

ROCKETPLANE GLOBAL



Investment Partnership Opportunity

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Introduction



Rocketplane Global Inc. is committed to making access to space as safe, convenient, and commonplace as commercial air travel.

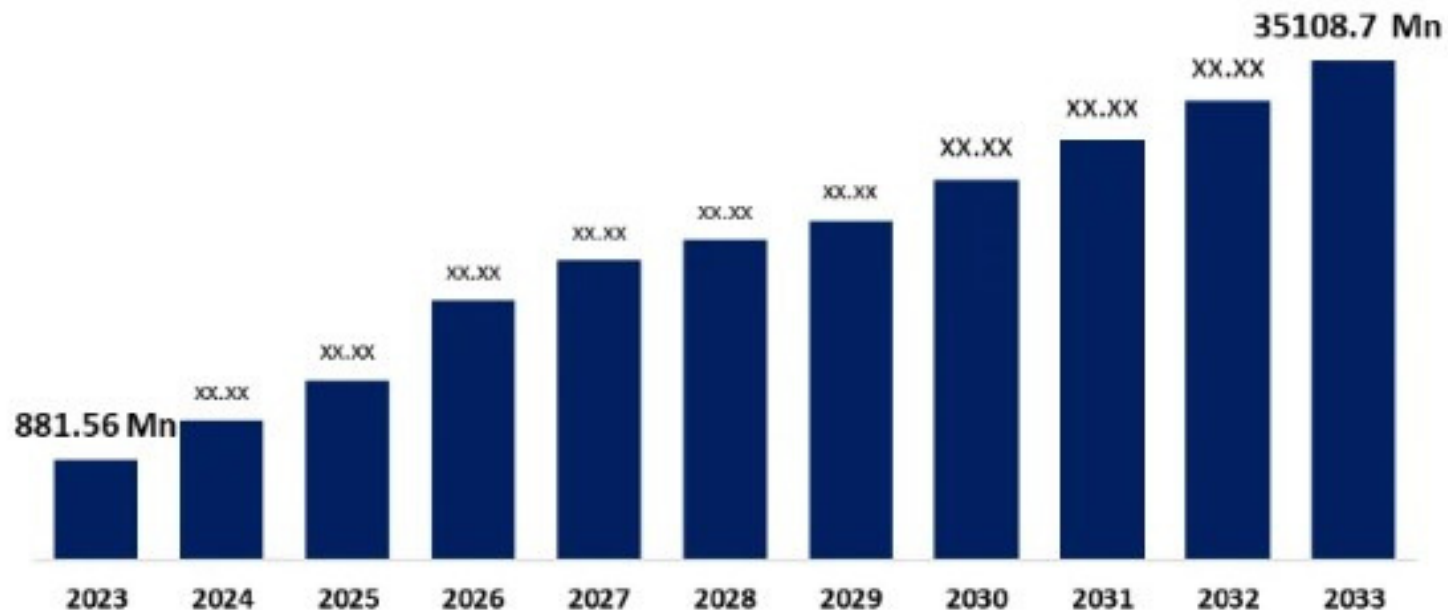
We will achieve these goals by designing and building state-of-the-art reusable spacecraft, providing unparalleled human spaceflight experiences, at a price point that is remarkably competitive.



Market Forecast

New York, United States , July 26, 2024 (GLOBE NEWSWIRE)
-- The Global Space Tourism Market Size is Expected to Grow from USD 881.56 Million in 2023 to USD 35108.7 Million by 2033, at a CAGR of 44.55% during the forecast period 2023-2033.

Global Space Tourism Market



Space Travel Demand



Zero G has facilitated **850+ flights** to **22,000+ people**.
Zero G flies ~28 passengers onboard each flight.

Ticket Price:
\$9,900



Space Perspective is slated to begin flying commercial operations in 2026. They have already sold **1,800 tickets**.

Ticket Price:
\$125,000



Virgin Galactic has **800 reservations** yet only provided seven paid crews with trips. Flights expected to resume in 2026.

Ticket Price:
\$450,000



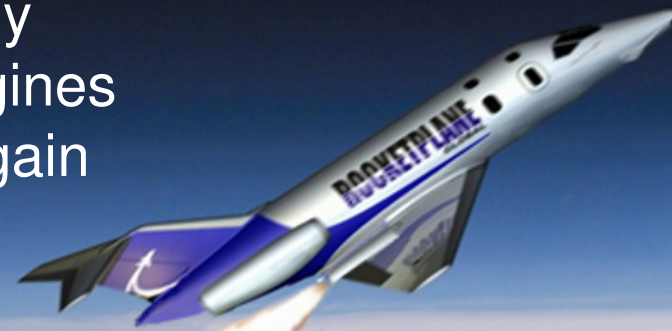
“So far, there are about 3,000 to 4,000 people on the waiting lists for these trips,”
-David Doughty, co-founder of the space travel agency RocketBreaks

Space Travel Demand Met by Rocketplane's Innovative Design



Rocketplane XP Vehicle Architecture Advantages:

- Horizontal Takeoff and Landing
- No Air Drops or Shape Changes
- No “Jettison” Launch aka “Stage Separations”
- Utilizes Known, Proven Technology
- Safe, Highly Reusable Rocket Engines
- Just Add Fuel and LOX and Fly Again



Rocketplane Global's rocket powered modified Learjet provides the excitement of Virgin Galactic's flights at half the cost:

**Ticket Price:
\$225,000**

The adventure of a Lifetime.....



- Strap into one of Rocketplane's luxurious seats.
- You take off for a journey of a lifetime. You feel the excitement as the rocketplane flies to the rocket ignition point at 35,000 feet.
- The rockets roar to life, propelling the spacecraft upwards with a force nearly three times that of Earth's gravity, sending passengers through the cosmos at speeds rivaling a bullet's velocity!

