# ENVIRONMENTALLY SUSTAINABLE IS GREEN SPEED Possible?

## Boeing 707 – Enters Service 1958





## Brief History of Speed – But, Was Not Sustainable



UK and France

Noble Experiment But Not Sustainable



### Soviet Union

Not Even a Noble Experiment



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## **Business Aviation**



## Fifty years of Existence

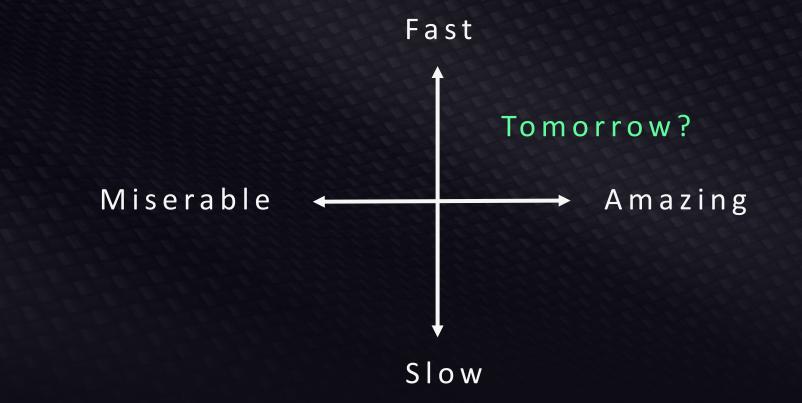
Only 10 Percent Increase in Speed





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Can We Give Humanity Back Time, and Be Kind to Our Planet?



#### OUR VISION

To build the next generation of global air transportation networks

#### HOW WE DO IT

High-speed mobility solutions that significantly reduce the time, enhance the experience, and leave no carbon footprint behind

#### WHAT WE BELIEVE

Time is our most precious resource

We can create a better travel experience

We can create a more connected world where distance is no longer a barrier

#### We can be kind to our planet



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## Coalescing Technologies Aircraft Operations

#### **AIRPORT NOISE**

#### **EMISSIONS**

#### **SONIC BOOM**

Meets the strictest noise requirements

20-40% below current supersonic standards

Flies subsonic over land faster than any other aircraft

Stage 5 levels

Path to carbon neutrality

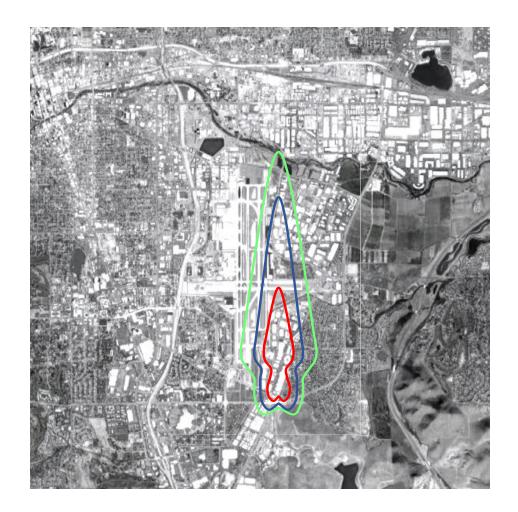
Boomless Cruise™ capability

Support SAF supply chain and pressure demand



Mid bypass ratio engine Low Jet Velocity Modified VNRS to reduce TO thrust levels High climb rate e levels comparable to those of a modern 73

Noise levels comparable to those of a modern 737 and far from the Concorde days

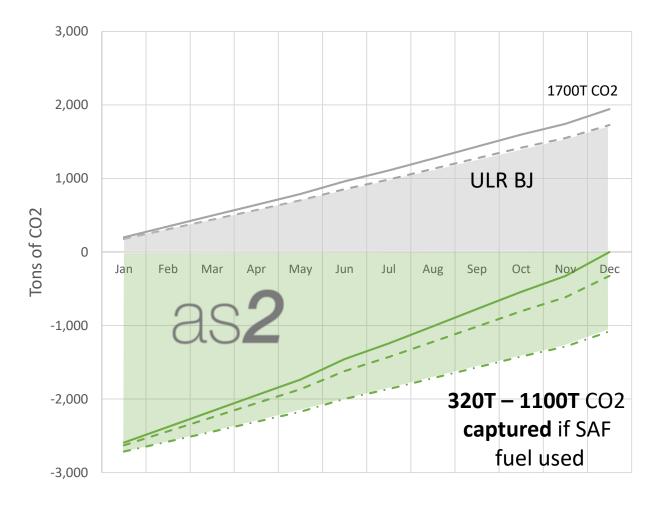




Regular large cabin business jet annual CO2 production estimated at 1700T using a 30% blend of SAF

