

Plan of Supersonic Business Jet



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Establishment of "Committee of Practical Research on Ecological Supersonic Transport"

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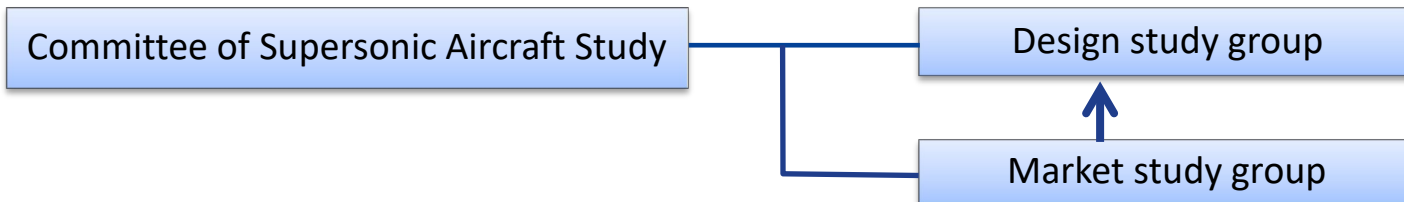
Team structure and members

Committee of Supersonic Aircraft Study

Chair-man: Prof. Shigeru Obayashi
 Director, Institute of Fluid Science, Tohoku University

Member: University of Tokyo
 Suwa University of Science
 Kawasaki Heavy Industries Ltd.
 SUBARU Corporation
 Japan Airlines Co. Ltd.
 MOOG JAPAN LTD.
 Tokyo Fluid Research Co. Ltd
 Japan Aerospace Exploration Agency
 Electronic Navigation Research Institute
 Sky Aerospace Institute

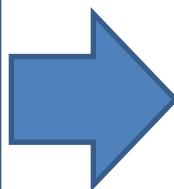
Secretary General: Ryoji Yanagi President of Supersonic Jet Planning Inc.



Concorde



Airport Noise	Noisy
NOx	much
Fuel	much
Price	High
Sonic Boom	Noisy



Supersonic Business Jet



Airport Noise	Quiet	Existing Civil Turbofan Engine
NOx	Less	
Fuel	Less	Small Size Low Drag
Price	Low	Small Size Existing Engine
Sonic Boom	Quiet	Small Size Low Boom Design

