TELEDYNE ENGINEERED SYSTEMS
SEGMENT OVERVIEW

2016
Parent Company Teledyne Technologies

- Headquartered in Thousand Oaks, California with locations across the globe
- $2.3B in 2015 revenues; over 9,300 employees
- Teledyne Technologies is a leading provider of sophisticated instrumentation, digital imaging products and software, aerospace and defense electronics, and engineered systems. For more information, visit Teledyne Technologies’ website at www.teledyne.com.
Teledyne Technologies Industrial Markets, Global Presence

2015 Sales ≈ $2.3B\(^{(a)}\)

**End Markets\(^{(b)}\)**

- U.S. Government: 26%
- Offshore Energy, Infrastructure and Transportation\(^{(c)}\): 25%
- Commercial Aerospace: 19%
- Commercial Imaging and Machine Vision: 13%
- Analytical and Electronic Test and Measurement\(^{(d)}\): 10%
- Other Industrials\(^{(e)}\): 7%

**Sales by Geography\(^{(b)}\)**

- U.S. Commercial: 30%
- U.S. Government: 26%
- Europe: 22%
- MEA and Other: 15%
- Asia Pacific: 4%
- Other Americas: 3%
- Other: 4%

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(a) Revenue reflects full year 2015
(b) Approximate sales percentage by end market and geography for full year 2015
(c) Includes Marine Instrumentation for offshore energy and hydrographic survey, Engineered Systems for energy and power generation, and other product lines
(d) Includes Environmental Instrumentation and electronic Test & Measurement Instrumentation
(e) Other includes commercial electronics for microwave and satellite communications, industrial interconnect systems and other product lines
Teledyne Technologies

Four Segments – $2.3B 2015

Aerospace and Defense Electronics

Instrumentation

Digital Imaging

Engineered Systems
Teledyne Values are the foundation for all actions and relationships with our customers, partners, employees and community.

Integrity and Ethics

Respect and Transparency

Commitment and Accountability

Leadership and Teamwork
Teledyne Engineered Systems at a Glance

Teledyne Brown Engineering

**Mission Systems**
- Systems Engineering
- Modeling and Simulation
- Test and Evaluation

**Marine Systems**
- Naval Vessel and Marine Hardware Design and Manufacture
- LCS Gun Mount
- Army Missile Round Trainer
- Mine Seeking Hardware

**Space Systems and Global Commercial Space Imaging**
- Multi-User System for Earth Sensing
- Mission Planning and Control Center Operations
- Payload/Cargo Integration
- Space Flight Hardware

**Energy & Environment**
- Chemical Processing Equipment
- Facilities M&O
- Radiological/Classified Laboratories

**Turbine Engines**
- Small turbine engines
- Propulsion system development to integration

**Energy Systems**
- Space Nuclear Power
- Hydrogen Generators
- Specialized Batteries
- H2/O2 Fuel Cells

**CML**
- Composite Parts for Commercial and Military Aviation
Approximately 1.4 million square feet in 7 locations in 5 states and the UK
Manufacturing square footage totaling 346,000 including 179,000 in Huntsville, Alabama
1,150 employees
Established in 1953 to support Dr. Wernher Von Braun’s Rocket Team.

Founded Cummings Research Park, the second-largest such park in the U.S.

Evolved from a defense and aerospace service contractor to an engineering and advanced manufacturing company focused on solutions for large scale projects in challenging environments.
Teledyne Brown Engineering
Full-System/Product Life-Cycle Capabilities

- Research and Technology
- Systems Concept Development
- Sustainment and Recapitalization
- Systems Design and Analysis
- Management and Operations
- Manufacturing and Assembly
- Systems Integration and Test
Teledyne Brown Engineering
Mission Systems

► Weapon Systems Engineering and Integration; Test Planning, Conduct, and Analysis
► Service Oriented Architecture-Based Systems and Framework Solutions
► Software Development
► Modeling and Simulation
► Technology to System Product Development
Teledyne Brown Engineering
Space Systems

