

ASSAILING FALCONS

#flyfromwithin



SPONSORSHIP BROCHURE-2021

OUR TEAM

ABOUT US

Assailing Falcons is one of the most distinguished members of SAE International. The team brings together engineers from a variety of backgrounds that are involved in aircraft design and manufacturing, providing them with professional expertise and hands-on knowledge. The team's goal is to allow students to better themselves and hone their skills by embarking on a journey of learning, technical experience and achievement.

Founded in 2010, we have built 10 advanced class RC planes and achieved successful outcomes in the participating competitions.

OUR MISSION

As a team, we aim to grab the highest laurels for the country and construct aerodynamically efficient aircrafts. We tend not only to achieve our mission statement of the competition but also learn and gather deep knowledge about avionics and aeronautics for further field development. We work with utmost passion and focus to manifest airplanes which are capable of more than competitions.



SAE AERO DESIGN



SAE (Society of Automobiles Engineers) Aero Design is a series of aviation enthusiast events held in the United States of America, India, and Brazil every year. It is conducted by SAE International.

The SAE Aero Design competition is a real-world design challenge designed to compress a typical aircraft development program into one calendar year, taking participants through the system engineering process of breaking down requirements. It exposes participants to the nuances of conceptual design, manufacturing, system integration/test, and sell-off through demonstration.

We have been participating in this competition for over 10 years and have been excelling at it every year.



MathWorks®

NASA

SIEMENS

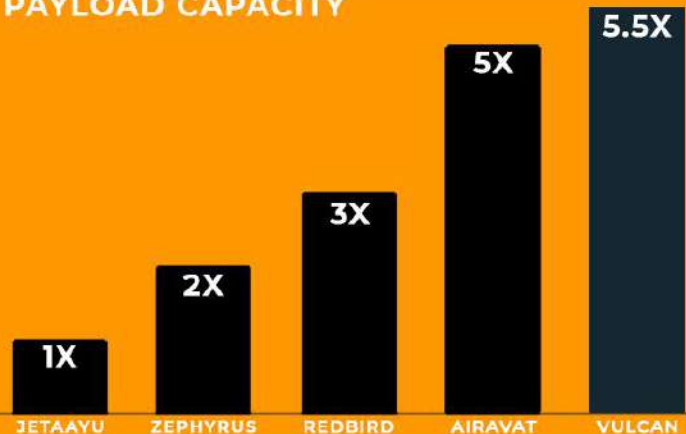


SOLIDWORKS

FLAGSHIP 2021

The past year, we all have faced additional challenges from the global COVID-19 pandemic. All said our team has worked diligently in innovating our 2021 flagship 'Vulcan'. Vulcan is a single electric motor propelled aircraft. It has a tricycle landing gear along with a semitapered wing planform. It has the capacity to lift 40.47-pound force. Vulcan flies with a cruise speed of 43 ft/s. It can deliver three CDAs, aero howlers and water bottles.

PAYLOAD CAPACITY



The mission statement for 2021 is to design a system that can deliver colonists, habitats, and supplies to the surface of Mars. Vulcan is a collaboration of fresh ideas and unique designs.



APPLICATIONS



PANDEMIC AID

Our aircraft is capable of flying at high altitudes, reach remote places where transportation facilities are unavailable

THERMAL IMAGING

Thermal imaging along our planes' long flight endurance can detect temperature field anomalies and provide live feed to the ground.



AGRICULTURAL USE

Quick takeoff and landing with autonomous flight can help in dropping fertilizers at a designated place

TERRAIN MAPPING

Our planes are capable of terrain mapping by maintaining a terrain database on the sd card on the autopilot which given terrain height



HUMANITARIAN AID

It includes, but is not limited to, package dropping during disasters and drones for surveillance programs

AUTONOMOUS AIRCRAFT

The new mission statement involves designing and implementing an autonomous glider to mimic colonization of Mars by landing colonists in a drop zone. The glider was designed to be delivered onto a designated drop zone autonomously using locking of GPS coordinates and stabilizing the glider based on gyro inputs, accelero inputs, and PID stabilization. The autonomous glide capability had to be employed while carrying maximum colonists in a no-propulsion-system glider and with a total weight constraint of 250 grams.



