2026 Collegiate Design Series
SAE Aero Design Rules

Version 2026.0

Forward

Welcome to SAE Aero Design 2026! This year marks the 40th anniversary of the SAE Aero Design competition and we are proud once again to challenge students with relevant aircraft design and engineering experiences this year. Technical competition and project management is a hallmark of the aerospace industry. Students are introduced to the concepts of design, manufacture, and mission performance through an industry-like series of competition events, which require technical documentation, test readiness presentation, and flight competition.

The 2026 competition introduces a new multi-engine cargo mission for the Regular Class. Multi-engine cargo aircraft perform an important role and provide payload flexibility across industry. The Regular Class mission requirement creates decision points around both propulsion design and payload integration, type, and quantity. The power limiter is removed for this class and teams will balance takeoff performance (current draw) against mission endurance (battery capacity). After successful flights, teams are required to increase payload for the next flight attempt emphasizing vehicle optimization around multiple payload configurations.

The SAE Aero Design Rules Committee continues to be impressed with the ingenuity, teamwork, and dedication of the student teams. The experience the competition provides is tailored to be representative of real-world process with a focus on hardware and flight demonstration in addition to requirements deconstruction, preliminary design, and analysis. Working on a team to accomplish a difficult engineering challenge and learn by doing is a key element. Good luck to all teams undertaking this journey.

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1.1 INTRODUCTION

Official Announcements and Competition Information

The SAE Aero Design competition provides engineering students with a real-world aircraft design challenge. Industry professionals develop these rules with a focus on educational value and hands-on experience. The rules compress a typical aircraft development program into one academic year. This competition exposes participants to conceptual design, manufacturing, system integration/test, and verification through demonstration.

SAE Aero Design features three competition classes—Regular, Advanced, and Micro.

1. **Regular Class** develops a fundamental understanding of aircraft design by focusing on heavy and volumetric payload, leveraging all-electric, multi-motor propulsion while balancing power and endurance.
2. **Advanced Class** develops advanced aircraft integration skills to execute precision payload delivery and recovery, leveraging concepts such as autonomous flight and flight mode transition in an all-electric aircraft.
3. **Micro Class** develops aircraft design trade-offs to optimize takeoff performance and payload weight, pushing the limits of small-form-factor, all electric aircraft design.

1.2 SAE AERO DESIGN RULES AND ORGANIZER AUTHORITY

General Authority

The competition organizing bodies consist of SAE International, Inc. and the SAE Aero Design Industry Advisory Board (which includes Event Directors and Rules Committee). The competition organizing bodies reserve the right to revise the competition schedule and/or interpret or modify the rules at any time and in any manner, that is, in their sole judgment, required for efficient and safe operation of the event or the SAE Aero Design series.

Penalties

The competition organizing bodies reserve the right to modify the points and/or penalties listed in various event descriptions; to accurately reflect the operational execution of events, or any special conditions unique to the site.

Rules Authority

The SAE Aero Design Rules are the responsibility of the SAE Aero Design Industry Advisory Board Rules Committee and are issued under the authority of the SAE Collegiate Design Series. Official announcements from the competition organizing bodies shall be considered part of and have the same validity as these rules. Ambiguities or questions concerning the meaning or intent of these rules will be resolved by the SAE Aero Design Industry Advisory Board Rules Committee or SAE International Staff.

Rules Validity

The SAE Aero Design Rules (www.saeaerodesign.com/go/downloads) dated for the academic year of the competition are the rules in effect. Rule sets dated for prior competition years are invalid.

Rules Compliance

By entering an SAE Aero Design competition, the team members, Faculty Advisors and other personnel of the registered university agree to comply with, and be bound by, the rules and all rules interpretations or procedures issued or announced by the competition organizing bodies. All team members, Faculty Advisors and other university representatives are required to cooperate with and follow all instructions from the competition organizing bodies.

Understanding the Rules

Teams are responsible for reading and understanding the rules in their entirety. The section and paragraph headings in these rules are provided to facilitate reading and do not affect the paragraph contents.

Loopholes

Anticipating a comprehensive design space covering all possibilities and potential questions about the aircraft's design parameters or the conduct of the competition is virtually impossible. Safety remains paramount during any SAE International competition. Any perceived loopholes will be resolved in the direction of increased safety. When in doubt, please contact the SAE Aero Design Rules Committee using the FAQ forum early to avoid design impacts at competition.

Participating in the Competition

Teams, team members as individuals, Faculty Advisors and other representatives of a registered university who are present on-site for competition are "participating in the competition" from the time they arrive until they depart the site at the conclusion of the competition or earlier by withdrawing.

Visa--United States Visas

Teams requiring visas to enter to the United States are advised to apply at least sixty (**60**) days prior to the competition. Although most visa applications go through without an unreasonable delay, occasionally teams have difficulties and may not be issued visas before the competition.

AFFILIATED STUDENT TEAM MEMBERS WILL HAVE THE ABILITY TO PRINT A REGISTRATION CONFIRMATION LETTER FOR THE INDIVIDUAL EVENT(S) THEY ARE ATTENDING. ONCE A STUDENT TEAM MEMBER AFFILIATES THEMSELVES TO THEIR TEAM PROFILE PAGE UNDER THEIR INDIVIDUAL EDIT SECTION, THEY WILL HAVE THE OPPORTUNITY TO PRINT THEIR PERSONALIZED LETTER WITH THE FOLLOWING INFORMATION: STUDENT'S NAME, SCHOOL'S NAME, THE CDS EVENT NAME, OFFICIAL DATES AND LOCATION(S).

Letters of Invitation

Neither SAE International staff nor any SAE Aero Design Industry Advisor Board members are permitted to give advice on visas, customs regulations or vehicle shipping regulations concerning the United States or any other country.

Certificates of Participation

SAE International and Event Directors do not create Participation Certificates outside of the auto-generated certificate on your team profile page at http://www.sae.org/.

Certificates are available once students are affiliated to the current competition's team. Certificates will not be available once that competition year closes.

Violations of Intent

A violation of the intent of a rule will be considered a violation of the rule itself. Questions about the intent or meaning of a rule may be addressed to SAE Aero Design Rules Committee members or SAE International Staff.

Right to Impound

The competition organizing bodies reserve the right to impound any on-site vehicle/aircraft/component at any time during competition for inspection and/or rules adjudication.

Flight Operations Procedure

Refer to the SAE Aero Design Operations Procedure document for information on competition operations, safety, and procedures for flight attempts, line etiquette, flight log management.

1.3 Society Membership and Eligibility

Society Membership

Individual team members shall be members of SAE International or an SAE International affiliate society. Proof of membership, such as a membership card, is required at the event. Students may join online at: https://www.sae.org/participate/membership/join

Teams shall read the articles posted on the SAE Aero Design News Feed (www.saeaerodesign.com/go/news) by SAE International and the other organizing bodies. Teams shall be familiar with all official announcements concerning the competition and rule interpretations released by the SAE Aero Design Rules Committee.

Team Pilots

Team pilots are not required to be students or SAE International members; however, all pilots shall be current members of the Academy of Model Aeronautics or the Model Aircraft Association of Canada (AMA has an agreement with MAAC). Valid AMA membership cards shall be presented at competition prior to flying any team's aircraft. Non-US pilots can obtain a discounted AMA Affiliate membership covering flying activities while in the US by going to the AMA web site and submitting the following form: https://www.modelaircraft.org/files/902.pdf.

1.4 Liability Waiver and Insurance Requirements

All on-site participants and Faculty Advisors are required to sign a liability waiver, which is part of their Fast-Track Registration Form that can be printed off their team registration page. Individual medical and accident insurance coverage is the sole responsibility of the participant.

1.5 RINGERS PROHIBITED

To maintain the integrity of the competition, the Faculty Advisor(s) shall prohibit ringers. A ringer is someone with exceptional skills related to the competition (e.g., a professional model builder) that is not a legal member of the team but helps the team earn points.

1.6 DESIGN AND FABRICATION

The aircraft shall be designed and built by SAE International student members without direct involvement from professional engineers, radio-control model experts, pilots, machinists, or related professionals. The students may use any literature or knowledge related to R/C aircraft design and construction and information from professionals or from professors, as long as the information is given as a discussion of alternatives with pros and cons and is acknowledged in the references in the design report. Professionals may not make design decisions, nor contribute to the drawings, the report, or the construction of the aircraft. The Faculty Advisor shall sign the Statement of Compliance given in the Appendix.

1.7 AIRFRAME DESIGN REQUIREMENTS

Original Design

Any aircraft presented for competition shall be an original design conceived by student team members. Photographic scaling of an existing model aircraft design is prohibited. Use of major components such as wings, fuselage, or empennage of existing model aircraft kits is prohibited. Use of standard model aircraft hardware such as motor mounts, control horns, and landing gear is allowed.

Unique Design

Universities may enter one team per class in each SAE Aero Design competition, but each entry shall be a unique design, significantly different from each other. If the aircraft are not significantly different in the opinion of the competition organizing bodies, then the university will be considered to have only a single entry and only one of the teams and its aircraft will be allowed to participate in the competition. For example, two aircraft with identical wings and fuselages but different empennages would not be considered significantly different. For guidance regarding this topic, please submit a rules question at www.saeaerodesign.com.

Airframe Eligibility

Airframes will only be allowed to compete during a *single academic year*. An airframe may be entered in both SAE Aero Design East and SAE Aero Design West during the same *academic year*, but that same airframe may not be used in either competition during the following year. Entering the same airframe in SAE Aero Design West one year and SAE Aero Design East the next year is not allowed.

An airframe is considered “entered to competition” during an academic year once design documentation is submitted. If the airframe does not fly at competition during that same academic year, the airframe is not eligible for competition during future academic years.

The airframe shall be designed within eleven (11) months of competition and constructed within nine (9) months of competition. The airframe includes the fuselage, wings, and tail.

1.8 Official Languages

The official language of SAE Aero Design series is English. Document submissions, presentations and discussions in English are required at all US competitions in the series.

1.9 Registration Information, Deadlines, Withdrawal, and Waitlist

SAE is shifting the registration process in 2026 to a Lottery System. Teams intending to participate in the SAE Aero Design competitions shall sign up during the Lottery Interest Window per the registration schedule in Table 1.1. The lottery will close October 23 with registration and waitlist positions published on October 24. All teams that secure a registration spot when the lottery is published will be invoiced within 24 hours. By registering, the registered University assumes liability of the student project. Teams will sign up for the interest window at https://www.saeaerodesign.com/cdsweb/reg/Upcomingcomplist.aspx

Table 1.1: Registration Schedule

Event	*Process*	*Start (Open)*	*End (Closed)*
Lottery Interest Window	*Teams register interest for competition location and classes for 2026*	October 9, 2025 10:00:00 AM EST	October 23, 2025 11:59:59 PM EST
Lottery Published	*Registration spots are assigned and published via lottery.*		October 24, 2025 12:00 PM Eastern
Registration Closes for 2026 Season	*Any open registration spots after the lottery runs will remain available on-demand until this date.*		November 30, 2025

The registration fee is non-refundable and failure to meet these deadlines will be considered a failure to qualify for the competition. Separate entry fees are required for each event.

