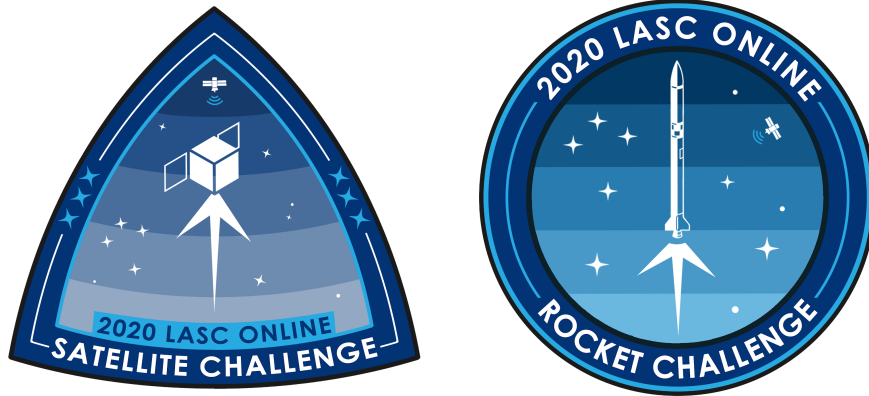


2020 LASC

ONLINE



Latin American Space Challenge (LASC)

2020 LASC Online Edition

Master Integrated Schedule Document

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

Revision History

REVISION	DESCRIPTION	DATE
00	Baseline of the document.	10/02/2020
01	Major Revision: 2020 LASC Online Edition.	09/08/2020
02	Revision on dates for the submission of Podium Session Materials and Poster Session Materials.	07/11/2020
03	2020 LASC Online update: keynote speakers, challenge's presentation, dates and times detailed.	23/11/2020
04	Time correction for the break on 29 NOV 2020 from 16:30 to 17:00 and Keynote Speaker's name adjustment.	29/11/2020

1. INTRODUCTION

The *Latin American Space Challenge* (LASC) is a three-day series of events which will set the background and provide structure for the Latin America's largest experimental rocket engineering competition.

Due to the COVID-19 pandemic, the **2020 LASC Online** will be a virtual event. Teams will be challenged to develop, simulate and present their rocket projects submitting progress reports, simulation results, project technical reports and videos describing their project. Also, the **2020 LASC Online** will host a *sprint*-like event for online challenges for the registered teams.

For the **safety** of all *rocketeers*, *satelliteers*, general public and LASC Organization, the 2020 Latin American Space Challenge will not host a scored *launch window*.

2. BACKGROUND

The noise, fire, high speeds, and the adrenaline of launching a rocket encourage people to pursue science, technology, and mathematics based careers and for the progress of the science and technology of their countries.

A space competition motivates them to extend themselves beyond the classroom to design and build the rockets themselves. Students enrolled in this challenge also could learn to work as a team, solving real world problems under the same pressures they'll experience in their future careers.

The *Latin American Space Challenge* (LASC) has a mission to motivate people from all latin american countries to develop and launch a rocket with a smallsat as a payload. The vision of the LASC is to provide motivation for latin american students and enthusiasts to pursue their dreams

3. PURPOSE AND SCOPE

This document primarily defines the schedule on which participants in the *Latin American Space Challenge* must submit required deliverables to the event organizers in order to be considered "timely" in scoring.

The impact of timeliness on scoring is described for each respective deliverable in Section 6 of the LASC Rules & Requirements Document, maintained on the LASC website.

Furthermore, this document, integrates other information useful to participants, such as the deadlines for early, on-time, or late-payment of fees, due dates for required waivers/forms, and the detailed event schedule of the *Latin American Space Challenge* itself.

Additional documents and complementary guidance for the **2020 LASC Online** will be published on the LASC website.

4. REVISION

It is expected the LASC Master Schedule Document may require revision in the months leading up to a competition. Also, major revisions will be accomplished by complete document reissue. Such revisions will be reflected in updates to the document's effective date.

The LASC Integrated 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 LASC website.

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 Integrated 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.