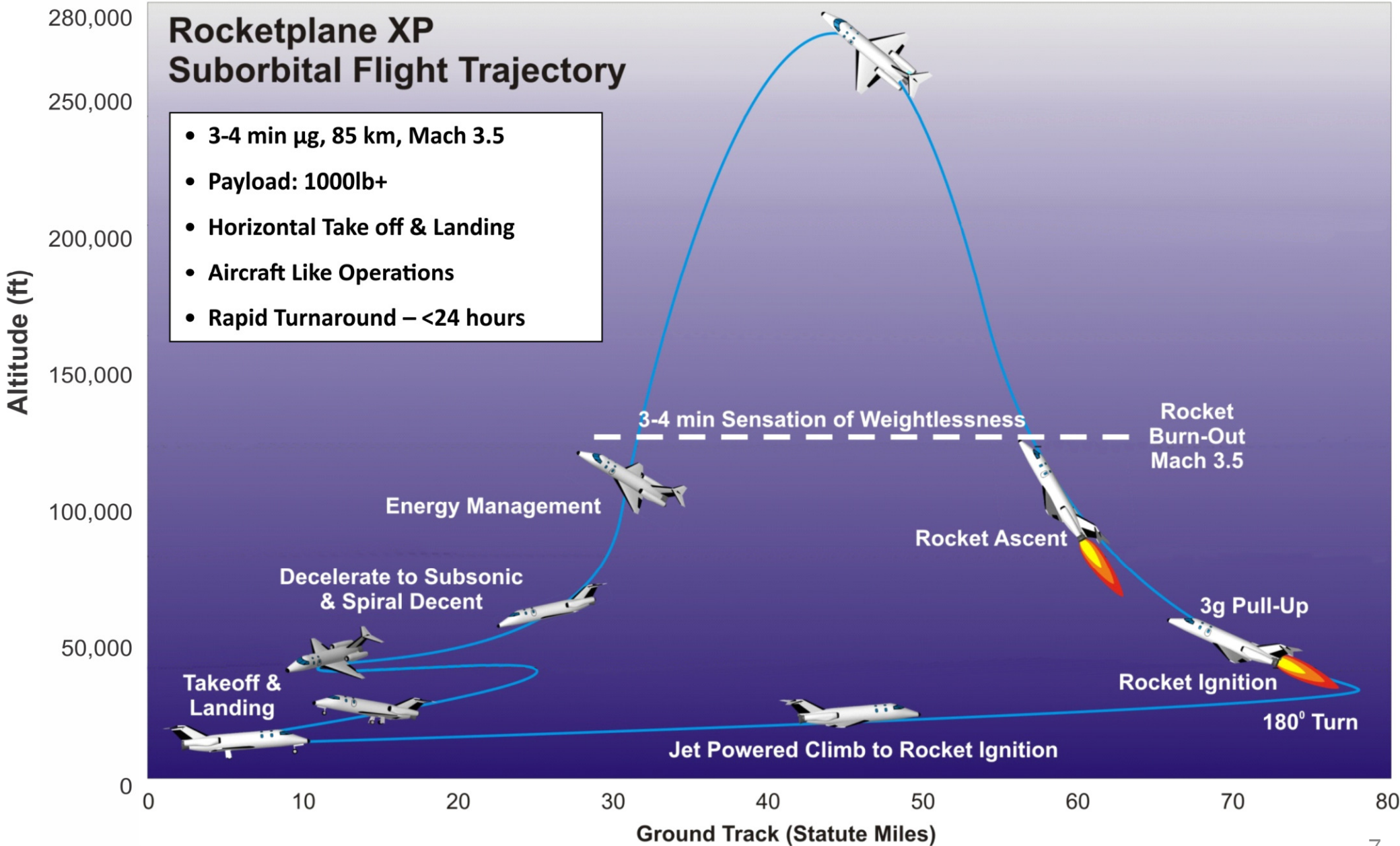


- As you ascend, the blue sky fades and the blackness of space fills the windshield.
- The rocket burn ends, for the next three minutes you coast ever upwards, passing 85km in altitude, you feel weightless, the view out the window is – spectacular!
- You start to feel your weight again as the Rocketplane rushes back into the atmosphere. A few moments of strong g-force tell you you're on your way home.
- The Rocketplane glides to a gentle landing back at the spaceport, you disembark and the ride is over, but the experience remains forever.

XP Flight Profile





Rocketplane XP Suborbital Flight Trajectory

- 3-4 min μg , 85 km, Mach 3.5
- Payload: 1000lb+
- Horizontal Take off & Landing
- Aircraft Like Operations
- Rapid Turnaround – <24 hours



Competitive Landscape



Vehicle Name	Rocketplane XP	SpaceShip Two Unity	New Shepard	Spaceship Neptune
Vehicle Company	Rocketplane Global	Virgin Galactic Unity 22	Blue Origin	Space Perspective
				
Price per ticket	\$225,000	\$450,000	Up to \$28 million	\$125,000
Vehicle Data				
Total Estimated Mass (lb)	18,000	15,800	45,346	Unknown
Take Off	Horizontal	Horizontal	Vertical	Vertical
Landing	Horizontal	Horizontal	Vertical	Vertical
Staging	None	Two Staged Air Launched	Two Stage	None
Performance Data				
Oxidizer/Fuel	Ethanol and Liquid Oxygen	HTPB and Liquid Nitrous Oxide	Liquid Hydrogen and Liquid Oxygen	Helium and Hydrogen
Experience:				
Max Reentry (gs):	4	6	5.6	n/a
Duration	TBD	3 days training	3 days total, two traini	No Required Training
Flight Time (min)	45 minutes	1.5 Hours	11 Minute flight	1/2 Day (6 hours)
Height	280,000 feet (85 kilometers, or 53 miles)	About 262,000 feet (86.182 kilometers (53.551 miles)	330,000 feet (100 kilometers, or 62 miles)	Up to 100,000 feet (or close to 19 miles)
Pilots	1	2	1	1
Location	Any Spaceport	Spaceport America, NM	West Texas, USA	Cape Canaveral, FL
Market Data:				
Passengers	3	6	6	8
First Revenue Flight	TBD	July 11, 2021	July 20, 2021	Estimated 2025
Most Recent Flight	N/A	June 8, 2024	August 29, 2024	N/A

Rocketplane Global Inc. 27 Years of Innovation



1997
Pathfinder



2003 - 2010
Rocketplane XP-A & XP-B



2013
Rocketplane XS



2016
Rocketplane XD



2023
Rocketplane XP-C

1994 Spacecast 2020 "Black Horse":

Designed by Mitchell Burnside Clapp. Studies at the USAF Phillips Lab and by Burt Rutan and supersonic aircraft designer Dan Raymer contributed to the development of the design.

1997 NASA Bantam-X Program award:

Pathfinder design. 4,000 pounds to orbit capability for about \$8 million per launch. Subcontractors included Scaled Composites, Conceptual Research Group, & Caispan.

2002 DARPA Rascal Spaceplane design:

Aim: 150 kg satellite for less than \$2 million per flight. Optimized performance with Mach 10 vehicle as first reusable stage, expendable second stage.

2003 - 2010 Rocketplane XP:

\$30 million rocketplane passenger vehicle development. 4 to 6 passengers in a comfortable, safe, reusable rocketplane. Jet engines to launch altitude, rocket to 100+ km, jet powered return. Rocketplane files for bankruptcy in 2010. John Burgener and George French buy it out of bankruptcy in 2011.

2013 DARPA XS-1 bid:

Enhanced version of Pathfinder with improved aerodynamic wings and electronics. Full team assembled to begin construction if awarded contract with DARPA. Air refueled combined jet airplane / rocketplane. Powered return.

2016 DAPRA XS-1 second bid:

Smaller drone version, 1500 pounds to orbit. No jet engines, or human pilots reduces weight and initial costs. Requires lift or tow to get to launch altitude. Glide return.

2017 Rocketplane Global Inc, a Delaware company, replaces Rocketplane Global LLC, a Wisconsin company. UK Space Agency Bid. Full team assembled to begin construction if awarded contract, and matching funds lined up.

\$1 Billion in launch agreements with OneWeb and CB 2.0.