Team/Class/University Policy

A university or college may only have one team registered per class. The registration fees shall be paid within two (**2**) business days of registration invoicing to be eligible for competition. Invoicing will take place once a team secures a registration spot, either when the lottery results are published or at any point afterward.

Individual Registration Requirements – ACTION REQUIRED

A team member shall be enrolled as degree seeking undergraduate or graduate student at the college or university of the team with which they are participating. Team members who have graduated during the seven (**7**) months prior to the competition remain eligible to participate.

All participating team members and Faculty Advisor(s), both domestic and international, shall individually affiliate to their respective college or university on the SAE International website (http://www.sae.org/) Team Profile page.

If you are not an SAE International member, go to http://www.sae.org and select the "Membership" link. Students will select "Student Membership" and answer the questions. All student participants shall be members of one of the organizations listed in Section 1.3 to participate.

Faculty members who wish to become SAE International members will select "Professional Membership". This is not mandatory for Faculty Advisors.

Each team member may participate for only one team. If the university or college is entering multiple classes, team members shall choose only one team to affiliate and participate with in the competition. For example, students cannot compete as part of a Micro class team and an Advanced class team.

Reservation Process

SAE is shifting from "pre-registration" to a new "reservation" process for teams placing in the top three (**3**) overall in their class during the previous competition year. These teams are guaranteed a spot, but they shall sign up during the lottery interest window along with all other teams. Reservation-eligible teams will be tagged in the system, which secures their place once they sign up. If a reservation-eligible team fails to complete the lottery interest window sign up, they will forfeit that reserved spot opportunity.

SAE will publish a reservation-eligible list for the 2026 season on the news feed. Reservations do not limit a team's ability to sign up for other events. For example, a team that qualifies for a reservation at one event may also sign up for the lottery at another event. The existing event pairing structure (such as East 2025 with East 2026) continues to apply.

If a team is eligible for reservations at both events in the same class, they will be asked to which event they would like their reserved spot to apply, as SAE will only honor one (**1**) reservation spot per class.

1.10 Voluntary Withdrawal

Teams shall notify SAE International if they voluntarily withdraw from the competition. This notification allows organizers to move teams from the waitlist into the competition participation list. Teams will be able to request withdrawal through https://saeaerodesign.com in the area they can view their registration and roster information.

1.11 Waitlist

Once an event reaches the venue's capacity, all remaining teams will be placed on a waitlist. The waitlist is capped at sixty (**60**) spaces per event and closes on the same day registration closes. Once a team withdraws from an event, an SAE International staff member will inform your team by email (the individual who registered the team to the waitlist) that a competition spot has opened. You will have **24** hours to accept or reject the position and an

additional **2 business days** to complete registration payment. Waitlisted teams shall submit all documents by the deadlines and any team that does not submit all documents will be removed from the waitlist.

1.12 Deadline Policy

Registered teams are required to submit several documents prior to the competition.

Late Submission Penalty

Late submission of the Design Report, Technical Data Sheet(s), and Drawings by the deadline will be penalized five (**5**) points per day, up to a maximum of five (**5**) days late. If your required documents are more than five (**5**) days late, the documents will be classified as "Not Submitted" and your team will not be allowed to participate.

Automatic Withdrawal Policy

Failure to submit the Design Report, Technical Data Sheet(s), and 2D Drawings within five (**5**) days of the deadline constitutes an automatic withdrawal of your team. Your team will be notified before or on the 4th day of no submission that your documents have not been received. After the 5th day, your team's registration will be canceled. No refunds will be given.

Table 1.2: Design Report Submission Schedule

Activity/Action	*East Event Deadline*	*West Event Deadline*
Design Report	02/01/2026 11:59:59 EST	03/01/2026 11:59:59 EDT
TDS	02/01/2026 11:59:59 EST	03/01/2026 11:59:59 EDT
2D Drawing	02/01/2026 11:59:59 EST	03/01/2026 11:59:59 EDT

1.13 Faculty Advisor

Each team shall have a Faculty Advisor appointed by the college or university. The Faculty Advisor shall accompany the team to competition and is considered by competition officials to be the official university representative. Faculty Advisors may advise their teams on general engineering and engineering project management but may not design any part of the vehicle nor directly participate in the development of any documentation or presentation. Additionally, Faculty Advisors may neither fabricate nor assemble any components nor assist in the preparation, maintenance, or testing of the vehicle. In brief, Faculty Advisors may not design, build, or repair any part of the aircraft. Faculty Advisors may not participate in flight operations during competition weekend except as noted.

1.14 Questions, Complaints and Appeals

Questions

Any rules questions or comments should be addressed to the SAE Aero Design Rules Committee by submitting a question at https://www.saeaerodesign.com.

General information about hotels and other attractions, as well as a schedule of events, will be posted at https://www.sae.org/attend/student-events/.

Complaints

SAE International staff are the first point of contact for general complaints. SAE Aero Design Rules Committee members will be available to listen to complaints regarding errors in scoring, interpretation, or application of the rules during competition. Volunteer judges and other competition volunteers should not be recipients of complaints at any time.

Appeal / Preliminary Review

A team can only appeal issues related to scoring, judging, venue policies, and/or any official actions *regarding their own team*. Team Captain(s) and/or the Faculty Advisor shall bring the issue to the competition organizing bodies for an informal preliminary review before filing an official appeal.

A team cannot file an appeal to cause harm to another team's standing and/or score.

Cause for Appeal

A team may appeal any rule interpretation, own-team scoring or official actions which the team feel has caused some actual, non-trivial, harm to own-team, or has had a substantive effect on their score.

Teams may not appeal rule interpretations or actions that have not caused the team any substantive damage.

Appeal Format

If a Faculty Advisor or Team Captain(s) feel their issue regarding an official action or rules interpretation was not properly addressed by a member of the organizing body, the team may file a formal appeal with the Appeals Committee.

All appeals shall be filed in writing (see Appendix B) to the Event Director by the Faculty Advisor or Team Captain(s) only.

All appeals require the team to offer twenty-five (**25**) points as collateral. If the appeal is successful, the team ***will not*** forfeit the twenty-five (**25**) points. If the appeal is overruled, the team will forfeit the twenty-five (**25**) points.

Appeals Period

All appeals shall be submitted within thirty (**30**) minutes of the end of the flight or other competition event to which the appeal relates.

Appeals Committee

When a timely appeal is received, the committee will review the claims. All contentions or issues raised in the formal appeal will be addressed in a timely manner. The consideration in each review is whether the actions in dispute were just and in-line with the intent of the rules. Once the review is completed, a new order will be issued affirming, reversing, or modifying the original determination.

All rulings issued by the Appeals Committee are final.

The Appeals Committee shall consist of a minimum of three members: the Event Director or delegate, an SAE International representative, and an SAE Aero Design Rules Committee member.

1.15 PROFESSIONAL CONDUCT

Unsportsmanlike Conduct

Unsportsmanlike conduct is not acceptable. If SAE staff and/or Rules Committee members observe unsportsmanlike conduct, SAE Aero Design reserves the right to assess penalty points or remove the team from competition.

Arguments with Officials

Arguments with, or disobedience toward, any competition official may result in the team's elimination from competition. All team members may be immediately escorted from the competition grounds.

Alcohol and Illegal Material

Alcoholic beverages, illegal drugs, firearms, weapons, or illegal material of any type are not permitted on the event sites at any time during competition. Any violations will result in the immediate expulsion of all team members and Faculty Advisor(s) of the offending school, not just the team member(s) in violation. This rule applies to team members and Faculty Advisors. Any use of illegal drugs or alcohol by an underage person will be reported to local law enforcement authorities.

Event Director's Authority

The Event Director reserves the exclusive right to revise the competition schedule and/or to interpret the competition rules at any time and in any manner required for efficient operation or safety.

Ground Safety and Flight Line Safety Equipment

- **No open toe shoes allowed.** All team members, including Faculty Advisors(s) and pilots, are required to wear CLOSED toe shoes during flight testing and flight competition.
- **Smoking is prohibited.** Smoking is prohibited in all competition areas.
- **Personal Protective Equipment required.** All students involved in flight-line launch and recovery operations shall wear safety glasses.
- **Only non-visible Class 1 eye-safe (EN/IEC 60825-1 2014) lasers are allowed**. Laser pointers are prohibited.

1.16 SAE TECHNICAL STANDARDS ACCESS

A cooperative program of SAE International's Education Board and Technical Standards Board is making some of SAE International's Technical Standards available to teams registered for any North American CDS competition at no cost. The Technical Standards referenced in the Collegiate Design Series rules, along with other standards with reference value, will be accessible online to registered teams, team members, and Faculty Advisors.

2 General Aircraft Requirements

2.1 Technical Definitions

- The word "shall" within these requirements denotes legal, inspectable or operational requirements. Satisfaction of shall statements determines valid scoring.
- The word "will" within these requirements describes or clarifies a system or device's intent or purpose.

2.2 Aircraft Identification

The Team Number, as assigned by SAE International, shall be visible on both the top and bottom of the wing, and on both sides of the vertical stabilizer or other vertical surface(s) that exist.

1. Aircraft shall be identified with the school name, mailing address, and email address either on the outside or the inside of the aircraft.
2. Team Numbers on Regular and Advanced aircraft shall be a minimum of four (**4**) inches in height. If vertical surfaces are insufficiently sized to accommodate four (**4**) inches height team numbers, smaller sized numbering will be permitted.
3. Team Numbers on Micro Class shall be a minimum of two (**2**) inches in height.
4. The University name shall be clearly displayed externally on the wings or fuselage. The University initials may be substituted in lieu of the University name, provided the initials are unique and recognizable.

The assigned Team Numbers appear next to the school name on the "Registered Teams" page of the SAE Aero Design Collegiate Design Series website at:

SAE Aero East: https://www.sae.org/attend/student-events/sae-aero-design-east

SAE Aero West: https://www.sae.org/attend/student-events/sae-aero-design-west

2.3 Prohibited Aircraft Configuration

Unless otherwise specified, competition entrants shall be fixed wing configuration only. Advanced class aircraft may have variable geometry wings. Lighter-than-air aircraft, rotary wing aircraft, or auto-gyros and steerable, parafoil aircraft are prohibited.

2.4 Empty CG Design Requirement and Empty CG Markings on Aircraft

The Empty CG location will be verified during Safety and Airworthiness Inspection. Empty weight flight demonstration is not required. All aircraft shall meet the following Center of Gravity (CG) requirements:

1. All aircraft shall be flyable at their designated Empty CG position (no payload, ready to fly) on the submitted 2D aircraft drawing.
2. All aircraft shall have the CG marked on both sides of the fuselage with a CG symbol (Figure 2.1) .
3. CG markings shall be a minimum of **0.5 inches** in diameter centered at the Empty CG position **+/-0.25 inches**, per the submitted 2D drawings. Flying-wing type aircraft may place the CG markings on the bottom of the wing.

