

November 15, 2009
Volume 2, Issue 6

MTMA FLYER



Official Newsletter of the Mantua Township Missile Agency, NAR Section 606, Aurora, Ohio

Fall Regional Meet
2009 Coverage

Report on New
High Power Field

The End of Electric
Matches?

2009-2010 Launch
Calendar

Back to the
Moon



From Your Sometimes Senile Editor

By Mike Nowak

Since this newsletter changed format in July, the cover has featured a color photograph of a dramatic model rocket launch. Because of the significance of what happened on October 28, 2009, I decided to break with tradition. The successful flight of the Ares 1-X was a first step to get us back on the moon and deserved to be on the cover.

Nearly everyone who has flown a model rocket must have seen the movie "October Sky." It captures the beginning of the space race mania that caught the interest of many young people. It led to many seeking careers in science and engineering and jumpstarted our hobby. By the time that we landed on the moon, model rocketry was gaining in popularity. By the time we left the moon, interest began to wane. While the Space Shuttle has been a part of our culture for nearly 30 years, it did not have as much of an effect.

The big question is whether or not Americans will become excited again about the possibilities of space travel, of going to the moon and Mars. Much is different now about our culture, so it will be interesting to see. Another question is whether our hobby will benefit as a result of all of this activity. It all remains to be seen. Things were different during the last space race. There are many more rules and regulations that restrict us. I remember flying my first rockets at a Cuyahoga County Metropark ball field in the late 1960's. Today, if I tried to do that with my children, I would be arrested. Most public parks feel that our hobby and many others such as model aircraft are nuisances, causing excessive noise and damaging the environment, as well as being potentially dangerous. This reinforces the forward thinking of the Aurora Parks Department, which supports our use of the Ray Harmon Flying Field. The short sightedness of others stunts the growth of the next generation of aerospace engineers.

Regardless of what the future holds, it will be exciting to watch our exploration of space continue. Hopefully our American spirit of adventure will grow as a result.

Cover Photo: *NASA's Ares I-X test rocket soars into blue skies above Launch Pad 39B at NASA's Kennedy Space Center in Florida on Oct. 28, 2009. Image credit: NASA/Sandra Joseph and Kevin O'Connell*

MTMA Fall Regional Meet

By Mike Nowak

After the successful hosting of three open meets and one regional meet this spring, MTMA was anxious to host another regional meet this fall. All was good to go for September 19. It looked like we were going to get competitors from across the state as well as two adjacent states. Unfortunately, the weather did not cooperate, and the weekend was a washout. The meet was rescheduled for October 10, then at the last minute it needed to be rescheduled to Sunday, October 11, again due to foul flying conditions. Attendance was low, just barely enough to qualify as a regional meet. But those that did attend had a great time. It became a classic shoot out between MTMA and the Skybusters.

A Streamer Duration saw most competitors flying conservative due to the low ceiling and modest winds. There were no thermals to catch as well. The longest flight of the day was in C Division, Ted Schaetzle's 24 seconds. Unfortunately, he ejected the motor on his second flight and as a result placed third. Cheryl Cziryak-Hamer had a combined score of 39 seconds for first place, with James Kral close behind at 31 seconds. B Division was won by Hannah Cziryak with a 20 second flight. Brian Recktenwald placed second with 9 seconds.

D Dual Eggloft Duration returned, along with its level of carnage. Only four competitors managed qualified flights. After breaking an egg on the first flight, he managed a duration of 51 seconds on his second flight, with an intact egg. Cheryl Cziryak-Hamer placed second with 32 seconds, with her daughter Hannah right behind with 19 seconds. The only other qualified flight was Mark Recktenwald's 11 seconds. Most fliers were plagued with incomplete parachute deployment with the cold temperatures and high humidity.



Mike Nowak's miniscule Delta II ready to be launched



Ted Schaeztle's Unique Open Spot Landing Model with its triangular shipping carton airframe

Division was a close battle of siblings, with Hannah Cziryak's 16.15 m distance edging out her brother Andrew's 18.7m. Jim Kral led all competitors with 13.74m. Cheryl Cziryak-Hamer tried to recapture the magic of her "nearly on the pin" flight from early spring, but ended up 100m away from the target.

Sport Scale brought out some amazing models. The top three models were NARAM-esq in their quality. Lee Hamer placed third with 635 points with his beautifully done RP-3, which suffered minor damage in flight. Just ahead of him with 645 points was Mike Nowak, flying his NARAM 51 Peanut Scale entry, Delta II. It flew arrow straight without fins, and recovered with minimal damage. By far, the best model of the meet was Mark Recktenwald's AIM-54C, which placed first with 687 points, making a perfect flight. While the model was based upon the Estes Kit, Mark added custom details and paint pattern, as well as custom made waterslide decals. Very impressive indeed.