2022 John Burgener acquires 100% of Rocketplane Global Inc.

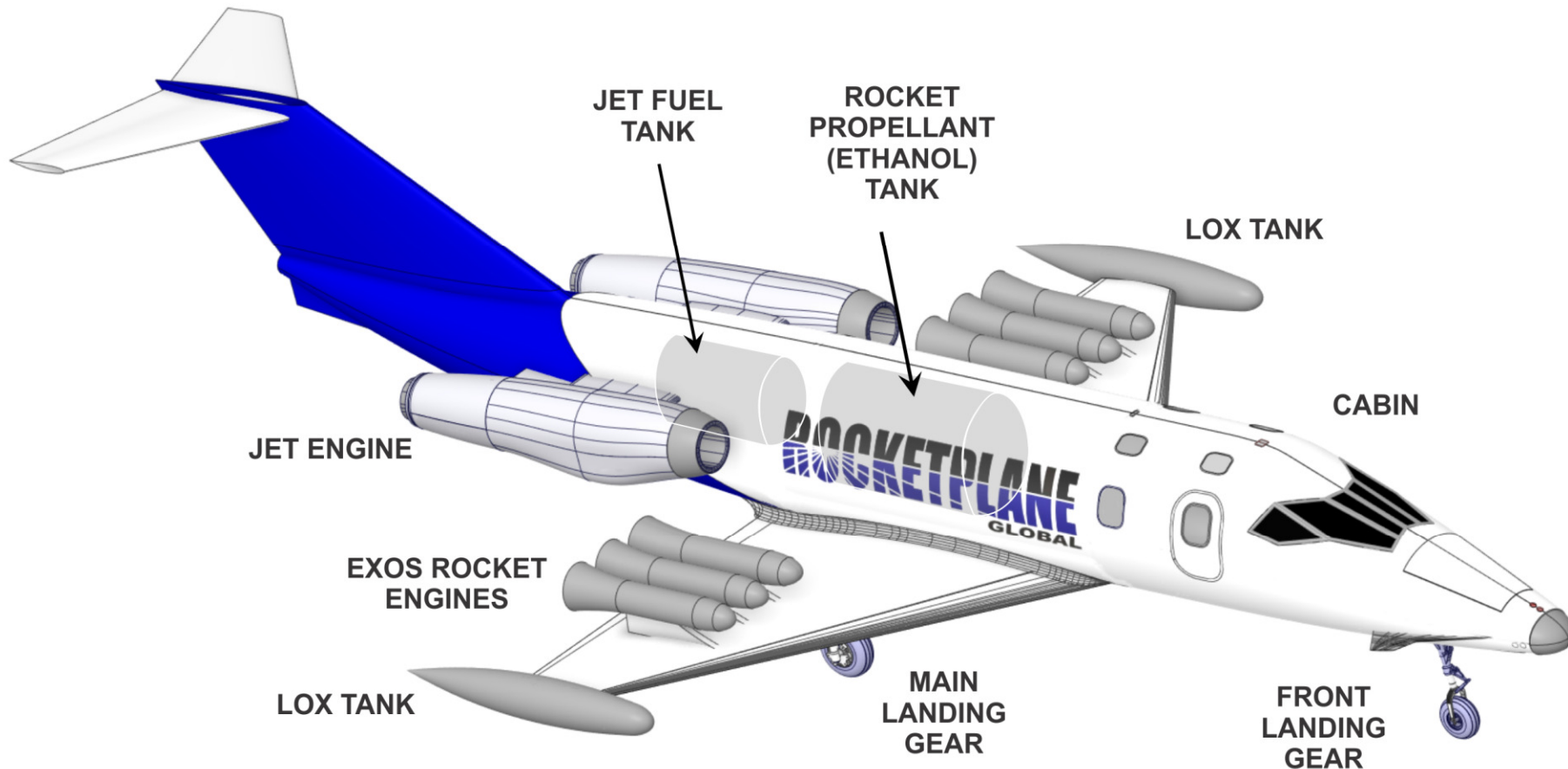
2023 Rocketplane XP-C

4 passenger vehicle. Newer technology, safer and simpler to build design. Competition is Virgin Galactic, but the XP-C is less expensive to build and fly, and designed to fly weekly.

Rocketplane Global's XP-C



Based on a modified Learjet, it is a sub-orbital airplane & spacecraft that enables frequent space travel to 85 km / 53 miles altitude for three Passengers + one Pilot. It will use six of Exos Aerospace rocket engines, producing 5,000 pounds thrust each, running on Liquid Oxygen & ethanol to ensure high reusability. Most modifications are in the wings. The main aircraft remains as from the factory.

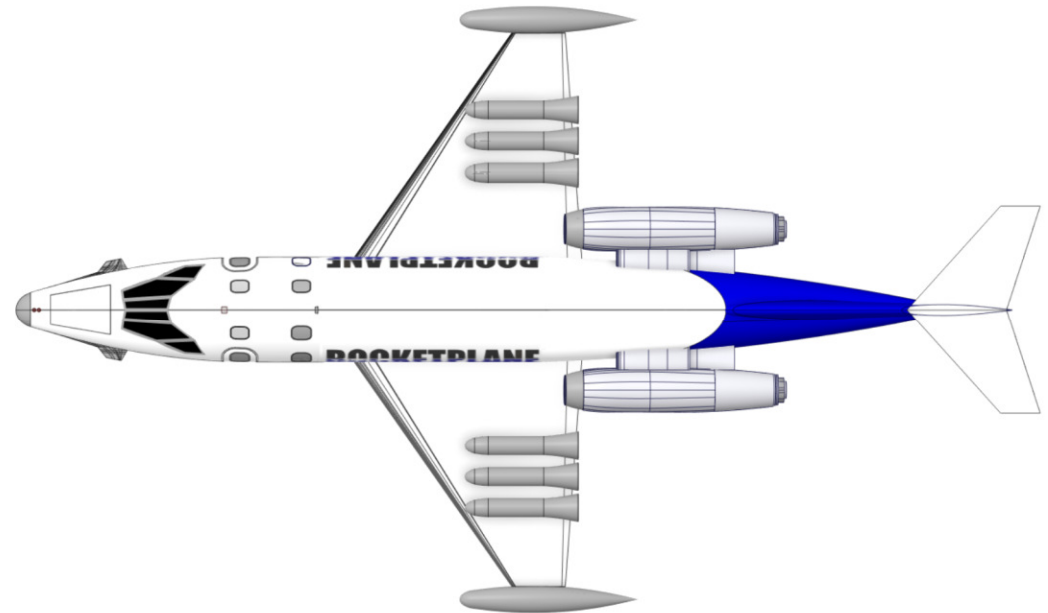


XP-C Vehicle Specifications



Rocketplane Global has strategically evaluated the placement of aircraft elements with a strong focus on safety and ease of construction. Patent pending design enhances performance and maximizes efficiency.

Pilot	1
Seating Capacity	4 (3 passengers + pilot)
Seat Pitch	36 in (0.91 m)
Takeoff Field Length	9200 ft (2800 m)
Landing Field Length	4300 ft (1300 m)
Max. Altitude	280,000 ft (85 km)
Mission Time (μG Time)	45 min (3+ min)
Jet Engine Type	Garrett TFE731
Rocket Engine Type	Exos Aerospace
Rocket Engine Fuel	LOX / Ethanol



XP-B Supersonic Wing has been built and tested.



