim is now underway with a Sport Copter Vortex build. Follow his progress at www.rotaryforum.com by searching, "My Sport Copter Build." And, Tim, thanks for the videos!

Industry News

China is celebrating the March 18 public debut of the AC313, (*above and below,*) described by official sources as "giant domestic helicopter for civil use with a maximum take-off load of 13.8 tons." But sharp-eyed observers have noticed the resemblance to a legacy European design, and they're correct.

The helicopter is a close offshoot of the Zhi-8, also called the Z-8, which was reverse-engineered from the French SA 321 Super Frelon. The Peoples Liberation Army purchased 13 of the French aircraft in the late 1970s. After years of technical challenges, the Z-8 was finally finished and certified in 1994.

It's not clear how much of an update the AC313 represents. The maximum takeoff weight is only slightly above the Z-8's 13.0 tons.

Next Meeting

Our next meeting will be held Saturday, April 10th, at 10am in the second-floor classroom of Airgyro, at the Spanish Fork / Springville Airport, 350 West 2050 North, Spanish Fork, UT 84660. This meeting will not be available online, but distant members are invited to participate via telephone conference call. At 9:55am, dial (702) 473-3463. When prompted, enter the passcode 790752, followed by the # key.

Web Traffic Trivia

As PRA chapters go, our website project has been one of the more ambitious. A web presence can be an important part of building a community over distance, particularly challenging here in the west, but it also provides a simplified process for new members wishing to join, and we're having some success using our site to promote our activities. If you can find a way to include even a small, subtle link to www.utahrotorcraft.org in communications, such as in your e-mail signature, it can make a difference in building traffic to our site.

Summary

Reported period	Month Mar 2010
First visit	01 Mar 2010 - 02:40
Last visit	26 Mar 2010 - 12:08

	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Viewed traffic *	**269**	**659** (2.44 visits/visitor)	**2310** (3.5 Pages/Visit)	**6664** (10.11 Hits/Visit)	**6.89 GB** (10956.69 KB/Visit)
Not viewed traffic *			**3177**	**3515**	**869.77 MB**

* Not viewed traffic includes traffic generated by robots, worms, or replies with special HTTP status codes.

Our overall web traffic for March (*above*) roughly doubled that of December, due in part to interest in the webinars. Even through the numbers are not yet big, patterns are visible.

Connect to site from

Origin			Pa
Direct address / Bookmark / Link in email...			7
Links from an Internet Search Engine - Full list			1
- Google	85	87	
- Google (Images)	42	50	
- Yahoo!	24	24	
- Windows Live	12	12	
- Unknown search engines	2	2	
- AT&T search (powered by Google)	2	2	
Links from an external page (other web sites except search engines) - Full list			2
- http://www.rotaryforum.com/forum/showthread.php	72	84	
- http://my.dimdim.com/pw_plack/	32	32	
- http://www.experimentalhelo.com	18	18	
- http://www.pra.org/index.php	18	18	
- http://www.bing.com/search	14	14	
- http://www.rotorfx.com/mosquito_experimental_ultralight_helicopt...	12	12	
- http://www.domaworld.com	9	9	
- http://pra.org/index.php	8	8	
- http://www.lightsportaircraft.ca	8	8	
- http://www.aero-news.net/fb/index.cfm	6	6	
- Others	42	54	
Unknown Origin			

The statistics available from our hosting service (*sampled above*) show us where this traffic currently originates. As our site has become better known to search engines, we now get more traffic from Google than any other source. Among external pages providing links to ours, mentions which include links on the Rotary Wing Forum are the obvious champion. If you participate on the forum, make sure to include a link back to our site in your signature - it really helps! Note, also, that if you add a link in your signature today, it will also appear in your archived posts going back years, catching the attention of newcomers searching old topics.

One surprise among these numbers is the traffic coming from experimentalhelo.com. Given that website's traffic, 18 referrals is a significant number, suggesting a good potential promotional partner.

