

Boeing Employees Model Rocket Club

Sanctioned Section of the National Association of Rocketry (N.A.R.) Number 627

Newsletter for November, 2004

Location: Kent Recreation Center
Time: 2nd Saturday of Every Month
at 10:00 a.m.
Website: www.bemrc.org

President: Bruce Johnson
Vice President: Dave Davis
Secretary / Treasurer: Bob Turner
Librarian: Mark Shelton

News items and editorial comment in this publication do not necessarily reflect the views and opinions of the Boeing Company



Burt Rutan /Scale Composites Win X-Prize

***** **BEMRC Launch Schedule** *****

November 13 th (Saturday)	Kent, WA - Winter Seminar Series Kick-Off
December 11 th (Saturday)	Kent, WA - W.S.S. First Build Session
January 8 th , 2005 (Saturday)	Kent, WA – W.S.S Second Build Session
February 12 th (Saturday)	Kent, WA – W.S.S. Third Build Session
March 12 th (Saturday)	Kent, WA – Fourth Build Session
April 9 th (Saturday)	Kent WA – Launch Session

***** **On The Cover** *****

SpaceShipOne and Mojave Aerospace Ventures, LLC. team reaches over 360,000 feet to win the \$10 million ANSARI X PRIZE on October 4th. The threshold of space is 328,000. Brian Binnie, who piloted the flight, was released from the mothership, White Knight, at 50,000 feet early this morning. Binnie continued into space breaking the August 22, 1963 record by Joseph A. Walker who flew the X-15 to an unofficial world altitude record of 354,200 feet.

The aviation pioneer Burt Rutan, who conceived SpaceShipOne and whose company Scaled Composites built the vehicle, said he was "so proud of my team".

The flight followed the pattern of previous SpaceShipOne missions. The rocket plane was first carried to a launch altitude of 50,000 feet by the White Knight aircraft. It was then released and its engine ignited to take it up through the Earth's atmosphere. Unlike the first X-Prize mission, however, SpaceShipOne did not experience a roll near the top of its flight.

Burt Rutan has already announced that his company will build five rocket planes like SpaceShipOne for British entrepreneur Sir Richard Branson. The founder of the Virgin Group of companies plans to offer flights into space for \$205,000.

***** **Quote(s) of the Month** *****

“That dude over there. He’s one funny dude.” - Brett Boone on Edgar Martinez

“You think this is cool?” Rutan asked, pointing to the freshly flown SpaceShipOne. “Wait 'til you see SpaceShipTwo ...

“According to my scuba instructor, if a shark attacks, you're supposed to poke it in the eye with your finger. After that, I suppose you should hit it in the face with a cream pie, or maybe hose it down with a seltzer bottle.” - Jerry L. Embry

***** **Mapping The Whetstone** *****
by: Dave Davis

Three years ago, Bob Pullman and I started a weather related sounding rocket research project called "Project Glenda". The purpose of Glenda was to deploy payloads into thunderstorms to determine precursor signals of tornados as a potential early warning system.

There are two payload systems that are used. The first is a programmable datalogger which collects temperature and humidity data every ½ second and stores it on board the capsule. The data is then downloaded to PC upon capsule recovery. The second payload uses converted Vaisala radiosondes which broadcast temperature, barometric pressure, and humidity data telemetry back to a ground station for recording and analysis. These radiosondes and multiplexed telemetry have been highlighted in previous editions of this newsletter.

On September 25th of this year, two Glenda flights were made over in Columbia County at the Blue Mountain Rocketeers (BMR) "Lone Tree" launch site. This site is also known as the Whetstone Site. The purpose of this pair of flights was to confirm the perceived presence of a thermal boundary layer that's over the site and its thickness. What this thermal layer does is grab a rocket into a thermal updraft and proceed to blow it across, then off of the launch site. The neighboring landowner is not very conducive to the hobby and keeping rockets off of his property is very important. Mapping this thermal layer would be a good test of the Glenda sensors and the BMR Board of Directors approved of the flights.

Both flights had great boosts and lofted the payloads through the thermal layer. However, we had two recovery type failures. Both were interesting and have been analyzed. The first was the Glenda 98m (4" red) booster. The bulkhead on the payload capsule separated at recovery deployment. I'll take the hit on this one. Cesaroni delays are much more accurate than Aerotech. I set the delay at 10 seconds, and it deployed at 10 seconds. The problem was, the flight sim'ed out at 8 seconds, which is a typical Aerotech "M" delay. All the parts were recovered and the beast will fly again. The Glenda 54mm (2.125 Grey) booster was flown on an H128-M motor. The payload capsule separated cleanly on its own recovery system, while the booster streamlined in under its "fail safe" mode of preserving the payload. The cause of the failure has been traced to a shift of the booster recovery system due to the increased acceleration of the "H" motor. This was the largest motor to date for this booster and we'll need another recovery system redesign.

