State of the NAR

February, 2013
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NAR President
Safety Minute: Keep Spectators Safe

Significant risk reduction can be achieved by positioning people and vehicles crosswind from the launch pads.

Wind Direction

Put spectators here

Angle the rails *away* from the crowds!
How Are We Doing?

• Our membership levels are at an all-time high

Around 5600 (+1100 in last 3 years) thanks to focused efforts including the $5 recruiting bonus to members and hobby shops plus kit stuffers and other manufacturer publicity
How Are We Doing?

• Our finances remain very good as a result
  – Increasing services significantly because we need to and can afford to
  – Section grants, educational support and outreach, launch infrastructure, upgraded HQ technology
  – ~$400K annual revenue, breakeven budget, appropriate reserves
How Are We Doing?

• Our magazine is the best it has ever been
  – Paying for top-quality “how to” and technical articles
  – Still looking for great content to sustain 56-page issues
  – Now the only rocketry magazine available in hobby shops

• Our outreach programs are doing well and growing
  – TARC: Largest participation since Centennial of Flight
  – 4-H partnership: Strong and growing
  – NASA SLI: Largest participation ever
  – Civil Air Patrol: New Memorandum of Understanding agreed to
  – Seattle Museum of Flight: New Memorandum of Understanding signed
Our Priorities

• Continue to make flight safety our organization’s first priority
• Support and celebrate all forms of commercial sport rocketry: Model rockets to Level 3 high power, High performance to oddrocs, sport rocketry to international competition.
• Increase our organization’s size: Members and sections, then increase member services as our size goes up
• Support and expand outreach and educational efforts
• Offer members full transparency and the opportunity to participate
• Provide more national support to our local sections

Be safe, have fun, pay forward
Our Concerns

Rockets that should *not* be flown too often *do* get flown

- Near misses and landing mishaps occur too frequently
- Financial health would be significantly impacted by a major incident
- Three hazards to focus on:
  - Power Lines
  - Fire Prevention
  - Trajectory Management
Power lines
Multiple fatalities and serious injuries have occurred

STAY AWAY!

Call the power company; let them recover the rocket (even the models you don’t want back might attract kids.) Even if it costs you, it is money well spent!
Fires: Prevention is Key
Significant cause of loss of flying privileges

• Clear the area around the pads
  – NFPA requires blast deflector and cleared area near launch pads.
  – *Specific cleared distances specified for HPR (more for “sparky” motors).*
  – Pad blankets, pre-soaking of ground can also help.

• Have adequate firefighting equipment, and *know how to use it!*
  – Fire extinguishers alone will not stop a grass fire – tools needed.
  – Observe burn bans: If dry & windy, fires may be unstoppable – don’t fly.

• Assign a fire watch for the pads; don’t just watch the flights.
• Fires at crash sites get going if people do not hurry to the site expecting to find one.
Trajectory Management

- Maximize recovery area
- Place spectators cross-wind
- Aim rails away from spectators and parking areas

1500’ Exclusion zone: No occupied buildings or highways

500’ Safe Distance

1500’ x 1500’ Launch Site

Spectators here
NAR Safety Codes

• Updated in August to reflect the updates to NFPA Codes 1122 and 1127 that took effect in June
• Multi-rocket simultaneous launches have new safety (personnel standoff distance) requirements in both
  – For more than 10 model rockets, 2 HPR rockets
• HPR rockets with onboard electronic staging/deployment systems must have such systems “armed” only when upright on launch pad, minimum people at pad
• Smaller launch site minimum dimension requirements (1000 ft) for G and below “HPR” motors
  – New NFPA codes makes the upper limit of “model rocket” motors a full G (160 N-sec), not 62.5 grams of propellant
  – Hybrids, sparky motors, and motors with >80N average thrust are still “HPR”
Our Other Concerns

• We need to continue to attract and retain new NAR members to sustain our future

• Development encroachment and landowner fear of “safety” or litigation continues to reduce access to launch sites

• We could use more sections; too many members do not belong to one
  – We need sections with flying sites near every major population center

• We need more NAR volunteers to improve our services and programs, both locally and nationally
Membership Surveys

- About 2000 NAR members responded to our 2008 and 2011 online surveys
- Almost every section’s leader responded to a 2012 survey
- Four areas for improvement stood out as priorities on all surveys and we have worked hard on all of them
  - Increase support to sections
  - Provide better support for efforts to gain/maintain launch site access
  - Redo the NAR website
  - Enhance the “how to” article content in Sport Rocketry
- Number one impediment to members’ enjoyment of the hobby is access to launch sites
- Another triennial survey is due next year.

Your feedback has driven the NAR Board’s agenda
NAR Board Actions

- Reaffirmed goals: 5800 members (2900 HPR certified), 140 sections with 3500 members – by NARAM in 2014
- Section support: Section grant checks go out in early March
  - Not limited to safety items
- Implementing a new program to certify teachers
- Implemented a program to recognize HPR skills with “Rocket Science Achievement” awards
- Museum of Flight: Joint effort to collect artifacts and create an exhibit on the history of model rocketry
- Approved a code for HPR competitions
- Renewed membership rewards for recruiting new members
  - You will receive $5 in cash for every member new to the NAR who cites you as their referrer when they join (next payout in July)
- Upgrading infrastructure for National Events
More Board Actions

• Plan to award 10 Cannon teacher grants ($500 each), 10 NAR scholarships ($1000), $2200 in R&D prizes (Thanks, Bob!), and $2400 in NARAM travel grants for B Divisioners.

• Our insurance coverage has been increased:
  – $2M limit (was $1M), covers Canada as well as US
  – $1M for fire damage to launch site (was $100K, then $300K)
  – Teams participating in TARC & SLI covered at section launches
  – Cost in 2013 is the same as 2012.

• New Web site to be rolled out incrementally
  – Permits content owners to maintain their own sections
  – Expanded member section with more member-only content
Our Value Proposition

• At $62/year (senior) dues we are the best value in the hobby and should say it proudly:
  – Includes a great 56-page bimonthly magazine
  – Includes insurance that is valid anywhere in the US & Canada, anytime, not just at sanctioned launches
  – Includes HPR certification through Level 3
  – Includes US & international competition programs
  – Includes family member discount of $12
  – Includes a 64-page Member Guidebook with discount coupons

We all need to recruit personally to keep our NAR going and growing!
What Can You Do?

- *Fly safely*, and ensure that others around you do the same!
- Recruit new NAR members, HPR certifications, competitors
- Take your own turn volunteering to help with your section or with the NAR nationally
- Do community outreach to community leaders, young people, parents, and to those who work with young people

Be safe, have fun, pay forward