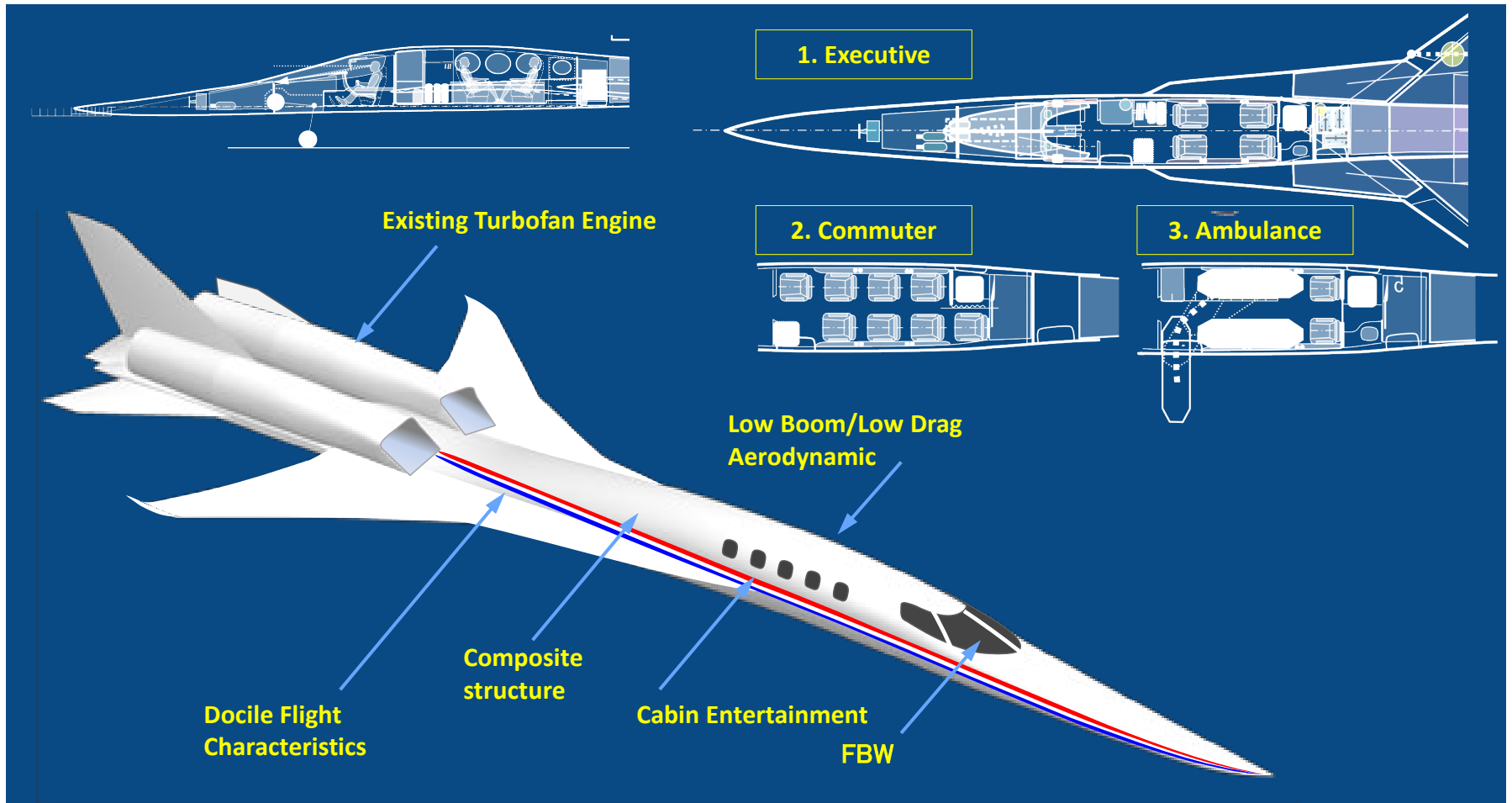


Design Policy

- **Light jet Class Weight**
- **Low sonic boom**
- **Current production engine**
- **Target EIS end of 2020s**

Aircraft Specifications

item	Spec
Max Takeoff Weight	8.6 ton
Length	26 m
Wing area	28 m ²
Seating	1+5 (max 2+8人)
Powerplants	7000lbs × 2 Existing Turbofan eng.
Max Cruise Speed	Mach 1.4
Range(supersonic)	≈2100 nm
Range(subsonic)	≈3000 nm
Field length	≈4000 ft
Altitude	45,000 ft



- **Floor Plans;**
 1. Executive (1 Pilot+5 Passengers)
 2. Commuter (2 Pilots+8 Passengers)
 3. Ambulance (2 Pilots+2 Stretchers+2 Paramedics)
- **Technology;** Typical Technologies are shown above

- Other Supersonic Airplane Plans
Price; 2~3 times expensive than subsonic Bizjets
- The Supersonic Business jet
Price; around 20M\$

Current Plans for Supersonic Airplane
 • High Price and Over-water Supersonic Flight

