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End Of The Year Promotion

We are now taking deposits for our next production run. We are very thrilled with the response of the LS7 engine and the amount of inquiries that we have had about it. This is your chance to own your own Hummingbird helicopter with the LS7 engine or

the Lycoming engine. There is limited space available so don't drag your rotorblades.. You can have your own helicopter and start building by next Spring. If you put your order in now, you will still receive 2011's pricing. If you buy a standard kit, we will

take \$5,000.00 off of the current price. If you would like to purchase a Quickbuild, we will give you a free MGL instrument kit. This opportunity will only last until December 31,2011. For more information, please email Sales@Vertical-Aviation.com.

You Can Now Have Your Own Hummingbird Model



Vertical Aviation's very own Hummingbird model that we proudly display in our office.

Vertical Aviation Technologies is now offering the option to own your very own Hummingbird helicopter model. This is a unique idea for that person in your life that would love to have a customized and personalized gift. All model can be manufactured without any restrictions. Models are built up to the same standard as we would when sending out one of our helicopters. This is a great way to dream up a paint scheme or color that you have always wanted for when you owned your own Hummingbird.



With meticulous detail, every model is custom built from drawings and information right from our factory. Each model is of a museum quality and is hand carved out of mahogany wood. The color options and designs are endless. Whatever you can think of we can do.

You can also buy a Hummingbird T-shirt, hat, or coffee mug. These make great gifts for all occasions. For more information, contact Bethany at Bethany@Vertical-Aviation.com. She will help you with ordering as well as designing your own Hummingbird model.



Most Traveled Hummingbird Moves Further South

We have sold many Hummingbird all over the world in the last 20 years, but we only have had one helicopter that has been resold. This Hummingbird started its journey here in the states at our building facility. It was sent to Slovenia in 1993. Then it was sold to a new customer in Slovenia in 2004. He wanted to have some modifications done to his aircraft. Those modifications included a new paint

scheme, conversion to Lycoming powerplant, new instruments, added a datatron clock, heater system, rear intercom, new upper cowling, and a full maintenance inspection. He sent it back to our facility in Sanford, FL that same year. We sent the Hummingbird back in 2005. He enjoyed flying this Hummingbird for the next 2 years. A gentleman in Florida then purchased this helicopter in

2007. He needed a reliable aircraft that he could use to shoot movies and take aerial pictures. The Hummingbird was the right aircraft for the job. He installed a front mounted camera on the nose of the Hummingbird. He has used this helicopter to shoot TV shows, movies and pictures for websites and magazines. Now, this Hummingbird is on the move again. It has been bought by a custom-

er in Brazil. He is currently doing some maintenance then it will be flown down to Brazil. This helicopter is by far the most traveled Hummingbird in the world. This is a true testament that our aircrafts are built to last. With each customer change, we are there to ensure that all changes are held to Vertical Aviation Technologies standards. We keep our standards high so you can enjoy your Hummingbird for many years.



The original Hummingbird in Slovenia



The Hummingbird after all of the modifications

Safety Colors Available for Blades

The main rotorblades come standard on the Hummingbird painted with a flat black to reduce “flicker” at night on the bottom of the blades. As an option, the top portion of the blade can be painted yellow and white in order to increase visibility to someone flying above you. To take it a step further and really have a customized Hummingbird, you also have the option to have the blades painted whatever color you would like. Stand out from the rest of the birds in the sky. For more information, please email Sales@Vertical-Aviation.com.



