

R/C Sportflyer

August, 2004

Next Meeting at Stamm Field – Thursday, August 5 @ 7:00 p.m.

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Send newsletter information and items for sale or wanted to the newsletter editor. He's almost always home after 9:00 PM or call his work number, 913-624-2570, it has a recorder, or send via Internet.

Club Web Site: www.rcsportflyers.com

The Radio Control Sport Flyers fly from Stamm Field, located near the south-east corner of Longview Park, operated by the Jackson County Parks Department. For information about the Parks department, visit their web site at: <http://www.jacksongov.org/rec.shtml> For the calendar of parks events: http://www.jacksongov.org/rec_ce.shtml

Minutes of the July 1, 2004 Meeting

We had 21 members and 1 visitor at the meeting. We have one new member this month, Anthony Daniel. If you see him, say hi and make him welcome.

The minutes of the last meeting were approved.

George Wright had preliminary results on our open fun-fly. Looks like we did well and the treasury is in good condition.

Old Business:

T-shirts and hats: John Urton has club hats at \$10 each. Dave Walter has received the shirts for those that ordered them a few months ago. See Dave for your shirt if you ordered one. From now on we can order various shirts, cups, etc., from a link on our club's web site. They are being sold at cost.

Training: - Dennis Tschirhart - We consistently have 5 to 6 students. Training is going well. We can always use some help and it isn't necessary to be an instructor. If you are willing to check the planes or simply talk with the students and answer their questions, that would be great.

Safety: The last meeting had a discussion about a safety problem with helicopters. The good news is that, after a discussion with the individual involved about the safety situation, not about personalities, etc, not only did we get positive resolution on the safety situation, we also got a new club member. Since the problem is in the past I won't mention any names, but a big Thank You to the people involved and their willingness to work together for the benefit of all.

New Business:

Nothing to put under new business, I think everyone wanted to get the meeting over with and get back to flying. It was a beautiful evening and much better spent flying. Remember the club picnic coming up in September. For the new members, this is probably the most fun event the club does. The wives come out and we have good food. So far we've had good weather so the combination of food and flying makes for an ideal situation.

Show and Tell: Bob Armstrong had a real neat Top Flight P-51 Mustang with a Super Tiger .60 in it. It's certainly not meant as criticism, but I feel I've got to mention that there were some moans and groans about it not having retractable gear. Maybe some of the moaners and groaners would give Bob a hand on that?

Raffle Prize: The \$30 gift certificate was won by Herb Hestand. Way to go!

They would probably never make a point of it, but club members John Urton and Kelly Tippetts will be participating in the Scale Masters (National Championships) at Gardner in September. John flew Kelly's plane at the regional meet at Hillsdale and they took first place. This gave them a spot in the Scale Masters. That's a great accomplishment! Congratulations John and Kelly.

Calendar of Events – Models

Aug 5 RCSF Club Meeting – At Stamm field
Aug 7 RCSF Club Fun Fly
Aug 28-29 24th Annual Dyer Turkey Farm Glider Regatta, Higginsville, Steve Gooseman, Ph: 660-584-7602
Sgoose33@hotmail.com
Sept 2 RCSF Club Meeting – At Stamm field
Sept 4 RCSF Club Fun Fly
Oct 7 RCSF Club Meeting – At Stamm field
Oct 9 RCSF Club Fun Fly
Sept 10-12 KCRC 50th Anniversary Fly-in
Sept 23-26 US Scale Masters Championship – Gardner Airport
Sept 25 RCSF Club BBQ
Nov 10 RCSF Static Display and Delta Darts at the church

Calendar of Events – Full Scale

July 27 - Aug 2 EAA annual bash, Oshkosh
Sept 4 National antique aircraft fly-in, Blakesburg, Iowa

The general news media did have fairly reasonable coverage of the first civilian space flight (at least I think it made the altitude to be considered “space”) by Scaled Composite’s Space Ship One and White Knight. This is an effort by the Rutan team to capture the X-Prize. The X-Prize is a \$20 million prize to be awarded to the first civilian group that can make two space flights within three weeks. I believe this is the first time a manned, civilian craft has made it to space. The article is from the Avweb aviation electronic newsletter and web site. (www.avweb.com)

– Walt.

Mojave Launch Successful, Far From Perfect 328,491 Feet, 2.9 Mach, and Awaiting Confirmation ...

Sixty-three-year-old Mike Melville's flight Monday in Burt Rutan's design, funded privately to the tune of roughly \$20 million by Paul G. Allen, and built mainly by a group of no more than 30 individuals (though all of Scaled Composites' 120 or so employees had a hand in it) was a success — rocketing at "about" 2.9 Mach to "about" 328,491 feet. That mark (reported by "inertial nav data") is just 491 feet above the target altitude required for "space" flight, but 31,509 feet shy of the planned 360,000-foot apogee. It was enough to earn Melville astronaut wings from the government, and a handshake plus a "You've joined the club" from Buzz Aldrin (Melville said later of the encounter, "That was serious stuff, man."). However, the altitude deficit was similarly attributable to some serious stuff — including a control-system failure. The system that failed was described by Rutan in this way: "I can't think of anything more important on the vehicle itself." [See AVweb's [pre-launch](http://www.avweb.com/news/features/187539-1.html) and [launch day image galleries.](http://www.avweb.com/news/features/187542-1.html)] (<http://www.avweb.com/news/features/187539-1.html> and <http://www.avweb.com/news/features/187542-1.html>)