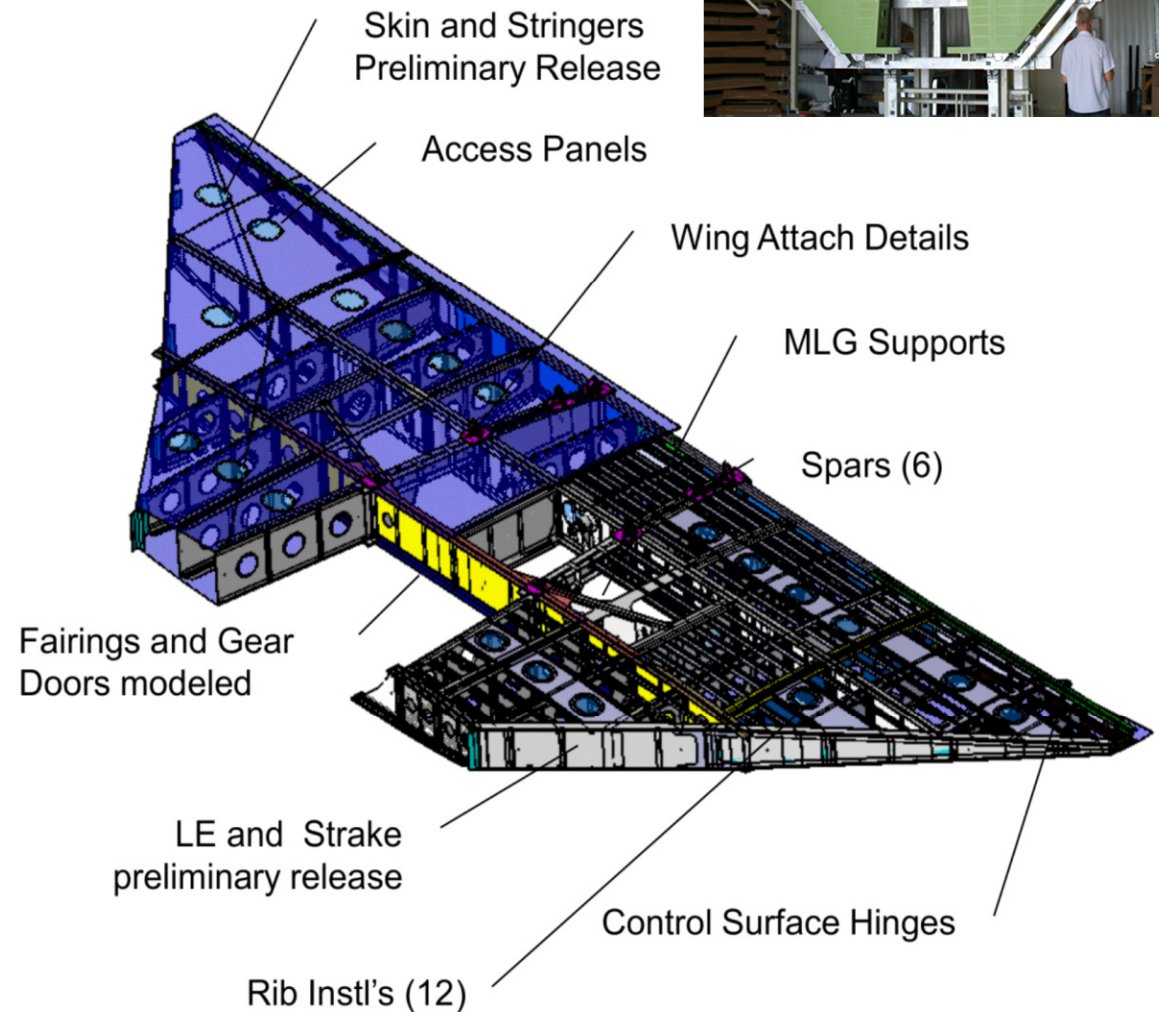
Actual XP-B wing built and tested to destruction

Engineering complete for XP-B,
XP-C will need additional
engineering.

Past work (2005-2010):
70 Drawings,
51 released as draft or modeled.
29 drawings finalized.

Flight article design
aspects determined:
control surfaces,
actuator installations,
RCS support, LE, TE.

Significant reviews
to minimize weight
and simplify manufacturing.



Aero Analysis

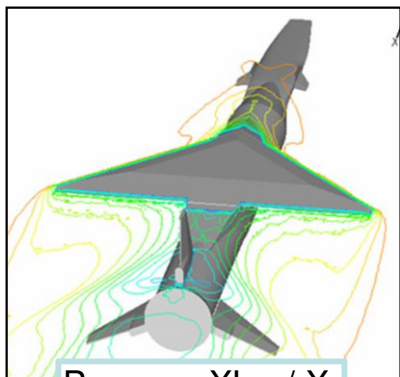
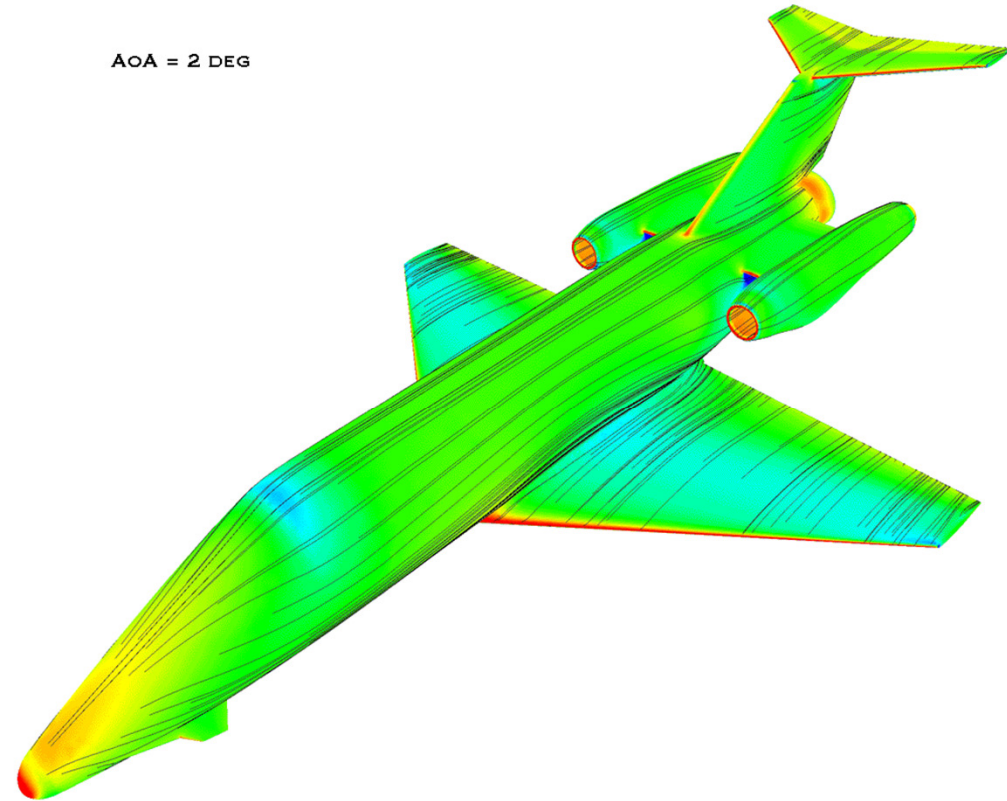
- **Aerodynamics Verified By:**

- Empirical Methods
- In-House (XP) Computational Fluid Dynamics (CFD)

