May 21, 2021

Dear American Rocketry Challenge Contestant,

Congratulations! You are a finalist for The American Rocketry Challenge for 2021. Your team's local qualification flights have earned you an invitation to participate in The American Rocketry Challenge National Finals between June 12 and June 20 at your choice of one of the 11 official Regional Launch Sites around the U.S. 615 teams from 47 states entered this year's competition and your qualifying score was one of the 100 best. You can be proud of your achievements in aerospace design and rocketry.

To accept your spot in the National Finals please fill out and return the registration form that the registered supervisor for your team will be receiving. You can do so using the online Registration Portal. If for some reason you cannot access the Registration Portal, please email us immediately and we will provide you with PDFs you can complete and email to us. All forms must be received by **Sunday, May 30, 2021**. If we do not receive all forms from your team by Sunday, May 30, we will offer your spot to an alternate team. Likewise, if you will not be able to attend the Finals, please let us know as soon as possible so that we may offer your spot to one of these alternate teams.

The enclosed information should answer your questions about procedures for the National Finals. It also addresses many of the questions that we have received from teams over the last several months concerning event rules, legal rocket designs, etc; please read the entire document carefully. In case of conflict, the official rules take precedence. Remember that the exact model you fly at the National Finals must have previously been test-flown successfully, and you will not be able to do any test or practice flights at the flying site before your Finals flight.

Please contact us at jeremy.davis@aia-aerospace.org if there are things that you need to know about registration that are not covered by this letter.

Sincerely,

Jeremy Davis
American Rocketry Challenge Manager
Aerospace Industries Association (AIA)

Trip Barber
American Rocketry Challenge Manager
National Association of Rocketry (NAR)

THE AMERICAN ROCKETRY CHALLENGE 2021 NATIONAL FINALS

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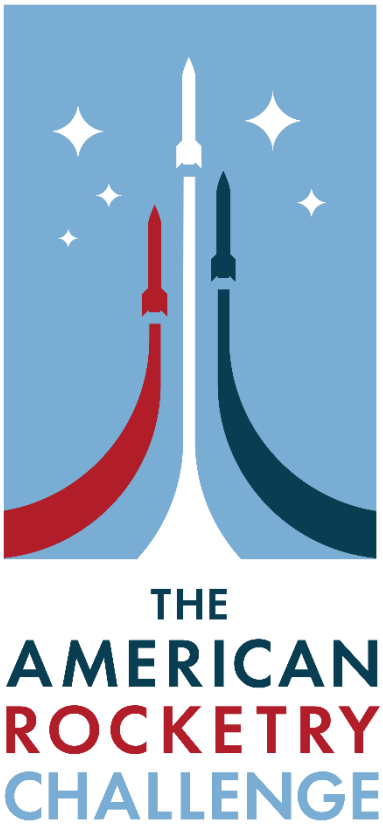


2021 The American Rocketry Challenge Finals

Finals Schedule

DISTRIBUTED FINALS

Due to our concern for the health safety of all the participants, the American Rocketry Challenge 2021 National Finals will not occur at a single-site at Great Meadow, Virginia, with our usual 1000+ participants. Instead, the National Finals will comprise 11 separate Finals launch sites over two weekends—all run by the same flying rules and procedures with support from a local chapter (section) of the National Association of Rocketry (see the list on the following page). Each Launch Site is broken down into three-hour Launch Windows, where no more than four to eight teams are on the field at any one time.

Each launch is being run under the COVID safety protocols of its local jurisdiction, which in some cases limit the number of participants (students, adult supervisors, and supporters) that can attend . Please respect these local requirements, even if they vary from those in your own home location or your own personal preferences.

Each launch is also being held in a fairly austere location compared to the National Finals at Great Meadow. **If you need a work table and chairs, a canopy for shade, or food and water, plan to bring these yourself.** No site will have any of these. They will all have launch pads and a launch system, and the range crew staff to support you, but that's it!

