



TELEDYNE TECHNOLOGIES INCORPORATED

2003

ANNUAL REPORT

2003 HIGHLIGHTS

Selected Consolidated Financial Data

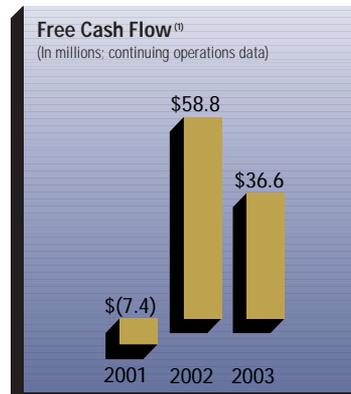
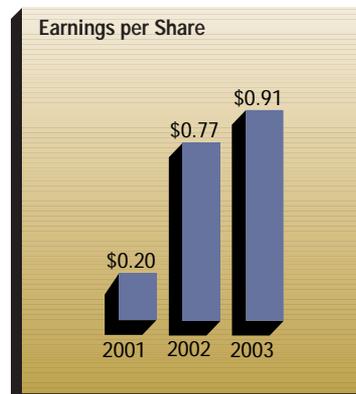
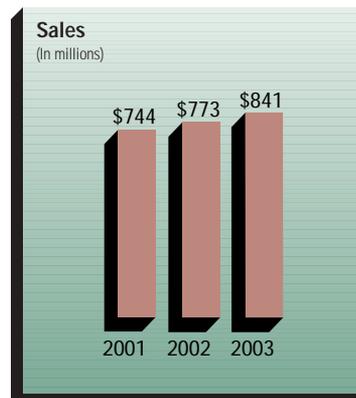
(In millions, except per-share data)

Summary Financial Information

	2003	2002	2001
Sales	\$ 840.7	\$ 772.7	\$ 744.3
Net income	\$ 29.7	\$ 25.4	\$ 6.6
Diluted earnings per-share	\$ 0.91	\$ 0.77	\$ 0.20
Weighted average diluted common shares outstanding	32.7	32.9	32.4

Summary Balance Sheet Data

	2003	2002	2001
Cash and cash equivalents	\$ 37.8	\$ 19.0	\$ 11.9
Working capital	129.5	102.6	115.3
Total assets	428.1	391.1	349.3
Long-term debt	—	—	30.0
Stockholders' equity	\$ 221.0	\$ 176.8	\$ 173.0



⁽¹⁾ Free Cash Flow defined as Cash Flow from Operating Activities less purchases of property, plant and equipment.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the "Notes to Consolidated Financial Statements" in this 2003 Annual Report on Form 10-K for additional information regarding Teledyne Technologies Incorporated financial data.

TO OUR STOCKHOLDERS

Our Strategy

Teledyne Technologies is a leader in several niche markets that are regulated and have significant barriers to entry. Going forward, our strategy is to create larger transformational growth platforms, primarily through acquisitions, focused on related businesses with defensible leadership positions. We are building these growth platforms around three core markets: aerospace and defense electronics, electronic instrumentation and government systems engineering.

In the last three years, we have completed a number of sequential steps to transform the company into an agile and efficient organization. We made several key management changes, restructured our workforce and introduced more aggressive operational excellence initiatives across our businesses. In fact, our operational excellence programs affect incentive compensation awards of most operating and senior management. Our persistent emphasis on operational excellence in every aspect of our business, from finance to manufacturing, helped drive our improved performance in 2003.

In addition to managing costs, we continued to grow through bolt-on acquisitions. After completing just one acquisition in each of 2001 and 2002, we announced three bolt-on acquisitions in 2003. We utilize a disciplined approach when screening for acquisitions, focusing on related businesses within our core markets. For example, we have doubled the size of our instrumentation business through acquisitions, and each acquired business has been in the environmental instrumentation market. Furthermore, our operational excellence initiatives include the rapid integration of the businesses we acquire. Following the acquisition of the Aviation Information Solutions businesses in 2003, for example, we consolidated its manufacturing operations from Wichita, Kansas to our Los Angeles facility within five months.



Robert Mehrabian
*Chairman, President and
Chief Executive Officer*

Since our spin-off, we have been conservative in our allocation of capital. In fact, our free cash flow over the last three years was greater than the total cash we spent on acquisitions, and we ended 2003 with approximately \$38 million of cash on the balance sheet. Given our strong balance sheet and our ability to successfully integrate previous acquisitions, our goal is to increase both the number and size of acquisitions.

As a result of organic growth, acquisitions and operational excellence, revenues in each business segment increased from the prior year, and earnings for the corporation increased substantially, for the second year in a row. Sales grew by 8.8% in 2003 and GAAP earnings per share increased 18.2%. Excluding the one-time tax benefit in the third quarter of 2003 and pension income and expense, full year 2003 earnings increased 32.9% over 2002.

Aerospace and Defense Electronics

Increases in defense spending helped our defense electronics businesses grow organically by over 20% in 2003. We experienced strong sales of microelectronic products used in military aircraft and communication products used in variety of applications. We estimate that each F-22 production unit contains approximately \$500,000 of Teledyne content, and we believe that the F-35 Joint Strike Fighter will offer similar opportunities. In 2003, we began development of a family of fiber optic transmitters and receivers, delivered initial evaluation units of a new ejection seat sequencer and received orders for prototype rigid-flex printed circuits, all for the F-35 program.

In 2003, Teledyne extended its leadership in the market for tamper-resistant military communications modules and military traveling wave tubes used for radar, satellite communications and electronic warfare applications. Pursuant to a new Air Force contract, Teledyne began designing cryptographic modules, in addition to the company's continued role as manufacturer of tamper-resistant communication components. Even though military satellite communication systems typically operate at X band, there are occasions when the military may wish to utilize commercial communication satellites that operate at C band or Ku band. Teledyne pioneered the development of triband traveling wave tubes that can operate at all three bands and sales of triband tubes surged during 2003, as the U.S. military added additional capacity for various, primarily mobile, satellite communication systems.

At the end of the fourth quarter, Teledyne announced the acquisition of the U.S. assets of Filtronic Solid State from Filtronic plc, and the transaction was completed in the first week of fiscal 2004. The Solid State business, which designs and manufactures customized microwave subassemblies for electronic warfare, radar and other military applications, is highly complementary with our existing defense electronics businesses. In addition, we are currently consolidating the Santa Clara, California operations of Solid State with existing microwave subassembly operations in Mountain View, California.

In another difficult year in commercial aviation, Teledyne responded with market share gains in existing product lines, an acquisition of a complementary business, and further expansion into new military aviation markets. Teledyne's forward fit market share for data acquisition systems on new Airbus A320 and A330/340 family aircraft increased from under 10% in the year 2000 to approximately 50% at the end of 2003. In the second quarter of 2003, Teledyne acquired the Avionics

Information Solutions businesses (or AIS) from Spirent plc. In addition to manufacturing consolidation synergies, AIS has a number of complementary product lines which are now marketed by our existing direct sales force. Other product lines, such as AIS' new Electronic Flight Bags and airborne file servers, increased the addressable market for our Teledyne Controls business. In addition, AIS expanded our capability in flight data analysis with unique software systems for military training applications. These Computer Aided Debrief Systems are to be installed at 10 Navy Flight Simulator facilities throughout the U.S.

Government Systems Engineering

As described later in this report, while much has changed over the last 50 years, Teledyne Brown Engineering, Inc., our government systems engineering business, continues to participate in some of our country's most significant defense and space programs. Furthermore, financial performance in 2003 was very impressive, as both operating profit and operating margin reached record levels. While profitability will likely decline in 2004, as certain awards fees will not recur, sales in our systems engineering segment should benefit from strong orders in 2003, which increased 9.5% compared to 2002, and were 13.7% greater than 2003 sales.



Ivars R. Blukis
Chief Business Risk Assurance Officer

The internal control environment at publicly held companies has become a topic of intense interest to investors, regulators and employees of these companies. With the passage of the Sarbanes-Oxley Act of 2002, that interest has transcended into a legislative mandate.

Teledyne Technologies takes pride in its history of and commitment to strong internal controls.

For the past two years, Ivars Blukis, Chief Business Risk Assurance Officer, has headed Teledyne Technologies' internal audit function. He reports directly and separately to the Chairman of the Audit Committee of the Board of Directors and to the Chairman, President and Chief Executive Officer of Teledyne. He is a member of the Disclosure Committee and the project leader for the implementation of the Sarbanes-Oxley Section 404 requirements.

Mr. Blukis has been with Teledyne for 28 years, and prior to his current assignment he was CFO for the Electronics and Communications Segment. He holds degrees from Stanford University and Santa Clara University, as well as CMA certification.

