Yankee Rotors

Oct 2010

The Official Newsletter of Yankee Rotors

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

Next Meeting

Sunday Oct 17th at 1:00 PM at John's house at the tall shed. Some called about the Barnett, however, it needs to be covered and tied up for the winter in the event it does not sell. Therefore if you can come early and help hold some tarps on it would be appreciated. John's ship is almost out of the shop and will be based at Laconia Municipal Airport. In the meantime planning and construction of the trainer may continue.

Rusty Blake has been instructed to secure a coupler for the engine and gearbox, however, Ray Mahue may have found one for considerable less money. In either event developments will be posted as they occur..

Donation Time

Time to hit people up for donations before the year ends, They get a tax break for donating anything we can use or sell to further the ends of Yankee Rotors. Don't be shy, just ask. Think how many time you get asked for a donation. Just ask, it works and it's tax deductible.

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 horiaontal 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

Bill Parent's Monarch is coming along just fine. There is fine attention to detail. Beautiful work Bill!

Final Adjustments

John's modified RAF is almost complete. A couple of new bolts, a new grip with a push to talk switch, the registration number and this ship is ready for FAA inspection and flight testing. Part of the final adjustments are the proper rigging of the control system. With the control system in a neutral position, corrections must be made. At left, Al holds a level on the control system inside the cabin.

At the other end, the rotorhead must also be in a neutral position. Furthermore, it must be able to pivot side to side at least ten degrees. In addition the fore and aft movement must also be set.. Forward –1 or –2 degrees, and aft 19-20 degrees. AT these points the rotorhead stops in front and behind the rotorhead must be set. Sounds simple, but we didn't get everything done. There wasn't enough travel from side to side. At right, Dale hold an angle finder to insure that a neutral position is attained.

The control system was later adjusted my myself. It involved lengthening one push/pull rod, and shortening another. Again sounds simple enough but alone, I can't tell you how many times I had to walk up and down a ladder, make sure system is level, back up to check degree of tilt, back down to make it level, back up to check the other direction. Gee, I don't remember having to be this precise with my modified Bensen, but this is what the factory call for and this is how this machine is rigged. The only deviation I made was to allow more negative forward movement. The –1-2, just didn't seem like it was enough, so I allowed quite a bit more.

Some have seen this picture before. The modifications include a near centerline thrust location on the horizontal stabilizer and the mast is slightly taller. This raises the cg exponentially, thus reducing the possibility of a "bunt over" condition: an inverse airflow resulting in the aircraft tumbling forward and falling out of the sky.

There is still more to do. There is weight and balance data to collect.. I have drained the anti-freeze out of the machine, oil is drained, need to remove the remaining fuel and obtain the empty weight of the machine. Now I can attach the heater hoses without making too much of a mess. Finally, a hang test for the proper cg limits needs to be performed. This insures that I will have enough control movement to make sufficient travel for my weight, a passenger's weight, and fuel. Not having this done can result in a Crash, or a minor incident which could injure the occupants, or damage the aircraft. The data becomes part of the operating limitations of the ship and are required to be in the ship by the FAA.