

## Prop Mods

*Don Bates (CA)* - On page 2 of the October 1999 CSA newsletter is a picture of an extreme propeller mod by Bill James. It sports an ever widening chord down to the axis of rotation. Periodically someone always comes around to trying to get extra thrust out of the hub area of the blade. After all, why waste it? Intuitively it seems correct to have the pitch angle go to 90 degrees at the axis of rotation. But what is the result approaching the axis? No thrust, just drag and torque. So what should that chord be at the axis? If not longer, shorter? How much? Difficult to imagine, but theoretically for optimum efficiency the engineering equations tell us the chord must go to zero at the axis of rotation!

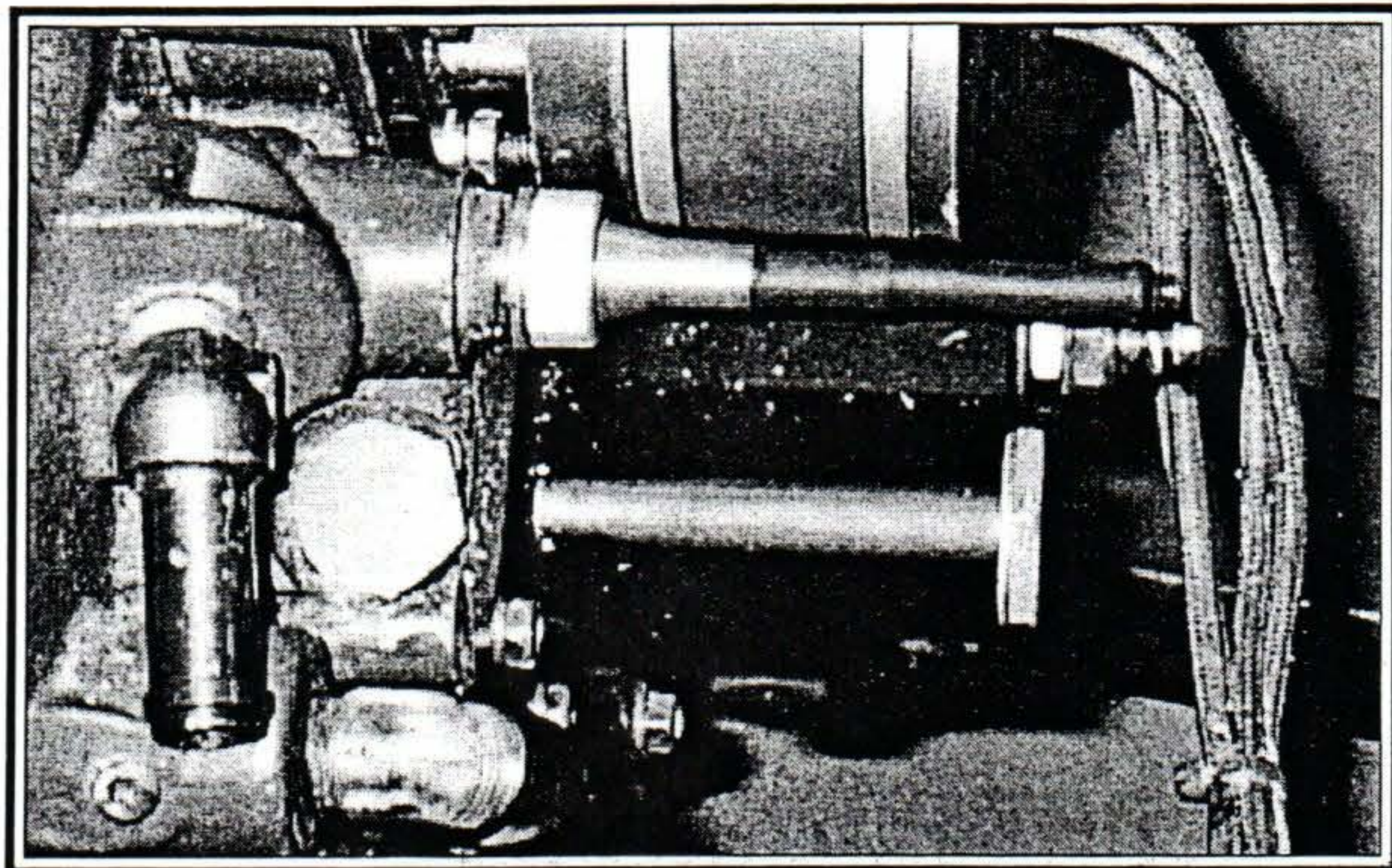
Why is this important? Often I hear the comment that the center of the propeller doesn't do much anyway. It may not produce much thrust, but it is an integral part of the overall blade loading. There is an optimum blade loading for each individual combination of speed, drag and power. If you drastically change one part of the loading, it throws the entire loading off and cuts efficiency. Just because one prop performs better than another doesn't a rule make. It only says the old one was a worse match than the new one.

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### Rough River at Oshkosh, The Best of Both

*Ernie Raudenbush (FL)* - You can have the best of both worlds by landing at Wautoma airport, Y50, 35 miles west of OSH. The uncontrolled field has free camping, showers and air conditioned buildings for the hot days. The Saturday night beef/corn roast is \$10. Meals are provided by Kiwanis.

You can fly into OSH each day or take the van for \$15 round trip. We have a good time and nobody tries to sell you anything and the only noise is the airplane noise we make. Bring your own tie downs. Contact Wautoma airport 920-787-3030 or 787-5163



Bob Davenport's solution to the short tach cable need

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### Microair Radio

*Steve Sorenson (VA)* - The little Microair radio is installed and working beautifully; but it wasn't easy. First, the radio worked only with electret mics. When transmitting I got terrible feedback and the signal went nowhere. The Australian factory provided helpful support. I rewired the system, removed the old RST intercom and searched for suspected ground. This time the radio spontaneously went into transmit mode and kept squealing until shut down. I returned it to American Avionics, who promptly sent a replacement.

The replacement had a much better installation manual so I again rewired with shielded wire. I still got feedback. I looked at the antenna and noticed I had never installed toroids, an important feature of Jim Weir's

antennas. It worked flawlessly with the old radio so I didn't expect it as the problem. Three toroids added on the coax next to the foil antenna produced fantastic transmission and reception. The intercom feature works too, but has a hot mike when on.

I recommend this radio. It is light, cheap and loaded with features like flip flop tuning, frequency memory and transmit light. The LCD display is a little hard to see in bright light. I don't know if the first radio was defective, but I suspect I damaged it in my first installation. The Microair Company and American Avionics stood by their product and I now have a new radio that I am very happy with for my second 18 years of Eze flying.

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### Wanted

Good used 2 blade cruise propeller, crush plate, spinner, and 6" prop extension for O-235-C1 large bolt hole pattern. Contact:

Chuck Hartsell  
chartsell@michweb.net  
(231)775-4085  
8150 S. 35 Rd.  
Cadillac, MI 49601

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### For Sale

3-bladed performance propeller for IO-360 200 hp motor or Franklin engine installation in a cozy. It has 90 hrs on it and is in perfect condition. \$1400.00 Larry Aberg 503-789-7116

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### For Sale

O-235-C accessory case, 800 hrs. since new. \$50 No provision for oil cooler or fuel pump.  
O-290 cold induction oil sump and induction tube system for MA-3 carb. Lowers engine profile considerably. \$250 OBO.

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