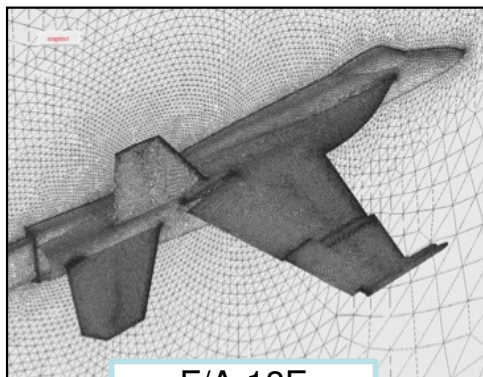
- **Analysis Tool**

- Industry Standard CFD Tools
- Substantial Historical Precedence

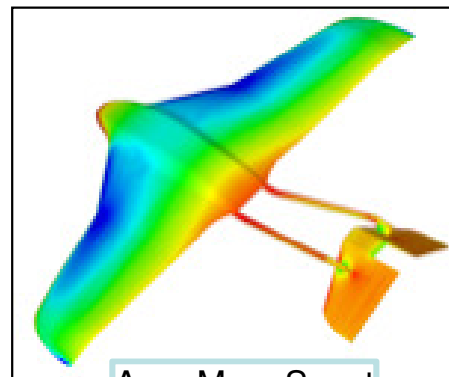
AOA = 2 DEG



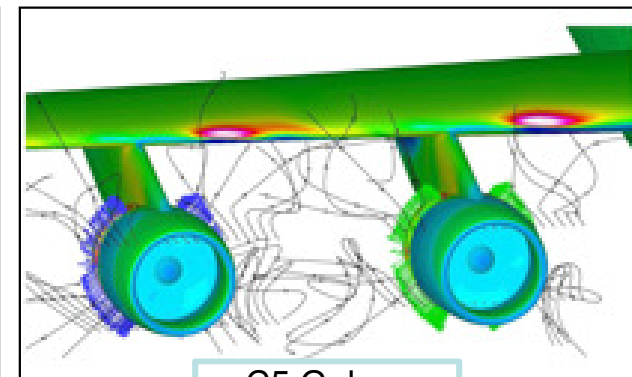
Pegasus XL w/ X-43



F/A-18E



Ares Mars Scout



C5 Galaxy

Aero Analysis Validation

- **Experienced Wind Tunnel Testing Team**

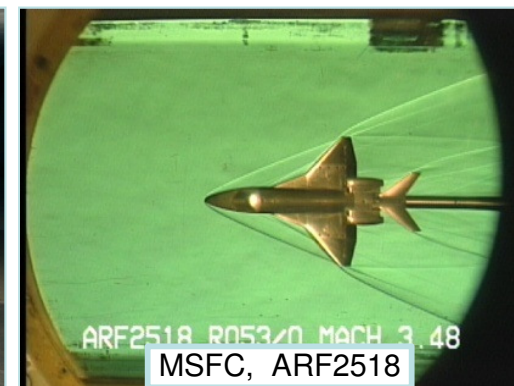
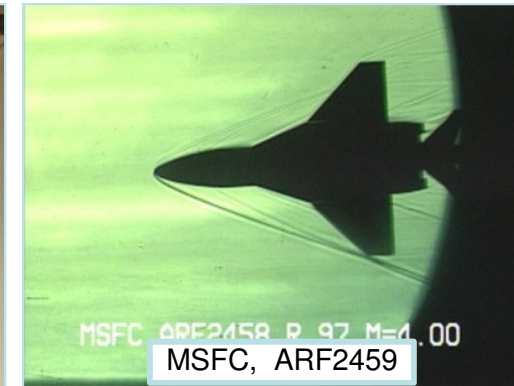
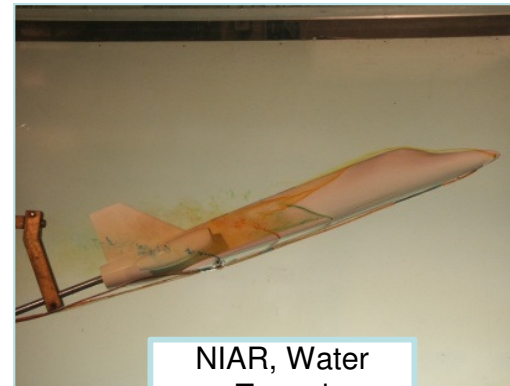
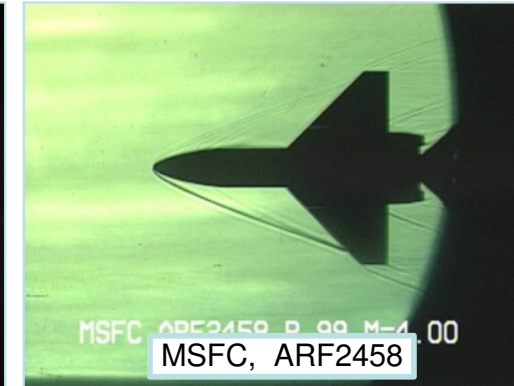
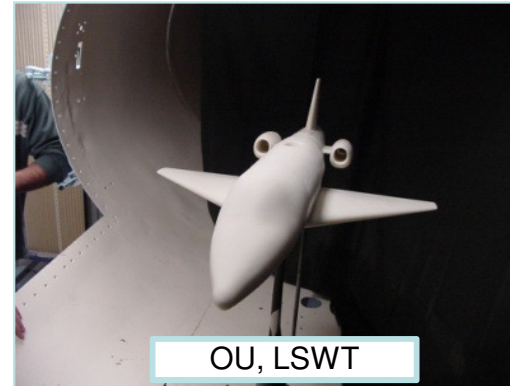
- Built five different models
- About 500 hrs of wind tunnel testing completed on the XP program

- **Wind Tunnel Facilities Used**

- Low Speed
 - LA Comp Subsonic Wind Tunnel, University of Oklahoma
 - Walter H. Beech Wind Tunnel, NIAR, Wichita State University
- High Speed
 - NASA Marshall 14" x 14" Supersonic Wind Tunnel

