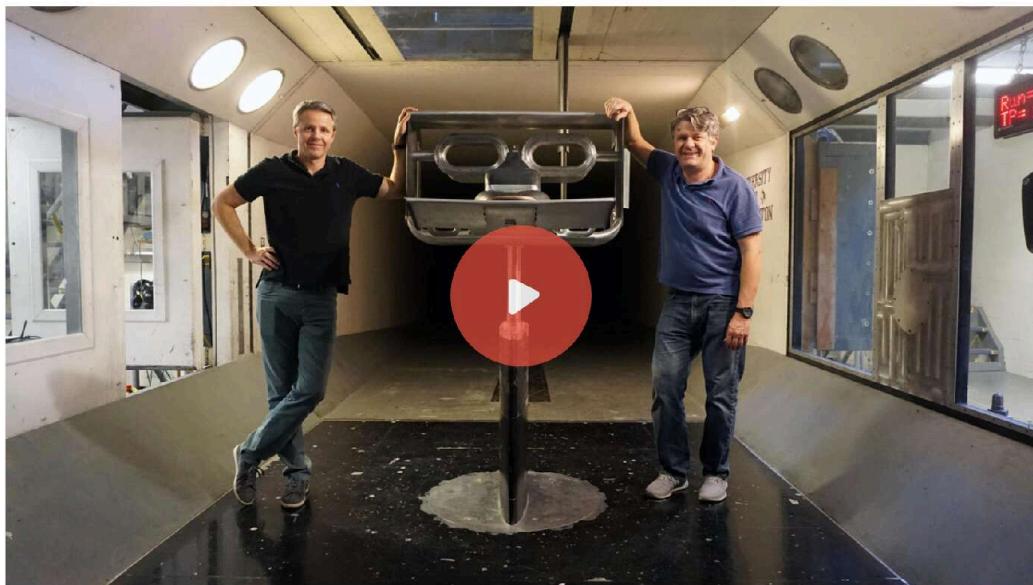


Commonplace aerial mobility for people and cargo with revolutionary Fluidic Propulsive System

[PITCH VIDEO](#) [INVESTOR PANEL](#)



jetoptera.com Edmonds WA [Twitter](#) [Facebook](#)

Hardware Infrastructure Technology Infrastructure

[OVERVIEW](#) [UPDATES 4](#) [WHAT PEOPLE SAY 48](#) [ASK QUESTION 21](#)

Highlights

- 1 Realizing the vision of a flying car and deploying capable drones, a \$1.5 Trillion market by 2040
- 2 Prototypes flying today; safer, 30 dB quieter, twice as fast, energy agnostic compared to any VTOLs
- 3 The Fluidic Propulsive System is the quietest aviation propulsor ever; "sounds like wind, not like a machine"
- 4 Awarded 42 patents, more than 150 pending; extensive R&D with \$7.8mm invested to date
- 5 Five contracts awarded from the US Air Force and US Army.

Our Team



Andrei Tristan Evulet CEO/CTO/Co-Founder



Aerospace engineer, 15-year GE career in R&D and Technology, Technology Integration Manager for the record-shattering GE9X, the largest ever turbofan, main inventor with over 50 patents, PhD in Aerospace Engineering.

We think of a more detailed and mutually beneficial integration of the propulsor with the airframe. Our name reflects that approach. All other aircraft bolt conventional multi-blade propulsion systems onto the airframe with no synergy. FPS enables us to augment thrust and lift at the same time. It's revolutionary and the benefits are exceptional.



Simina Farcasiu CFO and Co-Founder

Entrepreneur in finance, software and energy, Chief Investment Officer, Belstar Management Company; CEO and Founder Lower48 Analytics, SAAS platform for upstream oil and gas investment management.



Todd E Newton Vice President of Business Development

Extensive 27-year experience in Aerospace Business Development, 26 years in USMC (Infantry) Pvt-LtCol; Manned & Unmanned Aircraft Systems, Sensors & Controls.

