

## Investor Pitch Deck 5/20/2022

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Accurate, Reliable Positioning, Navigation, Timing (PNT) <u>Without</u> GPS

#### NOTE REGARDING FORWARD LOOKING STATEMENTS



• THE INFORMATION SET FORTH HEREIN CONTAINS "FORWARD-LOOKING INFORMATION", INCLUDING "FUTURE-ORIENTED FINANCIAL INFORMATION" AND "FINANCIAL OUTLOOK", UNDER APPLICABLE SECURITIES LAWS (COLLECTIVELY REFERRED TO HEREIN AS FORWARD-LOOKING STATEMENTS). EXCEPT FOR STATEMENTS OF HISTORICAL FACT, THE INFORMATION CONTAINED HEREIN CONSTITUTES FORWARD-LOOKING STATEMENTS AND INCLUDES, BUT IS NOT LIMITED TO, THE (I) PROJECTED FINANCIAL PERFORMANCE OF THE COMPANY; (II) COMPLETION OF, AND THE USE OF PROCEEDS FROM, THE SALE OF THE SHARES BEING OFFERED HEREUNDER; (III) THE EXPECTED DEVELOPMENT OF THE COMPANY'S BUSINESS, PROJECTS, AND JOINT VENTURES; (IV) EXECUTION OF THE COMPANY'S VISION AND GROWTH STRATEGY, INCLUDING WITH RESPECT TO FUTURE M&A ACTIVITY AND GLOBAL GROWTH; (V) SOURCES AND AVAILABILITY OF THIRD-PARTY FINANCING FOR THE COMPANY'S PROJECTS; (VI) COMPLETION OF THE COMPANY'S PROJECTS THAT ARE CURRENTLY UNDERWAY, IN DEVELOPMENT OR OTHERWISE UNDER CONSIDERATION; (VI) RENEWAL OF THE COMPANY'S CURRENT CUSTOMER, SUPPLIER AND OTHER MATERIAL AGREEMENTS; AND (VII) FUTURE LIQUIDITY, WORKING CAPITAL, AND CAPITAL REQUIREMENTS. FORWARD-LOOKING STATEMENTS ARE PROVIDED TO ALLOW POTENTIAL INVESTORS THE OPPORTUNITY TO UNDERSTAND MANAGEMENT'S BELIEFS AND OPINIONS IN RESPECT OF THE FUTURE SO THAT THEY MAY USE SUCH BELIEFS AND OPINIONS AS ONE FACTOR IN EVALUATING AN INVESTMENT.

• THESE STATEMENTS ARE NOT GUARANTEES OF FUTURE PERFORMANCE AND UNDUE RELIANCE SHOULD NOT BE PLACED ON THEM. SUCH FORWARD-LOOKING STATEMENTS NECESSARILY INVOLVE KNOWN AND UNKNOWN RISKS AND UNCERTAINTIES, WHICH MAY CAUSE ACTUAL PERFORMANCE AND FINANCIAL RESULTS IN FUTURE PERIODS TO DIFFER MATERIALLY FROM ANY PROJECTIONS OF FUTURE PERFORMANCE OR RESULT EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS.

• ALTHOUGH FORWARD-LOOKING STATEMENTS CONTAINED IN THIS PRESENTATION ARE BASED UPON WHAT MANAGEMENT OF THE COMPANY BELIEVES ARE REASONABLE ASSUMPTIONS, THERE CAN BE NO ASSURANCE THAT FORWARD-LOOKING STATEMENTS WILL PROVE TO BE ACCURATE, AS ACTUAL RESULTS AND FUTURE EVENTS COULD DIFFER MATERIALLY FROM THOSE ANTICIPATED IN SUCH STATEMENTS. THE COMPANY UNDERTAKES NO OBLIGATION TO UPDATE FORWARD-LOOKING STATEMENTS IF CIRCUMSTANCES OR MANAGEMENT'S ESTIMATES OR OPINIONS SHOULD CHANGE EXCEPT AS REQUIRED BY APPLICABLE SECURITIES LAWS. THE READER IS CAUTIONED NOT TO PLACE UNDUE RELIANCE ON FORWARD-LOOKING STATEMENTS.

