



**RUNNING A**

**NATIONAL ASSOCIATION OF ROCKETRY**

**NATIONAL EVENT**

**By the  
NAR National Events Committee**

**2007 Edition**

## **National Association of Rocketry National Events**

So you and your NAR section are interested in hosting an NAR national event? Well, first of all, thanks! The NAR is an all-volunteer organization and our members tell us that national events are among the most highly-valued of our organizational services. This valued NAR service program depends on a steady flow of volunteers willing to take their turn so that their fellow NAR members have national events to enjoy each year. More volunteer time goes into running the three big national events than into any other NAR service program. So thanks for your interest in joining this group of important volunteers. This handbook will explain what is involved in bidding for and then running an NAR national event.

First of all, there are three of these events: the NAR Annual Meet (NARAM); the National Sport Launch (NSL); and the NAR Convention (NARCON). The NAR's goal is to rotate these around the U.S. to different locations each year (NARCON sometimes stays in the same place for a 2-3 years), and to have each of any given year's events in a different region of the U.S. This ensures that NAR members throughout the U.S. have a regular opportunity to attend each one of these events within a reasonable distance of their home. Of course, achieving this geographic diversity goal depends on having volunteers in the right regions of the U.S. at the right time, so occasionally it cannot be met.

Each of the NAR national events is very different in its activities and customer base, but many of the elements of running one of them are common. We will first discuss common management techniques, and then discuss the unique aspects of each separately. Let's begin by defining what each of these events is all about and when it is typically held.

**NAR Annual Meet.** NARAM began in 1959 and it has been held every year since that date. It is the first, the oldest, and the longest of our national events and it is the world's longest-running rocketry event. Its primary purpose is to provide the series of competitive model rocket flying events that lead to selection of the year's National Champion model rocket fliers, by age division and by section. It is also the venue for the annual formal meeting of the Association, including Trustee elections, that is required by the NAR By-Laws. It includes many other activities, such as sport (non-competition) flying, a manufacturers' open forum, a benefit auction for the NAR Cannon Educator Grant Fund, one of the NAR Board of Trustees' semi-annual meetings, and the annual Research and Development competition. It lasts one full week, starting on a Saturday and ending the following Friday evening, and is always held the first week of August, a week which sometimes starts in the last few days of July.

**National Sport Launch.** The NSL began in 1990, shortly after the NAR moved into the field of high-power sport rocketry. It is the NAR's premier annual high-power rocket launch, but it is not just about adults flying large rockets. It includes rocketeers of all ages and interests and encompasses model rocket sport flying as well. There are no formal competitive events or NAR business events at an NSL; it is purely about informal, safe flying for sport, fun, and fellowship. It lasts two to three days, and is generally held on Memorial Day weekend. Other weekends within a week or two of Memorial Day are sometimes used where there are local issues over flying site availability, as long as this does not conflict with the Tripoli Rocketry Association's annual premier event, the LDRS high-power launch. NSL flying is generally held all day Saturday and Sunday and at least part of the day Friday or Monday.

**NAR Convention.** The NARCON had its roots in the early days of the hobby, with the Pittsburgh Spring Convention, the MIT Technical Convention, and the Pearl River (NY) Convention annual events that were held in the late winter or early spring beginning in the late 1960's. These conventions provided a major rocketry activity during what was non-flying weather in that region of the U.S., and greatly advanced the communication of technical advances within the hobby. After these locally-sponsored events died off in the 1980's, the NAR stepped in to fill the demand with a single national convention, first at NARAMs and then, starting in 1991, as a standalone event. NARCON provides an indoor, non-flying venue (although there is occasionally a short and optional sport launch during it) for exchange of information about modeling techniques and the technology and history of the hobby. Recently the NAR Board of Trustees has held its "winter" semi-annual meeting at NARCON. NARCON dates are flexible, but the event is now always held across a weekend in February or March. NARCON is the only NAR national event that may be held in the same location more than once in a row; if the host section is willing and if their first NARCON is successful, the convention can be held up to a limit of 3 times consecutively in the same venue.

It is not the goal of the National Association of Rocketry to have these national events become major revenue sources; they are services provided at the lowest possible price and highest level of quality to the maximum possible number of our members. But it is also not the goal of the Association to subsidize them. It is expected that each one will operate on at least a break-even basis, with a modest reserve built into the budget for unanticipated expenses. In most cases, this reserve becomes a profit, and the NAR splits any profit with the host section. The NAR absorbs the liability for any loss (within certain conditions), so host sections that do a prudent and diligent job managing a national event are not placed at financial risk if bad weather or other events beyond their control make the event financially unsuccessful. And of course, NAR liability insurance (both site owner and section insurance are required) covers any liability from rocketry accidents that occur when flying is conducted within the Safety Codes of the NAR. Flying under these codes is an absolute requirement for any NAR event.

The NAR sets minimum expected service standards for national events, and expects event organizers to meet or exceed these. Every National Event Director, and the President of the host section, must sign an "Agreement" with the NAR National Events Committee Chairman laying out exactly what each party agrees to do in order to meet these minimum service requirements and ensure the success of the event. Copies for each event are included in this Handbook.

Running an NAR national event is a rewarding experience if the Event Director and his (or her) section work together as a team and get an early start on each of the required tasks. It can be stressful if the Director tries to run it as a "one person show" without a strong supporting team (which is why national event bids require both a Director and a host section), or if key volunteers wait until the last minute to do critical tasks. It is time consuming, though; the Director and his key volunteers should not expect to have much time for their own flying, and if they do spend a lot of time flying themselves the event is unlikely to go well. However, most people only serve once as a National Event Director, and the rest of their rocketry career they are the beneficiaries of national events that others run for them. So just view it as a one-time "payback" to the community for all the times that you have been to great events run by others. That's what volunteer work is all about.

## **Submitting a Bid for a National Event**

The process of hosting an NAR national event begins with submission of a formal proposal, or “bid” to the Chairman of the NAR National Events Committee from a host NAR section and a Senior NAR member who will be the Event Director. This Chairman has the discretion to award bids without the prior approval of the NAR Board of Trustees or President. It is the goal of this Committee (not always met, but always a goal) to have the national events of the next year awarded and announced no later than the final awards banquet event at NARAM, which is the last national event of the current year. This means that the bid for a national event should be submitted by July of the year prior, and submission earlier than this is better. Bids can be decided immediately upon submission, or if multiple bids are expected the Chairman may set a deadline date for submission to ensure all potential bids are available for consideration before a decision is made.

The purpose of requiring a formal bid is to ensure that the potential host section and event director have researched and documented all of the major elements critical to success in hosting the event and that the major costs are understood and affordable. Once a bid is awarded and announced, it is too late to be checking to make sure that the flying site and hotel are really available after all, or to find out that the hotel’s seasonal rates are far beyond the means of the average rocketeer! The exact format of the bid is at the discretion of the group submitting, as long as all the key elements are covered. These key elements are:

1. Description of Venue. Where will the rocketry activities of the event be held, and what are the characteristics of this venue? For an event involving flying (NARAM and NSL, sometimes even NARCON), this description must cover the launch site. For an event involving meetings (NARAM and NARCON only), it must cover the meeting room facilities.

a. Launch Site (not required for NARCON unless an optional launch is planned)

- Map showing distance from lodging, food services, site dimensions, parking, access roads, nearby structures that would be considered “occupied” under NFPA 1127
- Site owner restrictions on concessions, parking, access to surrounding recovery areas
- Status of obtaining owner permission to use site
- Usage costs for site (fee or gift to owner, site preparation/mowing, park entry fees payable by individual participants, etc.)
- Built-in on-site amenities (shelters, toilet facilities, food service, etc.) that might reduce rental costs for the event
- Local regulations affecting rocket flying and any local permits/requirements for launches
- Maximum rocket size supported by field per NFPA 1127 standards
- Maximum FAA waiver altitude, and any FAA restrictions on operations/times
- Typical weather and fire hazard conditions for month of launch

b. Meeting Rooms (not applicable for NSL)

- Location of meeting room facility relative to host motel and flying site
- Number of available rooms and seating capacities of each

- Costs of room rental (with a clear statement of the dependency of these costs on how many sleeping rooms are booked, if the meeting rooms are at the host motel)
- Status of obtaining owner permission to use facility
- Availability and cost of required audio-visual support (for both computer and standard transparency projection)

2. Description of Lodging and Dining. What facilities will be available for participants' lodging and food service, and at what estimated cost?

