

## **Minutes of the Board of Trustees of the National Association of Rocketry**

March 6, 2020

The meeting was called to order on Friday, March 6, 2020 at the Sheraton Tucson Hotel and Suites, Tucson, Arizona, at 8:40 AM. Trustees present: John Hochheimer, President; Mark Wise, Secretary; Kevin Johnson, Treasurer; Randy Boadway; Becky Green; Ed LaCroix; Jim Wilkerson. Trustees participating via conference call: Carol Marple, Vice President; Lynn Thomas. Trustees absent: None. Others present at various times during the day: Marie Stumpe (NAR HQ Manager), Todd Schweim (NAR web designer and publisher of *Sport Rocketry*), Don Carson, Jim Kral.

The Board immediately went into executive session. Topics discussed included insurance, financial and accounting systems, a recent FAA Notice of Proposed Rulemaking regarding Unmanned Aerial Systems, and the administration of the NAR Facebook page.

The Board came out of executive session at 9:05.

### **Member Concerns**

Carol mentioned the NAR's YouTube channel. There have been some posts to the NAR groups.io feed regarding posting videos. Should we revive our Public Relations committee, which has been dormant, to take the lead on this? Ed said that Steve Weaver (a NAR member and professional videographer) has volunteered to work on content development. Carol will e-mail him. John asked Carol to pull an announcement together to post to the Facebook page regarding this effort.

At the NARAM-61 Town Hall, a member said that he would like to see the "Needs Fixing" form return. John said that the form is obsolete, since there are other venues for accessing the Board for a faster response. Randy and Kevin said that a form might be useful for members to express concerns without them becoming public (for example, to the NAR Facebook page). John said the original form went to Section leadership annually, and that members who did not belong to a section did not have this access. Randy pointed out that Sections express their concerns in real time, and that Section Activities Committee chair Chuck Neff is "super-responsive" in replying. Randy suggested that a button could be added to the webpage for people to enter a "Needs Fixing" issue that would be sent to the NAR President and Vice President. Todd suggested that such a button be in the Members-Only section in order to keep non-members from submitting forms.

A member at the NARAM Town Hall asked that the expired motor testing process be streamlined. John said the existing process was developed with a good deal of thought, balancing member interests with NFPA requirements, and that we would not make any changes to the process at this time.

### **NEON Member Database**

John and Marie are working with Jonathan Rains to add former members to the database. When NAR transitioned to NEON, expired members weren't picked up in the data dump. Adding them to the database would save Marie a great deal of time in looking up old NAR members who renew after an extended break. However, it could also potentially double the cost of NEON, which is based on the number of records. The cost is currently \$300 per month, but could rise to \$600 per month.

## **Cash Report and Status of Financials**

We have a really good understanding of what our bank accounts have in them, but the QuickBooks Online situation is a less clear. NAR is now doing business with two main financial institutions: US Bank and Americhoice Federal Credit Union, with most of our activity with US Bank. Kevin is working with Anne Heacock, our accountant, to figure out how to make the money work better for the NAR. The accounts at Collins Credit Union can be closed – they currently total \$5.40.

Our cash accounts total is \$238,794.07. Roughly half the cash is liquid, half is in certificates of deposit. We will convert the CD's into other instruments. Kevin is working with John and Anne Heacock to decide on appropriate instruments.

Anne has looked at how we manage our finances and has some suggestions for improving accountability and controls. Committee checkbooks are a problem from the standpoint of accountability and tracking. We also need to unravel the information in QuickBooks and identify appropriate income categories for our bookkeeping.

Credit card income shows up immediately, but it can't be entered into the appropriate accounts until Marie reconciles the transactions. Without complete information on the transactions, she can't do the reconciliation.

NAR currently shows a \$90,000 loss for 2019, but reconciliation should reduce that number. Our income dropped by \$135,000, much of which was due to the fact that the \$67,000 payment from NASA for NAR's support to the Student Launch Program was late in arriving.

Net PayPal donations to NAR in 2019 (for the Museum of Flight program and the "Pay Forward Proud" campaign for the NAR History Fund totaled \$11,114.05.

John discussed the NAR's ability to pass a financial audit. The NAR is not the same organization that it was 63 years ago, or even 10 years ago. We have added more than 1000 members in the past four years and could reach 8000 members in the next year. That growth creates challenges – managing a 2500-member organization is different from managing a 7500-member organization. A number of HQ tasks that had been done manually are now being done electronically. We trust our members, but someone with ill intent could do a great deal of damage. Tighter financial controls are required for sound management. This issue also has implications for our Director and Officer (D&O) insurance, because we cannot qualify for the criminal activity rider until we put more safeguards in place. John added that the IRS would ask the same questions that the insurance company would with regard to the criminal activity rider if we were being audited. John proposed establishing a Finance Committee to study the issue and present recommendations to the full Board. He suggested himself, Kevin, and Ed Chess as members, with advice from Anne Heacock.