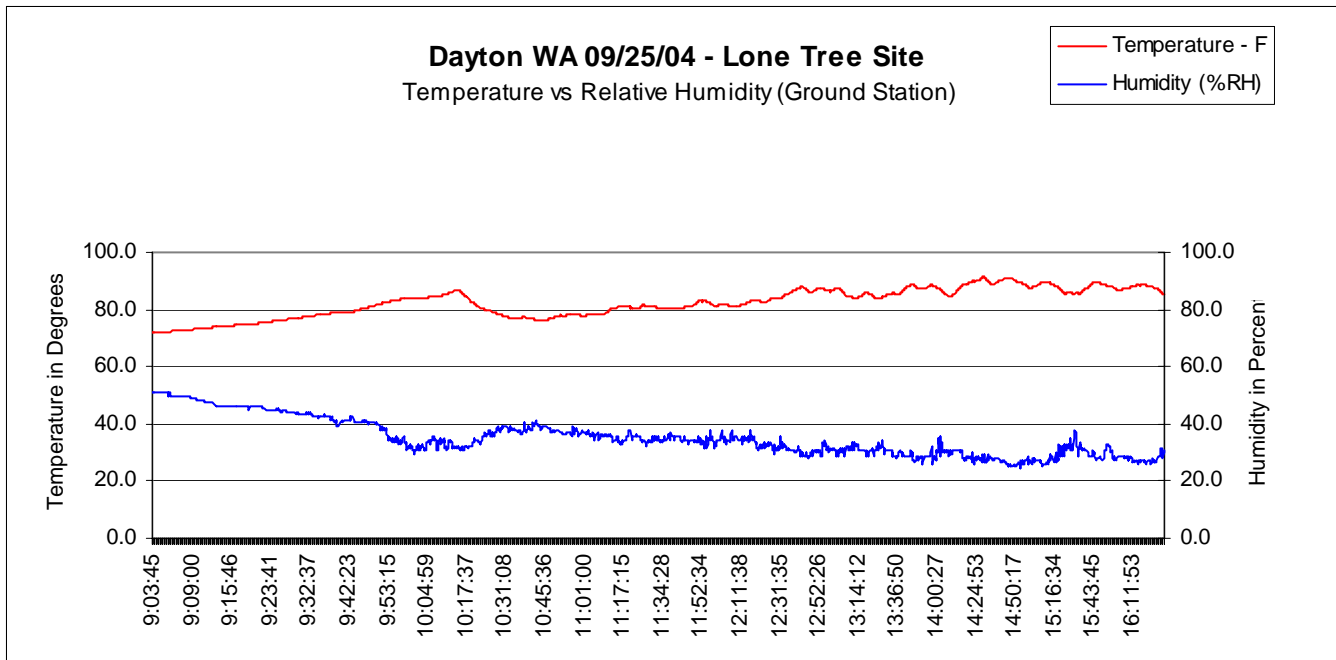
Now that the bad news is out of the way, here's the good news. We go solid recorded telemetry on the Glenda 98mm flight until the bulkhead separated cutting power to the payload. This was a major break though for Glenda. Solid broadcast telemetry during boost. While we lost the Glenda 54mm booster, the payload performed flawlessly and captured full data from liftoff to payload capsule touchdown. We got temperature and humidity data with data points every 1/2 second. The Glenda 98mm telemetry capture was temp, humidity, and barometric pressure every 1.5 seconds. For once, the payloads out performed the boosters.

The two flights collected some really great data at the launch. Even though the flights were not totally successful, they accomplished their mission of collecting the data. The purpose of the two flights was to confirm, or refute the existence of a thermal layer above the "Lone Tree" site. We found it and the results are astounding. The typical model of the atmosphere is that temperature and humidity decrease with altitude and the Whetstone site does not behave in a "normal" manner.

