

LANCER-II PROJECT

PROBE ROCKETS CHALLENGE

HIGH ALTITUDE AUTONOMOUS UAV

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► PROBLEM & INSPIRATION



To develop a safe and reliable platform for
atmospheric research and observation

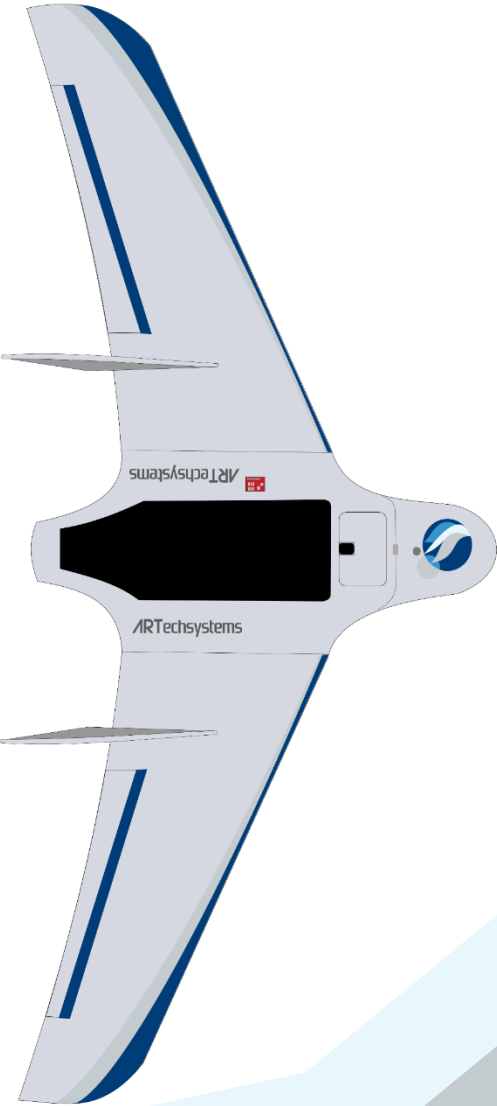
FUNCTIONAL CAPABILITIES OF HARDWARE

Technical Overview

HEIGHT	MASS	PAYLOAD
28-30Km 17.4 – 18.6 Mile	400g 0.88 lbs	700g 1.54 lbs

Sensors and Features

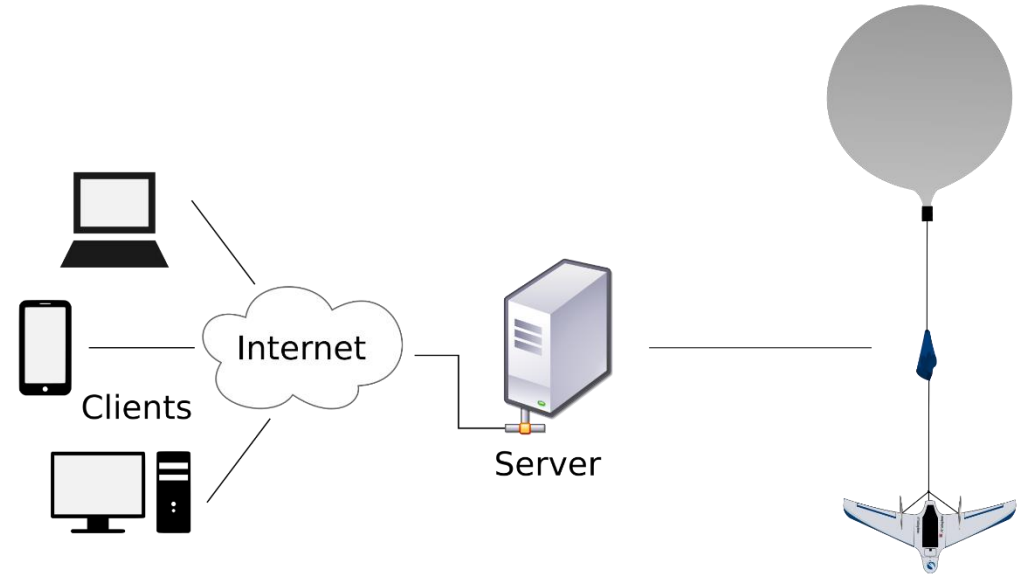
- GPS Tracking
- Gliding Capabilities
- Guided Flight Plans
- 3 Hours Extended Flight Time
- Common Payload Interface



▶ AEGIS SOFTWARE SUITE

Software Features

- Live Graphical Data Representation
- Encrypted Connection between Vehicle, Server and Customers
- On Demand Server Infrastructure
- Native Desktop and Mobile Apps
- APIs and Documentation for Software



