Contrails

President's Report

FAA Update

There is not too much new to report on the FAA SUAS rule-making initiative. I remain in close contact with the AMA, and they continue to work on their initial submission and I have been told it will be based on the current AMA rules, regulations and safety code. The AMA has attempted to get some insight into those issues that might be significant to the FAA, but has not had great success despite their repeated efforts. It appears that the first meaningful feedback will come from the FAA response to the initial AMA submission. While there is no reason to believe that the FAA will suggest revisions to the turbine regulations, the JPO will be a primary partner with the AMA should this be required. Until then, everyone can help by making sure to fly safely and do their best to support the AMA safety code and turbine regulations.

PowerBox BaseLog from Duralite Flight Systems

A couple of years back, I collected crash data for the JPO to prove to the AMA that speed was rarely a factor in model-jet incidents. While the data showed the absence of speed-related crashes, there were quite a few incidents related to battery and other electrical issues. From that point forward, I have made it a habit to install redundant electrical capability and to monitor the condition of my batteries closely. It has prevented the loss of a model on several occasions.

Duralite Flight Systems recently provided an opportunity for me to evaluate a new piece of equipment from PowerBox Systems called the BaseLog. It features fully redundant systems, including regulators, microprocessors and other electrical components. An incredibly bright OLED screen displays a significant amount of data for each battery, including actual voltage in digital and graphic form, system output voltage, time since last reset, remaining capacity in both digital and graphic form and a parameter called minimum value memory. This takes the form of a black line on the graphic output display that shows the minimum voltage during the flight. On a Lipo battery, for instance, the graphic display has a range of 6.8 to 8.4 volts. If the voltage drops to a low of 7.6 volts during use, the black bar will appear approximately at the mid-point of the graphic voltage display. The significant value of this data is that it will point to batteries that may not be up to the loads imposed, particularly if they develop problems as they age. Lastly, the display will also communicate any malfunctions, such as a regulator failure.



The BaseLog handles all modern battery types including LiPo, NiMH, Nicad and LiFePo. This last setting is used for A123. Battery chemistry is selected in the programming mode, as is the battery capacity and output voltage. The unit utilizes high capacity multiplex connectors for input and output, but Duralite Flight Systems has patch cords available for all major receiver systems on the output side. The BaseLog measures 2.5 by 3.25 by .75 inches and weighs a very light 3.2 ounces. The unit will handle peak current of up to 20 amps on each side.



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The unit is powered on by the familiar SensorSwitch. If you have never used this switch, it is a neat piece of gear that features an arming button and separate "on" buttons for each battery with LEDs to show power. If the switch fails, it has a safety feature that leaves the PowerBox in a powered state. The unit also has two remote LEDs that can be mounted in a convenient location for visual confirmation of power with the plane closed up and ready for flight.

The BaseLog has one other unique and very interesting feature. In keeping with coming telemetry trends, the unit is capable of transmitting real-time battery information utilizing either the Multiplex or Spektrum telemetry standards. Spektrum already supports telemetry for surface use, and recently announced an air transmitter with telemetry capability at the Nuremberg Toy Fair. I suspect that it will only be a short wait before a telemetry-capable receiver is available.

The BaseLog is available from Duralite Flight Systems here in the US. I have used Duralite products with great success over the years and Jack Price, their president, has always been accessible and ready to answer my questions. Visit their website at www. duraliteflightsystems.com for more information on the BaseLog or to place an order.

Canadian Representation

It has been some time since the JPO has had active Canadian representation. Thanks to the recruiting efforts of AI Watson and Bob Brusa, that is about to change. The JPO board has recently appointed Paul Dries to be the District VP for Canada until the next general election.

Paul has a mechanical engineering background and holds a managerial position at a company that specializes in drive systems for off-highway and military vehicles. He has been involved in modeling for more than thirty years, starting with boating and cars. For better than10 years he has been flying fixed-wing models with the last two years primarily focused on turbine-jets. Paul states his goal is to increase exposure of the JPO to Canadian jet pilots. More importantly, he will provide a link between the MAAC Jet Committee Chairman and the AMA. Welcome, Paul!

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Thanks, Fred!

If you happened to be in Toledo this year, you might have noticed that the JPO had a booth for the first time in a number of years. It was organized and manned by Fred Gambino, who put a significant amount of his own time and money into the volunteer effort. Art Arro, Ron Swartzkopf and Len McIntosh (JPO District VPs) also spelled Fred in the booth from time to time. I wanted to take a minute to publicly thank Fred for his efforts on behalf of the JPO.

Next Issue

I just received another new piece of electronics from PowerBox and Duralite Flight Systems called the Cockpit. There was not time to fully review it before my *Contrails* deadline, but I should soon have it installed in my MIBO A10. This model, with its myriad of servos, will put the Cockpit to the test. If you are interested in information on the Cockpit prior to the next issue of *Contrails*, keep an eye on RC Universe or drop me an email.

I am also working on a new DV8R for *JetPower* magazine. On paper, the DV8R promises to be a great entry-level turbine, but the proof will be in the flying. Construction is nearly completed, and so far, it has lived up to expectations.

Foledo Photo

Keith



The ground crew on Joe Grice's A10 get things ready.