- Type and cost per night of housing
- Availability of camping facilities
- Distance from housing to event (launch or meeting) site
- Cost of meal service per person (if included as a package, e.g. college dining hall); or distance from housing to restaurants
- Distance from housing to nearest commercial airport
- Options and cost per person for awards banquet (NARAM only)
- Tours and recreation opportunities in nearby area
- Nearest emergency medical facility to housing and to field

3. Management. How does the host organization plan to conduct the event?

- Principal managers for event and their previous experience
- Previous experience of host section with similar large events
- List of desired competition events (NARAM only – subject to approval by the NAR Contest Board)
- Other groups and individuals from whom assistance is planned (e.g. another section for sport range operation and equipment at NARAM, TRA prefecture teaming at NSL, etc.)
- Proposed daily schedule of activities
- List of range equipment that host section has available for event
- Arrangements for making high-power motors available on-site (NARAM and NSL only)

The budget is not submitted with a national event bid; it is developed and agreed to after the bid has been approved. Event Directors are not permitted to advertise the entry fees for a national event until the NAR National Events Committee Chairman has approved their event budget and fee schedule.

Event Directors who have significant up-front expenses that are payable before event revenue from entry fees is expected may request a cash advance from the NAR National Events Committee Chairman, as long as the “Agreement” among the Event Director, Host Section President and Chairman has been signed by all parties. This advance is repaid in connection with settling the books at the end of the event.

## **General Guidance for NAR National Events**

Think of a NAR national event as a party that you and your friends (from your section) are putting on for the NAR, one that you want your out-of-town friends to enjoy and be talking positively about for years. Like any good party you would host, keep it friendly; make sure all the key services happen, and happen on time; and keep it safe.

**Management.** The Event Director has to be a coach, leader, and manager of a team, not a person who tries to do it all single-handedly due to lack of support from his section, or due to lack of ability to delegate to others. It takes a half-dozen “core” committed volunteers that the Director sees and talks to regularly to make a national event succeed. Make sure that you have these commitments before you bid, communicate with your teammates (and the NAR National Events Committee Chairman) regularly, and meet with your local team at least monthly during the six months prior to the event to keep them all on the same page with you and to keep track of their execution of delegated details. Within the management team, one person must be accountable for receipt and disbursement of funds, including funds from registration. Other key jobs include an equipment manager, a local-area publicity manager, a vendor coordinator, a range crew manager (for NSL and NARAM), an awards manager (for NARAM), a results manager (for NARAM), and an audio-visual manager (for NARCON). And by all means, if you have any “crisis” issues or you need advice on what to do in a situation, call the NAR National Events Committee Chairman!

**Safety.** All NAR National Events must be run in strict compliance with the NAR Safety Codes and with NFPA Codes 1122 and 1127. The Event Director is responsible for enforcing this compliance, and must be a member of the NAR. This enforcement must include positive verification of current NAR/TRA membership and high power certification status for anyone flying high-power and current NAR membership for anyone flying NARAM competition. NAR membership is not otherwise required of participants. No flights of uncertified, experimental, or uncertified manufacturer demonstration motors are permitted at any NAR launch. The FAA waiver time and altitude limits must be precisely followed. The privilege of participants to fly does not override the obligation of the Event Director to prevent safety incidents that result from flights of questionable rockets or flights under marginal safety conditions.

**Launch Site.** A good launch site is a prerequisite to making a bid for, or getting, a NARAM or NSL. The site must meet Safety Code/NFPA 1127 minimum requirements for the altitude and power of high-power rockets being flown, and must be appropriate to the classes of competition events selected for NARAM. It must have on-field parking that is not too distant from the launch area, must have vegetation that is under control (close-cut and not dry and burnable) to a reasonable distance, and must not be susceptible to becoming impassable for days after rain. Written permission for use from the site owner must be presented to the NAR National Events Committee Chairman in connection with a bid, and NAR site owner insurance is required.

**Vendors.** Every large flying event depends on having on-field vendors of rocketry supplies (especially motors) in order to succeed. Even conventions are more enjoyable with a wide array of vendors. Work hard to get vendor support and give them recognition and publicity on your website and in your event announcements. A NARAM or NSL must have a motor vendor, as a minimum, in order to support fliers who come in by airline and cannot travel with rocket motors. The Event Director is responsible for ensuring that any high-power motor vendor has the appropriate license to

sell, but is not responsible for enforcing that fliers have any form of licensing to make purchases; this is the vendor's responsibility.

**Publicity.** First of all, take advantage of the free ad space your event gets in the NAR publications (see the "Agreement" for your event). Due to publication lead times, getting this ad in the right issue takes substantial advance planning. And a website is essential; the more attractive and full of content the better. In addition, NARAMs should provide a short article for a winter issue of Sport Rocketry highlighting the events, activities, and facilities of the upcoming NARAM to build customer interest. Also, ensure that after bid approval you immediately list your event in the "Launch Windows" online events calendar on the NAR website.

It is local area publicity that makes or breaks many National Events' attendance, especially for a NARCON or an NSL where typically many of the participants are locals who are not staying overnight, and do not register in advance. Publicize locally early and often, in hobby stores, in newspaper and radio/TV community calendars, in schools, everywhere that you might gain the attention of the type of people you are trying to attract. Send press releases out about a week before the event to your local TV stations and newspaper, but follow these up with in-person contact shortly thereafter (several days before the event) if you really want the coverage. If you get major media coverage in advance of the event or early in a multi-day flying event, be prepared with parking, toilet, and other facilities for spectator crowds and a crowd-control plan, i.e. people assigned to handle parking and to control spectators, flagline, etc.

**Motel.** The motel selection for a national event is one of the most critical early management decisions an Event Director makes. Pick one with bad service or bad rooms and you'll hear about it from everyone; Ramadas, for example, are famous for causing this issue. Pick one that is too expensive and your event turnout will be low or people will find someplace else cheaper to stay on their own. Be sure to look at one of the rooms that your customers will be sleeping in, and any meeting or banquet rooms you plan to use, before you sign the contract with the host motel. Be sure also that this contract locks in the rate that you will be charged for the sleeping rooms and for any associated support, such as meeting facilities.

The "ideal" motel has more than enough non-smoking two-bed sleeping room capacity to support your crowd, has meeting rooms that are complimentary (or offered at a reduced rate) if you book a reasonable number of room-nights for sleeping rooms, and will even offer a couple of complimentary rooms for such functions as your event headquarters. All sleeping rooms for a national event must be booked and paid for directly between individuals and the motel, with the individuals calling in to reserve against a block held in your event's name until 3-4 weeks before the event. Do NOT under any conditions put your event in a position with any liability for sleeping room rental fees or service charges, or for a guaranteed number of sleeping room reservations where unclaimed sleeping room reservations are paid for by the event if not reserved by the cutoff date.

