Chapter 35

Popular Rotorcraft Association

May 2008 Newsletter,

Proposed Rule Changes by the FAA and Why We Need to Act Now!

By Greg Gremminger

You may be aware, the FAA has an NPRM open for comment that proposes to change some of the rules about Sport Pilot. While most of the proposed changes seem to be good, there are a couple of areas that I feel could negatively impact gyroplane safety and the sport.

1. Replace sport pilot privileges with aircraft category and class ratings on all pilot certificates

7. Remove the requirement that persons exercising sport pilot privileges have an aircraft make-and-model endorsement to operate a specific set of aircraft

I believe this presents a significant safety issue for gyroplanes – maybe for other aircraft categories and classes as well! The logbook endorsement for particular Sport Pilot privileges allows the endorsing instructor or DPE to place additional restrictions on what that new pilot could fly – in addition to "set" limitations. Many gyroplanes fly much differently and have different safe operation conditions than many other gyro models. This may be especially true for custom built Experimental gyroplanes. The log book endorsement process provided a way to at least assure that new pilot should get further training and an additional logbook endorsement in a differently handling gyro before trying to fly it! There have been numbers of gyro fatal accidents where a "gyro" pilot attempted to fly a different gyro that they were not familiar with. The proposed Rotorcraft Gyroplane Cat/Class rating on the pilot certificate presumes that pilot is "legal" to fly any gyroplane!! With this NPRM that may be legal, but it is not safe. The gyroplane community has been working hard to try to educate gyroplane pilots on this issue – this NPRM revision will set that safety work back years by implying FAA endorsement that any gyro pilot can fly any gyro!

Also, it is impossible for an endorsing instructor to assure that a SP applicant would be safe to fly any gyro! As a gyroplane CFI, I would have severe reluctance about providing an 8710-11 endorsement for a student I trained when I have no way of assuring he/she would be safe to fly any and every gyroplane! I would have no control over just what gyroplane that applicant would be able to fly when they receive their rating! I suggest there still needs to be some way that an endorsing instructor and/or the DPE could still provide additional limitations on just what gyros that new pilot can fly!

3. Remove current provisions for the conduct of proficiency checks by flight instructors and include provisions for the issuance of category and class ratings by designated pilot examiners

(*Continued Page 3)*

This Months Questions

1. Which of these radio frequencies is designated by the FAA for air to air communications?

A. 122.75
B. 129.75
C. 128.50
D. 126.50
(Can you name the other?)

2. Towered Airports are indicated by what color on a sectional? (*Answers on page 2)*

Shelbyville Fly-in, *Or Not*

The dates for the Shelbyville Fly-in are September 5-7. The past several years, Mark & Cathy Greene have done an outstanding job creating an event that we all enjoyed. Last year, Larry Miller stepped-up and helped out with many of the preparations. I also recognize the efforts of the many who assisted with set-up, teardown or made any number of contributions to the success of our club sponsored event. At our May meeting, I called for a volunteer (s) to chair this year's, Shelbyville Fly-in. I'm hoping to hear from a new set of volunteers; someone who has enjoyed the previous events; someone who recognizes the efforts of those that made it happen in the past; someone who would like to show their appreciation by giving back to the club.

(Continued Page 3)

Rough-surface landings

By Larry E Miller

Even though you may be trained by a competent, and thorough CFI, the fact remains that nobody can thoroughly describe a dead-stick, rough-surface landing. This is something that you have to experience first-hand, and I hope that all of you NEVER will. Even though you may think, "that will never happen to me", it probably will. My instructor, Greg Gremminger, explained two rules of flying an experimental aircraft;

"Even though you may think, that will NEVER happen to you, it probably will. "

#1- " It is NOT a matter of will my engine fail it's WHEN will my engine fail"
#2-" NEVER fly over anything that you do NOT intend to land on"
I'm glad that he kept drumming it into my head that you can't be too well-prepared. Being prepared for any scenario is part of "situational awareness". When I acquired my gyro, my concern was to, not only find it's best ROC, but to find out it's descend-rate, not only in "length", (Continued Page 2)

Welcome to Our New Members

Three new members join Chapter 35. Doug Thompson, Tim Gannon and Frank Vitale, are all from the St. Louis area. Doug is a trike pilot, flying out of Smart field in St. Charles and is interested in purchasing a gyro kit (Magni maybe?). Tim has been around gyros for a number of years and is well into his single seat build . Frank is yet undecided on a gyro design but is leaning towards building a 2 place, dominator design. All three bring new resources and skill sets to our club and we are happy to have them aboard.

