The Soloy MKII ‘Sentinel’ is configured and finalized, and it’s time for some show and tell! That’s just what Dave Stauffer and Paul Haagland, Chief Pilot for Soloy, did recently. They took the MKII Sentinel on tour in Southern California and demonstrated it to law enforcement agencies.

What they knew, and was confirmed by pilots and observation officers of several agencies is that the Sentinel is in a class all its own among airborne observation platforms. “The whole idea of the Sentinel was to have a certified observation capable aircraft that would complement the MKII turbine platform. It makes the conversion tailor-fit for law enforcement and far less expensive to own/operate than a helicopter,” commented Stauffer.

The MKII Sentinel conversion includes a 450 shaft horsepower, Rolls-Royce 250-B17F engine and gearbox, along with Garmin G500 PFD/MFD avionics. The Sentinel law enforcement package features a 270° articulating observer seat with an oversized left hand observation window, a re-contoured cabin headliner with 4-point crew harness for more head room, a wing-mounted universal camera mount, and a 200 amp generator.

Pilots who flew the Sentinel as it toured Southern California discovered that the Sentinel is an airplane that gives law enforcement agencies superior observation capabilities without the high costs associated with helicopter operations. The turbine powered, fixed wing airplane can get officers on station faster and stay in position longer. “When the bad guys hear a helicopter they know we’re coming. From the ground, the Sentinel is just another airplane flying around. Criminals aren’t savvy enough to know we’re watching them.”

The ‘bad guys’ are being watched through a camera positioned on the left wing. Soloy’s wing-camera mount can host virtually any camera up to 18.5” in diameter and 100 pounds. “Positioning the mount on the wing eliminates engine exhaust interference with an IR camera and reduces chances for FOD damage to the camera,” Dave Stauffer said.

The law enforcement pilots who flew the Sentinel were also impressed with the loitering time as another advantage to stay on station for hours at a time which is a significant advantage over a helicopter. “It’s a much smoother, steadier camera platform than a helicopter or piston engine airplane. My observer could lock the FLIR camera in on a target and hold it there to get a very clear image on the Airborne Display’s...
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HD monitor,” said the pilot of a large metropolitan area. An additional note: pilot responsible for fixed wing operations in a major southern California metropolitan area was greatly impressed with the availability of power in the Soloy turbine conversion. “We operate between 5,000 and 8,000 feet and mainly in controlled airspace. When the Air Traffic Controller tells us to climb 2,000 feet for traffic avoidance, they want us to do it now,” he said. “While the typical piston airplane’s climb can seem extremely slow, when you push the throttle on the Soloy, the airplane gets up there right now! It’s pretty amazing!”

Another feature this pilot liked about the Soloy Sentinel was the aircraft’s rock-solid stability even at low speeds. “We can put it in a half-mile offset racetrack pattern and even as low as 70-knots, the airplane is hands-off stable – no mush at all,” he commented. “That can really reduce the pilot’s fatigue factor on longer surveillance missions.”

The four-day demo tour proved a great success for Soloy’s MKII Sentinel. The overwhelming consensus of those who flew it is...they want it! Watch out bad guys.

Spread the Word about the Sentinel

In an effort to maximize the exposure of the MKII Sentinel, Soloy is endeavoring in an ambitious marketing campaign to attract the attention of law enforcement agencies.

A feature story highlighting the conversion process surrounding the MKII Sentinel will be in the May/June edition of ALEA’s AirBeat magazine. Participants can see Soloy at the ALEA show, Booth 332 or arrange a demo flight by contacting Dave Stauffer at daves@soloy.com or 360.754.7000.

Cecil Card: Quality SpARKS from the Back of the Shop

You may not notice him because he’s at the back of the shop. Helmeted and protected from flying sparks he’s Soloy’s federally certified welder – Cecil Card, Soloy’s only welder. He’ll be the first to tell you he’s a "low key guy in the back of the building." What Cecil does, however, is more than low key. He contributes mightily to Soloy’s reputation for quality with his welding skills. Cecil is certified in all kinds of welding from heli-arc, also known as TIG or tungsten inert gas welding, to acetylene and MIG. His certification includes 1/1200 to 3/4" thick materials such as aluminum, stainless steel, 4130 steel and Inconel, a nickel-chromium based super alloy.

Originally hired by Nick Parkinson in 1978 from General Electric where he was building components for the Alaska Pipeline, Cecil first worked at Soloy for 11 years. His first encounter with Joe Soloy was in the lunch room one day when Joe asked him if he wanted a cup of coffee. Sure, Joe poured Cecil that cup and then introduced himself. “Joe treated everybody like family,” Cecil fondly remembers when Joe flew him and his wife Joanne over Mt. St. Helen’s after the eruption.

In 1989, Cecil had an opportunity to work with Al Swindahl, renowned chassis builder for NHRA top fuel dragsters. During his two years building race cards – one even made for Shirley ‘Chas’ Muldowney – Cecil learned about G forces and loads and their effect on his welded products which he would apply to his work at Soloy when he returned in 1991 – and where he’s been ever since.

Cecil is involved in every project at Soloy. He first worked on the Bell 47 Turboconversion and continues his welding skills on engine mounts, oil tanks and exhaust pipes. “I like that Soloy doesn’t present all kits. We are working on a number of common parts which we would apply to our work at Soloy when he returned in 1991 – and where he’s been ever since.

Cecil is involved in every project at Soloy. He first worked on the Bell 47 Turboconversion and continues his welding skills on engine mounts, oil tanks and exhaust pipes. “I like that Soloy

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First AS350D Takes Shape at Soloy’s Olympia Facility

While the Honeywell powered versions of the AS350B model helicopter have been available for many years, all previous conversions required the complete drive train be converted to that used on the original AS350D model. Soloy has recently completed the development of a conversion kit specifically suited to the B series engine installation and drive train.

The SD kit configuration is approved on our existing STC SH5815SW and is based on the popular SD1 kit for the AS350BA and the SD2 kit for the AS350B2. The kit includes the same Honeywell LTS101-600A-3A engine used on the SD1 installation and includes 95% of the parts used in the AS350BA and AS350B2 conversions. The differences are primarily in the instrument and instrument markings with only the SD2 using an electronic over speed control system.

The AFS inlet barrier filter system and AKV cycle counter options are approved for all kits.

The use of many common parts will greatly reduce the cost of future airframe model upgrades should the operator decide to further enhance the helicopter’s capabilities in the future.

The first SD is owned by Paul’s Aircraft Service of Yellowknife NWT and is being installed in a very low time AS350B. This will be Paul’s fourth Soloy conversion. He currently owns three SD2’s, which are leased to several well known Northern operators.

International Deliveries of MKII Conversion

The Soloy MKII conversion to international operators remains strong due to performance and economics. The high price of fuel costs and the decreasing availability of 100LL fuel, especially in remote areas, make the MKII very popular as evidenced by a recent MKII conversion delivered to Guatemala.

Soloy delivered the MKII to the Central American owner/operator of a large farming operation in the mountainous regions surrounding Guatemala City, Guatemala. The MKII was also chosen for its ruggedness, durability and ease of operation.

Soloy has recently taken a deposit for the Soloy MKII demonstrator from an Indonesian customer that will use it for aerial camera operations.