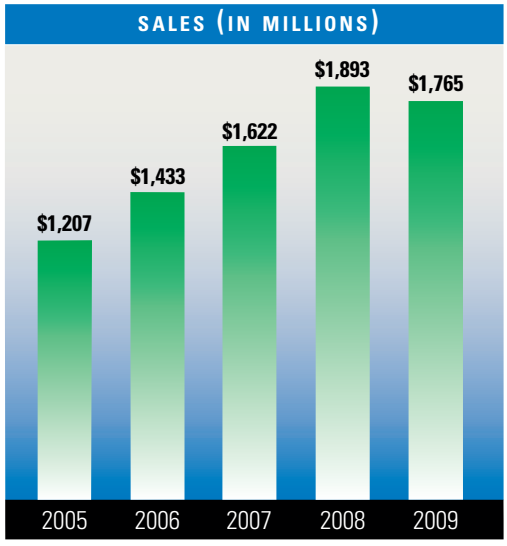
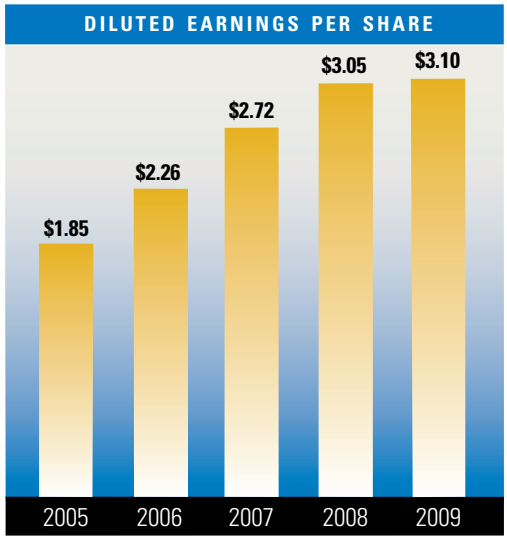
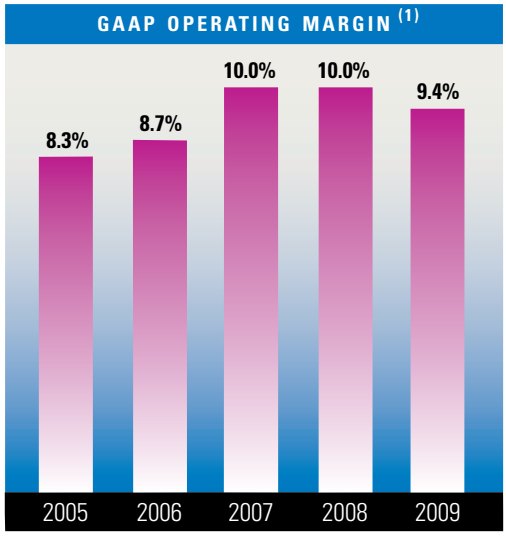
TELEDYNE

2009 Annual Report







(1) Income before other income and expense and income taxes divided by sales

2009
Financial Highlights

SELECTED CONSOLIDATED FINANCIAL DATA
(In millions, except per-share data)

SUMMARY FINANCIAL INFORMATION

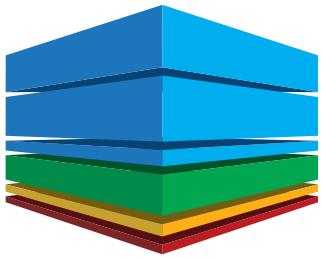
	2009	2008	2007	2006	2005
Sales	**$ 1,765.2**	$ 1,893.0	$ 1,622.3	$ 1,433.2	$ 1,206.5
Net income attributable to Teledyne Technologies	**$ 113.3**	$ 111.3	$ 98.5	$ 80.3	$ 64.2
Diluted earnings per common share	**$ 3.10**	$ 3.05	$ 2.72	$ 2.26	$ 1.85
Weighted average diluted common shares outstanding	**36.6**	36.5	36.2	35.5	34.7

SUMMARY BALANCE SHEET DATA

	2009	2008	2007	2006	2005
Cash and cash equivalents	**$ 26.1**	$ 20.4	$ 13.4	$ 13.0	$ 9.3
Working capital	**$ 250.6**	$ 281.3	$ 213.7	$ 216.4	$ 154.0
Total assets	**$ 1,421.5**	$ 1,534.5	$ 1,159.4	$ 1,061.4	$ 728.2
Long-term debt and capital lease obligations	**$ 251.6**	$ 332.1	$ 142.4	$ 230.7	$ 47.0
Total equity	**$ 667.4**	$ 506.9	$ 506.9	$ 408.3	$ 326.0

See “Management’s Discussion and Analysis of Financial Condition and Results of Operation” and the “Notes to Consolidated Financial Statements” in this 2009 Annual Report on Form 10-K for additional information regarding Teledyne Technologies Incorporated’s financial data.

