TeledyneReport

For the Year 1976

Technology: Then and Now

ON THE COVER: One of many early flag designs, the Bennington flag partially shown at the left, was flown at the battle of Bennington in 1777. The actual flag is preserved at the Historical Museum in Bennington, Vermont. Its stars were 7-pointed in contrast to the 5-pointed stars of our present 50-star flag detailed at the right.

This Teledyne Report reviews the development of technology in the United States, from the earliest days to the present, in some of the areas in which Teledyne is active.

TELEDYNE REPORT featuring subjects of particular interest from Teledyne activities, is issued on a quarterly basis. Previous topics include:

Life Insurance: This largest segment of the insurance industry not only provides financial security for millions of families and individuals, but is also one of the nation's major sources of investment capital.

The Refractory Twins: Two high melting point metals, tungsten and molybdenum, play versatile and vital roles in every modern industrialized society.

The Instrument Makers: Teledyne's oldest company goes back 131 years. From surveying the Old West, to moon mapping and machine tool encoders, its history is the history of the technology of measuring.

Industrial Engines: Compact portable power from gasoline and diesel piston engines has taken the drudgery out of manual labor. Now the goal is to reduce noise and emissions.

Job Corps: A decade of motivating and training a half million alienated and disadvantaged young people has produced some remarkable new teaching methods... and a lot of good citizens.

Friendly Explosives: Using explosives to save lives in aircraft emergencies may sound unlikely, but it's the safest, fastest, most reliable method ever developed.

Microelectronic Hybrids: From vacuum tube to transistor to integrated circuit, the history of electronics has been one of fitting more and more complex electronic circuitry into less and less space. A hybrid microcircuit is a sophisticated form of microelectronic packaging that goes a step beyond the individual large scale integrated circuit.

The Energy Options: Nuclear fuels and coal are both abundant enough to make a significant contribution to U.S. energy needs over the next several decades. Unlike many other energy sources, the technology to use them on a large scale exists today.

Workmen's Compensation Insurance: Most working people are already protected. The goal is coverage for every employed person.

Drilling for Offshore Oil: Almost half our national resources of oil and gas are believed to lie under offshore waters. The technology for getting them out is here—but it won't be easy.

The Search for Oil: With supplies dwindling and demand growing, sophisticated geophysical techniques are being brought to bear on the problem of locating new oil deposits.

High Speed Tool Steels: These precision, premium-priced alloys are vital to the production of virtually every commodity we use in modern life.

Energy Crisis in the Computer Room: As the quality of utility electrical power falls off and brownouts and blackouts become more common, the incidence of computer failures goes up. Solid-state Uninterruptible Power Systems can solve the problem.

Raydist: This ultraprecise electronic navigation system can pinpoint locations at sea with sensitivity of one and a half feet at ranges of up to 250 miles from base stations.

Welding: One of industry's most versatile production techniques, welding is used in the manufacture of virtually every type of fabricated metal product made today.

General Aviation Engines: Propeller driven aircraft powered by conventional piston engines are not only alive and well more than 30 years after the advent of the jet, they dominate air activity today.

Rubber: Rubber compounds are being called on to do new technological jobs in applications ranging from industrial tires to Teledyne's new automotive bumper system that will dissipate five-mile-per-hour impacts.

Loran: Loran was one of the first all-weather electronic navigation systems. Recent Teledyne innovations have lowered costs and greatly improved its range and accuracy.

Seismology: This relatively young science has expanded from the classic study of earthquakes to become an important tool in oil and mineral exploration, detection of underground nuclear explosions and earthquake hazard reduction.

Casting: The simple process a small boy uses when he casts a tin soldier is the basis of a high technology industry that produces items ranging from high temperature turbine blades to 90-ton steel mill rolls.

AIDS: Aircraft Integrated Data Systems keep a running record of the vital functions of the new jumbo jets and provide airlines with an important tool for lowering costs associated with maintenance, fuel management and crew proficiency testing.

Thermoelectrics: Generators that convert heat directly into electricity are providing a practical new power source for applications ranging from space exploration to remote weather stations.

Thin Metals: Less becomes more when space-age metals are rolled out into thin strip and foil. These new materials, already being used in thousands of products, are making new metal-working techniques possible.

The Reproduction of Music. Men began experimenting with methods of recording sound over 150 years ago, but it remained for electronics and some very recent developments to allow music to be reproduced with concert-hall realism.

The Crowded Spectrum: The lower portion of the radio spectrum is already overcrowded with hundreds of wireless services. Microwave devices such as the traveling wave tube are opening higher frequencies for practical use.

Science and Cinematography: Modern techniques of slow motion cinematography let scientists and engineers analyze actions and events that happen too fast for the eye to follow.

Superalloys: Materials that retain high strength at temperatures approaching 2000° make the jet age possible.

Jets of Water for Dental Health: Studies show that high-pressure pulsed jets of water are a valuable aid in the care of teeth and gums.

The Last Eight Miles: The controlled descent to the surface of the moon was accomplished through use of a century-old principle called the Doppler effect.