One problem, failure (buckling) of a carbon-fiber fairing that covered the lower half of the rocket's new bell nozzle, was perhaps more obvious, but less critical; Rutan said, "It could have fallen off, and not been a problem." The nozzle itself was in no way compromised. But shortly after the rocket gave Melville 3 G's of forward acceleration plus the 4 G's of vertical acceleration as he guided the craft into its near-vertical climb (this is normal), the craft also rolled 90 degrees left (this is not normal) and experienced failure of a trim actuator. Fortunately, Melville recovered the craft — actually he "stomped the rudder" and it rolled back 90 degrees right. But he also immediately went to the backup trim system, later telling reporters, "It's never done that before." He continued, "That's what drove me about 20 miles away [from the intended flight path] in about five seconds ... it was amazing." After all, the actuators control the craft's direction of flight. The backup system worked as designed and "saved the day," said Melville. From the ground, a deviation (slight curve) of the rocket's otherwise-vertical-appearing contrail was visible early in the burn, but there is no confirmation that such a physical manifestation was representative of the actuator failure. Rutan would later say the trajectory error plus the fairing failure,

which could have added some percent increase in drag (depending on exactly when it happened), could have contributed to the lower-than-expected reported altitude.

In a post-flight press conference Monday, Melville said he couldn't say he didn't do it (command the roll), but also noted that a trim actuator used to control the craft's pitch while supersonic had failed. Of the roll problem, Rutan said that upon review of the data, "we will know exactly what caused that." For now, there are two actuators, one left and one right, Rutan explained. If the actuators do not act in unison, they would not command pitch, but roll. Fortunately, Rutan's design incorporates backup systems, one of which (we understand) was used by Melville to trim the craft for landing while near the apogee phase of the flight. At that altitude, two bottles of compressed gas are used for control — Melville said that system worked extremely well, and he only used half of one bottle. Melville noted that he had no intent of touching the primary system after the failure or troubleshooting while flying the flight profile, but had control response not been regained almost immediately, would have shut down the rocket and attempted to return home early.

... "I Was a Little Afraid on the Way Down" ...

Not operating on a discreet frequency spurred some tense pre-launch moments, too, as organizers asked the crowd (some listening on handhelds) just 10 minutes before the expected drop time to check for a stuck mic. After the drop from White Knight and rocket ignition, the crowd was informed at 7:53 that they "just got the call, he's OK. Everything's OK." At 7:55 we heard, "270,000 and still climbing" ... seconds later ... "316,000." On the ground, two booms were heard at 7:58 local. Initially thought by the crowd to be sonic booms (we had been told we might expect them) the failed carbon-fiber fairing covering the larger rocket nozzle (neither of which had flown before) later fell suspect. Melville, who endured about 4.5 G's maximum on the way up, said it's more than a little unsettling, the noises the craft makes while plummeting down at 2.9 Mach during re-entry at about 5.5 G's. On the ground at 8:02 the crowd finally got its chance to settle a bit as glints just above and to the left of the sun became visible. It was the first naked-eye indication that the craft had returned to atmospheric controlled flight and was being followed by its high-altitude chase aircraft, an AlphaJet owned (but not flown) by Paul Allen. After an uneventful landing and some quick speeches for the press, the crew went two miles out of their way to tow SpaceShipOne past the public and RV parking areas. In the crowd, one man held a sign that read, "SpaceShipOne, Government Zero." Melville took the sign and hoisted it above his head as he rode atop the craft.



... Reveling in the Afterglow

Success in spite of failures is arguably a more significant success. And for those who can simply read the numbers and quotes, for those who were not there, we must convey that this event was truly epic. To be there, it seemed the emotion behind every eye that had strained into the sky was shared in Rutan and Melville's post-flight embrace. And the tears Rutan wiped away as Melville took the microphone to speak could not be misunderstood. It was more than statistics and records; it was a feeling so positive, and it was grandeur. It was, after all, just Monday that a group of private individuals — extraordinary for their dreams, talent and conviction — came together under a common goal, and reminded the world that "the impossible" ... isn't. Had the flight gone off without a hitch, subsequent flights to fill the requirements and win the X-PRIZE would have soon followed (within weeks). As it is, there is no schedule for a next flight of SpaceShipOne. The troubles encountered will first be addressed and corrected. But whenever and whatever happens next, Monday was an event of inspiration for generations to come. Patty Gray Smith presented FAA Commercial Astronaut Wings to Mike Melville Monday morning. She then gave both Melville and Rutan, "who made it all happen," certificates "in recognition of this tremendous achievement." "I hope you display it prominently," she told Melville. "You bet on it!" he replied, "I don't suppose there are too many of these around." Not yet, anyway. Rutan, surprised to receive his own plaque of recognition, said under his breath, "I wasn't expecting that" and later leaned in to kiss Smith on the cheek. He then bowed into the press center microphones and stated clearly, "Now don't you ever say that Burt Rutan doesn't kiss up to the FAA." If somehow we've failed to impress upon you the purely positive nature and emotions generated by this historic flight, let us assure you, **there's** something you don't see every day.