NATIONAL ACHIEVEMENTS

1st



In Technical
Presentation, India
(2014, 2015, 2016, 2019,
2020)

1st



In Maximum
Payload lifted,
India

1st



In BITS-Pilani
EXPO

In India
(2012, 2014, 2015, 2016, 2017,
2018, 2019, 2020, 2021)



1st

In Maximum
Altitude attained,
India



1st

Amongst the
student teams of VIT
(2015, 2016)



2nd

INTERNATIONAL ACHIEVEMENTS

1st



In Design Report
(2019, 2021)

1st



In Maximum
payload lifted

1st



In Flying Round
(2020)

In Asia for 8
consecutive years



1st

In Technical
Presentation, India
(2019,2020)



1st

In Maximum
Altitude lifted



3rd

RANKINGS

BLUE PEGASUS 16th → 2012



2014 ← 10th KNIGHTOUT



NAUTILUS 13th → 2015



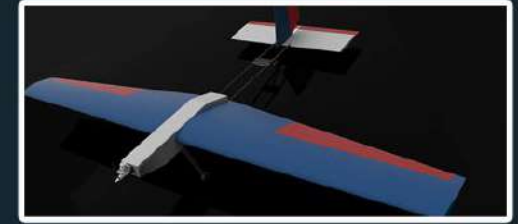
2016 ← 9th CARVAO



JETAAYU

7th

2017



2018

6th

ZEPHYRUS



RED BIRD

4th

2019



2020

3rd

AIRAVAT



VULCAN

5th

2021



WHY US

Our team started in 2010 with a dream, to become a forerunner in the undergraduate aero design space. It has been one of the oldest aviation teams in VIT, Vellore. Our dedication and strive for improvement have made it possible to defend our position of No.1 in Asia for 8 years. This journey has been possible with the help of our sponsors and their continuous support. The help and motivation offered by the sponsors gave our team the wings it needed to soar high in the sky.

By participating in one of the world's biggest the aero design competition, we are surely noticed and known by students of our university and people around the world. We ensure the satisfaction of our sponsors by branding them at various national and international aviation events.



BENEFITS OF SPONSORING US



MARKETING AND PUBLICITY

The magnitude and fame of the international event each year draw the attention of millions of enthusiasts. This can help the company to come under new international and national limelight.



CORPORATE SOCIAL RESPONSIBILITY

There is no better way to fulfill social responsibility than to support the undergraduate student team that represents the country at international level.



SPONSORSHIP BENEFITS DURING PANDEMIC

The COVID-19 pandemic has forced the world to use digital platforms more than ever before. Due to this, we have increased our social media campaigning. We regularly promote our sponsors on our social media handles. This can help the company to reach a new and wider audience than before.



VALUABLE ASSOCIATIONS

Association with a renowned institution like Vellore Institute of technology proves to be a beneficiary for the company's growth.



POTENTIAL EMPLOYEES

The relationship between the sponsor company and the team will build trust and loyalty towards each other, which can act as the start of future collaborations.

BUDGET



Structural Materials	(19%)
Miscellaneous	(10%)
SAE Registrations	(12%)
Shipment	(44%)
Avionics	(15%)

Avionics	₹1,30,000
Strutural Materials	₹1,70,000
Shipment	₹3,50,000
SAE Registrations	₹90,000
Miscellaneous	₹90,000

Maintaining a proper budget allows us to figure out our long term goals and work towards them, we ensure that we always have enough money for the things we need and the other things that are important to our team. Following a budget helps us to prioritize our spendings. We divide our money into categories of expenditure and savings, a budget makes us aware which category of expenditure takes which portion of our money. That way, it is easy for you to make adjustments and not pass over our budget.

HOW TO SPONSOR US

MONETARY SUPPORT

It would be carefully spent on day to day transactions



TECHNICAL SUPPORT

Software support is an essential demand to this vigorous and a complex competition



MERCHANDISE BRANDING

Attractive and identifiable products for recognizable the visual aesthetic of the team



LOGISTICS SUPPORT

This contains the indispensable shipment charges which are required to ship the RC plane to the site of competition



PRODUCT SUPPORT

Some parts of the RC plane are not easily found and hence providing with those would help the cause



OUR SPONSORS




TERMS AND BENEFITS

	PLATINUM	GOLD	SILVER
Credibility Offered	\$1400	\$1200	\$1000
Size of Logos	Large	Medium	Small
Promotional Events	✓		
Logo on the Aircraft	✓	✓	
Logo on Team Merchandise	✓	✓	✓
Details and Hotlink on the Website	✓	✓	✓
Company Logo on Banners	✓	✓	✓
Social Media Exposure	✓	✓	✓
Sponsor's Name on the Brochure	✓	✓	✓




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