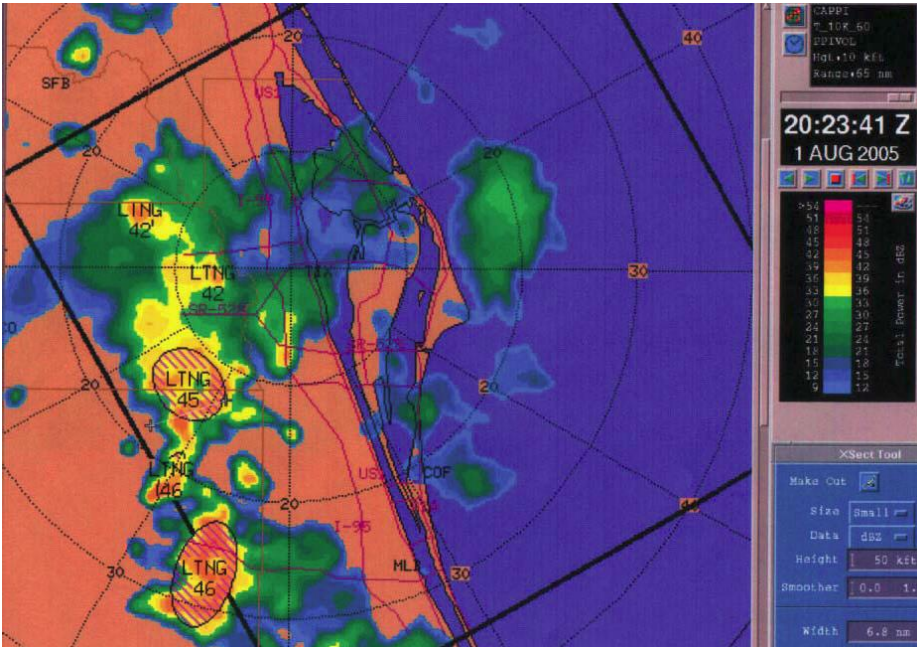
▶ WHY NOW?



SPACEX FALCON 9 LAUNCH

REVENUE STREAM 1

Weather Graph



Potential Market

- 80 Rocket Launches /yr
- 45th Weather Squadron USAF
- 300 Weather Balloons Yearly
- \$650 price per unit
- \$400 total cost per unit
- \$195 000 total market cap.

▶ REVENUE STREAM 2

Education and Research

2000 World Wide Units /yr

\$1 300 000 market size

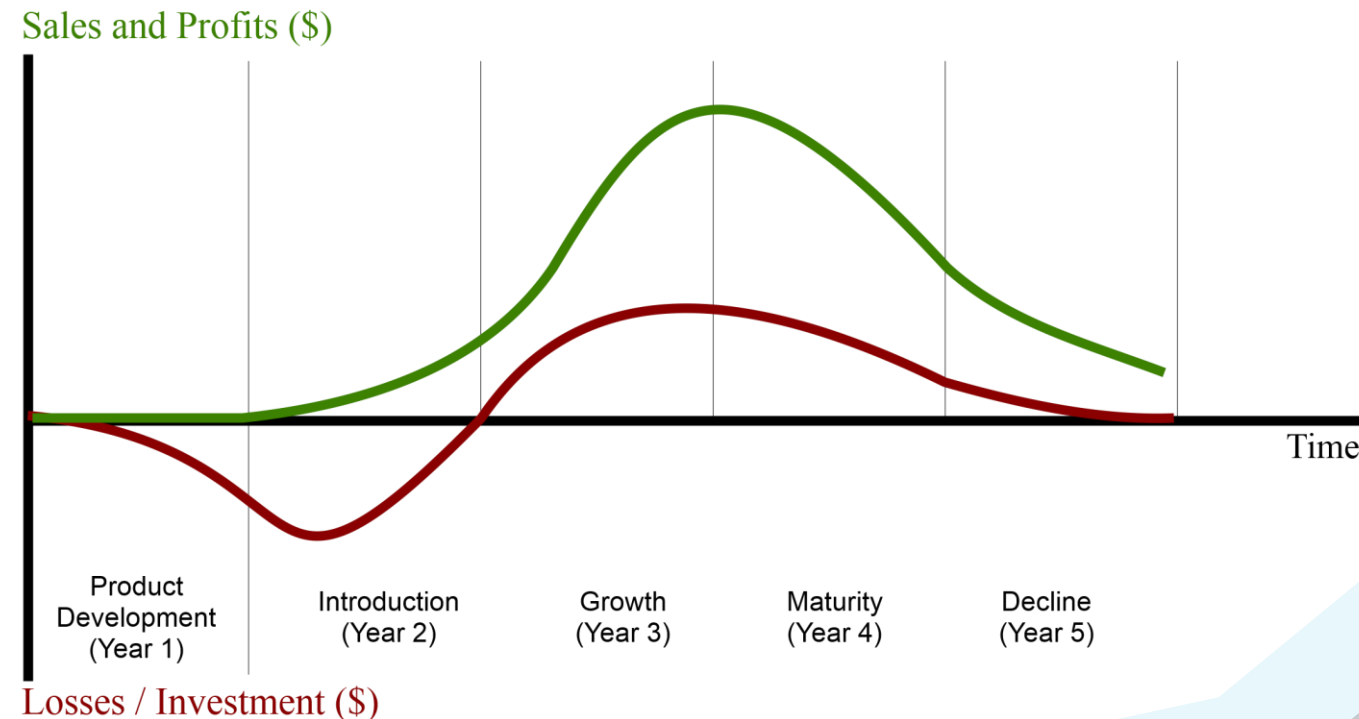


► PENETRATION AND EXECUTION

- Investment of \$40 000 for R&D and production
- B2B salesforce – no fixed cost commission based
- Operations \$10 000
- Patenting

Potential funding

- ESA BIC
- Angel Investors
- Space Companies
- Innovate UK



▶ SWOT ANALYSIS

Strengths and Opportunities

- Know-how and patents
- Connections
- Easy to diversify
- Space missions
- Short term observation programmes
- GIS, Disaster Relief
- Market gap for medium altitude observation

Weaknesses and Threats

- Small market size
- Permits to fly
- New technology
- Competition

► SUMMARY

Helium balloon ascent provides flexibility

Software Suite for data analysis

Market gap for medium altitude observation

Growing Market for launches

2+ revenue streams

Stable business model

Potential market monopoly



For more information:

<https://artech.space/>