We look forward to a COVID-free return to Great Meadow in 2022.

ATTENDANCE

Teams that are selected to attend the Finals must confirm their participation by completing the National Finals Registration tasks online in our Registration Portal. These must be completed and submitted no later than **Sunday, May 30, 2021**. Alternate teams will be notified by Monday, May 31, 2021 if a primary team has declined their invitation. If you cannot access the Registration Portal, notify us immediately and we will provide you with PDF forms you can complete and email us**.** While there is plenty of site capacity nation-wide (over 150 spots), individual sites may fill up depending on Finals teams' location and their choices. If the exact site and launch window time that you want is not available when you go to make your selection, you'll have to make a different selection from among what remains available. Please only sign up for ONE site/launch window.

We ask that any team that attends do so with an adult chaperone, preferably the supervising teacher, and at least one of the students; it is not mandatory that every student team member attend. Note: every person who attends, whether a student team member, supervising adult, or accompanying supporter, must be registered at the site registration portal.

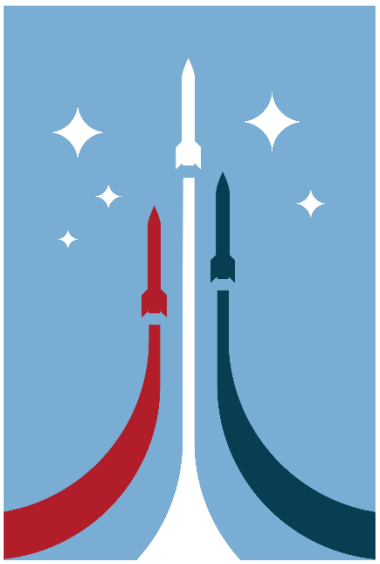
You may not add team members after your initial qualification flight attempt, except in the special case described in the TARC rules where a school has more than two teams whose scores are better than the Finals cutoff and has to limit Finals participation to just two teams in accordance with the rules. Please submit an add/drop form if you choose to drop team members. All team members who are registered as of the date of the Finals (regardless of whether they attend the Finals) will share equally in any prizes awarded to a winning team. All team members on the final team should have contributed to the designing, building, and/or launching of the team's entry.

TRAVEL & WEATHER

There are no additional event fees for those teams selected for the Finals, however travel expenses to attend are the responsibility of each team. With 11 sites all in different places, it is possible that one or more sites may have weather issues on their planned launch day and have to postpone the time or date as a result. Each NAR launch site manager will have all of the contact information provided to us for each team registered for their site and will advise affected teams **24 hours in advance** if this situation occurs.

THE AMERICAN ROCKETRY CHALLENGE 2021 FINALS SITES

Launch Site State	Launch Site City	Launch Date(s)	Launch Windows (Local Time)	Team Capacity per Window	Total Team Capacity	Host NAR Section
Alabama	Birmingham	12-June	0900-1200, 1300-1600	4	8	Birmingham Rocket Boys
California	Lucerne Dry Lake	11 & 13 June	0900-1200 & 1300-1600 on 11th, 0800-1100 on 13th	6	18	Rocketry Organization of California
Colorado	Pueblo (Hudson Ranch)	19-June	0900-1200, 1200-1500	4	8	Southern Colorado Organization of Rocket Enthusiasts
Florida	West Palm Beach	12 & 13 June	1200-1500, 1530-1830	6	24	Florida Spacemodeling Association
Nevada	Stagecoach (near Reno)	12-June	0900-1200	6	6	Sierra Rocketry
New York	Syracuse	12-June	1000-1300, 1300-1600	4	8	Syracuse Rocket Club
Ohio	Dayton (USAF Museum)	12 & 13 June	0800-1100, 1100-1400, 1400-1700	4	24	Wright Stuff Rocketeers
Texas	Rockdale (near Austin)	12 & 13 June	0830-1130, 1200-1500	6	24	Austin Area Rocketry Group
Virginia	The Plains (Great Meadow)	12 & 13 June	0900-1200 both days, 1230-1530 Sat	8	24	Northern Virginia Association of Rocketry
Washington	Pasco	13-June	0900-1200, 1230-1530	6	12	Tri-City Rocketeers
Wisconsin	Brighton (Bong Park)	12-June	0900-1200, 1300-1600	6	12	Wisconsin Organization of Space Hobbyists



