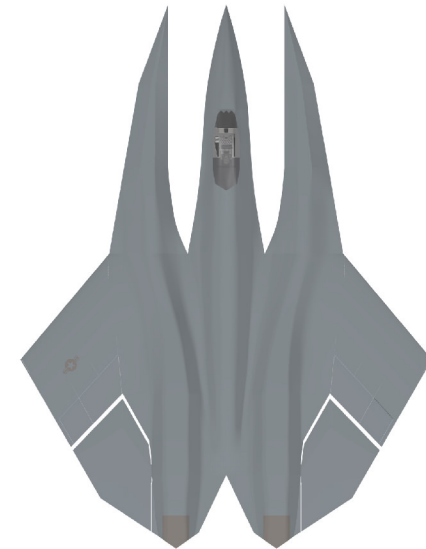


STAVATTI®



SM-39 RAZOR



SM-39 RAZOR NGAD FIGHTER BRIEFING

A Next Generation Air Dominance Fighter (NGAD) Engineered, Produced and Supported by Stavatti Aerospace Ltd.

STAVATTI AEROSPACE

This Presentation does not constitute an offer to sell or the solicitation of an offer to sell significant Military Equipment or Export Controlled Military Aircraft.

SM-39 RAZOR

STAVATTI®

The SM-39 Razor is a 6th generation twin engine Air Superiority and Air Dominance Fighter designed for both land and carrier based operations. Powered by two next generation variable cycle afterburning turbofans, the SM-39 will have a maximum level speed in excess of Mach 4.0, a tactical radius greater than 1,300 nm, internal weapons carriage and supermaneuverability. The SM-39 can replace F-15, F-22 and F-47 aircraft.

**SM-39 Razor
Afterburning Turbofans
Air Dominance Fighter**



**Mach 4+
25,000 lb Warload
1,300 nm Radius**

\$85 Million Unit Flyaway Cost
Cost Per Flight Hour (CPFH): \$12,953

STAVATTI AEROSPACE

SM-39 SPECIFICATIONS

STAVATTI®

SM-39 RAZOR SPECIFICATIONS

Aircraft: SM-39 Razor
Unit Flyaway Cost: \$85,000,000

Manufacturer: Stavatti Aerospace Ltd
First Flight: 2028-2029

Accommodation

Crew Single (S) or Two Seat (T)
Seating MK18 or ACES 5 Ejection Seats

Powerplant

Number 2
Type Afterburning Turbofan
Model ACE; E1400-NT-520
Manufacturer GEAE; NeoThrust
Afterburning Thrust (lbs) 52,400
Military Thrust (lbs) 42,700
Air Inlets Internal Compression
Nozzle LO VG Thrust Vectoring

Dimensions

Max Wingspan 53 ft 0 in
Max Length 70 ft 0 in
Max Height 13 ft 8 in
Wing Area 1,026 sq ft
Wing Aspect Ratio 2.74
Wing LE Sweep 50.0°

Weights

Empty 44,500 lbs
Max Internal Fuel (IF) 30,000 lbs
Max External Warload 25,000 lbs
Typical Combat (TCW) 66,000 lbs
Max Take-Off (MTOW) 100,500 lbs

Loadings

Wing Loading-TCW 64.3 lbs/sq ft
Wing Loading-MTOW 98.0 lbs/sq ft
Thrust-to-Weight-TCW 1.59 to 1
Thrust-to-Weight-MTOW 1.04 to 1
Design Load Factor-TCW 11.4 g
Design Load Factor-MTOW 7.5 g

Armament

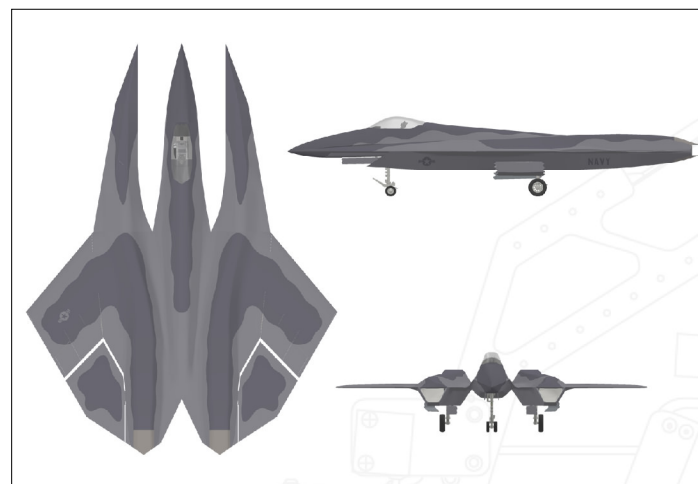
Fixed Internal 1 x 20mm M61A2 or DEW
Ammunition 1,000 rds
Stores Stations (Internal & External) 6
Max Warload 25,000 lbs

Avionics & Electronic Warfare

Radar ARACR AESA
IRST EOTS or AEOTS
HUD CED or HMD
Comm AN/ASQ-242 or ACNI
IFF AN/ASQ-242 or ACN
Data Link AN/ASQ-242 or ACN
GPS/INS FALCN
RF ECM AN/ASQ-239 or AFIDEWS
MAWS AN/ASQ-239 or AFIDEWS
DAS AN/ASQ-239 or ADAS
SPJ AN/ASQ-239 or AFIDEWS
Chaff/Flare AN/ALE-52

Performance

Max Level Speed @ SL 1.40 Mach
Max Level Speed @ FL600 4.20 Mach
Supercruise Speed @ FL400 2.00 Mach
Takeoff Speed: MTOW 152 Ktas
Stall Speed: MTOW 138 Ktas
Approach Speed: TLW 115 Ktas
Stall Speed: TLW 96 Ktas
Max Climb Rate @ SL >99,485 ft/min
Service Ceiling >100,000 ft
Max Speed Range, IF 1,277 nm
Supercruise Range, IF 1,700 nm
Supercruise Radius, F 750 nm
Air Superiority Radius, IF 1,400 nm
0.85 Mach Range, IF 2,419 nm
0.85 Mach Tactical Radius, IF 1,300 nm
0.85 Mach Ferry Range 5,200 nm
Takeoff Ground Roll, TTW 946 ft
Landing Ground Roll, TLW 1,501 ft

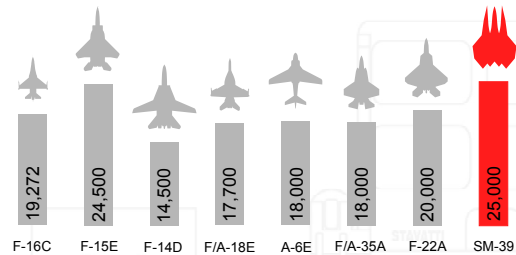


STAVATTI AEROSPACE

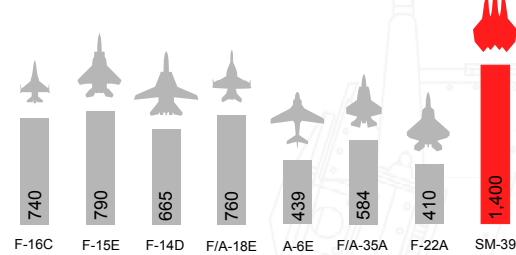
SM-39 COMPARISON

STAVATTI®

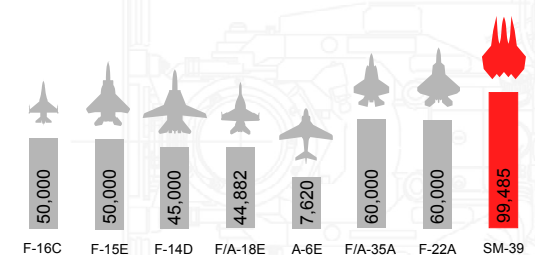
Maximum Warload (lbs)
With Partial Internal Fuel



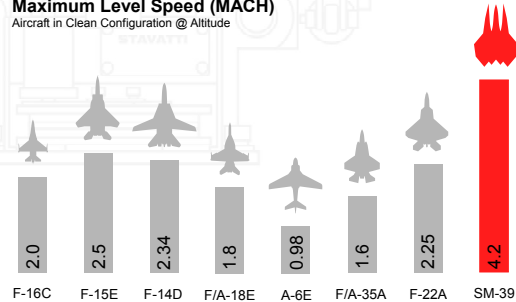
Tactical Radius (nm)
With Maximum Internal Fuel



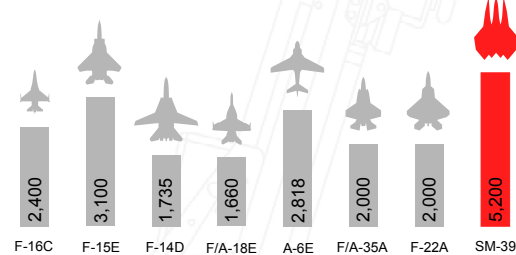
Maximum Climb Rate (ft/min)
Typical Combat Weight @ Sea Level, Standard Day