Throughout 2003, we continued our support of ballistic missile defense, including the Ground-based Midcourse Defense (GMD) program, our nation's largest missile defense program. Programs such as GMD, utilize Teledyne Brown's core competencies in software-based test and evaluation, data analysis and modeling and simulation. Further confirming our software capabilities, Teledyne Brown Engineering's Technologies Group achieved the Software Engineering Institute's Capability Maturity Model (or "CMM") Level 4 rating in 2003.

For decades, Teledyne Solutions, Inc., has provided Systems Engineering and Technical Assistance support to the U.S. Army Space and Missile Defense Command, and in 2003 Teledyne was awarded a contract to extend this work into 2007. In addition to the U.S. Army, Teledyne Solutions is now working for other major Department of Defense customers, including the Missile Defense Agency and the Program Executive Office for Air, Space, and Missile Defense.

Teledyne has been the prime contractor for the Propellants, Pressurants and Calibration Services Contract at Marshall Space Flight Center since 1971; and in 2003, we extended our role for another five years. Furthermore, as a subcontractor to Lockheed Martin, Teledyne was awarded the International Space Station Cargo Mission Contract at the Johnson Space Center. Coupled with our existing Payload Integration Contract, we are well positioned to benefit from the future development of the International Space Station.

Sales in our environmental solutions business, which includes several contracts primarily related to the destruction of hazardous materials, increased over 30% in 2003, and we expect that this business will continue to grow in 2004. For example, in 2003, Teledyne won a \$20 million U.S. Army contract to support the destruction of binary chemical warfare materiel stored at the Pine Bluff Arsenal in Arkansas, and Teledyne Brown and its teammate Science Applications International Corporation were awarded a contract by the Defense Threat Reduction Agency to provide Systems Engineering and Technical Support for storage, security, elimination and nonproliferation of weapons in the former Soviet Union.

Electronic Instrumentation

Over the last few years, we committed to build a larger, transformational growth platform in our instrumentation business. The acquisition of Advanced Pollution Instrumentation, Inc. (API) in 2001 expanded our traditional industrial gas analysis business into the environmental air quality market and was the first step in this transformation. In 2002, we acquired Monitor Labs, Inc., which, like API, is focused on the environmental gas analysis market. An easy synergy was obtained between these two acquisitions when API gas analyzers were incorporated as standard equipment in all of Monitor Labs' air quality monitoring systems. Besides air quality monitoring systems, Monitor Labs is the country's largest supplier of ultrasonic gas flow opacity monitoring systems, which are used to measure the amount of particulate matter emitted by industrial smoke stacks. Gas flow technology is not a new market to Teledyne, however, as Teledyne has manufactured Hastings Instruments' mass flow controllers for many years.

During the second quarter of 2003, we acquired Tekmar-Dohrmann, now known as Teledyne Tekmar Company, from Emerson Electric. Teledyne Tekmar expanded Teledyne Instruments' line of environmental monitoring and analysis products to include water quality in addition to API's gas analysis instruments

and Monitor Labs' air quality systems. Teledyne Tekmar's laboratory instruments have leading positions in the market for the detection and analysis of organic compounds in drinking water and wastewater. Through the recent acquisition of assets of Leeman Labs, Inc., which shares the laboratory water quality market with Teledyne Tekmar, we are now able to market equipment for the detection of inorganic compounds, such as mercury and lead, in addition to organic compounds, such as benzene and trichloroethylene. Furthermore, we believe that the technology in our acquired laboratory instrumentation businesses may be utilized over time to develop new products for our traditional online industrial process instrumentation markets.

Aerospace Engines

Faced with weak demand in the general aviation aftermarket and significant increases in product liability insurance, we relied on operational excellence, coupled with our growing OEM market share to help offset these challenges. Due to strong demand for new composite OEM piston aircraft, for which we are the sole source engine supplier, we continued to increase OEM market share. In fact, sales of Teledyne Continental Motors' engines for OEM aircraft have increased 20%, on average, in each of the last seven years. In addition to gaining share in our traditional high-power certified piston engine market, we continue to evaluate a new engine primarily targeted at segments of the market adjacent to our base business. Furthermore, despite relatively low profitability during the year, our piston engine business continued to generate strong cash flow, due to significant reductions in inventory made possible by our lean manufacturing efforts.

In our military turbine engine business, the Joint Air-to-Surface Standoff Missile (JASSM) was certified in 2003 and is now ready for operational use. JASSM Lot 3 Production will start in the middle of 2004, and we expect to deliver approximately 150 engines for this next generation cruise missile in the coming year.

Energy Technologies

In our Energy Systems segment, we were able to focus on commercial alternative energy products while capitalizing on our strong legacy of highly reliable power systems for government programs. In 2003, we sold our 50th fuel cell test station, introduced fuel cell testing services and won approximately \$65 million in long-term contracts for next generation power systems for manned and unmanned space exploration.

In the energy technologies marketplace, we continue to believe that Teledyne possesses a unique business; one which encompasses both tangible commercial energy technology products, such as fuel cell test stations and hydrogen refueling systems, in combination with a growing base of long-term government contracts. Equally unique in the alternative energy marketplace is that, in addition to anticipating 50% revenue growth in 2004, we expect this business

to be profitable. Considering the current valuation of energy technology peer companies, we believe that future opportunities exist to create value for our stockholders through a strategic alliance or perhaps a spin-off of Teledyne's Energy Systems, Inc.

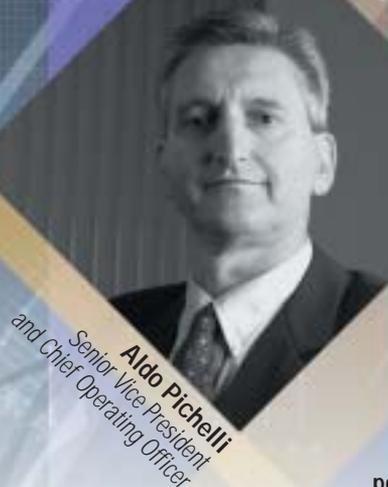
Outlook

We believe the 2004 and long-term outlook for our government businesses is quite attractive. We expect that support for defense priorities will remain strong, especially in some of our key markets such as defense electronics and engineering services. We are optimistic that the commercial avionics industry will begin recovering in late 2004. Furthermore, orders for other commercial electronics, such as electronic relays used for semiconductor test equipment, wireless applications and networking equipment, and broadband wireless radios were noticeably stronger in the latter part of 2003. As the worldwide economy continues to improve, we see a fortuitous concurrence of a strong defense market coupled with a recovery in some of our key commercial businesses. We will strive to position the company, through both our operational excellence initiatives as well as opportunistic acquisitions, to capitalize on these market trends and increase return to our shareholders.

Finally, I want to thank our Board of Directors and each employee of Teledyne. Without the Board's guidance and the efforts of our employees, the success we achieve would not be possible.



Robert Mehrabian
Chairman, President and Chief Executive Officer
February 27, 2004



Aldo Pichelli
Senior Vice President
and Chief Operating Officer

REVIEW

2003

Electronics and
Communications Segment

Al Pichelli has been the Senior Vice President and Chief Operating Officer of the Electronics and Communications Segment since August 2003. In his prior role as Vice President and General Manager of Teledyne Instruments, he doubled the size of that group through a focused acquisitions program in the environmental monitoring market. Mr. Pichelli has held various finance, manufacturing, operations and general management positions during his 23 years with Teledyne.

2 003 was a successful year for our Electronics and Communications segment with sales of \$447 million, compared to \$388 million in 2002. While demand in some of the company's market areas continued to be soft during this period, this was more than compensated for by strong demand in others. The company's diverse product lines and the multiple markets served—defense, commercial aerospace, medical and industrial electronics, telecommunications, electronic test and measurement, and environmental and industrial instrumentation—helped make these results possible.

Defense

Orders for electronic assemblies by military and defense customers remained strong throughout the year, primarily driven by accelerated delivery demand and additional option orders supporting the country's increased military operations. Repair depot services, spare parts, and replenishment orders for electronic modules and subassemblies were primary contributors to this increased demand. Products supporting secure communications, missile and missile launch systems, and aircraft displays all experienced increased requirements during 2003.

Sales of military traveling wave tubes (TWTs) increased substantially during the year, and demand for our TriBand TWTs, used by U.S. and European armed forces for satellite communications, reached an all-time high. The first substantial sales of our high frequency Ka band TWTs for both satellite communications and

instrumentation uses were made as well, and sales of spare electronic countermeasures TWTs for legacy systems used on the EA-6B, F-14, F-15 and B-52 aircraft remained at a high level.

The company is currently developing new ejection seat sequencers in support of the F-35 Joint Strike Fighter System Development Design phase. This design is a modification of Teledyne's fourth-generation electronic ejection seat sequencer now flying on the F/A-18E/F aircraft.