Illustrations courtesy of the following organizations:
Page 2, Washington letter, Mount Vernon Ladies Association of the Union.
Page 3, Liberty Song, Massachusetts Historical Society.
Page 3, Head of cello, photo no. CN182A, Smithsonian Institution.
Page 4, Whale engraving, Culver Pictures.
Page 6, Montgolfier engraving, National Air & Space Museum, Smithsonian Institution.
Page 6, Remotely-piloted aircraft, U.S. Air Force Photo.
Page 7, Blacksmith engraving, Bettman Archives.
Page 8, Williams advertisement, Essex Institute.
Page 8, Quadrant, The Cabrillo Marine Museum.
Page 9, Newcomen engine, Collections of Greenfield Village and the Henry Ford Museum, Dearborn, Michigan.
Page 11, Engraving, Diderot Pictorial Encyclopedia, Dover Publications.
Page 13, Lathe, photo no. P-63376, Smithsonian Institution.

1776 was the benchmark year of a new direction in the social and political thought and organization of a nation. More than just a revolt against an oppressive absentee government, the American rebellion was the seizing of a second chance to start afresh in a new world with new ideas and a new system in which the people were sovereign. "The American," Tom Paine said, "is a new Adam in a New Paradise."

Most of that Paradise, however, was a near wilderness that required more than just a new social and political system to make it a habitable place for its people. In 1776, without knowing it, America stood on the brink of becoming involved in another revolution that would ultimately have as great an impact on the life of the world as its political revolution did. That second revolution was one of science and technology.

It had started earlier in Europe and other areas and went on slowly for a long time until like a long-smouldering fire it burst into full blaze throughout the world, not many decades after the United States was founded.

Technology is nothing more than the sum total of all the arts, crafts, skills and knowledge that a society uses to provide for its needs and wants. In this sense, technology did exist in early America, though it hardly seems recognizable as such by present standards.

In 1776, the "Stage Wagon" that made three trips a week between Philadelphia and New York took almost two days to make the bone-shattering hundred mile journey, and that was considered excellent time compared to travel in less developed parts of the country.

Before two hundred years had passed, Americans had made repeated half-million-mile round trips to the moon, had driven a powered vehicle across its barren surface, had planted their flag there, floated in airless space, and spoken words that were heard across hundreds of thousands of miles of empty void.

When the tether was too short, or the cost too great to make other much longer journeys themselves, they built and sent ingenious automatons that could land on other planets, perform scientific experiments, collect data, and send back pictures and information across millions of miles of space.

How did America get from where it was to where it is? It would be impossible to trace, step by step, the development of the thousands of parallel and intersecting threads of scientific understanding and practical technology that eventually were woven together to make possible man's accomplishments in every field of endeavor from agriculture to space exploration. Needless to say, they came from every age and every corner of the globe, and each in its own time. The history of technology is full of ideas that came before their time and had to wait to be re-invented when other areas of knowledge made their realization possible. Nor is the revolution, or evolution, whichever you prefer, over yet, and it may well never be.

This closing issue of Teledyne Report for the Bicentennial year looks back at various technologies as they were two hundred years ago, and compares them with the technologies of today and Teledyne's involvement in them.