Figure 2.1: Center of Gravity Symbol

2.5 Gross Weight Limit

Aircraft gross take-off weight shall not exceed fifty-five (**55**) pounds.

2.6 Controllability

All aircraft shall be controllable in flight.

If an aircraft is equipped with a wheeled landing gear, the aircraft shall have a ground steering mechanism for positive directional control during takeoffs and landings.

Aircraft shall not rely solely on aerodynamic control surfaces for ground steering.

2.7 Gyroscopic and Other Stability Augmentation

Gyroscopic assist or other forms of stability augmentation are allowed.

2.8 Radio Control System

All aircraft shall employ a **2.4** GHz radio control system with a functional fail-safe system.

The control system's fail-safe system shall reduce the throttle to zero **immediately** upon loss of the radio signal. Teams may have to reset the fail-safe default to meet this requirement.

2.9 Managing Radio Frequency

Teams are responsible for managing radio frequency (RF) and addressing potential interference or conflicts. Competition organizers encourage teams to implement mitigation measures to minimize risk. Any intentional attempts by teams to gain an unfair advantage will be subject to the Unsportsmanlike Conduct rule in Section 1.15.

2.10 Spinners or Safety Nuts Required

All powered aircraft shall use either a spinner or a rounded model aircraft type safety nut. Nylon-insert Lock-Nuts are prohibited. **Figure 2.2** shows examples of acceptable hardware.

Figure 2.2: Spinners and Safety Nut

2.11 Metal Propellers

All aircraft shall not use metal propellers.

2.12 Lead is Prohibited

Lead shall not be included in the design, manufacture, or payload of the aircraft. The use of lead in any portion of aircraft (payload included) is prohibited.

2.13 Payload Distribution

The payload design shall not contribute to the structural integrity of the airframe.

The airframe shall be flight worthy without the payload installed.

2.14 Aircraft Ballast

Aircraft ballast is allowed. Ballast, if employed, shall be properly secured.

Ballast shall not be in a payload bay.

2.15 Control Surface Looseness or Backlash

Aircraft control surfaces and linkages shall not exhibit looseness or backlash within the mechanism's movement. Control surfaces with excessive backlash contribute to reduced control effectiveness in mild cases and to aeroelastic flutter in severe cases.

2.16 Servo Sizing

Analysis and/or testing described in the Design Report shall demonstrate the servos are sufficiently sized to handle the expected aerodynamic flight loads.

2.17 Clevis Keepers

All control clevises shall employ additional mechanical retention devices (keepers) to prevent accidental control clevis opening during flight.

2.18 Stored Energy Restriction

Aircraft shall be powered by the on-board motor(s). No other internal and/or external forms of stored potential energy are allowed, for example rubber bands or pressure vessels.

2.19 Battery Pack Restrictions

- All batteries shall be commercially available. Homemade batteries are prohibited.
- All batteries shall be positively secured and unable to move under all flight loads.
- The battery bay or location in the aircraft shall be free of any hardware or other protrusions that could penetrate the battery in the event of a crash.

2.20 Use of Lasers

The use of lasers for marking/highlighting landing zones or directing an aircraft to a landing zone is prohibited.

2.21 Power Limiter

Micro Class shall use a third-party electronic device (power limiter) to limit the power of the propulsion system. Regular Class and Advanced Class are not required to use a power limiter. The official power limiter supplier is http://www.Neuracing.us. The supplier will ship worldwide. The limiters are only available at the following link:

https://neuracing.us/product-category/saelimiters/

- The power limiter shall be unmodified. Repairs and/or modifications to the limiter are prohibited.
- The limiter shall be fully visible and easy to inspect.
- Only battery, receiver, Battery Eliminator Circuit (BEC), speed control, arming plug, and limiter shall be allowed within the power circuit.

2.22 Red Arming Plug

All electric powered aircraft shall use a discrete and removable red arming plug to arm and disarm the aircraft propulsion system. Disconnecting wiring harnesses to arm and disarm a system is prohibited.

The red arming plug shall be integrated into the electrical circuit between the battery and the electronic speed controller (ESC).

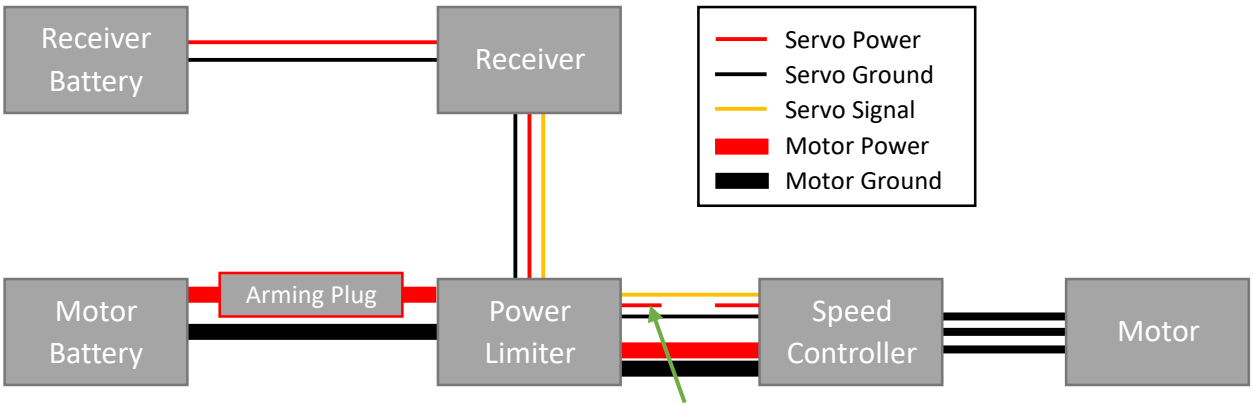
The red arming plug shall be located on the positive (RED) wire between the battery and the power limiter.

The red arming plug is located as follows:

- The red arming plug shall be a minimum of nine (**9**) inches away from any propeller at any point in its rotational plane. Intent is to enable volunteers to safely access the red arming plug if needed to safely disarm the aircraft.
- The red arming plug shall be located on the top, near the centerline of the fuselage or wing, and external to the aircraft surface.
- The red arming plug location shall be clearly visible.

The non-removable portion of the arming plug interface shall not have more than one male lead.

Disconnecting wiring harnesses to arm and disarm a system shall be prohibited.



Note: Speed controllers with a built in BEC should have the positive power wire in the servo connector disconnected.

Figure 2.3: Example diagram of propulsion system with Arming Plug and Power Limiter. Note, different classes may have additional requirements or allow for alternative configurations.

2.23 Receiver System Battery Pack

For Regular Class, a separate battery shall be required for the receiver system.

For Micro and Advanced Class, a separate battery or separate BEC shall be required for the receiver system.

If the receiver system has a separate battery pack, it shall have a minimum capacity of **1000** mAh and shall be a LiPo or LiFE type battery.

Batteries shall have enough capacity to safely drive all aircraft servos, taking into consideration the number of servos and maximum current draw.

The aircraft receiver system shall be able to operate without the arming plug installed.

Battery voltage regulators are allowed.

2.24 On/Off Switch

The receiver system shall be controlled by a clearly visible on/off switch mounted to the aircraft exterior, located at least nine (**9**) inches from any propeller at any point in its rotation plane. See Section 6 for details of the safety inspection.

2.25 Repairs

The original aircraft design as presented in the Design Report and presentation shall be maintained as the baseline aircraft during the competition.

In the event of aircraft damage, the aircraft may be repaired provided such repairs do not deviate from the baseline design. All major repairs shall undergo safety inspection before the aircraft is cleared for flight. See Section 6 for details of the safety inspection.

If a safety inspection is triggered after a flight attempt, teams shall complete a technical inspection before they will be allowed to return to the flight line queue. This remains true regardless of whether the primary aircraft is repaired or a secondary aircraft is selected for

the next flight attempt. The flight log will not be available for checkout until technical inspection clears the hold in the digital tracking system.

2.26 Design Change Process

Teams making changes to their aircraft design after the submission of the Design Report and prior to technical inspection at the flying event shall submit an Engineering Change Request (ECR).

- The ECR shall include definition of the design, description of the change(s), and motivating factors (requirements, performance, manufacturing).
- The ECR shall include an updated 2D drawing as described in Section 4.4 if any content on the drawing changed.
- The ECR shall be submitted at least one (**1**) week prior to the flying event.
- The ECR shall be uploaded to SAE following the same process for submitted the Design Report and should follow the same formatting guidelines.
- Design changes that are not received by the deadline are subject to penalty points.

Table 2.1: ECR Submission Schedule

Event	*East Deadline*	*West Deadline*
ECR Deadline	02/27/2026 11:59 PM EDT	04/10/2026 11:59 PM EDT

2.27 Alteration after Flight

Minor alterations are allowed after flight attempts. Consult with SAE Aero Design Rules Committee members to determine whether desired changes may be subject to penalty points. Any change made solely for safety of flight (as judged by Rules Committee) will not be subject to penalty points.

3 MISSION REQUIREMENTS AND SCORING

3.1 AIR BOSS

The Air Boss is a qualified SAE event official or appointed volunteer that manages the flight line process. Their responsibilities include:

1. Ensuring flight line safety by maintaining an orderly and controlled runway.
2. Being the official of record for the success or failure of the flight, including takeoff and landing.
3. Declaration of flight termination at any time during the flight attempt.

The Air Boss may continue flight operations at their discretion in continuous winds up to forty-five (**45**) knots with gusts no greater than sixty-five (**65)** knots.

3.2 PILOT AREA

A pilot area will be defined at pilot briefing. All pilots shall fly from the designated area.

3.3 FLIGHT ATTEMPT

Teams are allowed one (**1**) flight per attempt. There is no fixed or guaranteed number of flight attempts.

A **Flight Attempt** is defined as each time the team brings their aircraft for mission demonstration, starting when the team enters the 'On-Deck' area. Each team will have a limited number of flight attempts for the competition, depending on local conditions.

A **Take-off Try** is defined as the aircraft leaving the starting line and moving forward under its own power.

Airborne is defined as all parts of the aircraft no longer touching the ground.

A **Bounce** is defined as any part of the aircraft touching the runway after becoming airborne.

For all competition classes the aircraft may be throttled-up/run-up for take-off, subject to the following conditions:

- **Regular Class**: Two (**2**) team members may escort the aircraft from On-Deck to Runway and one (**1**) team member may hold the aircraft in place prior to take-off roll.
- **Micro and Advanced Classes**: One (**1**) team member may escort the aircraft from On-Deck to Runway and hold the aircraft in place prior to take-off roll.
- The aircraft holder may not push the aircraft on release.
- **Regular and Micro Classes:** Main gear shall remain on the take-off line prior to release.