Strong demand was also experienced during 2003 for the company's microelectronic products used on the F-22 Raptor and the EPLRS (Enhanced Precision Location Reporting System). These programs require a spectrum of technologies that range from fiber optic transmitters and receivers to solid-state relays and power controllers, as well as secure communications modules equipped



Traveling wave tubes provide high power microwave signals for modern battlefield radar and communication.



Far left:
Custom hybrids and multichip modules for military, aerospace, test, instrumentation and medical applications.



Left:
Electronic components and subsystems for modern tactical aircraft such as the F-35 Joint Strike Fighter.

with anti-tampering capabilities. The development of fiber optic devices and microelectronic modules for the F-35 Joint Strike Fighter began during the year.

In addition, the U.S. Air Force awarded Teledyne a contract to develop a custom tamper-resistant microcircuit which, when embedded in host electronics, is designed to provide enhanced communication security. This module will incorporate the latest encryption/decryption algorithms and provide users with multi-algorithm selectability.

In other product areas, defense orders for rigid-flex printed circuits and assemblies continued to be strong, outpacing 2002 results by approximately 20 percent. The year also saw an increase in prototype orders driven in part by significant sub-system design activity for F-35 programs. Several of these prototype orders are expected to develop into initial production awards in 2004.

Commercial Aerospace

The commercial air transport market remained relatively flat in 2003 for obvious reasons, and current forecasts do not project a significant upturn until 2005. However, our strategic investments in developing new products for Airbus aircraft have helped offset the effects of this weak market. The company's market share of Data Acquisition products at Airbus reached approximately 50 percent at the end of the year and is expected to continue growing. Airbus, for the first time in history, has overtaken Boeing as the leading

producer of commercial aircraft. Our joint development agreements with Airbus in the area of Data Analysis Software are expected to further enhance this cooperative effort.

The business jet market showed a significant downturn in 2003. However, the Magnastar phone system for business jets continues to enjoy a substantial market share and is the system of choice for most aircraft manufacturers.

Another player in the commercial aerospace market joined Teledyne at the end of June with the acquisition of the Aviation Information Solutions (AIS) businesses of Spirent plc. AIS designs and manufactures aerospace data acquisition devices, networking products, and flight deck and cabin displays. Their products include Airborne File Servers for onboard

networking and hosting of software applications, Wireless Gate Link for transferring information and data to and from the aircraft at the gate, and an Electronic Flight Bag that provides digital access to information, such as approach and navigational charts, without the added weight of paper documentation.

In addition, AIS develops software applications and ground-based analysis systems focused on improving aircraft operational performance, safety and pilot training. AIS' products and services are used in air transport, business aircraft and military applications, and are highly complementary to Teledyne's existing lines of data acquisition and communications products.



The Electronic Flight Bag provides pilots with paperless information access.

REVIEW 2003

Continuous emissions monitoring systems for pollution control in the power generation industry.



Medical Electronics

Sales for medical electronic assemblies and subassemblies were steady for 2003, with somewhat lower orders for MRI imaging product applications offset by increased requirements for X-ray, CT and PET imaging assemblies. Growth within the PET imaging products sector was paced by new product introductions which have benefited from recent changes in medical insurance benefits that extend coverage to PET diagnostic imaging. Orders for our microelectronic modules used in implantable medical devices remained steady during the year.

In addition, a new line of medical oxygen monitors based on electrochemical sensors was introduced. These monitors are tailored to the specific needs of a customer and provide a significantly higher level of mobility than previous models.



Surface mount microwave relays used in applications ranging from test equipment to cellular telephone base stations.

Industrial Electronics

Higher sales and orders for the company's line of high-reliability industrial electronic assemblies were achieved throughout 2003. Increases in the sales of our transportation and automotive electronic assemblies were partially offset by slightly reduced activity in instrumentation and industrial automation programs. The year included expanded offerings for low-cost manufacturing in other countries, including mainland China, in conjunction with a strategic partner. Manufacturing capacity was also expanded in Mexico.

The year saw continued expansion of the company's portfolio of Industrial Solid State Relay products, making it one of the most comprehensive in the industry. Increased demand was also seen for our energy efficient line of diode-based light emitting modules that are being increasingly used by electronic sign manufacturers to replace neon lighting systems.

Telecommunications and Electronic Test and Measurement Products

A significant increase in demand for broadband transceivers, used in point-to-point radios that are part of the cellular telephone infrastructure, was seen during the year. The company's wireless communications group continued to expand its product offerings with the development of transceivers for new frequency bands, as well as the introduction of a unique low-noise, low cost frequency synthesizer for this market.

The company's RF and microwave coaxial switch and its relay product lines

were consolidated during the year. These are now being sold under the Teledyne Relays label. Although the telecommunications, semiconductor test, and general test measurement markets continued to be soft, Teledyne Relays had an excellent year with new designs, partly driven by its expanded portfolio of products.

Environmental Instruments

Demand for environmental monitoring instruments was strong in overseas markets during the year. In March 2003, Teledyne API won an order for the largest single project in its history to establish a major ambient air monitoring network in the city of Naples, Italy. By year's end, approximately 300 monitoring instruments had been successfully delivered.

Teledyne Monitor Labs had great success and gained additional market share in 2003 as well, with its latest LightHawk® opacity/dust monitoring systems. The company had already been the country's largest supplier of opacity monitoring systems. The LightHawk® system precisely measures the amount of particulate matter emitted by industrial smoke stacks. It operates with high reliability under very hostile conditions, assuring customers years of EPA compliant performance.

Hazardous air pollutant regulations for the pulp and paper industry have required this industry to operate opacity monitors in conjunction with refined data acquisition systems. Monitor Labs focused on this industry in 2003 and was successful in winning a significant portion of this business. One of the world's largest pulp



LightHawk® for dust monitoring in hostile industrial and utility environments.

and paper producers rated the company's RegPerfect® system "the preferred system, which performed best in all tests, installed in the shortest time, and had the most modern architecture compared to the competition."

In May 2003, Teledyne acquired the Tekmar-Dohrmann division of Emerson Electric Company in its continuing strategic expansion of its instrumentation business. Renamed Teledyne Tekmar Company, this well-regarded laboratory instrument company has leading market positions in key measurement areas, such as drinking water, waste water and pharmaceutical quality assurance.

Growth in this area in 2004 will be driven in part by customer acceptance of Teledyne Tekmar's newest product, the Velocity XPT™ Purge and Trap Concentrator. This instrument can double the sample throughput of environmental testing laboratories for certain types of analyses, a feature of interest to both commercial and governmental testing laboratories. Six leading manufacturers of gas chromatographs have elected to sell the

Velocity XPT™ as an accessory to their own products.

Business conditions in Asia—particularly Japan—are beginning to increase sales of Teledyne Tekmar's Purge and Trap products. In addition, new Japanese regulations for the first time mandate the use of Total Organic Carbon (TOC) measurements to assure the quality of their drinking water. This should compel customers to buy TOC analyzers over the next few years, creating a unique new market opportunity for Teledyne Tekmar.

Industrial Instruments

During the year, Teledyne received a significant order for trace gas analyzers, total sulphide analyzers, and total hydrocarbon analyzers from a leading supplier of carbon dioxide to the food and beverage market. Carbon dioxide, typically refined from industrial sources, must be purified for use in soft drinks, beer and sparkling water. Beverage producers, to ensure compliance with industry standards as well as to protect the quality of their own brands, require CO₂ suppliers to provide computer printouts verifying the analysis of undesirable impurities. Benzene as well as acetaldehyde, in minute quantities, can adversely affect the taste of these beverages. Standards of the International Society of Beverage Technologists call for measuring benzene at the parts-per-billion level. Teledyne recently introduced a line of Flame Ionization Detector (FID) analyzers for this work.



Phoenix 8000® total organic carbon analyzer monitors water purity for drinking water, wastewater, industrial and pharmaceutical applications.

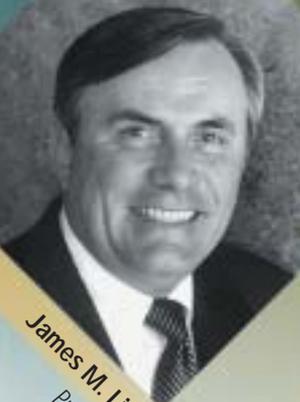
Measurement of precise vacuum levels is another important requirement in many industrial processes. With its latest vacuum instrument, the IGE-3000 Ion Gauge, Teledyne Hastings has become a full service vacuum measurement company, covering pressure ranges from atmosphere through the high vacuum ranges required by many manufacturing processes. This new instrument offers the user accurate, repeatable pressure measurements starting in the medium vacuum range, continuously through into the ultrahigh vacuum range.

In the arena of offshore oil and gas exploration, Teledyne recorded its first order for its latest generation towed seismic array in 2003. The value of this order exceeds \$10 million, with delivery scheduled in 2004.

