

March/April 2022

S. M. S. M.

World's Fastest Private Jets



***Private Flying Takes Off, Boosting Demand for Business Jets
Some well-heeled, would-be private-jet fliers are being turned
away as industry booms***

November 27, 2021 - By Doug Cameron

THE WALL STREET JOURNAL
WSJ

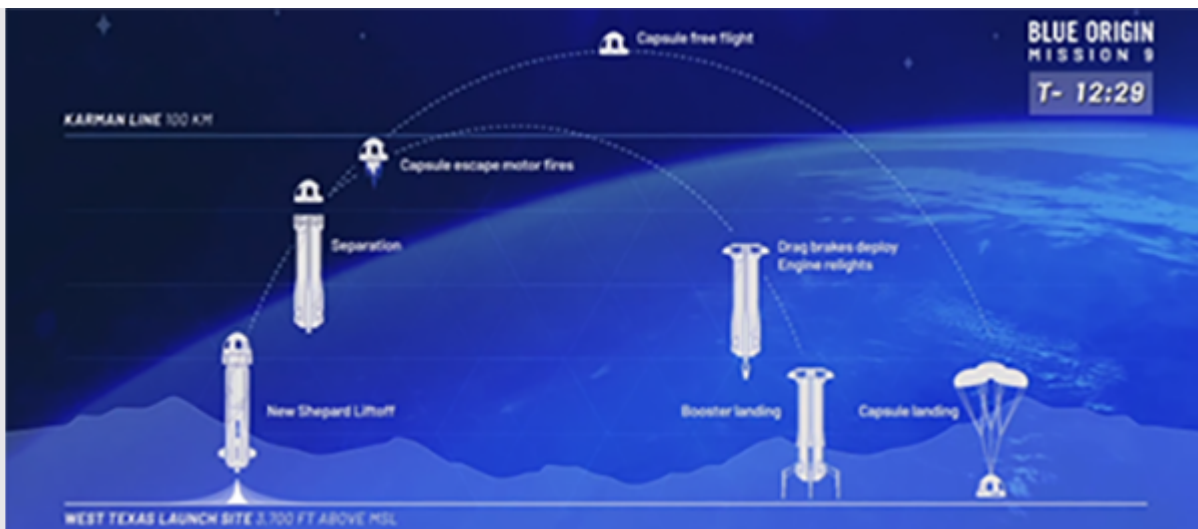
Register for FastForward Group Call

HUMAN SPACE FLIGHT

HSAT's collaborator, industry leader, friend and colleague **Dr. George Nield** flew in the **New Shepard's 20th mission** and fourth with humans onboard. Sharing George's experience on a call, we discussed the flight, the launch, the re-entry, and the landing at a different location. Thus, albeit over a small distance, the spaceflight could still be considered a "tiny" Point-A-to-Point-B flight. Much like the Wright brothers first flights were small hops, yet precursors to the Point-A-to-Point-B air transportation industry, so shall these first spaceflights usher in a new type of transportation. For all of us, in the High-Speed Aerospace Transportation (HSAT) industry, small steps are exciting, welcome, and encouraging milestones to the future Point-to-Point, Spaceport-to-Spaceport HSAT industry that we envision. Gradatim Ferociter, for a Point-to-Point HSAT future.



(photo credit: Blue Origin)



ORBITAL

This quarter has also kept us watching for the Space X's Starship first Orbital test flight from Boca Chica, Texas to Hawaii, the long way around the world and with an estimated flight time of around 90 minutes. This is the Point to Point that could change the HSAT game, forever.

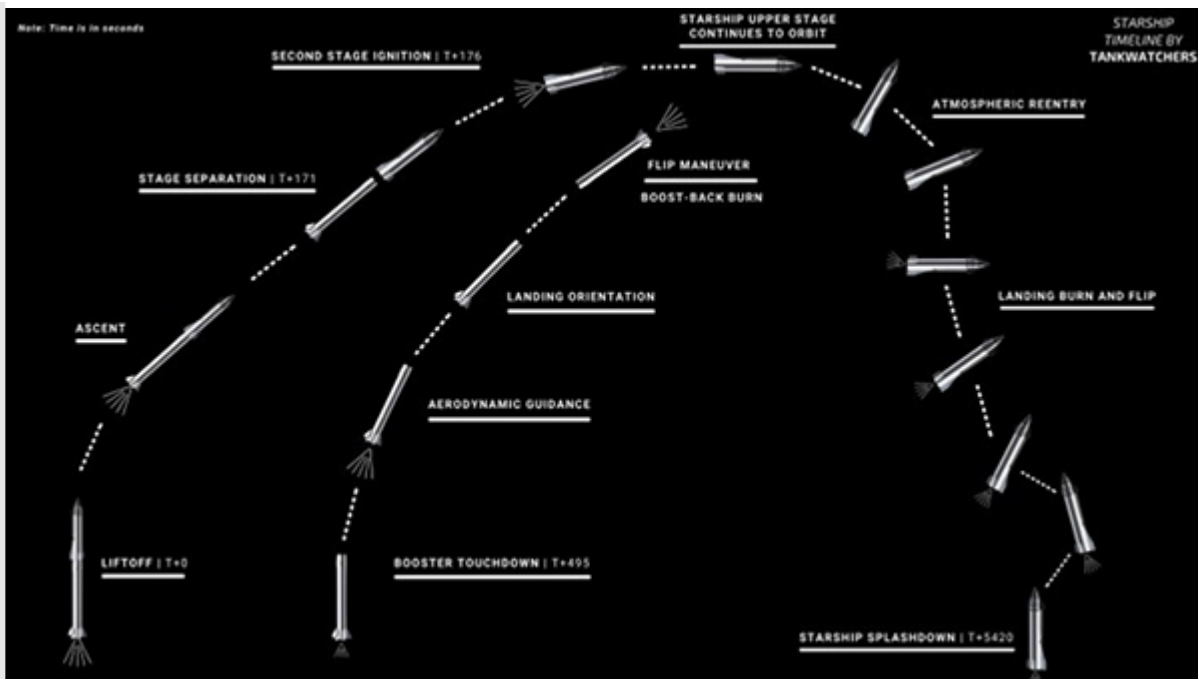
(photo credit: DARPA)



