National Small Business Conference
San Diego, California

MTI’s Story

Paul S. Hsu, Ph.D.
Chairman and CEO
Manufacturing Technology, Inc.
July 20, 2004
Company Overview

- Founded by Dr. Paul Hsu in 1984
- Total Product Lifecycle Support
  - Obsolescence Management Tools and Services
  - Avionics and Electronics Design/Redesign
  - ATE Design and Development
  - Engineering and Technical Services
  - Electronics Manufacturing and Precision Metal Work
- 480+ Employees Worldwide
- 10 U.S. Locations and 18 Countries Worldwide
- Headquarters: Fort Walton Beach, Florida
Manufacturing Technology, Inc.
People • Technology • Integrity • Commitment • Customer
- 13 acres in FWB Industrial Park
- 100,000 sq ft office & manufacturing
- TOP SECRET facility clearance
Crestview Facilities

- 50,000 sq. ft manufacturing facility
- 18 acres at Crestview Industrial Airport (8000 ft runway)
- 15 acres available for warehouse expansion
MTI

Precision Metal Fabrication

CNC Vertical Milling

Turning Center

WaterJet

Welding

CNC Amada Brake

GrindingMaster
In-House Test Capability

- Continuity and Isolation Testing
- Special Test Equipment
- In-Circuit Testing (Teradyne)
- Environmental Testing
- Functional Testing
- Shock & Vibration Testing
Engineering Tools Utilized

- Electrical & Mechanical Design
  - ORCAD
  - Solid Edge
  - Mechanical Desktop
  - AutoCad
  - ALGOR (finite element modeling)

- VHDL Modeling & Simulation
  - Active VHDL
  - ORCAD Express
  - ORCAD PSPICE
  - Exemplar Logic’s Leonardo
  - Model Technology’s Model Sim

- Software Development
  - Languages
    - C, C++, Visual Basic, JAVA, Delphi, ATLAS
  - SEI Level 2
    - Morton Kern Systems (Configuration Management)
JSF Firewire Network Daughter Boards

- Designed and Developed IEEE 1394B Compliant Network Daughter Boards
  - 57 Units Per Aircraft
  - Extended Bandwidth Firewire Communications Protocol
  - Implements Physical and Link Layer Protocols
  - Interfaces Up to Three Serial Communications Buses
  - Nodes Are Fault Tolerant & Failures Do Not Impact Network Operation
- Possible Twenty Year Production Contract
Global Depot Presence

USA

EUROPE

ISRAEL

TAIWAN

INDIA

S. KOREA
F-15 PACS Form, Fit, Function Redesign

Legacy:  MTBF: 38Khr; Power: 4.5W; $2.7K

MTI Redesign: MTBF: 97Khr; Power: 1.75W; $2.6K

- Eliminate Obsolete Component and Performance Issues
- Preserve Customer NRE Investment with Technology Independent, VHDL
- Significantly Enhance MTBF & Reduce Spares Inventory
- Reduce MTTR Using Enhanced BIT
- Reduce Component Count & Cost Via Increased Integration Densities
- Validate Hardware Via Bench, LRU/Pod Integration, Environmental and Flight Qualification Tests
An obsolescence management tool that:

- Provides near real-time, life-cycle obsolescence assessments for complex systems/platforms
- Facilitates trade-off analyses to quickly identify best cost, sustainment solutions
• Proactive Management of System Obsolescence Over the Product Life-Cycle
  • Accurate Obsolescence Forecasts
  • Comprehensive Impact Analysis
  • All Compatible Component Solutions
  • Decision Support for “Best” Phased Sustainment Solutions

• Parts Commonality Analysis (PCA) Across Multiple Systems & Platforms

• DLA Inventory Analysis
### AIR FORCE

<table>
<thead>
<tr>
<th>System</th>
<th>Model/Version</th>
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<tbody>
<tr>
<td>AWACS</td>
<td>C-5 Galaxy (LAE)</td>
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<tr>
<td>Automated Test Equipment (LEA)</td>
<td>Combat Talon II</td>
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<tr>
<td>B-1</td>
<td>COMPOSITE AVCOM</td>
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<tr>
<td>B-2 Spirit</td>
<td>E-8 Joint STARS</td>
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<tr>
<td>Boeing/LU Directorate</td>
<td>Electronic Warfare SE (LNSE)</td>
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<td>C-141</td>
<td>F-15 A/B/C/D/E</td>
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<td>C3I Systems (LHI)</td>
<td>F-15 FMS</td>
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### ARMY

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<tr>
<td>Apache</td>
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<tr>
<td>Black Hawk</td>
<td>TARGETS</td>
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<tr>
<td>Hawk-Missile</td>
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### OEM’s

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Total Parts Plus is a suite of decision support tools in the form of online applications and services, located at http://www.totalpartsplus.com.

Subscribers evaluate electronic parts for obsolescence, availability, and substitution. Subscribers can also make informed management decisions relative to the electronic parts and design usage.
provides you with the ability to collaborate with design / component engineers around the world for solutions.

Geographic Penetration

- USA: 65%
- Canada: 6%
- Japan: 7%
- France: 9%
- Germany: 2%
- Italy: 2%
- Spain: 1%
- Israel: 4%
- China: 1%
- Taiwan: 1%
- South Africa: 2%
- China: 1%
MTI’S Mentor Protégé Program

- Epoch Software – *Software Development*
  - Awarded USAF Mentor-Protégé Contract (Brooks AFB)
  - EPOCH/MTI awarded $6.6M in contracts for software services (WR-ALC)

- Creek Indian Nation – *Electronics & Metal Fabrication*
  - Muskogee Technology Joint Venture
  - Awarded STRICOM $48M IDIQ (5 years)

- General Precision Manufacturing – *Metal Fabrication & Services*
  - Awarded USAF Mentor-Protégé Contract (Brooks AFB)
  - Doubled GPM Revenue to $800K
U.S. Troop Deployment

- **Europe**: 116,000*
- **Bosnia & Herzegovina**: 1,500
- **Kosovo**: 1,800
- **Iraq**: 146,000
- **Afghanistan**: 9,000
- **Egypt**: 800
- **Djibouti**: 1,500
- **South Korea**: 37,000
- **Japan**: 43,000
- **Philippines**: 500

*Total troops when not deployed elsewhere, excludes Kosovo and Bosnia deployments

**SOURCE:** U.S. Department of Defense