5. DOCUMENTATION

The following documents include standards, guidelines, schedules, or required standard forms. The documents listed in this section are either applicable to the extent specified in this document, or contain reference information useful in the application of this document.

DOCUMENT	FILE LOCATION
LASC Rules & Requirements Document	http://lasc.space/documents-and-rules/
2020 LASC Rocket and Satellite Challenge	http://lasc.space/documents-and-rules/
LASC Forms and Templates	http://lasc.space/documents-and-rules/

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6. DELIVERABLES AND PRE-EVENT DATES

The following table records the schedule on which participants in the *2020 Latin American Space Challenge Online* 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. Unless otherwise specified, all times given are Brasilia Time (BRT).

DEADLINE DATE	ACTION
23:00 - 16 AUG 2020	Entry Application due per Section 5 of the 2020 LASC Online Rules & Requirements Document. The link for the Google Form will be available on the LASC Team Center: http://lasc.space/team-center/ .
20:00 - 17 AUG 2020	Acceptance Announcement per Section 5 of the 2020 LASC Online Rules & Requirements Document. Official List will be available on the LASC Team Center: http://lasc.space/team-center/ .
23:00 - 30 AUG 2020	Submit 1st Progress Update and Mission Patch per Section 8 of the 2020 LASC Online Rules & Requirements Document. Link will be available on the LASC Team Center: http://lasc.space/team-center/ .
23:00 - 04 OCT 2020	Submit Final Progress Update per Section 8 of the LASC Rules & Requirements Document. Link will be available on the LASC Team Center: http://lasc.space/team-center/ .
23:00 - 11 OCT 2020	Submit Preliminary Design Review Video per Section 2.4 of the 2020 LASC Rocket and Satellite Challenge. Link will be available on the LASC Team Center: http://lasc.space/team-center/ .
23:00 - 08 NOV 2020	Submit Project Technical Report per Section 8.5.3 of the 2020 LASC Online Rules & Requirements Document. Link will be available on the LASC Team Center: http://lasc.space/team-center/ .
23:00 - 15 NOV 2020	Submit Virtual Poster Session Materials per Section 8.5.4 of the 2020 LASC Online Rules & Requirements Document. Link will be available on the LASC Team Center: http://lasc.space/team-center/ .
23:00 - 15 NOV 2020	Submit Virtual Podium Session Materials per Section 8.5.5 of the 2020 LASC Online Rules & Requirements Document. Link will be available on the LASC Team Center: http://lasc.space/team-center/ .
20:00 - 18 NOV 2020	Announcement of Teams Selected for the LASC Online Conference Day Podium Session per Section 8.5.5 of the 2020 LASC Online Rules & Requirements Document. Link will be available on the LASC Team Center: http://lasc.space/team-center/ .

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7. 2020 LASC ONLINE EVENT SCHEDULE OVERVIEW

The following table records the detailed schedule of events for the *Latin American Space Challenge*. Unless otherwise specified, all times given are Brasília Time (BRT). The *2020 Latin American Space Challenge* will be held **online**. Detailed schedules of each day's events are provided in the following sections.

DATE	EVENT(S)
20:00 - 22 NOV 2020	<p>2020 LASC Online Challenge Presentation per Section 3.1 and 3.2 of the 2020 LASC Rocket and Satellite Challenge. Link will be available on the LASC Team Center: http://lasc.space/team-center/.</p> <p>The meeting will be held online on Google Meet for Team Leaders and on YouTube for Rocketeers, Satelliteers and General Public. The Challenge Presentation will be the moment that LASC Organization will provide the details of each challenge for the Registered Teams.</p>
20:00 - 23 NOV 2020	<p>Submit the topic of the Challenge(s) Picked for the 2020 LASC Online Challenge per Section 3.3 of the 2020 LASC Rocket and Satellite Challenge. Link will be available on the LASC Team Center: http://lasc.space/team-center/.</p>
21:00 - 23 NOV 2020	<p>Announcement of Challenges Picked for the 2020 LASC Online Challenge by Teams per Section 3.3 of the 2020 LASC Rocket and Satellite Challenge. Link will be available on the LASC Team Center: http://lasc.space/team-center/.</p>
09:00 - 28 NOV 2020	<p>2020 LASC Online Conference: Held online via YouTube and Google Meet, the LASC Conference will host presentations of companies and organizations on the future of space activities.</p> <p>Conference Podium Session: Held online via YouTube and Google Meet, the Conference Day gives students, judges, the public, and media a chance to watch presentations of the selected projects. Judges will begin evaluating projects as defined in the LASC Rules & Requirements Document.</p>
14:00 - 29 NOV 2020	<p>2020 Rocket and Satellite Challenge Presentations: Each team participating in LASC will present their solutions for the challenges in sessions of 10 minutes online via Google Meet and live streamed on YouTube. There will be a 5 minutes of Q/A for each presentation.</p> <p>Awards Ceremony: For participants, spectators, and media, the awards ceremony will take place online - livestream on YouTube.</p>