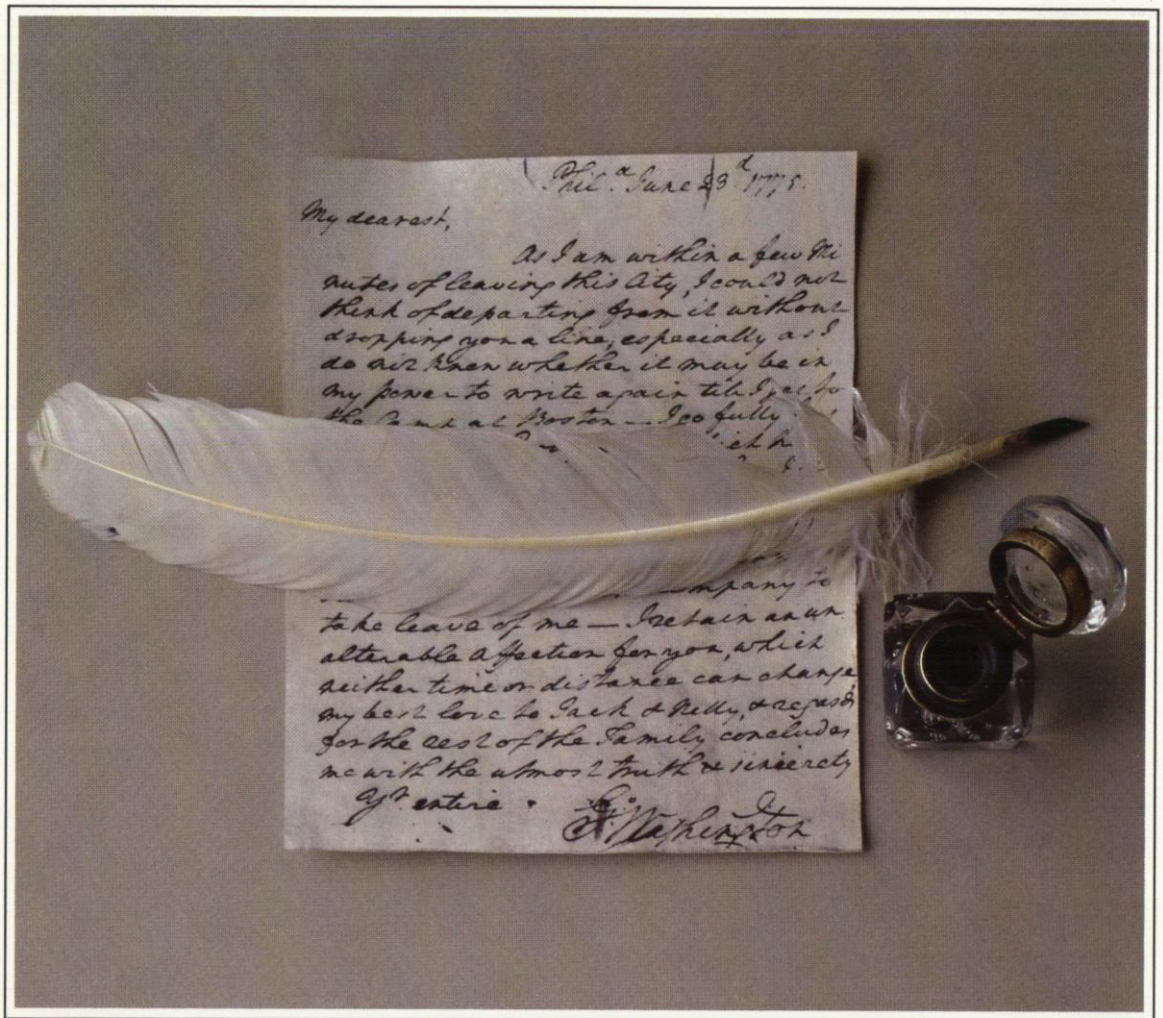
Communications

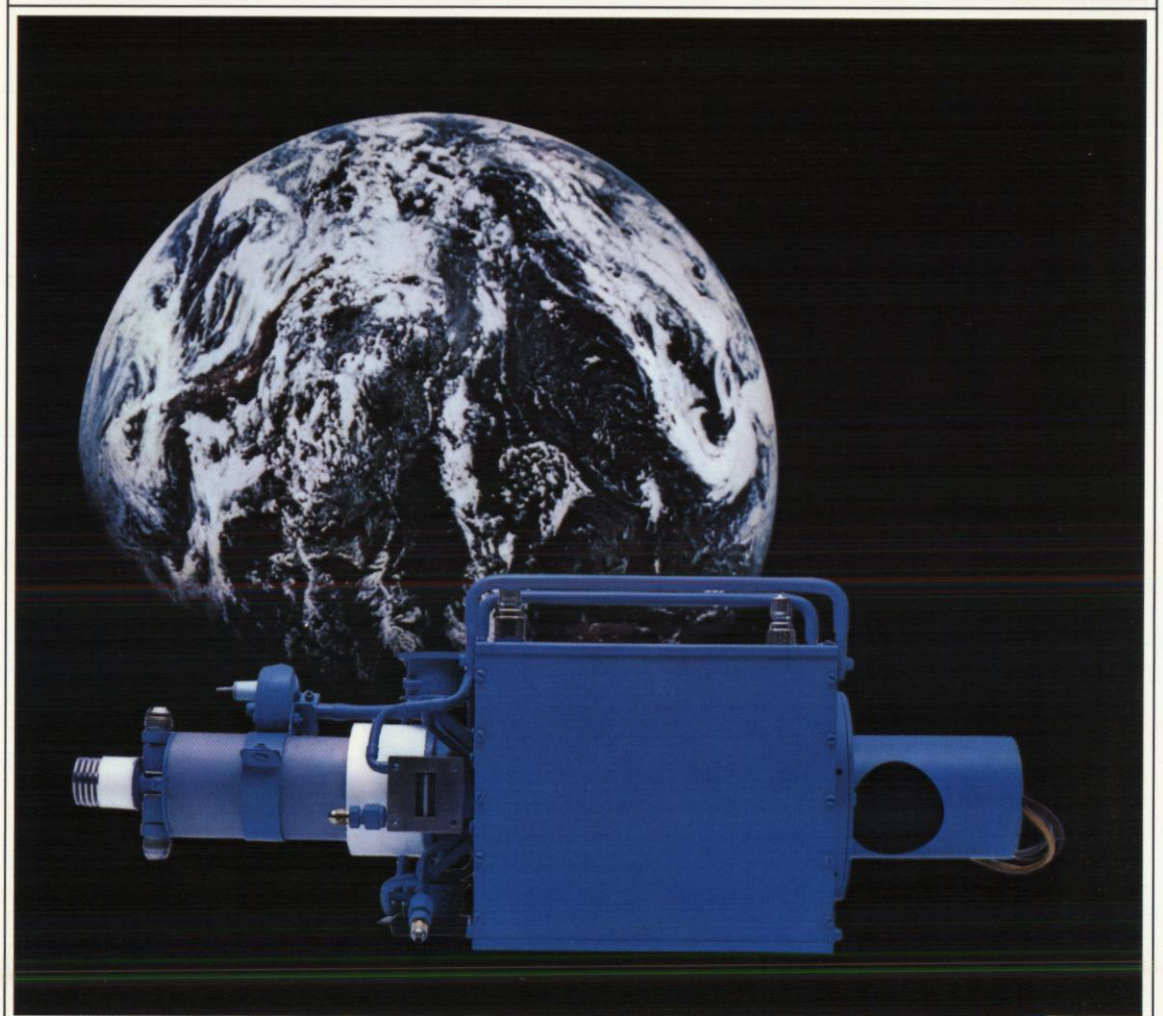
Many attempts were made throughout the ages to communicate information across long distances. Marathon runners, signal fires, smoke signals and drums notwithstanding, in America at the time of the revolution the prime method was the written message, delivered usually by horse rider or ship. A timely example is the letter, reproduced here, from George Washington to his wife Martha, written in June of 1775 on the eve of his departure from Philadelphia to take command of the Continental Army at Boston.