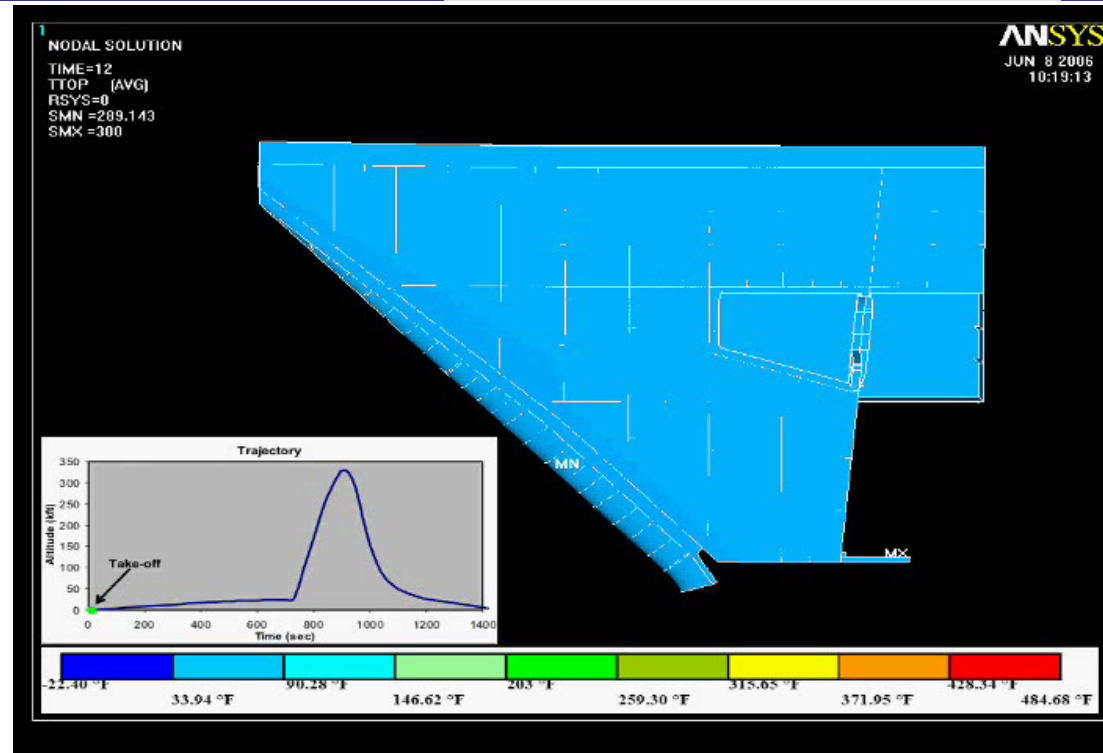
- **Water Tunnel**

- NIAR Flow Visualization Laboratory

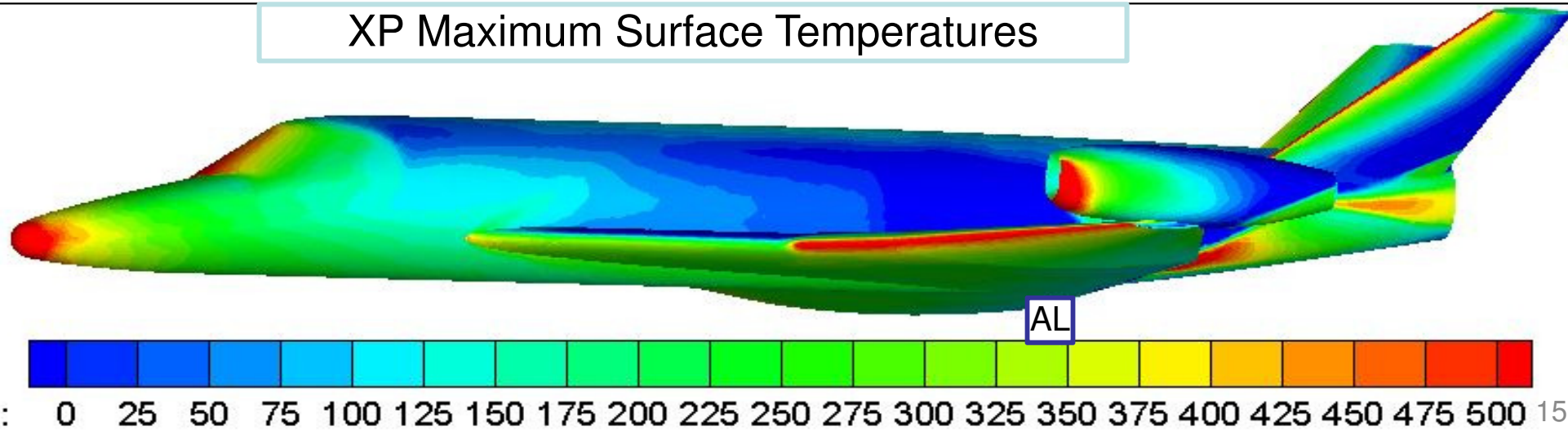


Thermal Analysis

- **Thermal Analysis**
 - Uses Industry Standard Tools
 - Verified Aluminum Airframe With Titanium Edges is Robust Structural Solution
- **Thermal Coatings**
 - Used for Localized “Hot Spots”
 - Proven (X-43) Thermal Barrier Coating

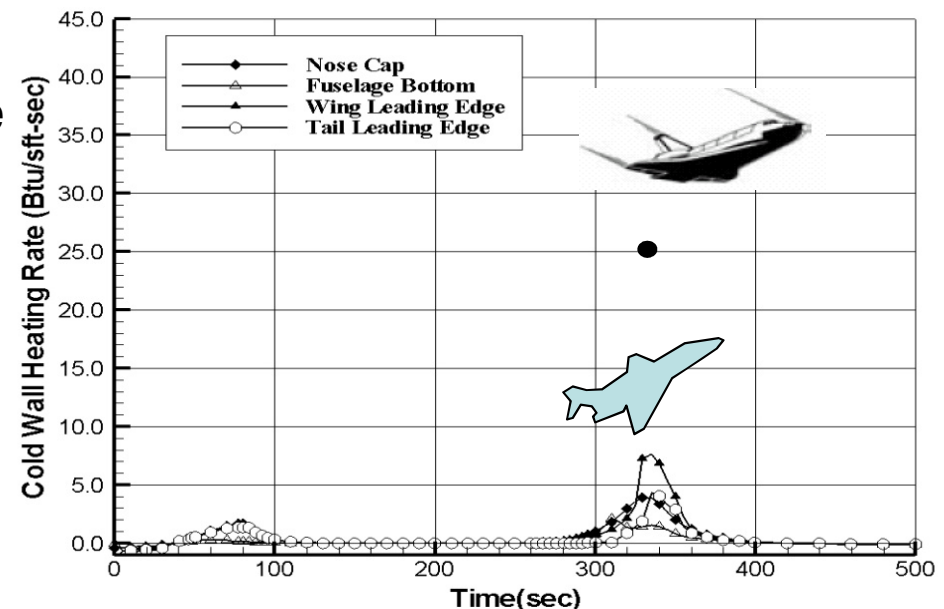


XP Maximum Surface Temperatures



Aero Heating

- **XP Heating Far Less Than Space Shuttle, X-15 or SR-71**
- **XP Surface Temperatures Below Limits of Titanium or Aluminum**
 - Short Duration Exposure = Less Heat Buildup
 - XP < 30% Space Shuttle Heating Rates
 - XP < 10% Space Shuttle Max Temps
 - XP < 3% Space Shuttle Immersion Time
- **XP Thermal Protection Layer**
 - Rejects (Releases) Heat Quickly
 - Common Materials (No “Tiles”)
 - Minimal Coverage of Vehicle
 - Durable, Long Life
 - Monitored after each flight
 - Condition Based Maintenance Routines



XP Re-Entry Heating Far Less Than Space Shuttle

Risk Reduction with Safe Rocket Engines



Blue Origin uses an escape capsule / separate passenger module to improve passenger safety in case there is destructive failure of a rocket engine.

Virgin Galactic uses a hybrid rocket engine to minimize risk of destructive failure. If the engine fails, the rocket has no option but to glide back to Earth, but may not have enough glide time to get back to the landing strip.

Rocketplane will use Exos Aerospace rocket engines, designed and tested to run over 1,000 times without failure, employing Rapid Shut Down (RSD) inherent design elements, just like jet engines.

Destructive testing with **RSD disabled does NOT result in explosion.**

With six of the Exos engines on the Rocketplane, we have significant redundancy to continue flying even if an engine shuts down.

Exos Aerospace Rocket Engines



Exos has 20+ years of innovation with safe, reliable, reusable engines

Exos Aerospace, one of the twelve companies with a current FAA Launch license and just one of three licensed to fly reusable rockets, has made significant contributions to the aerospace industry. They have manufactured hundreds of state-of-the-art rocket engines and developed a myriad of high-performance flying vehicles, including pioneering manned rocket racing planes. These manned systems represent an exciting intersection of cutting-edge technology and human exploration. Moreover, their expertise extends to supplying NASA with lunar lander analog hardware and providing advanced rocket engines for a wide range of spaceplane missions. This impressive track record highlights their dedication to innovation and their pivotal role in advancing space exploration.



