

STAVATTI™



STAVATTI AEROSPACE BRIEFING



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 Place Sportplane*



*SM-27 Machete
Close Air Support*



*SM-28 Machete
Close Air Support*



*SM-31 Stiletto
Trainer & Light Fighter*



*SM-47 Super Machete
Air Defense Fighter*



*SM-26 Slick
Performance Sportplane*



*SM-36 Stalma
Multi-Role Fighter*



*SM-39 Razor
Air Dominance Fighter*



LEADERSHIP TEAM

STAVATTI™



Chris Beskar
President & CEO



Bill McEwen
COO



Jeffrey A. Gongoll
Secretary



John R. Simon
Chief Strategic Development and Asset Officer



Norman Edwards
Director of Finance



Richard E. Guild
Director of Military Aerospace



Wendell Maddox
Vice President
DoD Marketing



Jeff Peer
Director of Flight Testing



Adarsh Deepak
Director of Aerosciences



Robert C. Sugarman
Director of Human Factors



Stuart E. Cart
Director of Innovation



Dimitriy Giebler
Executive VP



Steve Hargan
Senior Strategic Advisor



Wyman Howard
Director of Performance



Vlad Boryshpolov
Director of Aviation Safety



Deane Joyce
Advisor



John Lu
VP of Business Asia



Sergiy Tsikhotsky
Director Of Stavatti Ukraine

STAVATTI AEROSPACE

Stavatti is now developing a variety of new Aerospace Vehicles including:

**Military Aircraft
General Aviation Aircraft
Commercial Aircraft
Spacecraft & Launch Vehicles**

Stavatti's Strategic Vision includes the following vehicles and systems:

Military Aircraft

- Fighters and Attack
- Trainers
- Bombers
- Reconnaissance/ISR
- Military Transports

Commercial Aircraft

- Narrowbody Airliners
- Widebody Airliners
- Regional Airliners
- High Speed Transport
- Cargo Transports

General Aviation

- Light Sport Aircraft
- Single Engine Land
- Multi Engine Land
- Multi Engine Amphibious
- Business Jets

Spacecraft

- Spacelaunch
- ICBM/SLBM
- Interplanetary
- Interstellar
- Space Fighters

Stavatti will Enter the Market with the introduction of the SM-66, SM-150 and SM-26 sportplanes, the SM-31 Stiletto as a Supersonic Trainer and Light Fighter and the Machete series as a Premier CAS solution. Stavatti's new line of aircraft will then include the SM-36 Stalma and SM-39 Razor fighters, followed by transports, a commercial airliner and many other aircraft in the decades to come.

SM-150 Turbo Axial Piston or Electric 2 Place Sportplane



135 KTAS
575 lb Useful Load
850 nm Range

The SM-150 is a Next Generation two seat Sport Aircraft. Stylish and affordable, this advanced sportplane will introduce a new generation to aviation. Prototype First Flight Anticipated in 2021-2022.

SM-27 Machete Turboprop Attack/Close Air Support



**400 KTAS
8,000 lb Warload
870 nm Radius**

The SM-27 Machete is a Turboprop Attack and Close Air Support (CAS) aircraft. The Machete will replace A-1s, OV-10s, AT-6Bs and A-10s. Prototype First Flight Anticipated in 2021 followed by Flight Testing & Qualification.

SM-28 Machete Turbofan Attack/Close Air Support



**570 KTAS
12,000 lb Warload
670 nm Radius**

The SM-28 Machete is a Turboprop Attack and Close Air Support (CA) aircraft. The Machete will replace A-10s, Su-25s, A-7s and A-4s. Prototype First Flight is Anticipated in 2022 followed by Flight Testing & Qualification

SM-31 Stiletto Afterburning Turbofan Supersonic Trainer and Light Fighter



**1.5+ Mach
7,100 lb Warload
2,300 nm Range**

The SM-31 Stiletto is a 5th Generation Supersonic Trainer and Light Fighter to replace F-5, T-38 and MiG-21 aircraft worldwide. Prototype First Flight Anticipated in 2022 followed by Flight Testing & Qualification.

SM-47 Super Machete Afterburning Turbofan Air Defense Fighter



**2.0+ Mach
12,000 lb Warload
625 nm Radius**

The SM-47 is a single engine Air Defense Fighter, Strike Fighter and Trainer. A super-maneuverable aircraft with Forward Swept Wings, the SM-47 replaces F-16 ADFs, F/A-18A/Bs, Mirage 2000s and JAS 39 Gripens.

SM-36 Stalma Afterburning Turbofan Multi-Role Fighter



**Mach 2.6+
20,000 lb Warload
900 nm Radius**

The SM-36 Stalma is a 6th Generation Multi-Role Fighter designed to replace F-35A/Cs, F/A-18E/Fs, Rafales and MiG-29s. Prototype First Flight Anticipated in 2025 followed by Flight Testing & Qualification.

SM-26 Slick
Turbocharged Piston or Turboprop
High Performance Sportplane



330 KTAS
1,150 lb Useful Load
1,100 nm Range

The SM-26 is Stavatti's two seat tandem High Performance Sportplane and Basic Military Trainer. The SM-26 is a 2/3rds Scale Machete inspired Sportplane that will be FAR 23 certified. Prototype First Flight Anticipated in 2022.

SM-39 Razor Twin Afterburning Turbofans Air Dominance Fighter



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

The SM-39 Razor is a 6th Generation Air Dominance Fighter designed to replace F-22s, F-15s, F-14s, F-111s, Su-27s and Su-57s. Prototype First Flight Anticipated before 2030 followed by Flight Testing & Qualification.