Before the century had ended, however, a mechanical semaphore system had been developed in France that relayed messages by coded signals from station to station across a distance of 144 miles from Paris to Lille.

The next century brought the electric telegraph and the telephone, and the first tentative chirps of wireless transmission that first became radio and later television.

Today, thousands of individual telephone conversations are sent simultaneously across the world by a single microwave satellite communications link. Teledyne makes traveling wave tubes, special microwave devices that operate at extremely high radio frequencies, which transmit these simultaneous messages from ground stations to the relaying satellites. These satellites also relay a dozen simultaneous television channels or the encoded data used by computers. From letter by horseback rider, man has achieved the ability to see events halfway around the world, or across the void of space, as they occur.





Top: Letter from George Washington to his wife, 1775.
Bottom: Teledyne traveling wave tube for satellite communications.

Music in the Home

For all practical purposes, music in early revolutionary days was homemade. There were public performances by amateurs and professionals in the larger population centers, but those were not available to most people. Of the slightly more than two million colonists living in America in 1770, some 90% led rural lives.

Among the popular home instruments of the time were harpsicords, flutes, the English cittern (a type of guitar favored by amateurs), violins and other stringed instruments. The piano was relatively new in Europe and one of the first imported to America was ordered in 1771 by Thomas Jefferson.

There was growing commerce in sheet music, music lessons and simple instruments, and at least one soul quenched his thirst for music by building his own "folk cello" the carved head of which is shown. Music also fanned the flames of the rebellion. "The Liberty Song" whose lyrics were written by John Dickinson in 1768 was the most famous of these, and the prototype for many that followed.

Today, music is omnipresent, available at the most remote localities at any time of the day or night through radio or recordings.

Teledyne has long been involved in one of the key developments that permit concert-hall realism in home music reproduction—the development of the famous AR series of high fidelity speakers that introduced the acoustic suspension concept of speaker construction. Teledyne Acoustic Research now produces nine models of speakers to meet a great range of home and professional music reproduction needs.

Top: Head of folk cello made by George Jewett, 1795, on copy of Liberty Song from Boston Almanac, 1769.
Bottom: Three of Teledyne's AR acoustic suspension speakers.