THE AMERICAN ROCKETRY CHALLENGE

2021 The American Rocketry Challenge Finals

Finals Procedures and Rocket Design and Construction

FINALS PROCEDURES

Flights

Every Finals team will have a three-hour “launch window” during which they must check-in and fly TWO flights. No flights may be made outside of this launch window, and no practice or test flights are permitted before or during the launch window. The first flight will have a goal altitude of 775 feet (duration goal 39-42 seconds) and the second flight will have a goal altitude of 825 feet (duration goal 41-44 seconds). These may be done with the same rocket, or with different rockets, at the team’s discretion. Neither of these sets of performance goals are exactly the same at the qualification flight goal; we want to see which teams understand rocketry well enough to know how to adjust their rocket’s flight performance. It’s called a “Challenge” event!

Primary and Backup Models

We recommend that you bring two models to the Finals, even if you plan to do your flying with only one. If your primary model lands in a tree, power line, or other dangerous place where it is visible to the judges but cannot be recovered safely, or if you experience a rocket motor catastrophic failure as judged by the Range Safety Officer (burst motor or complete failure of the ejection system, with the cap still retained in place on the ejection charge), or if you have an altimeter failure (an altitude reading of greater than zero but less than 50 feet after a normal qualified flight) the judges may allow you to have a replacement flight. There are no other circumstances that permit a replacement flight, your score is based on your two official flights.

Students Only

All elements of rocket design, preparation, and flight are to be done by student members of teams. Only student team members -- no teachers, mentors, parents, or non-team members -- may assist a team with rocket pre-flight preparation, check-in, or set-up on the launch pad, nor may they approach or be near the pad when students are setting up for their flight. Anyone can help on recovery if the rocket drifts outside the main flying field area.

Rocket Motors

Your rocket must be powered only by commercially-made model rocket motors that are safety-certified by the NAR and listed on the **final** NAR Engine Certification List at www.rocketcontest.org. We expect that almost all TARC 2021 Finals teams should be able to drive to their chosen Finals site. In those cases where a team chooses to fly, remember that it is ILLEGAL to put model rocket motors, igniters, or other pyrotechnic materials in your baggage on an airplane, **DO NOT TRY THIS**. It is also illegal to ship a rocket motor by UPS or USPS without disclosing to the shipper what you are shipping, and these shippers will not accept motors for shipment by private individuals. If you are flying to your Finals site, order motors from a vendor who has the necessary shipping permits, and make an advance arrangement with the launch site organizer to receive them for you. Do NOT surprise the launch site organizer with motor shipment that he did not know were coming!

Time Management:

Each team must sign up in advance for a single three-hour "launch window". **You must check in and fly both of your flights some time during your assigned window.** Between 4 and 6 teams will be flying in each launch window period, and each may fly at any time during that period. You should prep

your first flight and get your egg prior to the launch window. Pre-weighed eggs will be provided by the launch organizer.

If you fail to make one of your flights by the time your window closes, that flight will be recorded as “DQ” (disqualified). Misfires are not an excuse for missing an assigned launch window -- so do not wait until the last moments of your window to fly your second flight.

Places

The places in TARC 2021 will be awarded based on the SUM of the scores from each team’s two flights. Any team that cannot make a second flight or that is disqualified on one flight will be ranked behind all teams that do make two qualified flights.