Vertical-Aviation.com

INTRODUCING THE LS7 ENGINE



In our Research and Development facility

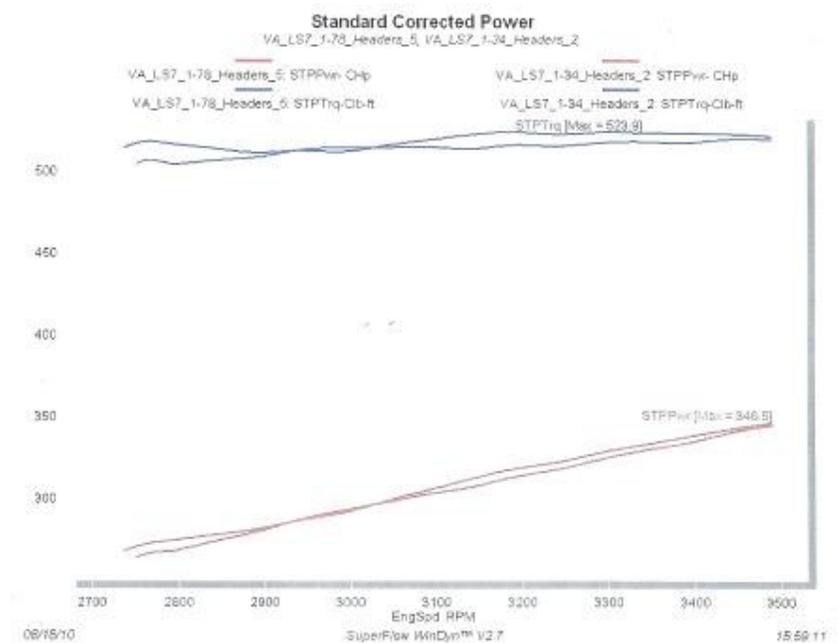


Dry Sump Oil System



Close up of fan assembly

Over the years many people around the world have asked “Do you have an engine that will run on automobile fuel?” Many areas of the world do not have access to 100 LL aviation fuel. With the thought of the Environmental Protection Agency outlawing leaded aviation fuel, we decided to bring back our V-8 powerplant as an optional engine in the Hummingbird. We decided to use the General Motors LS7. This engine is specially designed and built for the Hummingbird. It is not a stock LS7 engine. This engine is configured with the best components available on the market including forged crankshaft, connecting rods and pistons. A special designed camshaft optimizes torque and horsepower at the continuous r.p.m. of 3250. A dyno chart is provided below. The blue line is torque and the red line is horsepower. A newly designed cast aluminum oil pan and specially designed cylinder heads have been created specifically for the Hummingbird helicopter. The exhaust system required extensive test cell time in order to optimize the power curve. The computer system is programmed for the Hummingbird application with redundant communication with critical input sensors. The throttle is fly-by-wire and is fully governed when set. Wide band O2 sensors provide the capability to use 87 octane auto gas up to 100 LL aviation fuel. The oil system is a dry sump design with an optional oil cooler for extreme operating conditions. This engine was configured for the Hummingbird and will make 325 h.p. at 3200 r.p.m. It is derated to 280 h.p. and will produce 280 h.p. up to 12,000 feet. This is the only helicopter available that provides sea level performance to 12,000 feet with a piston engine using auto gas. Engine installation is simple and easy to maintain. It starts like your car, runs smooth, and is quiet. Thanks to everyone that made this happen.





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Follow us on:



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<https://twitter.com/#!/Hummingbird260L>



www.youtube.com/user/VerticalAviationTech

CERTIFIED DESIGN AT A HOMEBUILT PRICE

Vertical Aviation Technologies, Inc., located in Sanford, Florida, is the manufacturer of the Hummingbird helicopter. The company was founded by Bradley G. Clark in 1987. We have sold over 173 helicopters worldwide from commercial helicopter operators to governments including the United States. We have an excellent reputation with the FAA and never had a fatality in any helicopter we have built or sold including the Hummingbird.

Currently, Vertical Aviation Technologies, Inc. produces the Hummingbird 260L helicopter as well as the Hummingbird 300LS.

Employee Corner



Mike Harmon has been our shop manager for 3 years but has been with the company for 5 years. He has a lot of aviation experience under his belt. He was born in Maine but raised in Georgia. He hangs his Georgia Bulldogs flag at his desk. He proudly served in the Navy for 5 years right out of his high school where he did maintenance and re-

pairs on aircrafts. Then, he spent the next 12 years honing his skills for huge companies like Page Avjet, McDonnell Douglas, and Lockheed Martin. He has been married to his

wife, Nancy, for 27 years. When he isn't running the shop here at VAT, you can find him on the golf course, fishing, or shooting. He is an asset to our team. We look forward to many more years of him leading our team.

DID YOU KNOW?

The Hummingbird is the only helicopter sold in kit form that has an engine that uses automobile-fuel. We wanted an engine that many people all over the world can use when aviation fuel is not available.

We're on the web!

www.Vertical-Aviation.com

Vertical Aviation Technologies: Making the world more accessible.