**Range Equipment.** The minimum standards for quantities and size of range equipment are specified in the "Agreement" for NSL and NARAM, and the NAR ships in the contest model rocket range equipment for NARAM. It is the Event Director's responsibility to make sure that the equipment works from the opening moment of the first flying day, and keeps working throughout the event. This requires laying all the range equipment out and doing a full operational check and repair session on it (and charging the batteries) well before the event – not the morning of the event. And it requires having someone whose duty it is throughout the event to check and repair the equipment, do a daily cleaning on launch rods and ignitions clips, and charge the range batteries.

## **Budget Guidance for NAR National Events**

**Cash Donations.** All requests to hobby and professional aerospace industry companies for cash donations to support NARAM must be handled solely by the NAR National Events Committee Chairman, and no “trophy sponsorships” may be committed to by the NARAM CD except as approved by the Chairman. At other national events, and for sponsorship of non-trophy aspects of NARAM, Event Directors may solicit local cash donations; and they may solicit merchandise donations (door prizes, etc.) from whoever they wish. All donations over \$100 in value should be made to the NAR or to the host NAR section, not to individuals, and should be acknowledged with a letter citing the NAR’s tax-exempt number. The Chairman will handle this acknowledgement for NARAM trophy donations.

**Emblematic Items & T-Shirts.** NARAMs must provide one cloth patch to every registered full-week participant as part of the registration materials paid for by their entry fee. No other national event should do this. Be very cautious in ordering emblematic items (mugs, belt buckles, extra patches, etc.) for on-field sale; these almost always sell poorly and lose money, sometimes a lot. Allow participants to order such items in advance and do not get more than a few extras (10-20%) beyond this. T-shirts are the big seller, and all NARAM and NSL should offer them; NARCONs may at their discretion. Order good quality, and do not go overboard on the number of colors (but more than 2 is good). Price these 75-100% over cost. Order no more than 25% over what people pay for in advance, and only common sizes.

**Concession Sales.** Many national events choose not to manage their own food and drink concessions, but rather let the field or site owner or a local civic group do this as a fund-raising venture from which the host NAR section gets no profit. This is OK if the host section gets a clear local (e.g. volunteer fire department or site owner) goodwill benefit out of it. Otherwise, refreshment concessions should be managed as a money-maker for the event and included in the budget plan. If there are eating establishments within a mile or two of the range or in the same facility as the NARCON, it is not necessary to offer food as part of the event. It is required that cold non-alcoholic beverages be available on the NARAM and NSL flying ranges.

**Entry Fees.** This is the main revenue source for national events. Everyone who participates in the event must pay entry fees and meal costs, with only a few exceptions: host section members who do no NSL/NARAM flying or who participate in no NARCON events due to workload from running the event may be exempted; and guest speakers who are not NAR members and come to the event solely to speak to a plenary session by invitation of the Event Director should be exempted. In general:

- Age 18 and under participants should pay less than adults
- Families should get a “no greater than” fee for the whole family that is equivalent to the regular entry fee for one adult plus two kids
- Team entries at NARAM should pay a fee 50% higher than the fee for a single adult contestant
- People who participate for only one day (or for only one weekend of NARAM) should pay a lower fee than full-duration participants
- People who “sport fly” only at NARAM (and are not eligible for trophies), or who sport-fly only model rockets, should pay a lower fee than competitors or high power fliers
- People who register in advance of some deadline date several weeks in advance of the event should pay less than people who register at the last minute or on-site
- Vendors may be charged a modest fee for the privilege of selling on-site at the discretion of the Event Director. It is sometimes better just to ask them to make a merchandise donation for door

prizes, etc. instead. Vendors who purchase a trophy sponsorship at NARAM may not be charged a vendor fee.

**Meal Fees.** Do not go overboard on organized meals/banquets and make the per-person cost unaffordable. The only mandatory group-seating meal for all attendees at any national event is the final award banquet for NARAM. Other group meals at NARAM (“mid-week social”, etc.), NARCON, or NSL can be much more informal. Allowing people to make their own arrangements for breakfast and dinner should be the norm, unless the event is being held in a place remote from food service. In general, providing central food service at a national event is a huge pain and major potential source of money loss. Where it is provided (NARAM banquet), price it at cost (rounding up to the next whole dollar) but be sure you include service charges and taxes in the price, and check for payment status at the serving line.

**Trophies and Awards.** Trophies are not required, and in general should not be awarded, at national events other than NARAM. The “NARAM Agreement” specifies exactly how many trophies, of what size range, and for what purposes are required at a NARAM and no others should be given besides these. This is the largest single NARAM expense and the Contest Director should get competitive bids for this as a single large order. Take delivery of it at least a week before NARAM so that you can check for engraving errors and have time to get them fixed. Order at least one extra trophy of each size for the types used as individual event trophies; you will have ties for places and in case of ties it is expected that both winners will eventually get a trophy (even if one is mailed after the event).

**Meeting Room Fees.** Meeting room fees can be a significant expense for NARAM and are often the largest expense for a NARCON; these rooms are not required for an NSL. The “Agreements” for NARAM and NARCON specify the minimum meeting room requirements for these events. First choice for these is to use the host motel, particularly if a reduced or waived room rental fee can be had if the event fills a specified minimum number of sleeping rooms there. This can be dangerous for budget planning if the required minimum number is high, since this may result in a sudden large rental bill at the last minute if the event does not draw as large a crowd as hoped. If you enter into a deal with a motel on this, get in writing what the minimum number is and let the NAR National Events Committee Chairman know (and agree with) this number beforehand. If the cost of doing this is too high at the event’s primary motel or the motel has inadequate facilities, schools and community centers have often been used for meeting facilities, especially for NARCON.

**Bank/Pay Pal Costs.** It is expected that a NARAM will open a special checking account for the event, and doing so will require some paperwork (such as the NAR’s IRS tax-exemption letter) to do it in an organizational name and with minimum fees. Some of the post-9/11 security regulations have made it very time-consuming to open an organizational bank account, so start early on this one. NARCONs and NSLs may choose to open event accounts or they may use the host section’s account, as long as there are clear records kept concerning the separation of funds between the section and the national event. Increasingly, event organizers are opening Pay Pal accounts to accept electronic fee payment. Both checking accounts and PayPal charge fees for their services. It is not possible to run national event fee collection through the NAR Technical Services or NAR HQ credit card accounts.

**Website Hosting Costs.** All NAR national events must operate websites that contain information about the event and the host hotel, directions for getting there, entry forms, etc. Generally these will be done as a part of the host section’s website. The NAR owns the domain name [www.naram.org](http://www.naram.org) and will provide access to this domain name by the December before a NARAM.

**Rental Equipment Costs.** The minimum requirements for large tents, tables, chairs, and porta-potties for a NARAM or NSL launch range are specified in the “Agreements” for those events. NARCONs and NARAMs will also probably have some rental costs for the audio-visual equipment needed to support meetings and presentations. Most presenters these days expect a laptop with projector; some will use old-style transparency projectors. Be sure to sort out with each presenter what they need, and whether they are bringing their own laptop/projector. Audio-visual devices are extremely expensive to rent (especially from motels), so borrowing from section members should be tried first.