3.4 AIRCRAFT CONFIGURATION AT LIFTOFF AND DURING THE FLIGHT ATTEMPT

The aircraft shall remain intact during a flight attempt to receive full flight score.

A twenty-five percent (**25%**) deduction from the flight score will be assessed in the event any of the following items are observed to completely detach from the aircraft during a flight attempt.

- Stickers
- Tape
- Coverings

Except as previously noted, a flight shall be disqualified in the event any components, other than a broken propellor during landing, fall off during a flight attempt.

3.5 Competition Circuit Requirements

1. During departure and approach to landing, the pilot shall not fly the aircraft in a pattern that will allow the aircraft to enter any of the no-fly zones.
2. Aerobatic maneuvers shall be prohibited during the flight competition for all competition classes. This includes but is not limited to: loops, figure 8's, Immelmann, all types of rolling maneuvers, and inverted flight.
3. Regular and Micro Class aircraft shall successfully complete a minimum of one (**1**) complete **360**° circuit around the field. See Table 3.2 for additional information.
4. Advanced Class has no specific flight pattern (See Section 8 for clarification).

3.6 Time Limits and Multiple Takeoff Tries

1. Multiple takeoff tries per flight attempt are allowed for some classes within the class-specific time allotment according to Table 3.1.
2. If an airborne aircraft bounces or returns to the ground after being airborne and is beyond the take-off distance limits, the flight attempt shall be disqualified.
3. Takeoff time starts when the team is called to the flight line from the On-Deck Area.

Table 3.1: Flight Attempt Information

Class	**Time Limit (sec)**	**Can make multiple take-off tries if:**			**Team members allowed beyond On-Deck Area:**
		Still within the Time Limit	Bounce within required take-off distance	Bounce outside the required take-off distance	
Regular	60	Yes	Yes	No	Two (2) Escort + Pilot
Advanced	60	Yes	Yes	No	One (1) Escort + Pilot
Micro	60	No	No	No	One (1) Escort + Pilot

3.7 On-Deck Area

The 'On-Deck Area' is near the flight line where teams will prepare for their flight attempt.

1. Teams shall surrender one (**1**) flight attempt when directed to the On-Deck Area as they wait for their turn to take the flight line.
2. Teams may mount propellers, perform control surface checks, and range checks.
3. Teams may decide, or be directed by the Air Boss or Pit Boss, to leave the On-Deck Area for maintenance and/or technical issues but shall forfeit the flight attempt.
4. Teams will ensure they have sufficient reserve power to handle any expected delays.
5. Teams shall not be allowed to install their propulsion arming plugs.
6. Motor runup and testing shall not be allowed.
7. Three (**3**) team members are allowed along with the pilot and aircraft in the On-Deck Area.

3.8 Take-off

Take-off direction will be determined at the discretion of the Air Boss. If possible, the take-off direction will face into the wind. Changes in wind direction may affect the take-off direction throughout the day. The Air Boss reserves the right to change the take-off direction at any time for weather or safety.

1. All aircraft shall remain on the runway during the take-off roll.
2. Table 3.2 defines distance requirements.
3. Making the initial turn before passing the "distance from initial start before turn" requirement shall disqualify the flight attempt.

Table 3.2: Take-off Information

Class	Take-off Distance Limits	Distance from initial start before turn	Description
Regular	100 ft.	400 ft.	Aircraft shall be airborne within the prescribed take-off distance.
Advanced	None	None	Aircraft has full use of the runway.
Micro	See Section 9.5	400 ft.	Team may use the entire launch area per attempt to get the aircraft airborne. Only one (**1**) launch release per flight attempt is allowed.

3.9 Landing Requirements

A successful landing is defined as a controlled return to the ground. Aircraft shall remain inside the specified landing zone for each class. The aircraft may leave the landing zone only if given permission by the Air Boss.

Table 3.3 describes the pre-determined landing zone for each class.

1. Landing zones will be visibly marked prior to the start of competition.
2. Teams and their pilots are responsible for knowing the class-specific landing zones.
3. Any aircraft that leaves the designated landing zone or the paved runway for any reason during landing shall be disqualified.
4. Any flight where the aircraft does not make initial touch down for landing inside the designated landing zone shall be disqualified.
5. Touch-and-go landings are not allowed and shall be judged as a failed landing.
6. Landing within the zone is defined as all supporting parts of the aircraft touching the ground within the landing zone. For example, a wing tip or fuselage can overhang the edge of the landing zone, provided no supporting part of the aircraft is physically touching outside the landing zone.

Table 3.3: Landing Distance Limit

Class	Landing Distance Limits (ft.)	Description
Regular	400 ft.	Aircraft shall land in the same direction as take-off. Aircraft shall stop within the designated landing zone to avoid a penalty (ref 3.9.3).
Advanced	Available Runway	
Micro	200 ft.	

3.10 Grounding an Aircraft

1. An aircraft shall be grounded if it is deemed non-flightworthy or not in compliance with the rules by any member of the competition organizing bodies.
2. Until the non-flightworthy or out-of-compliance condition has been addressed and cleared by re-inspection, the aircraft shall not be allowed to fly.

3.11 Flight Rules Announcement

Flight rules and updates will be reviewed in a pilot meeting before flight competition begins.

3.12 Flight Rules Violations

1. Violation of any flight rule may result in the team being eliminated from the competition.
2. All members of an eliminated team may be escorted from the grounds.

3.13 Local Field Rules

In addition to competition rules, the local flying club may have additional rules in place at the event flying field.

1. Club rules shall be obeyed during the competition.
2. If club rules conflict with competition rules, it is the responsibility of the Team Captain(s) and/or Faculty Advisor to bring attention to the conflict and follow the appeals process to resolve the conflict.

3.14 No-Fly Zone

Each competition will have venue-specific **no-fly zones** defined during the pilot meeting.

1. At no time shall an aircraft (controlled or uncontrolled) enter the no-fly zones.
2. The first infraction for crossing into the no-fly zone shall result in a disqualified flight attempt and zero points will be awarded for that flight.
3. A second infraction shall result in disqualification from the entire event and a loss of all points.
4. Teams and their pilots are responsible for knowing and complying with all no-fly zones and complying with all venue-specific rules.
5. If a team is unable to directionally control their aircraft and it is headed towards or is in a no-fly zone, the Air Boss may order the pilot to intentionally crash the aircraft to prevent endangering people or property. If ordered, this safety directive will be followed immediately.

3.15 Competition Scoring

A team's final, overall score is composed of scores in the following categories:

1. Technical Design Report (Design Report and Drawing)
2. Flight Demonstration Readiness Review (FDRR) Presentation
3. Flight Event
4. Penalties

Teams shall submit **AND** receive a scored Design Report **AND** Presentation to qualify for the flight portion of the competition.

Participation in all three categories – Design Report, Presentation, and Flight Event – is mandatory for overall score eligibility. Passing Requirements Check & Safety and Airworthiness inspection counts as participating in the Flight Event.

3.16 Aircraft Empty Weight Definition

All aircraft parts that are not class-specific payload contribute to the empty aircraft weight, including, but not limited to: airframe, receiver, electronics, batteries, hardware, brackets, straps, and other associated features.

4 DESIGN REPORT

The Design Report is the primary means for teams to convey their aircraft design's suitability to accomplish the mission. The Design Report should explain the thought processes and engineering philosophy driving design decisions.

Important topics to cover are: selection of the overall vehicle configuration, wing planform design, drag analysis, aircraft stability and control, power plant performance, and performance prediction. Other topics should be included as appropriate. SAE Aero Design Report Guidelines are available for download at www.saeaerodesign.com/go/downloads. For more information regarding performance prediction, a white paper by Leland Nicolai is also available at the above link.

4.1 SUBMISSION DEADLINES

The Design Report, 2D drawing, and Tech Data Sheet (TDS) shall be electronically submitted to www.saeaerodesign.com no later than the Action Deadlines given on the SAE International Website (See Table 1.2):

https://saeaerodesign.com/Deadlines.aspx?seriesCode=AERO

Neither the Organizer nor SAE International is responsible for any lost or misdirected reports, drawings, or server routing delays. SAE International shall not accept any paper copies of reports received through regular mail or email.

4.2 ORIGINAL WORK

The Design Report shall be the team's original work for the current competition. Resubmissions of **previous and current** year's design reports will not be accepted. Recitation of previous year's work is acceptable **if and only if** cited and credited to the original author(s). Plagiarism is a forbidden industry and academic practice. All references, quoted text, and reused images from any source shall have appropriate citation within the text and within the Design Report's Table of References.

Reports may be checked against **previous and current** submissions to determine if re-use, copying, or other elements of plagiarism are indicated.

For the SAE Aero Design Competition, plagiarism is defined as any of the following:

1. Use of information from textbooks, reports, or other published material without proper citation
2. Use of sections or work from previous SAE Aero Design competitions without proper citation

If plagiarism is detected in the Design Report, a team will be given **24** hours to make a case to SAE and the Rules Committee. If the report and/or case is found to be insufficient, the team will receive zero score for the report. The team will be allowed to compete in all remaining competition categories but will not be eligible for awards. SAE reserves the right to notify the University.

If plagiarism is detected in the Presentation, the team will receive zero score for the presentation. The team will be allowed to compete in all remaining categories of the competition but will not be eligible for awards. SAE reserves the right to notify the University.

The SAE Aero Design Rules Committee & SAE International has the sole discretion to determine whether plagiarism is indicated, and these rules are enacted. The above rules may be implemented before, during, or after the competition for up to six (**6**) months.

4.3 Design Report Requirements

The Design Report is valued at **50** points as detailed in Table 4.3.

- The Design Report shall not exceed thirty (**30**) pages. Only the first thirty (**30**) pages will be scored if the design report exceeds the limit.
- The Design Report shall include a Cover Page with Team Name, Team Number, and School Name and Team Member Names.
- The Design Report shall include a current Certificate of Compliance signed by hand by the team's Faculty Advisor.
- The Design Report shall be typewritten and double-spaced. Tables, charts, and graphs are exempt from this. For single-spaced reports, only the first fifteen (**15**) pages will be scored. All other content sections will receive zero (**0**) points.
- The font shall be **12 pt**. proportional; or 10 char/in. non-proportional font.
- The margins shall be: **1.0** inch left, **0.5** inches right, **0.5** inches top, and **0.5** inches bottom.
- Each page, except the Cover Page, Certificate of Compliance, 2D Drawing and TDS shall include a page number.
- All report pages shall be ANSI A (8 1/2 x 11 inches) portrait-format.
- The Design Report shall include a Table of Contents, Table of Figures, Table of Tables, Table of References and Table of Acronyms.
- The Design Report shall be single-column text layout.
- The Design Report shall include the TDS appropriate for the team's competition class. The TDS shall include the Team Name, School Name, and Team Number.
- Non-original technical content and graphics shall cite the originating author's credit.