**Jim moved that the NAR establish a Finance Committee to formulate appropriate accounting policies and present them to the Board. Randy seconded. Motion carried unanimously.**

**Mark moved that the Finance Committee consist of John, Kevin, and Ed Chess, with advice from Anne Heacock. Ed seconded. Motion carried unanimously.**

John asked Don Carson to serve as an independent reviewer.

## **FAA and NPRM regarding Unmanned Aerial Systems**

John has heard from several members regarding a Notice of Proposed Rulemaking (NPRM) that would mandate remote identification for unmanned aerial systems. This NPRM has profound implications for Academy of Model Aeronautics (AMA) activities. Most of the e-mail he has received runs along the lines of “Why isn’t the NAR doing more?”

John said that the FAA’s proposed changes are in sections that are not related to rocketry. The rocketry activities that are regulated are carefully spelled out in Part 101 of the Federal Aviation Regulations, and there have been no indications that any changes are forthcoming. John’s discussions with the FAA indicate that the NPRM is a non-issue for rocketry. He does not think it would be prudent to ask FAA for too much clarification, out of concern that FAA may then revisit existing regulations. While the FAA does not always know where UAS are operating, they do know where rockets are being flown – with pre-approval in accordance with FAR 101.27 – for any activities that require a waiver.

Randy said that as an educational organization, it is incumbent upon NAR to teach our members what to do in order to fly safely.

Ed suggested that we emphasize the message that rocket-propelled models fall under FAR 101, subpart C (Amateur Rockets).

John envisions establishing a relationship with the FAA similar to the relationship that we share with the Bureau of Alcohol, Tobacco, Firearms, and Explosives, where BATFE, Tripoli, and the NAR have annual meetings that are actually quite cordial – and short.

## **NAR Support for Booth at National Science Teachers Association Conference**

For the past 15 years or so, the Aerospace Industries Association has sponsored a booth that NAR has augmented with participation from local Sections. AIA is no longer supporting the booth, but CMASS will staff the booth for this year’s convention, which is in Boston. Lynn has been to the convention as an attendee, and she says that the booth gets a lot of attention. Participation would cost about \$3000-3500.

**Lynn moved that NAR fund a booth at the NSTA conference in an amount not to exceed \$3500 to cover the booth fee, materials, and shipping. Jim seconded. Motion carried unanimously.**

*Note: The NSTA meeting scheduled for April 2-5, 2020 has been cancelled due to the COVID-19 crisis. ([https://s6.goeshow.com/nsta/national/2020/update\\_conference.cfm](https://s6.goeshow.com/nsta/national/2020/update_conference.cfm), accessed March 24, 2020.)*

## **Insurance**

The Scottsdale Group has underwritten the NAR’s insurance policy for several years. This year, they came to us this year with a slightly different proposal: a wildfire exclusion, to be added to the existing UAS and drone exclusions. In this context, “wildfire” is defined as a fire exceeding one acre in area (a square 209 feet on a side). Wildfires are becoming more common and more severe, which is straining the insurance companies. We have a bid from another underwriter that does not contain the wildfire exclusion, but this offer only provides \$1,000,000 of coverage. NASA requires a \$5,000,000 policy in order for the NAR to support the Student Launch Program. Bob Blomster, our agent, is still looking into the situation.

Such exclusions are going to become part of more and more insurance policies. As of the date of this meeting, the coronavirus crisis is *already* affecting the insurance industry, and the situation will only become worse. If the NAR is not burdened with a wildfire exclusion this year, it will happen next year.

Jim asked about a wildfire rider to the policy, or negotiating to redefine the size of a “wildfire” upward.

Jim Kral asked if high power fliers could or should pay an insurance surcharge. John said the more fundamental question is that such insurance might not be available at all. Kevin would be wary of an HPR surcharge: How do we determine who would pay? Would a certified but inactive HPR flier be subject to the surcharge?

John asked the Board to define some of the issues and some of the implications, then discuss what we think our next steps should be. Are there any best practices to implement? Should the NAR mandate specific fire equipment at section launches?

Becky and John brought up the potential implications for launch site owners. If a landowner is not covered in the event of a wildfire loss, how much harder will it become for Sections to obtain launch sites? John sees the wildfire exclusion as a potential “red flag” for owners of prospective launch sites.