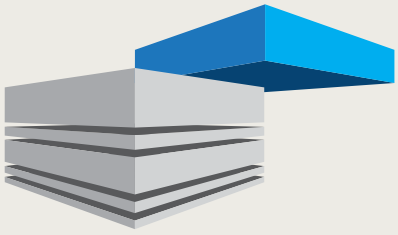
Sales by Segment
Approximate sales by end market for fiscal year 2009



- 70% **Electronics and Communications Segment**
- 20% **Engineered Systems Segment**
- 6% **Aerospace Engines and Components Segment**
- 4% **Energy and Power Systems Segment**

Electronics and Communications 70%

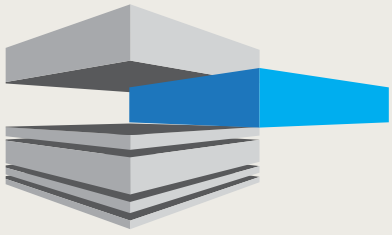
Defense Electronics 30%



Overview
Defense electronics businesses provide a range of highly specialized electronic subsystems to our government and other defense contractors.

Selected Products / Services
- Integrated microwave assemblies
- Harsh environment interconnects
- Infrared and visible light imaging sensors
- Electronic manufacturing services

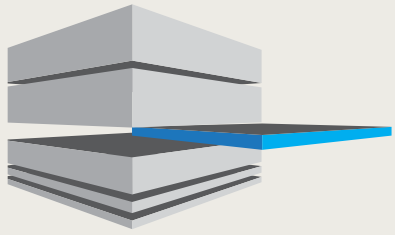
Instrumentation 32%



Overview
Instrumentation provides power to subsea drilling systems, helps locate new energy reserves, reports subtle changes to the environment, and detects trace contaminants in air and water.

Selected Products / Services
- Ocean bottom interconnects
- Acoustic Doppler water current profilers
- Hydrophones and streamer cables
- Emissions monitoring instrumentation

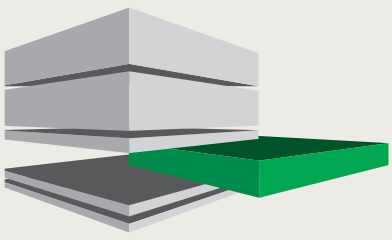
Electronics (Avionics & Other) 8%



Overview
Aircraft information management solutions are designed to increase flight safety and efficiency of aircraft transportation. In addition, alongside our defense electronics, we produce precision electronics for other commercial markets.

Selected Products / Services
- Wireless aircraft data acquisition systems
- Electronic Flight Bags (EFBs)
- Commercial microwave subsystems
- High performance relays

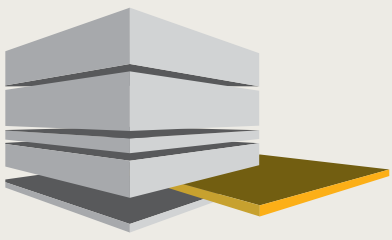
Engineered Systems 20%



Overview
Within the Engineered Systems segment, our products and services focus on protecting America, expanding national interests in space, and improving environmental safety.

Selected Products / Services
- Missile defense systems engineering
- Space hardware and engineering services
- Chemical, biological, radiological and nuclear (CBRN) systems and services
- Manufacturing services

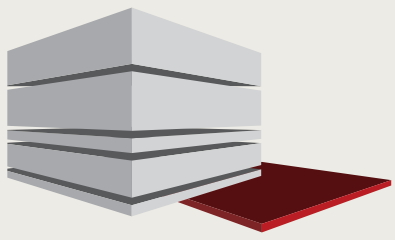
Aerospace Engines and Components 6%



Overview
Teledyne Continental Motors, Inc. provides piston engines for a number of today's most popular general aviation aircraft.

Selected Products / Services
- Aircraft piston engines for OEM aircraft
- Aftermarket engines, parts and services
- Digital electronic engine control systems

Energy and Power Systems 4%



Overview
We provide highly reliable power and propulsion systems primarily for aerospace and defense applications, as well as high purity hydrogen generation systems.