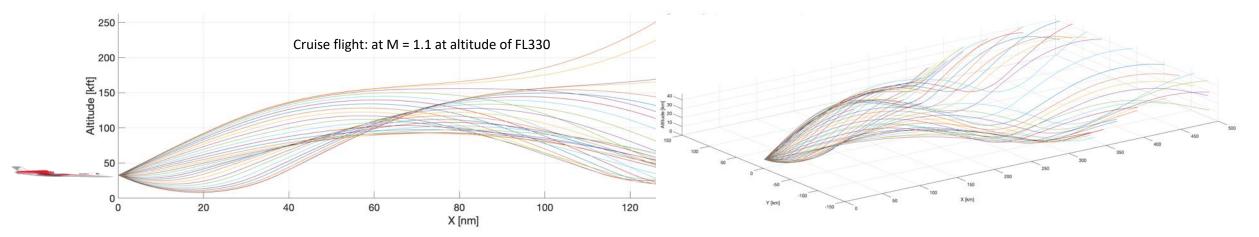
<u>Aerion's CO2 capture initiative</u> makes AS2 airplanes operationally **CO2 neutral** independent of operator's choice of fuel

Whenever SAF blends are used the AS2 will be **Carbon NEGATIVE** 

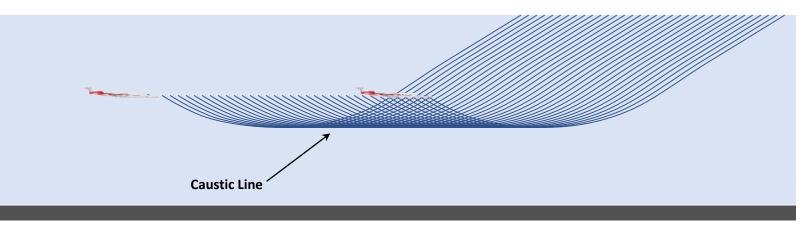




• Ray tracing is the calculation of wave propagation along the ray path through the atmosphere



• The caustic line is defined by a sequence of points in time where the rays change slope and are directed upwards







#### **Our Pledge: Starting Now**

Being kind to our planet is deeply engrained into our ethos – it is part of who we are. We are committed to building our company from scratch on a commitment that we will have carbon neutral emissions from day one.

- Our goal bring the world's connections closer together by removing the barrier of time and distance, but we will not do this at a cost to our environment.
- Speed and protection of our environment are not mutually exclusive. Green Speed is possible.



### **Our Commitment: Deeds Not Words**

- Our commitment extends beyond the output of our aircraft over their lifespan
  - the processes and materials we use to construct them,
  - the facilities housing our operations, and in time
  - aircraft retirement at end-of-service
- We will hold others to the same standards as we do ourselves.
- We believe that with innovation, sustainable supersonic travel is possible.

## We Are Committed to Addressing Climate Change

#### **Our Aircraft: Designed For Fuel Efficiency**

Creative new aircraft designs – Advanced aerodynamics and non-afterburning fuel efficient engines

#### **Our Energy Source: Designed To Run Clean**

First aircraft and engine in the world designed from the start to run on 100% SAFs – Net carbon 80% reduction

#### Our Customers: Customer Care Program Designed For Carbon Neutral Flying

First customer care program that provides carbon offsets for up to 300 flight hours per year.

#### Our Planet: Partnership Program Designed to Reforest The World

Aerion in partnership with groups like One Tree Planted and Plant-It. Aerion will plant 100,000,000 trees.



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- Being kind to our planet is deeply engrained into Aerion's ethos
- We don't believe speed and protection of our environment are mutually exclusive
- Our environmental commitment extends to our company and our products

## Green Speed *is* Possible

SUPERSONIC