Armadillo Aerospace
Founded by John Carmack

Lunar Lander Challenge
1st Place

Rocket Racing League
development program

Super Mod
(VTVL)

4 Launches and 3 recoveries on 1st SARGE vehicle
Aug 2018 – Oct 2019

Italy \$6.4M grant LOI. 2022 -2025
Exos Aerospace Italia Srl work with Defense on Suborbital Air Launch dev and Linerless Type 5 H2 tank manufacture

2022 USAF Contract for Hypersonic Reusable Launch Vehicle

Today

2000 2006

X-Prize Competition w/Pixel and Texel Round 1 Winners

2008 2009

Lunar lander Challenge 2009 Armadillo prize \$ winner- NASA Morpheus Sale

2010

2010-2013 STIG Rocket flies to 95km

2011

Exos Aerospace continues funding of Armadillo Team with new management and commercial objectives

2015 2018

2021 2022

2021 Phase II Air Force Hypersonic Contract

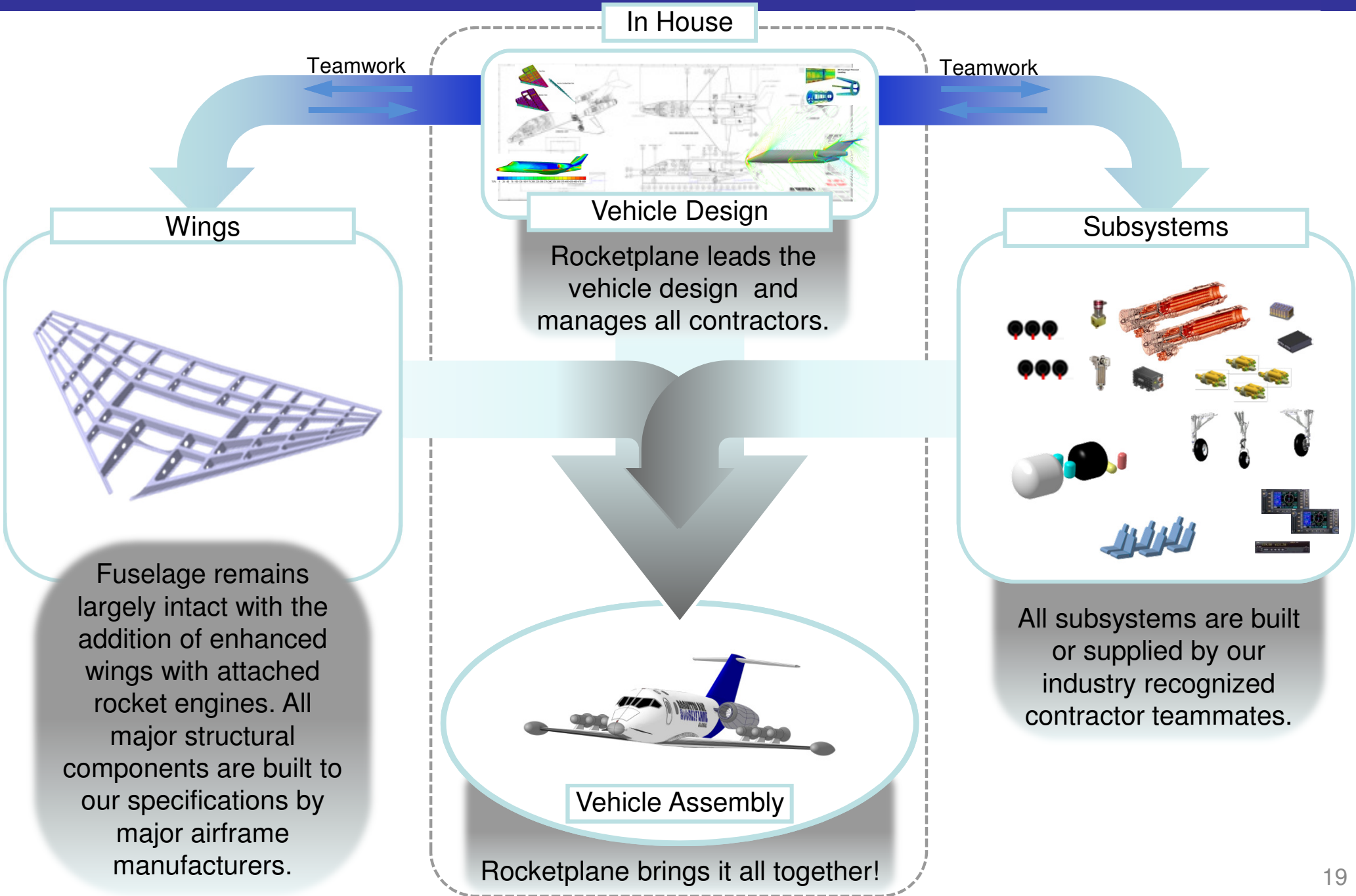
2022 2022 2023

Complete BLK3 Flight demonstration and qualify vehicle for NASA IDIQ and execute on Air Force contracts for additional **no competitive bid** Hypersonics work.

Exos' competitive advantage is demonstrated by what Exos has already done:



How We Plan to Build It



Leadership Team



John Quinn

CEO of Exos Aerospace. Nuclear Submariner, Power Professional, Entrepreneur. Leads a highly skilled team with over 23 years expertly crafting hundreds of rocket engines and numerous high-performance rocket vehicles, including groundbreaking manned rocket racing planes.



John Burgener, Director, CEO

Active with New Space companies for 30 years. Investor/consultant to Rotary Rocket, XCOR Aerospace, Pioneer Aerospace. Teletigiscs, Inc. Owns 100% of Rocketplane Global stock. Owner and director of Telegistics, Inc. and Burgener Research, Inc. Holder of many patents including a 2018 patent on the Rocketplane XS design.



Mitchell Burnside Clapp

CEO of Embassy Aerospace providing consulting and support to DARPA/TTO. Founded Space Development Agency. Acclaimed Test Pilot, Engineer and Physicist. Selected as a Astronaut nominee (89, 91, 93), and has earned various military decorations.

What's Next

Rocketplane is Currently Seeking: \$1.5 million

This seed money will enable Rocketplane to thoroughly review the previous wing design to update to current technology levels, add in rocket engine supports, and LOX tanks, review stress, strain, temperature analysis, run wind tunnel tests on updated design.

Minimal employees, no offices, have contract engineers work from their offices.

Exos will conduct wind tunnel testing.



Year 1

Year 1 of production: \$12.5 million:
Hire aircraft manufacturer to build and test wings. Exos Aerospace build one of the 6 rocket engines with our required details, test and demonstrate interface with Learjet controls.



Year 2

Year 2 of production: \$20.3 million:
Production of operational wings, addition of 6 rocket engines, LOX tanks, buy Learjet, install wings on Learjet. Expect some test flights.



Year 3

Year 3 of production: \$10.6 Million:
Test flights, engineering and mechanical adjustments, first flights to space.



Year 4

Operations: \$6.5 Million:
The vehicle will be given its final testing, shown to be safe and reliable, ready for customers. We expect a profit for the 4th year.

Detailed Financial Requirements



Rocketplane Global, Inc.

Development Costs

Confidential

Note: All prices are in US\$ assuming US location and US personnel. Canadian costs for Canadian location and personnel would be lower.