STAVATTI CALIFORNIA

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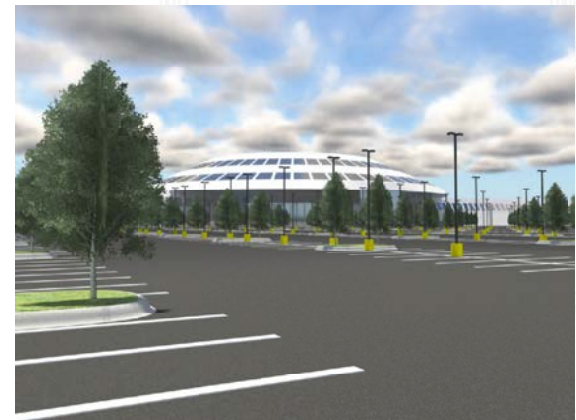
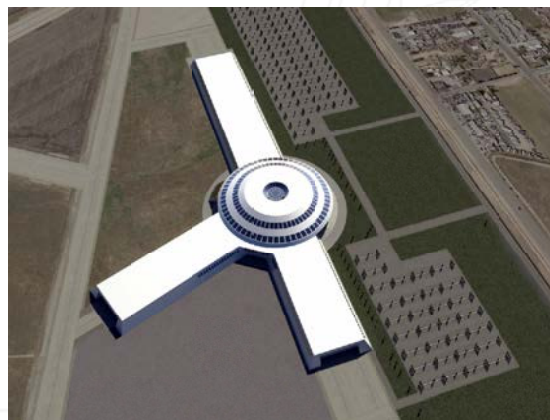
**In May 2016 Stavatti Aerospace Ltd Established a
Prototype and Production Center in San Bernardino, CA**



Airframe Structures, Landing Gear, Oil Tools & Turbines

STAVATTI AEROSPACE

- Stavatti's Proposed 1M Plant will have a footprint of 1 Million sq ft and provide over 2 Million sq ft of combined office and aircraft manufacturing and assembly space.
- The 1M Plant is designed to manufacture 3 or more Stavatti aircraft models simultaneously under one roof and could serve as Headquarters to Stavatti Aerospace.
- The 1M Plant will employ 10,000 or more workers for a minimum of 20 years.



- Stavatti's has begun the site selection process for the 1M Plant and is evaluating more than 20 potential candidate sites at which to establish this facility.
- Ground-Breaking on the iconic 1M Plant is planned for 2022-2025.

Key Enabling Breakthrough and Disruptive Technologies that Stavatti is Developing or Has Licensed For Direct Applications include:

AIRCRAFT

Novel Vehicle Configurations
Internal Compression Air Intakes
Wave Drag Reducing Configurations
Channel Wing STOL Configurations
Circulation & Boundary Layer Control
Inertial Propulsion

AIRCRAFT SYSTEMS

Power-By-Wire Flight Controls
Compact Electromechanical Actuators
Piezo-Electric Deicing

AIRFRAME

Novel Structural Configurations
Foam Metal Sandwich Structures
Nano-Corrosion Control

ARMOR

Foam Metal Sandwich Armor
Beskar Steel™ Alloy Armor
HMWPIB Reactive Armor
Molecular Chromium Plate

AUTONOMY

Active Synthetic Intelligence (ASI)™

BATTERIES & CAPACITANCE

Lithium-Graphene-Silicon Anode Battery

CREW PROTECTION

Standard Armor G-Suite (STAGS)
Modular Armored Cockpit (MAC)

COCKPIT & HUMAN FACTORS

Proprietary Ejection Seats
Proprietary Flight and Throttle Grips

COMPUTING

HyperKnowledge™
Photonic Processors
EtherForth™ and GreenArrays™

DISPLAYS

Canopy Embedded Display (CED)™
Holographic Multi-Functional Display (HMFD)
Full Panel Active Displays

ENERGY & POWER

K-Capture Electron™
Modulated Interference Fusion (MIF)™
Thermo-Alpha Radio-Isotope Fuel Cell
Economical Synthesis of Radioisotopes

MANUFACTURING TECHNOLOGIES

Directed Light Fabrication
Explosive Forming and Joining
Laserwelding and Friction Stir Welding
Laserforming of Titanium
Femtosecond Laser Machining

MATERIALS

Non-Carbothermic Titanium Diboride
Scandium Aluminum & Titanium
Boron, Basalt & Graphene Fiber Composites
US5670574 High Temperature Resin
Beskar Steel™ High Performance Alloy

POWERPLANTS

Variable Pitch Contra-Rotating Propellers
TB2 Supercharged Diesel Rotary Engine
Variable Cycle Turbojet Powerplants
MagnetoHydrodynamic Energy Bypass (MHEB)
Bladeless Boundary Layer Turbines
Radioisotope Gas Turbines
Hi ISP Plasma Rockets and Ion Engines
Wet Steam Geothermal Power
Integrated MicroGrid Solutions (IMGS)

ROBOTICS

Autonomous Flight Droid

SENSOR & AVIONICS

Micro AESA Sensor Technology
Charge Telescope
Stavatti Avionics System Architecture (SASA)