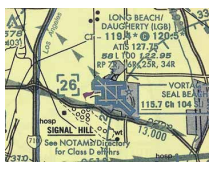
Answers to Questions on Page 1

1. Which of these radio frequencies is designated by the FAA for air to air communications?

The FAA has designated two frequencies for air–to-air communication; 122.750 and 122.850. Pilots are encouraged to use either channel for general conversations with other aircraft. Even though the channels are designated general use, please keep conversations professional and brief. Both channels may also be used by private airports, not assigned a Unicom frequency (St. Genevieve). If you encounter an airfield using one of the frequencies, be respectful and choose the alternate frequency or limit air-to-air communications until you're out of radio range. Whenever you pass below Class B airspace, it is a good idea to keep your radio set to 122.75. Pilots operating in VFR corridors in class B air space are urged by the FAA to use frequency 122.750 MHz for the exchange of aircraft position information.

2. Towered Airports are indicated by what color on a sectional?

Towered airports are depicted in blue.



Rough-surface landings (Continued from Page 1)

but "time" also This is how I accomplished it; I took my gyro up to 1100ft,agl . I usually fly at, or around 550ft,agl. I found a straight road ,and paralleled it, from directly over-head. When I reached an intersecting land mark "Rail road track", I shut my engine down to an idle, and kept my craft flying level. When I reached the altitude of 550ft agl, I made a mental mark of my location above the road. I also checked the lapsed time on my watch. Later, I checked the distance with my car's odometer. Under no wind, my time was 35-seconds; my distance was aprox. 2200ft (.4 mi.). Later. I tried with winds of 5, 10,15, and 20 mph, with the winds at different angles.

When my engine threw a rod, everything got quiet, a deafening quiet! My first thoughts were "this is for real, and for keeps! You've got 35 seconds!" I had just crossed from flying over a recently-harvested bean field, to a recently harvested corn field. It had recently rained 3 inches, so I opted to turn back to the bean field, since I knew that it would be considerably smoother, yet STILL rough. The next thought that came into mind, as I was banking for my final approach, was, "it's gonna be rough!" No amount of auto-rotation landings on a smooth runway, can prepare you for the actual event of a rough-surface landing. The next-best thing was the fact that Greg had taken the time to verbally instruct me of the sequences of a pilot's acts, needed to successfully land in rough terrain, and I listened! (By-the-way, for the life of me, I can't understand why he didn't let me try it in his Magni! Ha Ha!) Anyway, he told me that you need to flare high, (I flared at about 2ft) this kept my roll-off to a minimum (aprox 8ft) He also told me to keep my nose wheel up until the machine stopped. He said, "It's better to sacrifice your tail than your nose wheel, possibly pod), also subjecting your craft to a turn –over. Being aware of all of this, I landed, with a considerable bump, and almost No roll-off. I walked away, not a scratch on me, or the gyro. Thanks Greg!

Larry E Miller,
Chapter 35

Solo Flight Traditions

By Bob Heimberger

Remember your first solo flight? I certainly do. Greg Gremminger, my instructor, was the first to congratulate me when I landed. After making a logbook endorsement for solo flight, he asked me to face away as he signed and dated the back of my shirt . With scissors in had, Greg cutout the newly signed swatch and handed it to me. Ever since that day, I have wondered how the tradition started.

Some suggest it stems from early days in aviation, when pilots wore a scarf with which to clean their goggles. Student pilots, however, were obligated to use their own shirt tails to clean their goggles. When a student became a pilot, the shirt tail was cut and handed to him to symbolize that he, too, was now entitled to wear the scarf of a pilot. In other aviation lore, the traditional removal of a new pilot's shirt tail is a sign of the instructor's new confidence in his student. In the days of tandem trainers, the instructor would tug at the student's shirt tail whenever he was getting himself into trouble. After the first solo, the new pilot proved himself competent in the air and no longer needed such a safety device. Another possible explanation suggests that the tradition was born out of a safety issue. To warn other pilots, the instructor required that student pilots flying solo be identified by cloth streamers trailing from their airplanes. The material may have been cut from the students' shirttails. The origin of the tradition may never be confirmed, but it is nice to know that the celebration of first solo flight is still recognized today as is was in the past.

