Headquartered in Thousand Oaks, California with locations across the globe

$2.6 B in 2017 revenues; over 10,700 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

2017 Sales ≈ $2.6 B\(^{(a)}\)

**End Markets\(^{(b)}\)**
- Offshore Energy, Infrastructure and Transportation\(^{(c)}\): 25%
- Commercial Imaging and Machine Vision: 13%
- Commercial Aerospace: 10%
- Other Industrials\(^{(e)}\): 7%
- Analytical and Electronic Test and Measurement\(^{(d)}\): 19%

**Sales by Geography\(^{(b)}\)**
- U.S. Commercial: 26%
- U.S. Government: 30%
- Europe: 22%
- MEA and Other: 3%
- Other Americas: 15%
- Asia Pacific: 4%
- Other includes commercial electronics for microwave and satellite communications, industrial interconnect systems and other product lines

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(a) Revenue reflects full year 2017
(b) Approximate sales percentage by end market and geography for full year 2017
(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 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
Approximately 1.4 million square feet in 8 locations in 6 states and the UK

Manufacturing square footage totaling 346,000 including 179,000 in Huntsville, Alabama

1,100 employees
Engineered Systems – Teledyne Brown Engineering History

► 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
Teledyne Brown Engineering
Mission Systems

► Situational Awareness
► Weapon Systems Engineering and Integration
► Software Development
► Modeling and Simulation/Test and Evaluation
► Medical Logistics
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
Geospatial Solutions

- Multi-User System for Earth Sensing (MUSES) Platform
  - Multiple payload options
- Precise Pointing of High-Resolution Earth-Imaging Instruments
- On-Site Command and Control 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
► Classified laboratory
Teledyne Brown Engineering
Maritime Systems

- Maritime Systems Design, Development and Integration
- Marine Hardware and Vehicles
- Depot Maintenance, Logistics
- Offshore and Harbor Security Monitoring Systems
- Communications/ISR
- Deep Submergence Systems Certification
Teledyne Energy Systems, Inc. (TESI)

► Advanced Power/Energy Solutions for Harsh Environments
► Electrical Power Generator Cooling via Hydrogen Gas
► Fuel Cells
► Electrochemical Energy Conversion
► Cell Development/Battery Solutions
Teledyne Brown Engineering
Quality Focused

- AS9100, Third-Party Registered (Aerospace)
- ISO 9001, 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 #54,508
  - 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 18 Level III certifications in Nondestructive Testing.
- NAVSEA Note 5000
- P-9290 Certification for Deep Submergence Systems

*Certificates shown are for TBE only are not applicable to every program.
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 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 Technologies IR&D

► 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
Additional Slides
Teledyne Technologies
Four Segments – $2.3B 2015

Aerospace and Defense Electronics

Instrumentation

Digital Imaging

Engineered Systems
Teledyne Technologies
Four Segments – $2.39B 2014

Aerospace and Defense Electronics
Instrumentation
Digital Imaging
Engineered Systems
Teledyne Aerospace and Defense Electronics

Sophisticated electronic components and subsystems and communications products

- Defense electronics
- Harsh environment interconnects
- Data acquisition and communication equipment for aircraft
- Wireless and satellite communications
Teledyne Instrumentation

Monitoring and control instruments for marine, environmental, industrial, and defense

- Electronic test and measurement
- Power and communications connectivity devices for distributed instrumentation systems and sensor networks deployed in mission critical, harsh environments
- Marine navigation instruments, imaging, and a broad array of under water vehicles
Teledyne Digital Imaging

- High-performance sensors, cameras, and systems within the visible, infrared, ultraviolet, and X-ray spectra
  - Medical applications
  - LIDAR systems
  - Industrial uses
- Research laboratories for government programs and business
  - Materials research
  - DARPA/IARPA
  - Advanced imaging
Teledyne Engineered Systems

- **Engineered Systems**
  - Research and Technologies
  - Systems Concept Development

- **Engineering Services**
  - Systems Design and Analysis
  - Engineering Support
  - Management and Operations

- **Advanced Manufacturing**
  - Manufacturing and Assembly
  - Systems Integration and Test
  - Sustainment and Recapitalization
Teledyne Aerospace and Defense Electronics

Aerospace and Defense Electronics

Instrumentation

Digital Imaging

Engineered Systems
Teledyne Instrumentation
Engineered Systems Segment – TBE
Concept to Reality

Engineered Systems
• Research and Technologies
• Systems Concept Development

Engineering Services
• Systems Design and Analysis
• Engineering Support
• Management and Operations

