2009 FRC Season: NASA Grant Writing Tips

Is your existing/potential FRC Team thinking of applying for a NASA Grant as outlined at https://frc-grants.arc.nasa.gov/directions.php? The following tips are written for applicants considering a 2009 NASA Grant in the fall of 2008. In subsequent years, some of these details may vary.

I. *Overview: Six Things to keep in mind.*

Start ASAP: You are answering several questions and need to collect data from several sources. This will take your team about 8-16 hours of thoughtful work to complete. Start drafting/writing questions that you can answer right away while you are waiting on data/information from others. Ask others for what you need from them early. Questions about "percentage of free and reduced lunch" and others like them might take several days (even a week) for a school to get back to you on. Even if you are unsure if you are going to submit the application, start writing early until the final decision is made. This is a much better idea than trying to cram one of these together at the deadline. You can always use what you've written next year or for other purposes.

Be Thoughtful: Grant programs exist because some "other" entity has decided it's worthwhile to appropriate funds toward a program or cause. Thoughtful, thorough applications are a must. When you submit a grant application to NASA, you are participating in a formal Federal Government procurement process. Take it seriously, we can guarantee that NASA will treat your application seriously. No matter how hard your team works on a grant application it's a guarantee that those who put the grant program together have worked much harder to provide that opportunity. In this case, NASA has made millions available to current and prospective FRC teams and has done so this time around in the face of national economic crisis. Consider the energy and effort it takes dedicated individuals to continue to convince the federal government to continue the program. It's surely more than it takes to answer the 11 (at most) questions you will work on. Dot your "i's" and cross your "t's" and consider the audience.

Remain Humble, yet Exude Confidence: Every written work, including a NASA FRC grant application, has a tone and "feel" to it. It's one thing to come across like, "We'd love to have NASA's assistance in growing/keeping a meaningful program in our community" but quite another for your application to have a feel of, "NASA, we need your money now for this year and without it, we'd have no clue what we'd do." The application instructions and program description make it exceedingly clear that it's not a "giveaway" program. NASA wants to fund FRC teams that are working toward and/or have a plan to stand on its own two feet from financial, human, and community standpoints. All of that takes a lot of work and relationship building and your team needs to demonstrate a willingness and enthusiasm for that process. However, your team should also have the courage and optimism to see the potential good in its own community when projecting into the future.

Have a Plan B: When you compare the number of FRC teams (existing and incoming) to the number of grants available in this program it's obvious that some teams will get turned down, even teams with great applications. This is a highly competitive situation as NASA receives two to four times as many applications for grants than they are able to fund annually. Have Plan B to fund your team "when" your team isn't awarded a NASA grant. Even if that means it's going to take an additional year to begin in FRC. If you don't have a Plan B (or at least working at an alternate funding plan) it becomes rather likely that your team won't exist beyond NASA grant funds anyway. Oh, and include students in this process as much as you can – it's an opportunity to learn.

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Review Everything Before Submitting: After you go through the application, please, please go back and read the application instructions again. Every year, NASA has to remove applications from the evaluation process because they are incomplete or incorrect. In particular, please make sure you understand what type of grant you are applying for, and for which event you are applying. Read the "Types Of Sponsorship" section on the application directions page (https://frc-grants.arc.nasa.gov/directions.php) thoroughly to make sure you apply for the proper type of grant for your team.

Say Thank You: After NASA announces the grant recipients it's also a great idea to follow up and send a thank you to NASA, especially if your team WASN'T chosen. Practicing common courtesies and modeling appropriate behavior for students and team members is part of mentoring. This is a fantastic way to teach young people about strengthening relationships, dealing with adversity, and showing class and respect in the midst of disappointment. Besides, you never know what may become of a relationship down the road so long as you are polite, positive, and do those little things that seem to have been forgotten all too often in today's world.

2. Type of Application: What Questions Apply? What should my team consider?

Be sure you read carefully when selecting either *regional challenge* or *program growth* type!
Rookie Team: Answer 1, 2, 3, 4, 5, 6, 7, 7a, 11
Second Year Team: Answer 1, 2, 3, 4, 5, 6, 7, 7a, 8, 9, 10, 11 – *Be sure you've met year one requirements/responsibilities first if you had a grant last year! You wouldn't ask your boss for a raise on the same day you missed a project deadline at work, would you?*
Veteran Team: Answer 1, 2, 3, 4, 5, 6, 7, 7a, 11

In all cases, 7a is exceedingly important so please pay careful attention to all of the rules here. NASA needs direct confirmation that your school and district are on board and supportive. Imagine getting the funds from NASA and for some silly procedural reason have the terms/conditions surprise the school in such a way the grant can't be accepted. With that in mind, schedule a brief meeting ASAP with school administration to go over the grant. Administrators are also very busy people, make sure they send the email/letter to the CORRECT ADDRESS and if they'd like help drafting the confirmation letter/email, here's a sample:

To NASA FRC Grant Administrators,
I am writing as the (title) of (school name) to confirm the desire of FRC Team (Team #)'s desire to apply for a (grant type and event name if applicable). (school name) and (school district name) are committed to fully supporting Team (team #)'s existence and participation in the FRC program. In addition and on behalf of (school name), I understand and accept the terms and conditions of NASA FRC sponsorship as outlined here: https://frc-grants.arc.nasa.gov/directions.php. If you should need additional information, please feel free to contact me at your convenience and thank you for considering Team (team #)'s application.
Sincerely,

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3. Specific Question Tips

Question 1: Completing a robot, competing, and technical skills are all signs of success, but be sure to address the global goals of your program and how they connect to FIRST ethos and ideals. Lack of the big picture, even for a rookie team, won't bode well on this application.

Question 2: This is your team's specific roadmap for relationship and community building. In the end it's important to show that you are working at this and you have a clear and measurable plan of attack, it's not as important (especially for rookies) how far along that plan is.

Question 3: A lot like #2 above, but this is specific to equipment, robot completion, and other foreseen expenses of your team. Don't guess at numbers. Be sure you have reasons/grounding for your estimated figures. Be sure to note what funding sources are confirmed, and which ones (if any) are tentative.

Question 4: In short, how will students be supported/mentored through the process and from what sources. Be honest here, every FRC team has its times when mentoring is in short supply, but please remember that FRC is a "mentor-based program" (see *FIRST* Mission Statement at www.usfirst.org) where mentors contributing as active participants is a critical factor in the success of the team. Make sure you have adequate mentor support, and that you describe that support here.

Questions 5 and 7: These questions deal with school engagement, support, and integration. Please see note about 7a in part 2 above. Strong ties to school community and educational program along with administrative support are two big predictors when it comes to FRC team sustainability.

Question 6: This is all about robot construction and the team's ability to minimally provide a place to complete an FRC robot. This is also a place for rookies to show where/how they might need mentoring for the upcoming season and beyond. Again, it's not necessarily important how far along the plan is for a given team in this area, but it is exceedingly important to show a vision for long-term sustainability in this area and, some growth if you aren't a rookie, and perhaps also show how obstacles are being overcome through creative problem solving.

Questions 8-10 for Second Year Teams: These three questions are all about delivering on what you promised in the first year as a team, how you overcame obstacles, and how you have grown into the meaningful part of FIRST culture as well as executed your plan for sustainability. Even though you still may be "struggling" in some areas (what team isn't?), your team was born partially though the help of others and it's your turn to start embracing and demonstrating an ability to participate in that part of FIRST culture, also showing at least $6K of funding to replace the NASA funding when you team is no longer eligible for this part of the NASA Grant Program. As for question 10, connecting directly to the curriculum opens doors for an FRC team and makes the program stronger in the community. Also, this is an appropriate time to determine before you apply for second-year funding, if you satisfied ALL of the participations criteria for your rookie-year grant. Did you complete your robot and participate in at least one competition? Did you submit a copy of your Chairman's Award-equivalent write-up? Did you complete the required survey? NASA will expect to see this evidence during the evaluation process.

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Question 11: This is your chance to personalize the application. Don't miss any opportunities here, but be sure you team delivers/can deliver on anything you say "Fluff" is never a good way to end an application, especially this one.

4. What to know about using the Online Application form

-- Use an external text editor first as recommended, but when you cut/paste from your text editor some characters (like apostrophes) may get garbled so make sure all is corrected before submitting
-- Know the difference between "SAVE" and "SUBMIT" buttons and use them appropriately
-- There is a120 minute timer/timeout feature. Know what that means, it's explained in the instructions.
-- Count on problems – We all make mistakes. Save back up file(s), and allow time to fix mistakes.
-- When you do finally submit the application, you will get an auto-email confirmation. When your school administrator sends the letter/email for 7a, they will get a return email to confirm submission.
-- Set a team deadline that is BEFORE the actual deadline. No matter how good an online submission system is, trying to submit something online at the exact same time the rest of the country is doing the same, is inviting a problem and will create unnecessary stress. Plan ahead.
-- Before you hit the "SUBMIT" button go back and read the instructions and your submission again, one more time. As NASA conducts the application evaluations, the only information that they are permitted to consider is the information contained in the application. If there are mistake or incomplete information, they cannot interrupt the evaluation and ask you for clarification. They will have to simply give it a lower evaluation score, and move on. You don't want to have this happen to you!

GOOD LUCK TO ALL TEAMS THAT APPLY