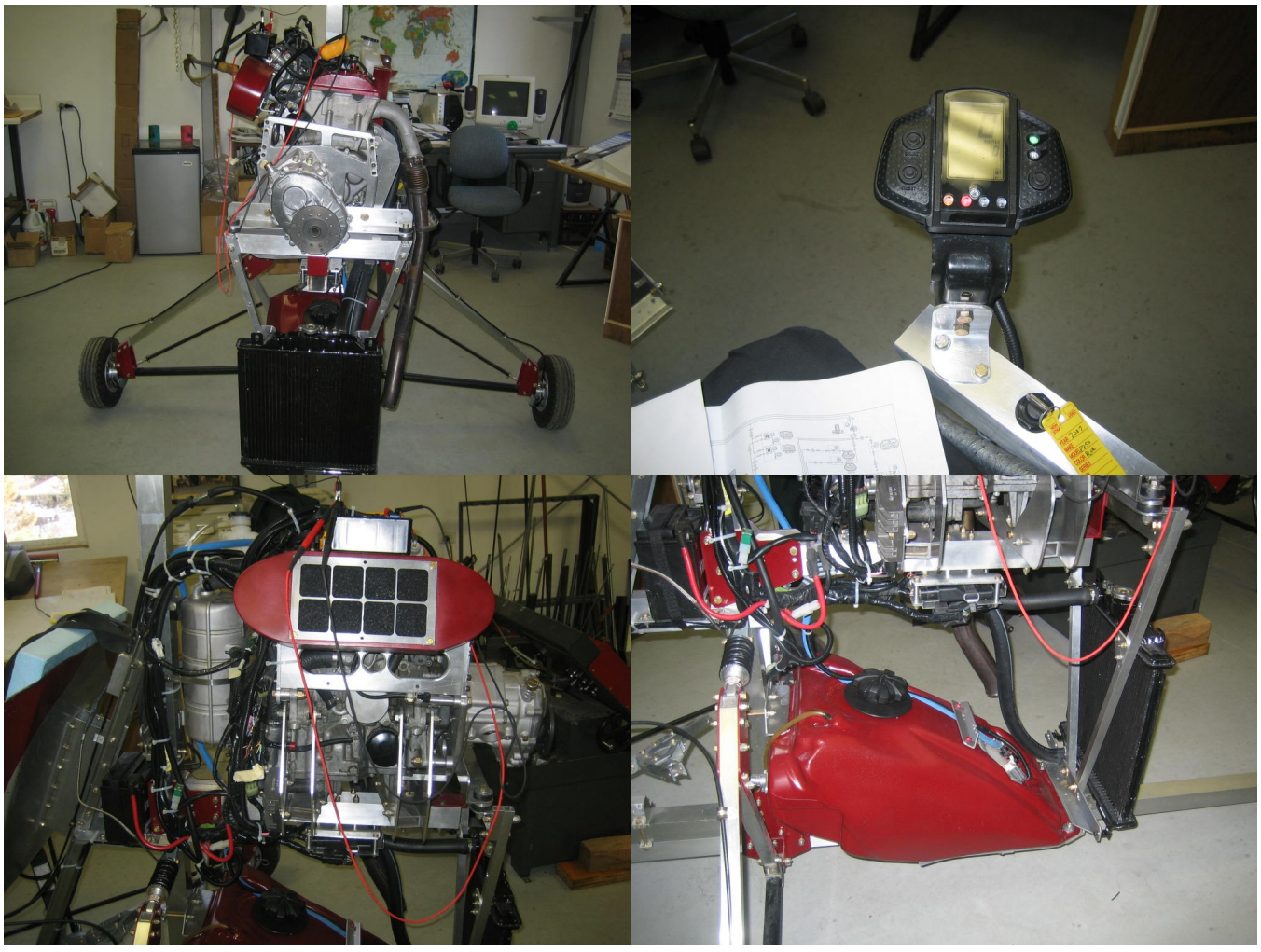
Looking at the Top-10 pages within our site by views, (*facing page,*) a couple of things jump out. First, our photo gallery has great potential to be among our most-visited pages. "Photo/Video" is already in fifth place with just an "under construction" page posted there. Jay Carter's archived webinar has drawn 68 views of the actual video, with viewing time averaging about 3/4 of the video, well above average for media on websites.