(continued on next page)

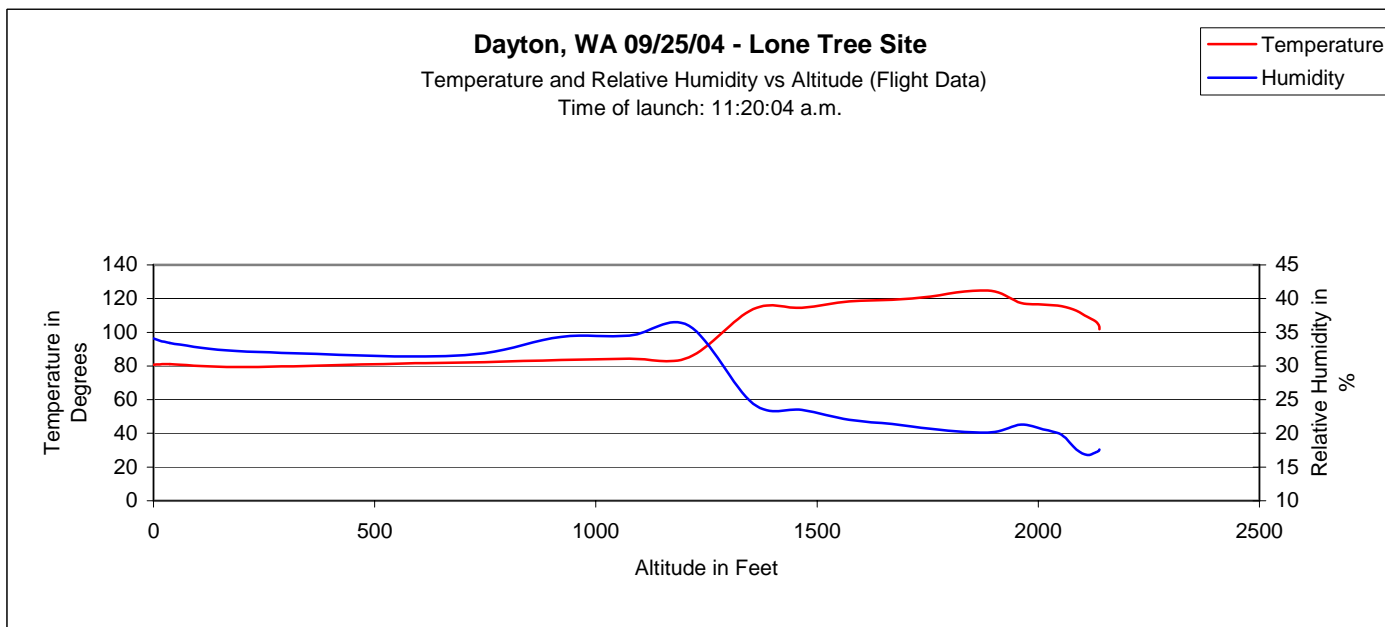
(Lone Tree Site continued)

To provide baseline site conditions, we took ground condition data to compare it with the flight condition mapping data. Here's a chart of the ground data:



At the time of the Glenda flights, the ground temperature was around 80 degrees, and a Relative Humidity around 37-38%. Under the standard atmospheric model, temperature goes down, as does humidity as you increase in altitude. At "Lone Tree", this was not the case.

Here's the flight data:



(continued on next page)

(Lone Tree Site continued)

Temperature and humidity stay relatively constant until you reach 1,300 - 1,400 feet. Then things get interesting. The temperature rises rapidly, and the humidity drops. The sensors detected a 500 foot layer of hot, dry air which topped over 124 degrees at 11:00 in the morning. That's a 40+ degree difference from ground conditions. As the sensors penetrated the layer, more "normal" readings were detected.

What this means flight wise is pretty straight forward. If you put a rocket into the layer, it's going to head for the road, and will probably land on the upset landowners property. We saw a great example of this with Tom Ledgerwoods IROC powered by a Three Grain CTI motor. This bird got caught in the layer, and headed straight for the road where Tom recovered it. The best solution to beat this drift is with x-form parachutes or similar design, or dual deployment in order to pass through the layer reducing exposure to the thermal updrafts and drift. The layer is there and the perception has been confirmed.

While the results of these two flights, are really cool, the impressive part of Glenda is the infrastructure that supports the flights. To make these flights successful, we had to build two ground stations, with one to collect the baseline site data and another to collect the flight data. Our goal was to run with off-the-shelf computing hardware and software with as few "custom" components as possible. The laptops were DX4 486 100Mhz and Pentium 75Mhz IBM Thinkpads running on 12 VDC portable power. The radiosondes were government surplus and the dataloggers were from commercial suppliers. The radiosonde signal decoder came from a commercial German supplier and the only "custom" components were the boosters themselves.