Table 4.3: Technical Design Report

Section	Page Count	Points Available		
		Regular	Advanced	Micro
Cover Page	1	40	40	40
Certificate of Compliance	1			
Design Report	27			
2D Drawing	1	5	5	5
Subtotal Design Report (not including TDS)	**30**	**45**	**45**	**45**
TDS: Maximum Flight Score Prediction	1	5	-	-
TDS: Sequence Diagram for Payload Delivery/Capture	1	-	5	-
TDS: Vehicle Performance	1	-	-	5
Total Design Report (including TDS)	**31**	**50**	**50**	**50**

4.4 2D Drawing Requirements

2D Format and Size

The 2D drawing shall be one (**1**) ANSI B sized page (PDF) format (**11** x **17** inches). Teams outside North America that cannot submit an ANSI B size drawing shall use the closest available page format size.

Markings Required

The 2D drawing shall be clearly marked with the Team Number, Team Name, and School Name.

Views Required

Drawings shall include at a minimum, a standard aeronautical 3-view orthographic projection arranged as described:

1. **Left** side view, in lower left, with nose pointed left.
2. **Top** view, above and aligned with the left side view, also with nose pointed left (wing-span break-view permitted).
3. **Front** view aligned to side view, located in the lower right (projection view non-standard movement as noted by projection view arrows in accordance with ANSI-Y14.5M 1994 or more recent).

Dimensions Required

Drawing dimensions and tolerance shall be in English units, decimal notation accordance with ANSI-Y14.5M 1994 to an appropriate level of precision to account for construction tolerances (allowable variation from analyzed prediction to account for fabrication) (i.e. X.X = ± .1 in; X.XX = ± .03 in; X.XXX = ± .010 in).

The minimum required dimensions/tolerances are aircraft length, width, and height.

Summary Data Required

The drawing shall contain a summary table to include but not limited to:

1. Wingspan
2. Wing Area
3. Aspect Ratio
4. Empty weight
5. Battery(s) capacity
6. Motor make and model
7. Motor KV
8. Propeller manufacturer, diameter, and pitch
9. Servo manufacturer, model number, and torque specification in ounce-inches for each aircraft servo. Identify the servo being used at each position on the aircraft.

Weight and Balance Information

The 2D Drawing shall contain the following weight, balance, and stability information:

1. A clearly marked and labeled aircraft datum
2. A weight and balance table of pertinent aircraft equipment. Each item shall show its location from the aircraft datum in inches (the moment arm), the force, and resultant moment. See www.saeaerodesign.com/go/downloads for additional information. The minimum pertinent equipment list includes:
   a. Motor
   b. Battery(s)
   c. Payload(s)
   d. Electronics
3. Aircraft mean aerodynamic chord, stability margin and Center of Gravity (CG) information listed below shall be clearly shown on the 2D Drawing.
   a. Aircraft mean aerodynamic chord
   b. Stability margin for loaded CG and empty CG
   c. Empty CG location (flightworthy)
   d. Fully loaded CG (flightworthy, with payload, if applicable)

4.5 TDS: Flight Score Prediction (Regular Class Only)

Regular Class shall include a maximum predicted flight score (PS) prediction as part of the Design Report. The graph represents an engineering estimate of the aircraft's maximum single flight score performance as a function of density altitude.

1. Predicted Flight Score may or may not be linear over the relevant range.
2. Only one (**1**) flight score prediction value shall be presented on the graph for a given density altitude. This value may account for predicted headwind for local conditions, rolling drag, inertia, motor and propeller performance, or any other factors that may affect take-off performance. All these factors are allowed components of the monotonic prediction.
3. The team shall explain how the prediction was generated in the Design Report.
4. Graph axes shall be in English units, decimal notation.

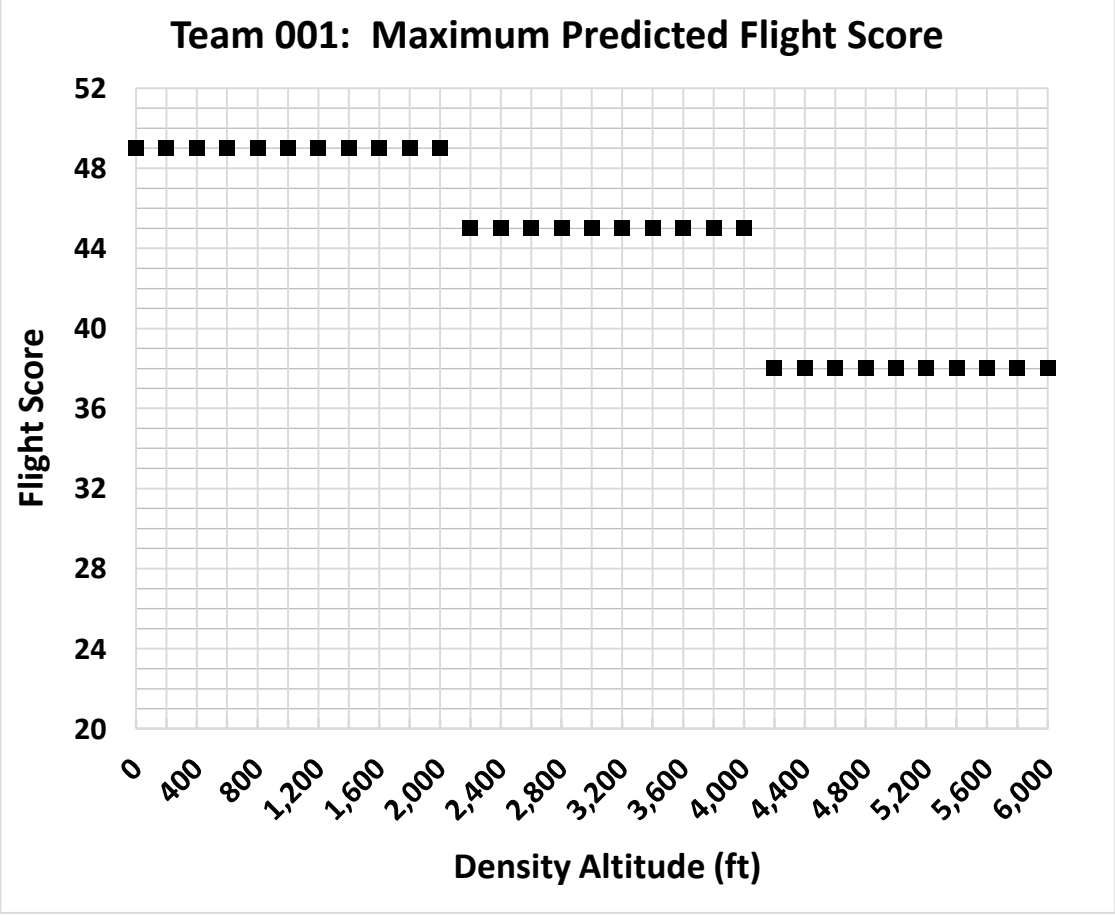


Figure 4.1: Example Regular Class Maximum Predicted Flight Score

4.6 TDS: Sequence Diagram for Payload Delivery/Capture (Advanced Class Only)

Advanced Class team shall provide a single-page TDS identifying critical contributors to sequence of operations using a sequence diagram, or a type of interaction diagram using the Unified Modeling Language (UML) to show how objects interact in a sequence of events.

The team's sequence diagram TDS shall illustrate the autonomous flow of operations and interactions between various contributors involved in the take-off, release/delivery, capture, and Return to Base (RTB) process. Figure 4.2 shows an example sequence diagram for ordering food from a restaurant.

The Autonomous Sequence Diagram shall include:

1. Contributors: Players and external entities that interact with the system, such as, but not limited to the Pilot, Vehicle, Payload, Command & Control, Release Mechanism, Delivery Mechanism, and Capture Mechanism
2. 2-4 Sentences describing the overall system, contributor roles, and the desired outcome from the system

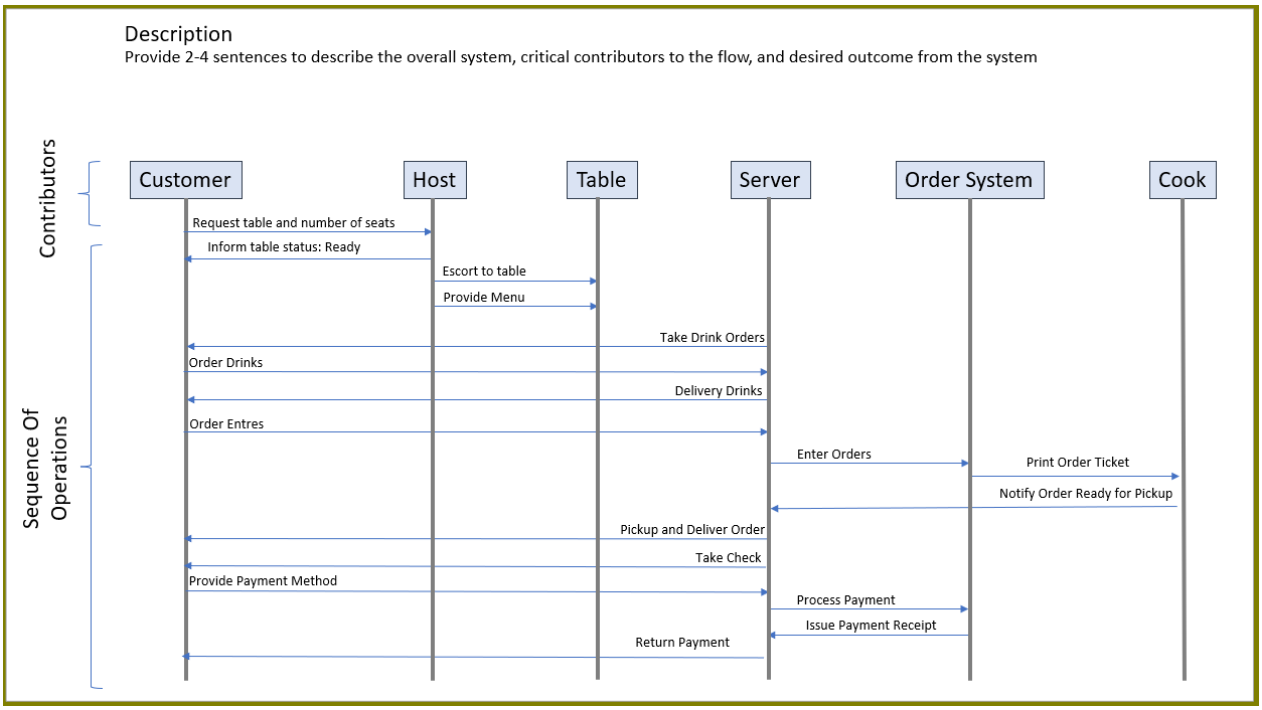


Figure 4.2: Example of Advanced Class Sequence Diagram

4.7 TDS: Aircraft Performance Prediction (Micro Class Only)

Micro class shall provide a plot of the aircraft's neutral point and a plot of static margin on a single page, each from -**10**° to +**15**° angle-of-attack with the water container half-full. Teams should include content discussing stability accounting for water movement in their Design Report.

