

FAA Issues "51%" Guidance to Aircraft Builders

The FAA published Advisory Circular 20-27G on October 7, returning clarity to the process used by Designated Airworthiness Representatives (DAR) and its own inspectors when determining whether an Experimental Amateur Built (EAB) aircraft will be considered 51% amateur-built.

In response to complaints that manufacturers were gaining EAB certificates for aircraft which were built in factories or by professionals working for hire, the agency proposed in July, 2008 to require documentation that a minimum of 20% of the fabrication and 20% of the assembly had been done by amateurs. This would have been really bad news for many kits, including many on the existing FAA list of approved kits. It also left "fabricate" a vague term, opening the door to interpretations which could vary widely. (*See "FAA", page 2*)



November Meeting - We've been meeting for over two years at Airgyro at the Spanish Fork Airport. It's about time we met the neighbors! Join us Saturday, November 14 at 10am for our business meeting at Airgyro, followed by a tour of the Utah Helicopter Flight Academy. Chief Instructor Brian Peterson has arranged an upclose show-and-tell of the machines with which we've shared the airspace at previous meetings, (*above*,) and be sure to bring any questions about training and the helicopter job market.



Website News – Get in the mood for winter projects with a look at some extensive build threads now linked from our "For Builders" page at www.utahrotorcraft.org. PRA Director Stan Foster is finishing a sweet Helicycle (*below*); Tim Heilig is restoring a '60s-vintage Helicom Commuter, and Vance Breese is swapping a new engine (*above*) into his "Predator" gyroplane.



FAA (continued from page 1)

With EAB aircraft comprising a growing segment of the US general aviation fleet, and composite business jets being registered as experimentals, it's no surprise the FAA was also lobbied to limit the complexity allowed for amateur-built aircraft. This would have shut down homebuilders who now use CADD and CNC to implement new ideas which in years past were the exclusive turf of big companies with defense development contracts.

There was also anxiety among builders already working on kit aircraft. Would half-built aircraft suddenly become ineligible for EAB, rendering them static displays unless major portions of the parts provided by the manufacturer were replaced by new parts fabricated by the buyer?



Fortunately, enthusiasts filed comments calling for enforcement of the existing rules, noting the potential for a significant, negative economic impact on one of the few manufacturing sectors in which the US is still competitive.

The result of the long process is AC 20-27G, and it not only leaves the heart of the former 51% rule in place, but provides an improved task-listbased method for determining compliance. FAA Order 8130.2F, the "bible" for both DARs and FAA inspectors in local areas, has also been revised, and will reduce the patchwork of expectations for both builders and kitmakers.

Read AC 20-27G, and FAA Order 8130.2F dealing with experimentals. It's also instructive to read some of the many comments received by the FAA in response to the NPRM. Find the files, EAA reaction and more at utahrotorcraft.org on our "For Builders" page.

Helos Earn "Glowing" Review

If you're having trouble finding a job as a helicopter pilot, keep an open mind. There are new jobs being created all the time.

The Hanford Site is a nuclear production facility located on the Columbia River in Washington state. It's mostly decommissioned now, but in the 1940s it was part of The Manhatten Project, the government's code name for the team which developed the nuclear bombs dropped on Japan to end WWII. By the 1960s, it grew to include nine reactors and several plutonium processors.



Over the decades, radioactive cesium and strontium salts were dumped in sites totaling about 9,000 acres. Now, the habits of local wildlife are creating a...um, containment issue.

Specifically, the Seattle Press-Intelligencer reports jackrabbits have burrowed into the ground, have found the salt and developed a taste for it, and now spread it over a wide area above ground through their droppings. *Radioactive droppings!*



An outfit called CH2M Hill Plateau Remediation Company has been contracted to find the poop and safely remove it, and has discovered that detecting radioactive rabbit scat from 50' AGL at 80 MPH is way faster and more cost-effective than using humans on foot with detection gear. It also allows follow-up crews to remove the undesired material with less digging and disruption of the land.

Tests done before the project started confirmed the rotor wash would not scatter dirt or...um, debris. (A certified gyro might have made a good candidate had downwash been an issue, but none are currently available new in the US.)

So now, \$300,000 in federal stimulus funding is being used to fund CH2M's contract to clean up the "nuclear waste." Insert your own joke here about the Troubled Assets Relief Program.

(See "Glowing," page 3.)