Hyperthermia

Winter can be one of the best flying seasons of the year. Low density altitude and stable air masses help any aircraft to perform its best. For the pilot though , cold weather fling can pose some serious health risk, the most common, hypothermia. We have learned how to keep warm but, did you know that hyperthermia can hurt us in warm weather? If challenged by long periods of intense heat, the body may lose its ability to respond efficiently. When this occurs, a person may experience hyperthermia. In other words, hyperthermia occurs whenever the bodies metabolic heat production or environmental heat load exceeds normal heat loss capacity. (Continued Page 4)

Darren Twellman ,Magni M-16
Flying over the Ice flow in the Mississippi

Safety Wire

Safety wire is a simple and effective way to help prevent fasteners from loosening to the point of falling off . However, safety wire ***is not*** a set and forget application. Engine and flight vibrations, along with corrosion from the elements can weaken safety wire to the point of failure. All applications where safety wire is used must be checked at each maintenance interval and the torque values of the fasteners they hold, must be verified .

Proposed Rule Changes (continued)

By Greg Gremminger

Same concern as other commenters: For gyroplanes, there is very limited availability of gyroplane DPEs. And those DPEs are not necessarily familiar with or able to provide a proficiency test in many different model gyroplanes. The ability of gyroplane CFIs to provide at least the Proficiency checks for sport pilots with other ratings offsets this issue quite a bit. To require even previously rated pilots to now absorb additional expenses in time and money (and frustrations) to find a DPE to conduct a Proficiency test will encourage outlaw flying, insufficient training, and economic penalties on the light sport gyroplane community and producers. The gyroplane community has been encouraging increasing gyroplane CFI numbers and availability – with some success in the last several years. Availability of good training is a recognized major impact on gyroplane safety. With additional difficulties for many aspiring gyroplane pilots to get a legal rating, those prospective pilots are discouraged from getting full and proper "legal" training as well.

Also, we have been encouraging our gyroplane producers to make the necessary investments to meet the ASTM standards. But more roadblocks for pilots to get "legal" ratings further compromises available resources needed for producers to meet the standards or compete economically in the light sport market with classes of aircraft where such licensing difficulties are not encountered! At least in the gyroplane community it seems that every effort to improve safety is met with some new ill-advised regulatory roadblock or wrench in the spokes thrown by bureaucrats that don't really understand the growth and safety impacts they are making on the gyroplane community! It would avoid such public and regulatory discouragements to legal and safe training if those bureaucrats would at least involve someone from the gyroplane community when formulating rules about aircraft they know little about! – like Sue Gardner did when she was the original NPRM Project Manager.

Photo Contest

Do you have some great gyro related photos? If so, enter them in the Chapter 35 photo contest. Each month the top photos will be printed in the monthly news letter. During the Shelbyville Fly-in, all of the photos will be displayed and the winning photo will be chosen by the attendees. The winning photo will be featured on our club web site and the winning contestant will be given a 8x10 or 13x19 inch printed collague of the top photos entered in the contest.

Contest rules are as follows:

- Submitted photos must depict some aspect of the gyroplane sport.
- Submitted photos must be original and taken by the contestant or someone they know personally
- Submitted photos must include a description of the photo and the name of photographer
- Submitted photos must be of sufficient resolution to print, main subject should be clear, in focus, and properly exposed.

Please send entries to rjheim@swbell.net. Photo files should be uncompressed and with sufficient resolution for printing. If you have a printed photo you would like to enter, mail the photo to me and I will scan the photo and return it to you. This contest is open to anyone wishing to submit a photo.

Shelbyville (Continued)

If that's you, then you are who we are looking for. Mark has offered to help guide the new chair person through the planning process and has compiled a list of things needing to be done. At our June meeting (ST. Charles Co. Airport) we can discuss the planning process and any new ideas some of you may have. We will discuss what needs to happen first, and I'm hopeful by then, we will have a volunteer to chair the event. Without our member's support and hard work, the Shelbyville fly-in would never happen. I'm so confident this years event will be the best yet, I've already made my hotel reservations.

By: Bob Heimberger

New News Letter Format

By: Bob Heimberger

Recently, I was given a copy of Microsoft Publisher software and thought I would try my hand at creating the club newsletter with it. The software makes it easy to format any number of publications and takes full advantage of available space for print and pictures. Learning the software is pretty intuitive and I hope to get better at using it with time. In addition to the software, I was also offered an opportunity to have a limited number of the news letters printed– *in color*. The only thing I needed to supply was the paper to print it on. I approached a paper supplier in St. Louis and told him of my mission. He agreed to sell the paper at cost, $20 for 500 sheets of photo quality , 17 X 11 paper. (enough for 3 years printing). I bought the paper (my donation to the club) and set out to design the news letter.

