{NOTE: This reference version of the application is made available to teams for planning purposes only , and minor changes may be made in the final version. The final, on-line application will be available via the NASA Robotics Education web site at http://robots.nasa.gov in the coming days. . All actual application submissions must be made through the web-based application form. No hardcopy applications will be accepted. Again, the text on the following pages is for planning purposes only.}

2003-2004 NASA Sponsorship Application
Team Planning Document

Some Comments from the NASA Robotics Education Team

On behalf of NASA's Robotics Education Project, welcome to this year's application process. We are very excited that your school or organization is planning on participating in one of the NASA-related FIRST competitions this year. Our experience here at NASA with FIRST over the past few years has convinced us that this will be one of the most significant experiences your students, teachers, and mentors have ever had. You are choosing to provide your students with the opportunity to use their minds to accomplish an incredible task: starting with a bunch of unrelated parts and the ideas that exist only in the minds of your team members, create a functioning robot in only 6 weeks. Wow! As you get started with the process of applying to be sponsored by NASA, we want to explain a few things to you. First the facts, then a bit of philosophy. . .

Facts:

- FIRST teams from around the US can apply for one of **many NASA regional sponsorships** that will cover (1) the team's "entry fee" into one of the FIRST regional competitions that NASA is associated with and (2) provide an additional $1,000 travel and materials allowance. To simplify the process, NASA will arrange to pay the sponsored team's event registration fee directly to FIRST so the only direct funding a team will receive will be the additional $1,000. This funding will be sent to teams AFTER the FIRST kickoff in January, 2004.
- Again this year, a second type of sponsorship, Space Grant sponsorships, will be available to teams from **North Dakota, South Dakota, Nevada, Oregon, and Kansas** through the **NASA Space Grant Program.** Teams from these five states are encouraged to apply for NASA Space Grant funding which will cover one $5,000 event registration and up to an additional $5,000 allotment for materials and travel expenses. Please note that **Space Grant sponsorships are only open to teams from North Dakota, South Dakota, Nevada, Oregon, and Kansas.**
- Approximately 50% of all teams selected for NASA sponsorships will be rookie teams (teams that have never before competed in a FIRST event). The intent of these sponsorships is to assist in the formation of new teams, and not to provide financial support for existing teams. Teams that have received NASA sponsorship in a previous year may apply for a second year of funding, although NASA sponsorships are limited to a two-year maximum for any team.

- Finally, while NASA strongly supports the expansion of the FIRST competition into a truly international event, *we regret that we cannot offer sponsorships to non-US teams.*

Several Important Notes:

- FIRST will ***NOT*** be making travel arrangements for sponsored teams. Teams will make their own kickoff and event travel reservations.
- Applications will be accepted through Friday, November 7th, 2003.
- NASA will review submitted applications and inform teams of their selection via the NASA Robotics Education Web site (http://robotics.nasa.gov) on Wednesday November 19th, 2003.

Requirements:

All teams selected by NASA agree to the following conditions of sponsorship. Teams not complying with all sponsorship requirements will not be considered for future NASA sponsorships and may be required to provide reimbursement of funds applied toward their team during the current year.

1. The name of the NASA center providing sponsorship must appear in the sponsored team's official name on record with FIRST. Other sponsors may be listed before or after the NASA center, but the NASA center must be included.
2. Sponsored teams agree to have *all* members complete a brief general survey at the beginning and end of the season to assist NASA in assessing the impact of the program.
3. Sponsored teams MUST complete a Chairman's Award submission and provide a duplicate copy to NASA.
4. Sponsored teams agree to complete a robot by the deadline specified by FIRST, and ship this robot to the appropriate competition.
5. Sponsored teams must attend the NASA-related regional FIRST competition associated with the sponsorship that they applied for and received.
6. Sponsored teams agree to attend all three days (Thursday-Saturday) of the sponsored competition.
7. Sponsored teams acknowledge that the NASA sponsorship may not be transferred to another team, and must be used by the original team applying for sponsorship.

Additionally, teams applying for a second year of NASA sponsorship must:

8. Demonstrate at least $6000 of existing corporate or community funding and
9. Agree to mentor a rookie FIRST team either directly or via telephone/E-mail.