The other key attribute that made these flights successful was our continuous testing and development. We found out early on that the radiosonde payloads could take the "G" loads caused by the booster acceleration. During one testing session a couple of years ago, we ran people crazy when we played the payload telemetry over an external speaker system. We now listen via headphones and digitally record the flight data for later playback.

Glenda has several payloads under development that we've been testing. The location beacons have been the most interesting. We made a flight last year ago in Dayton with an acoustic "noisy" payload beacon. The recovery crew went out after the capsule and came back empty handed as it was making too much noise! That was one successful flight test. The "Fergiesonde" is named for Bobs' dog Fergie, who ran around the Whetstone site one launch with the location transponder in her collar. We knew that if the payload could survive the "Fergie" test, that it would survive flight. We have one recording payload on the drawing board, which will record the voltage potential inside of a cloud. We're finding that there are two types of tornados. Those driven by heat, and those driven by electricity.

Project Glenda will be back in Dayton for the March/April 2005 launch for another set of test flights. We'll be bringing a new datalogger booster, and a repaired 98mm radiosonde payload. We've made a lot of progress this year and next year looks even better. With each flight we make, the system becomes more and more stable and predictable. With this September pair of flights, all of the pieces came together from the ground stations, to the payloads.

The Blue Mountain Rocketeers have supported our Glenda work for the past three years and has put up with our recovery system failures and screechy telemetry transmissions. I would like to thank the following folks who got these two flights off the ground and brought back the pieces while I was tending the ground station telemetry recorders to capture the data: Tim Quigg, John Quigg, Dean Smith, Steven King, and John Clizer. We could not have done it without you. Thanks Blue Mountain Rocketeers. You're making the dream possible.

***** 2004 / 2005 Winter Seminar Series Returns *****

After the success of last years build class, BEMRC will be hosting another Winter Seminar Series this year. BEMRC has been hosting winter classes annually since the 80's, and we're continuing the tradition. The classes kick off on the second Saturday of November at the Kent Recreation complex (7-226 Building at 22649 84th Avenue South), starting at 10:00 am. in Meeting Room "C". Examples of the kits to be built in the classes will be shown with an overview of our hobby, the NAR and TRA safety codes and general news and information.

This years series of classes runs from November 2004 to March 2005. Here's the schedule and the types of kits to be built.

November 13th, 2004 Kick-Off

December 11th - First Build Session - Estes Alpha III (**Note Change**)

January 8th, 2005 - Second Build Session - Custom Rocket Company Grab Bag

February 12th - Third Build Session - Multi Stager

March 12th - Edmonds Boost Glider

The classes are open to all past and present Boeing employees, their families, and to the general public. Costs to Boeing employees, is \$10 which includes 2005 membership dues with BEMRC. The class cost to the general public is \$40, which covers the cost of class materials. Class materials include the kits, plus motors, ignitors, and recovery wadding. Weather permitting, BEMRC will host launches after each class at our launch site at the south east corner of the Kent Space Center.

To sign up for the classes, attend the Kick-Off in November, or contact any BEMRC BoD Member. Class size is limited to 12 builders and sign ups are on a first come basis. Precedence will be given to Boeing employees with any remaining openings available to the general public. Door prizes will be handed out during each class session.

Tools and building materials for the classes are often found around the house, or are available at any local hardware store, or hobby shop. The typical hobbyist uses a shoe box, or small fishing tackle box to store everything in.

Here's a good starting list:

- Five Minute Epoxy
- Testors Model car glue
- Ruler, or straight edge
- Pen, and Pencil
- Paper Towels
- Sandpaper (320, 400, and 600 grit wet/dry paper works best)
- Notepad
- Scissors
- ½" Masking Tape
- ¾" Masking Tape
- Transparent Tape
- Hobby Knife (X-Acto, or similar)
- Mixing cups for epoxy
- Stir Sticks for Epoxy
- Disposable brushes to apply epoxy
- Paper Clips

***** **BEMRC 2005 Elections** *****

It's election time. If you are interested in holding a Board of Directors position for 2005, contact Bruce Johnson, or any BoD member. There's no compensation, and it's a volunteer position. Open positions include President, Vice-President, Treasurer, and Librarian. We're also looking for a newsletter editor if anyone wants the gig. Elections will be held at the December meeting and will be posted in the January 2005 newsletter.