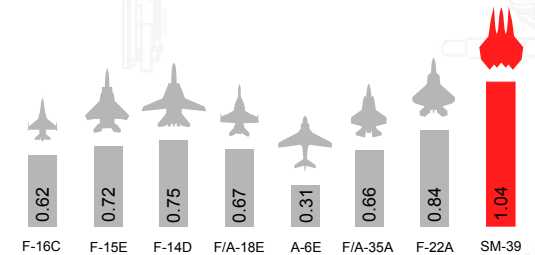
Maximum Level Speed (MACH)
Aircraft in Clean Configuration @ Altitude



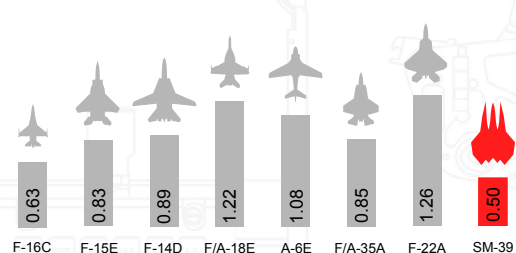
Maximum or Ferry Range (nm)
With Maximum Internal + Maximum External Fuel



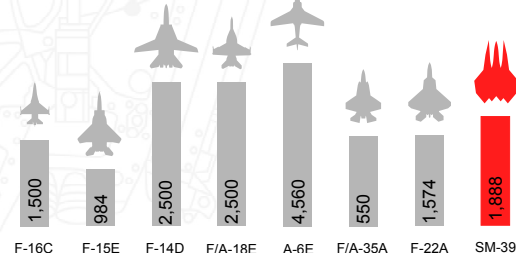
Thrust to Weight Ratio
MTOW @ Maximum Power



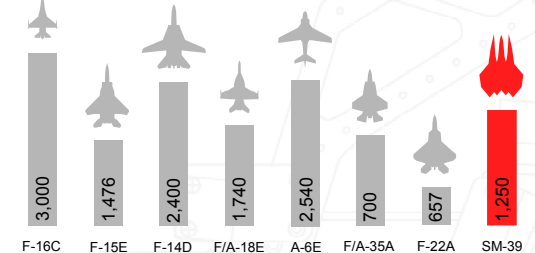
Relative Fuel Burn Ratio
Fuel (lbs) to move 1,000 lbs of Warload 1 nm



Takeoff Distance (ft)
Over 50 ft Obstacle



Landing Distance (ft)
Over 50 ft Obstacle



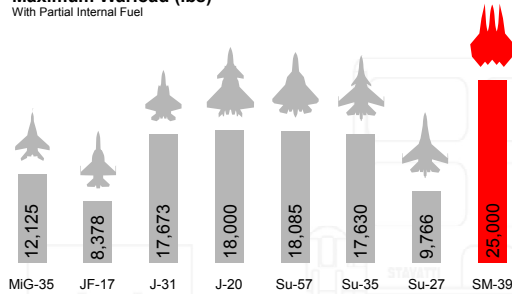
STAVATTI AEROSPACE

SM-39 COMPARISON

STAVATTI®

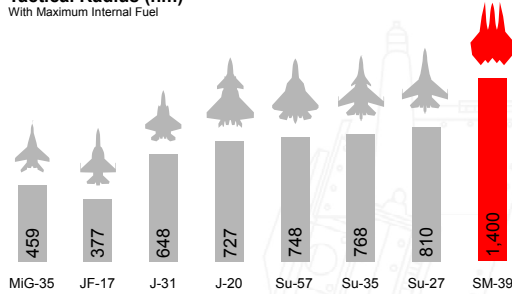
Maximum Warload (lbs)

With Partial Internal Fuel



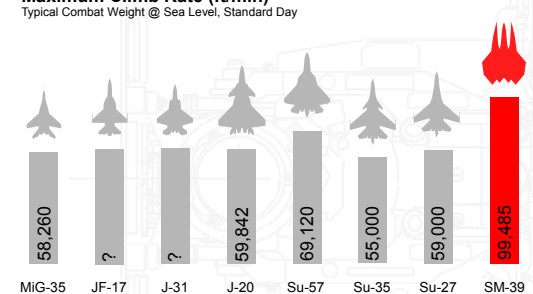
Tactical Radius (nm)

With Maximum Internal Fuel



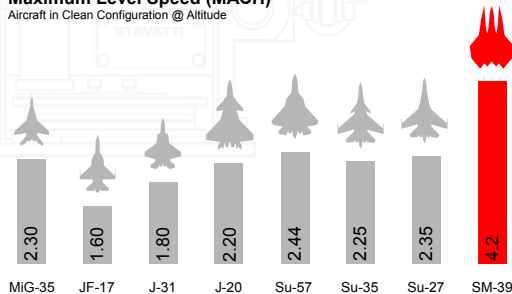
Maximum Climb Rate (ft/min)

Typical Combat Weight @ Sea Level, Standard Day



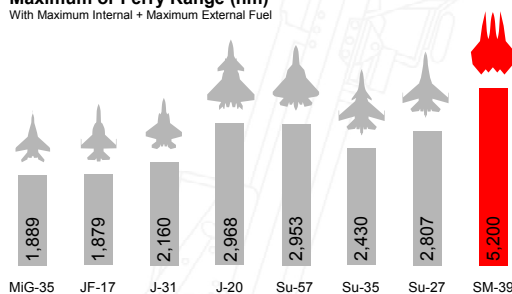
Maximum Level Speed (MACH)

Aircraft in Clean Configuration @ Altitude



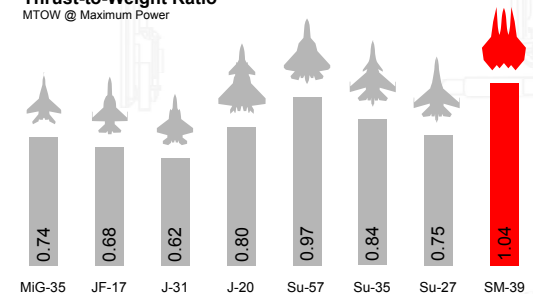
Maximum or Ferry Range (nm)

With Maximum Internal + Maximum External Fuel



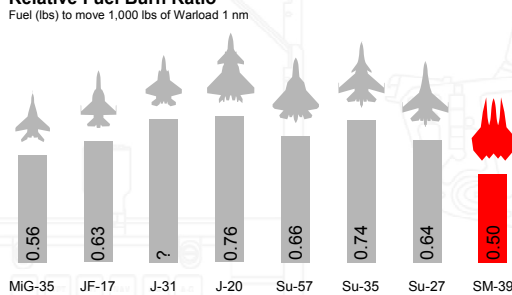
Thrust-to-Weight Ratio

MTOW @ Maximum Power



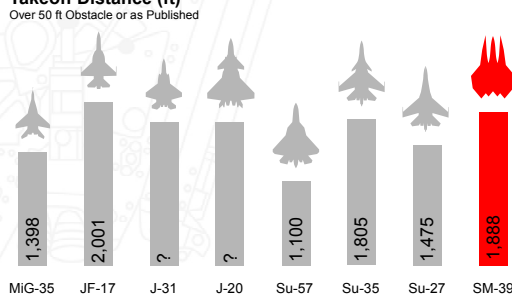
Relative Fuel Burn Ratio

Fuel (lbs) to move 1,000 lbs of Warload 1 nm



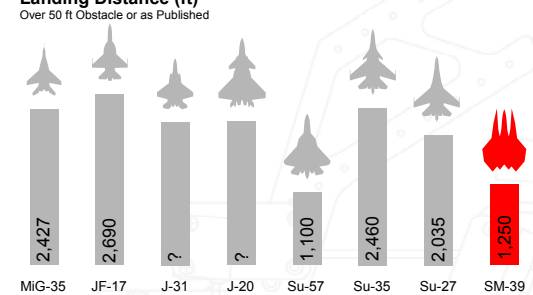
Takeoff Distance (ft)

Over 50 ft Obstacle or as Published



Landing Distance (ft)

