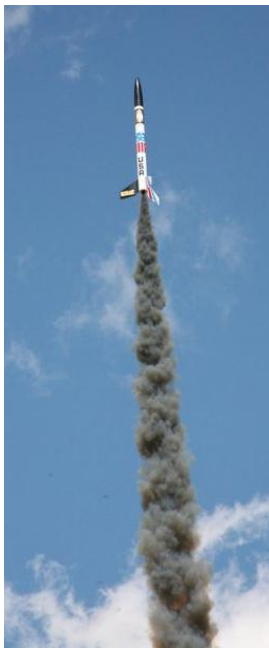


# Host Section

Southwest Michigan Association of Spacemodeling Hobbyists (SMASH) section #500 of the National Association of Rocketry (NAR). Founded in 1988 the section has promoted rocketry to the community making rocketry a fun, safe, and educational hobby for the whole family.

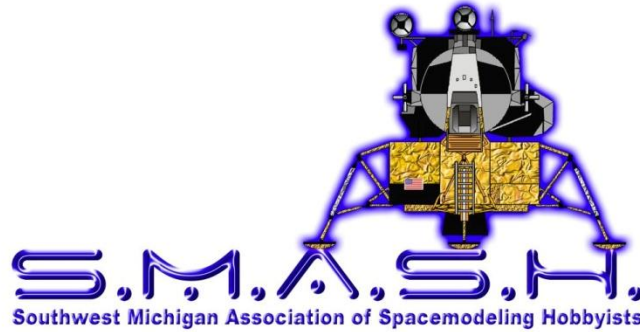


SMASH & MMAR members are from all over the Midwest. The members of SMASH would like to invite you to NARAM-54 in 2012.

Model Rocketry is a safe, educational and fun hobby

[www.naram.org](http://www.naram.org)

NARAM-54 made possible by these sections:

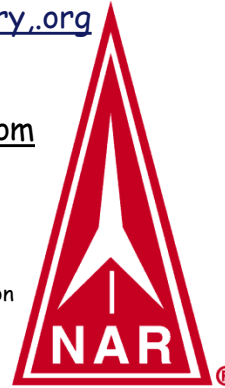


[www.smashrocketry.org](http://www.smashrocketry.org)

M.  
M.  
A.  
R.

[www.mmarocket.com](http://www.mmarocket.com)

This event is sanctioned by the National Association of Rocketry  
[www.nar.org](http://www.nar.org)



Contest Director

Contact information:  
Pam Gilmore  
Muskegon, Michigan  
[psgilmore@gmail.com](mailto:psgilmore@gmail.com)  
231-755-0652

[www.naram.org](http://www.naram.org)

# NARAM-54

Celebrating the 50<sup>th</sup> Anniversary of John Glenn's Friendship 7 Flight

July 28, 2012 to August 3, 2012



[www.naram.org](http://www.naram.org)

# Sport Launch

Saturday July 28<sup>th</sup> to Friday August 3<sup>rd</sup>

## Contest Events

July 30<sup>th</sup> to August 3<sup>rd</sup>

Research & Development (36)

C & T Division: G Egg Loft Altitude (w/ altimeters) (24)

A & B Division: D Egg Loft Altitude (w/ altimeters) (19)

Classic Model (20)

Sport Scale (20)

A Helicopter Duration (20)

B Boost Glider Duration (19)

C Streamer Duration Multi-Round (14)

A Super-Roc Duration (13)

A Parachute Duration Multi-Round (11)

Set Duration 50 Sec. (8)

Open Spot Landing(4)

HPR Events TBD

L1, L2, L3 Certifications

## Social Events

NAR Town Hall Meeting

Educational Fund Auction

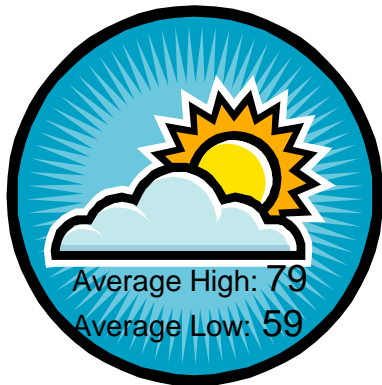
Golden Jubilee Imagination Celebration

Dead Cow Soiree

Manufacturers Forum

Swamp Gas Night Launch

Mercury Atlas Commemorative Launch



[www.naram.org](http://www.naram.org)

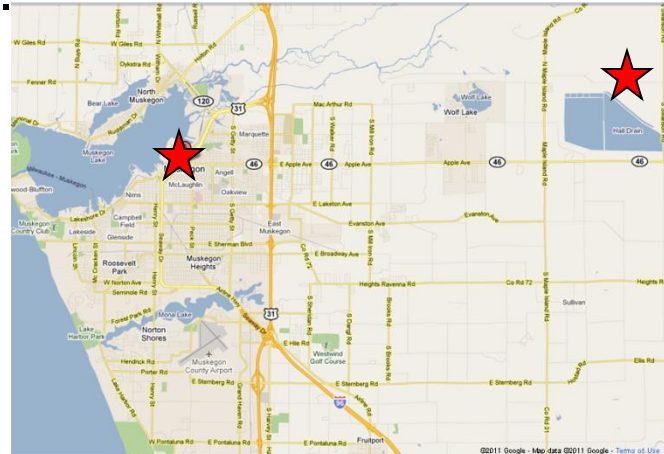
# Launch Site

11,000 Acre facility, with a waiver to 15000' AGL

## MMAR Rocket Club Launch Site

At the Muskegon County Waste Water Facility  
8301 White Road, Muskegon, Michigan  
GPS: N43.263144, W-86.02958

Map of Hotel and Launch Site:



[www.naram.org](http://www.naram.org)

# Host Hotel



## Holiday Inn Muskegon Harbor Downtown Muskegon, Michigan

Features:

pool, game area, exercise room, lounge, restaurants. Banquet facilities, computer work station,

(888)HOLI-DAY or  
[www.holidayinn.com](http://www.holidayinn.com)



## Camping



There are a number of campgrounds in the area and most have lakes for swimming and fishing.

For more information see the web site.

[www.naram.org](http://www.naram.org)