***** **BEMRC 2005 Dues** *****

BEMRC membership dues, are \$5 for 2005. If you're taking the build classes, your dues are included with the registration. Included with this months issue is a membership registration form. Just fill out the form, and send it off to Bob Turner. Make checks payable to BEMRC. The past couple of years, we haven't had a need to charge dues. However, activity is picking up and maintenance and repair costs on the GSE are increasing, as well as, costs of materials for holding the build classes. Please have your dues in by the end of January, as the membership list will be adjusted at that time to reflect paid memberships.

***** **NAR/TRA vs BATF Lawsuit Update** *****

Back in August, ATF released a Q&A page on their web site basically stating their position on how they were going to handle enforcement with the rocketry community. In September, ATF put the screws to a hobby shop in Illinois. One of the side benefits of the PAD exemption ruling was that the judge told TRA and NAR that if ATF started action again without following the rule making process to contact him and he'd call everyone back together. With this Illinois hobby shop incident, TRA/NAR joint counsel requested a hearing from the judge and was granted one, on October 15th. The hearing request and affidavit from the hobby shop owner are included with this newsletter. The hearing went down on the 15th and as of this writing, nothing has come down from it. Results of this hearing will be published in our next issue.

***** **BEMRC Web Site** *****

Mark Shelton was been working on getting the BEMRC web site operational and has made significant progress. It's got past newsletters and other interesting information. Check out <http://bemrc.org> and if you like what you see, give Mark a shout.

***** **2005 BEMRC Launch Schedule** *****

The 2005 launch schedule is under development and will be released in the next issue. We'll have three launch sites to support next year. So, it looks like the 2005 flying season is going to be a busy one. Everyone keep their eyes open for candidate launch sites due to the fluid launch site situation. Sites can vanish rapidly here on the west side. So keeping on the look out for new sites is always to our benefit.

Questions and Answers

Hobby Rocket Motors

8/09/04

ATF has received a number of questions about the applicability of Federal explosives law and regulations to hobby rocketry.

The following frequently-asked questions and answers are set forth to provide rocketry hobbyists with guidance to enable them to enjoy their hobby in compliance with the safety-and-security related requirements of the law and regulations.

ATF looks forward to continuing to work with the rocketry community to help ensure that hobbyists understand and are able to comply with all applicable requirements. Hobbyists who have additional questions should feel free to contact ATF's Explosives Industry Programs Branch at 202-927-2310.

1. Which rocket motors and reload kits are exempt from ATF regulation?

Fully-Assembled Motors

Any fully-assembled rocket motor containing more than 62.5 grams of propellant is subject to the permitting, storage and other requirements of Federal explosives law and regulations as set forth at 18 U.S.C. Chapter 40 and 27 C.F.R. Part 555. Any other fully-assembled rocket motor (*i.e.*, any fully-assembled motor containing up to 62.5 grams of propellant) is exempt from regulation pursuant to longstanding ATF policy. Pending rulemaking, certain fully-assembled motors containing 62.5 grams of propellant or less are also considered to be exempt as propellant actuated devices.

Reload Kits and Propellant Modules

Any reload kit or propellant modules that can be used in the assembly of a rocket motor containing a total of more than 62.5 grams of propellant (even if the individual propellant modules each contain 62.5 grams of propellant or less) are subject to the permitting, storage and other requirements of Federal explosives law and regulations. All other reload kits and propellant modules (*i.e.* reload kits and propellant modules that can be used only in the assembly of rocket motors that contain a total of no more than 62.5 grams of propellant per assembled motor) are exempt from regulation pursuant to longstanding ATF policy. Pending rulemaking, certain reload kits and propellant modules that can be used only in the assembly of rocket motors that contain no more than 62.5 grams of propellant per assembled motor are also considered to be exempt as propellant actuated devices.

2. Is a person who manufactures propellant or electric igniters for his own use required to obtain an ATF permit or license?

Questions and Answers Hobby Rocket Motors

No, a license or permit is not required to manufacture explosive materials (including propellant, igniters, etc.) for one's own use. A person manufacturing for his/her own use is, however, required to store non-exempt explosive materials in an approved storage magazine. Additionally, a permit is required if a person wishes to transport non-exempt explosive materials, and a license is required if a person wishes to engage in the business of selling explosive materials that he/she manufactures.

3. I would like to manufacture and distribute single use rocket motors and/or propellant reload kits. What ATF license is required?