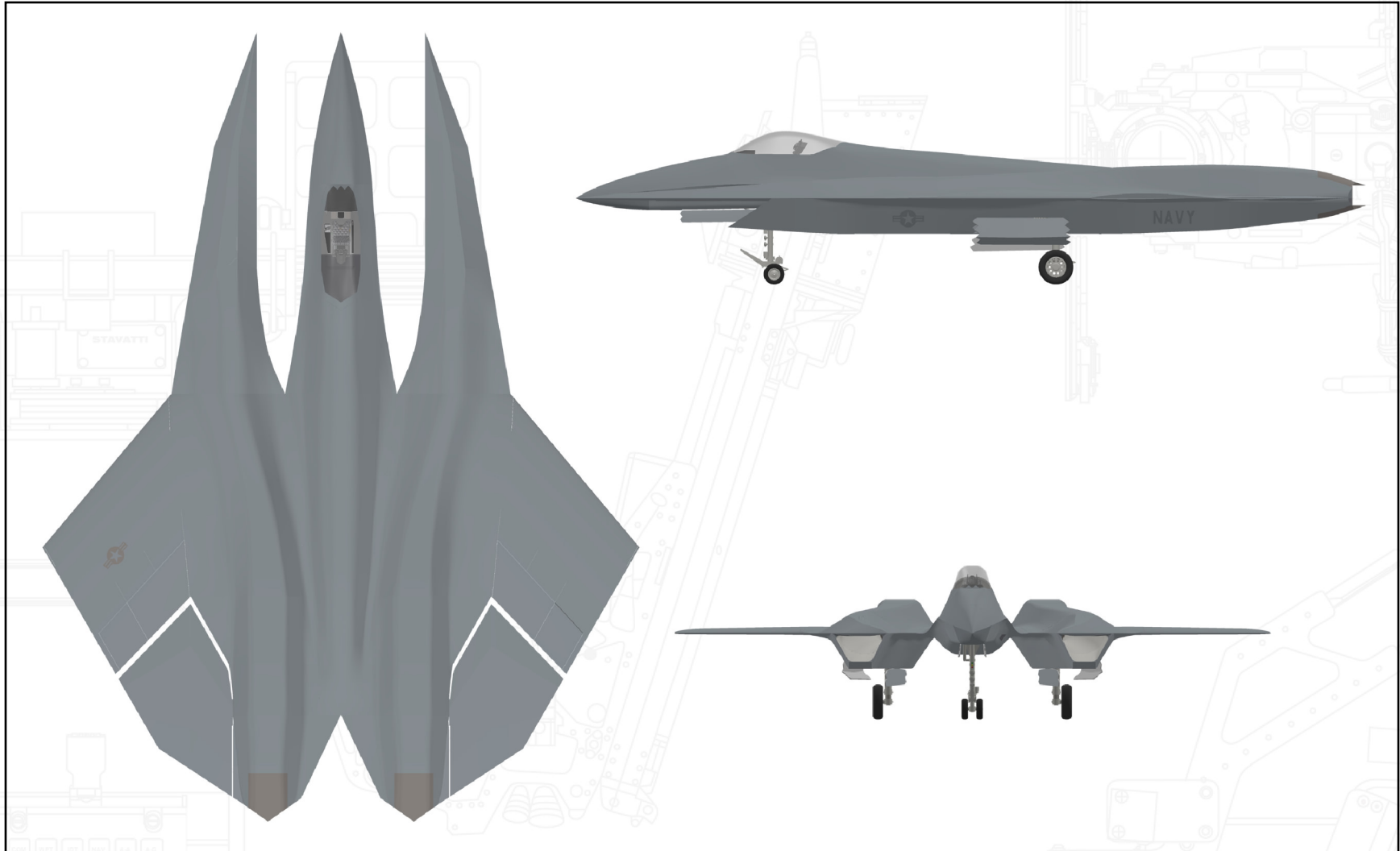
Over 50 ft Obstacle or as Published



STAVATTI AEROSPACE

SM-39 ARRANGEMENT

STAVATTI®



STAVATTI AEROSPACE

MAR 2026

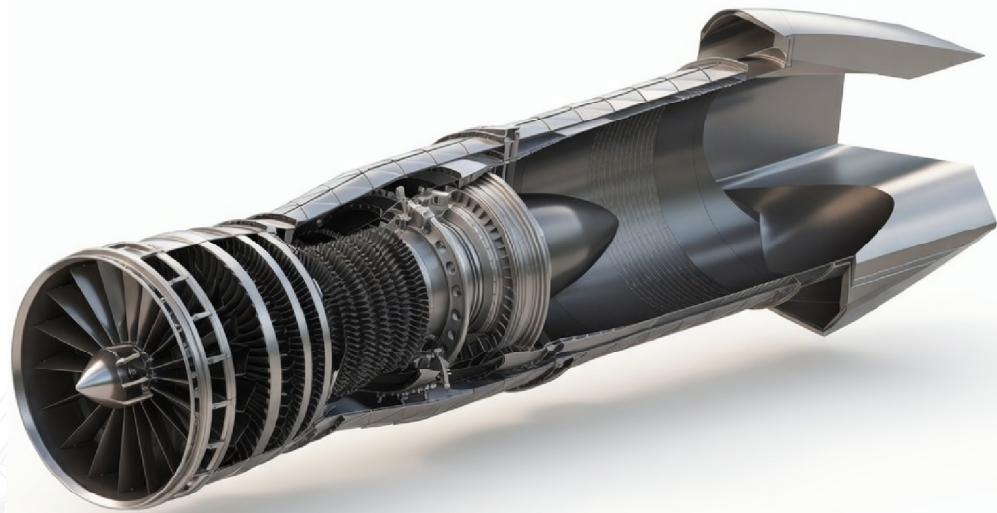
CAGE CODE: 8GT89 DUNS: 117383324 PSC: 1510

COPYRIGHT © 2026 STAVATTI AEROSPACE LTD

The SM-39 is powered by two 50,000 lb class Variable Cycle Afterburning Turbofans. These powerplants may be produced by Pratt & Whitney, General Electric or by the NeoThrust™ Division of Stavatti. Stavatti began design of the E1400-NT-520 Variable Cycle Engine (VCE) in 2012 as a baseline powerplant for the SM-39. This powerplant will deliver approximately 52,400 lbs of SL Static Thrust with maximum AB power.

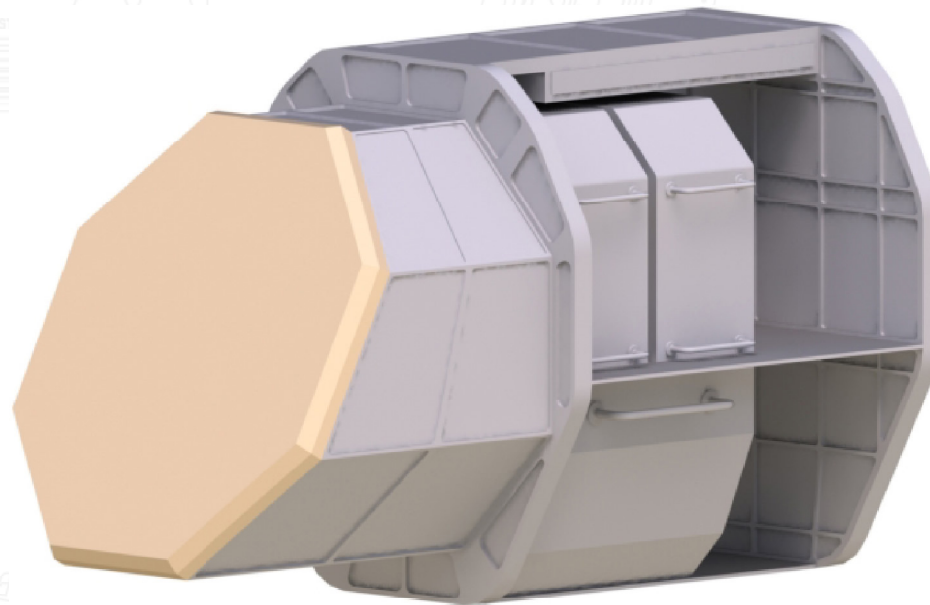
Powerplant Specifications

Model: E1400-NT-520
Type: Afterburning Variable Cycle Turbofan/Turbojet
Max Thrust: 52,400 lbs SL, Static Thrust
Mil Thrust: 42,700lbs SL, Static Thrust
Max Inlet Airflow: 360 lbs/sec
Shafts: 2
Fan Stages: 3
Compressor Stages: 6
HP Turbine Stages: 1
LP Turbine Stages: 1
Fan Pressure Ratio-All Cycles: 4.75
Max Bypass Ratio-Turbofan Cycle: 0.544
Compressor Pressure Ratio-All Cycles: 9.68
Overall Pressure Ratio-Turbojet Cycle: 45.98
Combustor: Annular
Max Turbine Inlet Temp: 4,440° F
Thrust-to-Weight Ratio: 11.26



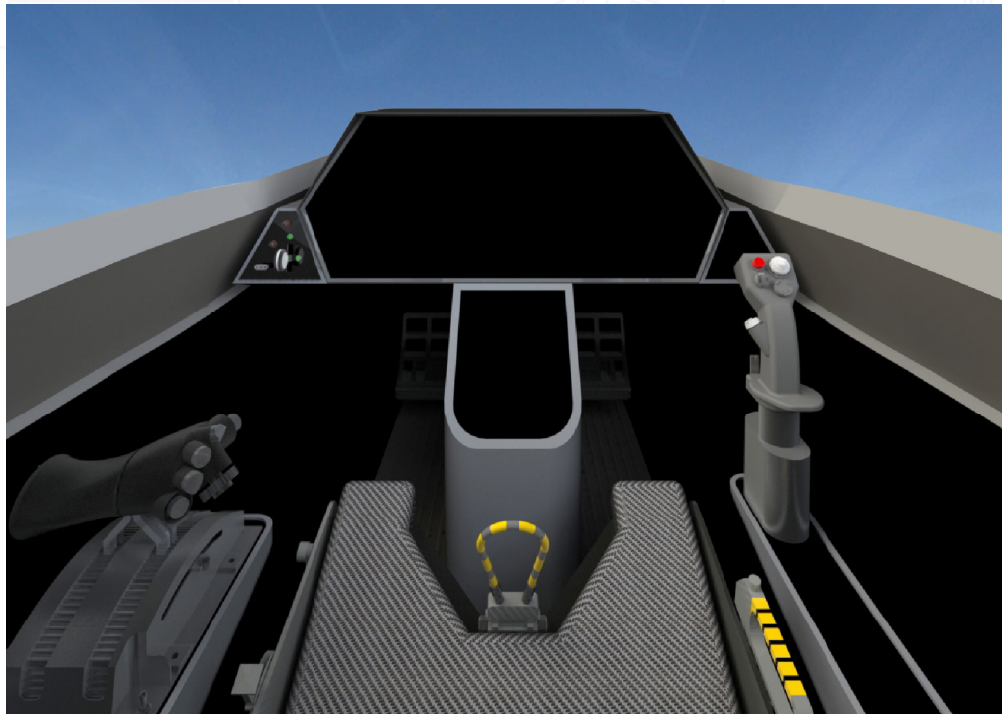
Benefiting from Titanium Diboride Cermets, the E1400-NT-520 offers a specific fuel consumption of 0.56 lb/lbf-hr at military thrust at 1.57 lb/lbf-hr with afterburning.