SOFTWARE

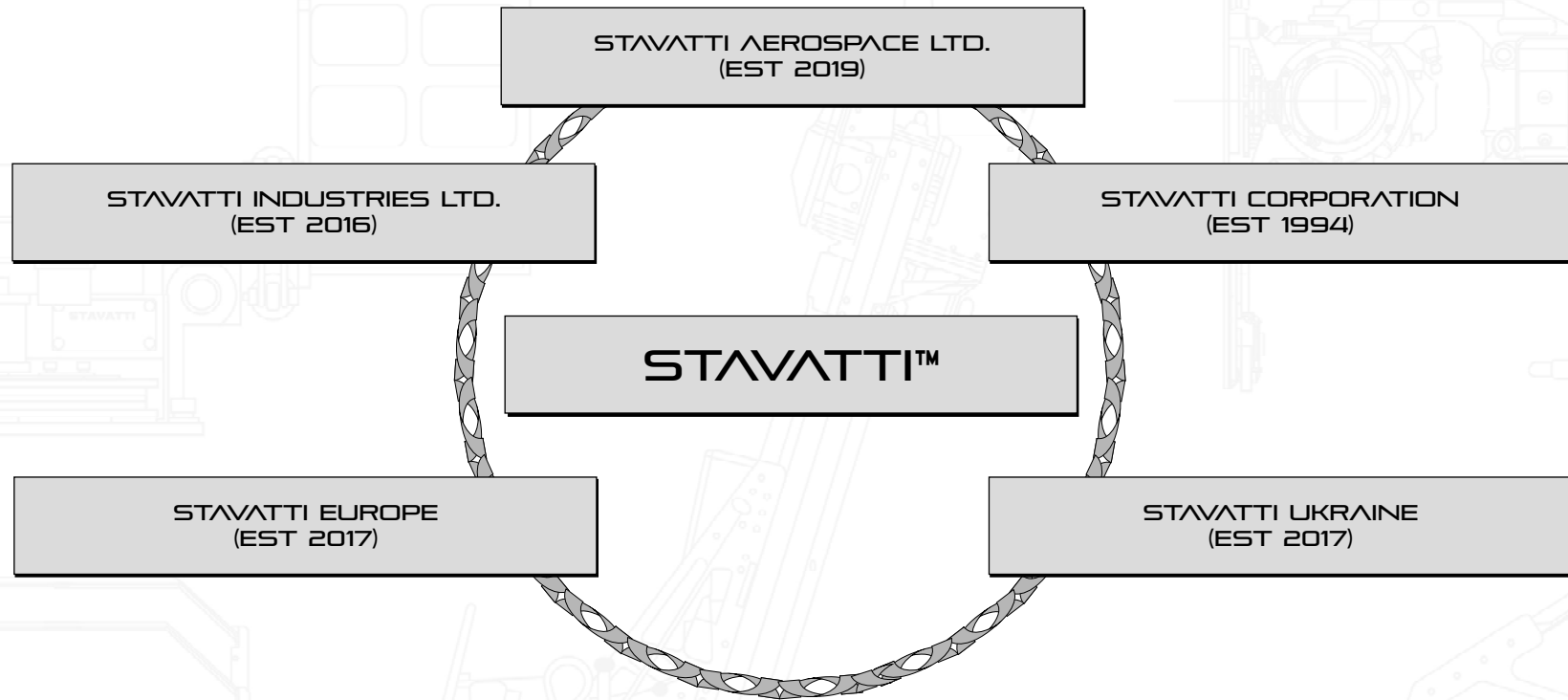
Stavatti Proprietary CAD/CAM/PLM Solution