# Meeting the challenges of tomorrow, today

## <<(Click to watch 60 sec video)>>

Investor Pitch Deck

## The problem we solve:

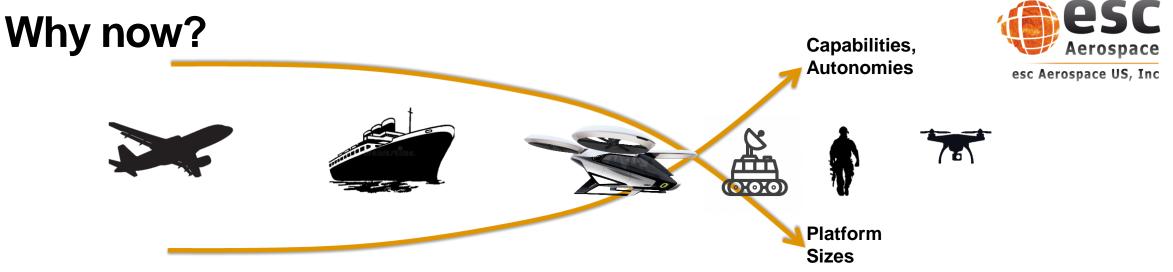


## • GPS inherently unreliable

- Trees, buildings, weather cause interferences
- Easily jammed or worse ... "spoofed" (false GPS signals)
- Without reliable and accurate PNT:
  - Financial systems may fail
  - Autonomous vehicles could crash
  - Military missions may fail
  - Lives may be lost



Accurate, Reliable Positioning, Navigation, Timing (PNT) <u>Without</u> GPS



### Military Demand (TODAY)

- GPS easily jammed/spoofed
- Almost every military system dependent on PNT
- Alternative PNT recognized as National Defense priority

### **Commercial Demand (Emerging)**

- Devices that require accurate PNT getting smaller and smaller
- Capabilities and autonomies are increasing exponentially

### **Our solution**

- Meets military needs for TODAY
- Positioned for commercial growth as demand increases

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## **Our Solution**

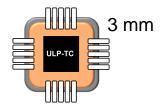


### <u>escPNT™</u>



Network Assisted Visual Aided Non-Positioning Low-Earth Orbit (LEO) Satellites GPS/GNSS /w RTK

### escULP-TC<sup>™</sup>



- Enables >24hr PNT "holdover"
- Critical to other markets (i.e. IoT, communications, etc.)

- Leverage multiple layers of sensors for resiliency and accuracy
- Base product currently being sold commercially
- Technology layers sold as prototypes to multiple DOD services (Air Force, Army, Navy, etc.)
- Focus on low Size Weight, Power and Cost (SWaP-C)
- Timing Circuit provides significant opportunity as its own product and PNT enhancement

## **Market Size**

#### **Total Market**

- Location Based Services: \$133B
- Timing IC: \$11B

## > \$144B

Total Addressable **\$80B** 

Target Market

## >\$30B

- DOD Radios
- Other DOD
- Commercial



### **Market Data Location-Based** Services 2023: \$133B Timing IC 2019: \$7.17B 2027: \$11.21B UAS 2017: \$18.1B 2025: \$52.3B Autonomous Driving 2019: \$54.2B 2026: \$556.7B