REVIEW

Systems Engineering
Solutions Segment

2003



James M. Link
President

DEFENSE

Technologies Group

Diversifying its customer base and broadening partnerships with small businesses were key focuses of Teledyne Brown Engineering's Technologies Group in 2003. The company broke new ground in the arena of Space Control by expanding its products and services to the U.S. Strategic Command, which plans to replace one of its existing software models with Teledyne Brown's Extended Air Defense Simulation (EADSIM). Developed by the company and first deployed in 1989, EADSIM is the world's most mature and widely used force-on-force model. It provides the Warfighter with analysis, training, and operational planning in one package. The company continues to grow and maintain this system.

Teledyne Brown Engineering also supported Lockheed Martin on its Strategic War Planning System Modernization effort and Science Applications International Corporation at the U.S. Strategic Command, providing support for Space Operations, Global Missile Defense, Information Operations, and Global Strike.

During 2003, the company continued its long-standing support of the Ground-based Midcourse Defense program in response to the Government's directive of fielding an operational missile defense system by September 2004. Program modifications have required extensive changes in test activities. Teledyne Brown develops and implements evaluation capabilities, test data reduction software, and evaluation algorithms, as well as

collecting, archiving, and distributing raw and reduced test and analysis results.

As a first-tier subcontractor to the Raytheon Company, Teledyne Brown continued its participation on the Loitering Attack Missile-Aviation team, completing phase II of the vulnerability assessment. The company received additional funding for a propulsion study in which Teledyne Continental Motors-Turbine Engines will participate. Its goal is to demonstrate that a turbofan motor will meet the Loitering Attack Missile-Aviation requirements.

Teledyne Brown also participated with Lockheed Martin on the proposal team for the Future Combat System's Unmanned Ground Vehicle programs, which should provide the company with additional credentials that can be leveraged for future growth.

Missile Defense System Exerciser (MDSE) personnel conduct a development test in TBE's dedicated MDSE lab. After these tests are completed, the software will be used to test interoperability among the distributed military services components and integrated system performance.





In 2003, Teledyne Brown Engineering, Inc., won a potential \$40 million subcontract from Lockheed Martin Space Operations of Houston in support of the International Space Station (ISS) Cargo Mission Contract. Teledyne Brown will be integrating pressurized and unpressurized cargo items for the Space Station.

The company's support for the Federal Aviation Administration was expanded in 2003 with a proof of concept contract for the Automated Airborne Flight Alert System. This work is to demonstrate a data system that will provide selected aircraft flight data and situational awareness data to ground agencies for homeland security purposes. Teledyne Controls will provide the airborne equipment for this system.

Working with Teledyne Brown Engineering, Sytronics of Dayton, Ohio has won a Small Business Innovative Research contract for specialized technical research on an Ultra High Resolution Synthetic Micro Satellite Array, which applies optical techniques to radar imaging for tracking air and ground targets. Phase I was completed in 2003. The company will be pursuing a Phase II award in 2004 to continue research and possibly build a micro satellite array.

In December 2003, the Missile Defense Agency awarded Teledyne Brown Engineering a role in its Targets and Countermeasures program, as part of the Lockheed Martin team. This program involves providing countermeasures software to develop, test and verify ballistic missile defense system performance. These targets allow testing of the missile defense technologies, now in development, to

intercept and destroy incoming ballistic missiles at various times in flight, including the Airborne Laser, the Kinetic Energy Interceptor, the Ground-based Midcourse Defense, the Aegis Ballistic Missile Defense, the Patriot Advanced Capability 3, and the Theater High Altitude Area Defense (THAAD). Targets and countermeasures will be developed to represent capabilities of ballistic missile threats of the type that could be used in an attack on the United States, our deployed forces and our friends and allies.

AEROSPACE

Systems Group

Teledyne Brown Engineering has been a key resource for NASA for more than 45 years. (See Brown Anniversary story.) This year the company won two major NASA contracts: the Propellants, Pressurants and Calibration Services Contract at the Marshall Space Flight Center, and the Space Station Cargo Mission Contract at the Johnson Space Center.

The first of these, awarded in October, has a potential value in excess of \$35 million over five years. Teledyne Brown has been the prime contractor for this program since 1971 and is a key leader on these most safety critical contracts. Company



Teledyne Brown's Hardware-in-the-Loop test tools help the U.S. Government's Missile Defense programs resolve interoperability problems before fielding the systems.

REVIEW 2003

Teledyne Brown supports the U.S. Army's Non Stockpile Chemical Demilitarization program.



employees have worked more than 1.7 million man hours over the last 12 years without a lost-time accident.

The International Space Station (ISS) Cargo Mission Contract, on which Teledyne Brown is subcontractor to Lockheed Martin, was awarded in November as part of a restructuring of the International Space Station Contract. This base contract, in excess of six years with options for further growth, involves providing services related to planning, preparation, and execution of cargo missions to the ISS. This contract, with Teledyne Brown's existing \$74.4 million ISS Payload Integration Contract, positions the company well for the next phase of the ISS program.

In May 2003, Teledyne Brown was awarded a \$2.9 million subcontract by the U.S. Army for the design and manufacture of 26 Missile Round Trainers, which will be used in the Patriot Advanced Capability Program for training purposes. The first of these systems was rolled out on October 23, and the company was praised for its efficiency in delivering a high-quality product two months ahead of schedule and at an affordable cost. Expected follow-ons could lead to significant additional engineering and manufacturing tasks.

Teledyne Brown has also continued to provide engineering and manufacturing support to the Marshall Space Flight Center under the Systems Development and Operations Support contract. This contract has the potential to be a 10-year

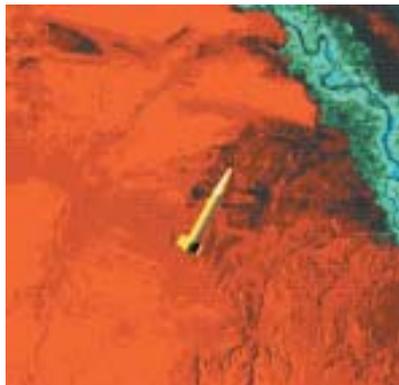
contract (5-year base with 5 one-year options). Awarded in June 2002, it has a \$568 million ceiling.

Environmental Systems

Teledyne Brown's Environmental Systems Group has expanded its technical base to serve a broad variety of customers as a provider of engineered solutions for managing and operating government facilities, handling and disposing of hazardous wastes, and removing potential hazards to the population and the environment. These services involve engineering, manufacturing and laboratory analyses.

The main focus of this activity is on two large ongoing programs: the Non-Stockpile II contract, and radiological environmental monitoring and analytical services at Teledyne Brown's Knoxville, Tennessee laboratory.

Since 1996, Teledyne Brown has supported the U.S. Army's Non-Stockpile Chemical Materiel Program and continues work on various tasks, including operation of the Army's Rapid Response System and management of its Integrated Logistics support. The company completed destruction operations at Fort Richardson, Alaska ahead of schedule, and has received a contract extension through March 2004, to maintain the Rapid Response System in a state of readiness. The integrated Logistics Support contract option year was exercised to provide centralized logistics and maintenance in support of the Army's



Teledyne Brown Engineering's expertise in modeling threat optical signatures leads the industry.



The Observable Protein Crystal Growth Apparatus is a device for the International Space Station that is used to delineate the relevant variables between Earth-grown crystals and Space-grown crystals.

Explosive Destruction System through September 2004.

In June 2003, Teledyne Brown won a U.S. Army contract with a potential value of \$20.4 million over 3 years to build a facility for the destruction of binary chemical warfare materiel stored at the Pine Bluff Arsenal in Arkansas. The company provides expertise in the design, installation, and operation of systems to safely treat and dispose of chemical warfare materiel.

In September, Teledyne Brown and its teammate, Science Applications International Corporation, were awarded a three-year, \$3.7 million contract by the Defense Threat Reduction Agency to provide Systems Engineering and Technical Support for elimination, storage, security, and nonproliferation of weapons in the former Soviet Union.

By building on previous accomplishments with the Army and the Defense Threat Reduction Agency, our Environmental Systems Group has had continued success in 2003 in weapons demilitarization and nonproliferation support, and looks forward to broadening this base in 2004, while maintaining our reputation of excellent service to existing customers. The company anticipates growth in business with governmental sectors such as Homeland Security, the Department of Defense, and the Department of Energy, as well as growth in design of specialty devices for hazardous materials transport and storage for

commercial customers that operate in government-regulated environments. Specific opportunities exist in the area of nuclear waste storage and transport, as well as remote handling systems for use in radioactive or other hazardous environments.

Teledyne Solutions, Inc.

Teledyne Solutions, Inc., was formed four years ago as a wholly owned subsidiary of Teledyne Brown Engineering, specifically to work on the company's Systems Engineering and Technical Assistance Contract (SETAC) with the U.S. Army Space and Missile Defense Command. Teledyne Solutions was recently awarded a two-year extension to this multi-million dollar contract, extending the performance period through April 2007.