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8. 28 NOVEMBER 2020 SCHEDULE DETAILS

The event will be online live streamed on YouTube. Speakers shall participate in a specific Google Meet call provided by LASC Organization. The link for the Google Meet call will be provided at least 15 minutes before the scheduled time of presentation.

All times recorded below are subject to change by LASC as needed based on extenuating circumstances. LASC will make every attempt to communicate schedule changes in advance.

TIME (BRT)	EVENT(S)
09:00 - 09:15	Opening Ceremony: LASC Organization will provide information about the 2020 LASC Online and a brief opening for the Conference.
09:15 - 09:45	Keynote Speaker: Paulo Eduardo Vasconcellos Brazilian Space Agency (AEB)
09:45 - 10:15	Keynote Speaker: Daniel Moczydlower CEO of EmbraerX
10:15 - 10:30	Break
10:30 - 11:00	2021 LASC Cooperation Program Mission, Vision and Updates - Vinicius Fernandes & Calvin Trubiene
11:00 - 11:15	Podium Session: Team 37 - Aerozono Space Technologies Democratizing Access to Space through Maker Technologies
11:15 - 11:30	Podium Session: Team 07 - Capital Rocket Team Blowdown Analysis for Hybrid Rocket Motors
11:30 - 12:00	Confirmed Speaker: Danilo Miranda Visiona Tecnologia Espacial
12:00 - 14:00	Lunch Break
14:00 - 14:30	Confirmed Speaker: Caius Reza Alba Orbital - Democratizing Access to Space
14:30 - 15:00	Confirmed Speaker: Adam Trumpour Launch Canada Rocket Innovation Challenge
15:00 - 15:30	Confirmed Speaker: Ramus Pedersen DanSTAR - Launching Dragonfly at EuRoC 2020
15:30 - 15:45	Break
15:45 - 16:00	Podium Session: Team 3 - Club de Investigación Universitario de Desarrollo en Sistemas Espaciales
16:00 - 16:15	Podium Session: Team 26 - Minerva UFRJ Monte-Carlo Analysis: Coupled Hybrid Rocket Motors Internal Ballistics
16:15 - 16:30	Podium Session: Team 17 - Projeto Jupiter Design, Testing, and Analysis of a Recovery System
16:30 - 16:45	Podium Session: Team 14 - TOPUS Projetos Aeroespaciais Drag and Stability Optimization Algorithm for Trapezoidal Fins Geometries
16:45 - 17:00	Closing Meeting: LASC Organization will provide information about the 2020 LASC Online and a briefing on the Conference and Podium Session.

9. 29 NOVEMBER 2020 SCHEDULE DETAILS

The event will be online live streamed on YouTube. Speakers shall participate in a specific Google Meet call provided by LASC Organization. The link for the Google Meet call will be provided at least 15 minutes before the scheduled time of presentation.