At the end of the day, the ladies' ruled the day, with Hanna Cziryak winning B Division with 1374 points and Cheryl Cziryak-Hamer winning C Division with 1428 points. Ted Schaeztle did well with 1098 points, as well as

1/8 Helicopter Duration saw an array of Tiddly Winks and Micromax Texas Twister models. Due to the windy conditions, there was little difference in performance between the two prototypes. Hannah Cziryak and her mother Cheryl tied for first place when their Tiddly Winks each flew for 8 seconds. Hannah's second flight was DQ'd when it ejected its motor. Cheryl's model did not fly a second time. The remaining flights were just barely qualified, with 2-3 second durations.

The MTMA favorite event, Open Spot Landing did not have any impulse restrictions. B



Mark Recktenwald's show stopping AIM-54C, which featured custom made decals to match the prototype

Mark Recktenwald with 1086 points. MTMA bareld edged out the Skybusters 3414-3162. This marked the first meet of the new contest year, and the last meet of the calendar year.

A Streamer Duration

B Division

| | | | |
|----------------------|----|-----|----|
| 1 Cziryak, Hannah | 20 | SEP | 20 |
| 2 Recktenwald, Brian | 9 | | 9 |

C Division

| | | | |
|-------------------------|-----|----|----|
| 1 Cziryak-Hamer, Cheryl | 17 | 22 | 39 |
| 2 Kral, James | 16 | 15 | 31 |
| 3 Schaetzle, Ted | 24 | EJ | 24 |
| 4 Hamer, Lee | SEP | 21 | 21 |
| 5 Recktenwald, Mark | 10 | | 10 |
| 6 Recktenwald, Adam | 8 | | 8 |

D Dual Egg Lofting Duration

B/C Division

| | | | |
|-------------------------|-----|----|----|
| 1 Schaetzle, Ted | Egg | 51 | 51 |
| 2 Cziryak-Hamer, Cheryl | | | 32 |
| 3 Cziryak, Hannah | | | 19 |
| 4 Recktenwald, Mark | | | 11 |

Sport Scale

B/C Division

| | | | | |
|-------------------------|---------------|-----|-----|-----|
| 1 Recktenwald, Mark | AIM-54C | 587 | 100 | 687 |
| 2 Nowak, Michael | DELTA II 7920 | 550 | 95 | 645 |
| 3 Hamer, Lee | RP-3 | 550 | 85 | 635 |
| 4 Schaetzle, Ted | Bomarc | 422 | 90 | 512 |
| 5 Kral, James | Korolev R-2 | 425 | 65 | 490 |
| 6 Cziryak-Hamer, Cheryl | Sonda IIB | 385 | 90 | 475 |
| 7 Cziryak, Hannah | Thunderbird | 367 | 95 | 462 |

MTMA Fall Meet Meet Champions

B Division

| | |
|----------------------|------|
| 1 Cziryak, Hannah | 1374 |
| 2 Recktenwald, Brian | 144 |
| 3 Cziryak, Andrew | 72 |

Sections

| | | |
|---------------|-----|------|
| 1 MTMA | 606 | 3414 |
| 2 Sky Busters | 535 | 3162 |

1/8A Helicopter Duration

B/C Division

| | | | |
|-------------------------|-----|----|---|
| 1 Cziryak, Hannah | 8 | EJ | 8 |
| 1 Cziryak-Hamer, Cheryl | 8 | | 8 |
| 2 Kral, James 85566 | 3 | 3 | 6 |
| 3 Recktenwald, Mark | ROT | 2 | 2 |

Open Spot Landing

B Division

| | |
|-------------------|-------|
| 1 Cziryak, Hannah | 16.15 |
| 2 Cziryak, Andrew | 18.7 |

C Division

| | |
|--------------------------|-------|
| 1 Kral, James | 13.74 |
| 2 Schaetzle, Ted | 24.12 |
| 3 Recktenwald, Mark | 29.16 |
| -- Cziryak-Hamer, Cheryl | 100.0 |

C Division

| | |
|-------------------------|------|
| 1 Cziryak-Hamer, Cheryl | 1428 |
| 2 Schaetzle, Ted | 1098 |
| 3 Recktenwald, Mark | 1086 |
| 4 Kral, James | 702 |
| 5 Nowak, Michael | 360 |
| 6 Hamer, Lee | 288 |
| 7 Recktenwald, Adam | 24 |