Today, Teledyne Solutions also provides Systems Engineering and Technical Assistance support to other major Department of Defense customers. It provides engineering services to the Missile Defense Agency, the U.S. Army Space and Missile Defense Command, and to various Army weapons systems assigned to the Program Executive Office for Air, Space, and Missile Defense.

In addition, Teledyne Solutions is a major subcontractor to Photon Research Associates for the development of the Battlespace Environments and Signatures Toolkit. This program involves the development of an optical signature model for predicting the infrared signatures of

ballistic missiles. The company's outstanding performance has been recognized, in part, through an award fee exceeding 90% for the last period.

The Office of the Secretary of Defense recently selected Teledyne Solutions, Inc. to participate in the Targets Management Initiative program. This highly competitive program selects innovative concepts for the investment of development funds for future test programs. The company was nominated for the program by the Missile Defense Agency for a concept to provide low-cost, reusable ballistic missile targets for the Agency.



Bryan L. Lewis
President

REVIEW

2003

Aerospace Engines
and Components Segment

Although Teledyne Continental Motors, Inc. experienced continued weakness in segments of its general aviation product lines throughout 2003, a continued focus on operational excellence combined with the company's growing OEM product mix resulted in a profitable year of operations.

Piston Aircraft Engines

The growing sales for OEM piston aircraft engines enjoyed by Teledyne Continental Motors in 2002 continued through 2003 despite challenging business conditions in global aviation markets. This was due in large part to the strong sales achieved by manufacturers of modern certified composite aircraft that use our engines. Continued strong sales of the Continental-powered Cirrus SR20 and SR22 single engine aircraft allowed Cirrus Design to become one of the world's largest producers of piston powered aircraft during 2003. In addition to Cirrus, Continental aircraft engine sales to Diamond Aircraft and Lancair also continued to grow in 2003. With Continental now powering many of today's new light aircraft, the company's OEM market share has risen from approximately 20 percent to approximately 50 percent of the domestic market during the past five years. The company expects that two new aircraft powered by Continental engines will begin rate production in 2004.



The company's replacement aircraft engine and spare parts markets, however, continued to be severely impacted by a number of conditions throughout 2003. The highly cost sensitive and competitive replacement engine market has seen operating costs rise resulting from continued increases in insurance costs. The market response to these conditions in 2003 resulted in the lowest after market engine order rate in twenty years for Continental after market engines.

Small Turbine Engines

Teledyne Continental Motors' small turbine operations continued to face significant restructuring challenges in transitioning from its historical product mix to one dedicated almost entirely to the production of low cost tactical missile engines for military markets.

To meet these challenges, the company's turbine manufacturing operations have been consolidated at the

The Twin Engine Adam A500 is one of two new aircraft powered by Continental expected to begin production in 2004.



Engine components for the U.S. Navy Improved Tactical Air Launched Decoy (ITALD) were produced for the first time in the small turbine manufacturing cell in Mobile, Alabama.



The premium Continental Platinum Engine continues to gain favor with new OEM aircraft manufacturers.

Mobile, Alabama manufacturing facility, with final assembly and test operations performed at the Toledo, Ohio facility. The new manufacturing cell for turbine operations continued to perform ahead of schedule in many areas. Along with the production of components for the Harpoon and Joint Air-to-Surface Standoff Missile (JASSM) engines, the cell began production of J700 engine components for the U.S. Navy Improved Tactical Air Launched Decoy (ITALD) in 2003. Both ITALD and JASSM components met or exceeded production cost targets in 2003.

Battery Products

In 2003, Teledyne Battery Products continued to expand the number of aircraft installations for its well-known Gill™ brand aircraft batteries. Validations of several of its Supplemental Type Certificates for foreign-operated aircraft, requiring both sealed and dry-charged batteries, have been obtained. Development of FAA Supplemental Type Certificates and Parts Manufacturer Approvals for sealed recombinant batteries in business jet and helicopter applications, where lower maintenance batteries are required, continues. Further approvals for this advanced line of batteries were made for various aircraft models, including those of Bell Helicopter, Bombardier, Cessna, Eurocopter, Pilatus, Sikorsky, Socata, and Raytheon.

During the year, Teledyne met with key aviation fleet operators to review overall replacement costs for the company's newly developed onboard charging and display kit. A final

Supplemental Type Certificate for the kit and batteries is expected in 2004. The new kit is expected to replace the existing Ni-Cad battery and charger system with Teledyne sealed batteries and a "smart" charger. This technology is designed to provide overall life-cycle cost savings for fleet operators.

Providing improved aircraft batteries with reliable performance characteristics is a continuing company goal. A brand new version of its sealed flagship battery is scheduled for release in 2004. It will be designed to provide significantly improved internal construction and a new rugged exterior. The designs of all the company's batteries, dry-charged and sealed, are currently being evaluated to maximize power and energy densities within a given envelope.

Service and Manufacturing Excellence Initiatives

Teledyne Continental Motors made important achievements in 2003 in its efforts to provide operational excellence in its service and manufacturing areas.

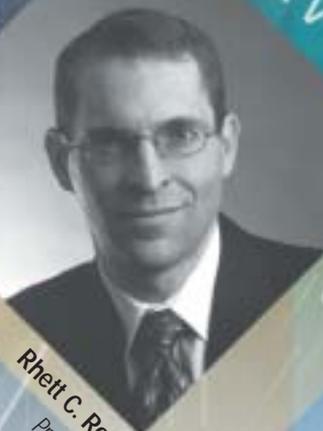
Continued development of the company's electronic Virtual Purchasing system has been integral in more than doubling inventory turns for our piston aircraft engine operations. In addition to achieving these outstanding inventory management results, the company continued to mature its build-to-demand lean manufacturing system to provide fast, reliable customer service on over 1,400 engine model specifications and 6,000 aftermarket service parts. Similar results have been achieved in the company's battery product operations, where inventory turns of 10 have been achieved.

The company's TCMLink electronic-based service support network made impressive strides in 2003, as well. The year ended with over 600 subscribers to the company's Fixed Base Operation Services Network, and 20,000 subscribers to the Aviator Services pilot support system. These innovative programs provide our general aviation customers with modern e-communications links to our service, maintenance, and product technical data.

In 2003, the company also made significant strides in expanding the use of a SCADA control system for process control monitoring and automation at its Mobile manufacturing center. This system has received favorable reviews for its creative approach to integrating modern quality methodologies, in a cost-effective manner, into engine component manufacturing.



Our battery products operation is working with Teledyne Controls to develop an on-board charging system for use with our aircraft lead acid batteries.



Rhett C. Ross
President

REVIEW

Energy Systems Segment

2003

Teledyne Energy Systems, Inc. returned to its roots in 2003 with major government contract wins to develop next-generation power systems for manned and unmanned space exploration. The company's commercial product lines added fuel cell stack testing services and advanced electrolysis system research contracts to its multi-year business base. The company continues to improve annual results while investing strongly in new business and product development.

As the record setting Pioneer 10 spacecraft, powered by a Teledyne Energy Systems' thermoelectric power system, sent its last communication on January 22, 2003, Teledyne Energy Systems entered a new space flight era with the addition of more than \$65 million in multi-year development and production contracts. Today, Teledyne Energy Systems provides thermoelectric materials research, thermoelectric generator production, fuel cell system prototyping, and fuel cell testing services to various departments within the U.S. Department of Energy, NASA and others.

Teledyne Energy Systems' commercial product line expanded in 2003, as well. The 50th Medusa RD test station was sold in 2003 and fuel cell testing services were added to the portfolio. There was growing interest in the Teledyne Titan™ hydrogen generator line in both the traditional industrial markets as well as those related to alternative energy and hydrogen vehicle refueling. The company also expanded its



commitment to developing advanced hydrogen generation technologies in partnership with the U.S. Department of Energy under a program to improve system efficiency and manufacturability.

The success experienced to date by Teledyne Energy Systems is a direct reflection of the skills of the dedicated engineering, operations and administrative staff employed by the company, who bring expertise in materials, thermal analysis, safety analysis, specialty welding and other fields. This team will be responsible for the design of power systems for next-generation space exploration, as well as for advanced hydrogen generators to meet the demand of hydrogen-fueled vehicles. The company enters 2004 with contracts in all major product areas, an enhanced product portfolio, and a strong focus on continuous improvement.

Mars Science Lander that may use the Multi Mission Radioisotope Thermoelectric Generator shown in the foreground.

Artist rendering courtesy of Rocketdyne Propulsion and Power business unit of Integrated Defense Systems unit of Boeing.