Selected Products / Services
- Power systems for government applications
- Military small turbine engines
- Gill™ brand aerospace batteries
- Hydrogen gas generators

Letter to Stockholders

The economic slowdown late in 2008 and the subsequent recession in 2009 had far reaching effects, including reduced access to financial capital and shifts in government funding, which affected Teledyne's portfolio of businesses to varying degrees. Teledyne responded appropriately by placing a heightened emphasis on operational excellence, making targeted investments to protect and improve our markets, and enhancing working capital management. We lowered annual operating costs by over $80 million, reduced headcount by 9.8%, and maximized cash flow. As a result, we ended 2009 with leaner, more focused operations, the strongest balance sheet in two years, and a pension that was approximately 90% funded. By quickly changing our cost structure, and through the efforts of our people, we delivered the following results:

2009 Selected Financial Highlights

- Record earnings per share of $3.10, including R&D tax credits of $0.39 per share
- Record free cash flow of nearly $190 million, excluding voluntary pension contributions [(1)]
- Acquired the remaining minority shares of Ocean Design for $25.5 million
- Net debt-to-capital ratio of 25.3%

Free Cash Flow[(1)] *(in millions, brackets indicate use of funds)*	**2009**	**2008**	**2007**
Cash provided by operating activities	**$ 154.9**	$120.4	$166.7
Capital expenditures for property, plant and equipment	**(36.2)**	(41.9)	(40.3)
Free cash flow	**118.7**	78.5	126.4
Pension contributions, net of tax	**71.1**	35.7	3.9
Adjusted free cash flow	**$ 189.8**	$114.2	$130.3

[(1)] The company defines free cash flow as cash provided by operating activities (a measure prescribed by generally accepted accounting principles) less capital expenditures for property, plant and equipment. Adjusted free cash flow eliminates the impact of pension contributions on a net of tax basis. The company believes that this supplemental non-GAAP information is useful to assist management and the investment community in analyzing the company's ability to generate cash flow, including the impact of voluntary and required pension contributions.

Technical Highlights

2009 also heralded several major technical successes and the launching of a number of new products. For example, Teledyne's electronics and infrared sensors were key elements in the successful repair and upgrade of the Hubble Space Telescope and the new Wide-field Infrared Survey Explorer (WISE) space astronomy mission, which is now scanning the sky helping us search for the origins of planets, stars, and galaxies. Teledyne Webb's robotic Slocum glider made the first transatlantic crossing of an unmanned underwater vehicle. The voyage took seven months and covered over 4,500 miles. During its 201 days in the water, the glider collected measurements of ocean water salinity and temperature, transmitting the data via satellite to a U.S.-based laboratory.

In our Defense Electronics businesses, Teledyne was awarded a contract from DARPA to develop terahertz electronic devices and integrated circuits designed to advance transistor technology, circuit design and circuit packaging at frequencies greater than 1,000 gigahertz. Teledyne's world-class team, along with other industry, academic and agency partners, is designing technologies under

this program to benefit a large class of communication, sensor, and data-converter circuits for Department of Defense applications. We also further expanded our defense microwave business with new products for counter Improvised Explosive Device (IED) applications and battlefield communication. For example, we designed a new Unmanned Aerial Vehicle (UAV) datalink transmitter, which is qualified on the Shadow platform.

NASA and the U.S. Air Force named Teledyne Scientific Company as the National Hypersonic Science Center for Hypersonic Materials and Structures. This award makes Teledyne the center of U.S.-based hypersonics materials research for the next five years, with a research focus on materials and structures, that enable aircraft to travel at speeds well above Mach 5, or five times the speed of sound.

Teledyne Marine

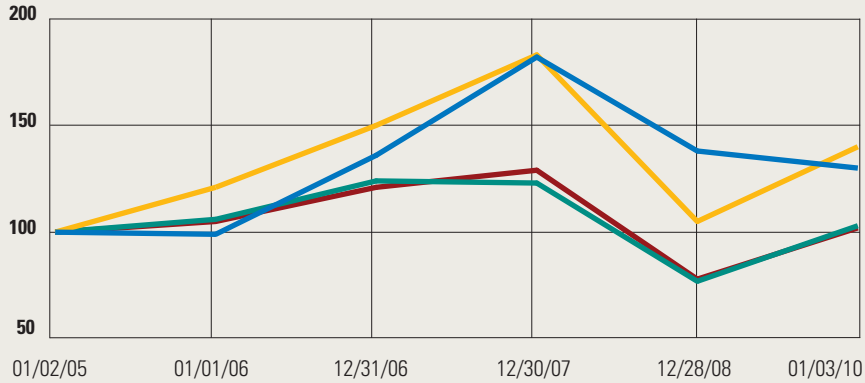
Teledyne's Marine Instrumentation businesses, which represent approximately 20% of total Teledyne sales, performed well in 2009. Innovations from the Marine group include key elements of tsunami warning systems designed to protect coastal populations, equipment for the Ocean Tracking Network that monitors the evolution of fish stock and neutrino telescopes embedded deep in the icecap to trace the origins of space. Teledyne advanced research in the underwater

Cumulative Total Stockholder Return

The graph set forth below shows the cumulative total stockholder return (i.e., price change plus reinvestment of dividends) on our common stock from fiscal year end January 2, 2005 through fiscal year end January 3, 2010, as compared to the Standard & Poor's 500 Composite Index, the Russell 2000 Index and the Dow Jones World Aerospace & Defense Index.

The graph assumes that $100 was invested on December 31, 2004.

