

Latin American Space Challenge 2023 LASC Edition



Master Schedule Document

*The electronic version is the official, approved document.
Verify this is the correct version before use.*

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LIST OF REVISIONS

REVISION	DESCRIPTION	DATE
00	Baseline of the 2023 LASC Master Schedule Document.	16/01/2023
01	New Deadlines for the Ticket Payment Dates.	23/03/2023
02	<ul style="list-style-type: none">• Schedule Details added for the 2023 LASC.• List of Teams for Groups 1 and 2 indicated for the Day 1 of the event.	16/08/2023

1. INTRODUCTION

The Latin American Space Challenge (LASC), hosted at the Cape Canavial area in Brazil, is Latin America's largest experimental rocket and satellite engineering competition.

It is widely recognized that such STEM competitions foster innovation and motivate students to extend themselves beyond the classroom, while learning to work as a team, solving real world problems under the same pressures they will experience in their future careers.

The event seeks to stimulate students, startup entrepreneurs and enthusiasts to complete a simulated space mission, by designing and building the rockets and satellites themselves. is a combination of the Rocket Challenge and the Satellite Challenge.

Since LASC's first edition, in 2019, where more than 350 students were present to 2022, with 1,600 students participating, the growth of the competition is visible with an increasing number of interested teams applying to the competition.

This document defines the rules and requirements governing participation in LASC. Revisions of this document will be accomplished by document reissue, marked by the version number.

2. REVISION

The LASC Master Schedule Document is a living document and will be updated as needed throughout the period leading up to the Latin American Space Challenge - at the event itself if necessary - in response to real-world events. The most up to date version will always be maintained on the website <http://www.lasc.space/>.

Participants should always verify they are working to the correct version by checking the Effective Date recorded on the header of their copy matches the version currently stored on the LASC website. Updates to the LASC Master Schedule Document will always be announced via website and other means.

Note: The event organizers will never revise this document to make the due dates of upcoming deliverables sooner than originally scheduled.

3. PRE-EVENT AND DELIVERABLES DATES

The following table records the schedule on which participants in the **2023 Latin American Space Challenge** must submit required deliverables to the event organizers in order to be considered "timely" in scoring, as well as the due dates for competition fees and required waivers and forms.

Table 1: Pre-event and Deliverables Important Dates.

DATE	ACTION
<p>19 January 2023 21:00 BRT</p>	<p>2023 LASC Kickstart with the official announcement of all rules, requirements and schedule for the Rocket and Satellite Challenge.</p>
<p>25 January 2023 19:00 BRT</p>	<p>Entry Application window <u>begins</u> per Section 6 of the 2023 LASC Rules & Requirements Document. The Team Registration Form will be available on the 2023 Latin American Space Challenge HeroX page: https://www.herox.com/SpaceChallenge2023.</p>
<p>10 February 2023 23:00 BRT</p>	<p>Entry Application window <u>closes</u> per Section 6 of the 2023 LASC Rules & Requirements Document.</p>
<p>12 February 2023 19:30 BRT</p>	<p>Acceptance Announcement per Section 6 of the 2023 LASC Rules & Requirements Document. Official List will be available on https://www.herox.com/SpaceChallenge2023 and http://www.lasc.space/.</p>
<p>26 March 2023 23:00 BRT</p>	<p>Submit 1st Progress Update per Section 9.1 of the 2023 LASC Rules & Requirements Document. The form shall be submitted by the 2023 Latin American Space Challenge HeroX page: https://www.herox.com/SpaceChallenge2023.</p>
	<p>Submit Mission Patch per Section 9.2 of the 2023 LASC Rules & Requirements Document. The file shall be submitted by the 2023 Latin American Space Challenge HeroX page: https://www.herox.com/SpaceChallenge2023.</p>
<p>28 May 2023 23:00 BRT</p>	<p>Submit 2nd Progress Update per Section 9.1 of the 2023 LASC Rules & Requirements Document. The form shall be submitted by the 2023 Latin American Space Challenge HeroX page: https://www.herox.com/SpaceChallenge2023.</p>
	<p>Submit Readiness Review Video per Section 9.3 of the 2023 LASC Rules & Requirements Document. The YouTube link shall be submitted by the 2023 Latin American Space Challenge HeroX page: https://www.herox.com/SpaceChallenge2023.</p>
<p>31 July 2023 23:00 BRT</p>	<p>Submit Project Technical Report per Section 9.4 of the 2023 LASC Rules & Requirements Document. The file shall be submitted by the 2023 Latin American Space Challenge HeroX page: https://www.herox.com/SpaceChallenge2023.</p>

Unless otherwise specified, all times given are **Brasília Time (BRT, UTC-3)**. More information is available on <http://www.lasc.space/>.

