

# Yankee Rotors

July 2011

## The Official Newsletter of Yankee Rotors

### December 2009 Association Officers

#### President

Al Fraser  
(603)744-0107

#### Vice President

John Christopher  
(603) 744-6232

#### Secretary-Treasurer

Dale Pike  
(603)279-4226

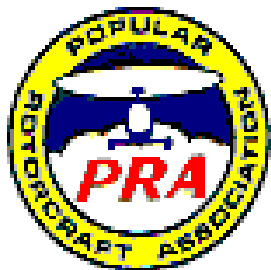
#### Technical Advisors

Ray Maheu  
(207)465-3203  
Rusty Blake  
(207) 663-4404

#### Editor

John Christopher  
(603)744-6232

**Regular meetings every  
3rd Sunday of each  
month at 1:00 p.m.**



### Next Meeting

Sunday July 17<sup>th</sup> at Al's hangar,  
John will be test flying his RAF.  
Here" the directions.

1. Take exit 20 off Interstate  
93 for US-3/NH-11/NH-132/Laconia  
toward NH-140/Tilton, 0.3 mi

2. Turn left onto NH-11  
E/NH-132 N/US-3 N/Laconia Rd  
Continue to follow NH-11 E/US-3 N  
6.3 mi

3. Turn right onto NH-11  
E/US-3 N/Laconia-Gilford Bypass  
5.6 mi

4. Take the NH-11 E exit  
0.4 mi, 5. Keep left at the fork,  
follow signs for New Hampshire 11  
E, 233 ft, 6. Turn left onto NH-11  
E/Lake Shore Rd, 0.4 mi

7. Turn left onto Airport Rd., Al's  
hangar will be on your left. It is right  
across the street from Kitchen  
Cravings.

If you get lost you can call my cell  
603-455-6344.

### Greenland Fly-In?

Only Al, Dale, and myself showed  
up at the Greenland Fly-in. We talked  
to many people, and also cited at the  
FAA seminar as "experts" of rotorcraft.

### What Am I Doing Here

Ever find yourself asking that question?  
I've mentioned member participation  
before and here it is again. I am here to  
help the general public, I cannot do it  
alone. People want to see other projects.  
Some have legitimate reasons for not  
coming, one even called and apologized.  
Others have no reason to help out.  
There may be changes occurring so when  
and if they do, all have been warned.

### For Sale

Parsons two-place gyro for sale.  
Contact Rusty Blake: 207-663-  
4404. B8-

### Bensen B8-M

This is a dismantled, frame,  
packed and ready for shipping. It  
includes the wheels and other  
items. It is a project, half the price  
of any pre-made airframe. The  
price is \$500 plus shipping.  
Interested parties should contact  
John Christopher. Phone number is  
603-744-6232.

### Barnett JB-4

We have a near complete two seat  
Barnett for sale. Normally for  
about 5k, this rolling frame needs  
an engine, rotors, and some  
instruments. Then up you go. Price  
reduced to \$1,000. This is pennies  
on the dollar for what it would cost.

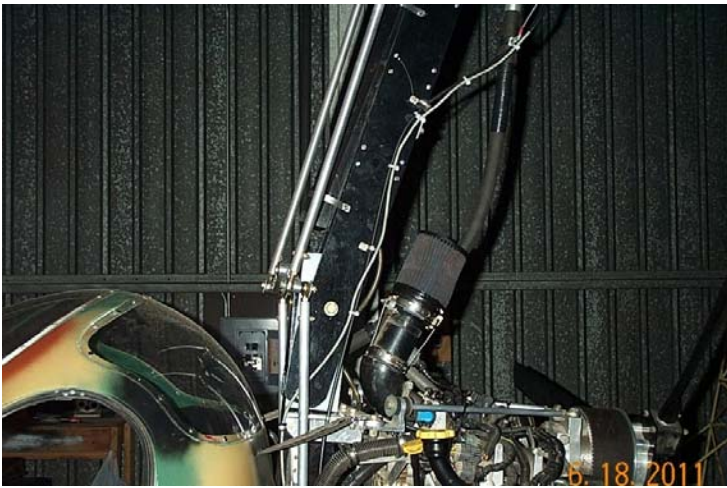
### Drop Keel Gyro

This Dominator style drop keel gyro  
sports a huge horizontal stab with  
centerline thrust, an 1100 cc Yamaha  
engine, seats two people and is a great  
flyer. Call Ray Maheu at 207-465-3203.

Original Bensen B8-M with  
72 hp Mc Colloch engine, 22'  
Dragon Wings rotors,  
mufflers, electric pre-rotator.  
A beautiful example of a  
flying modified Bensen, very  
clean. \$2,000.00

## Another Setback

In our last episode our hero was faced with replacing his air speed indicator and a circuit breaker for the strobes. During that repair, another observer noticed a loose washer on the lower half inch nut on the cheek plate mast. Does something look a little different? Like, the mast is not in its most forward position as it was set for CG? Verifying involves disassembly and that is what was done.



Disassembly could be worse. The push/pull tubes to the rotorhead have to be removed. The rotor had to be removed, droop stops, and the air intake. With these items removed, the cheek plates held by only two half inch bolts are removed and they may be tilted back exposing the inner rubber bushing and the eccentric. This is the only way to inspect these essential parts. The inspection showed the rubber bushing failed. The changed angle caused the eccentric to spin forward, moving the mast further back. The bushing needs to be replaced.



With all items and bolts detached, at left John and Al lower the cheek plates onto the back of the gyroplane. No wires or cables needed to be detached. The entire component is heavy and should not be attempted alone.



And there it is. Dale holds the damaged bushing. This soft rubber bushing becomes brittle with age and is a time limited part. It is there to dampen rotor vibration and resulting stick shake. The bolt broke completely through the bushing. Notice the lower eccentric. That was also moved during the failure. Things could have been worse, the angle not noticed and flight testing way out of CG presents a dangerous situation. A new bushing is on its way from South Africa, regular mail, about ten days they say.



## Greenland 2011 Fly-In

The Greenland flyin at Sanderson field was its typical great time for home-built enthusiasts. There was just one thing missing and that was the presence of gyroplanes. Despite the call for help not one, not a single member's project, except Al, showed up. I want to thank the one flying member, Jim Bauder, for calling. Jim usually attends this event but dates were unknown and he had prior commitments. He lives far away and I certainly understand. I know he wanted to be there but he made a promise and kept it.



But what about other members, flying or not? Are Al, Dale, and myself expected to carry the flag alone all the time? Neither of us NEED to be here, we are already flying. I expect more member participation as changes are already under discussion unofficially. Only the three of us showed up and we all had fun especially Al. At right is Bruce, a Yamaha engine expert, on call often. I believe he is already receiving some gyro training and made arrangements to help Al with a minor problem on his new prototype Yamaha engine. I hope he joins us.



Nice trike at left huh? Too bad he did not tie it down sooner. This is a very expensive aircraft, a two place, ballistic chute, instrumented, probably cost about 30k. All it took was a little wind to cause problem to this untied down



Aircraft. A steady gust of wind flipped it over, damaged the prop and other parts easily cost over \$1,000. There was an FAA seminar about the LSA rating. During question and answer time Yankee Rotors was hailed as being the "experts" on this subject and I answered question for two individuals, Al alone at our display to talk to people. I sold a video, a couple of magazines, not much money but something. What did you do? I'm not happy with the lack of member participation. What am I doing here anyway?