Equipment

The launch site host organization will provide each team with a launch pad with a 6-foot-long (or longer) “1010” (1 inch on a side, ¼ inch center slot) T-slot launch rail on a sturdy base (which may or may not have fine-scale elevation angle adjustment capability) and one pair of 12-volt electrical igniter leads with a single pair of micro-clips at the end. Launch rods will not be provided and may not be used; rockets will need “rail buttons” in order to fly. Teams are not required to use the launch system and rail provided. They may bring their own launch pads, towers, rails, or other hardware, "clip whips" to light clusters of motors from the organizer’s single pair of micro-clips on the ignition wires, and even their own electrical launch systems if they wish. Such individual launch systems must comply with the NAR Safety Code requirements and will be subject to safety check and approval and must be transported by the team – please do not ship big hardware ahead to the launch organizers. Launch rods may not be used and a minimum rail/launcher length of 6 feet is required.

Returns

All teams that have a safe and otherwise qualified flight must return their entire model containing the egg and altimeter to the "Returns Table" for post-flight inspection of the egg and recording of altimeter reading. Only the beeped-out (or flashed-out) reading will be used for scoring, data files will not be downloaded and used for scoring. You may return a flight after your launch window closes, if you have challenges recovering it, but all flights must be returned by the time the organizer has announced as the ending time for the overall launch that day.

NAR MEMBERSHIP AND INSURANCE

You are not required to be a member of the National Association of Rocketry to participate in this contest as a teacher or team member. But we certainly encourage membership, and you may need to become a member if you need insurance coverage for rocket flying in addition to whatever coverage may be provided by your personal insurance.

Your NAR membership includes personal liability insurance to cover YOU against liability claims from rocket activities conducted in strict accordance with the NAR Safety Code. This individual insurance does not cover others (such as your school or the owner of your launch site.)

ROCKET DESIGN AND CONSTRUCTION

First and foremost, read the Model Rocket Safety Code of the NAR, and the TARC rules, very carefully. These answer many questions about what is allowable and what is not. We have been asked many questions of interpretation, and have provided answers both individually and via the FAQ on the website. If you are in doubt about your design's compliance with our rules, it is better to ask us early than to find out at the Finals that what you did is not allowable. Remember that your rocket cannot weigh more than 650 grams at liftoff (with egg and rocket motor or motors) or have more than 80 Newton-seconds of total impulse in all of its rocket motors put together.

There is no minimum or maximum required length or diameter for individual sections of the rockets this year, but the assembled rocket must have an overall height when standing on a table of at least 650 millimeters from the bottom of the fins or other lowest part of the structure to the tip of the nose. And the payload section must be big enough in diameter to contain the 45mm diameter egg.

Motors must be retained in the rocket during flight and at ejection by a positive mechanical means (clip, hook, screw-on cap, etc.) and not retained simply by friction fit inside the motor mounting tube. If this mounting tube end sticks out at the base of the rocket, it is permissible to retain the rocket motor by exterior wraps of non-heat-sensitive tape (not cellophane or masking tape) that adhere to both the end of the exposed motor mounting tube and the exposed end of the motor casing.

Design Changes

You are free to change your team's design in any manner that you wish up until the moment you check in at the Finals. You are not required to use the same design that you flew for your "qualification" flight. Your second Finals flight (825 feet) can be done with a different model than the one used for the first flight (775 feet) if you wish. All rockets flown at the Finals must have been test-flown previously.

Motor Selection

Make sure that you have or can get the rocket motors you plan to use with your design at the Finals, or change your design to suit the motors that you can get. Some teams have problems with very slow liftoffs that make their rocket vulnerable to tipping over in flight ("weathercocking") in windy conditions. This is the result of an inadequate thrust-to-weight ratio for the rocket. If the average thrust of your motor(s) in Newtons (the unit of measurement of thrust that is labeled on the motor) is not greater than 20 times the liftoff weight of the rocket in pounds, then your rocket is underpowered and may weathercock.

Staging

Use of more than one stage is not permitted.