4. TICKET PAYMENT DATES

The following table records the schedule on which Teams, Rocketeers and Satelliteers in the **2023 Latin American Space Challenge** must pay for their tickets. Late payments are allowed, however prices will increase.

Table 2: Ticket Payment Dates.

DATE	ACTION
07 April 2023 23:00 BRT	<p>This is the on-time payment deadline for the BRL 1,000.00 Team Ticket in accordance with Section 6.4 of the LASC 2023 Rules and Requirements Document. This ticket increases to BRL 1500,00 for late-payment.</p> <p>The Team Ticket will be paid using the payment link provided on the LASC website: http://www.lasc.space/</p>
05 May 2023 23:00 BRT	<p>The BRL 1,000.00 Team Ticket is no longer refundable or if a team who has paid announces their intention to withdraw after this date. The refund shall be requested by e-mail to lasc@lasc.space before the deadline.</p>
	<p>This is the on-time payment deadline for the BRL 75.00 Rocketeer & Satelliteer Ticket in accordance with Section 6.4 of the LASC 2023 Rules and Requirements Document. This ticket increases to BRL 150.00 for late-payment.</p> <p>The Rocketeer & Satelliteer Ticket will be paid using the payment link provided on http://www.lasc.space/</p>

The ticket payment dates and link for **Spectator Tickets** will be available later on a specific website.

Brazilian Teams have until April 14, 2023 to request invoices or any other special payment procedure, such as processes involving public administration. After this date, a service fee of BRL 1,000.00 will be included in the total amount. This new rule was imposed on this year's event due to the **high workload** of the LASC staff involving legal invoices and special payments.

5. 2023 LASC TIMETABLE

The following table records the detailed schedule of events for the **2023 Latin American Space Challenge**. The 2023 LASC will be held on-site. Detailed schedules of each day's events are provided in the following sections.

Table 3: 2023 LASC Event Schedule.

DATE	EVENT(S)
<p>24 August 2023 <i>Thursday</i> FATEC Tatuí</p>	<p>Rocketeer & Satelliteer Check-in: LASC staff and volunteers will conduct check-in for Rocketeers and Satelliteer. At least one representative from each team must check-in all the Rocketeers associated with their team. Once checked-in, Rocketeers will receive their event credentials.</p> <p>2023 LASC Conference: The 2023 LASC Conference will host experience exchange between teams and LASC Evaluators inspections of the design implementation.</p>
<p>25 August 2023 <i>Friday</i> Cape Canavial</p>	<p>Kickstart and Mandatory Safety Briefing: All participants will gather for a kick-off presentation and mandatory safety briefing for launch operations.</p> <p>Group Photo: All participants will gather for group photos, opting for themselves whether or not to include their projects.</p> <p>Launch day: Launch and recovery operations will occur on-site at the Cape Canavial Launch Area (CCLA). There will be spectator viewing areas set up and teams will be able to display their rockets after recovery.</p>
<p>26 August 2023 <i>Saturday</i> Cape Canavial</p>	<p>Launch day: Launch and recovery operations will occur on-site at the Cape Canavial Launch Area (CCLA). There will be spectator viewing areas set up and teams will be able to display their rockets after recovery.</p>
<p>27 August 2023 <i>Sunday</i> Cape Canavial</p>	<p>Final Launch Day: Launch and recovery operations will occur on-site at the Cape Canavial Launch Area (CCLA). There will be spectator viewing areas set up and teams will be able to display their rockets after recovery.</p> <p>Awards Ceremony: For participants, family, friends, faculty, and media, the awards ceremony will take place at the sunset of the last launch day.</p>

Fatec Tatuí - Address: Prof. Wilson Roberto Ribeiro de Camargo - is located at the Rod. Mário Batista Mori, 971 - Jardim Aeroporto, Tatuí - SP, 18280-000.