The SM-39 will be equipped with an Cognitive Artificially Intelligent (CAI) AESA radar. With more than 1,800 module counts, the CAI AESA is a next generation lightweight X-band radar with digital beam steering and forming, and multi-mode functionality with air-to-air targeting, air-to-ground targeting and Synthetic Aperture Mapping.



A liquid cooled radar, the CAI AESA will benefit from a Gallium Nitride-powered array and may incorporate an optical quantum receiver/exciter processor.

The SM-39 cockpit will include single seat (SM-39S) and two seat tandem (SM-39T) variants. The cockpits will feature new design Stavatti display systems including a Large Area Avionics Display (LAAD), a Canopy Embedded Display (CED) as well as software driven communications, navigation and IFF/Interrogator. Flight controls will include an F-16 style side-stick and throttle HOTAS flight controls with an integrated four channel digital Power-By-Wire (PBW) flight control system.



SM-39 AIRCRAFT WARLOAD & STORES STATIONS							
= Internal Weapons Bay							
STATION NUMBER	1	2	3 FWB	4 MWB	5	6	
AIM-9 Sidewinder	×	×	×	×	×	×	×
AIM-120 AMRAAM	×	×	×	×	×	×	×
AGM-65 Maverick	✕	✕	✕	✕	✕	✕	✕
GBU-39/B SDB	■	■	■	■	■	■	■
GBU-38 JDAM/Mk.82	⊗	⊗	⊗	⊗	⊗	⊗	⊗
GBU-32 JDAM/MK.83	⊗	⊗	⊗	⊗	⊗	⊗	⊗
GBU-31 JDAM/Mk.84	⊗	⊗	⊗	⊗	⊗	⊗	⊗
GBU-12 PAVEWAY II	⊗	⊗	⊗	⊗	⊗	⊗	⊗
GBU-24 PAVEWAY III	⊗	⊗			⊗	⊗	
CBU-97/105 SFW	⊗	⊗	⊗	⊗	⊗	⊗	⊗
AGM-84E SLAM	✕	✕		✕	✕	✕	✕
AGM-88C HARM	✕	✕		✕	✕	✕	✕
AGM-154 JSOW	✕	✕		✕	✕	✕	✕
B61 MOD 11/MOD 12	⊗	⊗	⊗	⊗	⊗	⊗	⊗
370 USG External Tank	⊗	⊗			⊗	⊗	
600 USG External Tank	⊗	⊗			⊗	⊗	
Rated Load @ 7.5-g	4,500 lbs	4,500 lbs	5,000 lbs	12,000 lbs	4,500 lbs	4,500 lbs	

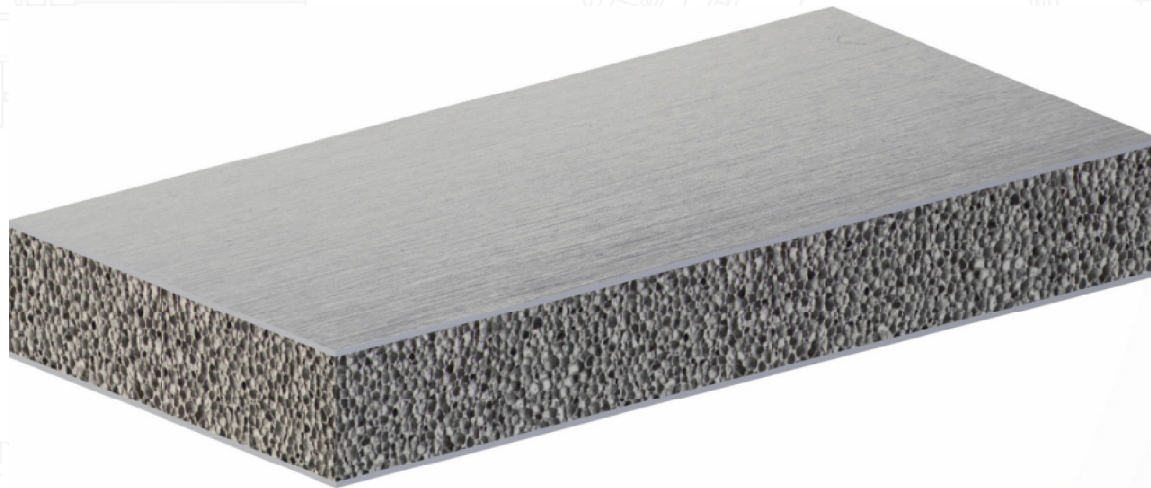
The SM-39 Razor has both fixed internal and expendable, internally and externally carried weapons, ordnance and stores. The SM-39 has two internal weapons bays and four primary and twelve secondary external hardpoints for subsonic, supersonic and hypersonic munitions and weapons.

The SM-39 can carry a total of **25,000 lbs** of external and/or internal stores.



SM-39 fixed internal armament includes one M61A2 20mm Vulcan cannon with 1,000 rds or a **Gas Dynamic Directed Energy Weapon**.

The SM-39 will have a Foam Metal Sandwich (FMS) Structure. Reinventing how airplanes are built, the SM-39 has external foam metal sandwich skins that are supported by an internal structure of frames, bulkheads, spars and ribs made from titanium, titanium diboride and scandium titanium alloys.



With an excellent strength-to-weight ratio and inherent vibration and sound dampening characteristics, the SM-39 structure is damage tolerant and is Laser and Friction Stir Welded to reduce parts count.

FUEL QUANTITIES

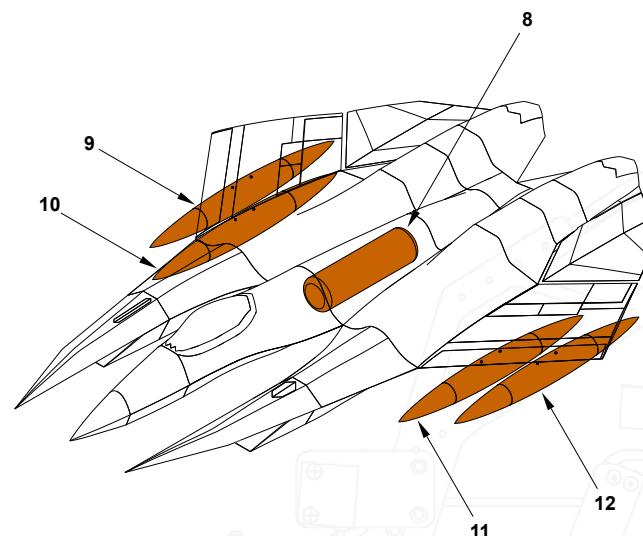
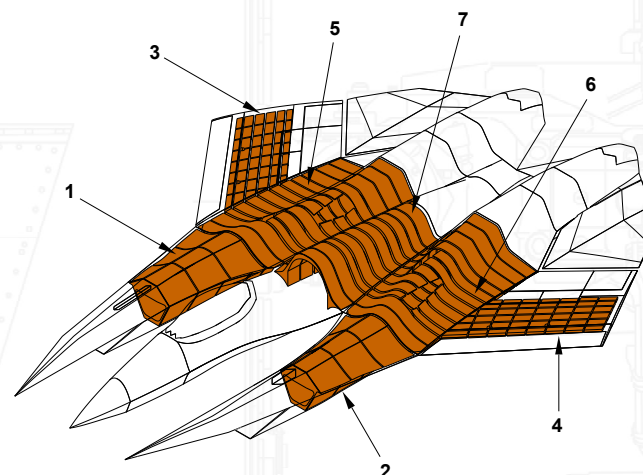
STAVATTI®

INTERNAL FUEL TANKS		USABLE FUEL		
TANK #	TANK LOCATION	US GALLONS	JP-4 POUNDS	JP-8 POUNDS
1	Left Strake: 27100	794	5,161	5,320
2	Right Strake: 27200	794	5,161	5,320
3	Left Wing: 27300	162	1,053	1,085
4	Right Wing: 27400	162	1,053	1,085
5	Left Fuselage: 27500	1,121	7,287	7,511
6	Right Fuselage: 27600	1,121	7,287	7,511
7	Center Fuselage: 27700	467	3,036	3,129
TOTAL INTERNAL FUEL		4,621	30,037	30,961

EXPENDABLE/EXTERNAL TANKS		USABLE FUEL		
TANK #	TANK LOCATION	US GALLONS	JP-4 POUNDS	JP-8 POUNDS
8	Weapon Bay: 44-970-50150	970	6,305	6,500
9	Left External: 32-600-50300	600	3,900	4,020
10	Left External: 32-600-50300	600	3,900	4,020
11	Right External: 32-600-50300	600	3,900	4,020
12	Right External: 32-600-50300	600	3,900	4,020
TOTAL EXPENDABLE/EXTERNAL		3,370	21,905	22,579

NOTES:

- 1) Fuel weights are based on JP-4 at 6.5 lbs/gal and JP-8 at 6.7 lbs/gal and an atmospheric temperature of 59°F.
- 2) Fuel quantities, in pounds, are rounded to the nearest pound.