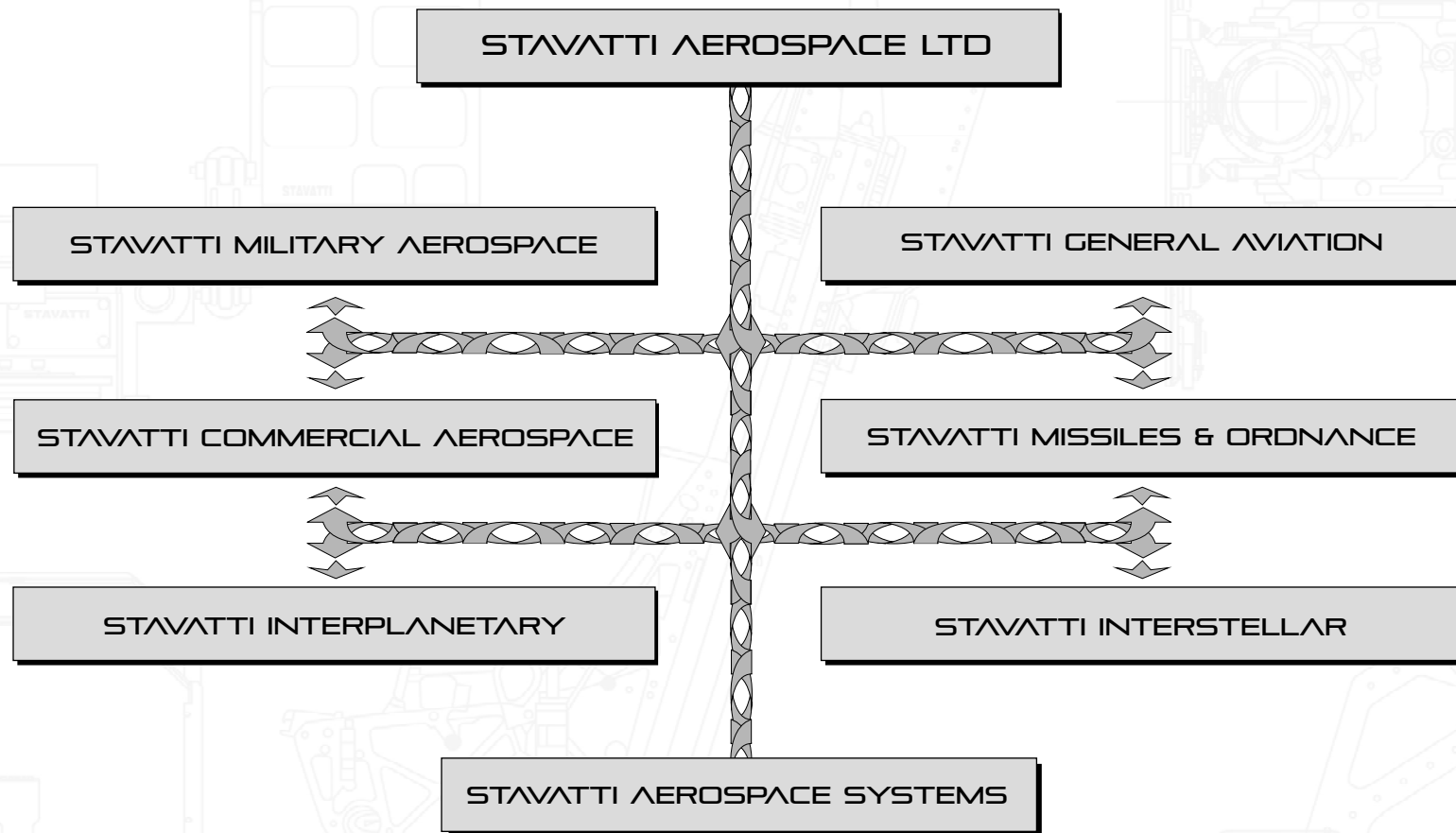
STEALTH & LOW OBSERVABILITY

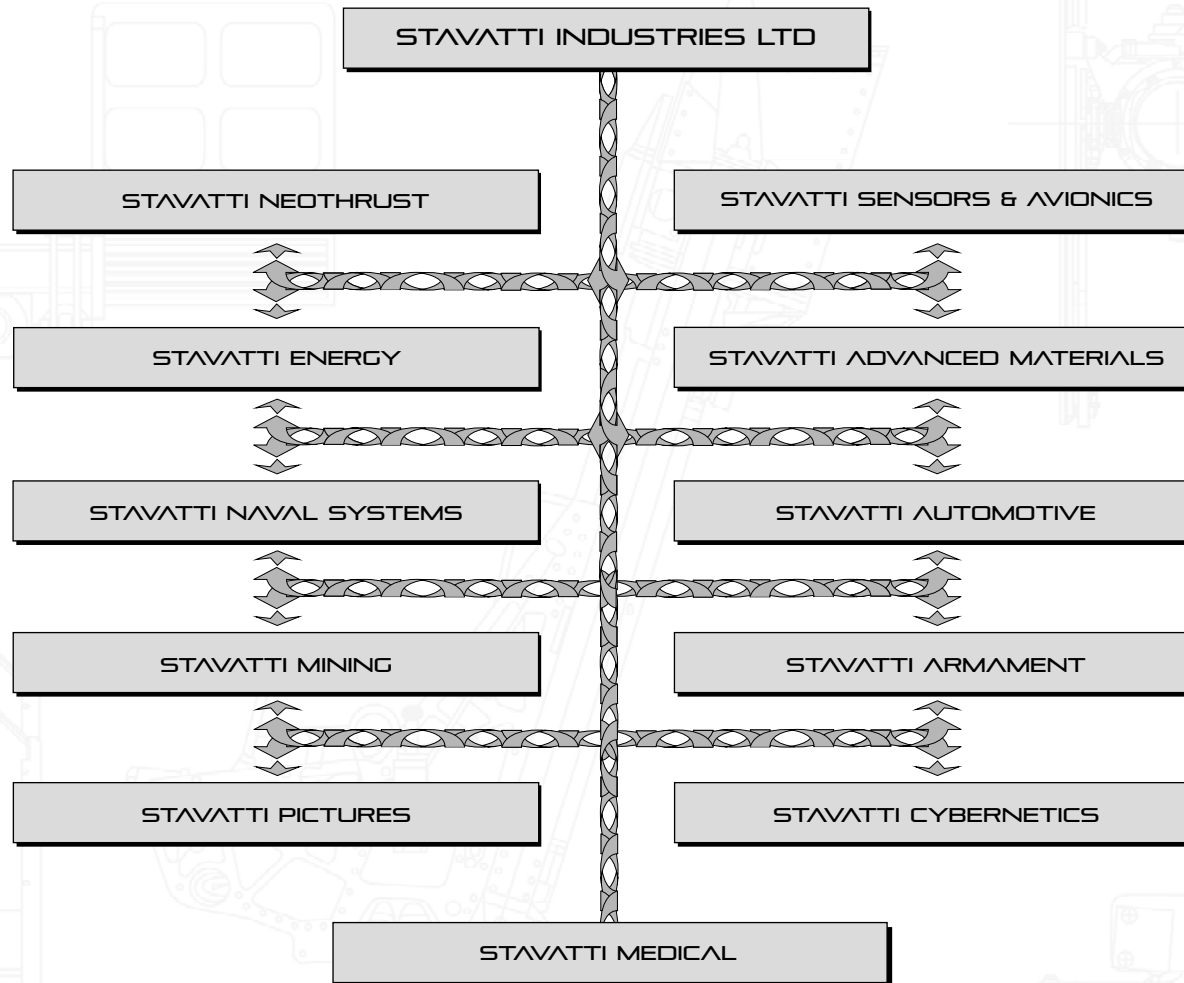
Active Wave Attenuation (AWA)
Active Plasma Cavity Stealth (APCS)
Ceramic-Metal Radar Absorbent Material
Nano-Stealth