**Flying Site Use Fee/Donation/Support Costs.** It is normal to have to pay something to the launch site owner for use of the field for a NARAM or NSL. Sometimes this is a “donation”, sometimes a straight fee. Even if nothing is mandatory, it is OK to provide a modest donation as part of the event budget if this will contribute to future goodwill for a site that the host section uses regularly. It is also common to have to do some site preparation (mowing) to support a national event, and it may be required that a local fire department unit be at the field for fire protection in dry climates, especially for a high-power launch. Be sure to anticipate these costs and include them in budget planning.

**Printing & Postage Costs.** All national events should have some sort of hardcopy information, procedures, and schedule handout that is provided to participants at registration, and each participant must get a name badge. There is no expectation that the registration handout will be an elaborate glossy, color (expensive) booklet. Much of the information provided to participants before and after the event can and should be done by e-mail with attachments, rather than the more expensive method of printing and regular mail. NARCONs customarily mail a CD-ROM to participants after the event, containing all the presentations done at the convention; be sure to budget for this cost.

**Range & Administrative Supplies.** Every national event ends up needing to buy “odds and ends” to function smoothly. These range from manila envelopes for registration to parking signs for the field, to pens and flight cards for range operations. The “odds and ends” category of expenses can get out of control in a hurry if the Event Director does not exercise prior-approval control over what his staff is allowed to get reimbursed for in support of the event. Purchase or construction of major capital equipment (complete launch systems and high power pads) is not an authorized national event budget expense. The NAR provides an 18-pad model rocket range and a wide variety of support equipment such as a PA system and trackers to NARAM organizers (shipped in at NAR expense, shipped out as a NARAM expense), and only launch rods and metal stakes for the launcher pivots and flagline are required to fill this contest range out locally. High power and sport model rocket range equipment, and most of the lead-acid batteries that run the ranges, should be provided or borrowed by the host section.

**Variable Expenses and Income.** Many of the expenses and revenues of a national event are fixed or vary little as a function of the number of event attendees. A few (meals and T-shirts) vary directly with the number of people who register. A national event budget proposal sent to the NAR National Events Committee for approval must include at least two estimates of the “variable” expenses and income, each based on a different estimate of the number of attendees. One estimate should be for the number of attendees that would cause the fixed plus variable event income to add up to equal the corresponding fixed plus variable expenses (“break even point”). The second estimate should be for the number of attendees that would cause the cash reserve/profit to equal the required minimum value specified in the “Agreement” for that type of event (\$250 for NARCON and NSL, \$500 for NARAM). The latter estimate is the one used to set the event fee structure.

## Typical National Event Budget Line Items

### INCOME

#### Fixed Income

Industry Cash Donations (NARAM only)  
Emblematic Item Sales (mug, patch, etc.)  
Concession Sales

#### Variable Income

for XX Attendees

for YY Attendees

Entry Fees

Contestant (NARAM only)  
Sport Flier (full event)  
Sport Flier (one-day or weekend only)  
Participant (NARCON)  
Late registration surcharges  
Vendor

T-Shirt Sales

Meal Fees

Banquet (NARAM only)  
Dinner/Social

### EXPENSES

#### Fixed Expenses

Trophies and Awards (NARAM Only)  
Emblematic Item Costs  
Meeting Room Rental Fees  
Concession Costs  
Bank/PayPal Costs  
Website Hosting Costs  
Rental Equipment Costs  
Tents  
Tables & Chairs  
Porta-Potties (& Cleanout)  
Flying Site Use Fee/Donation  
Flying Site Support Costs (fire protection, mowing, etc.)  
Trash Collection Costs  
Printing & Copying  
Postage  
Range Supplies & Equipment  
Administrative & Registration Supplies  
Shipping Range Equipment (NARAM only)

#### Variable Expenses

for XX Attendees

for YY Attendees

Meal Costs

T-Shirt Costs

## Management Checklist for Running a NAR National Event

### Prior to Bid Approval:

- Research and submit bid to NAR National Events Committee Chairman.
- Obtain written approval of proposed events from NAR Contest Board once National Events Committee has approved the bid, and before event is publicly announced (NARAM only)

### Upon Bid Approval

- Submit announcement of event to Sport Rocketry and NAR "Launch Windows" calendar
- Obtain written guarantee of room rate, number of rooms, and meeting rooms from principal host motel – submit any motel contract to NAR National Events Committee Chairman for review before signing it

	<u>NARAM</u>	<u>NSL</u>	<u>NARCON</u>
<u>9 Months Prior to Event</u>	October	August	June

- Decide on patch (NARAM only) or event logo design
- Decide banquet menu & obtain rate guarantee (NARAM only)
- Post initial event information (except fees) on website and establish link from NAR website with NAR webmaster
- Get cost estimates for major expense categories: rental equipment, T-shirts, meeting rooms, supplementary range supplies, etc.

<u>8 Months Prior to Event</u>	November	September	July
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- Develop cost accounting system for income & expenditures
- Obtain information on campground facilities nearest to motel/launch site
- Hold planning session with host section staff
- Obtain FAA waiver for high-power flights covering full duration of event (except NARCON)

<u>7 Months Prior to Event</u>	December	October	August
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- Complete budget and get budget/fees approved by NAR Natl Events Committee Chairman
- Complete design of application form and post on website
- Request tax exemption certificate for state sales tax (if permitted in state)
- Open event PayPal and checking accounts

### January – for all National Events

- Submit written progress report to NAR National Events Committee Chairman for his use in making a consolidated report to the NAR Board for its February meeting

	<u>NARAM</u>	<u>NSL</u>	<u>NARCON</u>
<u>6 Months Prior to Event</u>	January	November	September

- Meet with site owner/manager to review details & conditions of planned site use
- Forward application materials to Model Rocketeer for free publication (NARAM only)
- Forward text for part-page ad to Sport Rocketry and Model Rocketeer for free publication

	March	January	November
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- Complete confirmation package for e-mail back to those who have applied
- NAR National Events Committee Chairman send letters to manufacturers and aerospace industry soliciting funds for sponsorship of trophies (NARAM only)
- Event Director send letters to manufacturers and vendors soliciting registration packet materials and door (or other types of) prizes (but not cash donations)
- Order site owner insurance for event site (launch site and any non-hotel meeting facility)

	April	February	December
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- Reserve major rental items for range: tables & chairs; porta-johns; tents
- Order patches (NARAM only)
- Establish vendor or process for providing on-range refreshments
- Place trophy order with all engraving text (NARAM only)
- Complete day-by-day schedule for all events and post on website
- Write RSO guidelines for launch activities, including any local field-specific rules; post on website (NARAM and NSL only)

#### 1 Month Prior to Event

- Purchase any locally-provided range supplies (batteries, launch rods, stakes for pad pivots and flagline, etc.)
- Complete testing/repair work on all locally-provided sport range equipment
- Receive and inventory NAR range equipment from National Events Committee (NARAM only)
- Complete testing of Contest Manager software with NARAM events & factors
- Complete range crew work schedule sheet listing each range crew position for each day of event (NARAM and NSL only) plus event judges (NARAM only)

#### Month of Event

- Obtain leaflets from local points of tourist interest for use in registration packets
- Order contestant badge materials, meal & raffle/door prize tickets
- Review meeting room setup and banquet arrangements with the hotel manager
- Obtain NAR certified engine list and (NARAM only) model rocket performance record list
- Provide any special room grouping/assignment requests to motel
- Order T-shirts and any other emblematic items based on advance orders
- Obtain trash containers for range