Commercial vs Custom Parts

The flight vehicle must be made by the student team members. You may use commercially-available "off the shelf" component parts (body tubes, nose cones, egg capsules, etc.) and may adapt rocket kits for the event -- or you can scratch-build components if you prefer. If some company should release a kit specifically for this event or for the NAR "Eggloft" contest event you would not be allowed to use such a kit. Having a custom flight vehicle part fabricated by a composite or plastics company or custom wood machining company (even if it is to your design) does not constitute sale of a "standard off the-shelf product" and is not allowed. Having a mandrel fabricated to your specifications that you wrap fiberglass on to make your rocket body (for example) would be OK. In this case the company is making a tool that you are using, but you are making the part that flies**.** 3D printed parts are fine as long as the team did the design and printing.

Metal Parts

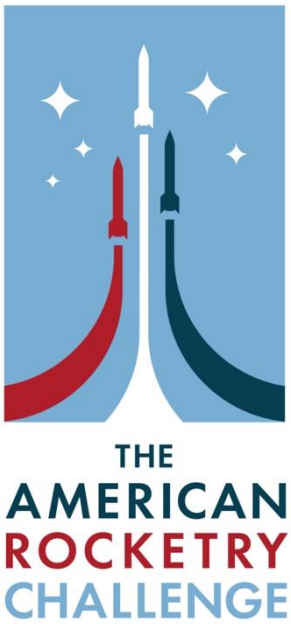
You may only use non-metal parts for the nose, body, and fins of your rocket, those parts that are the main structure of the vehicle. Fiberglass is OK. You may use miscellaneous metal hardware items such as screws, snap links, engine hooks, electronic circuit boards, and (if you wish) commercial re-loadable metal rocket motor casings.

Recovery

Your rocket must not separate into multiple portions during the recovery phase of its flight. All parts must remain connected together, and it must recover by parachute (one or more). The parachute must come out of the body but does not have to fully unfurl, although if the rocket lands at a speed judged to be unsafe by the RSO as a result of incomplete recovery system deployment it will be disqualified. If structural pieces (not counting disposable recovery wadding) or the rocket motor casing separate prior to landing, the flight will be disqualified. Breakage of fins or other parts on landing is not disqualifying.

Time will be recorded from the moment of liftoff to the moment that the first part of the rocket touches the ground, ceases its descent (e.g. lands in a tree), or disappears from the timers' sight.

Rockets may not be controlled by human intervention; radio control is prohibited. Flight control systems carried onboard the rocket such as electronic or other forms of timers, altimeters (other than the official scoring altimeter), etc. that control duration in some safe manner are permitted. They may not use pyrotechnic charges (black powder, pyrodex, or small rocket motors) to deploy recovery systems. They may use burn-through wires or igniters. If they are designed to sense acceleration or deceleration of the rocket as the basis for starting an ignition or ejection sequence through an igniter or other trigger, then there is a great risk that they can trigger on the ground or in your hands if you drop or jog the rocket while carrying it. Such systems must have a power switch, plug, or other disconnect mechanism that permits you to maintain them in a completely "safe" configuration until they are placed on the launching pad, and will not be allowed to fly if they do not.



2021 The American Rocketry Challenge Finals

Team Media Toolkit

Dear 2021 Finalist Teams,

Congratulations on advancing to National Finals!

Now that you've reached Nationals and the associated Regional Final Fly-Offs, we need your help reaching out to local media and spreading the word about the American Rocketry Challenge.

When your team appears on the news, it builds your reputation in both your school and community. Media coverage can also make a big difference in your fundraising efforts and most importantly, it shows other students how much fun it is to compete.

To get started, all you need to remember are these three simple tips:

- Find reporters and pitch them using the attached sample. (*Individual emails work best.*)
- Invite local media to attend your regional finals launch using the attached media advisory.
- Use these four keys to a good interview: (*Be Comfortable. Be Prepared. Be Clear. Be Yourself.*)

Every year, news organizations write hundreds of stories about teams. If you're not sure about approaching the press, we're happy to help. If you have any questions, please contact me at the information below. Don't forget to share your success – we love hearing your stories! We also encourage you to share your success and coverage on social media using #TARC2021 and tag our accounts, which are listed at the bottom of this document. If you need any additional information, both for your own purposes and for local media, please visit https://rocketcontest.org.