**Target Markets** 

Commercial

Mobility, sUAS

**Bottom-up Analysis** 

**GPS** - \$1.8B

**Radios** - \$30B

**DOD** (2021)

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Military

**Location-Based Services** 

and Timing IC in Military

and commercial markets

Dismounted, precision

weapons, sUAS, ISR,

autonomous ground vehicles

Autonomous supply/logistics,

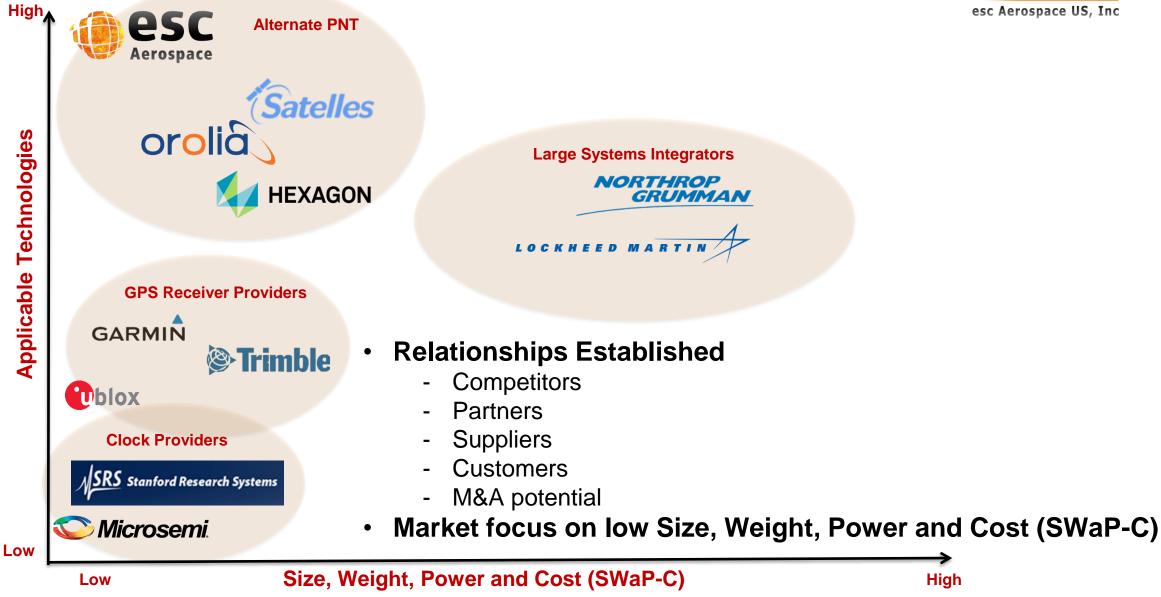
Radios – 800K radios

Autonomy - \$1.7B

precision agriculture, Urban Air

## **Competitive Landscape**





## **Business Model / Go To Market**

- 1. Leverage Government Small Business Incentives fund
  - Early development funding
  - Establish customer relationships

## 2. Leverage founder's relationships

- Decades of experience in military and commercial markets
- Pre-established relationships with potential teaming partnerships, customers, suppliers

## 3. Leverage investment

- Accelerated development/go to market
- Increased revenue growth



- Non-Dilutive
- Jumpstart startup

- Reduces BD effort
- Increased sales potential
- Positions for exit
- Improved probability of success

 Accelerates product development, market entry and growth

## Who are our customers/markets?



### Military/Defense (all services)

- Ground force (soldier/"dismounted")
- Search and Rescue
- Reconnaissance
- Precision weapons
- Autonomous ground/air
- Submersible Vessels
- etc.

### **Commercial Customers/Markets**

- Platform manufacturers (small unmanned aircraft, autonomous vehicles, automotive, etc.)
- Service providers (Inspection, insurance, search and rescue, disaster recovery, etc.)
- Product Manufacturers (IoT, radio, guidance/navigation, etc.)

## **Our Team**



#### **Key Technical Staff**



#### Founders/Executive Staff

#### Lars Weimer

- President & CEO
- 20 years of demonstrated achievements in all aerospace and defense system life cycle phases
- Held senior staff positions at Airbus
- Successfully launched several small businesses

#### **Danny Stirtz**

- **Executive VP Business Development**
- 40 years experience in systems development and commercialization, held senior positions at Northrop **Electronics, and Lockheed Martin**
- **Developed SR71 Astro-Inertial Navigation Systems** (ANS), GPS space and ground segments
- Successfully launched several small businesses



#### **Mathias Krueger**

- esc Aerospace Founder, Board Member and Investor
- Serial entrepreneur
- Founded, grew and sold companies in more than five countries



#### **Dr Cantwell Carson**

- Senior System Architect
- > 20 yr. experience in academia, national labs, and private sector
- Principal Investigator on numerous government / DoD contracts
- Developed a method of determining positions of LEO satellites for PNT



#### **Timothy Jones**

- Senior Software Engineer and Technical Lead
- Held positions at HP, Raytheon and Thales
- escPNT<sup>TM</sup> software lead
- Held clearances and contributed to patents

#### **Ed Seger**

- Highly capable and experienced developer with over 20 years of experience in FPGA and hardware development
- Development of radio front-end/FPGA for our LEO PNT contract with the Air Force
- Former positions range across multiple recognized commercial developers as well as the NSA



**Status** 





• Multi-services customs established and growing

## Products and services (how we earn money)

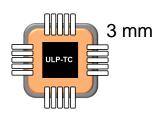


### <u>escPNT™</u>

- Multi-version packaging
  - Applications/Platform specific
  - Mil-Spec variant
  - Embedded/standalone
  - Licensed S/W

### • Recurring revenue

- Product maintenance/service
- S/W Licensing
- Embedded component licensing



3 Inch

### escULP-TC<sup>™</sup>

- Multi-version packaging
  - Embedded Chip
  - Timing device
- Licensing or technology sale potential



- Product sales
- Annual support
- Licensing

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- Integration services
- DOD Development/Deployment