Oil

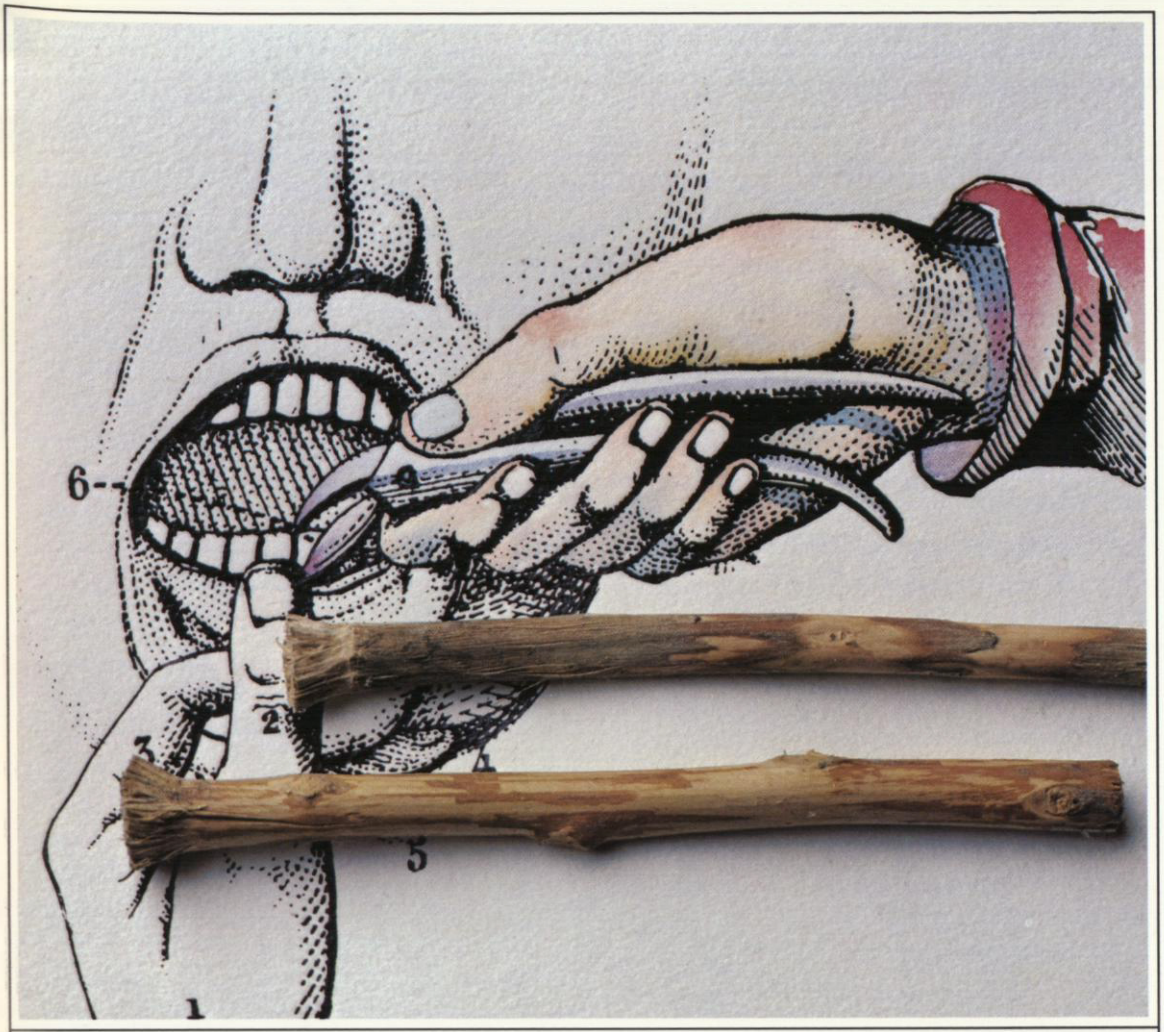
Oil, 200 years ago, meant whale oil or fish oil and it was a precious commodity primarily for lighting or lubrication, but it was not the major energy source that the word oil implies today. The New England whaling industry was small at that time, but the British and Dutch operated large fleets of sailing ships and small boats to produce whale oil.

Rock oil, or petroleum, was known from ancient times through naturally occurring seeps, but it was little more than a curiosity for the first 80 years of U.S. history.

E. L. Drake changed that in 1859 when he drilled the first successful oil well in Titusville, Pennsylvania. Since then, roughly 100 billion barrels of crude petroleum have been pumped from the earth in the United States, and almost half of the energy used in this country now comes from oil.

Today the search for oil again centers on the sea, but harpoon guns and long boats have given way to sophisticated technology for finding and extracting petroleum from beneath the ocean floor. Teledyne provides seismic sounding methods and computer programs to locate likely oil-bearing strata both on land and under the sea bottom, and builds offshore oil towers and performs drilling and workover services for extracting oil. Other Teledyne companies provide sophisticated gas-lift equipment and computer analysis services to improve yields from existing wells. Teledyne computer terminals are also used to control and optimize the flow of petroleum through nationwide pipeline networks.

Top: Early whale-oil lamp.
Bottom: Left, Teledyne survey boat making seismic profile of ocean sub-bottom. Right, Teledyne drilling rig in Gulf of Mexico.



Dentistry

Visiting a dentist in revolutionary days took considerable courage—and usually the impetus of an unbearable toothache. Anesthesia was unknown, and the universal remedy, extracting the tooth, was a brutal procedure involving some terrifying instruments that included forceps, a bird-beak shaped tool called a pelican, and one that had a handle much like a present-day corkscrew that was known as a tooth key.

Human or animal teeth were sometimes implanted in the gums and wired in place, and early dentures were also made with teeth carved in ivory, walrus tusk and bone.

Toothbrushes were unknown in the America of the 1770's, though they are reputed to have been invented by the Chinese in the 15th century. Chew sticks, made from tender shoots of the peach tree and other plants took their place. The end of the stick was chewed to separate the fibers and then rubbed on the teeth to clean them.

Today, Teledyne is involved in the manufacture of instruments and materials such as cements and impression compounds for the professional dentist. Teledyne's water-cooled turbine hand-pieces that can operate at speeds of up to 500,000 revolutions a minute, combined with diamond cutting burs, make tooth-filling a fast, efficient operation, with much less discomfort to the patient.

Teledyne has also revolutionized home dental hygiene with the Water Pik® Oral Hygiene appliance, that uses a pulsating jet of water for more efficient cleaning of the teeth and gums when used in conjunction with regular brushing.

Top: Fiber sticks for cleaning teeth, and early dental engraving. **Bottom:** Teledyne Water Pik Oral Hygiene Center, with other dental products. From left: Dental cements, impression compounds, turbine handpiece, diamond burs, and an articulator used in making dentures.