In accordance with the rules of the Securities and Exchange Commission, this presentation is not incorporated by reference into any of our registration statements under the Securities Act of 1933.



	01/02/05	01/01/06	12/31/06	12/30/07	12/28/08	01/03/10
Teledyne Technologies	100	99	136	182	138	130
Dow Jones World Aerospace & Defense	100	121	150	183	105	140
Russell 2000	100	105	124	123	77	103
S&P 500 Composite	100	105	121	129	78	102

domain by developing an ultra deepwater Doppler Velocity Log (DVL) for the Woods Hole Oceanographic Institution's Nereus vehicle. The DVL provided the vehicle with velocity data during a record 6.8 mile dive (10,902 meters) to the bottom of the Mariana Trench, the deepest known part of the world's oceans. The dive collected bottom imagery and data samples from the trench for further scientific study.

Teledyne Oil & Gas

Teledyne continues to gain market share and become a key player in the offshore oil industry. Our focus is on specialized products for increasingly demanding deepwater offshore energy applications, where higher temperature and pressure conditions challenge long-term reliability.

To further serve our customers, by combining the resources of several recently acquired companies including Ocean Design, U.K.-based Cormon and Teledyne Impulse, Teledyne created the Teledyne Oil & Gas division. The division specializes in wet-mateable interconnect solutions, glass-to-metal sealed downhole penetrators, and pipeline flow assurance systems to monitor lifetime asset integrity. The primary focus of this new strategic division is to leverage the synergy of products and services across these complementary businesses to provide additional value to our oil and gas customers. In October, Teledyne Oil & Gas officially opened its new European headquarters in Worthing U.K. The new center will serve as the nucleus for European support. The Oil & Gas division has also established a close collaboration with Teledyne Scientific Company aimed at research and development of materials that seeks to provide greater than 25 year product life in the harsh deepwater environment. The technical depth represented by this integrated effort has been greeted favorably by our customers as a key differentiator for Teledyne.

Engineered Systems

For over half a century, Teledyne Brown Engineering, Inc. (TBE) has been supporting NASA's mission to explore the Universe, and the company has had a role in nearly every U.S. space program. TBE has also worked for decades to defend our nation from the threat of ballistic missiles. In addition to core competencies in systems engineering and hardware in the loop simulation, TBE maintains significant capabilities in manufacturing space and nuclear qualified hardware. We were pleased that in 2009 TBE was named Alabama's Large Manufacturer of the Year and was presented an award by Alabama Governor Bob Riley in recognition of the company's superior performance in the areas of operational excellence, leadership, profitable growth, continuous improvement, customer focus, employee commitment and investment in training and retraining.

Aerospace Engines & Components

Teledyne Continental Motors, Inc. was impacted the most by the soft economy during 2009. Sales for engines to aircraft OEMs from our Aerospace Engines and Components segment were 65% lower in 2009 than 2008. Even in this market, we continued to focus on technology and growth opportunities. We recently announced that Teledyne Continental Motors plans to introduce a new 225-250 horsepower diesel aerospace engine. By allowing the use of a fuel with worldwide availability, we anticipate that the new engine will expand the small airplane market in the Far East and will also potentially open up the military UAV market to Teledyne. We believe there are significant long-term growth opportunities in military UAV and commercial international markets, particularly in Asia.

2010

Over the last ten years, we have built a company comprised of highly engineered products that are not easily commoditized. Despite some recent improvement, the current world economy remains challenging. In such uncertain times, our balanced mix of government and commercial businesses, with increasingly strong positions in defensible markets, should allow Teledyne to continue to thrive.

Teledyne is committed to:

- Achieving Quality Earnings Growth
- Driving Operational Excellence and Margin Expansion
- Generating Strong Cash Flow
- Acquiring Strategic Businesses

As we begin a new decade, our strong balance sheet provides us the financial flexibility to pursue complementary acquisitions and make continued investments in our businesses. Teledyne and its stockholders are also fortunate to have experienced business leaders who serve on our Board of Directors. I thank the Board for its contributions. And finally, I want to recognize our employees. The decisions we made and rapid actions we took to reduce our cost structure were not easy. Teledyne is a stronger company as a result of their efforts, hard work and perseverance. Thank you.

Chairman, President and Chief Executive Officer
Teledyne Technologies Incorporated

March 1, 2010

Executive Management

Robert Mehrabian*
Chairman, President and Chief Executive Officer

John T. Kuelbs*
Executive Vice President, General Counsel and Secretary of the Board of Directors

Dale A. Schnittjer*
Senior Vice President and Chief Financial Officer

Stephen F. Blackwood
Vice President and Treasurer

Ivars R. Blukis
Chief Business Risk Assurance Officer

** Section 16 Officer*

Melanie S. Cibik
Vice President, Associate General Counsel and Assistant Secretary

Rex D. Geveden*
President Teledyne Brown Engineering, Inc.