5 FLIGHT DEMONSTRATION READINESS REVIEW

Prior to conducting expensive test campaigns, professional engineers complete technical readiness reviews with senior technical leadership and independent reviewers. These reviews require engineers to assess program maturity, develop a planned path forward, and communicate effectively with technical leaders who may not be familiar with the detailed design. A Flight Demonstration Readiness Review (FDRR) communicates the team's path forward through the completion of competition including work remaining, outstanding issues or risks, and plan for mission execution. FDRRs are forward-looking reviews to anticipate potential challenges to successfully completing the mission.

The FDRR allows teams the opportunity to demonstrate they are ready to perform safely in the competition's flight operations. The maximum FDRR score is fifty (**50**) points. The score is comprised of scores from each judge based on the judges' evaluation of the technical content and the team's readiness to compete.

5.1 PRESENTATION REQUIREMENTS

1. The FDRR is timed with a follow-on, timed "Question and Answer" (Q&A) period. *Table 5.1* (Regular & Micro) and *Table 5.2* (Advanced) detail the time limits.
2. The FDRR shall be delivered in English.
3. The FDRR shall address, but is not limited to mission overview, preflight predictions, mission hardware & software pedigree and readiness, competition First Time Events & mission risks, outstanding major milestones prior to competition, team roles and responsibilities, and post flight risk planning. A **First Time Event** (FTE) is defined as any subsystem tests, assembly & integration, flight testing, new conditions, new pilot, or any other occurrence that may be encountered during competition weekend for the first time.
4. The FDRR is limited to student team members only. Non-team member pilot or Faculty Advisors can attend but are prohibited from participating in the setup, delivery, and/or the Q&A.
5. Use of visual aids are advised. Film clips, if used, shall not exceed one (**1**) minute. Film clips may not be accompanied by recorded narration.

5.2 PRESENTATION PROCESS AND PROCEDURES

Each virtual presentation room will have a lead judge responsible for ensuring compliance with competition rules and schedule. The lead judge will also identify a timekeeper.

1. With agreement from the team, the timekeeper will give the team a one (**1**) minute warning prior to the presentation time limit.
2. If the time limit is exceeded, the team shall be assessed a five (**5**) point penalty.
3. The presentation shall be stopped after one (**1**) additional minute.
4. A team shall have time for Q&A immediately following the presentation according to *Table 5.1* (Regular and Micro Class) and *Table 5.2* (Advanced Class). Questions may be asked by any judge.
5. Any time remaining or exceeding the presentation time limit shall be added to or subtracted from the Q&A time limit.

Table 5.1: Micro and Regular Class Presentation Time Breakdown

Time (Minutes)	Description
2	Setup presentation
12	Present Flight Demo Readiness Review
7	Questions & Answers
1	Close down presentation

Table 5.2: Advanced Class Presentation Time Breakdown

Time (Minutes)	Description
2	Setup presentation
15	Present Flight Demo Readiness Review
7	Questions & Answers
1	Close down presentation

6 REQUIREMENTS CHECK & SAFETY AND AIRWORTHINESS INSPECTION

A Requirements Check & Safety and Airworthiness Inspection of all aircraft will be conducted using checklists for each class. The checklists will be posted on SAE STARS. All teams will receive a unique code to access their interactive checklist and conduct self-certification.

Safety and Airworthiness Inspection is the process of checking each aircraft for any issues or problems that could cause a safety problem in flight or on the ground.

Requirements Check is the process of checking all aircraft for:

- Compliance with all General aircraft requirements.
- Compliance with all Class-specific requirements.
- The aircraft presented matches the design submitted by the team.

All aircraft shall pass the Requirements Check & Safety and Airworthiness to compete. **Per the Statement of Compliance, teams shall not begin the inspection process prior to presenting a fully completed Requirements Check & Safety and Airworthiness Inspection for their aircraft submitted on SAE STARS by the Faculty Advisor or Team Captain.**

Inspectors will spot check a list of five (**5**) to seven (**7**) requirements, instead of checking all items. These will be randomly chosen before the event. Even though items are being spot checked, teams shall comply with all items, at all times.

6.1 AIRCRAFT CONFORMANCE TO 2D DRAWING

During Technical Inspection, the aircraft will be inspected and measured for conformance to the 2D drawing presented in the Design Report (and any compliant ECRs).

1. At a minimum, aircraft length, wingspan and height dimensions will be measured and compared to the 2D drawing.
2. Aircraft will have the actual empty CG compared to the 2D Drawing empty CG.

6.2 DEVIATIONS FROM 2D DRAWING

Deviations from the documented 2D drawing in the Design Report and any compliant Engineering Change Requests (Section 2.26) may trigger penalty points. Dimensional deviations (dimensions in inches) that satisfy the equation below will not trigger penalties.

$$\left|L_{actual} - L_{drawing}\right| + \left|W_{actual} - W_{drawing}\right| + \left|H_{actual} - H_{drawing}\right| \leq X\ inches$$

$$Where\ X = \mathbf{1}\ for\ Advanced\ and\ Micro\ Class, \mathbf{2}\ for\ Regular\ Class$$

6.3 SAFETY AND AIRWORTHINESS OF AIRCRAFT

Safety and Airworthiness Inspection will assess the general safety and airworthiness of each aircraft for any problems that could cause departure from controlled flight. This assessment includes, but is not limited to:

1. Unintentional wing warps
2. Control surface alignment
3. Correct control surface response to radio transmitter inputs

4. Linkage problems
5. Structural and mechanical soundness of aircraft

6.4 Inspection of Spare Aircraft and Spare Aircraft Components

1. All spare aircraft and spare aircraft components (wings, fuselages and tail surfaces) shall be presented for inspection.
2. Teams may submit up to two (**2**) complete aircraft for inspection on Friday.
3. Additional spare aircraft and parts beyond two (**2**) sets may be submitted for inspection on Saturday and Sunday.

6.5 Aircraft Shall Maintain Compliance Throughout the Competition.

All aircraft shall meet all Requirements Checks & Safety and Airworthiness requirements throughout the competition.

Compliance with any rules requirement herein may be verified or require reinspection by any SAE official, event official or a designated technical/safety inspector at any time, including any errors of omissions made by officials during inspection.

6.6 Requirements Check & Safety and Airworthiness Inspection Penalties

1. If a team fails the spot check process for any General Aircraft requirements or Class requirements, there shall be a point penalty for each item failed. The aircraft shall be brought into compliance to compete.
2. SAE Aero Design reserves the right to assess the point penalty on any requirement item found during inspection, even if the item is not on the spot check list.
3. Any Requirements Check failure involving penalty points shall be confirmed by a Rules Committee member.
4. No additional penalty points shall be assessed for a team's second aircraft that has the same requirements failure as the first aircraft.
5. If a Requirements Check item failure is found on an aircraft after inspection or during flight rounds, the point penalty shall be applied and any flight score earned while the aircraft was non-compliant will be zeroed. The aircraft shall be brought into compliance before flying again.
6. Penalty points shall not be applied for failing any Safety or Airworthiness item. However, the team shall correct any failures before the aircraft is allowed to fly. Flight points earned while the aircraft was not in compliance with Safety and Airworthiness requirements may be subject to being zeroed.

7 REGULAR CLASS DESIGN REQUIREMENTS

The Regular Class objective is to design a multi-motor cargo aircraft that can maximize mission performance associated with payload delivery. Payload consists of unmodified, commercially available, 2L cylindrical plastic bottles, either EMPTY or FILLED, which will be carried on each flight. Successful teams will accurately predict maximum flight score and demonstrate an ability to incrementally increase payload capacity.

7.1 AIRCRAFT DIMENSION REQUIREMENT

Regular Class aircraft minimum planform wingspan shall be greater than seventy-two (**72**) inches.

Regular Class aircraft maximum planform wingspan shall be less than one hundred and twenty (**120**) inches.

Regular Class minimum wing chord shall be greater than four (**4**) inches.

Regular Class aircraft maximum body axis length shall be less than one hundred and twenty (**120**) inches.

7.2 MATERIAL AND EQUIPMENT RESTRICTIONS FOR REGULAR CLASS

Fiber-Reinforced Plastic (FRP)

The use of Fiber-Reinforced Plastic (FRP) is prohibited on all parts of the aircraft. Fiber-Reinforced Plastic includes duct tape. Exceptions include commercially available FRP motor mount, propeller, landing gear, and control linkage components. Exploration of alternative materials is encouraged.

Rubber Bands

Elastic material such as rubber bands, shall not retain the wing or payloads to the fuselage.

7.3 PROPULSION SYSTEM REQUIREMENTS

Electric Motor Requirements

The aircraft shall be propelled by either two (**2**) or four (**4**) electric motors. There are no restrictions on the make or model of the electric motors.

Gearboxes, Drives, and Shafts

Gearboxes, belt drive systems, and propeller shaft extensions are allowed if a one-to-one propeller to motor RPM is maintained. The prop(s) shall rotate at motor RPM.

Aircraft Propulsion System Battery

Regular Class aircraft shall be powered by a commercially available **4** cell (**14.8** volt) Lithium-Polymer battery pack. Maximum requirements: **2200** mAh.

Propeller Requirements

Maximum propeller diameter (per motor) shall be twelve (**12**) inches if two (**2**) motors are used or nine (**9**) inches if four (**4**) motors are used.

Power Limiter

Regular class aircraft are not required to fly with a power limiter.

7.4 PAYLOAD REQUIREMENTS

Bottle Cargo

Regular Class payload shall consist of unmodified, commercially available, 2L cylindrical plastic bottles, which shall be carried internally. Reference Section 7.5 for payload unloading demonstration requirements.

1. Aircraft shall contain a minimum payload of one (**1**) bottle during a flight attempt.
2. Bottle Cargo may have one of two configurations:

   EMPTY BOTTLE - containing unpressurized air or material such that gross bottle weight is greater than one (**1.0**) lbs and less than four (**4.0**) lbs

   FILLED BOTTLE - containing unpressurized air or material such that gross bottle weight is greater than or equal to four (**4.0**) lbs
3. After a successfully scored flight, the next flight attempt shall increase payload either by addition of at least one (**1**) EMPTY BOTTLE **AND/OR** replace at least one (**1**) EMPTY BOTTLE with a FILLED BOTTLE.
4. If payload material spills and clean up requires a delay in flight operations, teams shall forfeit one (**1**) flight attempt.

Cargo Bay Requirements

Regular Class aircraft shall have fully enclosed Cargo Bay(s) for carrying Bottle Cargo with the following additional requirements:

1. Bottle Cargo shall not be exposed to airstream at any point in flight.
2. Bottle Cargo shall not move or shift during flight.
3. The Cargo Bays have no restriction on size or shape.
4. Aircraft may contain multiple Cargo Bays.