October Meeting Minutes

The October 10th general meeting was called to order at 10:20am by President Doug Barker, with four members and two guests in attendance. The minutes of the August meeting were approved as published on the URA website. Secretary Paul Plack reported for absent Treasurer Nate Oldham a current bank balance of \$509.26, with an additional \$19.12 in URA's PayPal account, for a total of \$528.39. The treasurer's report was accepted as read.

New member Jeff Jones, of Santa Anna, CA was received. Jeff is a member and former President of the Ken Brock Rotorcraft Association (PRA 1), and was an event coordinator for the group's event at El Mirage in September.

Member Updates - Doug reported he's in the process of replacing the nose gear strut on his Butterfly Super Sky Cycle with a stronger one provided as a retrofit by the company. Doug reports that Butterfly LLC's Larry Neal, while maintaining the original strut was adequate, acknowledged that a perception by prospective buyers that it looked fragile dictated an upgrade. Doug needs to finish the street-legal motorcycle portion of his build and register it for highway use, before installing the Rotax 912 powerplant. He also has yet to acquire prop and rotorblades.

New Business - the format of the roster now available on the website was discussed. It was the consensus of those present that expanding the list beyond the 21 current members to include contact info for the approximately 45 non-members who had been receiving the newsletter prior to October was appropriate. The change will be made as soon as practical.

Mike suggested that URA should acquire basic first aid supplies to have on hand during association activities. Doug noted that VP Curt Pittman, a trained paramedic, has such a kit with him at all times. It was the consensus of those present that the idea of acquiring a kit for URA had merit, but no motion was presented.

ROTR - Under discussion of our 2010 event, Paul suggested URA should provide all the tools needed to conduct tests to locate the vertical center-of-mass (CoM) for all visiting gyroplane pilots who wish to document this parameter. The process would require a hoist of adequate height and capacity to lift machines until they hang

freely, ramps and platforms secure and high enough to conduct a main-gear balancing of any machines unable to be hang-tested from an airframe point other than the teeter bolt, certain photographic and marking equipment and supplies, and a computer with software allowing superimposing photographs. Approval was unanimous but informal; Paul will prepare a list of needed materials and bring a formal motion at a later date. Doug added his hopes that all pilots will also conduct and document the industry consensus stability tests developed by PRA's Greg Gremminger for their machines, and make them publicly available.

The business meeting was officially adjourned at 11:14am, followed by the viewing of photos brought back from El Mirage by Doug and Paul. Chuck McKinley took dual instruction from Mike in Airgyro's SparrowHawk trainer following the program.

Glowing (continued from page 2)

In other career-related news, at a recent vocational training fair in Sandy, UT, a representative of Utah-based Mountain Ridge Helicopters stated that the school may be on the verge of gaining contracts for work hovering over orchards and fields to mitigate frost damage to agriculture. Much of the work would presumably go to the school's existing CFIs, most of whom are recent former students needing to build hours to qualify for jobs in government, law enforcement or industry.

This could be a tougher way to build hours than you think. In New Zealand recently, a man was arrested for allegedly attacking a helicopter with a rock and a spotlight as it hovered all night near his home, keeping crops frost-free. The guy decided he couldn't take it any more about 4am.

Correction -

An editing error at the bottom of page 3 in the October newsletter mistakenly made reference to a missing photo of



new member Chuck McKinley. Chuck and his Bensen are correctly pictured here.

All for the Best

Doug Barker, URA President

Today on the Rotary Forum I saw an RAF 1000 listed for sale. I well remember the last time I saw this small cabin class single for sale. It was several years ago and I was just learning about gyroplanes. I had a hunger to get into the sky and had decided that a gyroplane was going to take me there. I had looked at lots of different models and seemed to change with the wind on what the best option to get me started would be. I was still open minded and flexible. Mostly it just seemed that they were all a lot of money and I had a hard time seeing myself coming up with the money to be able to get any of them.



Then I saw the ad for this (*above*) little enclosed gyro. I read that it was in flyable condition and I remember focusing on the fact that it was only \$3,000. I knew that it would take some work to really be safe. I knew that the Hirth engine had a terrible reputation for reliability. I knew there was a big debate about whether a gyro needed a horizontal stabilizer and how the RAF 2000 without one was a dangerous machine to fly.