Susan L. Main*
Vice President and Controller

Robyn E. McGowan
Vice President, Administration, Human Resources and Assistant Secretary

Aldo (Al) Pichelli*
President and Chief Operating Officer, Electronics and Communications Segment

Kevin J. Riley
President Teledyne Scientific & Imaging, LLC

Rhett C. Ross
President Teledyne Continental Motors, Inc.

Robert L. Schaefer
Associate General Counsel and Assistant Secretary, General Counsel Electronics and Communications Segment

Robert W. Steenberge
Vice President and Chief Technology Officer

Jason VanWees
Vice President, Corporate Development and Investor Relations

Segment Presidents

Aldo (Al) Pichelli
Electronics and Communications Segment

Rex D. Geveden
Engineered Systems Segment and Energy and Power Systems Segment

Rhett C. Ross
Aerospace Engines and Components Segment

Stockholder Information

Corporate Offices
Teledyne Technologies Incorporated
1049 Camino Dos Rios
Thousand Oaks, CA 91360
Telephone: (805) 373-4545
Fax: (805) 373-4775
www.teledyne.com

Transfer Agent and Registrar
BNY Mellon Shareowner Services
480 Washington Boulevard
Jersey City, NJ 07310
(888) 540-9867

Stockholder Publications - Form 10-K
Annual reports (including Form 10-K) and proxy statements are mailed to all stockholders of record. Copies of our SEC periodic reports, corporate governance guidelines, codes of ethics and committee charters are also available on our web site at www.teledyne.com. For additional information, contact Corporate Communications or Investor Relations.

Stock Exchange Listing
The common stock of Teledyne Technologies Incorporated is traded on the New York Stock Exchange (symbol TDY).

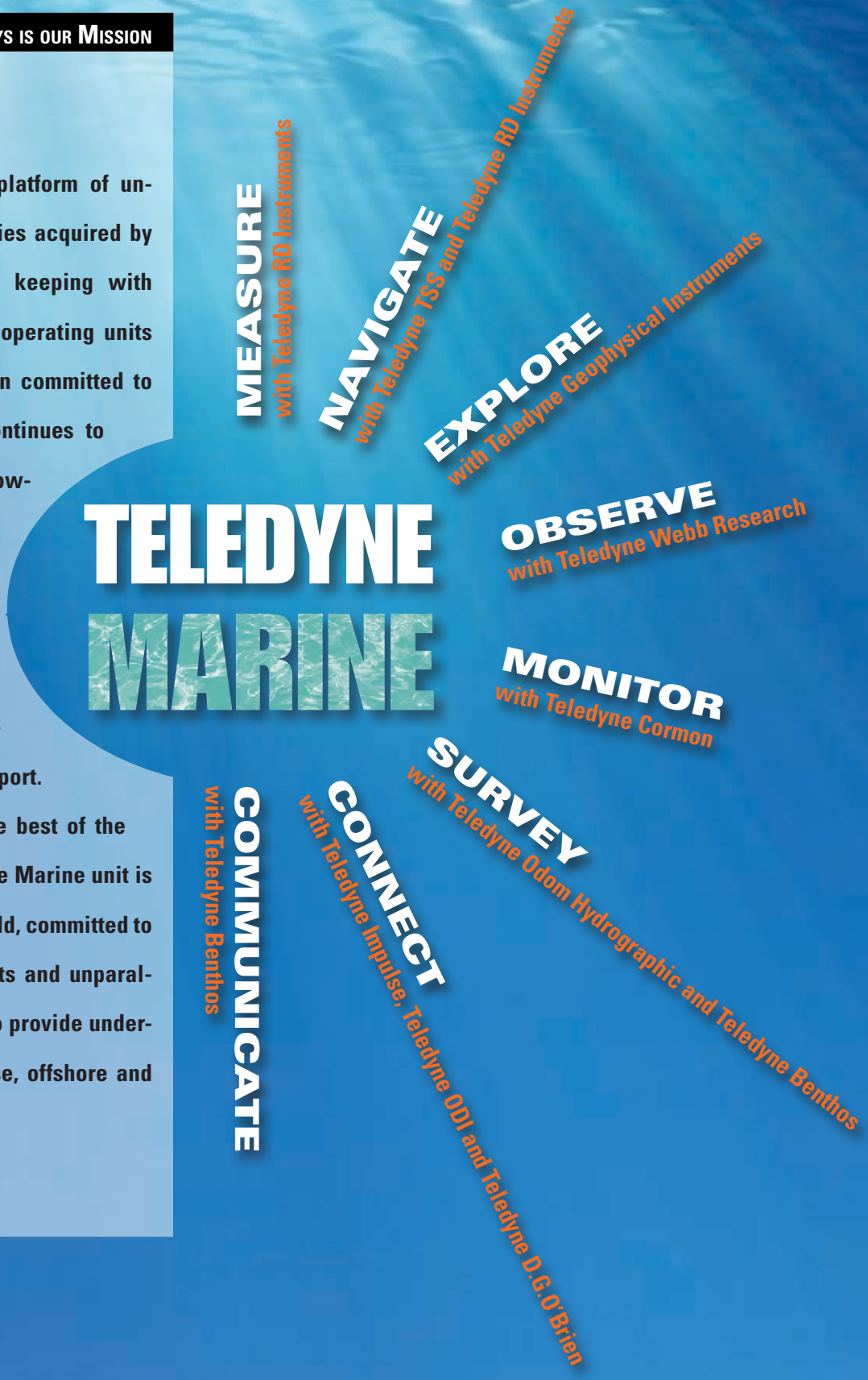
Annual Meeting
The annual meeting of stockholders will be held on Wednesday, April 21, 2010, at 9:00 a.m. PDT, at Teledyne Technologies Incorporated, 1049 Camino Dos Rios, Thousand Oaks, CA 91360.