7.5 REGULAR CLASS PAYLOAD UNLOADING

To complete a successful flight for score, post-flight Bottle Cargo unloading shall be accomplished within one (**1**) minute. This demonstration will occur at the weigh station after each successful flight.

This activity shall be performed by no more than two (**2**) team members.

The demonstration will start with all Bottle Cargo loaded and secured, and the aircraft configuration unchanged from the most recent successful flight.

Only Bottle Cargo successfully unloaded within the time limit will be counted, weighed, and recorded for that flight. FILLED BOTTLES shall weigh at least four (**4.0**) lbs or they will be counted as EMPTY BOTTLES. EMPTY BOTTLES shall weigh at least one (**1.0**) lbs or they will not be counted.

7.6 REGULAR CLASS SCORING

The team's Final Flight Score (FFS) is the average of the team's top three (**3**) flight scores achieved during the competition (FS_1, FS_2, and FS_3).

Scoring Equation:

$$FFS = \ Final\ Flight\ Score = \ (FS_1 + FS_2 + FS_3)/3 + PPB$$

Where:

$$FS = Flight\ Score = 4(EB) + 15(FB)$$

$$PPB = Payload\ Prediction\ Bonus = MAX(10 - (FS - PS)^2, 0)$$

$$EB = Count\ of\ EMPTY\ BOTTLES\ (\#)$$

$$FB = Count\ of\ FILLED\ BOTTLES\ (\#)$$

$$PS = Predicted\ Maximum\ Flight\ Score\ (\#)$$

The Predicted Maximum Flight Score (PS) is determined from the flight score prediction curve provided in the TDS (Section 4.5) and the density altitude measured at the event.

The Payload Prediction Bonus (PPB) will be calculated once at the end of the competition. The PPB will be calculated using whichever of the top three (**3**) flight scores utilized in the FFS calculation generates the largest PPB. A PPB score less than zero (**0**) will default to zero (**0**).

Ties in FFS will be broken by lowest aircraft empty weight.

Penalty Points

Penalty points assessed during competition are deducted from a team's overall score.

8 Advanced Class Design Requirements

The Advanced Class objective is to autonomously deliver and retrieve payloads to a predefined area. Teams earn points for completing various mission segments leading up to delivery and retrieval of their payload, with a strong focus on autonomous performance.

8.1 Aircraft Dimension Requirement

Advanced Class aircraft maximum planform wingspan shall be less than **120** inches.

Advanced Class aircraft maximum weight shall not exceed **3.50** lbs.

8.2 Aircraft System Requirements

Propulsion Requirements

Advanced Class aircraft shall be limited to electric motors only.

Advanced Class aircraft shall be limited to a maximum of three (**3**) motors and three (**3**) propellers.

Gearboxes, Drives, and Shafts

Gearboxes, belt drive systems, and propeller shaft extensions are allowed.

Aircraft Propulsion System Battery

Advanced Class aircraft shall be powered by a commercially available 4 cell (**14.8** volt) Lithium-Polymer battery pack with a maximum capacity of **3000** mAh.

Power Limiter

Advanced class aircraft are not required to fly with a power limiter.

Rubber Bands

Elastic material, such as rubber bands, shall not retain the wing to the fuselage.

8.3 Video Documentation of Proven Operational Ability for Advanced Class

Advanced Class teams shall provide video documentation demonstrating the proven operational capability of their aircraft during Inspection. Failure to do so will result in prohibition from entering the flight portion of the event.

1. Teams will provide a device to play the video for officials at a size that allows officials to clearly see the aircraft and runway.
2. The video shall show the following activities accomplished successfully with their competition aircraft:
    a. Conventional Takeoff mission segment with sustained, stable flight for ten (**10**) seconds
    b. Return to Base (RTB) mission segment with controlled landing on runway without damage
3. Videos shall be no more than **1.5** minutes. Edited video will be accepted if the video is of the same flight.

4. Video shall be provided to, and approved by, officials before teams will be allowed to enter flight competition.
5. Proof of Flight Video (PoFV) can be obtained on the day of the Requirements Check & Safety and Airworthiness Inspection, if the field is open. Once the flying portion of the competition has begun, the event will not pause for teams to record PoFV. Teams may record PoFV from another nearby open field and have the sole responsibility to coordinate with any external field.

8.4 Mission Description

The Advanced Class mission is based around payload delivery and retrieval from a Designated Landing Zone (DLZ). Mission success is measured by maximizing mission segment score with a higher score corresponding to more complex and connected mission segment execution.

The Advanced Class mission is broken down into several consecutive segments. Conventional Takeoff, Payload Release or Delivery, Payload Capture, and Return to Base (RTB). Each segment may be attempted autonomously or manually.

Maximum Mission time is four (**4**) minutes. Teams are incentivized to minimize mission time with a time bonus.

Conventional Takeoff is defined as transitioning from zero velocity on the runway to stable, horizontal flight consistent with Section 3.8.

Payload Release is defined as retaining onboard payload from conventional takeoff until intentional payload separation from the vehicle while the vehicle is airborne OR in motion.

Payload Delivery is defined as retaining onboard payload from conventional takeoff until intentional payload separation while the vehicle is stopped and resting on the DLZ.

Payload Capture is defined as picking up and retaining a previously Released or Delivered payload, as well as the aircraft and payload successfully returning to horizontal flight.

Return To Base is defined as a conventional landing back on the runway according to Section 3.9. Payload will only be weighed for this segment if Capture segment was successful.

Only one (**1**) payload shall be carried at a time.

To receive a Payload Capture Mission Segment Score, teams shall pick up a valid payload that was Released or Delivered during a previous flight attempt.

It is possible to score up to two (**2**) Payload Segment Scores during one (**1**) flight attempt if a team can score a Delivery or Release with one (**1**) payload and then score a Capture with a different payload.

To earn mission segment points, the released or delivered payload shall remain entirely within the DLZ for the mission.

The payload shall be fully supported by the DLZ. If the payload falls off or touches the ground outside the DLZ during the mission, or between missions, it will be disqualified from

any mission scoring. Released payloads which do not remain on the correct DLZ will be recovered by officials and returned to teams at least once per day.

Although mission segment scoring is additive, teams shall complete both Conventional Takeoff mission segment and Return to Base mission segment at a minimum to receive a Flight Score for a given flight attempt.

Conventional Takeoff shall employ aerodynamic lift generation from fixed wing surfaces during horizontal ground roll. Ground roll distance will be an outcome of the design but should be nonzero. Vertical takeoff from the runway is not 'conventional'. A hybrid approach with a propulsion device generating predominately vertical thrust (lift) will not be considered Conventional Takeoff. Given various propulsion solutions, a thrust line of up to ten (**10**) degrees from horizontal (runway/earth axis) is considered acceptable during conventional takeoff. Any propulsion device oriented greater than ten (**10**) degrees from horizontal shall not be active during Conventional Takeoff through liftoff.

Similarly, during Return to Base (Conventional Landing), Advanced Class aircraft shall not use propulsion systems generating substantial vertical thrust (propulsion devices with thrust lines greater than ten (**10**) degrees from horizontal/runway axis).

8.5 Aircraft Payload Requirements

Each team shall build and provide deliverable payloads. Payloads will be weighed regularly for scoring calculations. Weighing will occur prior to flight attempt if payload is present during takeoff. Weighing will occur after flight attempt if payload is present during landing.

1. Aircraft may carry up to one (**1**) payload during a given mission segment.
2. Payloads shall be clearly marked with team number in minimum one (**1**) inch font.
3. Payloads shall be uniquely numbered in minimum one (**1**) inch font.
4. Payloads shall be capable of unloading in under one (**1**) minute. If payload unloading is not performed in the time limit, the affected mission segments will receive zero (**0**) payload weight for scoring purposes.
5. The largest linear dimension of payload shall be twelve (**12**) inches or less.
6. Payloads may contain electronics or magnets but shall not be manually operated.

8.6 Designated Landing Zone (DLZ)

The Advanced Class aircraft shall deliver and recover payload from a Designated Landing Zone (DLZ). Teams are responsible for sourcing all DLZ materials and installing their landing zone. Teams may select and set up their DLZ after successfully completing Requirements Check & Safety and Airworthiness Inspection. Landing zone location selection and setup shall be supervised by an SAE Aero Design Rules Committee member. There will be a designated area on the far side of the runway where DLZs are allowed to be located. Payloads which remain on the DLZ at the end of a flight day will be impounded overnight and replaced the next morning prior to resumption of flight competition.

Designated Landing Zone shall conform to the following requirements

1. One (**1**) zone with a size of 8 ft x 8 ft.
2. Surface made from two (**2**) sheets of **4** ft x **8** ft coroplast (corrugated plastic) with a 4 mm thickness. Four (**4**) sheets of **4** ft x **4** ft coroplast is also accepted but will require additional staking.
3. Surface staked into the ground with a minimum of nine (**9**) stakes (Figure 8.1). Intent is a stake every four (**4**) ft. Stakes are eight (**8**) inch or longer, metal, and fully embedded into the ground.
4. No nets or modified surfaces that can adhere to or catch the payload (Velcro, magnets, tape, or other positive retention methods).
5. No electronics, batteries, or magnets are allowed as part of installed DLZ.
6. Moving the zone will only be allowed with official approval and oversight on a non-interference basis with competition flying.
7. Teams may only successfully land on their DLZ.

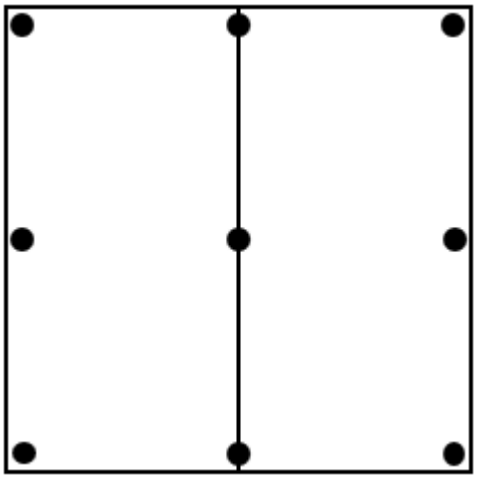


Figure 8.1: Designated Landing Zone Configuration with Stakes

8.7 AUTONOMOUS FLIGHT

Autonomous flight systems that cause the aircraft to navigate without direct pilot control input are allowed. Autonomous flight is subject to the following rules:

1. In addition to the motor, the aircraft shall have an active navigation system controlling at least two (**2**) degrees of freedom.
2. Teams shall have a manual override for control through a dedicated transmitter. There shall be a red-colored momentary switch on that transmitter to switch between autonomous and manual flight modes. The switch shall be configured such that pilot holds the switch for the aircraft to be in autonomous flight mode.
3. Manual override may be used at the team's discretion. Any use of manual override shall be considered manual for the scoring of that flight segment.
4. Pilots shall clearly announce any time the team switches between automatic and manual flight modes.