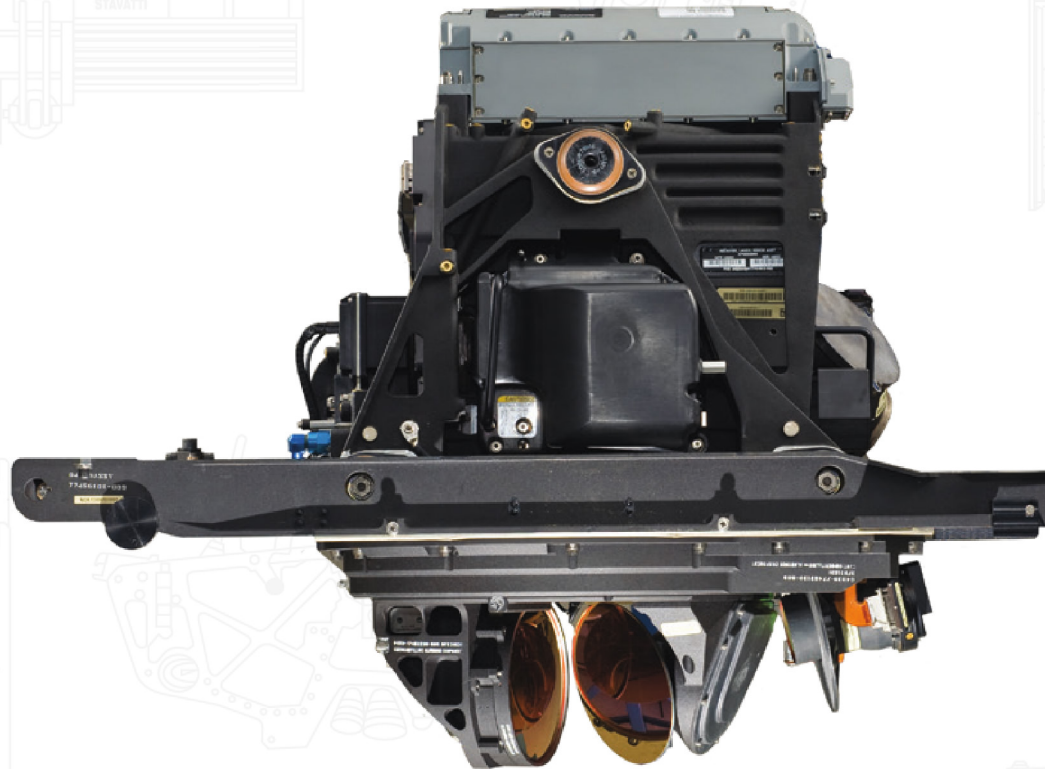
STAVATTI AEROSPACE

The SM-39 will be equipped with comprehensive Electronic Countermeasures (ECM) and Electronic Warfare Systems to protect the aircraft from surface-to-air and air-to-air missiles, as well as lasers and drone swarms in the high threat environment. The Production SM-39 aircraft will benefit from a Cognitive AI Advanced Digital Electronic Warfare System. Prototype SM-39 ECM/EW systems will include:

- AN/ALQ-239 Digital Electronic Warfare System (DEWS)
 - AN/ALE-52 Dispensers
 - AN/ALE-70 Towed Decoy



The SM-39 may be equipped with a Lockheed Martin EOTS (Electro Optical Targeting System) mounted within an airframe blended, low observable window. The EOTS is a lightweight multi-functional FLIR andIRST that provides both Air-to-Air and Air-to-Surface targeting capability.



The SM-39 Flyaway Cost will be approximately \$85 Million for both single seat (S) and two seat tandem (T) models. This cost includes airframe, powerplant, avionics, systems and all associated production costs.

SM-39S/T BASIC UNIT AIRCRAFT FLYAWAY COST

PRODUCTION COST ELEMENT

COST/VALUE

PERCENT

Airframe Group:

Proprietary

Proprietary

Systems Group:

Proprietary

Proprietary

Powerplant Group:

Proprietary

Proprietary

Avionics & Sensors Group:

Proprietary

Proprietary

Armament

Proprietary

Proprietary

AIRFRAME COSTS

Proprietary

Proprietary

Integration & Assembly Costs:

Proprietary

Proprietary

NRE Cost Per Aircraft:

Proprietary

Proprietary

Gross Margin:

Proprietary

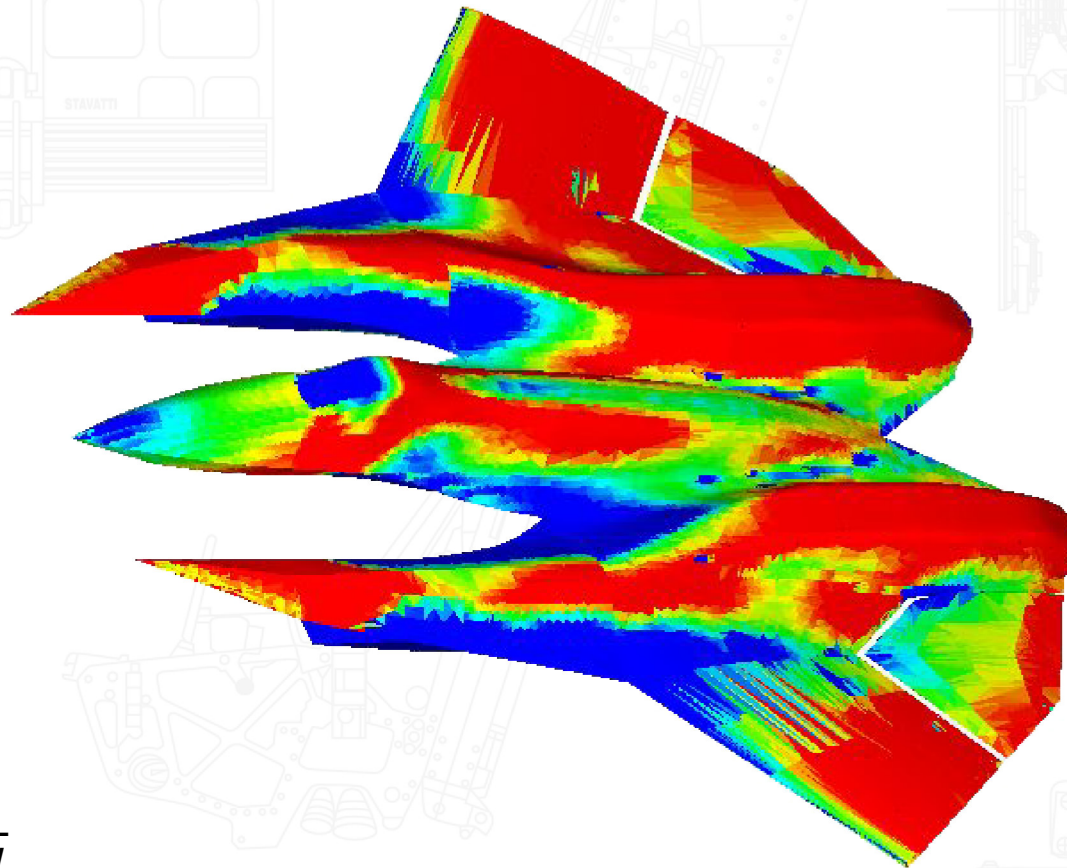
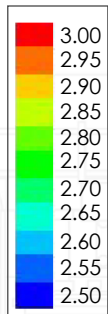
Proprietary

PRODUCTION UNIT FLYAWAY COST

\$85,000,000

100%

Stavatti performs Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA) of SM-39 airframe and parts with ongoing simulation 24/7.



