ROTOR GAZETTE

St. Louis Rotorcraft Club – PRA Chapter 35 – June 2006

A RECAP OF THE "DOC" FINNEGAN CELEBRATION FLY-IN

There was a great turnout, rotorcraft-wise, at least 16 flying machines there, in addition to Greg's brand new Magni, awaiting Airworthiness inspection, and one Mustang almost ready for flight.

Joe Swanton & Matt Defenbaugh flew in from Iowa, a 136 mile trip. Mark Knight flew 126 miles to get there, meeting up with Dan Probst on the way. Stan Foster flew 123 miles. Rick Marshall flew from his home base, but in his Warbird. Carl Schneider & Matt Steinke trailered in. It was great seeing gyros come in two and three at a time, and trying to figure out who it was.

Pat McNear and his wife drove up. Gary Crisler, who we usually see at Shelbyville every year, drove down from Michigan. Tom Milton, representing Chapter 18, drove down from the Chicago area. One of our club members, Ron Roberts, and his son, bicycled over 40 miles each way to and from the event.

Stan Foster was the lead gyro in a missing man formation for Bill. Gerry Loeser in his Sparrowhawk, and Dan Probst and Jeff Milburg, in their RAFS, completed the display. Their first pass was a very slow diamond formation, it looked like they were hovering in the air over our heads. On the second pass, they did a finger four formation, and Gerry split off into the sunset as the squadron passed overhead. There were a lot of tears, and a lot of silence, as the formation split. Thanks to Darren Twellman, who flew the cameraman, there will be a video available of the flight.

After the pilots returned, we had a short meeting to discuss the gyro parade. Once everyone was ready, we flew a parade of gyros for the crowd for about 30 minutes.

Three members of the Finnegan family took to the air. Darren took Holly, Bill's daughter, up in his Magni. Darren was trying to be thoughtful, and was giving Holly a nice, steady flight. Holly asked Darren if he was a daredevil, and Darren told her he was, a little bit. Holly asked Darren to show her what the machine could do. They left the airport area, and Darren took Holly for a real gyro experience. Holly liked it so much, she talked her mother into taking a flight. I was unaware of the Holly flight, and was totally surprised to see Carol, Bill's wife, getting into Darren's Magni. The next thing I knew, Darren was flying alongside Gerry's Sparrowhawk around the pattern. I believe that Craig, Bill's son, was with Gerry at the time. Carol said she loved the flight, and now had a better picture of what so fascinated Bill about these machines.

There was a ton of food at the celebration. Our own Larry Miller baked 15 pies and two German Chocolate cakes. **Of which there was none left** by the time I got back inside to try some. There were baked beans, chicken and noodles, mostaccoli, ham and beans, chili, mushroom soup, cole slaw, macaroni salad, potato salad, and deviled eggs. All home made.

A contingent of club members arrived Friday night, and helped set up the awning, chairs, and tables. Thanks to Bobby Ireland and Fred Blair for organizing that work. A special thanks to Donna Herrmann, Steph Gremminger, and Cathy Greene, the ladies who did most of the work getting the food ready, while the flyboys were out on the tarmac, or off flying in the skies.

Cathy and I estimate there were close to 150 people there during the day. There were always people hanging around the gyros, studying them, asking questions. Everywhere I stopped, there was lots of camaraderie present. As Cathy and I were preparing to leave, the airport office was full of family and friends watching Holly's video about their father.

St. Louis Rotorcraft Club
c/o Gerry Loeser
400 Country Meadow Lane
Belleville, IL 62221

Carol commented about how great it was for their family and friends to actually get to see what Bill's excitement was all about. Carol is truly a wonderful woman, and this event was an experience we'll never forget.

Thanks to all who helped make this a great celebration of a man called "DOC", and the wonderful contribution he made to our little world.

NOTE: Lots more pictures and dialogue available on rotaryforum.com. Holly Finnegan has a great slide show presentation in her thread regarding the celebration. Be sure to check it out!