- Receive and proofread all trophies
- Print flight cards, labels, judging forms

#### Week Before Event

- Obtain national pre-NARAM competition point totals from NAR Contest Board (NARAM only)
- Send out local press releases
- Fill out range crew duty list with final names and make copies for registration packets
- Complete and print directory of participants for registration packets
- Set up and conduct full operational test of range equipment
- Purchase then weigh/measure/inspect/number eggs for any eggloft event (NARAM only)
- Conduct launch site and range safety survey, complete the “Pre-Launch High-Power Range Safety Checklist”, and provide to National Events Committee Chairman or his designated on-site representative before flying starts (NARAM and NSL only)

#### Post-Event

- Complete list of all flight results and places for all contestants, post on website within 7 days of the end of the event (NARAM only)
- NAR National Events Committee Chairman mail thank-yous to trophy sponsors (NARAM only)
- Mail flight cards and point award sheet to NAR Contest Board within 30 days of end of event (NARAM only)
- Provide 'thank-you' certificates for staff & local helpers
- Complete payment of all bills & refunds
- Clean, pack, and ship NAR range equipment (NARAM only)
- Produce final financial accounting; close checking account, submit check & records to NAR National Events Committee within three months of end of event

## **Specific Guidance for an NAR Convention**

**Program.** The key to a NARCON is the program of presentations and speakers. Many NARCONs have a “theme” of some kind, such as commemoration of some hobby or spaceflight anniversary or a focus on some aspect of spaceflight, and a couple of highlighted speakers or activities that address this theme. Do not make the whole NARCON single-topic, though; the key to economic success is a diverse menu of events covering as many technical and craftsmanship interest areas as possible.

All NARCONs have one or two featured speakers who address “plenary” sessions of all the participants. These can be notable figures in the history of the hobby, or people with something interesting to say about some aspect of professional aerospace. These sessions are normally scheduled on Saturday, which is the day of peak attendance, and during times when they are the only activity – so make sure the speakers are good! NARCON budgets do not support payment of honoraria (fees) to plenary speakers, but normally can be designed to cover travel and lodging expenses for one or two of them, particularly if the event does not have to pay for use of meeting rooms.

The other key feature of a good NARCON is a diverse and interesting series of workshops and/or discussion groups that have something for rocketeers of all levels of experience. These are typically sessions of 75-90 minutes length on a single topic with one or multiple people speaking or demonstrating, with two to four such events going on simultaneously on different topics throughout substantial portions of each of the days of the NARCON. Each such “breakout session” requires its own meeting room, and the number that can go on at once is often constrained by the availability and/or affordability of such rooms (and supporting audio-visual equipment). It is good to have a permanently-dedicated area for vendor use and another for event registration/admin in addition. The other constraint is availability of people who know something they want to pass on about a topic of interest to other rocketeers; recruiting the right “volunteers” to do this is the number one job of a NARCON Director.

NARCONs also often have a building session of some kind (“kitbash” or some other theme), one or more group meals of some kind (deli-catered sandwiches for example, but preferably not expensive sit-down hotel banquet meals), and occasionally a sport launch. The launch is usually an activity to attract local publicity and participation, or tied to what is built in any building session. If you choose to have a launch, do not let it be the only event going on at that time or so remote from the convention site that people who do it miss most of the rest of the events. And since NARCONs are held in the winter when weather is often not great for flying, have a “plan B” if the weather does not permit flying safely.

**Facilities.** NARCONs are basically association conventions, which are the bread and butter of most large hotels, but they are run for hobbyists and kids who do not want to pay professional association rates for their attendance. Because they are small and low-budget, they have a hard time driving a good bargain with hotels to serve as full-spectrum host sites. Sometimes this can work, if the NARCON is held in what is the off-season for tourists and conventions in that region, but this may still require a “guaranteed” amount of sleeping room or catering business for the motel that is beyond the reasonable scope of a NARCON. More often, the host motel is used only for sleeping rooms with the NARCON events being held in a nearby school or community center. Wherever the meeting events are held, inspect the facilities first, and get the commitment to the specific rooms you need in writing.

**Proceedings.** NARCONs are expected to gather the materials used by as many as possible of the plenary and breakout session presenters and provide this to all participants, generally on a CD that is mailed out post-event. Ideally, participants can also be provided with an abridged printed version of these at registration; this is more difficult and expensive to pull off. NARCON Directors should ensure that presenters provide them with the electronic version of their presentation materials to support these.

## Typical NARAM Schedule

This typical schedule is based on a NARAM flown in temperate climates; NARAMs flown in the desert regions normally use a daily schedule that starts and ends flying much earlier.

### Friday

7 PM      10 PM      Registration at Motel

### Saturday

10 AM      5 PM      Sport Flying at Launch Site  
(odd-numbered NARAMs) US Team Selection Flyoff  
Registration at Field

7 PM      10 PM      Registration at Motel

### Sunday

10 AM      5 PM      Sport Flying at Launch Site  
(odd-numbered NARAMs) US Team Selection Flyoff  
Registration at Field

7 PM      10 PM      Registration at Motel

8 PM      9 PM      Contestant Briefing

9 PM      11 PM      Turn-in for craftsmanship events models and for R&D reports

### Monday

9 AM      5 PM      Contest Flying at Launch Site: 2 duration events  
Sport Flying at Launch Site

8 PM      10 PM      NAR Town Hall and Association Meeting

### Tuesday

9 AM      5 PM      Contest Flying at Launch Site: 2 events (tracking or duration)  
Sport Flying at Launch Site

5 PM      7 PM      Social Event (BBQ, etc.) and mid-week event awards (may be  
done Wednesday if no recreational event is planned then)

8 PM      10 PM      NAR Benefit Auction for the Cannon Educator Fund

### Wednesday

9 AM      1 PM      Contest Flying at Launch Site: 1 event (tracking or duration)  
Sport Flying at Launch Site

2 PM      6 PM      Tour or Recreational Event (time used for continued contest  
flying if a day has been or is expected to be lost due to weather)

8 PM      10 PM      Manufacturers' Open Forum  
Research & Development oral presentations: A & B Divisions

### Thursday

9 AM      5 PM      Contest Flying at Launch Site: 2 duration events  
Sport Flying at Launch Site

7 PM      9 PM      Research & Development oral presentations: C & Team Divisions

8 PM      9 PM      Section Leaders Forum

8 PM      10 PM      Viewing of craftsmanship event models (contestant pickup at end)

### Friday

9 AM      3 PM      Contest Flying at Launch Site: craftsmanship events and R&D  
Sport Flying at Launch Site

7 PM      10 PM      Awards banquet

## **Minimum NARAM Range Crew Positions (per shift)**

- 1 Range Safety Officer
- 1 Launch Control Officer
- 1 Queue Manager/LCO Assistant
- 2 Check-in
- 1 Pad Assignment
- 1 Flight data entry (using Contest Manager and a laptop)
- 1 Returns
- 1 Timer manager (timing days) or tracking communicator (tracking days)
- 6+ Trackers (2 per station, 3 stations minimum)
- 8+ Timers (2 per team, 4 teams minimum)
- Craftsmanship and Research and Development Judges (no other duties)
- Full-time host section person for range equipment repair/adjustment

## **Typical Sequence of Events at NARAM Awards Banquet**

- Dinner
- NARAM Event Awards (CD)
- Gregorek Junior Craftsmanship Award (in connection with appropriate event) (Larry Rice)
- Newsletter Award (Sport Rocketry editor)
- Best Midwest Qualified Flight Award (Bob Kaplow)
- Section of the Year Award (Section Activities Committee Chairman)
- Cannon Teacher Grants and NAR Scholarships (Education Committee Chairman)
- NAR President's Award (NAR President)
- Galloway Service Award (NAR President)
- National Championship Awards (CD)
- Announcement of Next NARAM (National Events Committee Chairman)

## **Supplementary NARAM/NSL Range Operations Procedures**

These procedures are provided as a starting point for local event-specific guidance that must be provided to all NAR national event fliers well in advance of their arrival. They supplement but do not replace the specific requirements of the NAR Safety Codes, NFPA Codes 1122 and 1127, and the U.S. Model Rocket Sporting Code. NARAM CD's should add to these general procedures any limited specific interpretations of ambiguous Pink Book competition rules for their NARAM events. Any such contest rule interpretations must be approved by the NAR Contest Board.

