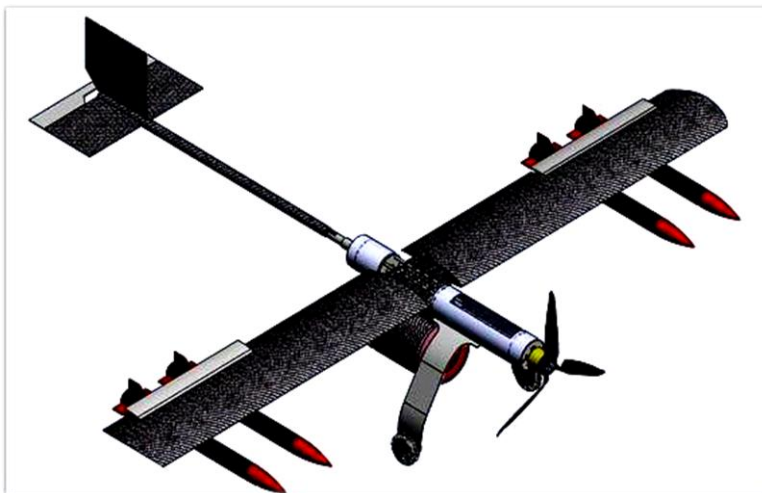




# SAN DIEGO STATE UNIVERSITY

SDSU Design, Build, Fly Competition  
2009/2010 Sponsorship Packet



# SDSU Design, Build, Fly

First off, we would like to thank you for the interest in supporting the San Diego State University's Design, Build, Fly Team - DBF. This yearly international event is very important to us and we strive to make each year better. We rely on sources of support from private and corporate sponsors, like you, to help us grow and reach our goal of making the annual Design, Build, Fly Competition a top notch event and a great experience for all participating students. Your donation not only allows us to apply knowledge accumulated in the classroom to real world experiences, but also cultivates traits of teamwork, creativity, and determination in each of our students.



2008/2009 DBF Team and Competition Plane

# Background Information

## What is Design, Build, Fly?

Design, Build, Fly is an international student competition hosted by the professional association for aerospace engineers, American Institute of Aeronautics and Astronautics - AIAA. AIAA is a nonprofit organization whose primary purpose is to advance the arts, sciences, and technology of aeronautics and astronautics and to foster and promote the professionalism of those engaged in these pursuits. The competition pits students from around the world against one another and asks them to design, build, and fly a remote-controlled airplane that completes a series of mission profiles set out each year by the DBF organizers. These mission profiles require students to balance opportunity cost of weight, power, size, endurance and many other issues that students will soon encounter in the work force. DBF encourages innovation by creating a fresh design challenge each year. Students are exposed to composites fabrication, various electronic hardware/wiring, basic aircraft propulsion, aerodynamics, and other applications they typically don't see in a classroom environment.

