NAR Board of Trustees conference call, October 7, 2020

The meeting was called to order at 8:05 PM Eastern Time.

Present: John Hochheimer, President; Carol Marple, Vice President; Mark Wise, Secretary; Kevin Johnson, Treasurer (arrived 8:35); Becky Green; Ed LaCroix; Steve Lubliner; Lynn Thomas; Jim Wilkerson.

Absent: None.

Todd Schweim managed the technical aspects of the Zoom meeting and provided his input as appropriate.

President's Report

Girl Scouts

A leader of a Section in Indiana was trying to work with a local Girl Scout troop, and was taken aback by the Girl Scouts' requirements for anyone having contact with Scouts (background investigation, youth protection training, etc.) The Section leader wanted to know if NAR had a Memorandum of Understanding (MOU) with the Girl Scouts. An MOU is in work as of this writing but is not yet in effect. Carol said that she thought that the Aerospace Industries Association was working on an MOU, and John said that Estes was doing the same.

Manufacts Article

Tom Beach, editor of *Sport Rocketry*, asked John about the appropriateness of a particular product that a vendor wanted to publicize in the Manufacts section. Without going into detail here, the Board's consensus was that the product was likely subject to legal restrictions separate from NFPA and Federal Aviation Regulations, and was inappropriate for inclusion in *Sport Rocketry*.

Civil Air Patrol

A Civil Air Patrol cadet attended a launch in Texas, bringing one rocket with a G motor and another with an H motor for Stages IV and V of CAP's model rocketry program. (Details may be found at http://lacapnm.org/Cadets/STEM/ModelRocketry/Stage_4_Columbia.pdf and http://lacapnm.org/Cadets/STEM/ModelRocketry/Stage_5_Challenger.pdf) The cadet was not a NAR member. This situation is not covered by NAR's MOU with CAP. John Thompson, the High Power Services chair, has been in contact with CAP, which wants NAR to accept their curriculum in lieu of NAR Junior Level 1 requirements.

Jim pointed out that there were likely insurance ramifications as well as other concerns. NAR is not responsible for supporting CAP's curriculum, particularly since it was never coordinated with us. NAR cannot have CAP cadets showing up unannounced to be mentored or proxy flown, and we are not going to change our NFPA-dependent process to accommodate CAP.

Steve volunteered to work with Jim on the matter. John said he'd update John Thompson.

Treasurer's Report

Kevin talked with Anne this weekend and told her that after the IRS Form 990 (tax return) is done, her top priority will be to get our non-profit status resolved with the IRS.

John said that Anne looked at NAR's phone bill recently and told John that we are paying over \$1200 per month for phone service. John will work with Anne and Marie to try to figure out a better way to manage HQ phone service. A toll free ("1-800") phone number is expensive to maintain and may be obsolete. We continue to look for other ways to reduce costs, including reducing the page count for *Sport Rocketry* from 56 to 48 pages.

Kevin said that he is still trying to get access to the accounts at Collins Credit Union. He finally heard from them, but they want the full Board of Trustees to meet at a Collins branch to show that we need access to the account. John will talk to Anne; we may need statements from Collins for the Form 990.

Kevin paid 12 authors for their articles in *Sport Rocketry*, at \$350.00 per article.

NAR has about \$170k in bank accounts, including about \$11,000 in Americhoice Credit Union accounts. Kevin has not closed the Americhoice accounts because we still have checkbooks outstanding with some committees. We need to call in the checkbooks and close the accounts.

HPR proposal

Jim said that Tripoli is not interested in our proposal to require different rockets on different weekends to certify Level 1 and Level 2 in a single weekend. Jim pointed out that for NAR to have such a policy while TRA does not would create differences between the two organizations' certification programs sufficient to cause NAR members to leave the organization in favor of Tripoli, or members using Tripoli's existing certification process to achieve Level 2 and then simply submit their TRA certification to NAR.

Jim said that we could always put recommendations instead of mandatory changes. Steve suggested that someone write an article for *Sport Rocketry* about the road to certification — what we'd like to see in the interests of safety. Jim suggested talking to Trip Barber and John Lyngdal for some of the history.

Earlier in the day, Jim sent the Board members a document with proposed updates to the HPR certification page on the NAR website, providing recommendations and expectations for progressing through certification levels without making explicit rule changes. The wording was vetted by a select group of Level 3 Coordinating Committee (L3CC) members, John Thompson (HPR Services chair), James Russell (TRA Technical Advisor Panel chair), and current and former TRA presidents Gerald Meux and Steve Shannon.

Jim moved that NAR update the HPR section of the NAR website to incorporate the recommendations. Lynn seconded. Motion carried unanimously.

The updates are also attached to these Minutes as an appendix. Jim will coordinate with Todd Schweim for the publication schedule and deadlines for *Sport Rocketry* and the *E-Rocketeer*.

Safety Committee

Steve solicited input from John Thompson and Chuck Neff regarding his proposal to require that all rockets meeting the definition of High Power be launched from rails. He said that their response was generally negative from them. Trip Barber and Ted Cochran recommended a Best Practices document

instead of a rule change. Steve will drop any proposals that mandate rails and will coordinate with Trip regarding appropriate mention in the *E-Rocketeer*.

Steve also mentioned that the Radio Controlled Rocket Glider (RCRG) safety code is not grounded in NFPA standards, and in fact contradicts them. Steve proposes retiring the RCRG safety code and replacing it with a Best Practices document. The Board will continue this discussion at a later time.

National Events

NARCON: Ed has begun e-mailing past NARCON presenters to invite them to reprise or update past presentations. He e-mailed 22 individuals and has heard back from about a third of them, receiving positive responses.