UPCOMING MEETINGS AND FLY-IN DATES:

JUNE 17: GREENVILLE FLY-IN/DRIVE-IN BREAKFAST

JUNE 30 TO JULY 4TH: CARL SCHNEIDER FARM FLY-IN

JULY 19-22: MENTONE CONVENTION

AUGUST 11-13: STE. GENEVIEVE FLY-IN

SEPTEMBER 8-10: SHELBYVILLE FLY-IN

SEPTEMBER 16-17: LITCHFIELD OPEN HOUSE

Ken Bricker sent me the second installment of his Aeronautical Decision making article quite a while back, but things have gotten a little sidetracked due to the loss of Bill Finnegan. This issue will be a double one so I can get caught up on things we normally see in the newsletter.

Risk Management Example One – Local flight around 5K1

First here is a review of the risk management checklists for **Perceive, Process,** and **Perform** as mentioned in the last newsletter.

Perceive hazards by looking at:
- **P**ilot (experience, currency, condition, etc)
- **A**ircraft (performance, condition, fuel, etc)
- en**V**ironment (weather, terrain, etc)
- **E**xternal pressures (schedules, appointments, etc)

Process risk level by considering:
- **C**onsequences (posed by each hazard)
- **A**lternatives (that eliminate hazards)
- **R**eality (avoid wishful thinking)
- **E**xternal pressures (get-home-itus)

Perform risk management:
- **T**ransfer (can you consult someone)
- **E**liminate (can you remove hazard)
- **A**ccept (do benefits outweigh risk)
- **M**itigate (can you reduce the risk)

Now here is my example for a local flight I'm going to make around Zelmer for a few touch and goes, and some fun flying. Notice how the three checklists are used in the three steps. Normally would I go through this elaborate list to make a local flight? Probably not, but again the reason for me going thru this is so that I can learn the checklists and perform these mentally before making the flight. Once I know the structure to follow for assessing risk, I can run thru this list mentally, before making my decision whether I should fly. I shall consider it another checkbox for the end of my preflight checklist.

I also want to learn this well enough so that as a flight progresses and I decide I want to do some advance maneuver or some squawk occurs, I can run thru this list mentally, so that risk management can be a part of my Aviation Decision Making on whether to continue the flight, go to a alternate field, or get some training before performing some new advanced maneuver.

Hopefully, this endeavor will help with your consideration of risk management before making your flight excursions. I'm open for any questions, comments, and pointers - for I'm learning this process myself.

Step 1 -Perceive hazards related to each PAVE element	
Pilot	I am a healthy and well rested 300 hour private pilot with 200 hours in the gyroplane I shall be flying. Hazards include relatively low gyroplane time and the fact I have not flown in the past three weeks.
Aircraft	Minimal VFR instrumentation, 5 of 13 gallon fuel capacity on board, brakes inoperative, one CHT intermittent, and engine is within 10 hours of its next 25 hour inspection.
en**V**ironment	6m visibility, 5000 overcast, 270@10mph, 36/18 runway hard surface dry, grass short, airport traffic low
External Pressures	None. This is just a fun fly around the airport for my own enjoyment.

Step 2 - Process with CARE to determine risk	
Pilot	
Consequences	Main hazard here is the 3 week time period since last flight.
Alternatives	Fly or wait for a day with better conditions.
Reality	Accepting the fact those 3 weeks off can pose some risk.
External Factors	Dealing with my own emotional pressure of wanting to fly.
Aircraft	
Consequences	Possible Hazards present: 5 gallon of fuel versus 13 gallon capacity on board. Brakes inoperative, Intermittent CHT on one cylinder.
Alternatives	Delay flight until squawks are repaired, add fuel.
Reality	This flight will be around the local area within sight of the airport. 5 gallon will give a 1 hour flight with 15 minute reserve. Brakes mainly used for holding aircraft during pre-rotation. I can spin to 100rpm before aircraft moves on a hard surface and rotor speed can then be increased from there on takeoff run. Monitoring of the EGT and coolant temperature for engine problems will lower some of the risk of possible engine damage that may result from an intermittent CHT probe.