Todd Schweim brought up the idea of creating a fire safety certification for Sections. Ed said that the Board could take steps to involve the NAR with respect to fire safety to show good faith to the insurance industry but if we do, can we rely on Sections to do the right things? John said that we have to continue to educate our members, and that we may have to come up with some hard and fast policies, similarly to how we have emphasized the safety codes.

Jim and Ed said that the NAR needs to start collecting data so that we can get a sense of just how much of a problem launch site fires actually are. Jim added that the OROC Section sends members to local fire training, and perhaps other Sections could emulate this practice.

Jim Kral asked about fires at LDRS and BALLS, two major HPR events. Jim Wilkerson said that personal injury is more of a problem at those events because there is virtually no flammable material at the launch sites (“You can’t set the playa on fire.”)

(Lynn left the meeting at 11:33.)

Ed asked about a fire reporting form analogous to the Malfunctioning Engine Statistical Survey (MESS) form.

John refocused the discussion on the immediate problem, and said that we would need to make some decisions before good data becomes available. Jim said that data, as it became available, could be used to refine any fire response programs.

Don Carson pointed out that many of our members don’t fly from club launches, and that graduated levels of response would be necessary. John suggested consulting former NAR president Ted Cochran. Jim suggested NAR member Jim Pommert, who works in the fire extinguisher industry.

Randy would like to see some professional or semi-professional training on fire protection and firefighting. John concurred.

John asked the Board what they thought about policy-oriented changes at the Safety Code level. He foresaw some pushback if we mandate things. Randy and Ed both asked whether there was really a need

to modify the safety codes. John agreed with the notion of not fixing the safety code if it wasn't broken, but he also said that the Safety Code is a pretty effective hammer.

It is important to remember that we are one big fire away from doing irreparable harm to the NAR. If we become uninsurable, we're done.

Jim said that we may not have the solution, but that we should mention at the Town Hall that this is becoming an area of increasing concern, and that members should look out for guidance from the Board on enhancing our ability to fight launch site fires. John asked whether we wanted to create an ad-hoc committee to look into the problem, to which Randy said that the Safety Committee might be the appropriate group to work on the issue. Jim asked whether there was a way to keep the current \$5,000,000 policy and add the \$1,000,000 policy that has no wildfire exclusion. John said that we would buy the \$1,000,000 non-excluded policy and add \$4,000,000 of wildfire-excluded coverage so that we have the \$5,000,000 in insurance that NASA requires us to have in order to run SLP.

The Board recessed for lunch at 12:02 and reconvened at 12:38.

### **Level 2 Written Exam Follow-up**

The HPR committee had proposed a requirement that the Level 2 written test only be administered by members who were certified at Level 2 or above. During the January 8, 2020 conference call, the Board's consensus was that any NAR Senior member could administer the Level 2 certification exam. The HPR committee objected to the decision, citing concerns over the possibility of cheating. John will let the committee know that the Board's decision stands, largely because we want testing opportunities to be more accessible. If the committee can point to more specific concerns, the Board may revisit the decision.

### **Recruiting Young Members**

Becky has been doing as much outreach as possible. (She describes it as her "passion.") She has had it pointed out to her that the hobby is overwhelmingly male and that we need to recruit more girls and young women. She has recently been helping a mom and her two daughters who live in her area build and repair rockets. This woman's company has a \$4,000,000 annual budget for girls in STEM. The mom asked Becky how we could get more girls involved in rocketry. Becky will reach out to the mom to see if it might be possible to use some of that budget to stage a major rocketry outreach event to help get more girls interested in rocketry and other STEM fields. John said that we work with Girl Scout troops. Mark said he's noticed that at the younger ages, boys and girls are present at launches at roughly even numbers, but fewer and fewer girls show up as they get older. He added that while recruiting is vital, we also need to explore how we can improve retention among girls as they get older.

Randy noted that every Section can give away a junior membership, but that only a dozen Sections took advantage of the opportunity last year.

Becky is also involved with the CubeSat competition (see [www.cubesat.org](http://www.cubesat.org) for more information). They are interested in NAR sponsorship in the form of launch assistance (not financial support). Not all Sections would be able to assist, since a CubeSat requires a minimum 6-inch airframe and weighs at least 1 kg, and thus requires a high-power motor to fly. Randy said that Chuck Neff could communicate this to Sections. Randy asked whether it would be worth giving away some memberships in order to maintain

interest, so that younger rocketeers would come back as BARs (Born Again Rocketeers) twenty years from now. John and Becky said that CubeSats are more about the payload than the launch vehicle, and that NAR membership might not be all that attractive to CubeSat participants. Still, some payload team members get really enthused by the rocketry side of the activity after they attend their first launch. John said that communication to Sections needs to be really clear. Becky asked whether NAR should become a sponsor. For now, interested CubeSat teams can send a payload to ARLISS (Section 801), and they will fly it. Randy sees sponsorship much like a TARC mentor list: we can start to build a list so that CubeSat teams can find possible launch opportunities that are closer. John said that there will need to be some minimal specifications for the launch vehicle.