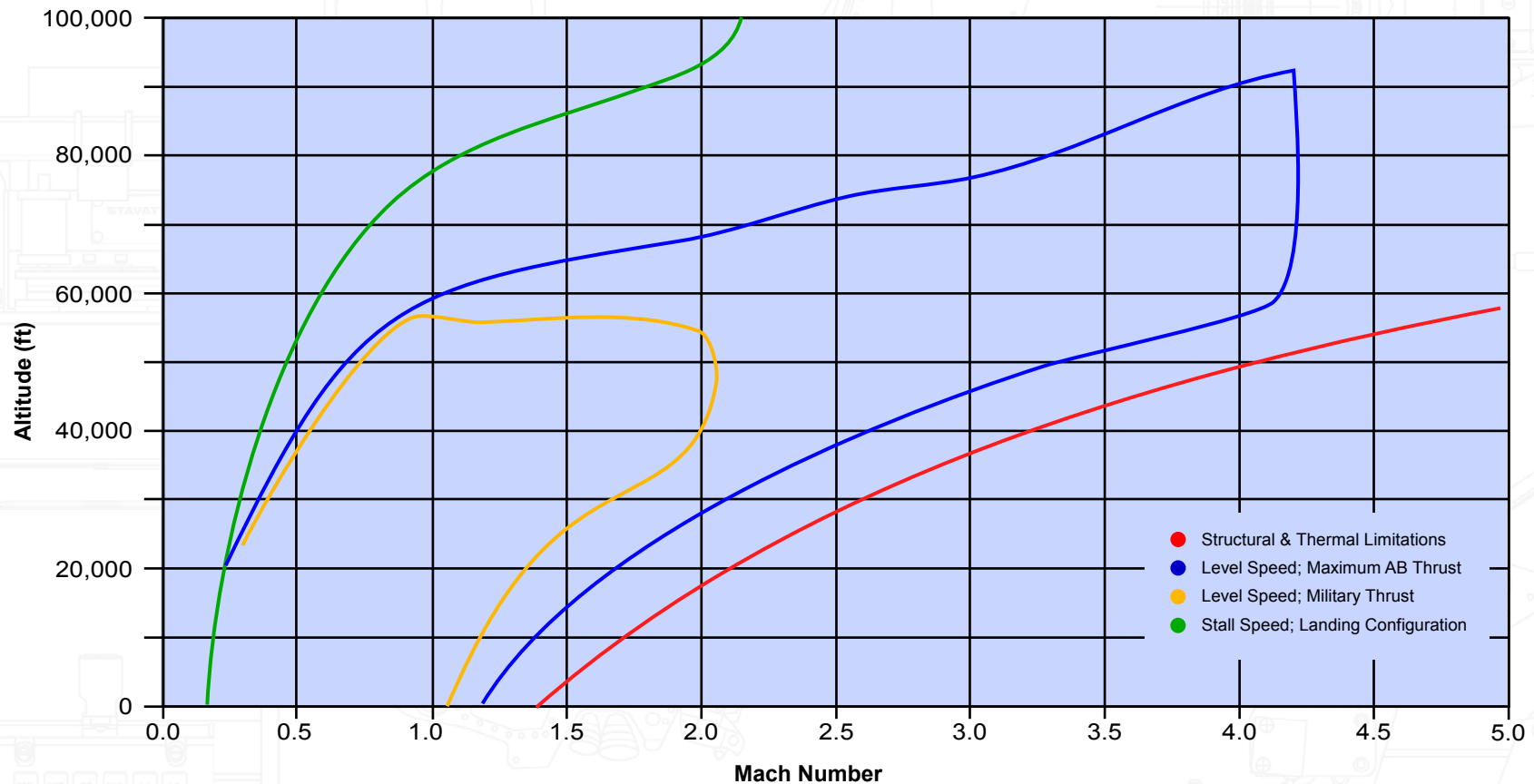
SM-39 RAZOR
CFD Simulation
Mach 4.2 @ 70,000 ft MSL
2° AoA at 80,000 lbs TOW

FLIGHT ENVELOPE

STAVATTI®

FLIGHT ENVELOPE

SM-39 @ Carrier Takeoff Weight (80,000 lbs)
2 x E1400 Powerplants @ Max AB & Military Power
N=1, Standard Day, 300 ft/min Service Ceiling



STAVATTI AEROSPACE

CLIMB RATE

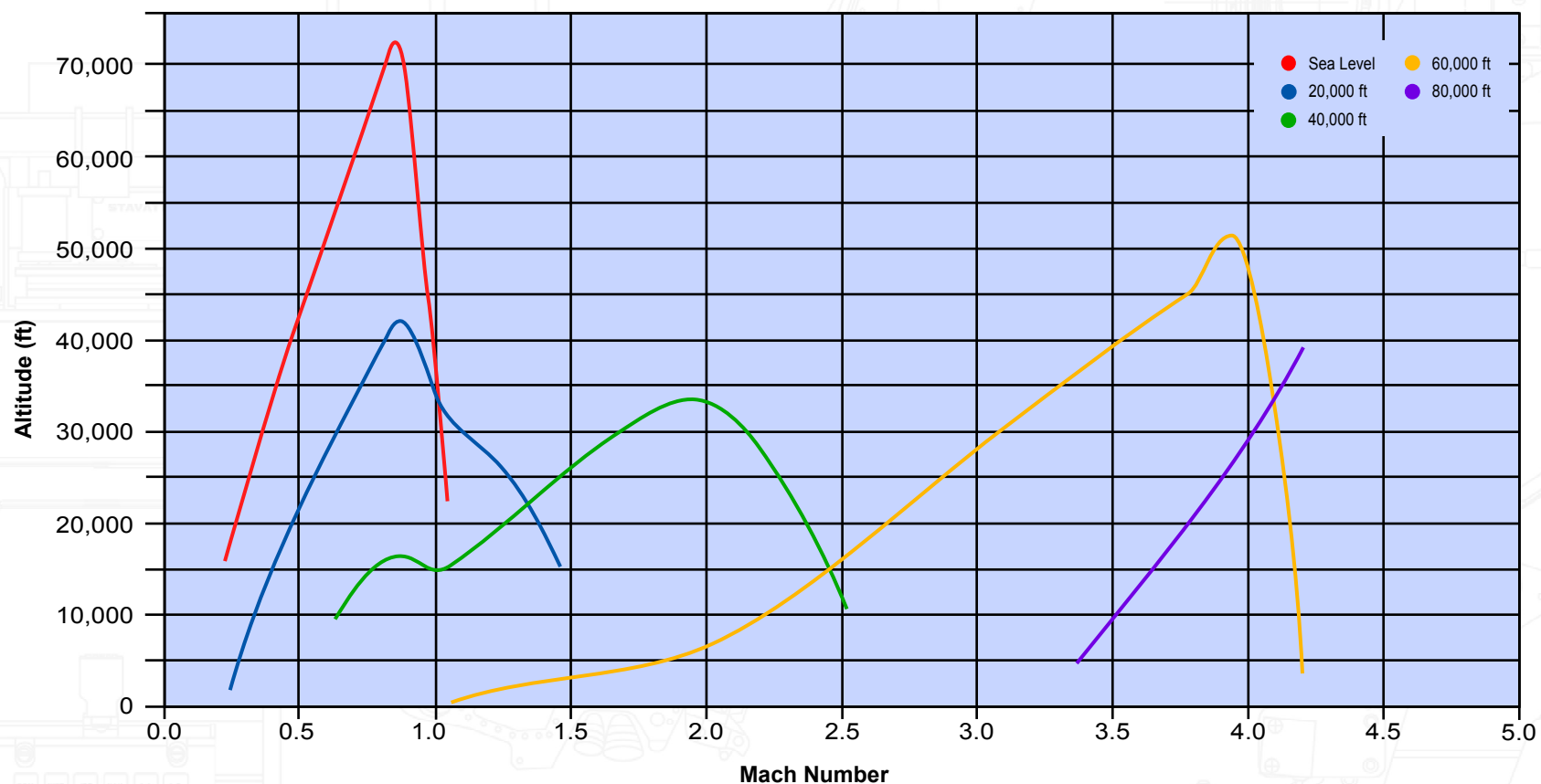
STAVATTI®

CLIMB RATE

SM-39 @ Carrier Takeoff Weight (80,000 lbs)