Advanced Power Systems

Teledyne Energy Systems' contract wins in 2003 open the door for its hardware to potentially fly on some of the most exciting space exploration missions of the next decade. Contemplated missions include a return to Mars as the power system for the Mars Science Lander, power systems for the deep space probes to the outer planets, and manned missions as the onboard power system for the Second Generation Reusable Launch Vehicle. NASA's overriding objective in each of these cases is to go farther, faster, using less fuel, with maximized safety and reliability.

Teledyne Energy Systems' first win of the year was for two contracts in the thermoelectric material development arena, which, if fully optioned, are worth approximately \$10 million in a multi-year effort to achieve a 2X improvement in the efficiency of thermoelectric materials. The first contract, Segmented Thermoelectrics, focuses on the use of different thermoelectric formulations staged or "segmented" together in a combined unit to optimize thermal energy utilization as temperature varies from the source of heat input to heat rejection. The second contract, "Superlattice Thermoelectric Structures," attempts to accomplish the same result by using specialized production techniques to align materials for optimum thermal energy utilization.

Teledyne Energy Systems, in partnership with the Rocketdyne Propulsion and Power business unit of Integrated Defense Systems of Boeing, was awarded a substantial contract by the U.S. Department of Energy and NASA to develop a "Multi-Mission Radioisotope Thermoelectric Generator (MMRTG)" capable of supporting planetary landing or deep space probe missions in one package. The contract is valued at \$57 million over 10 years if all development and production phases are optioned. Teledyne Energy

Systems began work in 2003 on a prototype unit design with a rated power of 110 watts. If selected for flight, the first two production units could be used to power the Mars Science Lander scheduled to launch in 2009.

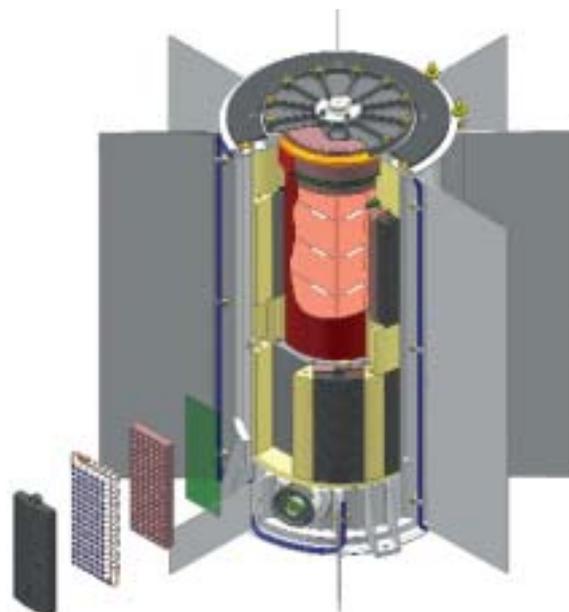
In addition, Teledyne Energy Systems was awarded a Phase II contract option to deliver a Proton Exchange Membrane (PEM) fuel cell power system prototype for use in the Second Generation Reusable Launch Vehicle. The option was exercised following the successful delivery in early 2003 of a PEM fuel cell power system breadboard rated at five kilowatts that exceeded all performance expectations. Teledyne Energy Systems is now working closely with NASA to provide a PEM fuel cell power system package in the 10 kilowatt range that is backward compatible for possible use in the current Space Shuttle fleet while incorporating advanced features that will suit it for next generation applications.

The balance of Teledyne Energy Systems' Advanced Power efforts in 2003

focused on delivering exceptional service and products to existing contracts, while advancing all of its technologies to meet the needs of tomorrow. The company has developed a number of design concepts that meet critical United States needs including advanced thermoelectric material concepts for programs such as the Jupiter Icy Moon Orbiter program, regenerative electrolysis/fuel cell system hybrids for use in powering high altitude balloons and unmanned aerial vehicles to increase on-station time, and hybrid fuel cell/thermoelectric concepts for communication applications.

Fuel Cell Test Stations

The 50th Medusa RD unit was sold in 2003 and the company received its first major contract that uses the Medusa LS test station. The Medusa line of fuel cell test systems provides high quality, simple to use automated test stations that support fuel cell and fuel cell stack testing up to 10 kilowatts.



Exploded view of the Multi Mission Radioisotope Thermoelectric Generator.

REVIEW 2003

Advanced Teledyne Perry NGX PEM Fuel Cell Stack developed for Use in the Second Generation Reusable Launch Vehicle Concept.

Second Generation Reusable Launch Vehicle Concept Design courtesy of the National Aeronautics and Space Administration.



In 2003, Teledyne Energy Systems introduced Fuel Cell Testing Services. Its first customer, NASA, has reserved 4 test stations for the analysis of life, durability and performance of key PEM fuel cell components. The first round of testing achieved more than 10,000 hours of continuous operation among the four test stations. A second round of testing has been started with a goal of 10,000 hours per station.

Teledyne Energy Systems expanded its fuel cell testing customer base in mid-2003 with the receipt of a contract to perform life testing of multi-kilowatt stacks for a major fuel cell developer. The tests use a Medusa LS test station and hydrogen gas produced by a Titan hydrogen generator. Performance under the initial contract led to the receipt of a multi-year testing services contract valued in excess of \$1 million. This contract will use two Medusa LS stations running 24 hours a day collecting performance and durability data.

PEM Fuel Cells

Teledyne Energy Systems continues to focus its PEM fuel cell efforts on technology innovations to meet immediate needs in the military and aerospace sectors. The common thread has been to enhance fuel cell power while reducing weight and volume. The culmination of the 2003 effort is the Teledyne Perry NGX fuel cell stack, which incorporates advanced flow and thermal management features that allow it to produce the same power as an NG2000 stack in approximately half the volume and weight. Although Teledyne Energy Systems will continue to offer its successful and proven NG2000 and NG3000 series stacks, the NGX stack will begin to supplant these older technologies initially in the aerospace sector where weight and volume are of premium value.

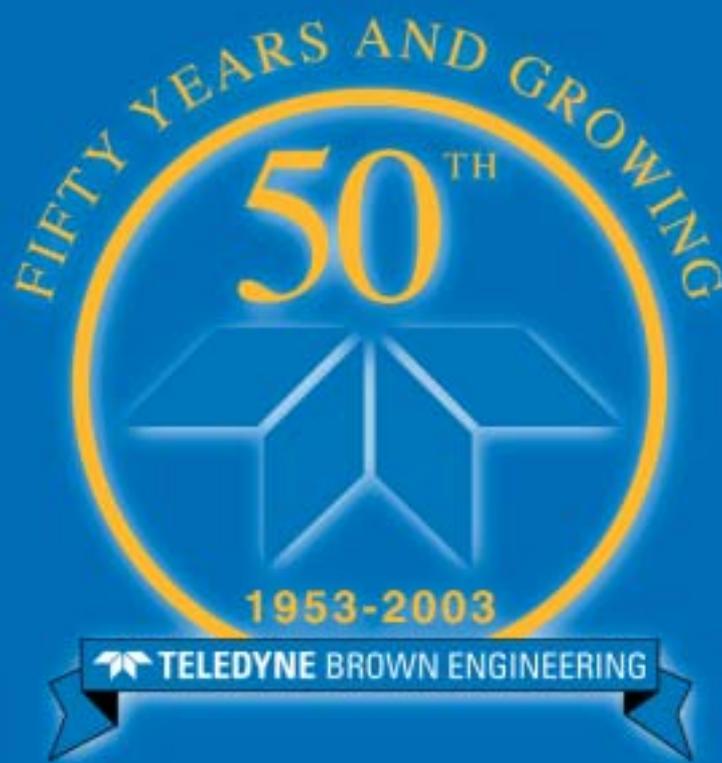
Teledyne Energy Systems has also continued its efforts to develop systems that operate with both gaseous and liquid hydrocarbon fuels. The company

completed its FTU-2 fuel processor/fuel cell prototype which is being used to analyze start up and transient response, control strategies and general performance. Results from these analyses will be used in the next stage of development aimed at enhancing life and the flexibility to operate on more complex hydrocarbon fuels such as diesel.

Hydrogen/Oxygen Generators

Teledyne Energy Systems Titan™ Hydrogen/Oxygen generator business provides a full line of systems that produce high purity hydrogen and oxygen gas for the power generation, semiconductor fabrication, fiber optic production, metals processing, and food processing industries. Although 2003 saw softness in the commodity production segments, such as semiconductor and fiber optic fabrication that fueled Titan generator product sales in the late 1990s, growth accelerated in the power generation segment as China, India and other developing regions met increased demand for electricity with new power plant construction. This market shift provided a stable platform for generator sales throughout the year.

Continued interest in hydrogen as a fuel has also provided growth opportunities. The company was awarded a U.S. Department of Energy grant to research technologies that would increase alkaline electrolysis efficiency and reduce production costs. The contract, which will begin in 2004, will look both at fundamental improvements to the underlying chemistry, as well as applying "Design for Manufacture" and "Lean Manufacturing" techniques to lower production costs. The company expects project results to provide new designs for the future, and contribute to its near term competitiveness goals.



