#### Controls Research LLC

Engineering Software Firm Frankfort, Illinois





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Current Gas Turbine Engine Design Tools are either:

- Too Simplistic
- Too Complex for Teaching and Learning
- Require Extensive User Construction
- Expensive

## Solution:



- Innovative Software System
  - Graphical User Interface
  - Intuitive Design Enhancing Learning & Creativity
  - Rapid Synthesis, Architecting, Simulation & Analysis
  - Excellent Presentation Features
  - Detailed Physics, Aerodynamics, Thermodynamics, Controls are Built-In

# Solution:

SimTurbo

Large Tool-set for Aircraft Engine Design

Modifiable Components

Students & Professors allowed to create freely

 Built-in Teaching: Gas Turbine Fundamentals, Thermodynamic Cycles, Control Systems

#### **Our Team**



Paul J. Hoffman, President, CEO & Founder

- BSME MIT, MSME Stanford U., MBA U of Toledo
- Over 45 years experience in Aerospace, Automotive & Power Systems

Chris Hoffman, Vice President of Sales & Marketing

 Over 15 years experience in Sales & Marketing of Technical Products

## **Market Opportunity:**

- Target 150 United States
   Aerospace Universities & Colleges
- Approximately 8700 Students
   In United States Aerospace Programs
- \$350K Initial Annual Revenue

  Assuming 10 percent adopt SimTurbo
- Excellent Growth Potential

with Correct Marketing

• These numbers increase to 4 Times for International Market.



# Product/Service:

High Level Overview:

Green: Engine

Orange: Actuators

Blue: Control System

Yellow: Sensors

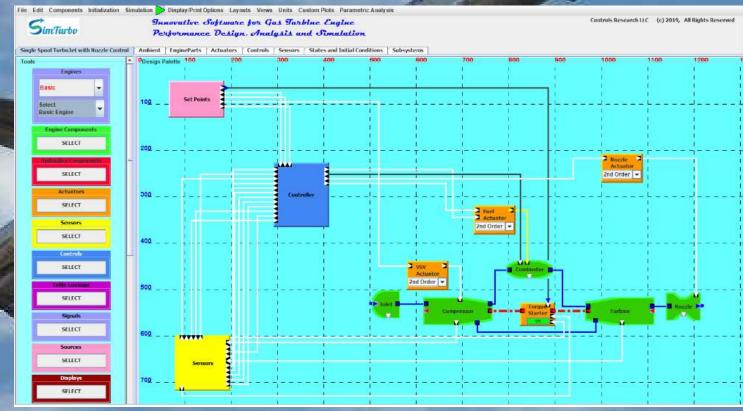
Pink: Set Points

Left: Tool Bar

Cyan: Palette with Engine Design

Note: Each Component masks Software within.





#### **Business Model:**



- 1) SimTurbo(c) will be deployed as a set of License Options to Users:
  - a) Annual License for ~ \$400
  - b) Lifetime License for ~ \$4000
  - c) Monthly Subscription for ~ \$40 With Lifetime upgrades for newly released features
- 2) Marketing: Free 30-Day Full Feature Trial License

Phone and Email Campaign to Targeted University Faculty Technical 30 minute or more Introductory Sessions for SimTurbo(c)

- 3) Phone and Remote Video Technical Support
- 4) Consultation and Collaborative Research Opportunities

### **Traction:**



- SimTurbo(c) was developed solely and is 100% owned by the Founder, Paul Hoffman over the past ten years. Controls Research LLC has zero debt.
- 2) The first version (Turbojet Option) is complete and will be ready for sales and distribution by early November 2025.
- 3) Marketing has been introducing SimTurbo(c) to selected Universities.

  Demo Sessions are currently set for prominent Universities.
- 4) Anticipated Future SimTurbo(c) Options:
  - a) Power Generation
  - b) Dual Spool Turbojet
  - c) Turbofan, Turboprop



- 1) Major competition for university market include:
  - GasTurb
  - GT-SUITE by Gamma Technologies
  - PROOSIS Propulsion Object Oriented Simulation Software
    - Simulink by MathWorks

imTurbo

- 2) SimTurbo(c) provides:
  - significantly less expensive than the above tools.
  - More user-friendly enhancements.
  - Faster design capabilities.
  - Teaching tools for control systems and thermodynamics.

# **Funding Desired:**

Total Funding Desired: \$1,000,000

Projected Use of Funding for 2025 and 2026:

- 1) Annual Salaries for Engineering: \$480,000
- 2) Annual Salary for Vice President of Sales and Marketing: \$100,000
- 3) Marketing Expenses: \$120,000
- 4) Base Operating Expenses: \$200,000
- 5) Travel Expenses to Potential Client Sites: \$100,000

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