### Sponsorship Brochure - 2018





#### About us

A member of SAE International,
Assailing Falcons is a student
organised team that brings real
world engineering projects and
applications to the undergraduate
student body.

- With a majority of aircraft components fabricated inhouse, the students are able to directly participate in all aspects of the project.
- The team brings engineers from all disciplines interested in design and manufacturing of aircrafts giving them technical experience and hands-on use of knowledge they were gaining through their respective degrees.



#### **Our Mission**

India is an upcoming aeronautical authority, and we strive to be a part of it. Every year, our engineers, industriously work on medium scale UAVs for competitions and much more. As a team, we aim to grab the highest laurels for the tricolour and fabricate aerodynamically efficient aircrafts.

We work with utmost passion and focus to manifest airplanes which are capable of more than competitions.

### **SAE AERO DESIGN**.

SAE Aerodesign is a series of mechanical engineering events held in USA, India and Brazil every year.

It is conducted by SAE International. The SAE AeroDesign competition has been designed to provide exposure to graduate and undergraduate students of situations that engineers face in their work environment.

We have been participating in this competition for 7 years and have been excelling at it.



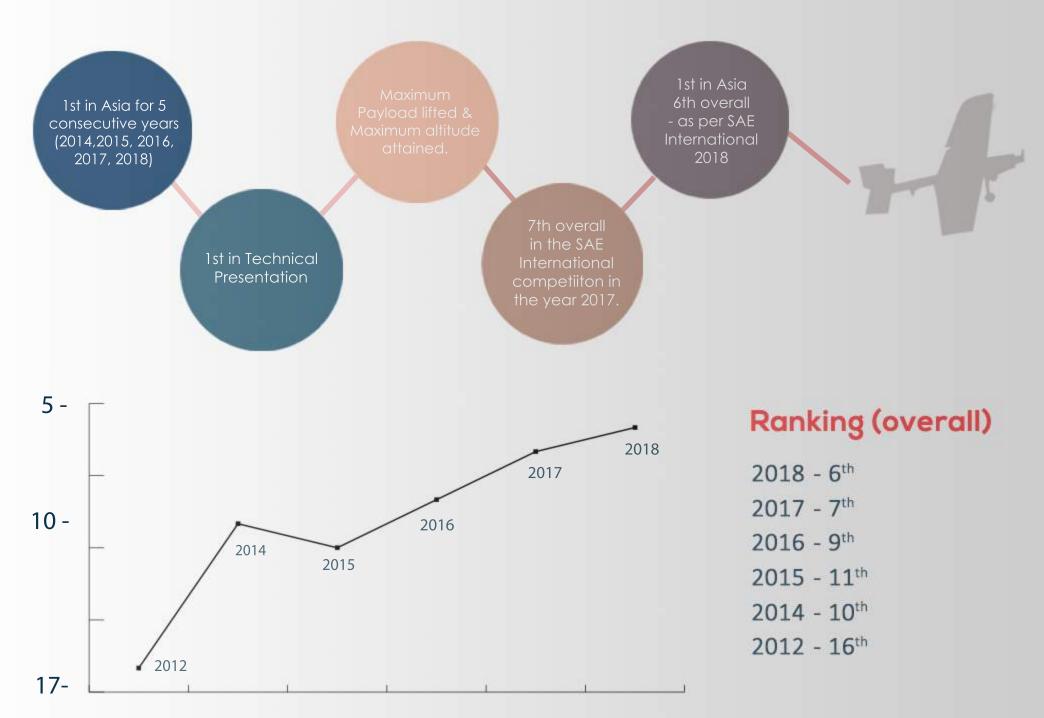








### International Achievements



### **National Achievements**

1st in Technical Presentation (India, 2014, 2015, 2016) 1st in Maximum Payload Lifted(India, 2014, 2015)

Best Student Team in VIT University for years 2015, 2016

2nd in BITS Pilani Expo





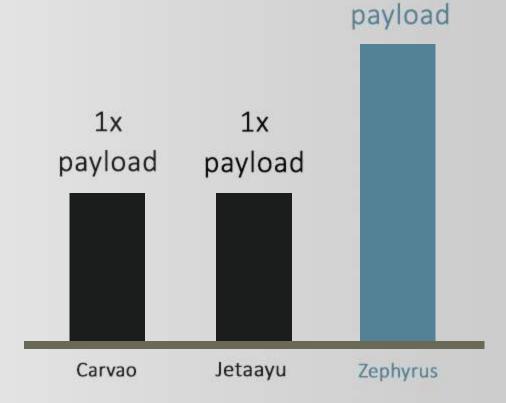


### **Current Standing Plane**

- Every year, our team's aim is to improve the benchmark set by the aircraft's performance.
- Our 2018 plane, Zephyrus, is bigger and faster.
  It was engineered for accessibility and high shelf
  life with its carbon fibre moulded fuselage, the
  application of this plane is not limited to
  one's thinking.
- Introducing a provision of dropping more payloads has expanded the usage to larger array of applications.