<https://www.google.com/maps/place/Fatec+Tatu%C3%AD+-+Prof.+Wilson+Roberto+Ribeiro+de+Camargo+-+Faculdade+de+Tecnologia+de+Tatu%C3%AD/@-23.3305979,-47.8707448,17z/>

The Google Maps link with correct position of the **Cape Canavial** can be accessed by the following link:

<https://www.google.com/maps/place/Latin+American+Space+Challenge/@-23.3691882,-48.0115186,15z>

For more information, please access the 2023 Latin American Space Challenge Launch Operations Procedures on the following link:

<https://www.lasc.space/2023-lasc/documents-forms>

Unless otherwise specified, all times given are Brasília Time (BRT). More information is available on <http://www.lasc.space/>.

5.1. Day 1, Thursday, August 24, 2023 Schedule Details

The Day 1 of the 2023 LASC will take place at FATEC Tatuí. The event schedule includes Check-in for Rocketeers & Satellites, Opening Meeting and a Conference & Podium Session.

Two groups of teams (Group 1 and Group 2) will be defined because of the maximum capacity of the auditorium at the FATEC Tatuí. Each group will be indicated in a separate document published on LASC Website. The group will be defined based on the information provided on the Project Technical Report.

Table 4: Day 1 Schedule.

TIME (BRT)	EVENT(S)
24 August 2023 Thursday 09:00-10:00 BRT	<p>Group 1 - Rocketeer & Satelliteer Check-in Check-in for the Group 1 begins at 09:00 BRT at the FATEC Tatuí Auditorium. All the Rocketeers & Satelliteers and mentors for each team of the Group 1 should arrive at the location NO LATER THAN 09:30 BRT.</p> <ul style="list-style-type: none"> • Confirmation of Team fees payment • Confirmation of Rocketeer/Satelliteers fees payment • Waiver and Release of Liability Form signature • Rocketeer/Satelliteers Credentials • LASC T-Shirts • Recovery team safety briefing • Rocket Safety Reviews <p>LASC Teams will be directed to bring their unloaded rockets, payloads and satellites.</p>
24 August 2023 Thursday 10:00-10:45 BRT	<p>Group 1 - Opening Meeting All Group 1 attendees will gather within the auditorium for the official opening meeting. Representatives from LASC will introduce themselves, acknowledge sponsors, provide general event information, and any additional updates.</p>

TIME (BRT)	EVENT(S)
24 August 2023 Thursday 10:45-12:00 BRT	Group 1 - 2023 LASC Conference & Podium Session Teams will be asked to present their projects to the judging panel as an evaluation step. The best projects of the Group 1 may be asked to present their projects to the audience as a Podium Session. A pitch up to 5 minutes can be presented on the main systems of the project for the selected teams.
24 August 2023 Thursday 12:00-14:00 BRT	Break All Teams from Group 1 must exit the FATEC Tatuí.
24 August 2023 Thursday 14:00-15:00 BRT	Group 2 - Rocketeer & Satelliteer Check-in Check-in for the Group 2 begins at 09:00 BRT at the FATEC Tatuí Auditorium. All the Rocketeers & Satelliteers and mentors for each team of the Group 2 should arrive at the location NO LATER THAN 14:30 BRT. <ul style="list-style-type: none"> • Confirmation of Team fees payment • Confirmation of Rocketeer/Satelliteers fees payment • Waiver and Release of Liability Form signature • Rocketeer/Satelliteers Credentials • LASC T-Shirts • Recovery team safety briefing • Rocket Safety Reviews LASC Teams will be directed to bring their unloaded rockets, payloads and satellites.
24 August 2023 Thursday 15:00-15:45 BRT	Group 2 - Opening Meeting All Group 2 attendees will gather within the auditorium for the official opening meeting. Representatives from LASC will introduce themselves, acknowledge sponsors, provide general event information, and any additional updates.
24 August 2023 Thursday 15:45-17:00 BRT	Group 2 - 2023 LASC Conference & Podium Session Teams will be asked to present their projects to the judging panel as an evaluation step. The best projects of the Group 2 may be asked to present their projects to the audience as a Podium Session. A pitch up to 5 minutes can be presented on the main systems of the project for the selected teams.
24 August 2023 Thursday 17:00 BRT	Tear Down: All Teams Must Exit The Building, No Re-entry All LASC staff, sponsors, vendors, exhibitors and teams should remove their displays from FATEC Tatuí by 17:00 BRT.