Hardware Manufacturing
• Manufacturing and Assembly
• Systems Integration and Test
• Sustainment and Recapitalization
Teledyne Brown Engineering History

- Established in 1953 to support Dr. Wernher Von Braun’s Rocket Team
- First full-service, high-technology firm in Huntsville, Alabama, and the first tenant of Cummings Research Park
- Founded Cummings Research Park, the second-largest such park in the U.S., named for Teledyne Brown’s first Company President, Milton K. Cummings
- Teledyne Brown has evolved from a defense and aerospace company service contractor to a full-spectrum engineering, operations, and advanced manufacturing company.
Teledyne Brown Engineering History

- **1950**: Explorer
- **1960**: Apollo
- **1970**: Skylab
- **1980**: Space Shuttle
- **1990**: International Space Station (ISS)
- **2000**: Ground-based Midcourse Defense (GMD)
- **2010**: Space Launch System (SLS) Program
- **Present**: Multiple User System for Earth Sensing (MUSES)

**Projects**
- Redstone Rocket
- Harpoon
- Radiological Lab Services
- Hydrogen Fuel Cells
- Chemicals Weapons Demilitarization
- Nuclear Waste Containers
- Hydrogen Generators
- SWCS
- JASSM
- OSF
- Curiosity with MMRTG
Engineered Systems Facilities

► Approximately 1.4 million square feet in 8 locations in 6 states and the UK

► Manufacturing square footage totaling 346,000, including 179,000 in Huntsville, Alabama

► 1,100 employees

Locations:
1. TBE Plant 1, Cummings Research Park – Huntsville, AL
2. Teledyne Turbine Engines – Toledo, OH
3. TESI Sparks Facility – Sparks, MD
4. Teledyne Energy Systems – Hunt Valley, MD
5. TBE Office – Colorado Springs, CO
6. TBE Lab Facility – Knoxville, TN
7. Teledyne CML – UK
8. TBE Office – Houston, TX
ESS Values

Integrity and Ethics
• We act with the highest levels of integrity and ethics.
• We are committed to an environment of trust and honesty.

Respect and Communications
• We treat each other with respect and communicate openly and honestly.
• We are about each other, our families, and the communities in which we live.

Commitment and Accountability
• We are committed to the success of the Company, our customers, and our employees.
• We are accountable for actions.

Leadership and Teamwork
• We recognize and appreciate achievements by our people.
• We all share the responsibilities of leadership and teamwork.
Teledyne Engineered Systems at a Glance

Teledyne Brown Engineering

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

Space Systems and Geospatial Solutions
- Multi-User System for Earth Sensing
- Mission Planning and Control Center Operations
- Payload/Cargo Integration
- Space Flight Hardware

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

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

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

Maritime Systems & Manufacturing
- Naval Vessel Design and Manufacture
- LCS Gun Mount
- Army Missile Round Trainer
- Mine Seeking Hardware

CML
- Composite Parts for Commercial and Military Aviation
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Teledyne Brown Engineering
Full-System/Product Life-Cycle Capabilities

Full-Spectrum Engineering and Advanced Manufacturing

- Engineered Systems – Concept definition and prototyping through product lifecycle
- Engineering Services – Support the customer at any phase of the lifecycle
- Hardware Manufacturing – Design and analysis through fabrication, assembly and test, production, and installation and operations
Teledyne Brown Engineering
Full-System/Product Life-Cycle Capabilities

<table>
<thead>
<tr>
<th>Research and Technologies</th>
<th>Systems Concept Development</th>
<th>Systems Design and Analysis</th>
<th>Manufacturing and Assembly</th>
<th>Systems Integration and Test</th>
<th>Management and Operations</th>
<th>Sustainment and Recapitalization</th>
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► ► ► Quality Assurance = ► Safety Assurance ► ► ►

**Full-Spectrum Engineering and Advanced Manufacturing**

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► Hardware Manufacturing – Design and analysis through fabrication, assembly and test, production, and installation and operations
Teledyne Glider

World Leader in Long-Endurance Glider Autonomous Underwater Vehicles

- Buoyancy driven
- High endurance – 25 to over 365 days
- 300 – 1,000m depth rating
- Real-time remote piloting enables rapid response to changing situations
- Over 40 sensors and other options available
- Real-time data-to-shore transmission
- Fleets of gliders can be operated with minimal personnel and infrastructure

Proven Design with Over 500 Gliders in the Field
TBE Machine Tool Capability
Inspection and Test
Energy and Environment – Chemical, Biological, Radiological, and Nuclear

► Chemical and Biological Process Systems
► Live Agent Test Chamber
► Explosive Destruction Systems
► Chemical and Biological Agent Detection and Decontamination
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