[SEE MORE](#)

Pitch

JETOPTERA

Fluidic propulsion, capable drones, and aerial mobility
A revolution in the way we transport cargo and people



JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending

1

Jetoptera's Vision and Mission

Vision

Commonplace aerial mobility

Mission

Use Fluidic Propulsion and Lift Enhancement to create vertical and short takeoff and landing (V/STOL) quiet aircraft of unmatched speed, range, payload, and efficiency to transport cargo and people



Team



Andrei Eruel
CEO/CTO



PhD Aero, Rutgers
BS UMIST, MS PIB
Manager at GE Aviation
25-year experience in
R&D and propulsion
50+ patents

Technology Maturation Leader
GE9X – world's largest jet engine



Denis Dancinet
Chairman/BOD

PhD CS, Carnegie Mellon
BS CS, BA Math UPenn
Partner quant hedge fund
MD at Morgan Stanley
Started new trading venture
Private pilot



Todd Newton
VP Business Dev



BA, Oregon State
LtCol US Marine Corps
Numerous deployments
26-year experience in
Defense Aerospace
Multiple roles



Simina Farcasiu
CFO

PhD London, AB Princeton
Entrepreneur finance
and energy fields
CIO, PM hedge fund
MD Bear Stearns, Merrill Lynch
Quant finance experience

Problem: Where Is the Flying Car?



Legacy Approaches

	Fuel	Electric/hybrid	
Propeller			Is this our only, noisy choice?
Jet			➤ Helicopter Slow, big footprint, loud, complex, expensive
			➤ Tiltrotor Huge footprint, loud, very complex, very expensive
			➤ Harrier Extremely loud, complex, expensive and hot exhaust
			➤ eVTOL Slow, big footprint, complex, low battery energy density

Solution: Fluidic Propulsion



Jetoptera has succeeded in making
fluidic propulsion work in aviation.
Patented and demonstrated in flight





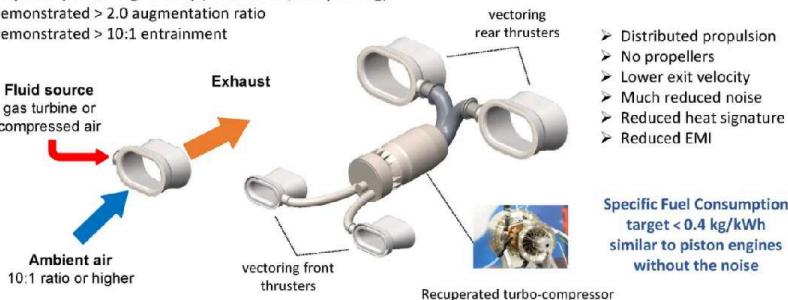
JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending.

6

Fluidic Propulsive System™

- Proprietary internal geometry (42 awarded, 158 pending)
- Demonstrated > 2.0 augmentation ratio
- Demonstrated > 10:1 entrainment



JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending.

7

Lift Enhancement

FPS enables tilt-wing VTOL and extreme STOL solutions – lift augmentation up to 2.5x thrust



- Non-round shape, conformation with wing, Boundary Layer Ingestion + Blown Jet Surface combine to lift coefficients of over 6.0 (C_L)
- Unlike propellers, unidirectional efflux is efficient
- Deploy on upper surface of airfoil reduces noise
- Faster exhaust jet increases augmentation
- Combination of thrust and lift enables VTOL
- Large amount of lift enables large payloads at expense of bigger wingspan, as well as extreme STOL (40 ft ground roll)
- At higher speeds potential to lower Drag via retractable FPS

JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending.

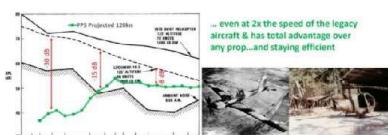
8

FPS = Fluidic Propulsive Silent

“It is important to note that your device (FPS), as comprised so far, will not sound like a machine. It will sound more like wind!”

