

April 2018

WHAT'S UP



Newsletter of the Syracuse Rocket Club / NAR section 566 / TRA Prefecture 53
Volume 13 Number 2

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2018 events

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The dates for club meetings (for the remainder of 2018) are: April 2, May 7, June 4, July 2, August 6, September 10, October 1, November 5, and December 10. (First Monday of each month, except September because of Labor Day and December because of a conflict on the first Monday.)

The dates for club launches are: May 19, June 16, July 21, August 18, September 22, and October 20. (Third Saturday of each month, except September to avoid a conflict with MARS.)

Also tentatively scheduled is a work day at the launch field on April 14.

See last page or our website (<http://syracuserocketclub.org>) for details and last minute changes.

MARS club launches (Geneseo, NY)

April 21–22	August 18–19
May 26–28 (National Sport Launch)	September 15–16
June 9–10	October 13–14
July 28–29	November TBD

URRG club launches (Potter, NY)

April 28–29	August 25–26
May 19–20	September 29–30
June 22–24 (Upstate Research Rocketry Festival)	October 20–21
July 28–29	November 17–18

NAR

NSL May 26–28 (Geneseo, NY)
Rocketry Festival/NARAM August 4–10 (Pueblo, CO)

TRA

LDRS May 16–20 (Riverdale, CA)
BALLS September 21–23 (Black Rock, NV)

MDRA

Red Glare April 13–15 (Price, MD)

See respective organization's/event's details and websites for last minute changes.

Meetings

January 8

Scott Sellers brought his assembled Semroc Sprite, and an unassembled Fliskits Tumbleweed.

We spent some time discussing various options for clear coats.

Scott reported the city school district has a TARC team getting ready to fly.

Dennis Friend donated a new plastic container for club equipment.

We'll be applying for an NAR grant to buy welding blankets.

There was discussion of the April work party.

February 5

Treasury has \$673.83 plus some dues collected recently.

There now is a page on the website for club launch statistics, with numbers for 2016 and 2017. Belated awards for both years were bestowed. (See page 4.)

There was discussion of rules for launch stats in 2018. Do we count catos? Recovery failures? It's complicated; should someone who ends up with a pack of defective E motors be penalized? If a chute fails to deploy but the rocket tumbles and lands intact should it count? What if the rocket drifts away and can't be found? No final decisions made but in the end we seemed to lean toward not counting (or counting separately) unsuccessful flights such as catos and lawn darts.

NAR is soliciting interest in a nationwide celebration on July 20, 2019 of the 50th anniversary of the Apollo 11 moon landing with clubs flying Saturn V models and so forth. We will respond with interest in participating. (See page 6.)

The March meeting will be a giveaway rockets building session.

We'll have a work day at Weigand's Field on April 14, pending approval from Milt Weigand.

Scott Sellers brought sheets of SRC stickers to be applied to rocket kits at Walt's. They have indicated approval but we need to finalize.

There was a review and re-confirmation of our goals for 2018.

First school launch date has been set, June 15 at Willow Field.

Tripoli needs to know (not immediately) which of our club launches will be Tripoli launches. We need to review the EX rules before deciding.

Brian reports possibility of buying some vinyl decals of our club logo and there seemed to be interest in a dozen or so. He is also exploring a bulk buy of snap swivels.

We talked about publicity efforts including flyers specific to each club launch to be posted, notices in Facebook community groups, and broadcast or online community calendars.

We had show and tell on our Sprite projects, with Brian's Circulus 3, Dennis's BT-60 scratch upscale, Rich and Scott's Semroc Sprites, and Rich's (parts for) BT-80 scratch upscale.

March 5

The March meeting was a giveaway rockets building session. The only business was a decision to hold the July launch on the third Saturday, as usual; we'd initially moved it to another weekend to avoid a conflict with another club, but that turned out not to be necessary.

2016 and 2017 awards

Most flights in 2016:

Dennis Friend	63
Dave Grimes	42
Tim Catterson, Roger Forell,	
Kevin Gonci (tie)	25

Most motors in 2016:

Dennis Friend	90
Dave Grimes	44
Roger Forell	27

Most total impulse in 2016:

Mark Riffle	4232.4 N-sec
Roger Forell	2418.0
Dave Grimes	2241.5

Most flights in 2017:

Dennis Friend	51
Scott Renshaw	35
Dave Grimes	25

Most motors in 2017:

Dennis Friend	67
Scott Renshaw	39
Dave Grimes	26

Most total impulse in 2017

Mark Riffle	4578.4 N-sec
Paul Gagnon	1939.6
Roger Forell	1518.5
Scott Renshaw	1516.8

Note that Scott missed third place in 2017 total impulse by only 1.7 N-s, or less than one A motor! James Shattell would have won with 9608 N-s if the M6000 motor on his only 2017 club flight had not catoed.