Members without e-mail service will continue to receive the printed version and all other members, the electronic version (both identical in layout).

This month's news letter is only a representation of what the software can produce. The content, format and design are all open for your input. Like any club activity, the success and quality of the news letter relies on input and content from our members. In each monthly issues, I would like to see reoccurring themes: Test Questions, Safety Tips, Photo of the Month, Upcoming Events, and Members Articles, Member Profiles , Feature Articles & Monthly Meeting Minutes.

This months news letter was compiled with articles and photos I had on hand. If you would like to submit content, please e-mail them to rjheim@swbell.net. If you have printed photos that you would like published , I can scan and return the photo to you.. If you're not sure how to write what you want to say, send me what you have and I'll edit it for you.

I have said all along that our club members have a great deal to offer to the gyro community. I hope all of you, and other aviation enthusiasts that read this letter ,will begin contributing articles.

Did you know

club member, Roy Beisswinger hosts a weekly internet radio talk show? That's right, Roy is the host of Ultra Flight Radio, a talk show dedicated to light sport aviation. Roy's show can be heard each Tuesday morning at 11:00am (Central Time) on Ultra Flight Radio, WWW.ultraflightradio.com. The show's topics change weekly, providing interviews with a variety of leaders in the aviation field. Engine maintenance, product reviews, FAA regulations, and flight safety are just a few of the covered topics.

Kentucky Dam State Park *By Bob Heimberger*

The Photos were shot last summer during a flight to Kentucky Dam State Park. Somewhat spontaneous, the trip was planned the morning of the flight. Flying from St. Charles, Bob met Greg & Steph Gremminger at the Perryville airport and together they flew to Cape Geraldo to rendezvous with Paul and Denise Salomon. Next stop was Kentucky Dam State Park (M34) for lunch. After landing at Kentucky State Park airport, the lodge shuttle picked us up and drove us to the restaurant, overlooking Kentucky Lake. After lunch, we were shuttled back to the airport to start home. The weather cooperated most of the day, only sprinkling for a short while on the return flight. For Bob, the round trip totaled 360 miles . For everyone, it was great way to spend a Saturday.

Greg & Steph Gremminger Magni M16
Photo: Bob Heimberger

Bob Heimberger Magni-M-16 (Far)
Paul & Denise Solomon Magni M-16
Photo Steph Gremminger

Kentucky Dam Airport
Photo: Bob Heimberger

Events & Fly-ins

PRA Chapter 35 Club Meeting
June 7th, 2008
St. Charles Airport (KSET)

Popular Rotorcraft Association
August 5th—9th
Mentone, In

12th Annual "Little Egypt Fly-in"
Mt. Vernon, IL Outland Airport
October 18, 2008

Hyperthermia (continued)

Symptoms of Hyperthermia

Heat fatigue is a feeling of weakness brought on by high outdoor temperature. Symptoms include cool, moist skin and a weakened pulse. The person many feel faint.

Heat syncope is a sudden dizziness experienced The skin appears pale and sweaty but is generally moist and cool. The pulse is weakened and the heart rate is usually rapid.

Heat exhaustion is a warning that the body is getting too hot. The person may be thirsty, giddy, weak, uncoordinated, nauseated and sweating profusely. The body temperature is normal and the pulse is normal or raised. The skin is cold and clammy.

Heat stroke can be life-threatening and victims can die. A person with heat stroke usually has a body temperature above 104 degrees Fahrenheit. Other symptoms include confusion, combativeness, bizarre behavior, faintness, staggering, strong and rapid pulse, and possible delirium or coma

Treatment of Hyperthermia

If the victim is exhibiting signs of heat stroke, emergency assistance should be sought immediately. Without medical attention, heat stroke can be deadly.

Heat exhaustion may be treated in several ways:

- get the victim out of the sun into a cool place, preferably one that is air conditioned
- offer fluids but avoid alcohol and caffeine - water and fruit juices are best
- encourage the individual to shower and bathe, or sponge off with cool water

urge the person to lie down and rest, preferably in a cool place

Prevention of Hyperthermia

Preventing hyperthermia is relatively straightforward: Use common sense in avoiding excessive activity in situations in which heat is present. Adequate intake of fluids before, during and after exercise in any situation also is essential.