

POWERED BY



— This is the decade for electrified aviation



Our Vision

A sustainable future for all air travel, with energy-optimized aircraft that make flying cleaner, quieter, safer, and more affordable than ever before.



Our Mission

To be the world's most trusted developer of practical, compelling electric aircraft from short haul cargo to supersonic passenger transport.

Electric propulsion pioneers



The World's First Commercial Hybrid-Electric AircraC

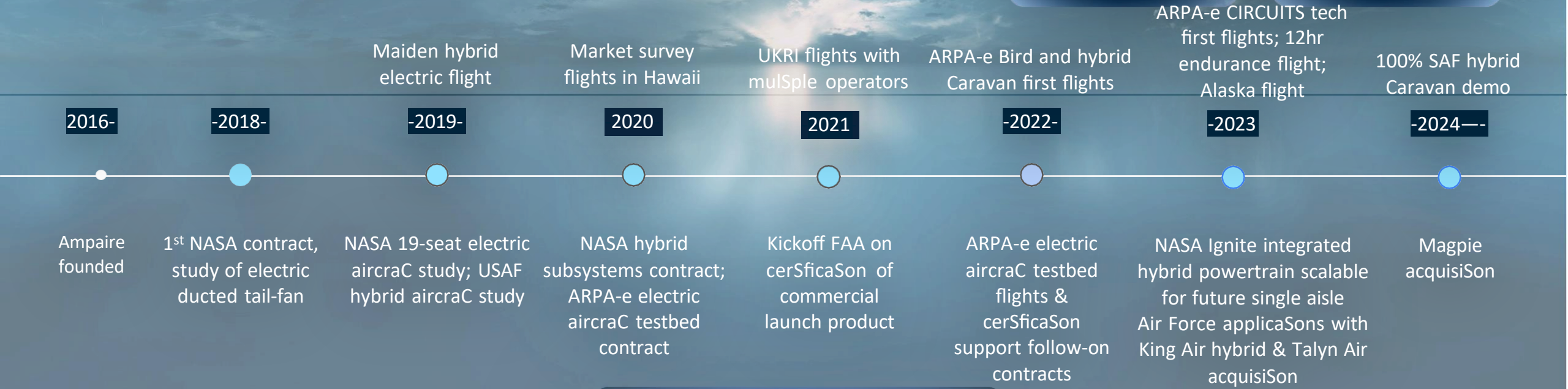
1,375+
Mile range (record breaking)