2016 and 2017 club statistics

2016 total flights: 444
 2016 total motors: 494
 2016 total impulse: 21,492.2 N-sec

2016 motor breakdown: 19 1/2-A, 80 A, 119 B, 87 C, 47 D, 28 E, 35 F, 59 G, 10 H, 4 I, 5 J, 1 K

2017 total flights: 364
 2017 total motors: 400
 2017 total impulse: 30,045.3 N-sec

2017 motor breakdown: 1 MMX, 2 1/4-A, 18 1/2-A, 46 A, 68 B, 77 C, 44 D, 34 E, 38 F, 50 G, 13 H, 1 I, 6 J, 1 K, 1 M



The Saturn V market

We're coming up on a big occasion: July 2019 will be the fiftieth anniversary of the first lunar landing mission, Apollo 11.

To celebrate, and to generate some visibility for model rocketry, the NAR is discussing organization of local launches on July 20, the anniversary of the landing day, featuring Saturn V scale models. That would be a third Saturday, so we'd probably have a club launch that day anyway. All we'd have to do is publicize it... and fly some Saturns.

That should be possible. Already there are at least three active club members who have Saturn V models in various scales and configurations. Just have to make sure they don't get lost or rekitted between now and then!

If they are, though — or if any of you want to add to the collection, what are the options? Currently not as many as there have been, unfortunately.

On page 6 is a table, drawn mainly from information on the rocketreviews.com site, about all the Saturn V kits I know of that have ever been produced.

The first Saturn V kits were introduced in 1969, the year of Apollo 11 and less than two years after the first flight of the real thing. Estes had two, the 1/100 K-36 and the smaller, semi-scale K-39. Centuri also had a 1/100 kit that year, and Space Age Industries had a 1/224 version. Cox introduced their 1/125 kit the following year.

Centuri, Space Age Industries, and Cox are no longer around, of course. Nor are most of the other companies that have produced Saturn V kits.

Estes issued a new 1/100 kit under the model number 2001 in 1988, then the 2157 in 1998, 2010 to 2011, and 2016 to 2017. Currently it's out of production. You can find it on eBay but the going price seems to be around \$130, compared to \$48 from AC Supply when they had it in stock.

Company	Name	Dates	Scale or dia. (in.)	Vendor	Notes
Apogee Components	Saturn V		1/70	Apogee	
Boyce Aerospace Hobbies	Apollo Saturn V		1/312		
Boyce Aerospace Hobbies	Skylab Saturn V		1/312		
Centuri	Saturn V (5142, KS-12)	1969–1983	1/100		
Cox	Saturn V (5075)	1970–1973	1/125		
Dr. Zooch	Saturn V	–2018	1.64"	eRockets	out of production; Dr. Zooch shutting down. eRockets has stock at this writing.
Dr. Zooch	Saturn V 500-F		1.64"		never released?
Dr. Zooch	Skylab Saturn V		1.64"		
Estes	Semi-Scale Saturn V (1239, K-39)	1969–1979	1.64"		
Estes	Saturn V (1236, K-36)	1969–1985	1/100		
Estes	Saturn V (2157)	1998, 2010–2011, 2016–2017	1/100		
Estes	Saturn V (2001)	1988–1994	1/100		
FlisKits	Mighty Saturn V		1/884	FlisKits	
Neubauer Rockets	Micro Saturn V		1/396		
Polecat Aerospace	Saturn V		10"		
Quest	Saturn V			ASP	MMX; under 6" tall
Saturn Press	Saturn V (SAT-V)		1/195		
Semroc	Saturn V (KS-6)		1/100		
Sheri's Hot Rockets	Saturn V		8.25"		
Sirius Rocketry	Saturn V		1/64		
Space Age Industries	Semi-scale Saturn V (K14)	1969	1/224		

Semroc still exists, but they aren't making their Saturn V kit right now.

Apogee has a big 1/70 kit available. Sirius has a bigger one at 1/64 on its web site, but it appears to be out of production. The 8.25" diameter model from Sheri's Hot Rockets is gone as well, and apparently so is the 10" one from Polecat Aerospace.

On the other end of things, Quest and FlisKits both have produced tiny MMX kits. The Quest one seems to be still available from ASP, and FlisKits is still selling theirs.

Aside from those and the Apogee kit, I was planning on writing that the only other kit I was aware of in production was the Dr. Zooch Saturn V. And then the day before I wrote this, Wes Oleszewski announced he's shutting down Dr. Zooch. At this writing eRockets still has some of his kits in stock, and other vendors probably do too, but once they're gone, they're gone! (I sent my order in last night.)

So you can scramble to get a Dr. Zooch, you can go small with Quest or FlisKits or go large and pricey (\$301) with Apogee, you can pay a premium for an out of production Estes, or you can hope Estes and Semroc will have the sense to re-introduce their kits in time for the Apollo 11 anniversary.

Or you can scratch build, or do a plastic model conversion. There's a 1/144 Revell available for about \$41. Or for something completely different, you could try converting the LEGO Ideas 21309 kit! Announce it as a heads up, though.

Notes on the Sprite

Don Carson, editor of Zog-43, the newsletter of NARHAMS (NAR section 139), saw the article on our Sprite build project in the last What's Up and kindly sent the following observations:

I built the SEMROC version of the Sprite a year ago to fly in Spot Landing at our East Coast Regional Meet and at NARAM-59 last summer. I have a few notes that may be of benefit to future builders.