Philosophy

And now, a little philosophy behind the NASA application process. . . Participating in FIRST is incredibly rewarding but it is difficult - it will likely be one of the most difficult

things your students have ever done, but as Albert Einstein said, "In the middle of difficulty lies opportunity." Here at NASA we want you to succeed. It is our goal to use this application process for three purposes:

1. Enable new teams to get involved with FIRST
2. Ensure that selected teams are likely to succeed and
3. Assist teams by explaining what is necessary to succeed.

The application consists of four parts. In the first step, you will select the type of sponsorship (regional or Space Grant) and the specific location that you will be applying to. The second step deals with logistical information including contact names and addresses. The third step of the online application consists of short answer questions designed to help you organize your team and your plans while also helping NASA to evaluate the strength of your approach and program. By fully completing these sections you are demonstrating that you have put some thought into the basic organization of your team. Finally, the fourth step applies only to those teams seeking a regional sponsorship. Teams applying for Space Grant sponsorships do NOT need to submit the following information but each team seeking a regional sponsorship <u>must submit supporting documentation to NASA via U.S. Mail by the application deadline or their application will be incomplete and will not be considered for funding</u>. Teams should begin working on these elements immediately, to avoid any last-minute problems.

Teams applying for regional sponsorships must send the following three documents in one package to:

> NASA Robotics Education Sponsorship Program
> c/o Ms. Heidi Boyette
> NASA Langley Research Center
> Mail Stop 139
> Hampton, Virginia 23681

1. A letter, on official organizational letterhead, from the primary educational, corporate, or community sponsor of the team. This letter must indicate the team's desire to apply for funding, the sponsoring organization's commitment to the team, and their agreement to the conditions of sponsorship outlined above.

2. A W-9 form completed by an authorized school or corporate official. NASA will provide the completed W-9 forms for sponsored teams directly to FIRST to enable FIRST to send the additional $1,000 directly to the sponsored schools. NASA will not retain any W-9 forms after selections have been made.

3. An itemized accounting of how the team plans to use the additional $1,000 travel and materials allowance provided to sponsored teams. Food is not an allowable use for these funds. Teams should provide as much detail as possible. Teams must include contact information (mailing address and phone number) for the organization indicated on the W-9 form, including the name of a contact person

at the organization or school. The check for the $1,000.00 travel and materials allowance will only be made payable to the school or organization indicated on the W-9 form. Please keep in mind that this additional $1,000 will not be sent to teams until after the January 2004 kickoff.

The evaluation of the application sections 1, 2, and 4 is easy, since they will not be "scored" by the NASA review committees. If these elements are incomplete, section 3, the narrative section of your application, will not be evaluated since without the most basic information from the first two sections, and the supporting documentation in the final step, your team is certainly not ready to participate in FIRST.

The third section, or application "narrative," consists of a series of open-ended questions. These questions have been carefully selected to represent those elements that are required to have a successful FIRST team. Questions dealing with who will help mentor your students, where you will build your robot, and how you will finance the project help NASA to evaluate your proposal, but are actually more important in assisting you to plan a successful program. If you fully address each of the areas outlined in the second section of the application, you are well on your way to a rewarding experience. So as you begin working on the application, don't view it as just paperwork that you must complete, but rather a tool for planning the success of your team. The entire NASA Robotics Education Team wishes you success, and we look forward to supporting you along the way!

Now, on to the application!

2003-2004 NASA FIRST Regional Competitions Application for NASA Sponsorship

Applications accepted through November 7th, 2003

How To Apply . . . A Quick Summary:
1. Plan by printing a hardcopy of the instructions and application (This is it!)
2. Complete the electronic sponsorship application (Sections 1, 2, and 3)
3. Send supporting documentation to NASA.
4. Register with FIRST for the appropriate NASA-related regional competition.

