

Investment Partnership Opportunity John Burgener jburgener@rocketplane.com www.rocketplane.com (905) 617-0788

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





Competitive Landscape

PROCHETPLANE *GLOBAL*

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 (Ib)	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							
	Ethanol and Liquid	HTPB and	Liquid Hydrogen				
Oxidizer/Fuel	Oxygen	Liquid Nitrous Oxide	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



Aero Analysis Validation

BOCKETPLANE

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

BOCKETPLANE GLOBAL

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





Design For Safety



Aero Heating

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- 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





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



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 highperformance 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.

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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 highperformance 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. 20

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 4

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



Year 3

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



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 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.

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 lowe

Development Costs	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	
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	\$14,673		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	3 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	
Mamt Chief Reaket Engineer		\$140.000	\$11.667		1 \$144.200	\$12.017	1	\$149 526	\$10.077	1	\$155.053	\$12.006		Chief Rocket	1	\$162.750	\$12.646	¢6 972	
Mamt Accountant		\$140,000) \$11,007		1 \$66.05	φ12,017	1	\$140,020	\$12,377 \$5.747	1.5	\$109,552	\$0.051		Accountant	2	\$103,730	\$13,040	\$0,823	
Tatal Calan		\$05,000	0 4 5 0 4 F 0 2		00,50	0 \$3,379		\$00,909	\$3,747	1.4	\$100,010	\$9,001		Total Calant	2	\$132,033	\$12,071	\$0,330	
Total Salary		\$1,015,000) \$04,503	10	\$1,423,000	5110,033	14.5	\$1,741,300	\$145,109	15	\$2,039,577	\$109,903		Total Salary	10	\$1,766,994	\$ 149,063	\$74,541	
Hoolth Insurance Colculated at \$2400 / percen / month		\$250,200	C \$21.600	1 12	C.	000.002	14.0	\$417 600	000 100	13	\$433.000	\$26,000			13	\$274.400	\$21,200	\$0	
101/ Mateb 59/		\$259,200	\$21,000		\$300,000	5 \$50,000		\$417,000	\$34,000		\$432,000	\$30,000				\$374,400	\$31,200	¢0 707	
40 IK Match 5%		\$50,750) \$4,229		\$71,10	J \$5,932		\$67,000	\$7,255		\$101,979	\$0,490		Tatal		\$69,450	\$7,434	\$3,727	
Total Salary + Health Insurance + 401K		\$1,324,950	5110,413)	\$1,654,760	5 5154,505		\$2,245,975	\$107,104		\$2,573,555	\$214,403		TOTAL		\$2,252,044	\$107,737	\$93,606	
Start-up Company Office Expenses			N/A			N/A			N/A			N/A					N/A		
Insurance Fees		\$100,000	\$8,333	3	\$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	5	\$612,000	\$51,000		\$614,000	\$51,167		\$614,000	\$51,167		Total Office		\$614,000	\$51,167	\$25,583	
							# Fliahts			# Fliahts		Fuel Cost / Fight			# 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		Total Fuel	\$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	0		\$1,000,000											
Wind Tunnel Testing		\$400,000)		\$400,000)		\$100,000											
De start En stare		6 0 500 000			* 4 000 000			* 4 000 000			61 000 000			Destantist		64 000 000	6 00 000	6 44.007	
Rocket Eligines		\$2,500,000			\$4,000,000			\$1,000,000			\$1,000,000			Rocket Maintenance		\$1,000,000	\$03,333	\$41,007	
Engineering & Design Subcontractors		\$2,400,000	J		\$6,800,000	J		\$5,400,000			\$2,000,000						Total Cost Per flight	\$185,402	
Vaars Evnenditures		\$12 565 950			\$20,266,78			\$10 603 973			\$6 478 055	Total Evnenses	\$49 915 659			\$1 119 611	Total Expenses/		\$4 449 644
		¢12,000,000			\$20,200,70	5		¢10,000,370			φ0,470,300	Total Expenses	ψ 1 0,010,000			φ 1,113,011	operating real		ψ+,++3,0++
												Income from 12 flights	\$8,100,000				Income from 24 flights		\$14,400,000
												"@\$225,000/ticket, 3					@\$225,000/ticket, 3		
												tickets per flight"				1	tickets per flight"		
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 fights per month, however the design should allow one flight per day, so the income may rise significantly above this forecast.												Total Investment required	\$41,815,659				Total Income in Year 2		\$9,950,356
Theoretical Ongoing Cash Balance (Before investor monies)		-\$12 565 950			-\$32 832 734	1		-\$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