Flying Machines

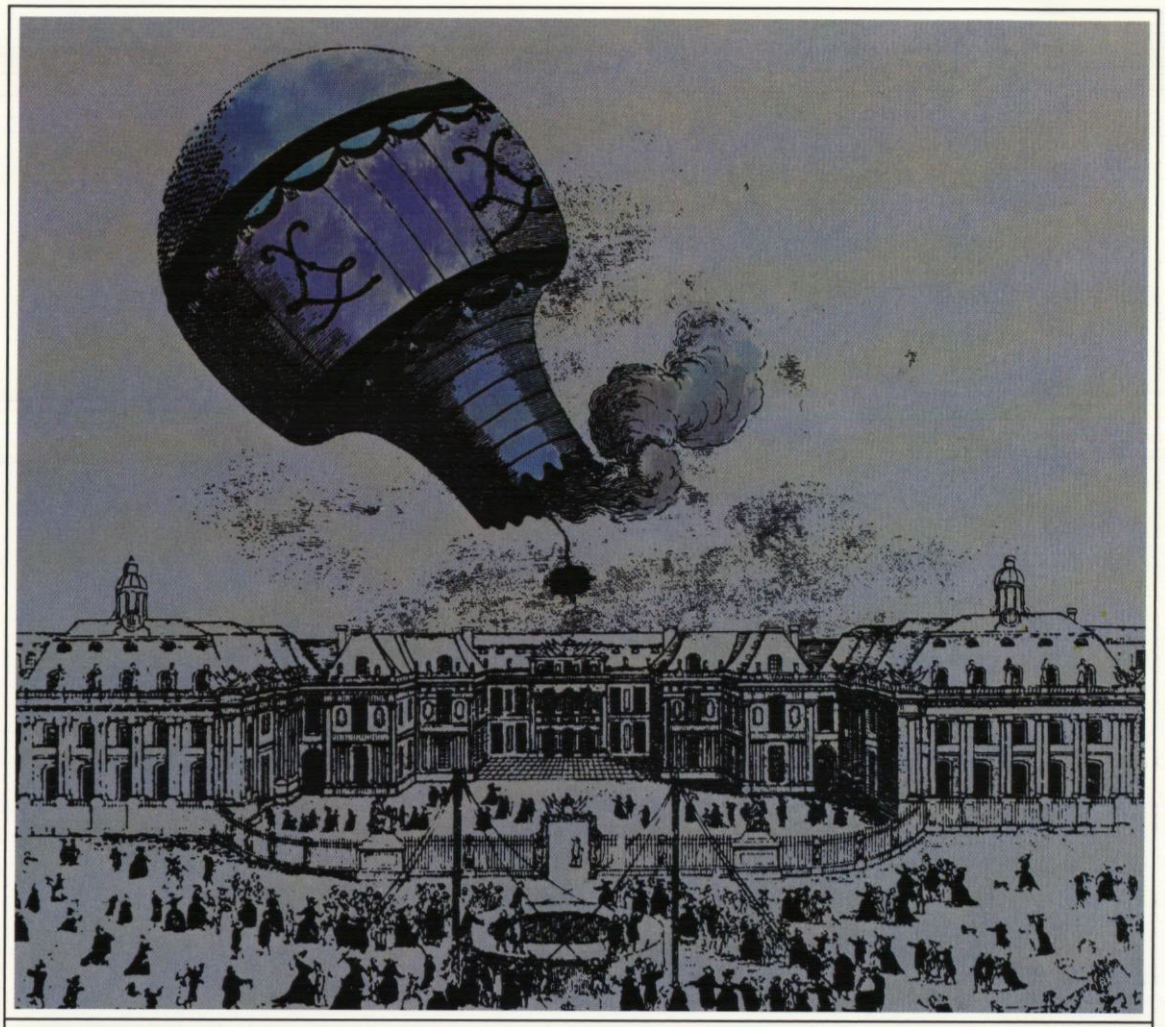
Revolutionary day Americans had both feet planted firmly in the plowed fields of an agricultural society, but some, at least, must have cast an envious eye on birds in the sky and dreamed of flying.

No man had flown at that time, but it was not long in coming. A Brazilian clergyman, Bartolomeu de Gusmao is credited with having successfully demonstrated a model hot-air balloon in 1709. In 1783, the year in which peace terms of the revolution were finalized, the Montgolfier brothers of France launched a large unmanned hot-air balloon, then one that carried a basket of animals aloft, and, finally, one that was used to make the first manned ascension.