How To Apply. . . Detailed Instructions:
1. Download and print out a paper version of the electronic application and instructions, which has been provided for you here as a PDF document, a Microsoft Word Document, and a plain text file (This is it!). Use this hardcopy version to gather necessary information and prepare answers to the essay-style questions in your favorite word processing application. You can then cut and paste your answers into the electronic form. (To view PDF documents, you will need the Adobe Acrobat plug-in, which may be freely downloaded from the Adobe web site. This is a good plug-in to install since the FIRST competition documentation may be distributed online as PDF files, and some of the robot kit suppliers also post PDF information about their products in this format.)
2. When you are ready to submit electronically, go to the NASA sponsorship on-line application and fill it out completely. *Incomplete or hardcopy applications cannot be considered* due to the nature of the review process (national, reviewers in many different locations).
3. This NASA application is only for NASA sponsorship. You must also register with FIRST to actually attend one or more events. While you may attend multiple events, you *must* register for and attend the event associated with the NASA center that you are requesting sponsorship from. Register your team for one or more of the 2003 FIRST competitions at:

http://my.usfirst.org/

Sponsorship applications and all supporting materials will be accepted through **November 7th, 2003**. The local event sponsorship review panels will consider your application, with sponsorship notifications being on Wednesday November 19th, 2003.

2003-2004 NASA Sponsorship Application
Application Login

Please provide the following information to begin the application process. This information was provided to you after filling out the initial, one-page preliminary application.

Primary Contact Email:
Password:

If you have not filled out the preliminary on-line application, take just a minute and do it right now at http://robots.larc.nasa.gov and you will receive your password.

Forgotten your password? Fill in your e-mail address and we will e-mail your password to you:

Primary Contact Email:

Information Validated!

Welcome back. We have successfully verified your contact information. Our records indicate that you will be submitting an application for **YOUR SCHOOL NAME**. If this is incorrect, please make any necessary corrections as you complete the full application below.

NASA Robotics Education Project
Application for NASA Sponsorship for 2004 FIRST Regional Events
(Step 1)

You may apply for NASA sponsorship only once each year.

Please select *either* a NASA-related competition (to apply for a regional sponsorship) *or* a NASA Space Grant state that you live in (to apply for a Space Grant sponsorship):

Regional Sponsorships (open to all teams):
- Chesapeake Regional (Annapolis, MD)
- Peachtree Regional (Atlanta, GA)
- Southern California Regional (Los Angeles, CA)
- Colorado Regional (Denver, CO)
- Buckeye Regional (Cleveland, OH)
- Pacific Northwest Regional (Portland, WA)
- St. Louis Regional (St. Louis, MO)

Space Grant Sponsorships (open *only* to teams from these states):
- North Dakota
- South Dakota
- Kansas
- Nevada
- Oregon

NASA Robotics Education Project
Application for NASA Sponsorship for 2004 FIRST Regional Events
(Step 2)

Optional information is in yellow. All other information is required.

If awarded a NASA sponsorship, will this be your team's first or second year as a NASA sponsored team?

- First year
- Second year

Part I: School Information
Address:
       Primary School
       Name:
       Street Address:
       Street Address (cont.):
       City:
       State:
       ZIP:
       Office Phone:
       Office Fax:

School Principal:
       Title:
       First
       Name:
       Last
       Name:
       E-mail:

Demographic Information:
       Total number of students enrolled in entire school:
       Approximate percentage of students receiving free/reduced lunch:
       School type: Public   Private
       School location: Urban   Rural   Suburban
If the team will be comprised of students from multiple schools, please list additional schools here (please list school names only):

Part II: Primary Contact Information
       Title:
       First Name:
       Last Name:
       Daytime Phone:
       Evening Phone:

Fax:
E-mail Address:
Subject(s) Taught:
Grade(s) Taught: 6 7 8 9 10 11 12 Administration
Years of teaching experience:

Part III: Alternate Contact Information
Title:
First Name:
Last Name:
Daytime Phone:
Evening Phone:
Fax:
E-mail Address:
Subject(s) Taught:
Grade(s) Taught: 6 7 8 9 10 11 12 Administration
Years of teaching experience:

Part IV: General Information
1.What is your FIRST team number?
(Returning teams or teams that have already registered with FIRST only - if you don't have your FIRST team number yet, leave blank)

2. How many years has your team been involved with FIRST?

3. Including the NASA-related event that this sponsorship will cover, please indicate all of the FIRST events that your team plans to attend this year:

4. Is your team planning to register for the 2004 Championship? Yes No Uncertain

5. How did you initially hear about this NASA sponsorship opportunity?

6. *(This question is for planning purposes only, and will not be considered in the evaluation of your application)* Is it likely that your team will attend the NASA-sponsored regional competition that would be funded by this sponsorship even if your team does *not* receive a NASA sponsorship? Yes No

Go To Step 3

NASA Robotics Education Project

Application for NASA Sponsorship for 2004 FIRST Regional Events

(Step 3)

It is strongly recommended that you type your answers to the following questions in your favorite word processing or text editing program and save that file. You can then cut your responses from that program and paste them into the boxes below. This will both ensure that you have a copy of your responses for your records and that you will not lose all of your work on this form in case of technical problems during transmission to NASA.