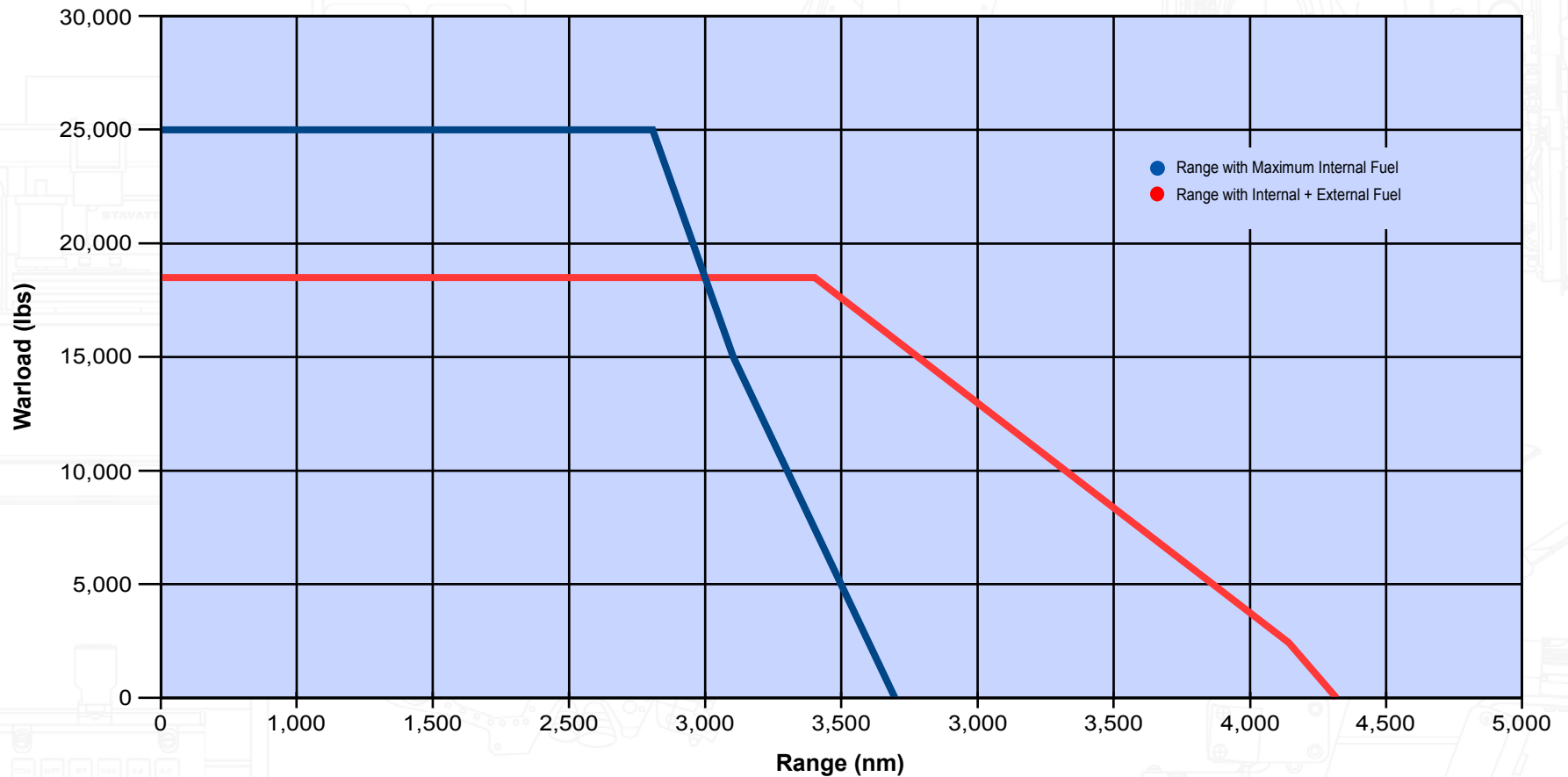
2 x E1400 Powerplants @ Max AB Power

N=1, Standard Day, 300 ft/min Service Ceiling



STAVATTI AEROSPACE

WARLOAD (PAYLOAD) RANGE
SM-39 Unrefueled Range @ Mission Weights
2 x E1400 Powerplants @ Cruise Power
N=1, Standard Day, Cruise Profile Altitudes



SM-39 DEVELOPMENT

STAVATTI®

CAL. YEAR	2027				2028				2029				2030				2031							
QUARTER	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
DEVELOPMENT PROGRAM EVENTS					Demonstrator Development & Demonstration/Validation (Dem/Val)				Full Scale & Engineering Manufacturing Development (FSD/EMD)															
					Production Tooling Design								Follow-On Production Engineering & Variant Development											
	CFD & FEA Simulation																							
					Wind Tunnel Models																			
	Detail Design				Wind Tunnel Testing: 38,381 Hours																			
FACILITIES, MACHINERY & EQUIPMENT	SolidWorks & CAD Workstations								Production Tooling Fabrication															
									Aircraft Production Machinery & Equipment (M&E)															
	Design & Prototyping Center: 173,358 Sq Ft								Manufacturing & Final Assembly Center: >400,000 Total Sq Ft															
					In-Flight Simulation								Paint & Completion Center: 50,000 sq ft											
	Industry Team Selection								Flight Testing, Demonstration & Certification: 4,000 Hours															
PROTOTYPE AIR VEHICLES & TEST ARTICLES	PLANNED PRODUCTION • SM-39 750 A/C Worst Case • SM-39 1,800 A/C Likely Case • SM-39 3,500 A/C Best Case				 SM-39 DAV-1				 SM-39 PAV-1				 SM-39 PAV-2				 SM-39 PAV-3				SM-39 FRP			
																	SM-39 LRIP							
FIRST FLIGHTS & TEST COMPLETION	ACRONYMS DAV: Demonstrator Air Vehicles PAV: Prototype Air Vehicles FT: Flight Test VSS: Vehicle System Simulator FMS: Full Mission Simulator LRIP: Low Rate Initial Production FRP: Full Rate Production								VSS								On-Going Vehicle Systems Simulator (VSS) Fatigue Testing							
									DAV-1 Flight Test (FT): 1,800 HRs															
					4,000+ HRs Total Flight Testing				PAV-1 Flight Test (FT): 900 HRs															
									PAV-2 Flight Test (FT): 700 HRs															
	E1400 AB VCE Design & Development								E1400 AB VCE Testing and Validation								PAV-3 Flight Test (FT): 600 HRs							
Program Costs	\$50M	\$50M	\$85M	\$65M	\$65M	\$65M	\$60M	\$60M	\$200M	\$200M	\$300M	\$300M	\$250M	\$250M	\$250M	\$250M	\$300M	\$300M	\$200M	\$200M				
Employment	350	393	393	393	393	393	393	393	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130				
Facility Size (sq ft)	173K	173K	173K	173K	173K	173K	173K	173K	400K	400K	400K	400K	400K	400K	400K	400K	400K	400K	400K	400K				

STAVATTI AEROSPACE

Stavatti Aerospace Ltd is a new aircraft manufacturer focused upon the design, production and support of next generation military and civil aircraft.

*SM-150
2 Seat Sportplane*



*SM-28 Machete
Close Air Support*



*SM-31 Stiletto
Trainer & Light Fighter*



*SM-920
Commercial Airliner*



*SM-47 Super Machete
Air Defense Fighter*



*SM-100
STOL Intermodal Transport*



*SM-36 Stalma
Multi-Role Fighter*

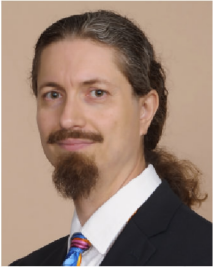


*SM-39 Razor
Air Dominance Fighter*



LEADERSHIP TEAM

STAVATTI®



Chris Beskar
President & CEO



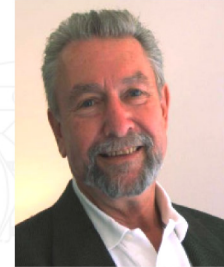
Bill McEwen
COO



Charles W. Moore Jr.
PlankOwner



Richard E. Guild
Director of
Military Aerospace



John R. Simon
CEO Niagara &
Director



Robert C. Sugarman
Chief Scientist
& Director



David Wilcock
Director



Norm Edwards
CFO & Director
of Finance



Wendell Maddox
Senior Vice
President



Jeffrey A. Gongoll
Secretary &
Director



Methodios Vallidis
Director



John Lu
VP of Business
Asia



Michael J. Green
Director of
Next Gen Aerospace



Stuart E. Cart
Chief Innovation
Officer



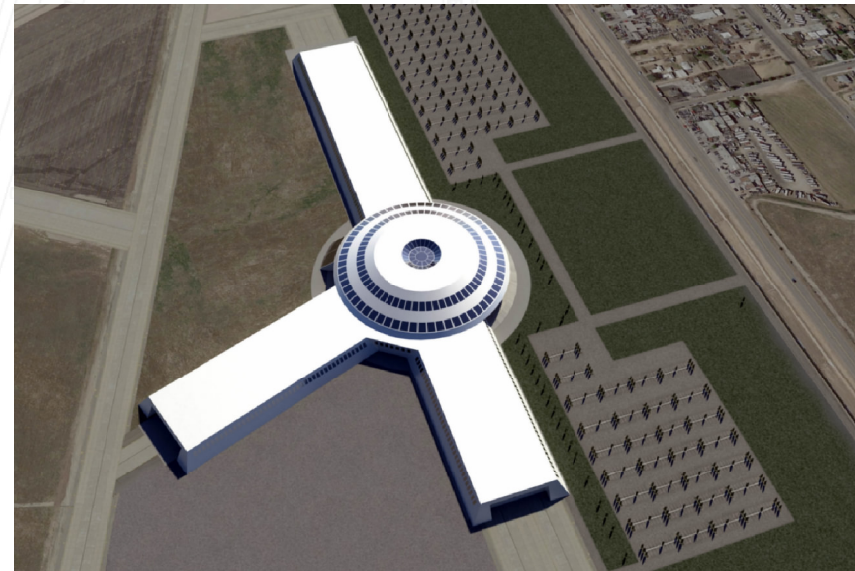
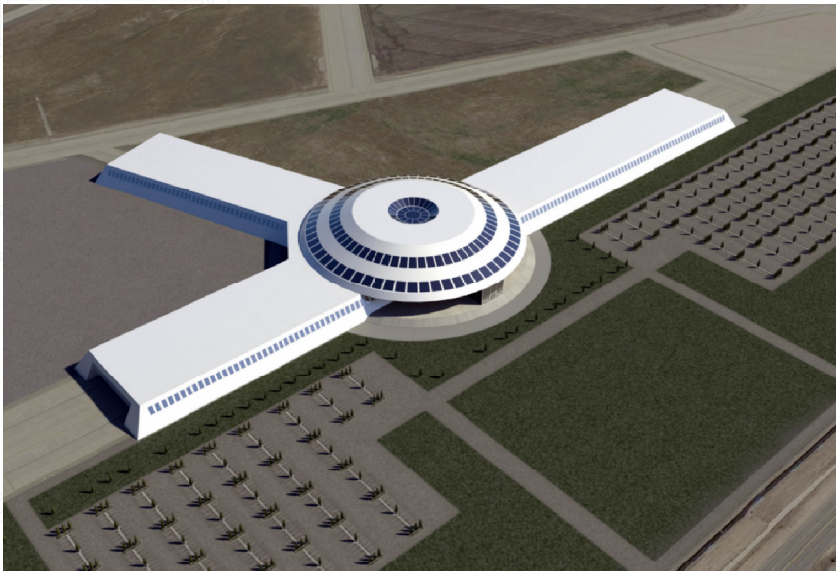
Dimitriy Giebler
Executive VP