Only a manufacturer's license is required. Licensed manufacturers may engage in the business of manufacturing explosive materials for purposes of sale or distribution or for their own use. It is not necessary for a licensed manufacturer to also obtain a dealer's license to engage in business on his or her licensed premises as a dealer in explosive materials. *See 27 CFR § 555.41(b)(3).*

4. How are rocket motor igniters classified?

Igniters are classified as explosives. Federal explosives law defines the term "explosives" as follows: "any chemical compound mixture, or device, the primary or common purpose of which is to function by explosion; the term includes, but is not limited to, dynamite and other high explosives, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs detonating cord, igniter cord, and igniters." *See 18 U.S.C. § 841(d).*

5. Must ammonium perchlorate composite propellant (APCP) be stored in a magazine?

Yes; however, single use rocket motors containing no more than 62.5-grams of APCP and/or rocket motor reload kits and propellant modules that cannot be used in the assembly of a rocket motor containing more than 62.5-grams of APCP 62.5 grams, do not require storage.

Accordingly, the following items must be stored in accordance with the requirements of the Federal explosives regulations:

Single use rocket motors containing more than 62.5 grams of APCP or other explosive material (not including pyrotechnic delay or ejection charges)

Reload kits and propellant modules that can be used to assemble a rocket motor containing more than 62.5 grams of APCP or other explosive material.

6. When attending a rocket launch overnight, how should one store one's non-exempt rocket motors, reload kits, and propellant modules?

Questions and Answers Hobby Rocket Motors

In accordance with the requirements of Subpart K of the Federal explosives regulations found at 27 C.F.R. Part 555.

7. *May a rocket motor dealer engage in the business of selling non-exempt rocket motors or non-exempt reload kits/propellant modules away from his/her licensed premises (e.g. at a launch site).*

No; however, delivery may be made at launch sites if the transaction/sale has occurred previously at the licensed premises.

8. *Are motors containing ammonium-nitrate explosive mixtures and/or potassium-nitrate explosive mixtures considered explosives?*

Yes.

9. *What type of magazine would I use to store my non-exempt rocket motors or other explosive materials?*

All persons who store explosives must store them in conformity with the provisions of Subpart K of the regulations. APCP rocket motors are, by way of example, considered to be low explosives. At a minimum, therefore, they must be stored in type 4 storage magazines.

10. *My rocket motors are being stored in a type-4 magazine with two flush mount locks on the lid with a lever mechanism that rests under a small piece of metal on the edge of the magazine wall (typically 18-gauge sheet metal), to secure the lid. Is this acceptable?*

No, the flush mount locks fail to meet the locking requirements set forth in 27 CFR § 555.210.

ATF has examined the flush-mounted bolt style locks, which secure the magazine by means of a bolt-type mechanism. The cylinder portion of the lock mounts in the lid of the magazine in such a manner that, when the key is turned, the bolt slides toward the outer wall of the magazine. This bolt engages in a slotted locking block attached securely to the inside of the magazine wall. Because this locking mechanism relies upon interlocking solid metal parts, operating in a fashion similar to a deadbolt lock, it provides a level of theft resistance that is substantially equivalent to that required by the regulations.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

TRIPOLI ROCKETRY ASSOC., INC.,)	
)	
and)	
)	
NATIONAL ASSOCIATION OF ROCKETRY,)	
)	
Plaintiffs,)	Case No. 00cv0273(RBW)
)	
v.)	
)	
UNITED STATES BUREAU OF ALCOHOL,)	
TOBACCO AND FIREARMS,)	
)	
Defendant.)	

URGENT MOTION FOR EARLY STATUS CONFERENCE

The Court has set a status conference in the captioned matter for December 17, 2004. For the reasons given below, plaintiffs Tripoli Rocketry Association, Inc. (“Tripoli”) and National Association of Rocketry (“NAR”) respectfully and urgently ask for an earlier status conference, to be held as soon as practicable for the Court.