If your team has a particularly unique/interesting story, please reach out to the American Rocketry Challenge at rocketcontest@aia-aerospace.org. The unique challenges of the COVID-19 should make for a compelling story to media of all sizes. We'll be in touch with more tips on reaching out to local media. If you participated in the marketing competition, please share your video with us! These will be great tools to use for us to for pitching and media outreach.

Good luck!

Lewis Lowe
The American Rocketry Challenge Communications and Media
lewisl@strategies360.com or 706-302-8404

PS – On the next page you'll find a sample email pitch for asking reporters to cover your team. When you use the pitch, attach the following sample press release and media advisory (filled out with your team's information) for inviting reporters to cover your team and attend an upcoming test launch. The final two pages have some talking points and FAQs that will help you tell your team's story and details about the American Rocketry Challenge's social media accounts.

Sample Pitch Email to Request Media Coverage

Subject: [School/Organization Name] Rocket Team Qualifies for National Finals

Dear Reporter Name:

I recently read your article, "Name of article about education/STEM/science-related topic (if you can find one)" and thought you might be interested in covering my school/organization's rocketry team which has successfully qualified for the National Finals of the 19th Annual American Rocketry Challenge, taking place on June [12/13/19/20th] \in [regional launch city].

- Over 3,500 students on 615 teams from across the country participated in this year's competition, and we outscored more than 500 other teams from across the country to secure an entry in the Final Fly-offs.
- Join [School Name] for a test launch at [Location] on [Date] at [Time]
- This year was particularly challenging because of the pandemic. [Add information about the unique challenges your team faced, particularly remote collaboration and launches]. But The American Rocketry Challenge is well-suited for a time of social distance; the launches take place outside and teams are required to maintain distance from each other!

We will host our regional qualifier launch Day, Month DD, at Time AM/PM. If you are available to join us, we would love to have you! We would also be happy to give you a tour of the lab where we build our rockets, while following all applicable COVID-19 safety guidelines and protocols.

We hope you can join us for a launch! I've attached some information on the American Rocketry Challenge. Please let me know if you have any questions. For more information on the American Rocketry Challenge, please click here.

Thank you,

[Name]

[Your Contact Info]

Sample Press Release Announcing Team Participation

NEWS RELEASE **DATE**

[School/Organization Name] Advances to National Finals of World's Largest Rocket Contest

[Team Name] of [City, State] is traveling to [regional launch city] for The American Rocketry Challenge final fly-off

[City, State] — [Team Name] from [Organization/School Name] has qualified to compete in the national finals of the 19th annual American Rocketry Challenge (TARC). The team is one of 100 teams from across the country competing to claim the title of national champion. The American Rocketry Challenge's Final Fly-Offs will take place June [12/13/19/20th] at [exact regional launch city], outside of [regional launch city]. The final would typically take place on a single day/launch outside of Washington, DC, but regional launch sites have replaced a national one due to COVID-19.

[Insert a quote from your teacher or mentor here. This can be about how proud they are of you, how hard your team has worked, etc. Please see the "Sample Quote & Student FAQs" section on the next page of this media kit for an example.]

After a year hiatus due to the COVID-19 pandemic, The American Rocketry Challenge is back in 2021 with slightly modified rules and procedures. The pandemic, distancing, and virtual learning have presented unique challenges to all participating teams. [Add specific examples about why the 2021 contest has been different from past contests or earlier plans because of COVID-19. Virtual meetings/launches, etc.]

The American Rocketry Challenge is the aerospace and defense industry's flagship program designed to encourage students to pursue study and careers in science, technology, engineering and math (STEM). The competition challenges middle and high school students to design, build and fly a rocket that meets specific altitude and flight duration parameters. This year's rules require teams to design, build and launch a model rocket that carries one raw egg to an altitude of 800 feet, stays airborne for 40-43 seconds, and return the rocket to the ground safely with the egg intact. At the National Finals, each team's goal is to launch a rocket 775 feet and land within 39-42 seconds. The second flight goal is 825 feet and land within 41-44 seconds.