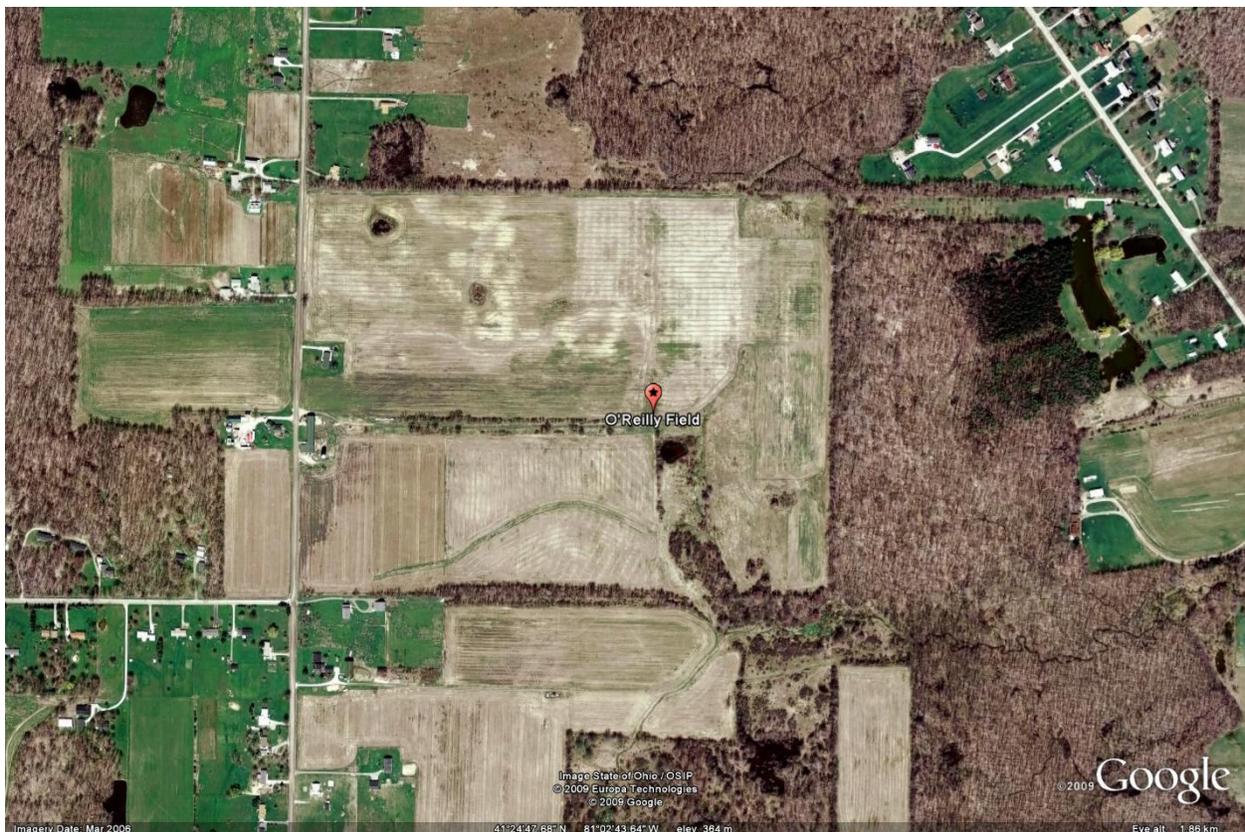
New High Power Field

By Mark Recktenwald

Great news!

MTMA has a new High Power rocket launching field!

Andrew Kleinhenz found us a wonderful farm field launch site. The O'Reilly Field launch site is located in Middlefield (Parkman Township), Geauga County, Ohio, at 16735–16766 Hosmer Road (41°24'48"N, 81°02'42"W), on the east side of Hosmer Road north of its intersection with Farley Road.