External Factors	I own aircraft, no external factors, doesn't need to be back at any certain time, no schedules to maintain, etc.
enVironment	
Consequences	Main hazard here is the 90 degree 10mph crosswind. My personal limit is 15mph 90 degree, but coupled with not flying for the last 3 weeks increases the risk. Realize that ground speed will be higher than normal to get rotors up to speed.
Alternatives	Three alternatives exist (1) wait for favorable wind conditions (chk with FSS, will conditions improve as the day progresses?) (2) If runway is wide, make takeoff run at an angle to decrease the crosswind component. (3) Use the parking lot for take off eliminating the crosswind component.
Reality	(1) Crosswind within my personal limits of 90@15mph. (2) Parking lot takeoff risks, less visibility to both flight / ground traffic due to hangers, also it's a shorter length.
External Factors	Factor here is checking my desire to fly against the current conditions, my experience level, and currency.
External pressures	
Consequences	Low risk, not expected to be anywhere, just a local flight for my own enjoyment.
Alternatives	Make flight for personal enjoyment or fly at a later date/time.
Reality	This flight my decision, not going anywhere, no one here wanting to see the gyro fly.
External Factors	None.

Step 3 - Perform by using TEAM to make risk management decisions	
Pilot	
Transfer	Can't transfer any of the risk with anyone-single place aircraft, must make the decision myself knowing my **REAL** capabilities/experience level.
Eliminate	Wait for a better day or time of day before making flight.
Accept	Accept the risk of not flying for 3 weeks and fly with the crosswind??
Mitigate	Risks are somewhat minimized by knowing my **REAL** personal limits and past experiences in crosswinds.
Aircraft	
Transfer	I'm responsible for the airworthiness of this aircraft or hire an A&P for their expertise.
Eliminate	Delay flight until squawks are repaired.
Accept	Accept the aircraft's present condition for this flight.
Mitigate	Mitigate remaining risks by performing a good preflight.
enVironment	
Transfer	Can't transfer risks of crosswind being it's a single place gyro.
Eliminate	Wait for a better day or time.
Accept	Accept the risk and fly??
Mitigate	Crosswind component is well with my personal limit.
External pressures	
Transfer	No external pressures to fly, only my own desire to make the flight.
Eliminate	Cancel flight.
Accept	Accept the risk and fly??
Mitigate	None

Summary

My decision would be to make this flight on the grass runway being it's wider than the hard surface and I can make my takeoff run at an angle with the runway to lower the crosswind component. Due to the drag of the grass and with a direct angle into the wind I can achieve a higher pre-rotation speed which will shorten my initial takeoff roll, which I believe is the number one risk of this flight. Once my initial takeoff is done, remaining touch and goes will be routine crosswind takeoffs and landings due to the rotor being at flying speed.

Notice how the three checklists for the Perceive, Process, and Perform steps intertwine to aid in making a decision to make the flight. Again I probably wouldn't set down and go through this to make a few rounds around the patch, but soon I will be proficient with these checklists that I can do this mentally before a flight of this type.

My next example will be of a cross country. With a flight of this type one may want to run thru these checklists for assessing risk on paper just because the risks become greater as the flight distance becomes greater, especially when it's into unfamiliar areas.

Isn't a safe flight an enjoyable flight! ---------- Ken Bricker

Gyrocopter For Sale

Air Command Elite, Rotax 532 – 65 hp, approx 200 hrs TT, Warp Drive Prop, Dragon Wings rotor, Tall redundant mast, Pre-rotator, Fiberglass enclosure with wheel pants, Aux fuel tanks, Instrument panel includes: ASI, Engine tach, Water temp, Compass, Turn-bank indicator, Rotor tach. Custom tilt trailer included. $7500. Email: flyguy115@yahoo.com for additional pictures, or call Frank at 301.782.2308 (MD)