1. This case is a dispute over the lawfulness of defendant United States Bureau of Alcohol, Tobacco, Firearms, and Explosives’ (“ATF’s”) licensing and regulation of the model rocket hobby, specifically, hobbyists’ use of model rocket motors containing ammonium perchlorate composite propellant (“APCP”). In its March 19, 2004 Order and Memorandum Opinion, the Court ruled on the parties’ cross motions for summary judgment. Among other things, the Court: (1) granted Plaintiffs’ motion challenging the procedural invalidity of ATF’s December 22, 2000 rule effectively revoking (without the

required opportunity for public comment) its earlier April 20, 1994 rule that had determined that sport rocket motors with APCP are license-exempt propellant actuated devices (“PADs”); and (2) deferred any ruling on Plaintiffs’ counts four and five, which sought invalidation of ATF’s new 62.5-gram propellant-mass threshold for licensing and regulating APCP hobby rocket motors, pending completion of notice and comment rulemaking on the 62.5-gram issue promised by ATF. In particular, the Court held that “the variance between the pronouncements in the ATF’s April 20, 1994 and December 22, 2000 letters, with respect to the applicability of the PAD exemption to sport model rockets, squarely fits into the scenario discussed by the District of Columbia Circuit in [*Alaska Professional Hunters v. FAA*, 177 F.3d 1030 (D.C. Cir. 1999)],” Memorandum Opinion at p. 20, and therefore ATF’s “December 22, 2000 pronouncement regarding the applicability of the PAD exemption to sport rocket motors was not in compliance with the OCCA [Organized Crime Act of 1970] or the APA [Administrative Procedure Act].” *Id.* The Court held in conclusion that “**the ATF’s pronouncement that sport rocket motors are not PADs is invalid...**” Memorandum Opinion at p. 22 (emphasis added).

2. As the Court’s March 19, 2004 Memorandum Opinion also noted, the Court had held previously in this case that ATF’s imposition of a 62.5-gram weight limit on APCP rocket motors was likewise the result of **invalid rulemaking**. Memorandum Opinion at p. 21. The Court deferred ruling on Plaintiff’s substantive challenge to this 62.5-gram limit until the limit itself had been set by ATF through proper rulemaking, which “will necessarily take several months.” Memorandum Opinion at p. 22. Reading the Court’s two opinions together, Plaintiffs believe that, at least pending the completion of the ATF’s rulemaking (which Plaintiffs are sure to challenge on the merits), the PAD

exemption applies to single-use APCP motors regardless of any 62.5-gram threshold. Indeed, there is apparently no other way to read the Court's two opinions in concert. ATF violated the law when it established the critical elements of its licensing and regulation scheme for sport rocket motors. And no new ATF rule has yet been issued to cure the defective procedures.

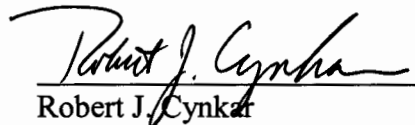
3. However, ATF's apparent aversion to (or difficulty with) efficient rulemaking and public participation has recently led it to attempt an end-run around the law and this Court's opinions and orders. Rather than expediting its promised rule, ATF issued unilaterally and commenced enforcement of a regulatory pronouncement on its web site (www.atf.gov/explarson/0504rocketryqa.pdf) to the same purported effect as the now-discredited two letters. A copy of the pronouncement is attached as Exhibit A. The pronouncement is entitled "Questions and Answers Hobby Rocket Motors" ("Web Announcement"). It states that "[a]ny fully assembled rocket motor containing more than 62.5 grams of propellant" and "[a]ny reload kit or propellant modules that can be used in the assembly of a rocket motor containing a total of more than 62.5 grams of propellant (even if the individual propellant modules each contain 62.5 grams of propellant or less)" are "subject to the permitting, storage, and other requirements of Federal explosives law and regulations." Web Announcement at Question 1.

5. Far from being the type of document designed to assist rocketeers, this document is now being used in the field by ATF inspectors to impose draconian new restrictions on motor dealers and to take enforcement action against them. *See* Affidavit of Kenneth Herrick, attached as Exhibit B. In short, whether by design or inadvertence, ATF's new and unlawfully promulgated requirements are now threatening to undermine

or even wipe out the sport rocket hobby. *Id.*

6. Plaintiffs' members are now asking how their apparently successful efforts to force ATF to comply with established regulatory procedures has had any effect, and how long they must endure ATF's unlawful application of new requirements. An early status conference will, among other things, enable the Court to take account of the ATF's recent actions described above, clarify the effect of the Court's previous two rulings as they apply in concert, provide the Court with an update of ATF's plans and schedules for rulemaking, and possibly set the stage for requests for additional relief.