[Include information about your organization's history with the contest- how many years has a team participated? Have any of the teams made it to the final fly-offs? Won the competition?]
[Team Name] will compete for more than $100,000 in cash and prizes, along with the title of National Champion. The top 25 teams will be invited to next year's NASA Student Launch workshop.

Sponsored by the Aerospace Industries Association, the National Association of Rocketry and more than a dozen industry partners, The American Rocketry Challenge is the world's largest rocket contest. Now in its 19th year, The American Rocketry Challenge has inspired more than 80,000 middle and high school students to explore education and careers in STEM fields. **This year, 615 teams representing 43 states, the District of Columbia, and the U.S. Virgin Islands designed and built model rockets in hopes of qualifying for the National Finals.**

For more information about The American Rocketry Challenge 2021 please visit www.rocketcontest.org.

Sample Media Advisory for Inviting Reporters to Test Launch*

*You can use this template to provide local media information about an upcoming launch. Giving media a visual or a specific event to cover will increase the likelihood of coverage

MEDIA ADVISORY **DATE: MM/DD/YYYY**

[School/Organization/Town Name] Students Conduct Qualifying Launch for Final Fly-Offs of World's Largest Rocketry Competition

[Team Name] from [Organization/School Name] is preparing to travel to [regional launch city] to compete in the National Finals of The American Rocketry Challenge (TARC) against 99 of the other top student rocketry teams in the country. The competition consisted of 615 teams of secondary school students from 43 states, the District of Columbia, and the U.S. Virgin Islands. Now the top 100 teams from across the country will be chasing $100,000 in cash and prizes and the title of National Champion. Join [Team Name] as they launch their qualification flights.

WHAT: [Team Name]'s test rocket launch for The American Rocketry Challenge 2021 National Finals

WHEN: [Day and Time]

WHERE: [Location Address (include directions if necessary)]

WHO: [Team Name] and [Names of Notable Volunteers, Sponsor Companies]

TEAM CONTACT: [Supervising Teacher Name, E-mail address and Phone Number]

NAR CONTACT: [Your Team's NAR Mentor or Observer for this Flight], National Association of Rocketry

MEDIA CONTACT: [Advisor or Primary Contact Name and Contact information]

NOTE: Proper social distancing and COVID-19 public health guidelines will be enforced at the test launch.

- RSVP REQUIRED -

Structured to emulate the aerospace industry's design, fabrication and testing process, The American Rocketry Challenge requires teams of 3-10 middle school or high school students to build and fly a model rocket that meets challenging design requirements and precise targets for altitude and flight duration. This year's rules require teams to build and launch a rocket carrying one raw egg to an altitude of 800 feet that stays airborne for 40-43 seconds. The rocket must return to the ground safely and with the egg intact. The requirements are slightly modified for the two launches at the national finals.

The National Finals will take place June [12/13/19/20th] at 11 regional launch sites, including just outside of [regional launch city]. For more information, please visit https://rocketcontest.org.

#####

Telling your The American Rocketry Challenge Story: Sample Quotes & FAQs

Here are some examples of the types of quotes you can use in your press release and media advisory. Make them your own!

Mentor quote

"The American Rocketry Challenge teaches students a love and appreciation for science and engineering through a fun – but challenging – competition," said [mentor's name], who also teaches [subject] at [school]. "The students on our rocket team have gained invaluable experience with problem-solving, teamwork and creativity, especially as they found new ways to work together over the internet and using other digital tools. I'm very proud of what they've achieved and look forward to competing against other deserving teams from across the country."

Student quote

"The American Rocketry Challenge is not only a great learning tool – it's a lot of fun!" said [student name], captain of [team/school name]. "We are super excited to compete against other rocket teams at the National Finals. For many of us, this is the beginning of what we hope is a long career in a STEM-related field."