The main thing is the current Estes mini engines have a really strong ejection charge, much more so than the old "Shorties." This results in the engine (in the 13–18 mm adapter) blowing out the back of the model past the engine hook. Once that happens, it is once again stable and it streamlines in for a prang. It is so light, it doesn't present much of a hazard. However, ejecting the motor and/or streamlining in is enough to get you DQ'ed in NAR competition - that and you miss the cool recovery feature of the Sprite itself.

I found that it took a combination of mods to tame that beast of an ejection charge. First, wrap tape around the engine to make a very tight fit in the adapter. Next bend the tip of the motor hook so that it points more towards the nose. I bent it so it made about a 60 degree angle. This helps the hook grab and hold better. Lastly, I had to add a second vent hole to relieve the ejection charge pressure.

The combination of those three things finally made the model reliably transition to tumble recovery.

I also tried wrapping some masking tape on the outside of the adapter to increase the friction. I could never make that reliably improve things and don't recommend that as a fix.

The Sprite does make a pretty good Spot Landing model. It has a good predictable flight path and drops out of the sky once it transitions to a tumble. At NARAM, I was comfortably in the lead (5.6 m from the spot), up until the last C Division entry flew. Nicklas Almstdt, flying his only flight of NARAM, dropped his model in 1.5 m away from the spot for a crushing win at the last moment. Good on him!

(Also note ejecting the motor is something we want to avoid on our field since it is a working hay farm. So take these steps to make sure it doesn't happen! RSH)



About the Syracuse Rocket Club

The Syracuse Rocket Club (SRC), serving hobby rocketry in central New York, is section 566 of the National Association of Rocketry (NAR) and Prefecture 53 of the Tripoli Rocketry Association (TRA) and was founded in 1997.

SRC holds a monthly sport launch in Van Buren once a month, May through October, typically (but not invariably) on the third Saturday (weather permitting). Launches are open to the public, with a \$5 launch fee for non SRC members who wish to fly rockets.

SRC welcomes all prospective new members to our monthly meetings. They are held usually on the first Monday of the month (second Monday if the first is a holiday or if otherwise necessary) from 7:00 to 8:30 PM at Walt's Hobby Town on Dwight Park Drive, near the State Fair Boulevard exit of I-690.

See calendar elsewhere in this issue for dates of launches, meetings, and other events.

For more information see our website: <http://syracuserocketclub.org>. We also are on Facebook at <https://www.facebook.com/SyracuseRocketClub>.

SRC officers are:

President:	Scott Sellers
Vice President/Treasurer:	James Shattell
Secretary/Editor:	Rich Holmes
Web Master:	Scott Sellers
Prefect:	Roger Forell

About What's Up

What's Up is the official newsletter of the Syracuse Rocket Club.

What's Up is published five times a year and is distributed electronically on the SRC website; latest and back issues may be downloaded at <http://syracuserocketclub.org/newsletters.html>.

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Next issue target publication date is June 2018.

Upcoming SRC Events

(Abbreviated; for details and full year see <http://syracuserocketclub.org/calendar.html>)

Date	Time	Location	Event
Apr. Mon. 2nd	7:00 PM	Walt's Hobby	Club Meeting, Discussion Topic: Preparation of club launch equipment for May launch. Training for launch equipment setup.
Apr. Sat. 14th	10:00 AM	Weigand's Field	Work Day. Build ditch bridge, clear brush.
May Mon. 7th	7:00 PM	Walt's Hobby	Club Meeting, Discussion Topic: Central New York Rocket Team Challenge preparation. Planning for National Sport Launch.
May Sat. 19th	10 AM – 3 PM	Weigand's Field	SRC Sport Launch and Test Launch for MOST Rocket Team Challenge Teams. Theme: Drag Races; Contests: Drag Race Competition and A Parachute Spot Landing
May Sat. 26th - Mon. 28th		Geneseo	NAR National Sport Launch. Visit the Syracuse Rocket Club Hospitality Tent. See the Syracuse Rocket Club Upscale Saber launch.
June Sat. 2nd		Skytop	MOST CNY Rocket Team Challenge
June Mon. 4th	7:00 PM	Walt's Hobby	Club Meeting, Discussion Topics: 1) Review of the CNY Rocket Team Challenge. 2) Syracuse Rocket Club assistance at June school launches. 3) Preparation for the June club launch and URRF launch.

Please check web site (<http://syracuserocketclub.org>) for changes, cancellations, and last minute events! Go/no go status of each launch will be posted on the web the evening before.

Directions to Walt's HobbyTown: From I-690, take Exit 5 (State Fair Blvd./Lakeland). Turn right onto Van Vleck Rd. Take the first right onto Dwight Park Dr. Walt's is immediately on your right.

Directions to Weigand's Field: From I-690, take Exit 2 (Jones Rd.). Turn left onto Jones Rd. Take the first right onto Van Buren Rd. After 1.6 miles turn left onto Connors Rd. After 1.0 miles turn left onto Canton Street Rd. Launch site is about 0.4 miles on your left; look for sign. Park in designated area. Please do not drive onto field without launch director's permission.