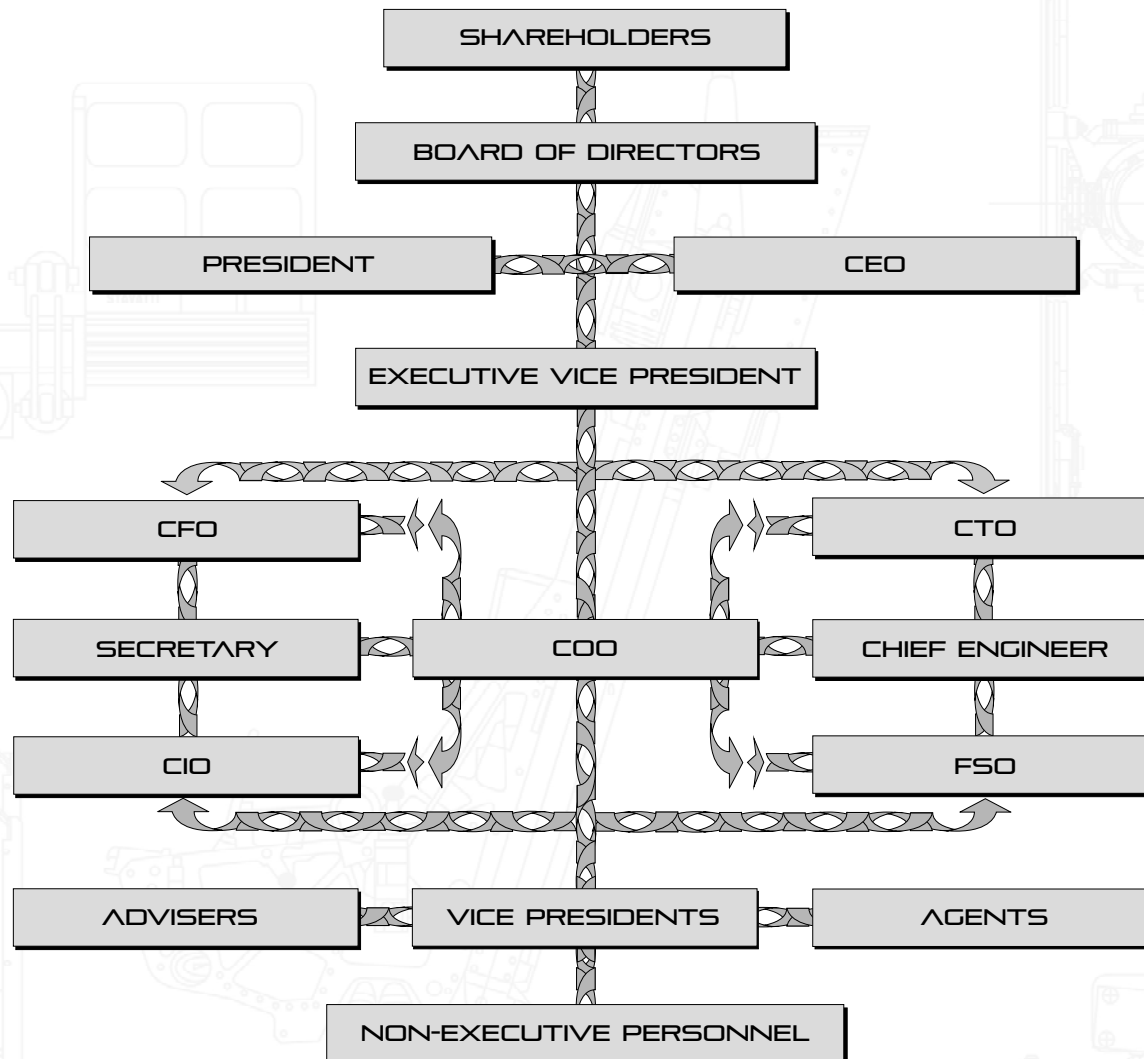
WEAPON SYSTEMS

Gas Dynamic Directed Energy Weapons
Positron Warhead™
Compact Air-To-Air Missile
Next Generation 20mm and 30mm Cannon Systems









Stavatti business practices adhere to distinct Core Values including...

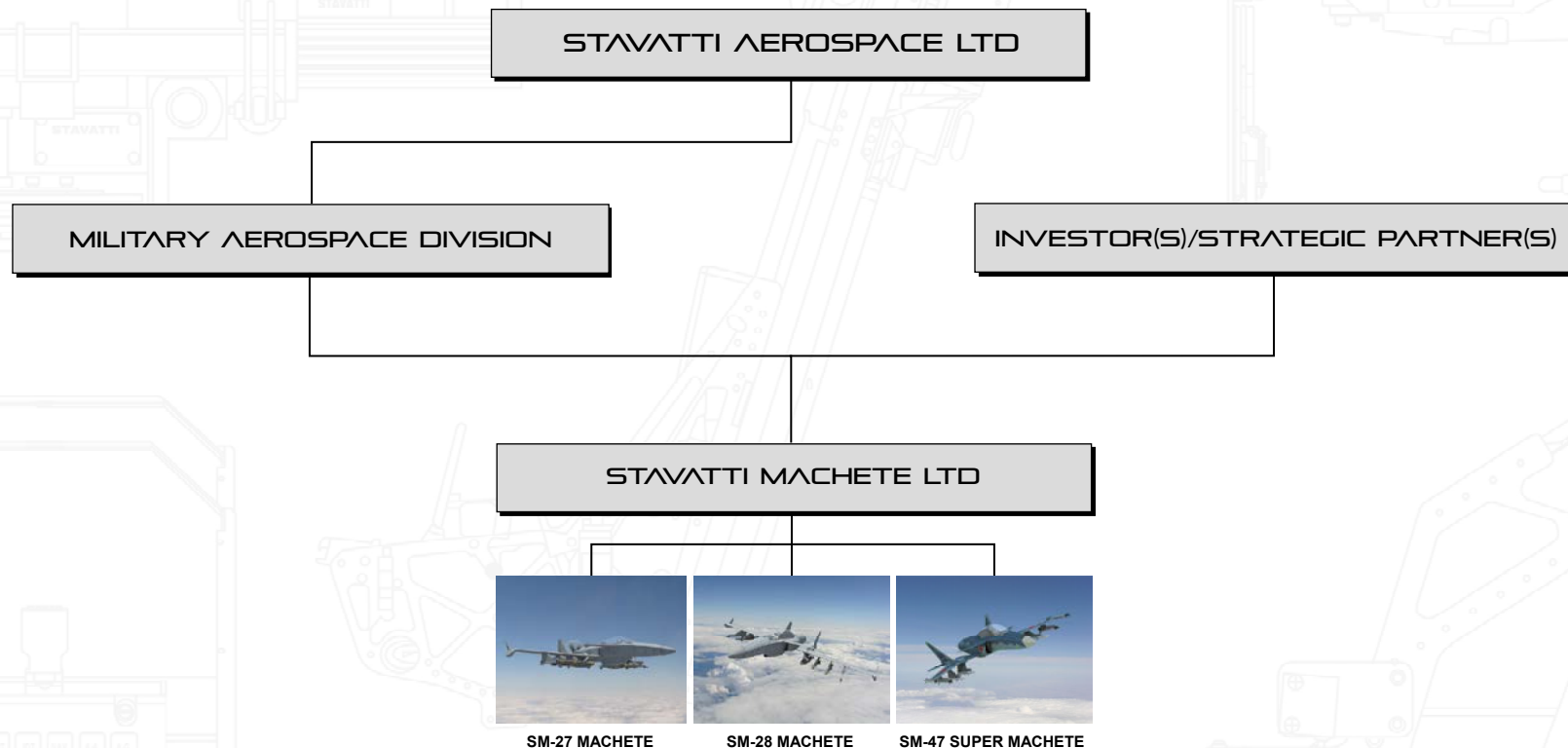
- **Best-in-Class Products**
- **Customer Success**
- **Mission Focus**
- **Responsibility and Patriotism**
- **Commercial Best Practices**
- **Employee Achievement and Success**
- **Revenue Creation**
- **Absolute Quality**
- **Leadership with Strategic Vision**
- **Individual Ability**
- **Continuous Learning, Improvement and Innovation**