Respectfully submitted,



Robert J. Cynkar
Joseph R. Egan
Martin G. Malsch
EGAN, FITZPATRICK, MALSCH
& CYNKAR, PLLC
7918 Jones Branch Drive, Suite 600
McLean, VA 22102
(703) 918-4942
(703) 918-4943 (FAX)
eganpc@aol.com

Attorneys for Plaintiffs

Dated: September 30, 2004

Copies to:

Jane Lyons, Esquire
Assistant United States Attorney
555 Fourth Street, N.W.
Washington, D.C. 20001

State of Illinois)
) ss.
County of *DaPage*)

AFFIDAVIT OF KENNETH HERRICK

Kenneth Herrick, being duly sworn, deposes and says as follows:

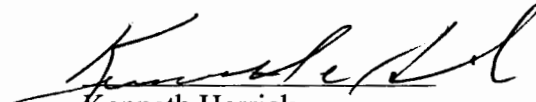
1. My name is Kenneth Herrick. I reside at 3131 Haber, Melrose Park, Illinois, 60164. I am the Rocketry Product Line Manager for Al's Hobby Shop, P.O. Box 449, 121 Addison Avenue, Elmhurst Illinois, 60126.
2. All's Hobby Shop is a family owned business. It has been in operation for over fifty years and has sold model rocketry products for about forty years. It is one of the largest hobby shops in the country.
3. Without any prior notice, a Bureau of Alcohol, Tobacco, Firearms, and Explosives ("ATF") inspector entered and inspected the premises of Al's Hobby shop on September 2, 2004. One or more ATF inspectors also inspected the premises on September 8, 9, and 13, 2004. These inspections were all for the stated purpose of gathering information in connection the Shop's application for renewal of its low explosives dealer permit ("LEDP"). I was present during almost all of the inspections, which consumed a total of over ten hours. There were also telephone calls from ATF on September 2 and 3, 2004.
4. ATF told me during the inspections that the rules it is following are set forth in a set of FAQs published in the ATF website on August 9, 2004. According to these rules, and what the ATF inspector said, fully assembled model rocket motors (such as the single-use Ellis Mountain motors we carry and sell) are subject to

use, and record the name of the driver that picked up any boxes for shipment and the driver's employer. These are all brand new requirements. I was also informed that the locks on the doors of the store premises were insufficient, although these are the same locks that have been in place during previous ATF inspections (and there is an electronic burglar system in place). Additionally, the acceptability of the locker we have been using for over six years to store the rocket motors was now questioned, and we are awaiting a final determination on that issue.

5. After being informed on September 8, 2004 that the Ellis Mountain single use motors now had to be stored in a special locker designed for explosives storage, I put these motors in the locker only to be informed the next day by ATF that the locker was now overweight because of the new motors stored there.
6. ATF has not yet determined if a renewal of our LEDP will be granted, and if they will levy any fines for infractions they maintain may have occurred based upon the inspection criteria discussed above.
7. After the inspections, I discussed the matter with management of the Shop and it was decided that serious consideration needed to be given to discontinuing sales


of model rocket motors because the profit margins do not justify the time and effort required to respond to the ATF.

Further affiant sayeth not

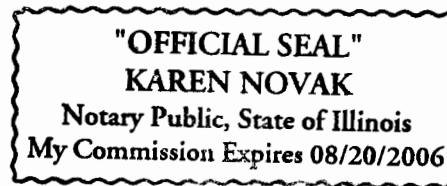


Kenneth Herrick

Subscribed and sworn to before me this
29th day of SEPTEMBER, 2004



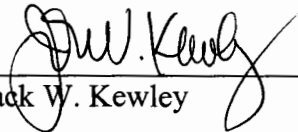
Notary Public for the County of DEPAGE
My commission expires on 08/20/2006



CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of Plaintiff's Urgent Motion for Early Status Conference and attached Affidavit of Kenneth Herrick was caused to be served on the following attorney of record for Defendant by placing a copy of the same in an envelope and mailing that envelope via first class mail on this 30th day of September 2004:

Jane Lyons, Esquire
Assistant United States Attorney
555 Fourth Street, N.W.
Washington, D.C. 20001



Jack W. Kewley

2005 Boeing Employees Model Rocket Club (B.E.M.R.C.) Membership Form

Date _____

Last Name _____ First Name _____ M.I. _____

Boeing Mail Stop/Mail Code _____

Boeing Phone Number () _____

Optional:

Home Address _____

City _____ Zip Code _____

Home Telephone Number () _____

Names of Family Members likely to participate in club activities:

Spouse _____

Children _____

Membership dues are \$5.00 per year per family. Completed forms and checks can be sent to Bob Turner, M/S 8J-49. Checks are payable to BEMRC.

This page is intentionally left blank.