With roots going back to 1953, Teledyne Brown Engineering reviews fifty years of technological accomplishments in support of a wide array of our country's most important aerospace, defense, environmental and homeland security programs.

TELEDYNE BROWN ENGINEERING

On the Cutting Edge of Technology for Over Half a Century



1953

1953 was a momentous year. In that year, U.S. Air Force test pilot Chuck Yeager set a then world speed record of 1,650 mph in the X-1 rocket plane, James Watson and Francis Crick announced the double-helix structure of DNA, Sir Edmund Hillary reached the summit of Mount Everest, and Wernher von Braun had already been working with the U.S. Army for eight years developing missile and rocket technology.

Josef Stalin died in 1953, the Soviet Union tested its first prototype hydrogen bomb, an armistice was signed to end the Korean war and the World Series was won by the New York Yankees over Brooklyn, their fifth consecutive win. The United States was already well into its "cold war" with the Soviet Union, and the "space race" was about to begin.

Against this background, a new company was formed in Huntsville, Alabama that has played an important role in this country's space, defense, environmental and national security programs ever since. It is known today as Teledyne Brown Engineering, Inc.



Huntsville had become the home of the Army's Redstone Arsenal in 1941, and in 1950, a German rocket development team, led by Wernher von Braun, transferred there from Fort Bliss and was assigned the task of developing a midrange missile for the U.S. Army. It became known as the **Redstone Rocket**.

In developing this rocket, von Braun's team needed additional engineering and manufacturing support and Teledyne Brown Engineering's predecessor company, Alabama Engineering and Tool Company, was formed to meet those needs. This company later merged with another and became known as **Brown Engineering**. In 1967, it was acquired by Teledyne, Inc. and became one of the most prominent members of that high technology corporation. It continues to play an important role today as part of Teledyne Technologies Incorporated.

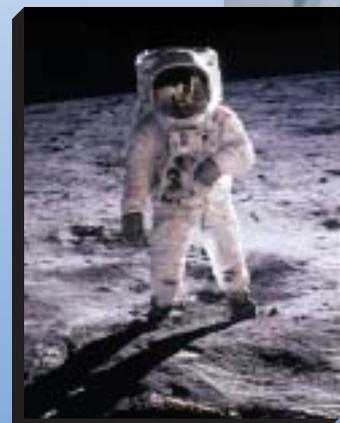
The 50 years that have led from that modest beginning to today are marked by some of the most significant milestones in our country's space exploration and defense efforts. In 1956, the Army Ballistic Missile Agency was formed and von Braun's team was given the mission of developing the country's first long-range missile, known as the Jupiter.



Then, on October 4, 1957, the nation was shocked when the Soviet Union successfully launched the world's first man-made earth-orbiting satellite, Sputnik. As this tiny satellite circled the earth, sending out its series of radio signal beeps, a crash program was initiated and a modified Jupiter rocket was able to launch this country's first satellite, **Explorer I**, just three months later on January 1, 1958. Brown Engineering played a significant role in the development of both the Jupiter rocket and its satellite payload.

In 1958, Congress created the National Aeronautics and Space Administration (NASA) with the specific mission of developing manned space flight, and Brown Engineering began a close association with that agency that continues today. In 1960, the Army's space activities were then transferred to NASA. The Marshall Space Flight Center was formed and, with 4000 personnel, became the largest and best known of the NASA centers.

In NASA's **Saturn-Apollo program**, which extended from 1961 to the first moon landing in 1969, Brown Engineering provided some 20,000,000 man-hours of support in a wide variety of efforts.





Since those early years, Brown Engineering has had a role in virtually every major Marshall Space Flight Center program, including the Skylab and Apollo-Soyuz programs of the 1970s, continuing into the Space Shuttle and International Space Station programs of today. Teledyne Brown Engineering became the payload integration contractor for Space Shuttle scientific missions, and was responsible for that mission on 24 highly successful flights during the 1980s and 90s.

Skylab was only a temporary space station, and in 1987 Boeing was selected to design and build Marshall Space Flight Center-managed modules for the new permanent version, the International Space Station. Teledyne Brown Engineering became a member of that team and still is today.

Based on its extensive experience during those years in developing crystal-growth furnaces, glove boxes and other scientific space experiment hardware, Teledyne Brown Engineering was selected by the Marshall Space Flight Center as the prime support contractor on the present microgravity research and development programs.

When NASA was created, the U.S. Army no longer participated in space projects, but continued rocket and missile development as head of the Army Ballistic Missile Agency and the Army Rocket and Guided Missile Agency. The Redstone Arsenal thus became the center for missile-related weapons development, as well as for emerging missile defense programs. Teledyne Brown Engineering has participated in and supported these activities ever since, becoming one of the Army's major **Missile Defense systems** engineering and technical assistance contractors.

In 1971, Teledyne Brown Engineering was awarded the Army's Systems Engineering and Technical Assistance Contract (SETAC). The company has remained on this contract continuously since its inception through many rebids. Their first major effort under SETAC was in support of the development of Safeguard, America's only functional Ballistic Missile Defense system that operated briefly in the 1970s.

During the 80s and 90s, Teledyne Brown Engineering was involved in essentially every Ballistic Missile Defense system effort. During the development of President Reagan's **Strategic Defense Initiative** (SDI), commonly called





“Star Wars,” the company was selected as one of 10 Centers of Excellence responsible for defining that system’s architecture.

To prevent conflicts of interest with other activities, SETAC is now handled by Teledyne Solutions, Inc., a wholly owned subsidiary of Teledyne Brown Engineering, Inc., created explicitly for this purpose.

Other Ballistic Missile Defense activities include support of the U.S. Army Space and Missile Defense Center and subcontracting assistance to Boeing.

Today, Teledyne Brown Engineering’s activities can be categorized in five major areas: Defense, Space, Environmental, Homeland Security, and Manufacturing. A significant portion of Brown’s business is still in programs for Department of Defense missile defense agencies and NASA’s [Marshall Space Flight Center](#).

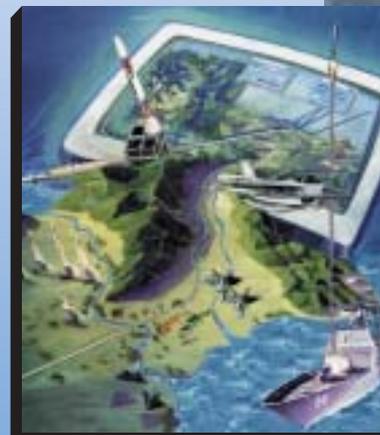
Defense

After 50 years, Teledyne Brown Engineering continues its original mission in support of U.S. Army ballistic missile defense programs with its strong and diverse engineering and scientific talent, providing state-of-the-art systems

engineering for the development and acquisition of complex weapons systems. The company is involved in a wide range of other defense systems as well, including space-based weapons; land, sea, and air combat systems; and equipment for individual warfighters.

One prime example is the company’s present role as a major subcontractor to Boeing on the highly important Ground-based Midcourse Defense program. These activities involve integration planning, design, evaluation, and management support for missile defense systems, including the development of high-fidelity threat signatures for use in target identification and countermeasures systems, as well as a variety of systems engineering, integration and testing services.

One of Teledyne Brown Engineering’s great strengths lies in its extensive experience and capability in developing world-class computer software systems for the modeling, simulation and analysis of complex situations. The company’s [Extended Air Defense Simulation](#) (EADSIM) product, for example, is the most pervasive and successful modeling and simulation product in use in the defense field, and has been the standard for air defense mission





planning for over a decade. It is used by almost 400 agencies in the U.S. and ten foreign countries for defense analysis, training and operational planning.

Other Teledyne Brown simulation-based products are used by the U.S. Army for testing, training and operations analysis, including force-on-force, mission planning, and battle scenarios. The company has also developed real-time distributed software systems for such applications as command and control systems development and interoperability and integrations assessment.

Space

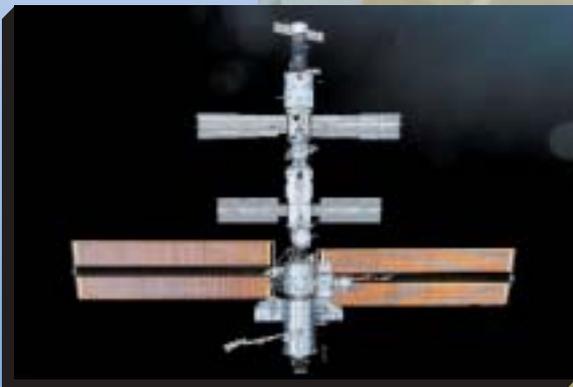
From its inception, Teledyne Brown Engineering has supported every key space program from the first U.S. satellite to its present-day role as a major subcontractor to Boeing on the development and operation of NASA's **International Space Station**. Support services range from concept development and design to systems integration and participation in the operation of mission control centers during live on-orbit missions. The company also designs, develops and fabricates space-qualified hardware, and

operates test facilities needed in developing and qualifying space hardware and systems for various programs.