- **New Aircraft Development Programs** are funded by the internal resources of Stavatti Aerospace and strategic investment partners through equity and debt financing as well as a combination of sources.
- **Investors include accredited investors, institutional investors, corporations, industry team members or government entities.**
- **Investors fund a portion or all of the development costs of a program in exchange for an equity or royalty position in the joint venture company, a direct royalty from the revenues of a specific aircraft product line or a value added interest payment.**
- **All funding is provided in phases including a risk reducing Demonstration and Validation (Dem/Val) phase, followed by Full Scale Development (FSD) and finally Low Rate Initial Production (LRIP).**
- **Alternatively, certain programs, in particular special access development programs, are funded entirely by end-user customers under contract, such as the SM-39 Razor which may be funded under a USAF/DoD contract.**

PROGRAM STRUCTURE

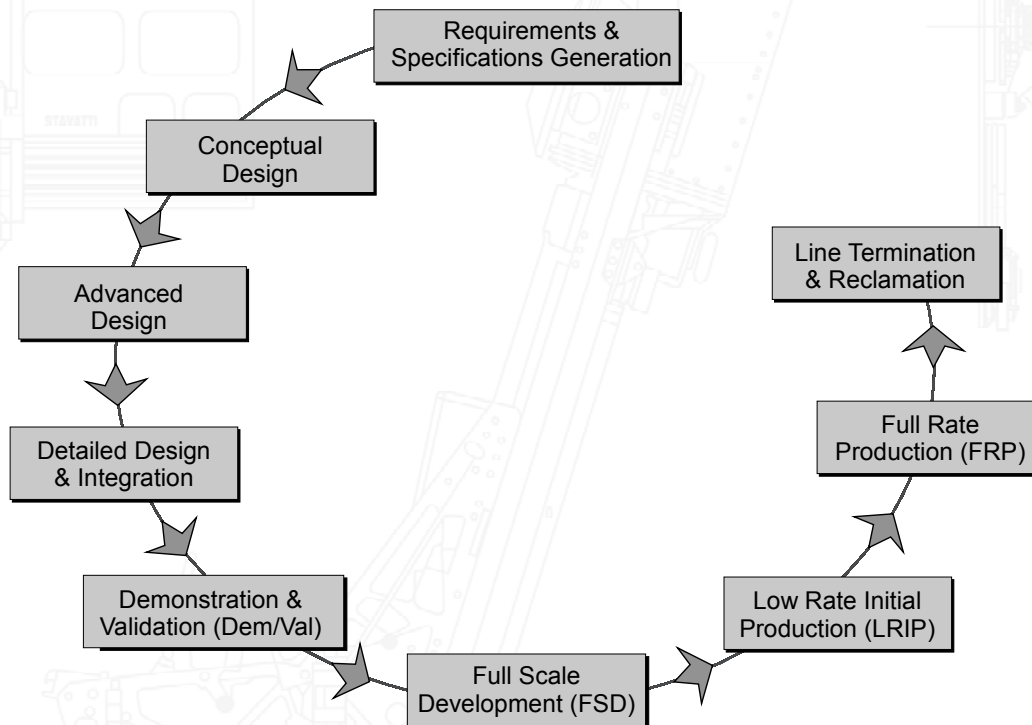
STAVATTI™

Each Aircraft Program is typically structured as a stand-alone joint venture company owned by Stavatti Aerospace Ltd and Investors and/or Strategic Partners. Joint venture companies are named after their associated program. Programs are managed by an appropriate division of Stavatti Aerospace Ltd. Example aircraft program organizational structures include:



STAVATTI AEROSPACE

Stavatti aerospace programs follow a streamlined, design, development, production and customer support process unique to the industry...

