



NATIONAL DESIGN AND RESEARCH FORUM
GOLDEN JUBILEE YEAR
NATIONAL SPACE CHALLENGE 2020
FOR SCHOOL STUDENTS



ONE SMALL STEP FOR KIDZ
GIVES A GIANT LEAP FOR THEIR DREAMS



Launch Date
19th January 2020
8th - 12th Std., Students



In Association with

State and Local Centres of The Institution of Engineers (India)



National Design & Research Forum (NDRF)
The Institution of Engineers (India)
N0.3, Dr. B. R. Ambedkar Veedhi
Bengaluru - 560001



www.ndrf.res.in

About NDRF

National Design and Research Forum is headed by **Padmashree Dr. Mylswamy Annadurai**, Former Project Director, **Chandrayaan-1 & Mangalyaan, ISRO**.

NDRF is an autonomous forum of the Institution of Engineers (India). It promotes Research, Design, Development, Productization and Innovation through collaborative efforts since 1969. NDRF plays a major role in deploying engineering and technology services, systems, and solutions for nation building. 2019-20 is the Golden Jubilee year for NDRF.

NDRF - National Space Challenge 2020

This exclusive space challenge is to mark the Golden Jubilee year of NDRF and present this wonderful opportunity to school students to design, explore and innovate in making own satellites with the guidance of NDRF and Space Kidz India.

Introduction about competition

This is an exclusive competition for school students studying 8th to 12th STD all over India. The basic guidance will be extended by NDRF to all the students and be challenged to design a small payload as an experiment to near space, which should weigh less than 50 grams and fit inside a 3.8 x 3.8 x 3.8 cm cube. Around 12 Teams will be selected and assisted to build the payload. The finished payloads will be launched into Near Space in a "High Altitude Balloon". The payloads/ data will be retrieved and given back to the respective teams for further study.

This challenge will require the students to use teamwork, creativity and design a payload to fly into Near Space.

Top 12 teams will be selected and awarded certificates and medals. Applications will be accepted from October 25th to November 25th, 2019. Results will be announced on December 15th and Payload Boxes will be dispatched to the respective teams. Students should complete the payload and send back to organizer before January 5th of 2020.

Why we need it?

The enormous Indian Achievements of Space has ignited curiosity for Space Exploration among the student community of India. But the question is, "How to get into it?". They are looking for a platform to learn and do. This mission will not just teach them but also provide them with a hands-on experience to reach the space and do experimentation. The excitement and curiosity they will derive from this mission will further enhance them and inspire them to pursue Space Exploration as their career which will ultimately lead to innovation and take this industry to greater heights.

Instruction for the Payload Proposal

- Keep your idea innovative and simple.
- Send your proposal / description of what would you send in a 3.8cm Cube to experiment in near space (i.e; at 65,000 to 328,000 feet above sea level).
- Your proposal should contain all the requirements needed for your experiment in detail which can fit inside a 3.8cm Cube with weight of 50 grams.
- A team can consist of 5 members maximum.
- Registrations will be cancelled if the proposal is not in detail.
- Once you are registered and in top 12 selected teams you will get a 3.8cm cube from us and guidance to design / complete your experimental innovative idea.
- The payloads will be placed inside the capsule in NSLV 11 and launched to the near space from Space Port, Chennai.

Register Online

www.ndrf.res.in

Important Dates

- Proposals to be submitted before :**
25th November 2019
- Announcement of selected proposals :**
15th December 2019
- Payloads to be shipped back to organizer :**
10th January 2020
- Launch of Payloads :**
19th January 2020

Lanuch Partner

Space Kidz India

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- State and Local Centres of
The Institution of Engineers (India) .
- Planetary Society of India.

Sponsorship



Academic / Industry Partner : Rs 1 Lakh

PAYMENT DETAILS

The Institution of Engineers (India)

Account No: 64144553579

IFSC code: SBIN0040022

Branch: SBI, Ambedkar Veedhi, Bengaluru.

For any queries **Please contact**
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