5. If the aircraft is flying in an unsafe manner, the Air Boss may order grounding as per Section 3.14.5. The flight shall be considered unsuccessful.

8.8 AUTOPILOT

1. The autopilot system shall use a discrete and removable Red arming plug to apply power, subject to Section 2.22 requirements. One (**1**) Red arming plug can be used for both autopilot and FPV.
2. Autopilot equipment may also have a reset switch, if desired. If a manual reset switch is used, it shall be located externally in accordance with Section 2.24. A wireless reset system is allowed.
3. Autopilot data link shall not use the same **2.4** GHz band as the pilot transmitter.

8.9 FIRST PERSON VIEW SYSTEM (FPV)

FPV is not required. For teams wishing to use an FPV system for operational reasons, the following conditions apply:

1. The pilot shall fly visually only (no FPV goggles or ground station reference).
2. FPV systems shall use a separate frequency from the flight control system. FPV systems CANNOT use the same frequency as the flight control system. Use of **2.4** GHz for FPV video is prohibited.
3. The FPV system shall use a discrete and removable Red arming plug to apply power, subject to Section 2.22 requirements.

8.10 PAYLOAD DELIVERY AND RECOVERY OPERATOR (PO)

Autonomous flight is encouraged. If teams elect to perform payload delivery and recovery operations manually, a Payload Operator (PO) shall be employed. All communication between the PO and pilot shall be in English. The Payload Operator may not manually control the payload itself.

1. One (**1**) team member may act as PO. The PO shall not rely on having a line-of-sight view to the aircraft or DLZ.
2. PO may activate the payload release or capture system using a second **2.4** GHz radio system or some other method based on their telemetry system, however this will count as manually executing that mission segment. Manual safety arming of an autonomous release system will not be considered manual execution of the mission segment.

8.11 ADVANCE CLASS SCORING

The team's Final Flight Score (FFS) is the sum of the team's top three (**3**) flight scores achieved during competition. Teams receive points for a flight attempt based on accomplishing mission segments, with more points awarded for autonomous flight. Segment scores are based on mission complexity, the payload weight carried for that mission segment, and a potential bonus for the total time required for mission completion. Flight Score (FS) is comprised of additive and multiplicative factors based on segments completed and a time bonus.

Scoring Equation:

$$Final\ Flight\ Score = FS_1 + FS_2 + FS_3$$

Where:

Mission Segment Multiplier (MSM)

Mission Segment	Autonomous Multiplier	Manual Multiplier
Conventional Take off	**2**	**1**
Payload Release	**4**	**1**
Payload Delivery	**8**	**1**
Payload Capture	**14**	**2**
Return To Base	**3**	**1**

$$FS = Flight\ Score = \left(S_{Takeoff} + \left[S_{Release}\ or\ S_{Delivery}\right] + S_{Pickup} + S_{RTB}\right) + TB$$

$$S_x = S_{Mission\ Segment} = 1 + \left(MSM * W_{Payload}\right)$$

$$TB = Time\ Bonus = \begin{cases} \mathbf{0} & if\ 180 \leq T_m < 240\ sec \\ \mathbf{1} & if\ 120 \leq T_m < 180\ sec \\ \mathbf{2} & if\ \ 0 \leq T_m < 120\ sec \end{cases}$$

$$W_{Payload} = Payload\ Weight\ (lbs)$$

$$T_m = Total\ Mission\ Time\ (sec)$$

Penalty Points

Penalty points assessed during competition are deducted from a team's overall score.

9 MICRO CLASS DESIGN REQUIREMENTS

The Micro Class objective challenges students to design a small, all electric aircraft to overcome conflicting design and performance requirements. Teams should maximize scoring for short takeoff and liquid payload, while minimizing penalties for wingspan and empty weight.

9.1 AIRCRAFT DIMENSION REQUIREMENTS

Micro Class aircraft are not limited to a maximum planform wingspan.

9.2 AIRCRAFT SYSTEMS REQUIREMENTS

Propulsion Requirements

Micro Class aircraft shall be restricted to electric motor propulsion only.

Propeller and Gearbox

Gearboxes where the propeller RPM differs from the motor RPM are allowed. Multiple motors, multiple propellers, propeller shrouds, and ducted fans are allowed.

Aircraft Propulsion System Battery

Micro Class aircraft shall use Lithium Polymer batteries. Batteries are allowed to be a maximum of four (**4**) cells.

Power Limiter

Micro Class aircraft shall use a 2021 or newer, **450** watt power limiter from the official supplier in Section 2.21.

9.3 PAYLOAD REQUIREMENTS

Types of Cargo

Micro Class payload shall consist of liquid water. Frozen water is prohibited.

Payload Container Requirements

Micro Class aircraft shall have a single Payload Container for carrying liquid water with the following additional requirements:

1. Payload container shall be fully enclosed with a minimum of two (**2**) sealable holes.
2. The first hole shall be on top of the payload container for filling.
3. The second hole shall be on the bottom of the container and used for unloading liquid water from the payload container.
4. Payload container shall have a minimum volume of **67** fluid ounces.
5. Competition organizing body members reserve the right to inspect team's Payload Container.

9.4 MICRO CLASS PAYLOAD UNLOADING

Teams shall demonstrate the ability to drain liquid water from an external port located at the bottom of the airplane without opening the internal payload bay. This timed demonstration will occur at the weigh station with the aircraft configuration unchanged

from the most recent successful flight. Only liquid water successfully drained from the aircraft within the time limit will be weighed and recorded for scoring.

1. The demonstration shall be performed by no more than two (**2**) team members.
2. The draining process shall occur within a one (**1**) minute window.
3. External forces (such as squeezing or applying air pressure) shall not be used during the draining process.

9.5 Micro Class Aircraft Take-off

A Micro Class team will have one (**1**) take-off try per flight attempt.

The Micro Class take-off performance scoring equation determines the team's flight score. The take-off performance is determined using four (**4**) distance limits of **10** ft, **25** ft, **50** ft, and **100** ft. Each take-off distance limit will earn a multiplier for the team's flight score.

Any take-off beyond **100** ft will disqualify the flight attempt.

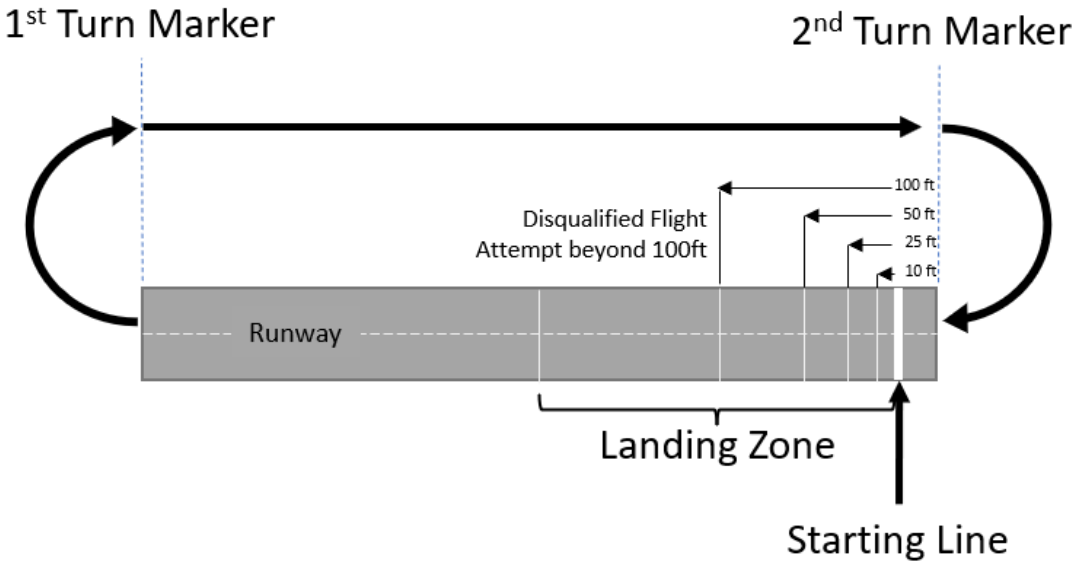


Figure 9.1: *Notional Micro-Class Flight Circuit*

9.6 MICRO CLASS FLIGHT SCORING

The team's Final Flight Score (FFS) is the sum of the team's top three (**3**) flight scores achieved during the competition (FS_1, FS_2, and FS_3).

Scoring Equation:

$$Final\ Flight\ Score = FFS = FS_1 + FS_2 + FS_3$$

Where:

$$Flight\ Score = FS = 3 * W_{Payload} * M + Z$$

$$M = \frac{11}{\left(W_{Empty} - 1\right)^4 + 8.9}$$

$$Z = B_{Takeoff} - S^{1.5}$$

$W_{Payload} = Payload\ Weight\ (lbs)$

$W_{Empty} = Empty\ Weight\ (lbs)$

$S = Wingspan\ (ft)$

$$B_{Takeoff} = \begin{cases} 20 & 0 \leq x \leq 10\ ft \\ 15 & 10 < x \leq 25\ ft \\ 9 & 25 < x \leq 50\ ft \\ 0 & 50 < x \leq 100\ ft \end{cases}$$

Penalty Points:

Penalty points assessed during competition are deducted from the team's overall score.

APPENDIX A - STATEMENT OF COMPLIANCE

Certification of Qualification

Team Name		Team Number	
School			
Faculty Advisor			
Faculty Advisor's Email			

Statement of Compliance

As faculty Adviser:

_____ (Initial) I certify that the registered team members are enrolled in collegiate courses.

_____ (Initial) I certify that this team has designed and constructed the radio-controlled aircraft in the past nine (9) months with the intention to use this aircraft in the 2026 SAE Aero Design competition, without direct assistance from professional engineers, R/C model experts, and/or related professionals.

_____ (Initial) I certify that this year's Design Report has original content written by members of this year's team.

_____ (Initial) I certify that all reused content has been properly referenced and is in compliance with the University's plagiarism and reuse policies.

____ (Initial) I certify that the team shall use the Requirements Check & Safety and Airworthiness Inspection checklists to inspect their aircraft before arrival at Technical Inspection and that the team shall submit the completed checklists, signed by the Faculty Advisor or Team Captain, to the inspectors before Technical Inspection begins.

Signature of Faculty Advisor	Date
Signature of Team Captain	Date

Note: A copy of this statement needs to be included in your Design Report as page 2 (Reference Section 4.3)

APPENDIX B - APPEALS

Team Name	
Team Captain	
Collateral Points	*All appeals will require the team to post twenty-five (25) points as collateral. If the appeal is successful and the action is reversed, the team will not forfeit the twenty-five (25) collateral points. If the appeal is overruled, the team will forfeit the twenty-five (25) collateral points* Collateral Points: 25 Sign if Agree: _____
Reason for this Appeal	
Rule Reference	*List the section(s) in the official rule that is (are) in conflict with the action(s) taken by competition official* Section:_____ Section:_____ Section:_____ Section:_____
Desire outcome	