

The MILO Space Science Institute

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The MILO Institute is a non-profit research collaborative led by **Arizona State University**, with support from **Lockheed Martin**

Our Purpose

Compelling Space Science

Affordable Access

Hands on Experience

MILO was founded to enable more scientists, engineers, and students to design, develop, and conduct deep space smallsat robotic missions with high science returns

Inspire
Challenge
Explore

- **Mission Concept Academy** provides use-inspired learning opportunities through project-based workshops
- **Innovation Accelerator** matures payload technology and entrepreneurial skills through an innovation challenge model
- **Project Office** for lunar and asteroid missions to enable participation in deep space exploration through MILO Institute partnerships

MILO Pathways to Deep Space Science

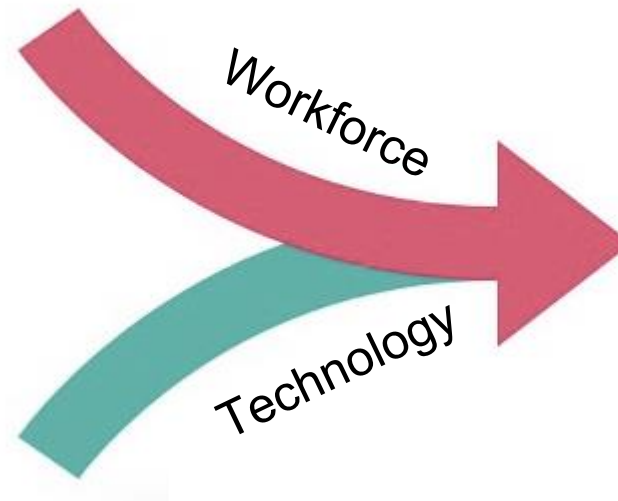
Payload development competition to advance technology and grow skills

Mission Concept Academy

- Space Science
- Space Engineering
- Entrepreneurship

Innovation Challenge Model

- Engage Academia, Industry, and Government
- Advance technology to flight readiness

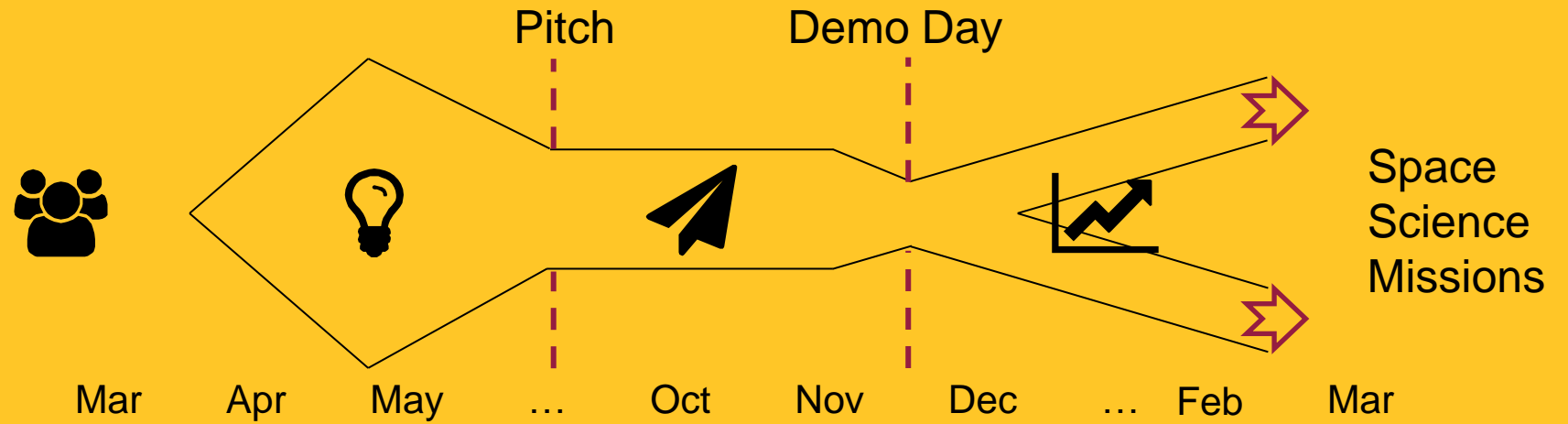


Deep Space Science Missions

- *Apophis Pathfinder*
- *LunaRide*
- *NEOshare*

Innovation Challenge

Year long program



Stakeholder Engagement



Design



Prototype



Accelerate

Examples

- Mining in Australia

- Lunar Rover in Brazil

- Apophis instruments in Canada

Mission Concepts

LunaRide (launch 2023-2024)

Carry a variety of small- to medium-class payloads to the surface of the Moon, accessing volume, mass, power, and data transfer capabilities of the lunar lander

Apophis Pathfinder (launch 2025-2026)

Perform the first-ever close flyby of Potentially Hazardous NEO (99942) Apophis *well before its historic 2029 Earth encounter*, providing initial reconnaissance data to inform and influence planning for additional flyby or encounter missions



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Thank you

For more information contact miloinstitute@asu.edu
or visit our web site, miloinstitute.org