	Year A	Year A Annual Salary & Expenses	Monthly Expenses No Flights Conducted	Year B	Year B Annual Salary & Expenses	Monthly Expenses No Flights Conducted	Year C	Year C Annual Salary & Expenses	Monthly Expenses Test Flights Conducted	Year 1	Year 1 Operations Annual Salary	Monthly Expenses Commercial Flights Conducted	Total Investment including year one operational costs.	Year 2	Year 2 Operations Annual Salary	Monthly Expenses Commercial Flights Conducted	Cost per flight for 2 flights/month		
Development Costs Start-up Company Personnel Estimates																			
Pilot 1		-	-		-	-	1	\$170,000	\$14,167	1	\$178,500	\$14,875	Pilot	1	\$187,425	\$15,619	\$7,809		
Pilot 2		-	-		-	-		-	-	1	\$175,000	\$14,583	Pilot	1	\$183,750	\$15,313	\$7,656		
Business Development / PR		-	-	1	\$85,000	\$7,083	1	\$87,550	\$7,296	1	\$91,928	\$7,661	PR	1	\$96,524	\$8,044	\$4,022		
Engineers/ Designers (@\$140,000 first three years)	3	\$420,000	\$35,000	5	\$700,000	\$58,333	5	\$700,000	\$58,333	5	\$735,000	\$61,250	Engineers	3	\$463,050	\$38,588	\$19,294		
Aviation Maintenance Technician (@\$63,000/year starting)		-	-		-	-	2	\$126,000	\$10,500	2	\$132,300	\$11,025	Technician	2	\$138,915	\$11,576	\$5,788		
Office Administration/HR (@\$50,000/year starting)	2	\$100,000	\$8,333	2.5	\$128,750	\$10,729	2.5	\$132,613	\$11,051	2.5	\$139,243	\$11,604	Admin	2.5	\$146,205	\$12,184	\$6,092		
Mgmt. - Mgr./CEO	1	\$150,000	\$12,500	1	\$154,500	\$12,875	1	\$159,135	\$13,261	1	\$167,092	\$13,924	CEO	1	\$175,446	\$14,621	\$7,310		
Mgmt. - Chief Engineer	1	\$140,000	\$11,667	1	\$144,200	\$12,017	1	\$148,526	\$12,377	1	\$155,952	\$12,996	Chief Engineer	0.5	\$81,875	\$6,823	\$3,411		
Mgmt. - Chief Rocket Engineer	1	\$140,000	\$11,667	1	\$144,200	\$12,017	1	\$148,526	\$12,377	1	\$155,952	\$12,996	Chief Rocket Engineer	1	\$163,750	\$13,646	\$6,823		
Mgmt. - Accountant	1	\$65,000	\$5,417	1	\$66,950	\$5,579	1	\$68,959	\$5,747	1.5	\$108,610	\$9,051	Accountant	2	\$152,053	\$12,671	\$6,336		
Total Salary	9	\$1,015,000	\$84,583		\$1,423,600	\$118,633		\$1,741,308	\$145,109		\$2,039,577	\$169,965	Total Salary		\$1,788,994	\$149,083	\$74,541		
Total People	9		0	12.5		0	14.5		0	15		0		13		0	\$0		
Health Insurance Calculated at \$2400 / person / month		\$259,200	\$21,600		\$360,000	\$30,000		\$417,600	\$34,800		\$432,000	\$36,000			\$374,400	\$31,200			
401K Match 5%		\$50,750	\$4,229		\$71,180	\$5,932		\$87,065	\$7,255		\$101,979	\$8,498			\$89,450	\$7,454	\$3,727		
Total Salary + Health Insurance + 401K		\$1,324,950	\$110,413		\$1,854,780	\$154,565		\$2,245,973	\$187,164		\$2,573,555	\$214,463	Total		\$2,252,844	\$187,737	\$93,868		
Start-up Company Office Expenses			N/A			N/A			N/A			N/A				N/A			
Insurance Fees		\$100,000	\$8,333		\$120,000	\$10,000		\$120,000	\$10,000		\$120,000	\$10,000			\$120,000	\$10,000	\$5,000		
Hanger Rent Charge		\$360,000	\$30,000		\$360,000	\$30,000		\$360,000	\$30,000		\$360,000	\$30,000			\$360,000	\$30,000	\$15,000		
Office Space		\$75,000	\$6,250		\$120,000	\$10,000		\$120,000	\$10,000		\$120,000	\$10,000			\$120,000	\$10,000	\$5,000		
Utilities		\$6,000	\$500		\$12,000	\$1,000		\$14,000	\$1,167		\$14,000	\$1,167			\$14,000	\$1,167	\$583		
Total Office Costs		\$541,000	\$45,083		\$612,000	\$51,000		\$614,000	\$51,167		\$614,000	\$51,167	Total Office		\$614,000	\$51,167	\$25,583		
						# Flights					# Flights	Fuel Cost / Flight			# Flights				
Rocketplane Jet Fuel/flight (1000 L @ \$1.25/L)						20		\$25,000		12		\$15,000	\$1,250		24		\$30,000	\$2,500	\$1,250
LOX (5000 L/flight @ \$1.50/L)						10		\$75,000		12		\$90,000	\$7,500		24		\$180,000	\$15,000	\$7,500
Ethanol (3600 L @ \$2.00/L)						10		\$72,000		12		\$86,400	\$7,200		24		\$172,800	\$14,400	\$7,200
Total Fuel								\$172,000				\$191,400	\$15,950	Total Fuel			\$382,800	\$31,900	\$15,950
Learjet		\$3,000,000									\$100,000				Learjet Maintenance	\$200,000	\$16,667	\$8,333	
Modified Wing		\$2,800,000			\$7,000,000			\$1,000,000											
Wind Tunnel Testing		\$400,000			\$400,000			\$100,000											
Rocket Engines		\$2,500,000			\$4,000,000			\$1,000,000			\$1,000,000				Rocket Maintenance	\$1,000,000	\$83,333	\$41,667	
Engineering & Design Subcontractors		\$2,400,000			\$6,800,000			\$5,400,000			\$2,000,000					Total Cost Per flight		\$185,402	
Year's Expenditures		\$12,565,950			\$20,266,780			\$10,603,973			\$6,478,955	Total Expenses	\$49,915,659		\$4,449,644	Total Expenses/ Operating Year		\$4,449,644	
												Income from 12 flights "@ \$225,000/ticket, 3 tickets per flight"	\$8,100,000			Income from 24 flights "@ \$225,000/ticket, 3 tickets per flight"		\$14,400,000	
												Total Investment required	\$41,815,659			Total Income in Year 2		\$9,950,356	
Note: First Rocketplane vehicle will cost approx. \$50 million, of which approx. \$20 million is engineering. The second Rocketplane vehicle will cost approx. \$30 million. The income is based on 2 flights per month, however the design should allow one flight per day, so the income may rise significantly above this forecast.																			
Theoretical Ongoing Cash Balance (Before investor monies)		-\$12,565,950			-\$32,832,730			-\$43,436,703			-\$49,915,659		-\$41,815,659		-\$46,265,302			-\$31,865,302	

\$50 million investment over 4 years,
 \$10+ million income/year revenue once operating with 2 flights per month.
 \$25+ million/year revenue at 4 flights per month.
 The Rocketplane design allows 1 flight per day. \$67,000 in direct costs per flight.
 \$225,000 per ticket for the first 1000 passengers, 3 passengers possible per flight.

Join us in Providing Unparalleled Human Spaceflight Experiences



Economic Benefits:

- **\$10+ million per year income with two flights per month**
- **\$25+ million per year income with four flights per month**
- **Potential for many flights per month**
- **\$67,000 direct expenses per flight**
- **\$225,000 per ticket, up to 3 passengers per flight**
- **Competition have shown huge demand for such experiences**
- **Spaceports are available in USA, Canada, UK, Germany, Saudi Arabia, Japan, Australia. We plan to have rocketplanes in many locations as profits allow expansion.**

Personal Benefits:

- **Fly to Space yourself, in the safest, most comfortable rocket vehicle**
- **Bring your friends**

Future:

- **Well developed satellite launch vehicle**
- **Lunar shuttle**