## Financials (Actuals to date and Projections)



Actual					Projected with investment									
Cash Flow and Profit		2020		2021	2022		2023		2024		2025		2026	2027
Revenue	\$	767,502	\$	592,711	\$ 1,502,330	\$	3,548,571	\$	3,591,048	\$	13,132,800	\$	55,943,020	\$ 130,929,056
Cost	\$	703,538	\$	625,146	\$ 2,423,877	\$	8,881,680	\$	8,625,800	\$	10,810,520	\$	20,021,671	\$ 29,295,533
EBIT / "Net Income"	\$	63,964	\$	(32,436)	\$ (921,547)	\$	(5,333,109)	\$	(5,034,752)	\$	2,322,280	\$	35,921,349	\$ 101,633,523
Loans	\$	(54,625)	\$	189,801										
Debt Service	\$	(27,302)	\$	(82,092)	\$ (150,000)									
Investment	\$	-	\$	-	\$ 1,000,000	\$	6,000,000	\$	6,000,000					
Total cash	\$	(17,963)		\$75,274	\$ (71,547)	\$	666,891	\$	965,248	\$	2,322,280	\$	35,921,349	\$ 101,633,523
Reserve		\$0.29	\$	75,274	\$ 3,727	\$	670,619	\$	1,635,866	\$	3,958,146	\$	39,879,495	\$ 141,513,019

SEE NOTE REGARDING FORWARD LOOKING STATEMENTS

#### Ask and Return on Investment

- Ask: \$1M (current crowdfunding campaign) (potential additional investment over 3 years)
- Significant share price increase over 5-year growth (>\$130M/yr. annual by 2027)
- Discount for early investors (see SEC filing)

#### **Use of Funds**

- Accelerate product development
- Increase business development and marketing efforts

## Summary

- Product discrimination in underserved markets
  - Low SWaP-C
  - Patent pending
  - Technology roadmap supports today's and tomorrow's needs
- Meets critical national defense need and emerging commercial markets
- Markets are large and growing
- Licensing for revenue/profit growth
- Revenue potential established (2020 and 2021 actuals)
- Strong basis of estimate for revenue growth
- Prototype systems delivered ... positioned for large deployments
- Exceptionally experienced leadership and technical staff
- Established relationships (customers, partners, potential acquirers)



esc Aerospace US, Inc

## Ask: \$14M

Growth to >\$130M within 5 yr

## **Discount for early investors**

### **Points of Contacts**



## **Danny Stirtz**

Executive Vice President (407) 579-5869 danny.stirtz@esc-aerospace.us

## Lars Weimer

President/CEO (407) 965-9679 lars.weimer@esc-aerospace.us

www.esc-aerospace.us

## Backup

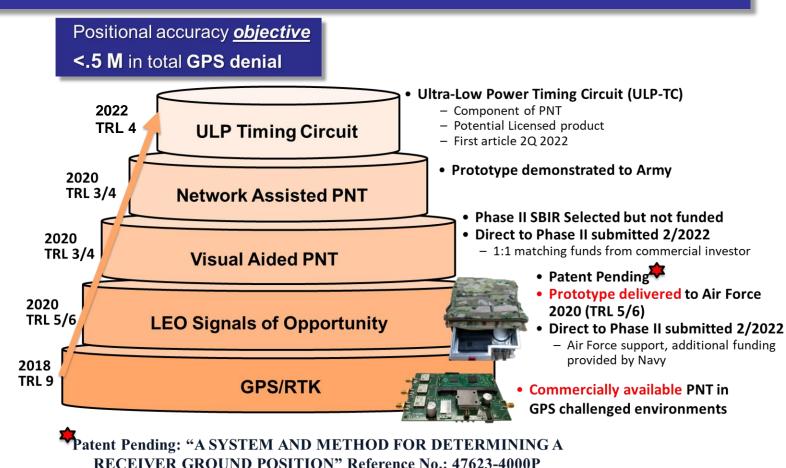




### No one technology meets demands across markets/use cases Systems <u>delivered</u> and positioned for large deployments

### **Our products:**

- Leverage multiple layers of sensors for resiliency and accuracy
- Focus on low Size Weight, Power and Cost (SWaP-C)
- Uniquely positions us to address currently very underserved markets
- SoOP independent of proprietary receiver and/or satellite signal content and service
- Timing Circuit provides significant opportunity as its own product and provides meets PNT critical need



RECEIVER GROUND POSITION

## **Ultra-Low Power Timing Circuit (escULP-TC<sup>™</sup>)**



- Timing circuits ubiquitous
  - maintain time "in-between" GPS signals (a few sec.)
- Many systems will fail when GPS absent for > a few seconds/minutes
- Current higher performance timing devices
  - very expensive
  - consume large amounts of power
- escULP-TC<sup>™</sup> bridges the gap between low cost/power timing circuits (crystal oscillators -XO) and high-end timing circuits (i.e. Chip Scale Atomic Clocks - CSAC)
- Used in escPNT<sup>™</sup> and sold as separate product
  - Large market potential (PNT, Communications, IoT, etc.)