HYPERSONIC

The Department of Defense (DOD) impetus and appetite for hypersonic flight testing keeps growing, the tests however still need to increase in tempo and flight times massively. It was encouraging to see Lockheed Martin-Aerojet Rocketdyne's Hypersonic Air Breathing Weapon successful test, the first in six months. We need much more, on the ground, CFD, wind tunnel, high enthalpy. We need, 10's of thousands of hours of a variety of tests, and we are tens of billions of dollars behind the power curve. Let's focus on a "Fly Forward Faster Better" mentality for our Nation and the Free World (building anything back does not help).

Register for the HSAT Workshop



HIGH SPEED CORRIDOR

This quarter, we also confirmed the feasibility of operating a high-speed R&D corridor in West Texas joining Midland Spaceport (one and only with scheduled carriers) to Spaceport America (one and first for winged suborbital commercial spaceflight service), and transiting through the White Sands Missile Range, my personal kudos and tanks to the FAA AVS, AST and DOD teams that supported the efforts of a very capable Kimley Horn Air and Space consulting team. Next steps, proving runs; supersonic, hypersonic and suborbital, coming in late 2022 and throughout 2023, stay tuned!

(photo credit: Rolls Royce)

ENABLING NEXT GENERATION HIGH-SPEED AND SUSTAINABLE FLIGHT

Transform the performance and efficiency of aircraft engines

Enable high speed – supersonic and hypersonic – flight capability

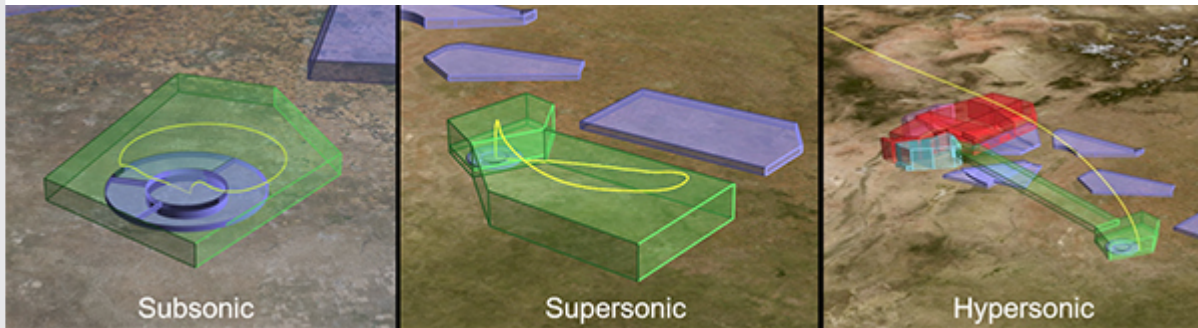
Support the drive towards more sustainable aviation

HSAT AIRSPACE CORRIDOR WHITE PAPER

Also, our Spaceport to Spaceport (S2S) HSAT Airspace Corridor White Paper progress was presented at the FAA Center of Excellence for Commercial Space Transportation

FAA-COE-CST last ATM Meeting held at FIT, in early April. We look forward to completing the White Paper in 2022 and informing the successor FAA AST about the findings, and recommendations to enable S2S Corridors Nationwide and then globally (the EU's and Germany DLR's input were notably present at the meeting). We send Kudos to Ken Davidian, FAA AST and David Klaus, CU Boulder for the excellent work and vision to make HSAT-FF and IFG an Associate Member of the COE a few years ago. Godspeed FAA COE-CST!

(Photo Credit: Midland Development Corporation)



IN CONCLUSION

This quarter, I was privileged to Co-Lecture an Embry-Riddle Aeronautical University Mini-MBA class on aerospace and aviation sustainability course, together with Dr. Anke Arnaud. The theme of the sustainability of HSAT piqued the students and faculty attention. We obtained excellent input to incorporate into the upcoming HSAT Environmental and Sustainability Working Group. As we concluded by consensus on the HSAT 4th Edition Workshop, December 2022, a Working Group must be stood up this year to lead the factual, objective, and relevant guidance about the environmental impact of the HSAT industry. Please, let us know if you would like to contribute to the Working Group, on this every day more relevant dimension of HSAT.



ASTM INTERNATIONAL
Helping our world work better

Committee F47 on
Commercial Spaceflight



University Consortium for
Applied Hypersonics



GLOBAL
SPACEPORT
ALLIANCE



INNER SPACE TRAINING

IGNITE YOUR MISSION - TRAIN LIKE AN ASTRONAUT

For More input on HSAT throughout the month of May and going forward, follow us on LinkedIn and Comment on the Postings



The HSAT-FF Groups are Non-Profit wholly owned subsidiaries of IFG, please support us by donating through Patreon today:



HSAT Advertising and Resources Page

For Advertising on HSAT and The Bulletin; Please Contact
yvettegarcia@fastforwardproject.com +1-305-904-5182

Donate to HSAT - FF