Independent Auditors
Ernst & Young LLP
Los Angeles, California

Current News and General Information
Information about Teledyne is available at www.teledyne.com.

Fathoming Seas and Waterways is our Mission

Teledyne Marine is a platform of undersea technology companies acquired by Teledyne Technologies. In keeping with Teledyne's philosophy, the operating units in the Marine group remain committed to their origins, and each continues to do what it does best. However, these organizations work together to provide their collective customers with a new level of combined technology, innovation, and worldwide support. Teledyne Marine brings the best of the best together. Each Teledyne Marine unit is a leader in its respective field, committed to delivering premium products and unparalleled service and support to provide undersea solutions to the defense, offshore and academic communities.



EXPLORE

NAVIGATE

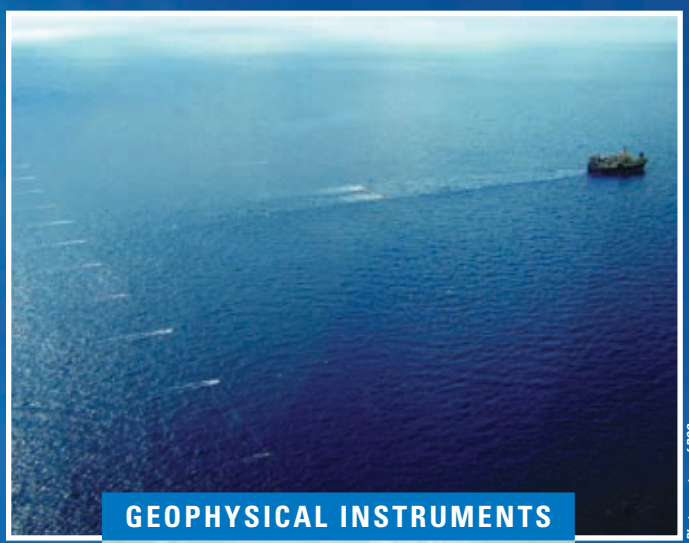


Photo courtesy of PGS

GEOPHYSICAL INSTRUMENTS

Teledyne Geophysical Instruments has remained at the forefront of technology advancements and today is among the largest, highest quality independent suppliers of streamer cables and hydrophones. Towed behind a survey vessel, these products are used extensively around the globe to locate new offshore oil and gas reserves.

TSS

Teledyne TSS Limited is hard at work around the globe in some of the harshest environments imaginable, in situations where performance and safety rely upon the highest integrity data results. By combining precision motion sensors with gyrocompasses, Teledyne TSS produces highly accurate inertial navigation systems for hydrographic surveying and weapon platform stabilization applications. These products are used extensively for defense and offshore oil and gas operations.

OBSERVE

COMMUNICATE

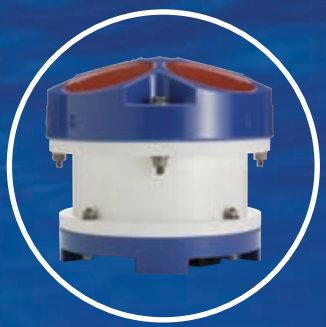
Photo by Dan Crowell

WEBB RESEARCH

Teledyne Webb Research produces innovative solutions for autonomous oceanographic monitoring. The company provides the ocean observing community and national centers with cost-effective sensor platforms capable of obtaining high resolution ocean water column data. Products include the Slocum Glider for long-range, extended duration subsurface sampling, the APEX float for physical and biogeochemical oceanography, and moored low frequency sweeping sound sources for basin scale tomography.

BENTHOS

Teledyne Benthos, Inc. manufactures a wide array of rugged, reliable oceanographic instrumentation and sensors for use in marine environments. One of the company's key product offerings is the Teledyne Acoustic Modem used for wireless horizontal or vertical underwater communication. Other products include acoustic releases, geophysical survey systems, glass flotation spheres, and undersea locating devices.