Please respond to each of the following questions. Provide enough information for reviewers to adequately understand how you plan to implement your team's participation in FIRST. The review panel will use your answers to these questions to determine how likely it is that your team will be successful. *Please note:* Formatting will NOT be preserved when the essay questions are transmitted to NASA. The 11 essay-style questions below will become 11 continuous blocks of text w/o paragraph separations or bold/italic text. Please save your time and do no try to provide fancy formatting because it will be lost, and may look worse than if you plan for continuous blocks of text. Also, do not use a table format to explain your budget - describe your budget in paragraph format. This is the final section of the online application process. Upon submitting this form, you will be provided with a summary web page of all of your responses, as well as instructions on mailing your supporting documentation to NASA. Please make sure that you print and/or save a copy of the summary page for your records.

Part VI: Project Description

1. Why are you considering entering a team in the 2004 FIRST competition? What will define success for your team?

2. Please address both of the following issues:
   (a) Explain the relationship you envision among your students, faculty,and community partners as part of this year's FIRST experience (i.e. how will your team be organized to facilitate interaction among these groups); and
   (b) Describe how you envision these groups working together and benefiting from their involvement with FIRST.
   - How many students do you anticipate participating in your FIRST program?
   - How many teachers do you anticipate actively participating in FIRST?
   - How many corporate/community mentors will participate in FIRST?

3. FIRST provides high school students with many unique opportunities, but because of the nature of the competition as well as the travel that can be involved, participation in FIRST can require significant financial resources. In addition to the entrance fees, teams must budget for robot prototyping and construction, travel to one or more events, and miscellaneous items like team T-shirts. Please outline your anticipated budget (expenses) and how you plan to fund your team's participation (income) this year.

4. Please identify the corporate or community partners/mentors who will assist and instruct the students in fabrication, mechanical and electrical concepts, computer programming and control, and computer aided design and animation. How will they enable your students to be successful in this project?

5. Please describe how participation in FIRST will contribute to your school's overall educational goals, how FIRST will integrate with your existing curriculum and how you envision FIRST helping your students meet applicable local or national standards in math, science, and technology?

6. Access to adequate woodworking, metalworking, welding, and other tools are important in the robot fabrication process. Some teams have these tools available at their school while others take advantage of tools and machine shops provided by their corporate partners. What facilities are available for your team's use in this year's FIRST program?

> Woodworking
> Metalworking
> Welding

Schools participating in FIRST receive the latest version of AutoDesk's AutoCAD-based drafting product for computer aided design/drafting and 3D Studio Max for 3D simulation and animation. Do you anticipate having mentors to assist students with:

> AutoCAD
> 3D Studio MAX

Please describe the facilities that will be used by your team to design, prototype, and build your robot.

7. Another critical element for the success of a FIRST program within a school is the enthusiastic support of the school or group's administration. Do you have support from your senior-level administration (i.e. principal or superintendent)? Yes No

8. {Year 2 teams only. Year 1 teams skip to question 11} If you are applying for year two funding please describe how you are mentoring a rookie team. If you are not yet mentoring a team, are you willing to mentor one if one is provided to you (i.e. via telephone or email conversation, personal visits, demonstrations, etc) Are you already mentoring or have you made arrangements to mentor a rookie team? Yes No

9. {Year 2 teams only. Year 1 teams skip to question 11} If you are applying for year two funding you must also demonstrate at least $6,000 in existing community or corporate sponsorship. Please list below the company name, amount of sponsorship, contact at company, and contact telephone number so that the reviewers may verify this support.

Have you secured in corporate sponsorship already? Yes No

10. {Year 2 teams only. Year 1 teams skip to question 11} Have you incorporated FIRST robotics activities into your classroom or other classes at your school? Yes No. If yes, please describe.

11. Please describe what will set your team apart from other teams competing in this year's FIRST competition - what makes you unique? If there are any other considerations that you would like to share with the review panel, you may do so here as well.

Submit application!