But I remember focusing on the price and thinking here is a way for me to get started in gyro flying at a price that I can afford. I remember feeling like I had to jump on it or it would be gone so I immediately contacted the seller (actually left a voice mail) saying I would take it sight unseen. But before I could get a hold of him in person, it had already been promised to another. I was heartbroken and felt like my once in a lifetime opportunity had been torn away from me. Now in retrospect, I can look back on that experience and be sooo... thankful that I didn't get that opportunity. Knowing what I know today, there would have been much more work and cost into getting that gyro to a safe and stable state, ready to fly, than I had any idea at the time. There is nothing wrong with taking on a project like that as long as you know what you are getting into up front and are prepared for it. But getting into a money pit, that will cost thousands more than your were expecting can be a hard way to get started.

At that time I didn't have the Utah Rotorcraft Association in place and a group of experienced gyro pilots that I could talk to about my plans. I just had me and I didn't have a clue how much I didn't know. Today, we all have such a priceless asset available as we strive to find our way towards our dreams. Today there are lots more rotorcraft available for sale. This tough economy has made it a buyers market for discretionary items so you couldn't possibly pick a better time to find a used aircraft and get started in this sport. Come and join us, learn from others instead of making your own mistakes. We welcome you to join us and want to help you to achieve your dreams. Keep the Rotor Side Up!

Classifieds - Gyros For Sale



SparrowHawk II Gyro, brand new. Subaru 2.5L, candy apple red, leather seats, MGL Odyssey 10" EFIS w/ GPS, Garmin SL-40 radio & GTX-327 transponder, PS Engineering intercom. Many custom features. Pleasant Grove, UT. Asking \$69K. Also available - flatbed tandem-axle trailer with hydraulic lift gate, non-marking tow bar,



more. Contact Brian, (801) 831-4649. (11/3) (See more "Classifieds," page 5)

Classifieds - Gyros For Sale

(continued from page 4)



Butterfly Aurora Gyro, single place, 50 hours TT, like new, Rotax 912. Powerful, reliable. Asking \$48K. Custom enclosed trailer available for additional \$3K. Contact Doug at Butterfly of Utah, (801) 628-7598. (10/3)

SparrowHawk Gyro, 140 hours TT, new 180 HP Subaru 2.5L; main gear upgraded to SH II. Radio, transponder, lights, doors, tow bar. Spanish Fork, UT. Asking \$49K. Call Airgyro, (801) 794-3555, or e-mail nate@airgyro.com. (9/3)



Pilot Advancements

This month, we're debuting a new section in which we'll acknowledge significant rotorcraft training or career milestones. This month, join us in recognizing Utah Helicopter students Iain Cornfoot, who soloed in the past month at Idaho Falls; Eli Hobbs, who passed his Private checkride at Pocatello; and Nate Bradfield (below) who passed his CFI checkride at Spanish Fork. Congratulations, all!



Winter Webinars

CFI Mike Burton is working on content for a series of three gyroplane training webinars planned for Saturdays 1/9, 2/13 and 3/13/10.

These sessions will stress topics regarding gyroplane safety and stability, and will feature noted experts. Join us at 11am at Airgyro, immediately after each of our monthly meetings this winter, as we welcome gyroplane enthusiasts from across the US who will participate via the internet. Watch for more details next month!

Nuggets from the Forum

Shawn Adams of Jacksonville, OR makes his living doing aerial photos and video from ships like this MD500E, (below,) and flies an Air Command UL on his off time.



How's this for a long cross country? A group of pilots ferried three Robinson R44s from the factory in California, across the US and Canada, to Greenland, Iceland and Norway. See "Three Robbie R44 flew from US to Europe via Greenland" (thread #23282) under "Flying Photos" at www.rotaryforum.com.



Your stories and photos are always welcome! E-mail Paul Plack, news@utahrotorcraft.org.



Utah Rotorcraft Association 738 E 425 S Layton, UT 84041



NEXT MEETING:

Saturday, Nov. 14, 10am Airgyro, Hangar 75, Spanish Fork Airport Followed by Tour of Utah Helicopter

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FAA Issues New 51% Guidance to Builders Helicopters Search for "Radioactive Waste" Hovering Helo Attacked by Angry Neighbor Classifieds - New SparrowHawk II Listing!



Boeing AH-6i

Boeing reports its new light attack/recon helo made its first flight Sept. 16th, at the company's facility in Mesa, AZ. The -6i shares avionics architecture with the AH-64 Apache Block III, in what Boeing describes as "...the most advanced and integrated cockpit ever installed in this sized helicopter." Hellfire missiles, the M260 seven-shot rocket pod, a machine gun and a minigun integrated with a sensor system have all been gualified on the platform. Boeing will produce the AH-6i in Mesa for unspecified customers.