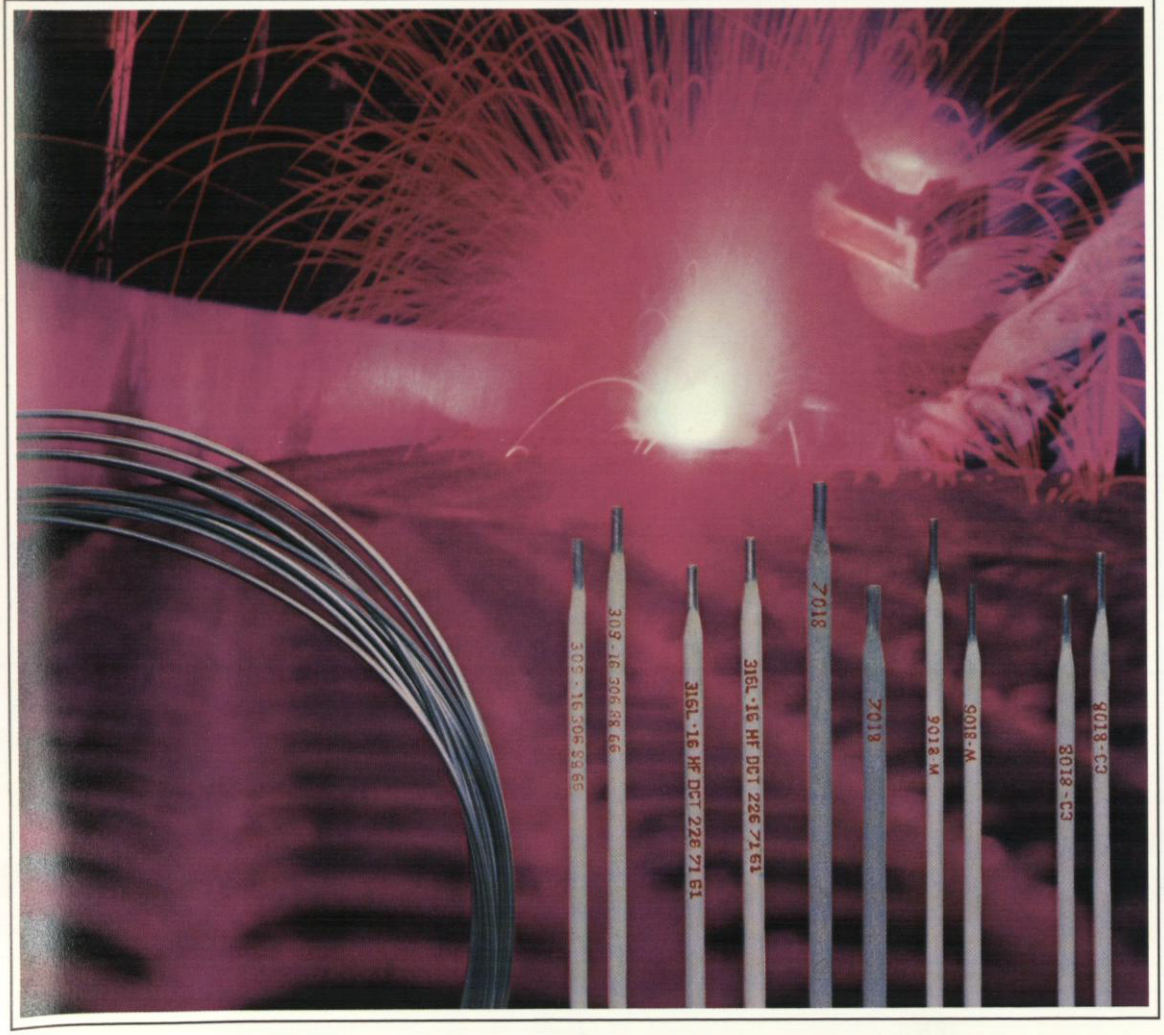
Heavier-than-air flying machines were much longer in coming, but when they arrived they soon overwhelmed the lighter-than-air approach.

Today, flights at supersonic speeds are commonplace, and space travel has extended the range of flight beyond our own planet.

While early man was anxious to get himself into the air, today some of the most sophisticated developments are directed toward true flying machines that can be flown without men aboard, in order to remove them from hazard in military reconnaissance, for example, or to permit higher aircraft performance than man's biological limitations permit. Teledyne Ryan Aeronautical is at the forefront of the development of unmanned flying machines with sophisticated aerial capabilities. One of the more than twenty-five types of such aircraft built by Teledyne Ryan is the AQM-34V, shown, for use by the U.S. Air Force in electronic countermeasure missions.



Top: Ascension of Montgolfier balloon with animals, 1783.
Bottom: Teledyne Ryan AQM-34V remotely piloted aircraft.



Welding

Every village worthy of its name in early America had a blacksmith. He was the town's universal handyman. He made the metal tools and implements of every kind needed and used by farmers, carpenters, and miners, as well as items such as hinges, latches and nails and even utensils for the home.

One of the techniques he used for joining metals was fire welding. The technique involved heating the parts to a white heat at the areas to be joined, placing them together and hammering them heavily from all sides. The work pieces were often re-heated and hammered many times to join them securely. This seemingly primitive method produced sound metallurgical bonds that were strong and reliable.

Today, welding has become one of the most versatile and widely used methods of fabricating metals, and a whole technology has grown up around it. Modern welding can be done by high temperature gas flame, by electric arc, by electric resistance, by mechanical friction and even by electron beam, laser beam, or ultrasonic energy.