Dr. Robert Dougherty, AIAA Aeroacoustics 2020 Prize Awardee

FPS™ – Extremely Quiet without Compromising Speed

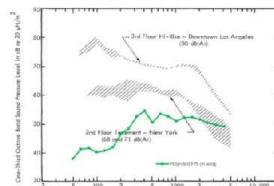


- noise from a rotary wing or propeller plane dominated by the blade movement
- Electric, piston and turbine driven propellers make similar noise and have tones that cannot be eliminated
- A “silenced” propeller has a compromised efficiency by deliberately slowing down its rotation speed and inherently the aircraft speed – and still is much noisier
- FPS has no tones
- It really sounds like the wind
- Aeroacoustics data proven 20-35 dBA lower than the quietest propeller ever devised
- 40-50 dBA lower than the quietest helicopter
- Any FPS will not be heard 200 ft above a city like LA or NYC, nor over a quiet rural neighborhood

JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending.

9



A New Way of Doing VTOL

Thrust + Lift Augmentation Never been combined before	Fast Speeds 200 – 400+ kn; retract thrusters at higher speeds
Fluidic Blown Wing Make wing work on vertical takeoff	Recuperated Turbine Piston-level SFC at fraction of weight
Simple Single system for VTOL and forward flight with no propellers	Low Noise Significantly quieter than helicopters or turbofans. Expect <50 dBA @ 400 ft
Distributed Propulsion Better coverage for higher portion of upper wing	Reliable Well understood, dependable, easy to certify gas turbine
Multiple Configurations Very compact, high L/D	Lower Cost Both to acquire and maintain
Fuel Agnostic Easily convert to hybrid or all electric	

JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending

10

Proven Solution

We have demonstrated Fluidic Propulsion in static, wind tunnel, and flight tests



JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending

11

Why Now?

Coandă effect (1910) Tendency of a fluid jet to stay attached to a convex surface and entrain additional fluid  Known for 100 years	Rockwell XFV-12 (1970s) Attempted to use Coandă ejectors for vertical flight only 
Bladeless fan (pat. 1981) Uses Coandă effect to create lower pressure area and mix entrained air  Gives entrainment but little thrust or speed	Boeing YC-14 (1970s) Used Coandă effect for blown flaps, Boundary Layer Control  BAE Demon (2010) Uses Coandă effect for flapless flight 

Holistic focus + innovation + enabling technology

- Focus on designing single system for vertical and horizontal flight; integrate propulsion and airframe
- Design a better ejector to increase thrust augmentation
- Integrate airframe and propulsion in novel ways to increase lift enhancement
- Rise of computer technology for simulation (CFD) and 3D printing (rapid prototyping)

JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending

12

Products

VTOL	J-300/500  Payload: 50/200 lbs Range: 500 mi Speed: 200 mph	J-1000  Payload: 200/400 lbs Range: 600/300 mi Speed: 200 mph	J-2000/4000  Payload: 450/1100 lbs Range: 500 mi Speed: 200 mph	High-speed  Payload: 450-1100 lbs Range: 900+ mi Speed: 400+ mph	
STOL	Solutions for STOL aircraft: FPS + USB for up to 10,000 lbs  Payload: 500 lbs Range: 250 mi	 Payload: 200 lbs Range: 500 mi	 Payload: 1,100 lbs Range: 1,100 mi	 Payload: 2,000 lbs Range: 1,200 mi	Licensing  License or sell Fluidic Propulsive System for VTOL

Market and Customers



Source: Five-year cumulative total addressable market estimates based on data from Goldman Sachs Drone Report, AT&T Freight Transportation Forecast, General Aviation Manufacturers Association, Morgan Stanley
© 2021 JETOPTERA, U.S. and International Patents Pending

14

Timeline and Financials*



© 2021 JETOPTERA, U.S. and International Patents Pending

15

Traction

- Won three military contracts plus two 2021 SBIR notices of award – completed a US Army Aerial Delivery Directorate and 2 USAF STRR Agility Prime VTOL;
- Invitation for VTOL demonstration at NEOM
- Cooperative Research and Development Agreement with US Navy
- Partnerships with GE Aviation, Honeywell
- Finalists in the AUVSI Xponential Startup Showdown, Starburst Accelerator and featured in the Dubai Airshow
- Selected by the U.S. Air Force for the High-Speed Vertical Take-Off and Landing (HSVTOL) Concept Showcase
- Awarded 42 patents, 158 pending



The future of air mobility needs a new propulsion system.

Help us deliver it.

info@jetoptera.com





JETOPTERA

© 2021 JETOPTERA, U.S. and International Patents Pending

17