FAQ:

*We've also put together the following **Frequently Asked Questions** to help you prepare for any upcoming media interviews (but not for direct external distribution):*

What makes this year's competition unique?

This year, teams had to find creative ways to overcome the challenge that we've all faced this past year, the COVID-19 pandemic. This meant that many teams had to take advantage of new digital software including video conferencing tools, computer aided design, and more. The pandemic has brought out unique problem-solving strategies in addition to those already required by the competition.

What is The American Rocketry Challenge?

- The America Rocketry Challenge (TARC) is the largest rocket contest in the world — nearly 5,000 students participate each year. After a hiatus in 2020 due to the COVID-19 pandemic, the contest is back in 2021 with modified rules to account for the need to reduce travel and crowds and maintain distance.

- The American Rocketry Challenge gives middle and high school students a chance to pursue their interests in science, technology, engineering and mathematics (STEM).

- While The American Rocketry Challenge was created in 2002 as a one-time celebration of the Centennial of Flight, it generated so much excitement from students and teachers that contest organizers, the Aerospace Industries Association (AIA) and National Association of Rocketry (NAR), decided to make the contest an annual event. The American Rocketry Challenge has become an important part of the STEM community, inspiring thousands of students to pursue STEM education and careers.

When and where will the National Finals take place?

The National Finals will take place over two weekends in June across 10 different regional launch sites located throughout the United States. Qualifying teams will compete at the closest location to maximize accessibility and safety.

Who can participate in The American Rocketry Challenge?

All students currently enrolled in grades 6-12 can participate, either through a school or sponsoring organization (like 4-H, home-schooled group, or even a religious institution). Each team must have 3-10 students.

[For Teams Actively Fundraising] **How do teams fund their trips to the National Finals?**

Teams use a variety of methods to raise the money to travel to the National Finals in [regional launch site], including through contributions from sponsor and supporting organization and other fundraising campaigns. If you would like to support our team, [Insert information about fundraising efforts]

Engage with fellow Rocketeers and The American Rocketry Challenge on Social Media

We love seeing your photos and videos on social media! You can connect with The American Rocketry Challenge program on Twitter, Facebook and Instagram. Post with #TARC2021 and tag our accounts so we can find and share your success!

We are also attaching some sample social media posts that you can copy and paste, use as inspiration, or edit as you please to fit your team/school. These can be used on your own social media, or your school/team's pages. Please include pictures and video to go along with these.

Twitter:

[Team name] is taking off for [regional location] for the final fly-offs of The American Rocketry Challenge! We can't wait to compete against the other 99 rocketry teams at #TARC2021 🚀 ☄️ (link to gif you can download and attach to tweet: https://images.app.goo.gl/pYEFd7Za898bCN8RA)

We're headed to the National Finals of #TARC2021! [Team name] has made our calculations, perfected our rocket, and conducted test flights. We can't wait to put our work to the test and blast off at #TARC2021 🚀 ☄️

Facebook:

[team name] is headed to [regional launch site] for the Final fly-off of The American Rocketry Challenge! We can't wait to show the other teams at @RocketContest how a model rocket really works 🚀 #TARC2021

We've been testing rockets for months while getting ready for #TARC2021, and we just heard from @RocketContest that we are going to [regional launch site] for the finals of #TARC2021! [Team name]. We can't wait to launch next month! 🚀

Instagram:

Test. Tweak. Launch. Repeat. After months of hard work, [Team Name] has made it to the finals of #TARC2021 hosted by @RocketContest! We're blasting off to [regional launch site] to compete against 99 other teams for over $100,000 in cash prizes! 🚀

[Team Name] is heading to the Final Fly-Off of #TARC2021! We beat out over 500 other teams to be one of 100 teams competing in May. We are ready to launch – and win! We'll see you in [regional launch state] for blastoff @RocketContest 🚀

Social Media Accounts

@RocketContest