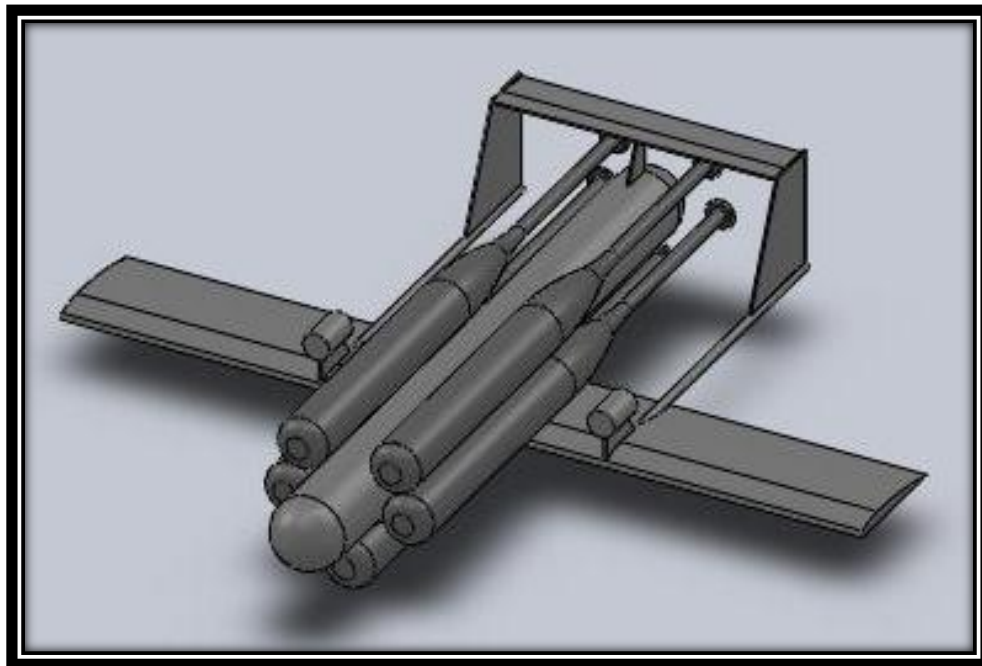
## Impact of DBF on Students

**Professional Development:** Knowledge gathered in the classroom is indispensable to students once they enter the engineering workforce. However, graduating students are lacking the practical knowledge needed to be well-rounded engineers. The Design, Build, Fly competition bridges this gap and gives us that hands-on experience in both the design and construction of a remote-controlled airplane.

**Organization and Communication Skills:** Engineering skills are an integral part of a project such as Design, Build, Fly but students learn much more than just technical knowledge. DBF also teaches the students teamwork, organizational skills, technical writing, and leadership. Members of the DBF team learn to work in a team environment while continually interacting with faculty, sponsor companies, the college of engineering, and other students. Thus, they are better prepared to enter the workforce upon graduation.

# About the 2010 Plane

The 2010 theme is baseball and the competition will be held in Wichita, KS. This year's mission parameters specify that the plane must be able to carry 10 softballs, internally, and carry five aluminum bats, externally, through a planned flight course. All of this must be accomplished while keeping the aircraft as lightweight as possible without compromising speed of both flight time and assembly/loading times. The teams also need to construct a lightweight case to carry the airplane.



Concept Idea for the 2009/2010 Airplane

## General Aircraft Requirements:

- The aircraft may be of any configuration except rotary wing or lighter-than-air.
- No form of externally assisted take-off is allowed. All energy for take-off must come from the on-board propulsion battery pack(s).
- Must be propeller driven and electric powered with an unmodified over-the-counter model electric motor.
- May use multiple motors and/or propellers. May be direct drive or with gear or belt reduction.
- Motors may be any commercial brush or brushless electric motor.
- Motors and batteries will be limited to a maximum of 40 Amp current draw.

To view complete competition rules go to [www.aiaadbf.org](http://www.aiaadbf.org).



# Sponsorship Program

SDSU Design, Build, Fly is a non-profit organization that depends entirely on monetary donations, materials, and technical guidance from corporate and individual sponsors. Without the generous support of our sponsors our program would not be competitive or successful.

## Company Recognition

By sponsoring SDSU's Design, Build, Fly team your company will be exposed to potential clients at various hobby airfields, many students/faculty around our campus, and additionally, participants/spectators at the competition. Whether your support is in the form of monetary donations, products, or materials, your company's logo could be placed on the aircraft, its case, team clothing, and/or on our website.



Your Company Logo Can Be Placed on Wings, Tail, or Transport Case

## Sponsorship Levels

### **Economy - \$1 - \$499 (materials/monetary)**

Benefits Include:

- Acknowledgement on DBF webpage
- And others...

### **Business - \$500 - \$1499 (materials/monetary)**

Benefits Include:

- Company logo on plane or transport case, small-sized
- Acknowledgement on DBF webpage
- And others...

### **First Class - \$1500 and above (materials/monetary)**

Benefits Include:

- Company logo on airplane *and* transport case, medium-sized
- Acknowledgement on DBF webpage
- And others...

**Sponsorship packages can also be customized to meet your specifics needs!**

## SDSU's Fundraising Goals:

- \$15,000 funds
- Composite Materials for fabrication of the plane and case (fabrics, bagging material, core materials, etc.)
- Disposable goods, such as gloves, dust masks, duct tape, trash bags, etc. for manufacturing
- Tools for manufacturing
- Propulsion / Electronic Controls for the airplane
- Travel and Accommodations for the competition weekend
- Team shirts for the competition weekend
- Food for first 5 meetings to attract new members

## Tax Deductible Donations

DBF is non-profit student organization. Any donation made to us is tax-deductible and can be claimed as a charitable donation.

For your tax purposes:

**SDSU AIAA Project and DBF**

**EIN # 20-3637366**

Please make checks payable to SDSU AIAA Project and DBF.

## Contact Information

For more information please contact us at:

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### **Mailing Address**

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Thank you to our 2008/2009 Sponsors!

***NORTHROP GRUMMAN***



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