5.2. Day 2, Friday, August 25, 2023 Schedule Details

Events scheduled include Mandatory Safety Briefing, Group Photo, Event Setup, Launch Preparations, and an opportunity for any well organized teams to attempt

flight. All these events will occur on Cape Canavial Property. More specific driving directions will be provided during the Day 1, opening Meeting.

Table 5: Day 2 Schedule.

DATE	EVENT(S)
25 August 2023 Friday 07:00 BRT	Cape Canavial - Gates Open The gate to the Cape Canavial opens at 07:00. Teams may begin showing up no earlier than 6:30am. LASC Security Staff will direct the participants to the Cape Canavial. LASC Security will establish the participant parking and Rocket Assembly Area.
25 August 2023 Friday 08:00 BRT	Mandatory Safety Briefing All Rocketeers and Satelliteers must meet for the Mandatory Safety Briefing. This meeting covers launch operations, safety instructions and any updates to procedures that have been made.
25 August 2023 Friday 08:45 BRT	Group Photo At 08:45 BRT, a mass group photo will be taken outside the Event Center. Teams not ready will not be in the photo. It is the team's responsibility to be ready at 8:45 PM. Rockets are optional. Teams can bring school and/or national flags. There will be two photos - one with team and/or national spirit, and one without.
25 August 2023 Friday 09:00-17:00 BRT	Launch Preparations and Judging Evaluations Once the Rocket Assembly Area (RAA) is established, participants will begin preparing their projects for flight, including Flight Readiness Review (FRR) and Launch Readiness Review (LRR) at the Mission Control Center (MCC). Cape Canavial Launch Area Open for Launch Operations LASC anticipates both staff and students being prepared to support launches no earlier than 09:00 BRT. <i>Note: The last launch operation window of the day will be at 16:30 BRT. The Rocket Assembly Area (RAA) will be closed at 17:30 BRT.</i>
25 August 2023 Friday 18:00 BRT	Cape Canavial - Gates Close All participants, including Rocketeers, Satelliteers and Spectators must depart the Cape Canavial. Camping is not allowed.

5.3. Day 3, Saturday, August 26, 2023 Schedule Details

Events scheduled include launch operations and the resolution of any judging activities not completed the previous day. All these events will occur on Cape Canavial Property.

Table 6: Day 3 Schedule.

DATE	EVENT(S)
26 August 2023 Saturday 07:00 BRT	Cape Canavial - Gates Open The gate to the Cape Canavial opens at 07:00. Teams may begin showing up no earlier than 6:30am. LASC Security Staff will direct the participants to the Cape Canavial. LASC Security will establish the participant parking and Rocket Assembly Area.
26 August 2023 Saturday 08:00-17:00 BRT	Launch Preparations and Judging Evaluations Once the Rocket Assembly Area (RAA) is established, participants will begin preparing their projects for flight, including Flight Readiness Review (FRR) and Launch Readiness Review (LRR) at the Mission Control Center (MCC). Cape Canavial Launch Area Open for Launch Operations LASC anticipates both staff and students being prepared to support launches no earlier than 08:00 BRT. <i>Note: The last launch operation window of the day will be at 16:30 BRT. The Rocket Assembly Area (RAA) will be closed at 17:30 BRT.</i>
26 August 2023 Saturday 18:00 BRT	Cape Canavial - Gates Close All participants, including Rocketeers, Satelliters and Spectators must depart the Cape Canavial. Camping is not allowed.

5.4. Day 4, Sunday, August 27, 2023 Schedule Details

Events scheduled include launch operations, final judging deliberations, and the Awards Ceremony. All these events will occur on Cape Canavial Property.

Table 7: Day 4 Schedule.

DATE	EVENT(S)
27 August 2023 Sunday 07:00 BRT	Cape Canavial - Gates Open The gate to the Cape Canavial opens at 07:00. Teams may begin showing up no earlier than 6:30am. LASC Security Staff will direct the participants to the Cape Canavial. LASC Security will establish the participant parking and Rocket Assembly Area.