Pages-URL (Top 10) - Full list - Entry - Exit				
65 different pages-url	Viewed	Average size	Entry	Exit
/	518	8.84 KB	288	192
/webinars.html	301	11.65 KB	113	87
/events.html	190	18.29 KB	82	82
/classifieds.html	137	7.86 KB	32	56
/photovideo.html	124	6.35 KB	5	29
/web/JayC_2010_0213/Jay_Carter_2010_02_13_800x600.html	84	4.36 KB	11	12
/ROTR.html	72	10.90 KB	8	16
/web/JayC_2010_0213/Jay_Carter_2010_02_13_800x600.mp4	68	35.49 MB	6	35
/webmeetings.html	61	7.18 KB	6	14
/web/JayC_2010_0213/JayC_QnA_Audio.mp3	58	4.37 MB	6	10
Others	697	5.39 MB	102	199

Our website, so far, is shelves in a library, but we need the books. If you have any ideas for website content, don't hesitate to suggest them by e-mail at webmaster@utahrotorcraft.org. As long as it relates to our region and/or supporting the enjoyment of personal rotorcraft we're interested!

Dick Dougherty's Yamaha/GyroBee Build

Dick Dougherty of Sedalia, CO is adapting an 80 HP Yamaha snowmobile engine to a GyroBee frame, and is going further than most builders in recycling components from the snowmobile. Many Yamaha converters retain the original engine instrument panel and starter switch, but this one also uses the sled's original air box and fuel tank. The GyroBee was designed for the 40 HP Rotax 447, so this one should really perform!



Utah ANG Apache D Tour

Stayton Barnes, Helicopter Editor

In October of 2009, the Utah Army National Guard's 211th Attack Reconnaissance Battalion replaced its A-model Apache helicopters with D-model Apache Longbow helicopters. Twenty-four new Apaches went to Iraq right off the assembly line, then came back to call Utah home. While these are not "brand new" Apaches, the A models all went back to Mesa, Arizona to be converted into D-model Longbow Apaches.

The stealth helicopter that Boeing-Sikorsky had been working on, the RAH-66 Comanche, was canceled around 2004 so those funds could be used to support aging attack, reconnaissance, and utility aircraft, and also to speed up UAV development. The D-model Longbow became the beneficiary of some of the Comanche program's technology.

Noticeable differences from the Alpha model are wider base frame for more wiring and technology, exhaust curved vertical in back for rotors to dissipate heat better, sensor probes out both engines, and the radar dome on top of the rotors (*shown above*) for masting up over hiding spots to search for targets. Also the pilot night vision sensor above the target acquisition and designation system on the nose of the aircraft (*right*) is noticeably bigger. Only one in every group of Apaches need this radar dome, as the info picked up can be sent directly to the other Apaches. This dome tracks up to 276 targets, prioritizes them, and assigns them to the rest of the Apaches, which can then fire on those targets without ever being exposed.

The new helicopters have glass cockpits, (*rear cockpit shown above,*) upgraded night-vision, fire-control radars and improved situational awareness.

Laser-guided Hellfire missiles will still be used to attack moving targets, but newer radar-guided Hellfire missiles are "fire-and-forget," allowing the pilot and gunner to move instantly to another target.

The Utah National Guard Army Aviation Support Facility is located at the south end of South Valley Regional Airport in West Jordan, UT. Contact Stayton Barnes (staytonjbarnes@hotmail.com) for more info or call Flight Ops for a tour at (801) 816-3680.

Editor's Note - If you get an opportunity to tour any of our region's aviation attractions, take your camera along, and do what Stayton has done – bring back stories and pictures! news@utahrotorcraft.org

Doug's Thoughts – Whirlybird's Ogden Open House

URA President Doug Barker

On Saturday, March 27, I spent the day in Ogden at the Whirlybird Helicopters hangar during their weekend event. While I am very sold on the advantages a gyroplane offers compared to a helicopter, I never miss any opportunity to fly in anything and if it has rotors rather than a fixed wing, so much the better. Mostly I stood around and talked to people and built relationships. Some people I invited to attend Rotors Over the Rockies in June. But after watching people come back from introductory flights and talking about being able to take the controls of a helicopter and actually fly it, I upgraded my plans from taking the cheap, $35, ten-minute flight to the $100, 30-minute lesson where I got to actually do some hands on flying of the helicopter. Typical helicopter lessons run $300 to $400 per hour so this was an incredible deal!