Our target date for the NARCON website to go live is November 1, and Ed hopes to have the presentation schedule done by that time. Ed and Todd still have to solve the issue of how to share video or slides in breakout rooms.

John would like to explore platforms. Is Zoom really the best platform? Ed would like to nail down a decision soon for planning purposes.

NARAM: Ed is just now reaching out to Dan Wolf, the NARAM-62 contest director. The website should reopen soon with any minor tweaks.

NSL: Matt Abbey is still standing by to host the event in Alamosa, Colorado next May.

John would like to determine whether we can use parts of the Virtual NARAM to shorten a traditional NARAM and increase participation. What can we learn from the Virtual NARAM going forward? Could we hold a blended Town Hall? Host virtual R&D presentations?

Ed mentioned possibility of concurrent virtual and onsite NARAMs, with awards for both presented at banquet.

A good deal of SLI is done virtually. John will talk to NAR's SLP leaders for ideas.

Sections

Chuck Neff, Section Activities chair, told Carol that NAR currently has 221 chartered Sections, an increase of 4 from last month. Section Grants and free membership certificates are being sent out.

<u>Miscellaneous</u>

Carol reported that the NAR Facebook page is running smoothly, with no current unrest. Carol recommends continuing on the current path and monitoring the traffic. She suggested updating the rules and publicizing the changes. John will work with Carol on messaging for publication in *E-Rocketeer*.

Jim informed the Board that he has been doing some professional photography at some launches. The consensus was that this activity did not violate the conflict of interest policy for board members.

Lynn said that she would contact the Civil Air Patrol to request copies of their rocketry books to see where the problems may lie. John will loop her into the conversations he's having with CAP.

Steve said that there is a conflict between the language in NFPA 1127 and Federal Aviation Regulations part 101 regarding the required distance between the launch site and occupied buildings and roads when flying HPR. Steve will talk to Trip Barber regarding a way ahead.

Ed said that Rocketry South Carolina (ROSCO), led by Bobby Weatherford, has expressed interest in hosting NSL in 2022.

The next scheduled conference call will be on November 4 at 8:00 PM Eastern Time. The meeting will be open to all NAR members via Zoom. Registration will be available in the Members Only section of the NAR website.

Call adjourned at 9:19 PM.

Item 1 - Proposed change to the main NAR HPR website page -

How do I get started in High Power Rocketry?

The NAR offers a three-tier certification program for adult members who wish to build and fly High Power Rockets. It also offers a HPR Participation Program to its Junior & Leader members (aged 14 to 17). Membership empowers you to apply for this High Power Certification and is free to all applicable NAR members. See descriptions of these certification levels below.

The expectation of the certification program is that members gain experience at each certification level prior to progressing to the next level. This would include building and flying several rockets that use one or more motors of the flyer's current certification level. Members are encouraged to keep flight logs of their HPR flights to capture successes, failures, and lessons learned. Having this experience log will assist your certification teams when you apply for certification at the next level.

<u>Item 2 – Proposed added recommendation final bullet in Section 1 prior to the Section 2 certification teams plus some word-smithery in the existing text</u>

Minimum Requirements

The individual seeking Level 2 High Power certification must be a minimum of 18 years old at the time of certification.

A copy of a government-issued identification can be used for proof of age.

Note: Other requirements may be imposed by state₇ or non-USA jurisdictional authorities. This document does not supersede any requirements imposed by the authorities having jurisdiction.

A flier seeking HP Certification must be a member in good standing of the National Association of Rocketry (NAR). Proof of NAR membership in the form of the flier's NAR-issued membership card shall be provided prior to the certification attempt. The individual must currently hold a HPR Level 1 certification, as identified on their NAR Membership Card.

Motors used for certification attempts must be currently certified by the NAR or by another organization (e.g., Tripoli) with a recognized certification program.

The general expectation is that a member will gain experience with additional Level 1 flights prior to attempting Level 2 certification, as noted under "How Do I Get Started in High Power Rocketry" on the main HPR page. This could include building several L1-capable rockets and multiple flights on H and I motors. A HPR flight log will help certification teams in evaluating a member's experience level prior to attempting a Level 2 certification flight.

<u>Item 3 – Proposed additional recommendation to the L3 Certification procedures</u>

1.0 Flyer Requirements

1.1 Any individual attempting NAR Level 3 Certification must be a Level 2 high power certified NAR member in good standing.

An individual may not submit a design for a Level 3 Certification project review to the L3CC until Level 2 certification has been successfully accomplished.

The Level 3 certification candidate is expected to have gained significant L2 experience through active, regular flying prior to starting a L3 certification project. Examples may include building several L2-capable rockets, flying a selection of 54mm and 75mm rocket motors, and K- and L-powered flights. Ultimately the necessary experience and the approval to begin the L3 Certification project rests with the L3CC member mentoring the project.

L3CC committee members will want to know the candidate's HPR experience at the start of the L3 certification project. Keeping a flight log, while not a requirement, will help with that process. Helpful flight log data can include date, launch, rocket, motor, electronics used, and whether the flight was a success/failure. If the flight was a failure, the presumed cause of the failure should be noted, along with the steps taken to prevent similar failures in the future.

Item 4 - Proposed recommendation to Jr L1, L1, and L2 certification procedures, somewhere in the flight section – (should we develop a template?). With the wide availability of freeware (OpenRocket/RASAero) I don't see asking for a simulation to be overly burdensome, and it gives the HPR flier a good grounding in the ability to simulate/estimate future projects.

Certification teams please consider discussing the following data for the proposed flight with the candidate - CP/CG locations, expected maximum speed & altitude, minimum launcher exit velocity, and touchdown velocity (appropriate parachute size based on rocket weight; recommended no more than 20 feet/sec).

Simulations for design, flight and recovery can be accomplished with commercially-available or freeware programs and/or manual calculations.