### **Both NARAM and NSL**

1. All fliers must wear their registration badges indicating registration status and high-power certification level when checking in rockets for flight or serving range crew duty.
2. If questioned, fliers must provide evidence that any high-power rocket that they present for flight will not exceed the waiver or cloud ceiling limits in effect.
3. No one under-age or not certified for the applicable motor impulse will be allowed past safety check with a rocket containing a high-power motor unless accompanied by an appropriately-certified sponsor.
4. All radio control equipment will be impounded while on site and released for use only by compliance with the frequency control procedures.
5. Only biodegradable recovery wadding is permitted.
6. Pad assignments will be issued based on the order in which fliers clear safety check with ready-to-fly models, and the order of availability of pads of the appropriate type. Assignments will be made only to unoccupied pads. Fliers with personal launching equipment at a busy pad have the option of moving their equipment to an unoccupied pad, or waiting until the pad with their equipment is free. No stacking or preallocating flight cards for a particular pad will be allowed.
7. Misfires that can be corrected with a spare igniter at the pad will be permitted to recycle without returning to Pad Assignment. The flight card will be removed from the ready-to-fly queue and re-entered when the flier again signals readiness. If the flier must leave the flight area to correct a misfire, the flight card will be returned to Pad Assignment.
8. The following are the areas into which you MAY NOT follow your rocket for recovery, and where a competition rocket that is seen to land will be granted a "Rule 10.4" recovery:
  - a.
  - b.
9. All igniters for high power rockets will be installed only at the pad before flight. They should be brought to the safety check in desk separately from, but along with the rocket.

- Sensitive igniters (such as 'electric match' and 'flash bulbs') must be shorted until hooked up to the range launch control systems at the pad.
  - Altimeter charges should also be shorted until the rocket is at the pad area.
  - Continuity checks on igniters that are installed in high power motors may only be made through the range launch control systems, after the rocket is at the pad, pointed upward, and ready to be flown.
10. All fliers are subject to being required to perform some form of range operations duty on a “fair share” basis, based on any preferences they indicate at registration and on the needs of the event. The Event Director may suspend flying privileges for participants that refuse, are late for, or do not show up for their assignments.
  11. All flier-provided launching devices must include an adequate blast deflector that prevents motor exhaust from directly impinging on the ground.
  12. The launch site owner requires the following restrictions: (rules on pets, glass containers, alcoholic beverages, other prohibited activities, etc.)

### **NARAM Only**

1. There will be two ranges set up for rocket activities: the Contest Range and the Sport-Flying Range. These will be the only areas from which rockets may be launched.
  - Competition flights will be flown only from the competition range.
  - Practice flights for competition models may be made from the sport range.
  - Each range will have its own Range Safety Officer. The RSO for the high-power range will notify the competition range RSO prior to launching a high-power rocket.
2. Contestants must check in for each official flight attempt and satisfy the check-in officer(s) that their model complies with the rules and is ready to be flown. A new flight card will be issued for each flight attempt. The contestant will ensure the card contains the proper information or provide it to the check-in officer, and will not handle the card thereafter.
3. Check-in for each event will close 15 minutes prior to the end time for that event. The pad assignment queue will close 10 minutes prior to the end time for that event. After the close of an event, all flights will be processed out of the assignment queue through a single launch attempt. Misfires on the pad after event close will not be granted additional launch attempts.
4. For events requiring a returned model, that return must be made within 90 minutes from the end (close) of that event.
5. For events that require tracking, all tracking will be to 'ejection'.

**NATIONAL ASSOCIATION OF ROCKETRY ANNUAL MEET**  
**TERMS OF AGREEMENT WITH HOST SECTION AND CONTEST DIRECTOR**

The NAR agrees to provide, as a minimum, the following support to the host section and Contest Director:

1. PUBLICITY AND MANAGEMENT.

- Publish a free 2-page ad/application in Model Rocketeer and a half-page ad in Sport Rocketry and publicize the event on the NAR's main web page
- Coordinate and arrange any press coverage by national (not local) media.
- Provide (via the NAR Contest Board) end-of-day and end-of-meet results processing using the host section's computer and Contest Manager software.
- Provide access to the [www.naram.org](http://www.naram.org) domain name for use with the NARAM website.

2. FINANCIAL.

- Provide copy of NAR's IRS tax exemption form.
- Solicit at least \$3000 in donations for trophy support from major corporations and from the hobby industry, and provide all special NAR national awards (Galloway, President's, and Section of Year Awards)
- Provide funding advances (repaid from NARAM budget) when required as a deposit to order trophies and patches or for other early expenses.
- Provide coverage against financial losses by the CD or host section which are due to unexpectedly low meet attendance or to events beyond their control, when expenses are within the limits established in the approved NARAM budget.

3. EQUIPMENT.

- Provide the following major range equipment in good working order at least two months before the meet, shipped in at NAR expense:
  - 18-position launch system for model rockets, with pad numerals and paddles
  - 18 launcher pivot heads and blast deflectors (no launch rods or pivot mounting stakes)
  - 16 digital stopwatches
  - 1 public address system with 2 speakers and wireless mike
  - 4 tracking scopes with tripods
  - 4 FRS radios
  - 1 battery charger
  - 2 Indian pump fire extinguishers
  - 6 100-foot sections of flag line
  - Scale for weighing rockets up to 15 lbs

The host section and Contest Director agree to exert their best efforts toward producing a successful and enjoyable NARAM that is run in complete compliance with the Pink Book and NAR Safety Codes and NFPA 1122/1127. They specifically agree to provide the following, as a minimum, in connection with this:

1. FINANCIAL.

- Provide a detailed budget for approval by the NAR National Events Committee Chairman prior to announcing the meet fees, with the fees/budget based on a planned profit/contingency reserve of \$500
- Establish a financial management system (including a local checking account) that ensures accountability for all NARAM funds, with all obligations controlled by the CD
- Provide detailed quarterly reports of NARAM income and expenses to the NAR National Events Committee Chairman
- Provide the National Events Committee Chairman a final detailed cost accounting, with a check to NAR for 50% of net profits, by November 30 after NARAM.

2. FIELD.

- Provide a field for 7 days of flying that is suitable to the events being flown (including high-power motors through at least "J" class), and that is reasonably free of hazards such as major roads , power lines, or tall vegetation.
- At odd-numbered NARAMs, provide use of contest-range portion of field for conduct of the US International Spacemodeling Team selection flyoffs on the Saturday and Sunday before NARAM competition starts
- Secure NAR Site Owner insurance and written permission for use from the owner or senior controlling government official and any local fire/police authorities (if required) for the field
- Provide parking for at least 150 cars, and toilet facilities, within 200 yards of the range head.
- Secure an FAA waiver to at least 5000 feet for a minimum of two full days (the Saturday and Sunday before NARAM competition starts), and preferably the entire week.