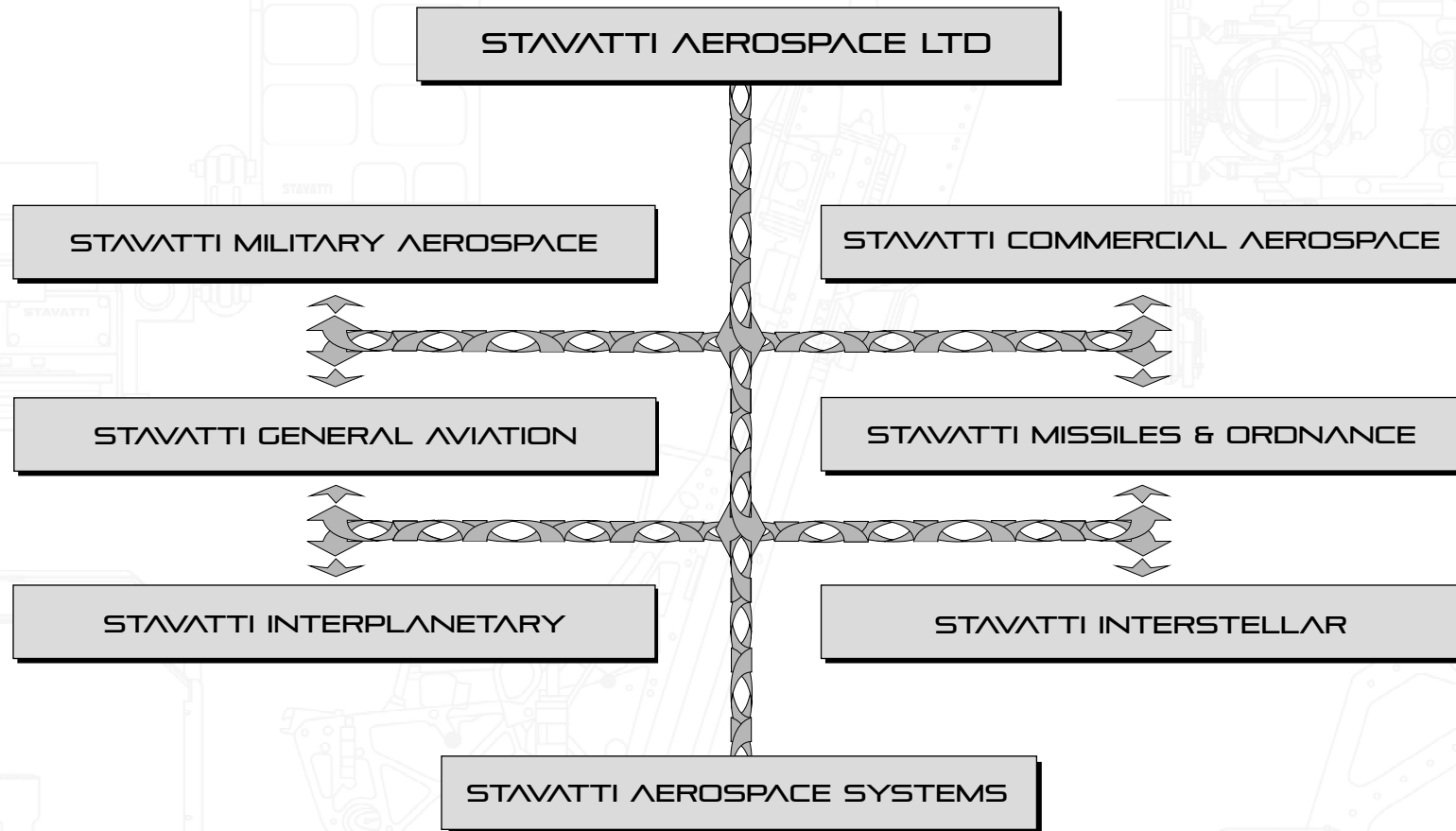
STAVATTI AEROSPACE

- Stavatti Corporation (“Stavatti”) was founded in Eagan, Minnesota on 20 July 1994.
- Stavatti Aerospace Ltd was organized as a Wyoming C corporation on 11 December 2019.
- Stavatti acquired the former USARC facility (SNAPPER) at the Niagara Falls International Airport (KIAG) on 30 October 2020. Totalling 180,113 sq ft on 19.52 acres, this facility now serves as Stavatti headquarters, prototype development and aircraft upgrade center.



- Stavatti's 2M Plant will provide over 2 Million sq ft of combined office and aircraft manufacturing and assembly floor.
- The 2M Plant is designed to manufacture 3 or more Stavatti aircraft models simultaneously under one roof including the iconic SM-920 Commercial Airliner.
- The 2M Plant will employ 15,000 or more qualified, skilled aerospace workers.
- Ground-Breaking on the iconic 2M Plant is planned for 2027-2029.

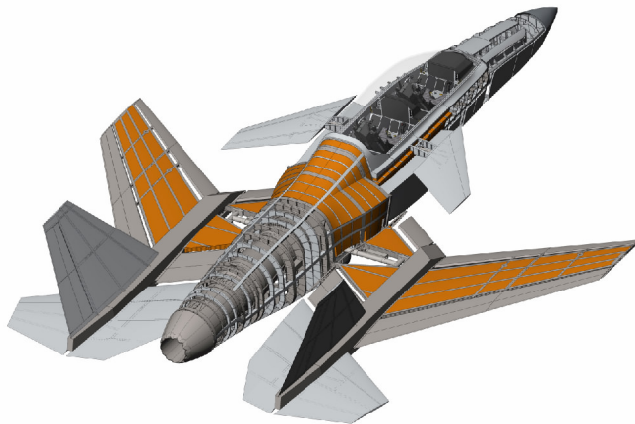
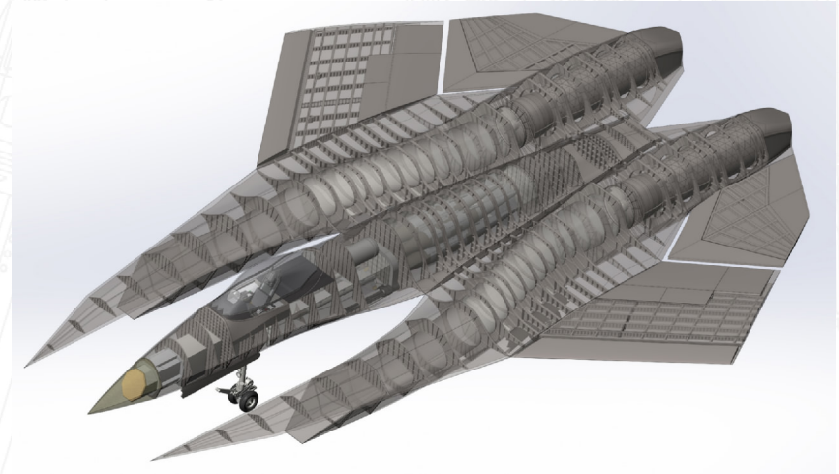
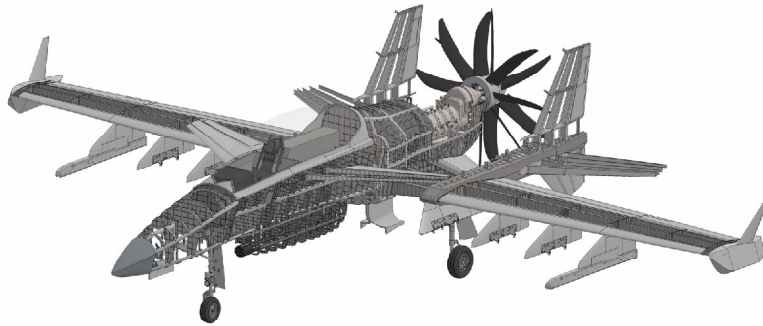




ENGINEERING

STAVATTI®

Stavatti conducts all engineering and design in-house using PLM CAD tools including SolidWorks Premium and CATIA



 **SOLIDWORKS**

 **CATIA**

STAVATTI AEROSPACE

CONTACT

STAVATTI®

Contact Stavatti today at:

STAVATTI NIAGARA
9400 Porter Road
Niagara Falls, NY 14304

STAVATTI MAIL STOP
P.O. Box 3010
Niagara Falls, NY 14304

STAVATTI WYOMING
30 N Gould Street, Ste 2247
Sheridan, WY 82801

MN Tel: 651-238-5369
NY Tel: 716-205-8396
email: aerospace@stavatti.com
<https://www.stavatti.com>



STAVATTI AEROSPACE
