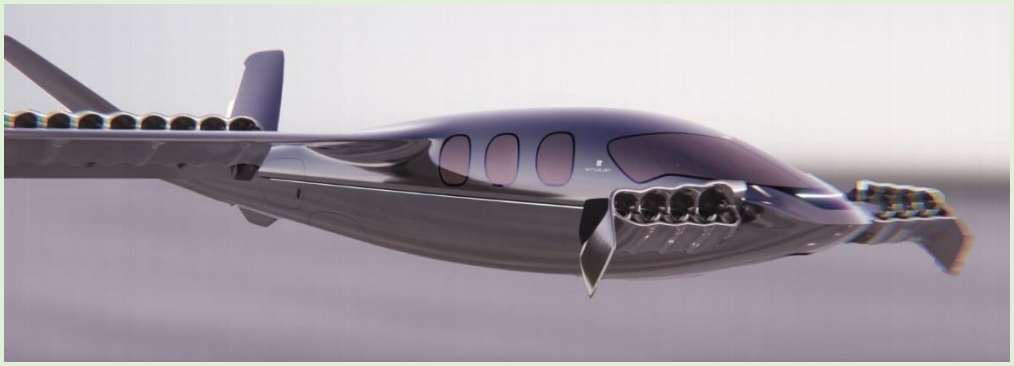
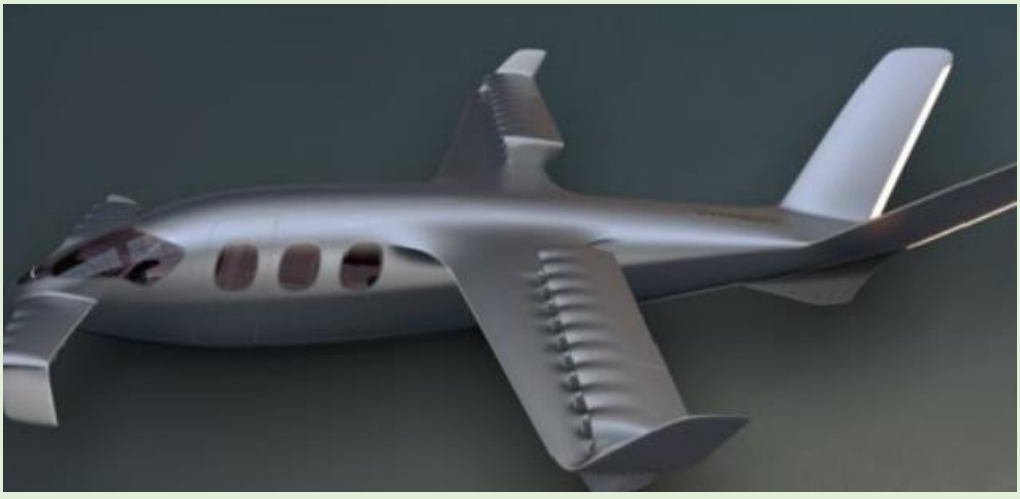
Sirius Jet

Hydrogen-Powered Aviation





Moderating the hydrogen aviation focus group is an interesting role which brings contact with a significant number of energy sector transformers and innovators around the world.

They bring vision and are often disruptive for sectors which may have considered them establish established but now facing challenges around the net zero agenda.

A couple of weeks ago I shared a couple of items on the emerging Sirius Jet concept

Sirius-aviation-ag-unveils-world%E2%80%99s-first-hydrogen-vtol-aircraft-sirius-jet

And, after publication, a pleasant and informative conversation was with David Crawford, a member of the Sirius team based in Sydney in Australia although there are also and facilities in both Switzerland and United States

The Sirius Jet company itself has done much background work sometimes it's not obvious to people in the sector, where all the research and development time and effort goes especially in a sector so regulated as the aviation sector. It’s not always the most glamourous part of major project management for key stakeholders certainly the most important,

David was kind enough to share some of his thoughts about his company, the background and his aspirations with me as Sirius jet came into London last week with something of a splash in an exhibition displaying their new flexible 28 fan hydrogen fuel cell jet

concept, - twenty of which are operant during flight - and eight as back up for reasons of safety and redundancy.