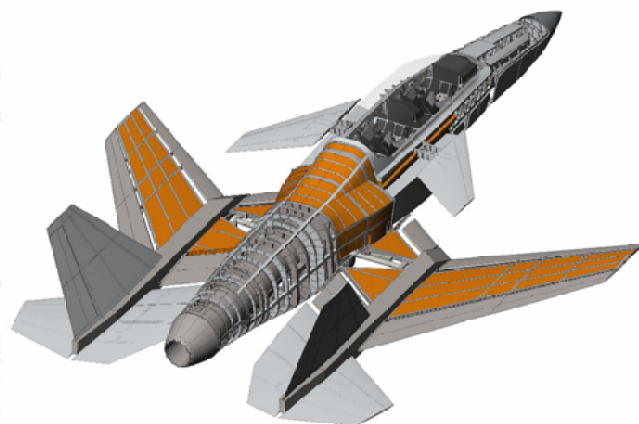
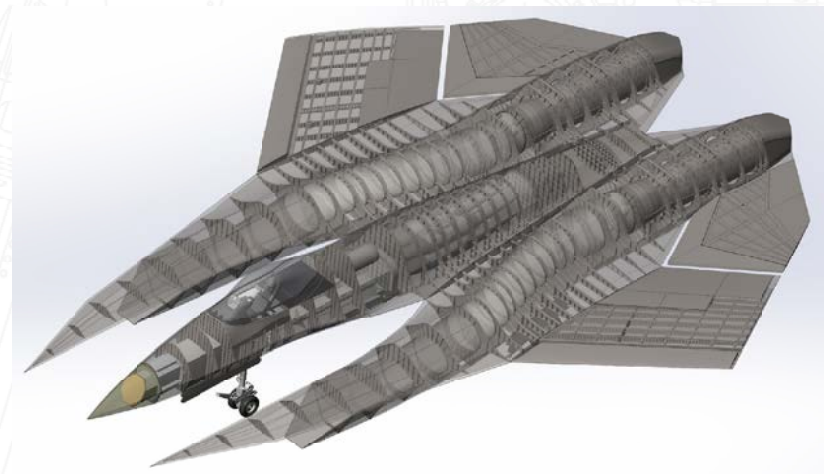
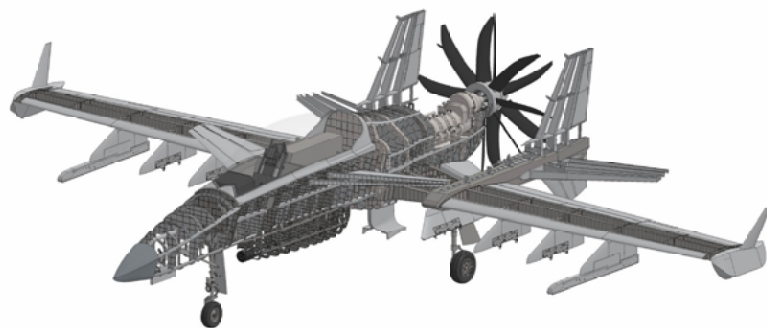


Implementing this process, Stavatti develops and delivers entirely new, advanced aircraft without sacrificing quality, performance or value.

ENGINEERING

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

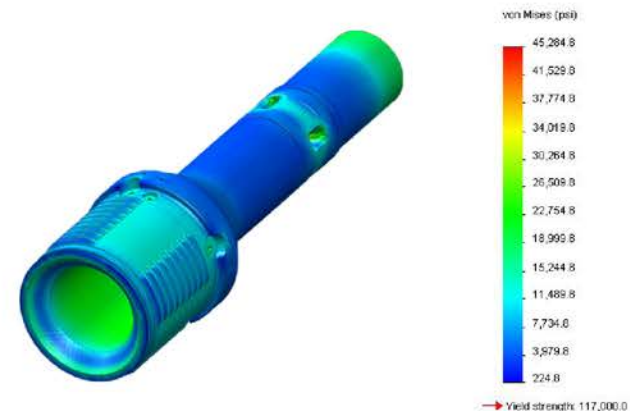
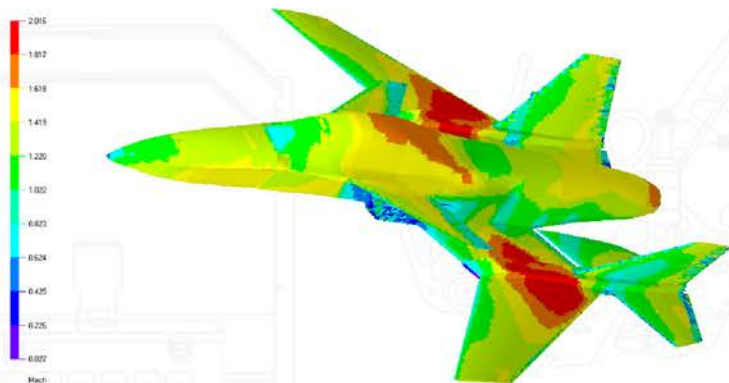
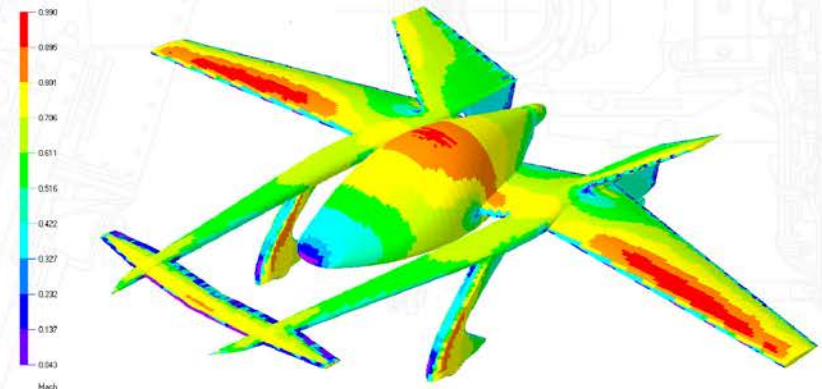
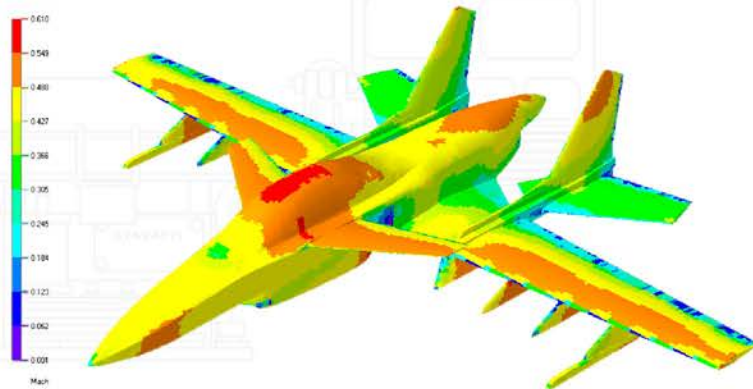


 **SOLIDWORKS**

 **CATIA**

STAVATTI AEROSPACE

Stavatti performs Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA) of all airframes and parts with ongoing simulation 24/7.