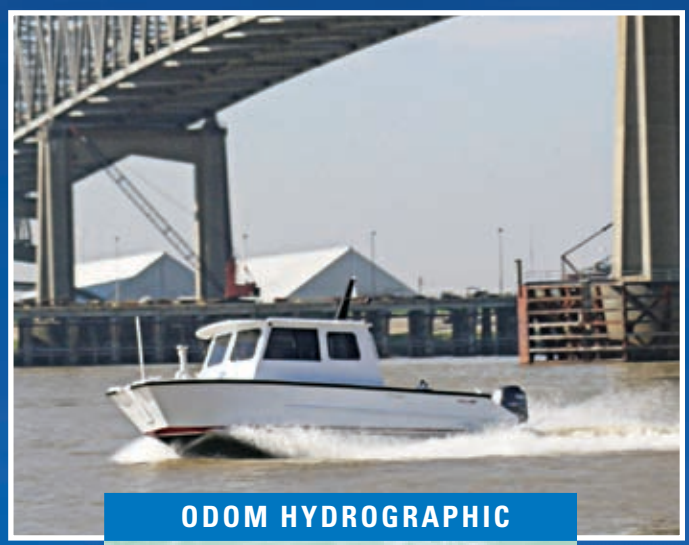


MEASURE

SURVEY

RD INSTRUMENTS

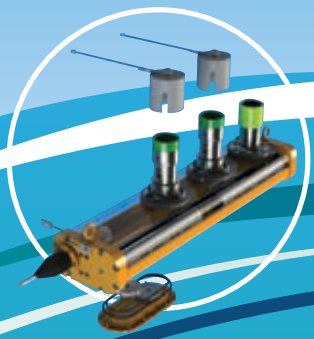
Teledyne RD Instruments, Inc. developed the industry's first Acoustic Doppler Current Profiler (ADCP), a revolutionary device capable of measuring the speed and direction of underwater currents at up to 128 individual points throughout the water column. Over the years, the company has expanded its core technology to create a wide array of current profiling, wave measurement, and underwater navigation products for applications ranging from shallow streams to full ocean depth environments. In 2009 the company added a Conductivity, Temperature, and Depth (CTD) product line, which provides the three parameters required to determine salinity, density and speed of sound in the underwater environment.



ODOM HYDROGRAPHIC

Teledyne Odom Hydrographic, Inc. is an industry leading manufacturer of single and multibeam echo sounders for hydrographic applications. Installed on survey boats, these products transmit and receive acoustic pulses which are reflected by the seabed, received by the sounder, and then used to calculate the distance between the water surface and the bottom. Depth data is then correlated to GPS position information in real-time and used to generate maps revealing the changing contours of the riverbed or seafloor. This critical data is used for navigational safety, as well as geological and oceanographic research. With more than three thousand echo sounders produced and distributed worldwide, the company has established an enviable standard for product reliability and unmatched customer service.

Teledyne Oil and Gas



Providing mission critical inter-connect, flow assurance and sensing solutions to the subsea oil and gas production industry

CONNECT

ODI

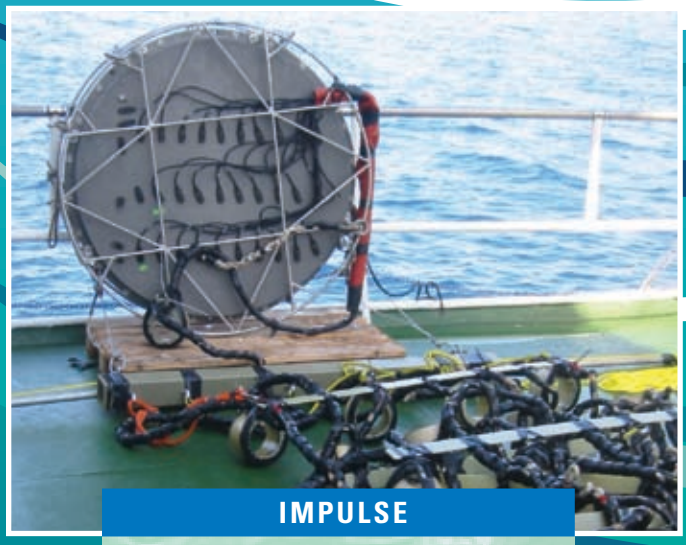
Teledyne ODI, Inc. is a leader in standard and custom-engineered wet-mateable subsea electrical and fiber optic interconnect solutions for subsea oil and gas, defense, and ocean science applications around the globe. Since its inception, the company has successfully remained focused on providing innovative engineered solutions for some of the world's most challenging offshore environments.

MONITOR

CORMON

Teledyne Cormon Limited provides engineered monitoring packages and applications expertise to the oil and gas industry. Its innovative flow assurance products and related services accelerate production, reduce operating costs and extend asset life for operators and processors worldwide.