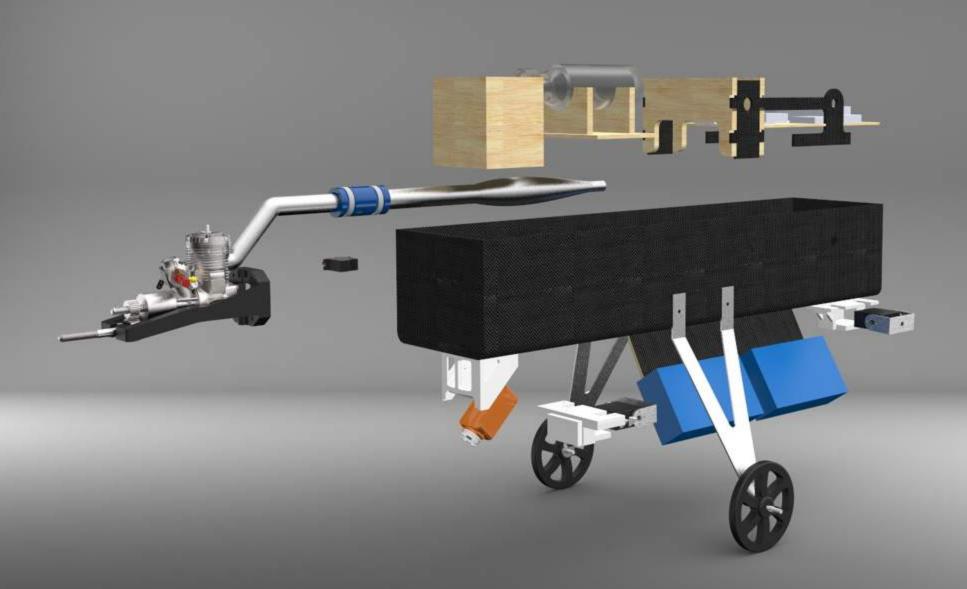
## Payload dropping

One of the facets which seperates
Zephyrus from our previous planes
and makes it stand out is the amount
of payload it can handle. Zephyrus has
the capability of handling twice the
weight of payload as compared to
Jetaayu or Carvao.



2x

CF Monocoque structure of fuselage and its better strength to weight ratio helped in lifting more payload. The optimization of thrust along with the usage of better quality of fuel helped us in achieving 4 pounds of payload lift capacity.







# Applications of our plane

#### **Humanitarian Aid**

With the limited use of the aircraft in the competitions, it can be expanded to a much wider spectrum of use. They include, but aren't limited to, package dropping during disaster situations, reconnaissance drone for surveillance programs and much more.

### **Terrain Mapping**

Our planes are capable of terrain mapping by maintaining a terrain database on the SD card on the autopilot which gives the terrain height in meters above sea level for a grid of geographic locations.

### Thermal Imaging

Thermal Imaging is and always has been an integral part of aircraft reconnaissance and is used in almost all types' surveillance and AWACS system. Zephyrus uses FLIR Tau which does not need any light whatsoever to produce a crisp image on which the smallest of details is seen. Thermal imaging along with our planes long flight endurance can detect enemies and provide live feed to the ground station for further analysis of the situation and can be used for security services and border surveillance.

### **Agricultural Applications**

Quick take-off and landing along with autonomous flight are effective features of our aircrafts which thus can be used for dropping fertilizers in designated areas of the fields.

### Our sponsors



















### Our sponsors















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### Why sponsor us

#### **Corporate Social Responsibilty**

Helping our team can be considered under CSR for your company.

# Association with a renowned institution

Association with renowned institution like Vellore Institute of Technology and its esteemed faculty.

#### **Marketing and Publicity**

International Publicity at SAE Aero Design, USA and publicity within the campus.

#### Potential employees/ Summer Interns

A collateral relation is formed which can end up with our team members working for your company.

### How to sponsor us

#### **Monetary support**

It will make the difference between good and unbeatable.

#### **Technical support**

Nothing is better than getting knowledge on research and development.

#### **Logistics support**

Shipment of the plane for the competition will be very helpful for the team.

#### **Product support**

Parts of the plane are rarely found.
Providing us with some will save us a lot of time, which we can utilize to reach higher goals.









Terms	GOLD	SILVER	EXECUTIVE
Credibility offered	\$1000	\$600	\$400
Size of logos	L	M	S
Promotional events for the company	•		
Logo on the aircraft	•	•	
Logo on team merchandise	•	•	•
Details and hotlink on the website	•	•	•
Company's logo on banners	•	•	•
Social Media Exposure	•	•	•
Sponsor's name in brochure	•	•	•

### **CONTACT US**

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