3. EQUIPMENT.

- Provide the following major range equipment without cost to the NARAM budget (except shipping costs for borrowed equipment):
  - 1 public address system for sport range
  - 18 or more launchers for sport range, including 6 for rockets of up to 20 pounds liftoff mass
  - Fire extinguishing and first aid equipment
  - Scale model measuring tools (if required)
  - 4 lead-acid automobile batteries (1 may be purchased with NARAM funds)
  - Laptop computer & power supply for results processing
  - Launch rods, and stakes for supporting flag line
- Provide the following major range equipment, by rental with NARAM funds if necessary:
  - 20x30 foot party canopy tent for range control

- 20x40 foot (or larger) party canopy tent or equivalent fixed shelter for prep area
  - Porta-johns (1 per 40 participants with cleanouts every 3rd day) if toilet facilities not available within 200 yards of range head
  - 12 or more 3x8 foot tables and 30 chairs
  - 2 or more large water coolers or equivalent source of cool water for range crew on duty
- Ship all NAR-provided range equipment, in good condition and working order, back to wherever the NARAM Committee Chairman designates (at NARAM budget expense) within 45 days of the end of the meet.

#### 4. ACCOMODATIONS.

- Arrange at least 90 motel or equivalent rooms of reasonable quality, in a single location, costing no more than \$100 per room per night, within a 30-minute drive of the launch site.
- Provide a 4-hour awards banquet on the last night of the meet, at a cost of \$30 or less per person, in a facility with a capacity of at least 250.
- Provide a meeting room for at least 200 people for at least 4 hours each on Sunday through Tuesday evenings of the meet and for at least 75 people on Wednesday and Thursday evenings.
- Provide a lockable room for storage and judging of craftsmanship event models from Sunday night until Thursday night of the meet.
- Arrange a meeting room for the NAR Board of Trustees (paid by NAR) for the Thursday afternoon and all day the Friday before NARAM, and for Monday evening during the meet.
- Arrange a lockable room (preferably at no cost) for use by NARTS as their store.

#### 5. MANAGEMENT.

- Provide a single Contest Director who is personally responsible for planning and conduct of the meet.
- Arrange a vendor with all required licenses to sell and store motors for all events plus high-power
- Provide at least 8 adults to assist the CD with advance arrangements and conduct of the meet.
- Send mail/e-mail out to applicants within a week of receipt of their application, acknowledging receipt of their application.
- Provide a web page with complete and current information about the event, plus a downloadable registration form, at least 6 months before NARAM and post on it the daily schedule of events and any local/RSO rules in effect for the meet by 1 June.
- Provide registration packet to participants on arrival that contains at least a patch, a roster of attendees, a schedule, and a name badge.
- Within 7 days of the end of NARAM, post on the NARAM website the final event places, flight results & point totals for every competitor.
- Provide a results processing process using Contest Manager software that supports timely posting of flight performance results on the field.
- Provide an on-field altitude data reduction capability based on the geodesic formulas (included in Contest Manager).
- Ensure that an article with photos on the event is submitted to Sport Rocketry magazine within 60 days.



**N.A.R. NATIONAL CONVENTION**  
**TERMS OF AGREEMENT WITH HOST SECTION AND EVENT DIRECTOR**

The NAR agrees to provide, as a minimum, the following support to the host section and Event Director:

1. PUBLICITY.
  - Publish a free half-page ad in all NAR official publications at least 4 months before NARCON.
  - Coordinate and arrange any press coverage by national (not local) media.
2. FINANCIAL.
  - Provide copy of NAR's IRS tax exemption form.
  - Provide coverage against any financial losses by the Director or the host section which are due to unexpectedly low attendance or to weather or other events beyond their control, when expenses are within the limits established in the approved NARCON budget.

The host section and Event Director agree to exert their best efforts toward producing a safe, successful and enjoyable NARCON that is run in full compliance with the NAR Safety Codes, NAR Board policies, and NFPA Codes 1122/1127. They specifically agree to provide the following, as a minimum, in connection with this:

1. FINANCIAL.
  - Provide a detailed budget for approval by the NAR National Events Committee Chairman prior to announcing the meet fees, with the fees/budget based on a planned profit/contingency reserve of \$250.
  - Establish a financial management system (including a local checking account) that ensures accountability for all NSL funds, with all obligations controlled by the Director.
  - Provide the NAR National Events Committee Chairman a final detailed cost accounting, with receipts and with a check to the NAR for 1/3 of net profits, within 60 days of the end of the NARCON.
2. FIELD.
  - Secure NAR Site Owner Insurance and full legal approval (including written permission for use from the owner or senior controlling government official and any local fire/police authorities if required) for the field for any launch, and for any non-motel meeting facility.
3. ACCOMODATIONS AND ARRANGEMENTS.
  - Arrange at least 40 motel or equivalent rooms of reasonable quality, in a single location, costing no more than \$100 per room per night.
  - Arrange meeting rooms, with seating and appropriate audio-visual support, (including at least two transparency projectors overall) for both general sessions for all NARCON attendees, and for three simultaneous breakout sessions, on the first (Friday) evening, all day Saturday, and Sunday morning of NARCON.
4. MANAGEMENT.
  - Provide a single Event Director who is personally responsible for the planning and conduct of the NARCON and is personally insured under the NAR policy.
  - Establish a website for NARCON that includes schedule, registration forms, directions, and

- hotel arrangements.
- Provide at least 5 adults to assist the Director with advance arrangements and conduct of NARCON.
  - Ensure that an article on the event with photos is submitted to Sport Rocketry magazine within 60 days of the end of NARCON.
  - Provide registration packet to participants on arrival that contains at least a roster of attendees, a schedule, a copy of as many of the convention presentations as possible, and a name badge.

AGREED BY: \_\_\_\_\_ NAR National Events Committee Chairman

\_\_\_\_\_ NARCON Event Director

\_\_\_\_\_ Host Section President

**NATIONAL SPORT LAUNCH**  
**TERMS OF AGREEMENT WITH HOST SECTION AND EVENT DIRECTOR**

The NAR agrees to provide, as a minimum, the following support to the host section and Event Director:

1. PUBLICITY.
  - Publish a free half-page ad in all NAR official publications at least 4 months before NSL.
  - Coordinate and arrange any press coverage by national (not local) media.
2. FINANCIAL.
  - Provide copy of NAR's IRS tax exemption form.
  - Provide coverage against any financial losses by the Director or the host section which are due to unexpectedly low attendance or to weather or other events beyond their control, when expenses are within the limits established in the approved NSL budget.

