

U.S. biofuel flight validates the flexibility of SMA's general aviation engines

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For the benefit of high school students and the environment – Ross McCurdy, a science teacher from Rhode Island – demonstrated the versatility of the Jet A piston engine from the Safran group's SMA subsidiary by performing a milestone first flight in the U.S. operated with a biofuel mix.



• In the photo, a SMA SR305-230-1 Jet A piston engine equipped Cessna 182 is filled with a biofuel blend by Ross McCurdy, on the ladder, Jochen Spengler, left, and Chris Howitt, right, in preparation for its 500-mile flight from Rhode Island to North Carolina.

A Cessna 182 from the Paramus Flying Club in New Jersey – retrofitted with one SMA's SR305-230-series powerplants – flew 500 miles from Rhode Island to First Flight Airport in Kill Devil Hills, North Carolina this month, fueled by a 50/50 blend of Jet A and refined, used cooking-oil biofuel.

“This shows the versatility of our engine, and the fact that it is capable of operating on many different types of certified fuel,” said Thierry Saint Loup, Vice President for SMA Engines, who oversees the company's U.S. operation in Grand Prairie, Texas. “With our engine, we are ready for the fuels of the future that will provide greater benefits for the environment.”

The SR305-230-series engines produced by SMA address the issue of increasingly scarce and expensive Avgas for the general aviation community by providing a highly capable powerplant that functions with Jet A, Jet A-1, TS-1 and No. 3 fuels – which are readily available around the world. Other advantages of the engines include a 30-40 percent reduction in fuel consumption when compared to engines that use leaded Avgas, which results in significantly longer range and endurance.

SMA is in full production with the latest SR305-230E enhanced version, which has been selected by Cessna to equip its Turbo Skylane JT-A aircraft – representing a major market breakthrough for the powerplant. Deliveries of the 230-hp. engine to Cessna began in 2012, with a service entry on the Turbo Skylane JT-A planned this year.

“Following substantial improvement to our first generation engine, we received this important endorsement from the world's largest general aviation aircraft manufacturer – Cessna – which is a testimony for our engine, and a confirmation that Cessna has faith in the Safran group and its capabilities.” Saint Loup said.

SMA will build more than 150 of the SR305-230E engines this year, with production ramping up further in 2014 and the following years to meet the needs of many aircraft manufacturers, he added.

The Paramus Flying Club's biofuel/Jet A flight was performed using the Cessna 182 equipped with a previous-generation SMA SR305-230-1 engine, which is one of some 40 such powerplants that were integrated on aircraft using Supplemental Type Certificate (STC) installations. Based on the initial excellent experience, a biofuel powered trans-continental flight is now envisioned with the Cessna 182.