John saw the main question as, “Is the NAR willing to be a no-cost sponsor to this enterprise?” NAR could get some free publicity. He also said that we would need more detail before we can determine whether Sections have the capability to support CubeSat launches.

**Jim moved that the NAR become a non-paying supporting organization of CTE Mission CubeSat in an effort to promote mutual STEM educational objectives. Randy seconded. Motion carried unanimously.**

*Note: The CubeSat developers workshop scheduled for May 4-6, 2020 has been postponed due to the COVID-19 crisis. (<https://www.cubesat.org/workshop-information>, accessed March 27, 2020.)*

AIA has money to support Girl Scout rocketry activities. It was suggested that we develop a program proposal to take to the Girl Scouts as part of an effort to establish a memorandum of understanding between the NAR and the Girl Scouts.

Free memberships for Juniors: John suggested that we could transfer responsibility for awarding free memberships to Board members, rather than Sections. We could give 200 memberships to Juniors. If our goal is really to bring in more young people, that might work better than the current setup.

Randy has collected some ideas from Sections. Chuck Neff suggested allowing Sections to present more than one membership. James Crampton suggested allowing hobby shops to give away memberships. A member who is active in 4-H said that 4-H state championships might be good places to award them. (Kevin mentioned that NARHAMS does exactly that). The *Sport Rocketry* editor can award up to five memberships during the school year to students who send in photos of their science fair projects. (He usually awards one or two). Todd said that we could run the science fair announcement in each issue of *Sport Rocketry* (it currently runs annually).

Another suggestion was to create a quarterly e-newsletter for Junior members or even interested non-members who subscribe via the website. We could have four issues ready to release, send them out quarterly, and revise them every few years. Ed suggested a section in *Sport Rocketry* aimed at younger members, and also suggested asking the teachers we meet at the NSTA conference what they think their students would be interested in seeing. (Note: with the cancellation of this year’s NSTA conference, we will have to wait a year or find another way to reach out to science teachers.) John asked Todd to explore options.

**Randy moved that the following people be authorized to award free Junior memberships in the following amounts:**

- **NAR president: 100 per year**
- **Other NAR trustees: 10 per year**
- ***Sport Rocketry* editor: 10 per year**

- **Section Activities chair: 10 per year**

**Ed seconded. Motion carried unanimously.**

Jim suggested we review results of this policy in six months. Randy will work with Chuck to send membership certificates to the people listed above.

Todd asked about re-contacting TARC alumni via Constant Contact, to update them on TARC and invite them back into the hobby. John will discuss this with Trip.

John said that we keep struggling with reaching out to younger members. He wondered whether it would be worth hiring a consultant on how to message young people more effectively.

Ed asked Carol about the reactivation of the Leader Advisory Council, a topic which has come up in previous meetings. She said some of the feedback she had received from past NAR presidents, trustees, and others was mixed. She added that the kids she had in mind for a new LAC were already heavily involved in rocketry, and that we did not really know how to recruit kids who were not already deeply into the hobby. Randy said that his daughter Amanda had some interesting thoughts on why she had been involved in her teens, and her thoughts about it now. He agreed to put Amanda in touch with Carol.

#### **Other Concerns:**

Marie had some suggestions for the website:

- She said that people who have let their membership expire for a while and then re-joined the NAR often forget that they've moved since their membership expired. She suggested that the online renewal form include the member's address so that there's an opportunity to correct it.
- We need a provision for home and school addresses for college students so that their copies of *Sport Rocketry* are sent to the desired destination.
- Renewing a family membership can be confusing. Todd will work with Marie to clarify the questions and get to work on solutions.

Todd brought up the idea of membership auto-renewal. He'd like to make that the default rather than the current manual renewal. John said that it would likely result in pushback from some members.

**Randy moved to eliminate the \$5.00 member referral bonus, effective March 6, 2020. Ed seconded. Motion carried unanimously.**

The Board moved back into executive session at 2:34 PM. Topics discussed included NAR's management of the NASA Student Launch Program.

The Board came out of executive session at 2:40.

**Randy moved that the NAR contract with John Lyngdal to manage the NASA Student Launch payment, in the amount of the NASA payment to NAR (less the insurance costs to be borne by the NAR), made in three installments annually. Becky seconded. Motion carried unanimously.**

**Kevin moved to adjourn. Becky seconded. Motion carried unanimously.**

Meeting adjourned at 2:45 PM.

Respectfully submitted,

Mark Wise, Secretary