Because of my weight, I am not a candidate to fly in an R-22. But they had a turbocharged Enstrom that was more than capable of hauling me up and around. While I haven't changed my mind and decided I need a helicopter instead of a gyroplane, I did love flying the helicopter! I highly recommend anyone that has a dream of flying make it a point to get up in the air on a regular basis to keep your dream alive. I know it costs money to take a flying lesson or introductory flight but all things considered it really isn't that much money, especially when compared to what it will cost you to own and fly your own aircraft.

The thing that surprised me most was that it flew very much like a gyroplane. While there certainly are more things you have to be aware of and watch, the end result was a very similar ride. It was way cool to lift off vertically and hover taxi and no gyroplane will ever be able to do that, but the rest of the flight wasn't much different from the flights I have taken in the SparrowHawk at Airgyro. Sitting in a small cabin, with nothing in front of you, cruising around the valley or up against the mountains, was just better than words can describe. Listening to others reports of flying is what got me excited about flying in the beginning, but having the experience yourself is a quantum leap forward and simply can't be beat.

I met a character (a helicopter student pilot) who was hanging out there on Saturday, just to support the school and because he loved helicopters. I don't think he flew all day but he was there meeting people and talking about the thing that excited him most about life. He had spent most of his life being a truck driver. He was used to making a six figure income but had decided he was tired of driving a truck and wanted to pursue a new career as a helicopter pilot. I heard him say over and over, "You know I could have chosen to be anything in the world, but what I wanted to do the most was fly a helicopter, so here I am." He wasn't worried about the economy being down right now, or about the lack of jobs for helicopter pilots at the present time. He had a dream to fly, and he wasn't going to let pessimistic reports of the economy, or little things (*see 'Doug,' page 8*)

Doug *(from page 7)*

like spending $70,000 to get his commercial ticket, stop him from pursuing his dream. He had decided what he wanted to do and he was finding a way to make it happen. That seems to be a very common theme among pilots of all types of aircraft.

In the gyroplane world, there aren't any certified aircraft, so there aren't any commercial jobs available for a gyroplane pilot. That means you have to have some other source of income to live on and or provide for your family. So the gyroplane has to be done on the side as a 2nd or 3rd or even 4th priority. But it is still doable if you really want it bad enough. At the weekend helicopter event I was talking to a rancher who flew his turbine Enstrom in to be a static display for the event. I asked him how much it cost him an hour to fly his helicopter and he replied about $400/hr. Depending on what you include in those figures, I project my operating costs for my gyroplane will be around $25/hr. (That doesn't include acquisition costs.) However, that's pretty affordable in my mind. And there are people who have gotten into gyroplanes with a much lower cost.

The bottom line is, it can be done if you want it bad enough, but you do have to have a burning, strong desire, and to achieve that you have to develop and feed your dream. Rotors Over the Rockies will be here before we know it. I hope you will all make the commitment to be there and to build your dream and keep it alive until you accomplish your goal. Please let me know if there is anything I can do to be of assistance to you.

New Member – URA welcomes back Heath Lowry, one of URA's "Founding Five," who left us for a while to accept a major professional opportunity. Heath lives in Riverton, UT with his wife Laurie. See a few of their honeymoon photos on page 7 of the March newsletter. Heath, welcome back!

MTO Sport Airworthiness Alert

A controversy arose last month regarding changes made to the design of the MTO Sport gyroplane's rotorhead without recertification by Australian authorities. This controversy may impact the US market, where the machine's manufacturer, Germany's Autogyro GmbH, has a petition pending with the FAA to self-certify Light Sport Aircraft (LSA.)

In Australia, the MTO Sport is classified "ultralight," not like our 254-pound unregulated machines, but directly comparable to our LSA. As such, the designs must be certified by ASRA. In this case, after the MTO Sport got signed off with the control design at left, above, the change on the right resulted in more available rearward tilt for the rotor.

The result can be seen above - the rotor can now contact the tail and prop. Since there was apparently no attempt to seek certification for the design change, there is no official record of when it happened, or which machines might be affected. As a result, ASRA has required all MTO Sport owners in the country to test their machines for prop and tail clearance, document passage of the test, and get an exemption letter before being allowed to fly.

In the US, the FAA has already suspended new airworthiness approvals on the Zodiac CH 601 XL and CH 650, after finding loads used in the design of the wing did not meet the ASTM standard for 1,320-lb. aircraft. The resolution of the Australian MTO Sport issue will be watched closely here.