With its extensive background as a payload integration contractor on 24 highly successful **Space Shuttle** scientific missions, and its performance in the development and production of hardware for the in-flight growth of crystals under microgravity conditions, Teledyne Brown Engineering was selected as prime support contractor on microgravity research and development programs by the Marshall Space Flight Center, and is currently fulfilling that role.

The company also produces integrated training systems using computer technology and interactive, multimedia techniques to prepare scientists, astronauts, and ground support personnel for the operation of complex space systems such as the International Space Station. These training system techniques have also been applied in a variety of commercial training applications by companies such as Mercedes Benz.

Teledyne Brown Engineering's space products and services have been successfully marketed to various international customers including the European, Russian, and Japanese space agencies.





Environmental

Modern technologies have brought with them a wide array of hazardous materials that can pose both short-term and long-term threats to the environment. Specialized techniques are needed for the handling, storage and disposal of such materials. The problems with nuclear materials are well known, but **chemical and biological materials**, as well as obsolete weapons, are also of great environmental concern.

Teledyne Brown Engineering's Environmental Systems group specializes in this field. This group received a three-year extension of its Certificate of Authorization in 2002 from the American Society of Mechanical Engineers, known as an N-stamp, which is required in performing work for the nuclear power industry. It has permitted Teledyne Brown Engineering to win major contracts, and qualifies it for future work on spent nuclear fuel and other nuclear industry projects.

An important current project is the manufacture of customer-designed containers for vitrified nuclear waste for the Department of Energy's Savannah River site near Aiken, South Carolina. The company also designs specialty hazardous materials handling and storage devices for government-regulated environments.

In support of these programs, Teledyne Brown Engineering operates a well-equipped, state-of-the-art laboratory in Knoxville, that offers complete high- and low-level radiological monitoring and analytical services. These services are used by the nuclear power industry for radiological environmental monitoring; for the signature detection of nuclear, chemical and biological devices; and for the analysis of debris produced in the disassembly of nuclear facilities. The Knoxville lab serves nearly every commercial nuclear facility in the United States, as well as the U.S. Air Force, the Department of Defense and the Department of Energy.

Weapons disposal and recovery solutions for the U.S. Army is another major area of environmental activity. Teledyne Brown Engineering is now carrying out a six-year contract for the design and fabrication of chemical processing systems to safely treat and dispose of chemical warfare materiel under the U.S. Army Non-Stockpile Chemical Demilitarization program.

Other Environmental services include threat reduction solutions involving the safety and security of nuclear, biological and chemical materials; cost-effective approaches to providing survivability of military personnel in nuclear,





biological and chemical environments; rapid response technologies for meeting emergency situations; and the manufacture of hardware and equipment needed to deal with these threats on a local, national or international basis. Teledyne Brown Engineering's extensive engineering and manufacturing capability provides the hardware and equipment needed to support these activities.

Homeland Security

Teledyne Brown Engineering's experience in space and defense projects has given it several capabilities that are now being applied in the field of Homeland Defense, in preparing for, responding to, mitigating and recovering from nuclear, biological and chemical threats.

The company's products range from threat definition and susceptibility analysis services, sensors, alarms and protection systems to emergency response vehicles and tools for dealing with hazardous materials and critical situations. One of its unique products is the **WaterSabre™** Fluid Jet Cutting System. This mobile, remotely operated machine can be quickly deployed at the scene of a hazardous threat. It uses an ultra-high-pressure water jet containing abrasive

particles, designed to cut through the metal structure of a vehicle or explosive device without generating heat or sparks. It also has alternative uses in helping free accident victims at crash sites. A related product is a Mobile Detonation Chamber system designed to permit the safe, on-site detonation of certain explosive devices.

Security of computer systems and networks is another vital field of Teledyne Brown Engineering's activity. This includes defensive software design and access control, intrusion detection, hacker profiling and safeguards, vulnerability assessments, and a variety of other security disciplines for computer and communications systems.

Teledyne Brown Engineering has also developed automated consequence management software that helps planners and emergency response managers to rapidly evaluate response alternatives in the event of terrorist attacks. The company is also a principal developer of advanced planning and operations control, under congressionally mandated FEMA/DHS-sponsored programs for disaster management and agency interoperability services.





Manufacturing

A key element in Teledyne Brown Engineering's support of many of the aerospace, defense and environmental programs described has been the company's capability in the area of close tolerance prototyping and low-rate **manufacturing** of needed hardware. The company operates a complete, modern machine shop with the latest automated CNC machining centers, as well as facilities for sheet metal forming, welding, and test and evaluation of complex mechanical systems. Teledyne Brown Engineering maintains a complete facility for electrical and electronic systems fabrication and a large clean room for the final assembly and testing of flight-qualified hardware.

Teledyne Brown Engineering has experience in engineering and building large structures such as the huge, highly accurate Element Rotation Stand used in the Space Station development, as well as smaller complex devices such as the **crystal growth furnaces** used in on-orbit microgravity scientific experiments aboard both the Shuttle and the International Space Station.

The company's assembly and integration capability is now being used in the fabrication of the Patriot Advanced

Capability-3 (PAC-3) Missile Round Trainer, and it is also used in fabricating large, stainless steel nuclear waste storage containers for the Savannah River nuclear facility, under a long-term contract.

With its great half-century record of achievement, and its large cadre of dedicated professional engineering, scientific and technical manufacturing personnel, Teledyne Brown Engineering looks forward to many more years of exceptional service to its customers in finding creative and cost-effective solutions to the problems and programs that will be forthcoming.



EXECUTIVE MANAGEMENT

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Aldo Pichelli*
*Senior Vice President and
Chief Operating Officer, Electronics
and Communications Segment*

James M. Link*
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Bryan L. Lewis
President, Teledyne Continental Motors, Inc.

Rhett C. Ross
President, Teledyne Energy Systems, Inc.

Robert W. Steenberge
Chief Technology Officer

Ivars R. Blukis
Chief Business Risk Assurance Officer

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* Section 16 Officer

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Kirkpatrick & Lockhart LLP*



Michael T. Smith ⁽²⁾⁽³⁾
*Retired Chairman and
Chief Executive Officer,
Hughes Electronics Corporation*

⁽¹⁾ Audit Committee

⁽²⁾ Nominating and Governance Committee

⁽³⁾ Personnel and Compensation Committee

** Charles H. Noski resigned as a director effective February 27, 2004, due to the demands of his position as Corporate Vice President and Chief Financial Officer of Northrop Grumman Corporation, a position he assumed in December 2003.

STOCKHOLDER INFORMATION

Corporate Offices

Teledyne Technologies Incorporated
12333 West Olympic Boulevard
Los Angeles, CA 90064-1021
Telephone: (310) 893-1600
Fax: (310) 893-1669
www.teledyne.com

Transfer Agent and Registrar

Mellon Investor Services LLC
P.O. Box 3315
South Hackensack, NJ 07606
(800) 356-2017

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, code 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 28, 2004, at 9:00 a.m., at Teledyne Technologies Incorporated, 12333 West Olympic Boulevard, Los Angeles, CA 90064-1021.

Independent Auditors

Ernst & Young LLP
Los Angeles, California

Current News and General Information

Information about Teledyne is available at www.teledyne.com.

FORWARD-LOOKING STATEMENTS CAUTIONARY NOTICE

This annual report contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, relating to earnings, growth opportunities, capital expenditures, pension matters and strategic plans. Actual results could differ materially from these forward-looking statements. Many factors, including changes in demand for products sold to the semiconductor, communications and commercial aviation markets, timely development of acceptable and competitive fuel cell products and systems, funding, continuation and award of government programs, changes in insurance costs, customers' acceptance of piston engine insurance-related price increases, continued liquidity of our customers (including commercial airline customers) and economic and political conditions, could change the anticipated results. In addition, stock 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 could realign government programs, and affect the composition, funding or timing of our programs. Reinstatement of flight restrictions would negatively impact the market for general aviation aircraft piston engines and components.

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.

While Teledyne Technologies' growth strategy includes possible acquisitions, the Company cannot provide any assurance as to when, if, or on what terms, any acquisitions will be made. Acquisitions, including the recent asset acquisitions of the Filtronic Solid State business and of Leeman Labs, Inc., involve various inherent risks, such as, among others, our ability to integrate acquired businesses and to achieve identified financial and operating synergies.

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 2003 Annual Report on Form 10-K. The Company assumes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or otherwise.

Credits:

Design: James Robie Design Associates

Writing: Robert McVicker

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