<p>27 August 2023 Sunday 08:00-15:00 BRT</p>	<p>Launch Preparations and Judging Evaluations Once the Rocket Assembly Area (RAA) is established, participants will begin preparing their projects for flight, including Flight Readiness Review (FRR) and Launch Readiness Review (LRR) at the Mission Control Center (MCC).</p> <p>Cape Canavial Launch Area Open for Launch Operations LASC anticipates both staff and students being prepared to support launches no earlier than 08:00 BRT. <i>Note: The last launch operation window of the 2023 LASC will be at 14:30 BRT. The Rocket Assembly Area (RAA) will be closed at 15:00 BRT.</i></p>
<p>27 August 2023 Sunday 15:00 BRT</p>	<p>Music Show - Power of Peppers A Music Show will be played in the Event Center by the band Power of Peppers with the best songs of the Red Hot Chili Peppers.</p>
<p>27 August 2023 Sunday 16:00 BRT</p>	<p>Latin American Space Challenge Awards Featuring keynote speakers, closing remarks will be made, music will be played, and winners of all competitions and categories will be announced.</p>
<p>27 August 2023 Sunday 18:00 BRT</p>	<p>Cape Canavial - Gates Close All participants, including Rocketeers, Satelliteers and Spectators must depart the Cape Canavial.</p>

Note: All times recorded above are subject to change by LASC as needed based on extenuating circumstances. LASC will make every attempt to communicate schedule changes in advance; however, we ask that teams remain flexible and adaptable to changes if/when they occur.

6. DAY 1 GROUPS

Due to the capacity limitation of the auditorium at the FATEC Tatuí, the 2023 LASC Schedule has separated teams that have successfully submitted a Project Technical Report into two groups.

Your team shall be present at the correct scheduled time on Section 5 according to the indicated group.

6.1. Group 1

Group 1 is scheduled for Day 1 from 09:00 to 12:00 BRT. The following Teams shall go to FATEC Tatuí in the indicated schedule:

Table 8: Group 1.

Team ID	Team Name
2	Apex Rocketry
5	Asa Branca Aerospace
11	Chaska
12	CIEA UNAC
14	Czar Space
15	Department of Space Science and Engineering (翰琨 陳's team)
18	EPOS Projetos Aeroespaciais
19	EPTA Team
27	Fênix - Estudos Astronáuticos
30	GIP UdeC
31	GISAT UdeC
32	GFRJ - Grupo de Foguetes do Rio de Janeiro
33	GFIG
34	Hatun Mayu
39	Hypernova Aerospace
40	ITA Rocket Design
42	Katari Society
50	Orion Aerospace Design
54	PoliSat
55	Potiguar Rocket Design
56	PotroRockets SAFI-UAEMex
59	Propulsion industries
61	RedCarbon
64	RocketWolf
74	Supernova Rocketry
80	Trishul

82	UFABC Rocket Design
83	UNESP Rocket Design
85	Volta
88	Club de Ciencias y Tecnologías Espaciales

6.2. Group 2

Group 2 is scheduled for Day 1 from 14:00 to 17:00 BRT. The following Teams shall go to FATEC Tatuí in the indicated schedule:

Table 9: Group 2.

Team ID	Team Name
1	Antares Foguetemodelismo
6	Beyond Rocket Design
7	Cactus Rockets Design
13	Conexalab
20	Equipe Rocket
22	Estelar Rocket Team
26	FEG Rocket Design
28	Galaxy Explorer
29	Gama CubeDesign
44	Kosmos
45	Los Pirómanos
46	Minerva Rockets e Sats
47	Monterrey Rocket Lab
48	Nova Aerospace
57	Programa CEOS
58	Projeto Jupiter
68	Sky Rocket Team

73	STES Rocketry Team
75	Tau Rocket Team
76	Team Aarambh
78	Team Antariksh
79	Topus Projetos Aeroespaciais
84	Void Laboratories
86	Zenith Rocketry
89	Gokova Rocket

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If your team is not listed and you are going to the event, please send a message to lasc@lasc.space as soon as possible.