Google Maps view of the O'Reilly Launch Site. The red marker shows the likely location of the launcher. The drive leading to it comes off Hosmer Road, just north of the barn. For additional views, visit www.mtmarocketry.org

The Federal Aviation Administration (FAA) has issued a waiver of sections 101.25(e) and 101.25(f) of Federal Aviation Regulations Part 101 ([FAR 101](#)) for all launches at the O'Reilly Field from November 2009 through June 2010. In accordance with this waiver, the maximum ceiling imposed for all Class 2-High-Power Rockets is 3,700 feet AGL at this site. All rockets to be launched are subject to approval by the Range Safety Officer (RSO) and the Launch Control Officer (LCO). For rockets weighing more than 16 ounces, the RSO will consult the "Waiver Table" from Rocketry Online's Info-Central (<http://www.info-central.org/?article=114>). **If the predicted maximum altitude of any rocket / motor combination exceeds 3,200 feet in that table, a flight simulation shall be required.** Flight simulations may be prepared using [RockSim](#), [wRASP](#), [wRASP32](#), or [ALTMARK - Model Rocket Altitude Predictor](#) with an initial Cd of 0.35. A higher Cd will only be accepted if previously verified by altimeter-equipped flights. **Rocket launches at this field will only be held on dates that MTMA will have the owner's permission in advance.** We are currently planning to hold the Annual Turkey Shoot at this field. Pending the results of membership polls, we will likely be using the field through the winter, until it is time to plant crops, at which time we will return to the Aurora field. Please remember to check the MTMA website or Yahoo group for last minute changes, as always.

Look mom! NO e-matches!

By Andrew Kleinhenz

This is for all who do, or who are thinking of, dual deploy.

I wrote Tim at Apogee Components and asked if the Perfect Flight dual deploy altimeter would indeed fire a new QUEST two lead igniter. He said "Yes" So I got to thinking.....

After I designed my own ejection charge using said (Quest) igniter I went off to the local gun shop to get black powder....I could not buy black powder because this particular shop could not carry it. What I got instead was: HODGDON Triple Seven FFFG. This is NOT...NOT...Pyrodex. (many Thanks to some quick information given by Mark over the phone which convinced me to give it a try).

So now my one ground test became two tests.



Note Andrew's ejection charge at the top. It is created from a section of 1/2" launch lug with a Quest igniter and filled with HODGON Triple Seven FFFG

Using HODGDON Triple Seven I made 2 ejection charges and did a complete mock-up for main deploy. I used about the same amount of this Triple Seven as given in a typical high power RMS. I fired the charges directly from a 9v battery, as I was first testing the igniter/powder combination.

Results:

- 1) 9V battery fires quest igniter...YES (we know that, but just to make sure)
- 2) Standard home made ejection charge using a QUEST igniter and Triple Seven black powder substitute...fired with 9V.....YES and PERFECT ejection. By the way, this was on a 4 inch rocket. The main cone was held on with friction fit on the snug side.
- 3) The Triple Seven (black powder substitute) is soap and water cleanup.
- 4) I DID power up my Missile Works Altimeter With the Quest Igniters to see if the continuity check (on power up) would fire the igniters. I did not have any problems and the altimeter did show continuity on both drogue and main.
- 5) I also found out with this test that sealing the electronics bay is most important!! I am glad I did not have the altimeter in the bay during the charge tests. On the first try I had some leaks that were corrected for the second test.

On November 8, I flew my dual deploy multiple times and the system worked flawlessly. I think, so far, we have a good substitute for black powder and e-matches, one that is easier to find and less expensive.

2009-2010 Launch Windows

| | | |
|-------------|------------------------|-----------------------|
| November 27 | Annual Turkey Shoot | O'Reilly Flying Field |
| December ? | Annual Christmas Party | Kleinhenz Home |
| December 12 | Launch | Harmon Flying Field |

Please check www.mtmarocketry.org for updates on launches and events in December, January and February

2010 Events

| | | |
|----------------|--------------------------|---------------------|
| January 9 | Section Annual Meeting | Twinsburg Library |
| March 12-14 | NARCON | Worcester, MA |
| May 1-2 | GLRMR-X | Amherst, OH |
| May 28-31 | National Sport Launch | Alamogordo, NM |
| June 10-15 | LDRS-29 | Lucerne Valley, CA |
| June 12-13 | Ray Harmon Memorial Meet | Harmon Flying Field |
| July 31- Aug 6 | NARAM-52 | Pueblo, CO |

"To get the most up to date launch information (including rainout dates), check our website www.mtmarocketry.org or subscribe to our Yahoo Group <http://groups.yahoo.com/group/MTMA/> and receive instant email updates."

MTMA Flyer

The official newsletter of the Mantua Township Missile Agency, published eight times each year (we hope!)

MTMA Officers for 2009:

President: Bruce Levison
teflonrocketry1@yahoo.com

V.P./Advisor: Mark Recktenwald
markrecktenwald@yahoo.com

Treasurer: Daniel Cutlip
danielcutlip@yahoo.com

Secretary/Newsletter Editor: Mike Nowak
MikeMNowak@gmail.com

MTMA Flyer
Mike Nowak
2349 Coventry Road
Cleveland Heights, OH 44118