- Stavatti aircraft will undergo extensive flight and operational testing to achieve Military Qualification and/or FAA Type and Production Certification
- Military aircraft will be flight tested at the Air Force Flight Test Center (AFFTC), Edwards AFB to ensure military qualification.
- Additional US DoD facilities, including China Lake, will be employed throughout the Stavatti weapon system testing effort.
- General Aviation aircraft undergo a complete FAA Type and Production Certification program, such as FAR Part 23, including flight testing at centers in California. Team Members including AESI will provide support.
- Stavatti will utilize Vehicle Systems Simulators (VSS or 'Iron Birds') for lifetime fatigue testing as well as Full Mission Simulators for crew training.

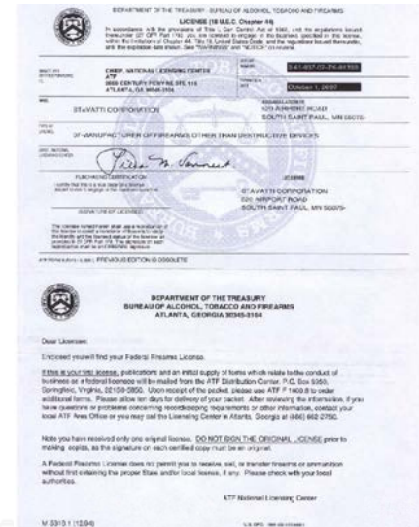
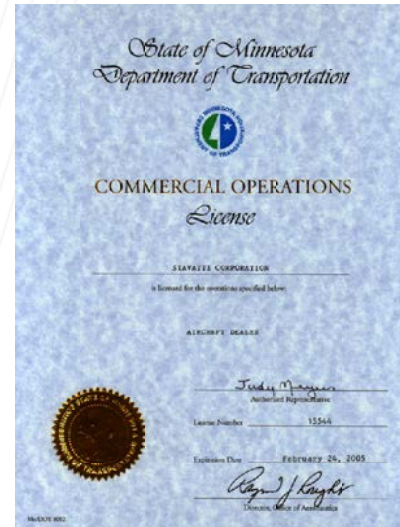
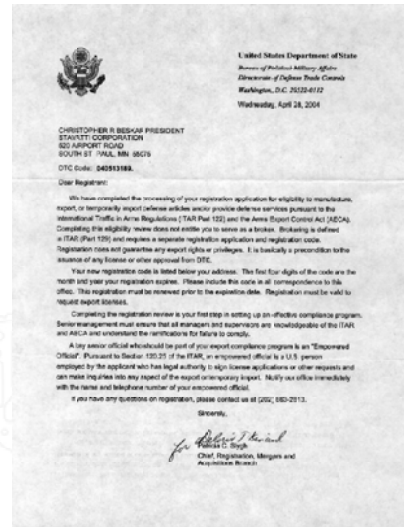


- Stavatti customers will benefit from full Contractor Logistical Support (CLS) of a comprehensive aerospace defense enterprise.
- Stavatti can provide CLS directly or can work with customers to establish organic logistical support.
- Stavatti will provide total procurement packages, including ground support systems, ordnance, spares and delivery.
- Stavatti will provide complete aircrew flight/combat training services as well as maintenance instruction.
- All aircraft will have a 2,000 Hour Nose-to-Nozzle Manufacturers Limited Warranty on all new aircraft and 24/7 world-wide customer assistance.



STAVATTI™

- | | | |
|---|--|------|
| State of Minnesota | | 3589 |
| SECRETARY OF STATE | | |
| CERTIFICATE OF INCORPORATION | | |
| I, <u>Joan Anderson Green</u> , Secretary of State of Minnesota, do hereby certify that: Articles of Incorporation, duly signed and acknowledged under oath, have been filed on this date in the Office of the Secretary of State, for the incorporation of the following corporation, under and in accordance with the provisions of the chapter of Minnesota Statutes listed below. | | |
| This corporation is now legally organized under the laws of Minnesota. | | |
| Corporate Name: <u>Stevall Corporation</u> | | |
| Corporate Charter Number: <u>81-135</u> | | |
| Chapter Formed Under: <u>363A</u> | | |
| This certificate has been issued on <u>07/24/1964</u> . | | |
|  | | |
| 
Secretary of State | | |
| -40777-1 | | |



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• **North American Industry Classification System Codes (NAICS Codes)**
Applicable to Stavatti Aerospace Ltd and Stavatti Industries Ltd Include:

- 336411 Aircraft Manufacturing**
- 336412 Aircraft Engine and Engine Parts Manufacturing**
- 336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing**
- 488190 Other Support Activities For Air Transportation**
- 336414 Guided Missile and Space Vehicle Manufacturing**
- 336415 Missile and Space Vehicle Propulsion Unit Manufacturing**
- 336419 Missile and Space Vehicle Auxiliary Equipment Manufacturing**
- 336111 Gas Turbines Except Aircraft Manufacturing**
- 332995 Aircraft Artillery Manufacturing**
- 332993 Ammunition Except Small Arms Manufacturing**
- 332994 Small Arms, Ordnance, and Ordnance Accessories Manufacturing**
- 333132 Oil and Gas Field Machinery and Equipment Manufacturing**
- 333131 Mining Machinery and Equipment Manufacturing**
- 332710 Machine Shop**
- 333249 Other Industrial Machinery Manufacturing**
- 332117 Powder Metallurgy Part Manufacturing**
- 541618 Other Management Consulting Services**

CONTACT

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