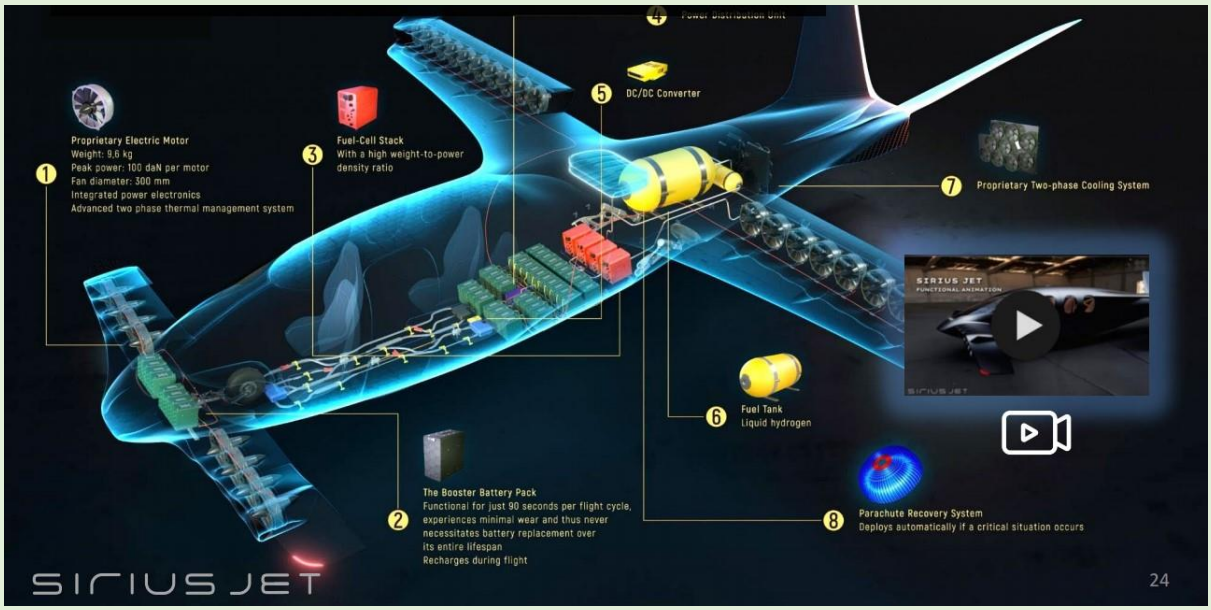
Although it wasn't flying in our capital, one of the homes of world finance, the hydrogen powered jet is it is a portent what might be coming and gain significant press traction, I was able to dig in and share some and learn some of the facts behind the concept and share them with you. The route to certification is, of course, vital, and documented in the indicative datasheet below.

Phase	Description	Timing	Date
Pre-Application	FAA prelim brief & plan	6-12 m	Mar 2022
Formal Application	Part 23 intention	Day 0	Sep 2024
Design Assessment	Design, System, Components Review	1-2 y	Dec 2024
Performance Assessment	Performance standards tests	Concurrent with Design	
Test Flights	Gather data in op. condition	1-2y overlapping	Jun 2025
Compliance Demo	Simulations, Analysis	2-3y	Jun 2026
Certification Review	Review	6-12 mos.	Jun 2027
Final Approval	Safety & Regs		Aug 2028

Such an innovative and potentially disruptive concept does not come from nowhere. It brings a formidable heritage they come from almost 100 years of aviation history with a long catalogue of success, including with Antonov and Airbus.

This credibility makes global senior level partner and stakeholder and global engagement more straightforward than may otherwise be the case in convincing safety regulators, airports, supply chain and especially the insurance sector that there's really is robust and viable

product. This process must be done before the business jet into mass production, perhaps two or three years hence.



The futuristic high-end design also shows, significantly, a design influenced by BMW and a sign of where the sector is going in and beyond the automotive sector as Sirius Jet flies from the boutique to the industrial in the next three or four years.

Flexible hydrogen fuel cell powered fans allow for much smaller take-off and landing areas, flexibility of siting and significant noise constraint advantages over convention kerosene powered aircraft a promising future awaits.

Stay tuned and I'll keep in touch with David and the Sirius Jet team, and endeavour to keep you informed as to where the future of aviation may ultimately lie.

Stay informed at the moderated focus group

https://bit.ly/32dolZb

Hydrogen Aviation