30,000+
Miles flown hybrid

Flying Faa Market Survey Flights On Airline Routes

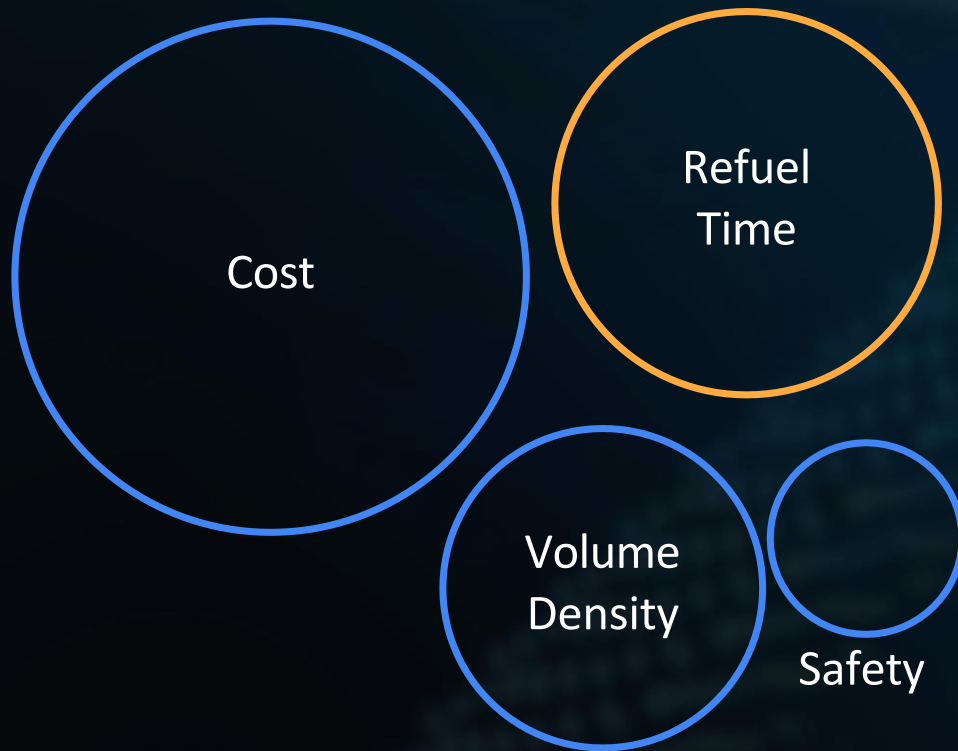
100%
Dispatch reliability

40%+
Fuel Cost Saving



ESS Challenges, Past & Remaining

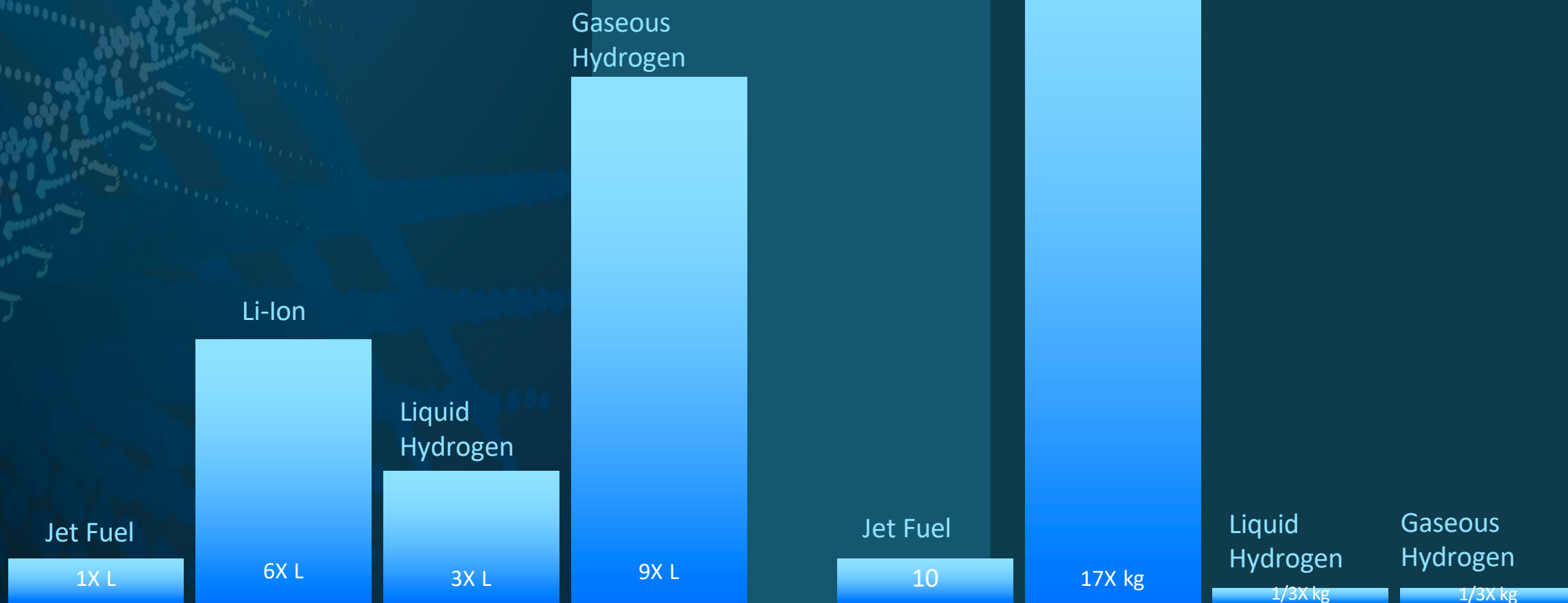
Automotive—



Aviation—

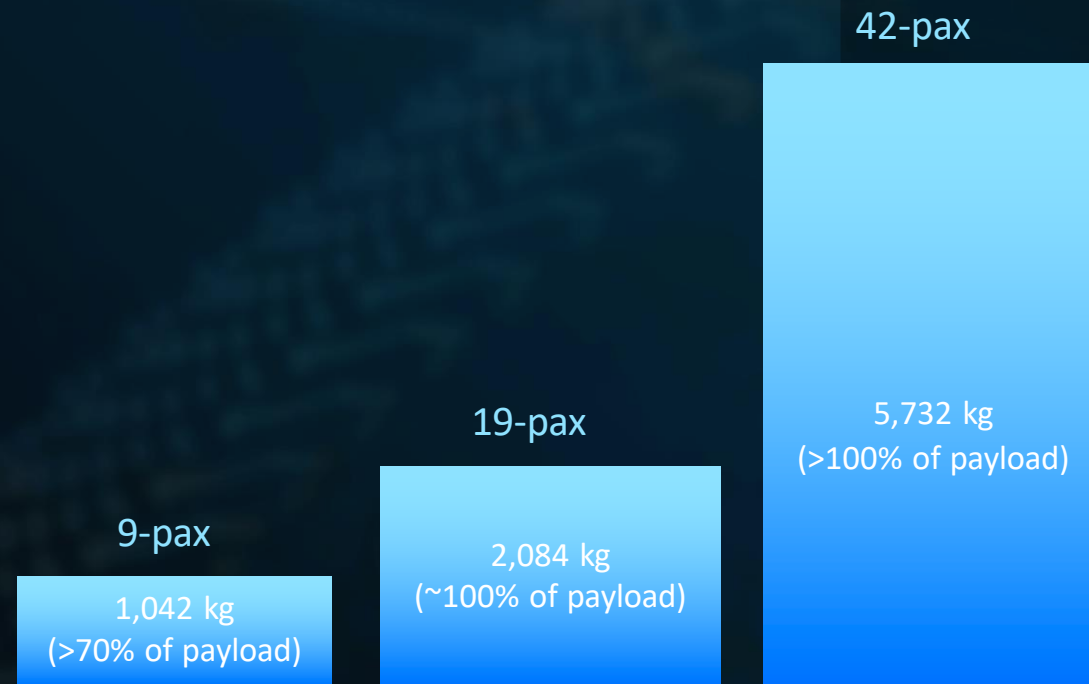


Energy storage density challenge



The elephant on the electric plane

IFR fuel reserves



Energy storage thermal challenge

Irrecoverable Thermal Runaway
Onset ~130C



Raise this temp

Rapid life degradation

Max Normal Battery Temp ~60C



Raise this temp

SL Hot Day 39.4C



Fault tolerant, lightweight
reduction of temp rise in
discharge and charge

Problem: What is the common 'scaling' barrier impacting virtually all electrified aviation development?

Electrified aircraft in development; some with flight test and customer demand



There are other key barriers:

- infrastructure
- payload-range
- stakeholder acceptance
- supply chain

Electrified aircraft in U.S. commercial operation

0

Electrified aircraft in European LSA commercial operation = 1

PIPISTREL

Takeaways

1

HYBRID ELECTRIC WILL DOMINATE THE
ELECTRIFIED AIRCRAFT MARKET SHARE
FOR THE NEXT DECADE

2

HYBRID TECHNOLOGY MATURATION WILL
ACCELERATE ELECTRIC AND HYDROGEN
FUTURES

3

ENERGY STORAGE RESEARCH THAT
ACCOUNTS FOR SYSTEM LEVEL FACTORS IS
CRITICAL TO SCALING

AMPAIRE



Decarbonizing aviation today



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