CONNECTIONS



IMPULSE

Teledyne Impulse designs and manufactures high reliability electrical and optical interconnection systems, motorized power transfer switches, and custom insert molded compression connectors for a broad range of harsh environment applications including oceanographic exploration, spacecraft and launch vehicles, defense, oil and gas exploration and production, and wastewater management.

D.G.O'BRIEN

Teledyne D.G.O'Brien has incorporated the unmatched reliability of glass-to-metal seals into optical and electrical solutions. The company designs and manufactures systems to transmit signals, data, and power in oceanographic applications where failure to perform may contribute to substantial lost revenue, aborted missions, or loss of life. Teledyne D.G.O'Brien's applications are designed to withstand the invasion of sea water at very high pressure over numerous pressure cycles, extreme temperatures, and challenging environments.

Directors

Roxanne S. Austin [2][3]
President and Chief Executive Officer
Move Networks, Inc.

Robert Mehrabian
Chairman, President and Chief Executive Officer, Teledyne Technologies Incorporated

Frank V. Cahouet [1][2]
Retired Chairman and Chief Executive Officer, Mellon Financial Corporation

Paul D. Miller [1][2]
Retired Chairman, Alliant Techsystems, Inc.

Charles Crocker [2][3]
Chairman and CEO, Crocker Capital and Retired Chairman and CEO, BEI Technologies, Inc.

Michael T. Smith [1][2]
Retired Chairman and Chief Executive Officer, Hughes Electronics Corporation

Kenneth C. Dahlberg [1][3]
Chairman of the Board of Science Applications International Corporation (SAIC)

Wesley W. von Schack [2][3]
Retired Chairman, President and Chief Executive Officer Energy East Corporation

Simon M. Lorne [1][2]
Vice Chairman and Chief Legal Officer
Millennium Management LLC

[1] *Audit Committee*
[2] *Nominating and Governance Committee*
[3] *Personnel and Compensation Committee*

Teledyne Technologies Incorporated

2009
Form 10-K

Forward-Looking Statements Cautionary Notice

From time to time the Company makes, and this annual report may contain, forward-looking statements, as defined in the Private Securities Litigation Reform Act of 1995, directly and indirectly relating to earnings, growth opportunities, product sales, product recalls, pension matters, stock option compensation expense, taxes and strategic plans. All statements made in this report that are not historical in nature should be considered forward-looking. Actual results could differ materially from these forward-looking statements. Many factors could change the anticipated results, including continuing disruptions in the global economy, insurance and credit markets, changes in demand for products sold to the defense electronics, instrumentation and energy exploration and production, commercial aviation, semiconductor and communications markets, funding, continuation and award of government programs, continued liquidity of our suppliers and customers (including commercial and aviation customers), availability of credit to our suppliers and customers, and the availability of valve lifters and the cost of the valve lifter issue at Teledyne Continental Motors, Inc. Increasing fuel costs could negatively affect the markets of our commercial aviation businesses. Lower oil and natural gas prices could negatively affect our business units that supply the oil and gas industry. In addition, financial market fluctuations affect the value of the Company's pension assets.

Global responses to terrorism and other perceived threats increase uncertainties associated with forward-looking statements about our businesses. Various responses to terrorism and perceived threats could realign government programs, and affect the composition, funding or timing of our programs. Flight restrictions would negatively impact the market for general aviation aircraft piston engines and components. Changes in U.S. Government policy could result, over time, in reductions and realignment in defense or other government spending and further changes in programs in which the Company participates, including anticipated reductions in the Company's missile defense engineering services and gas centrifuge service module manufacturing programs.

The Company continues to take action to assure compliance with the internal controls, disclosure controls and other requirements of the Sarbanes-Oxley Act of 2002. While the Company believes its control systems are effective, there are inherent limitations in all control systems, and misstatements due to error or fraud may occur and not be detected.

Teledyne Technologies' growth strategy includes possible acquisitions. The Company cannot provide any assurance as to when, if or on what terms any other acquisitions will be made. Acquisitions involve various inherent risks, such as, among others, our ability to integrate acquired businesses and retain customers and to achieve identified financial and operating synergies. There are additional risks associated with acquiring, owning and operating businesses outside of the United States, including those arising from U.S. and foreign government policy changes or actions and exchange rate fluctuations.

Additional information concerning factors that could cause actual results to differ materially from those projected in the forward-looking statements is contained in Teledyne Technologies' periodic filings with the Securities and Exchange Commission, including its 2009 Annual Report on Form 10-K. Forward-looking statements are generally accompanied by such words as "estimate", "project", "predict", "should", "believes" or "expect", that convey the uncertainty of future events or outcomes. The Company assumes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or otherwise.

1049 Camino Dos Rios • Thousand Oaks, California 91360 • 805.373.4545 • fax 805.373.4775 • www.teledyne.com