PART	TIME (BRT)	EVENT(S)
Part 1 08:00 to 09:30	08:00 - 08:15	Opening Meeting: LASC Organization will provide information about the 2020 LASC Online and Challenges' Presentation.
	08:15 - 08:30	Pitch Deck: Team ID 9 - RHMS (RC.LR20-02) Reusable Rockets: Revolutionizing Access to Space
	08:30 - 08:45	Pitch Deck: Team ID 6 - BIZU (RC.LR20-02) Responsive Launch Capability of Smallsats
	08:45 - 09:00	Pitch Deck: Team ID 32 - UIS Aeroespacial (SC.M20-01) Satellite Monitoring for the Northeast Brazil Oil Spill
	09:00 - 09:15	Pitch Deck: Team ID 3 - Club de Inv. Univ. de Des. en Sist. Espaciales (RC.LR20-02) Reusable Rockets: Revolutionizing Access to Space
	09:15 - 09:30	Pitch Deck: Team ID 1 - Minerva UFRJ (RC.LR20-02) Responsive Launch Capability of Smallsats
	09:30 - 09:45	Break
Part 2 09:45 to 11:00	09:45 - 10:00	Pitch Deck: Team ID 13 - Kosmos Foguetemodelismo (SC.M20-01) Satellite Monitoring for the Northeast Brazil Oil Spill
	10:00- 10:15	Pitch Deck: Team ID 36 - Minerva UFRJ (BC.O20-03) Deforestation in the Amazon
	10:15 - 10:30	Pitch Deck: Team ID 15 - UIS Aeroespacial (SC.M20-01) Satellite Monitoring for the Northeast Brazil Oil Spill
	10:30 - 10:45	Pitch Deck: Team ID 12 - Apex Rocketry (BC.O20-04) Moon Race and the Latin America
	10:45 - 11:00	Pitch Deck: Team ID 11 - Antares (RC.LR20-02) Responsive Launch Capability of Smallsats
	11:00 - 14:00	Lunch Break
Part 3 14:00 to 15:15	14:00 - 14:15	Pitch Deck: Team ID 16 - Beyond Rocket Design (RC.LR20-02) Responsive Launch Capability of Smallsats
	14:15 - 14:30	Pitch Deck: Team ID 19 - Supernova Rocketry UFJF (RC.LR20-02) Responsive Launch Capability of Smallsats
	14:30 - 14:45	Pitch Deck: Team ID 17 - Projeto Jupiter (RC.LR20-02) Responsive Launch Capability of Smallsats
	14:45 - 15:00	Pitch Deck: Team ID 26 - Minerva UFRJ (BC.O20-04) Moon Race and the Latin America
	15:00 - 15:15	Pitch Deck: Team ID 08 - Equipe LUFFT (BC.O20-03) Deforestation in the Amazon
	15:15 - 15:30	Break

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PART	TIME (BRT)	EVENT(S)
Part 4 15:30 to 16:30	15:30 - 15:45	Pitch Deck: Team ID 37 - Aerozono Space Technologies (SC.M20-01) Satellite Monitoring for the Northeast Brazil Oil Spill
	15:45 - 16:00	Pitch Deck: Team ID 16 - Beyond Rocket Design (BC.O20-03) Deforestation in the Amazon
	16:00 - 16:15	Pitch Deck: Team ID 07 - Capital Rocket Team (SC.M20-01) Satellite Monitoring for the Northeast Brazil Oil Spill
	16:15 - 16:30	Pitch Deck: Team ID 14 - TOPUS Projetos Aeroespaciais (RC.LR20-02) Responsive Launch Capability of Smallsats
	16:30 - 17:15	Break
Part 5 17:15 to 18:00	17:15 - 17:30	Pitch Deck: Team ID 10 - ITA Rocket Design (BC.O20-03) Deforestation in the Amazon
	17:30 - 17:45	Pitch Deck: Team ID 04 - TOPUS Projetos Aeroespaciais (RC.LR20-02) Reusable Rockets: Revolutionizing Access to Space
	17:45 - 18:00	Pitch Deck: Team ID 18 - Potiguar Rocket Design (RC.LR20-02) Responsive Launch Capability of Smallsats
	18:00 - 20:00	Break
Awards	20:00 - 21:00	Awards Ceremony: Featuring LASC Team, closing remarks will be made and winners of all competitions and categories will be announced.

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