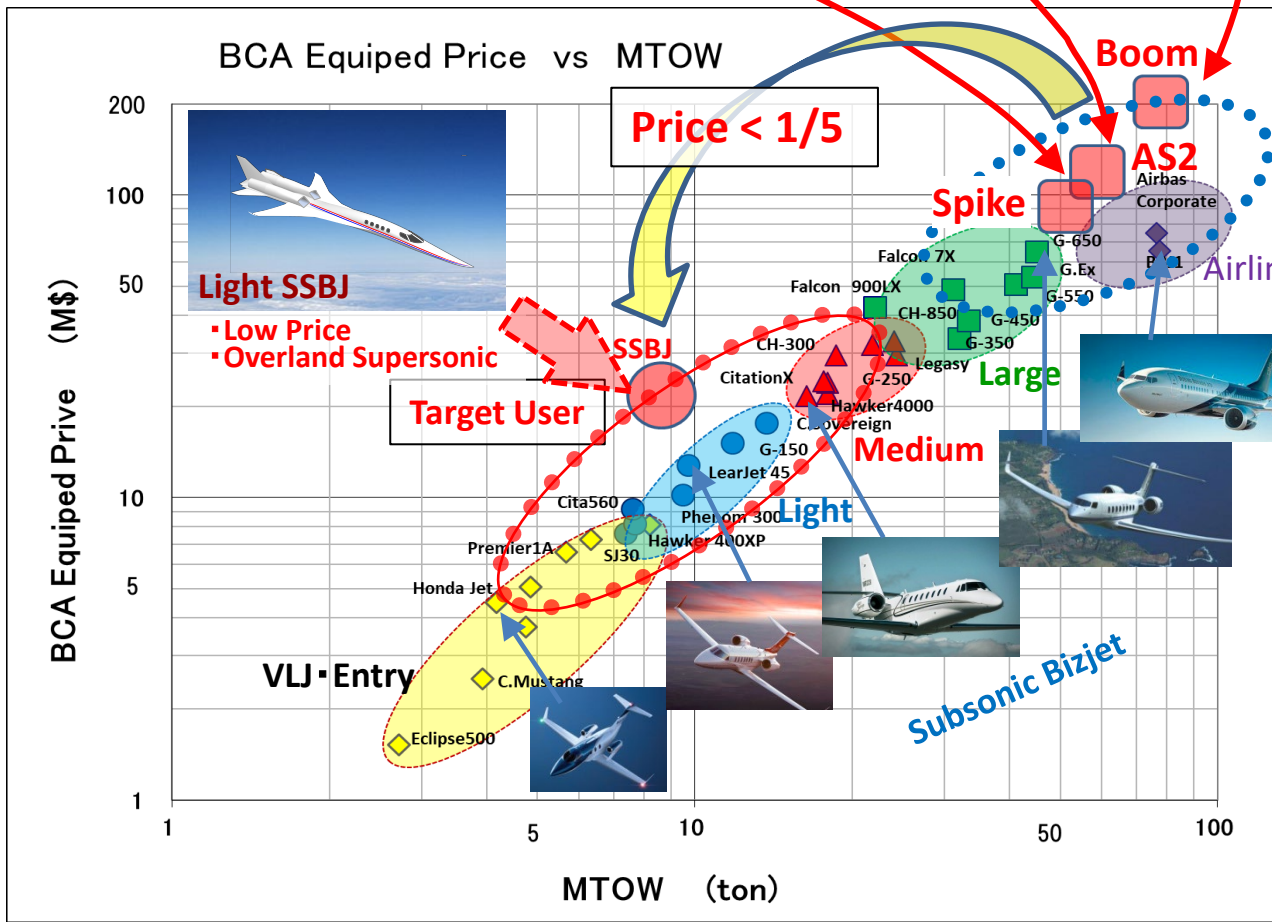
Spike S-512

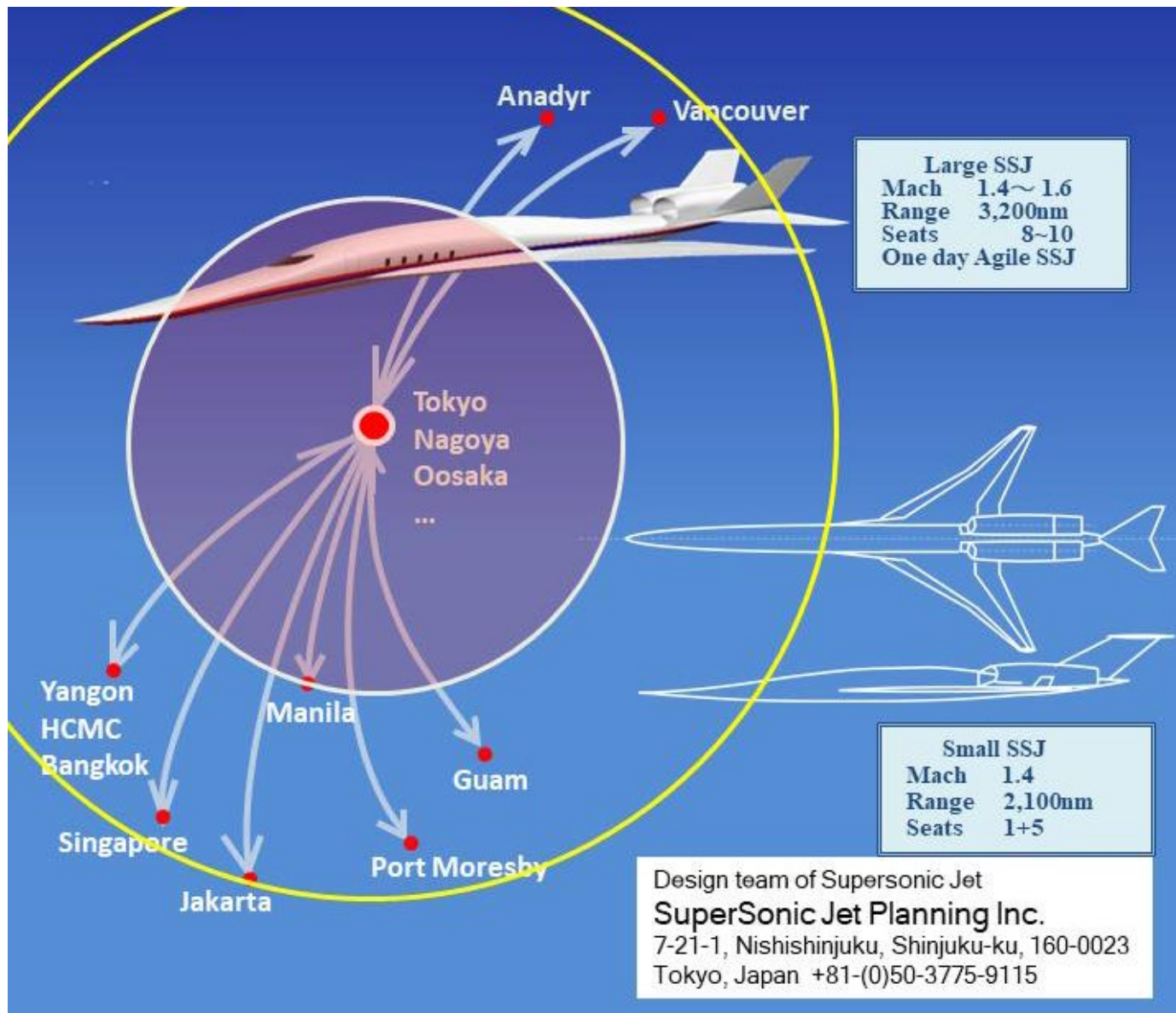


Aelion AS2



Boom





Innovation for Industries and Society !!