- Space Flight Hardware
- Ground Support Equipment, and Propulsion Subsystems
- Mission Planning and Control Center Operations
- Payload Testing, Integration and Training
Teledyne Brown Engineering
Global Commercial Space Imaging

► Multi-User System for Earth Sensing (MUSES) Platform
► Precise Pointing of High-Resolution Earth-Imaging Instruments
► Tele Science Center
► Hyperspectral Imagery Data
Teledyne Brown Engineering
Energy and Environment

► Hardware and Process Systems
  Design, Integration, Testing,
  Analysis, and Fabrication

► Radiological Laboratory Services

► Petro/Chemical Plant Laboratory
  Operations and Services

► Renewable Energy Evaluation and
  Implementation
Teledyne Brown Engineering
Marine Systems

- Design, Develop, and Manufacture
- Marine Hardware, Systems and Vehicles
- Naval Vessel Design, Integration and Manufacturing
- Underwater Systems Integration
- Depot Maintenance, Logistics
- Offshore and Harbor Security Monitoring Systems
Teledyne Brown Engineering Manufacturing

- Fully-Equipped Machine Shop
- Fabrication
- Electrical/Electronic Assembly
- Class 100K and 300K Clean Rooms
- Hydro Test and Pipe Cleaning
- Weld Shop and Paint Booths
- NDE Inspection
AS9100C, Third-Party Registered (Aerospace)

ISO 9001:2008, Third-Party Registered

SEI CMMI Maturity Level 3

NASA SSP-41173 Compliant

NQA-1 – Nuclear Quality Assurance System 2008/2009a

10CFR50 Appendix B – QA Criteria for:
- Nuclear Power Plants
- Fuel Reprocessing Plants

ASME Nuclear Stamps and Certificates:
- N Stamp, Nuclear Components, #N-2983
- NPT Stamp, Nuclear Partials, #N-2984
- U Stamp, Pressure Vessels, #33,360 and #41,018
- NS Certificate, Nuclear Supports, #N-3874
- R Stamp, Repairs, #R-2240

ASNT Level III Certified – TBE has the only individual in the U.S. with 22 Level III certifications in Nondestructive Testing.

NAVSEA Notice 5000

P-9290 Certification for Deep Submergence Systems
Teledyne Brown Engineering Recognition

2015
Large Business Prime Contractor of the Year Award

Awarded 3 Times
James S. Cogswell Outstanding Industrial Security Achievement Award from Defense Security Service (DSS)

2015
Institute for Operations Research and Management Science (INFORMS)

2015
Mentor Protégé Agreement of the Year Award
Teledyne CML Composites

► Comprehensive composite manufacturing and test capabilities

► High-quality manufactured composite components and assemblies for aircraft structures and systems
Teledyne Energy Systems, Inc. (TESI)

- Advanced Power/Energy Solutions for Harsh Environments
- Electrical Power Generator Cooling via Hydrogen Gas
- Heat-to-DC Power Technologies
- Electrochemical Energy Conversion
- Energy Systems Engineering, Integration, and Manufacturing
Teledyne Turbine Engines

- Small Turbine Engines for Tactical/Strategic Cruise Missiles, Decoys, Targets, and UAVs
- Propulsion System Design, Development, and Integration
- Turbine Engine Test Facility Services
Teledyne R&D ~$258M

- Central Research Laboratory – Approximately $50M government, customer, and Teledyne-funded R&D
  - Established in 1962
  - 108 technical staff, approximately 45% PhDs
  - Over 300 active patents
- Approximately $158M of internally-funded R&D carried out in Teledyne’s business units
- Approximately $50M of additional customer-funded or relevant government-funded R&D
Teledyne Brown Engineering

Full-Service Company

Concept – Production – Sustainment

Systems Engineering

Integration of Complex Systems

Corporate-Wide Reach Back

Capabilities Throughout Over 60 Teledyne Companies