The host section and Event Director agree to exert their best efforts toward producing a safe, successful and enjoyable NSL that is run in full compliance with the NAR Safety Codes, NAR Board policies, and NFPA Codes 1122/1127. They specifically agree to provide the following, as a minimum, in connection with this:

1. FINANCIAL.
  - Provide a detailed budget for approval by the NAR National Events Committee Chairman prior to announcing the meet fees, with the fees/budget based on a planned profit/contingency reserve of \$250.
  - Establish a financial management system (including a local checking account) that ensures accountability for all NSL funds, with all obligations controlled by the Director.
  - Provide the NAR National Events Committee Chairman a final detailed cost accounting, with receipts and with a check to the NAR for 1/3 of net profits, within 90 days of the end of the NSL.
2. FIELD.
  - Secure NAR Site Owner Insurance and full legal approval (including written permission for use from the owner or senior controlling government official and any local fire/police authorities if required) for a field that meets NFPA Code 1127 standards for "K" motors or bigger, and that is reasonably free of hazards such as major roads, inhabited buildings, tall vegetation, etc.
  - Provide parking for at least 150 cars, and toilet facilities, within 200 yards of the range head.
  - Secure an FAA waiver to at least 10,000 feet for the duration of the event.
3. EQUIPMENT.
  - Provide the following major range equipment without exceeding the agreed budget estimate for range equipment procurement:
    - 12 or more launchers for a model rocket sport range
    - 18 or more launchers for the high power range, with at least 6 capable of launching "K" powered rockets of up to 30 pounds, at least 12 more capable of launching "J" powered rockets of up to 15 pounds.

- Provide the following major range equipment, without procurement charged to the NSL budget but by rental with NSL-budgeted funds if necessary:
  - Fire extinguishing and first aid equipment
  - As many lead-acid batteries as required to support all the pads simultaneously
  - 1 public address system
  - 20x20 foot party canopy tent for range control
  - Porta-johns (1 per 40 participants) if toilet facilities not otherwise available within 200 yards of range head
  - 6 or more 3x8 foot tables and 20 chairs
  - 1 or more large water coolers for on-duty range crew

4. ACCOMODATIONS.

- Arrange at least 50 motel or equivalent rooms of reasonable quality, in a single location, costing no more than \$100 per room per night, within a 45-minute drive of the launch site.

5. MANAGEMENT.

- Provide a single Event Director who is personally responsible for the planning and conduct of the NSL and is personally certified by the NAR at Level 2 or above.
- Arrange a vendor with all required licenses to sell motors through at least "K" power for high-power flying and store them on the field, and who agrees to conduct business in compliance with BATFE regulations.
- Provide at least 3 adults to assist the Director with advance arrangements and conduct of NSL, and provide Range Safety Officers and Checkin Officers certified to NAR/TRA Level 2 or above.
- Establish a website for NSL that includes schedule, registration forms, directions, and hotel arrangements.
- Ensure that an article with photos on the event is submitted to Sport Rocketry magazine within 60 days of the end of the event.
- Send pre-NSL mailout to applicants at least 30 days before the event, containing at least the schedule, special rules, and maps.
- Provide registration packet to participants on arrival that contains at least a roster of attendees, a schedule, and a name badge.

AGREED BY: \_\_\_\_\_ NAR National Events Committee Chairman

\_\_\_\_\_ NSL Event Director

\_\_\_\_\_ Host Section President



## **The National Association of Rocketry**

The National Association of Rocketry (NAR) is a non-profit 501(c) (3) scientific organization (IRS #13-6165575) for spacemodeling (hobby rocketry) consumers. Founded in 1957, the NAR has over 4600 members and 110 affiliated clubs across the entire U.S. It is the largest and oldest independent national organization for hobby rocket fliers.

The NAR's primary orientation is education and consumer safety. It is the recognized national testing authority for safety certification of all model rocket motors in the U.S. It plays a strong role in the establishment of national safety standards for the hobby through its participation in the National Fire Protection Association. Its Safety Codes are recognized and accepted by manufacturers and public safety officials nationwide. The NAR also functions as the consumer liaison among hobby manufacturers, local public safety officials, and the U.S. Department of Transportation, the Federal Aviation Administration, the Bureau of Alcohol, Tobacco, Firearms, and Explosives, and the Consumer Product Safety Commission.

The NAR publishes the only national magazine devoted to model rocketry, the bimonthly Sport Rocketry. This color magazine goes to all NAR members plus numerous other subscribers and to newsstands around the nation. The NAR also provides a wide range of other services to its members, including education programs, liability insurance, and publication of technical literature.

The NAR sanctions over one hundred local, regional, and national model rocket competitions each year. It sponsored the Federation Aeronautique Internationale (FAI) World Championships when these were held in the U.S. in 1980 and 1992 and the U.S. teams that attend these events held overseas. It co-sponsors (with the Aerospace Industries Association) the annual Team America Rocketry Challenge for 7th through 12th grade students around the U.S. -- the largest rocket contest in the world. NAR clubs and individual members earn points during each competition year, which count toward the U.S. National Championships. These Championships are awarded at the NAR Annual Meet (NARAM), which is held in early August and attended by over a hundred of the nation's most expert fliers. Competition events range from altitude and scale modeling to parachute and glider duration.

The NARAM competitions have been held at a wide variety of sites around the U.S. over their 50-year history. These sites have ranged from military bases (Hanscom AFB and Aberdeen Proving Ground) to NASA facilities (four times at Johnson Spaceflight Center and twice at Wallops Island) and the Manassas National Battlefield Park, plus various state and local parks. Many of the awards at these competitions are sponsored by aerospace corporations such as Aurora Flight Sciences or Aerojet, or by companies in the hobby industry.

## N.A.R. PRE-LAUNCH HIGH POWER RANGE SAFETY CHECKLIST

SITE LOCATION: \_\_\_\_\_

### NFPA 1127 REQUIREMENT

**YES    NO**

Are launch pads the required distance away from the launch operator, spectators, and edge of the launch site for the size motors that are being allowed to be flown, and are measures taken to keep people this distance from launch pads that are in use?

Is the area around the base of each launch pad cleared so that dry, burnable materials are at least the required distance away from pads (including the 50% extra distance required for pads supporting “sparky” motor flights)?

Do all launch pads have jet blast deflectors that prevent motor exhaust from directly hitting flammable materials?

Is there a means available for determining if wind speed exceeds the safety limit of 20 mph?

Is the launch site minimum dimension at least one-half the maximum flight altitude that is being allowed, and at least 1500 feet?

Is there a means available and in use for ensuring that rockets do not exceed the waiver altitude?

Is there a system in use to promptly alert all persons in the launch site’s boundaries of an impending countdown and of any safety issues with a flight?

Are measures being taken to keep rocket launch angles within 20 degrees of vertical, to prevent rocket vertical flights from going directly over the heads of spectators, and to ensure that recoveries do not drift into spectator areas or outside the boundaries of the launch site?

Is there a minimum standoff distance of 1500 feet between the launch pads and any occupied building, or public road?

Is there an FAA waiver in effect for the launch period, with a copy of this waiver on the field and a means available to contact or be contacted by FAA air traffic control?

Are all launch pads stable and capable of providing rigid guidance to rockets of the size and weight being flown from them?

Is firefighting and first aid equipment immediately available for use, and is a means available to immediately request emergency fire or medical assistance if required, including the exact address of the site and the phone numbers to call for assistance?

Does the electrical launch system have features to prevent inadvertent firing of low-current igniters, and does it have the required removable safety interlock switch and a launch switch that returns to “off” when released?

Are measures being taken to ensure that all fliers have current user certification for the power level of high-power motor that they fly?

If there are power lines in the vicinity, is the number available to call for assistance if a rocket lands on these power lines?

Is the area where high power rocket motors are prepared for flight posted as a NO SMOKING area, and is smoking prohibited within 25 feet of any motors?

Does the range have a Range Safety Officer with a high power user certification who is exercising authority to ensure compliance with NFPA 1127 requirements?

**CHECKLIST COMPLETED BY:** NAME: \_\_\_\_\_

NAR # \_\_\_\_\_ DATE: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_