Teledyne is very active in the production of materials and equipment for high-reliability precision welding. Among these products are welding electrodes, and both solid and tubular welding wire. These are available in custom alloys to match virtually every welding requirement from welding space age alloys, to hard surfacing machine parts subjected to heavy abrasive wear. Teledyne also makes automatic and manual resistance welding machines, welding power supplies, non-consumable tungsten electrodes, and welding positioners and manipulators.

Top: Early blacksmiths.
Bottom: Welder fabricating structure, with Teledyne welding wire and electrodes in foreground.

Navigation

Navigation is an art that goes back some 8000 years to the time when the first-known navigators are believed to have set out across open seas. In addition to the magnetic compass for determining direction, a number of mechanical and optical measuring devices were available in revolutionary days for measuring the angle of the north star above the horizon, to establish latitude. These instruments included the backstaff and the more advanced octants, sextants and quadrants.

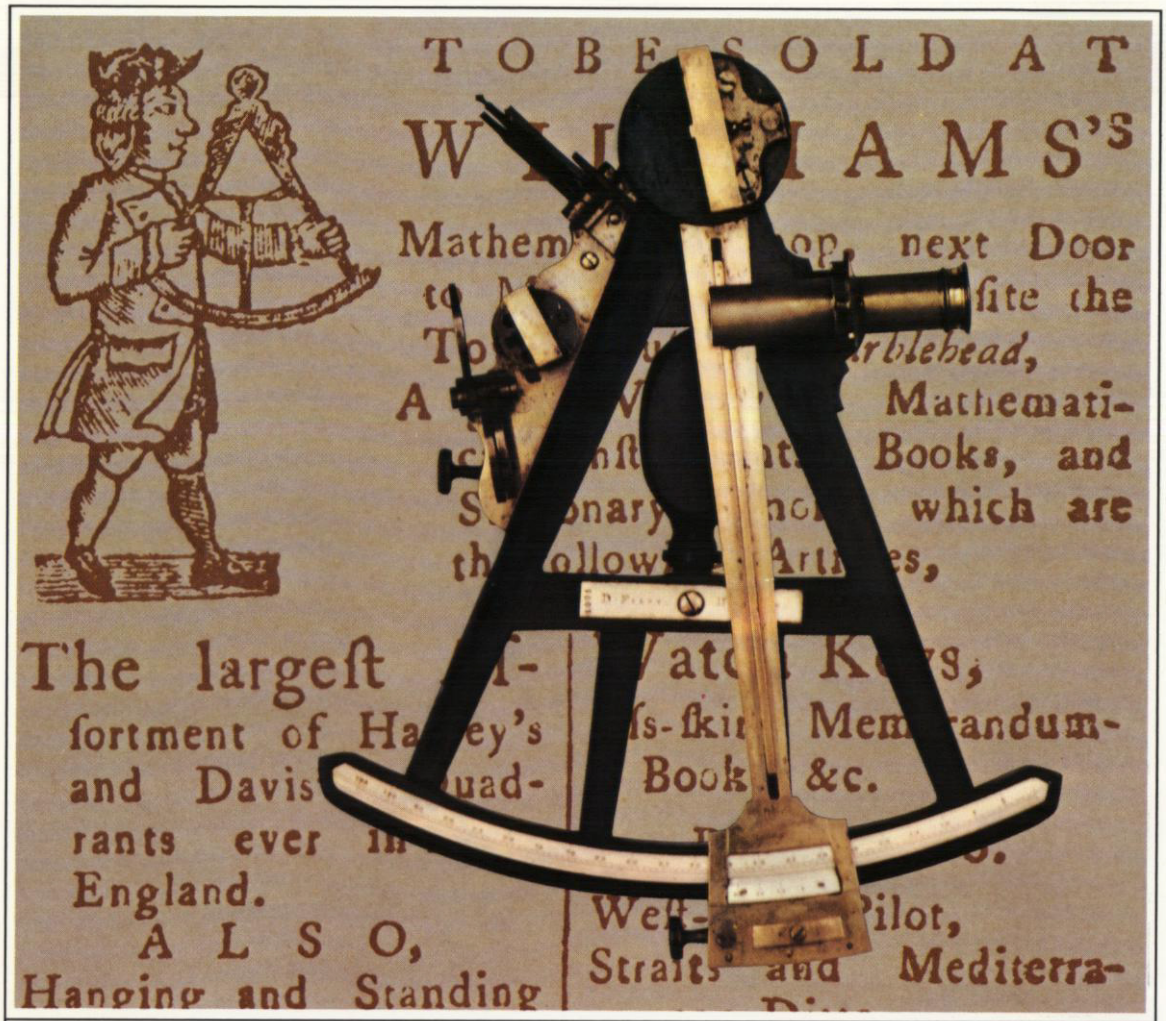
The chronometer, just being developed at the time of the revolution, was not yet accurate or widely used. It did, however, give the navigator some idea of his east-west position or longitude by making celestial observations and noting the exact time.

The navigator of those days, nevertheless, who depended on celestial observations, was literally and figuratively in the dark when the skies were overcast. True all-weather navigation was not achieved until electronic navigation aids were developed.

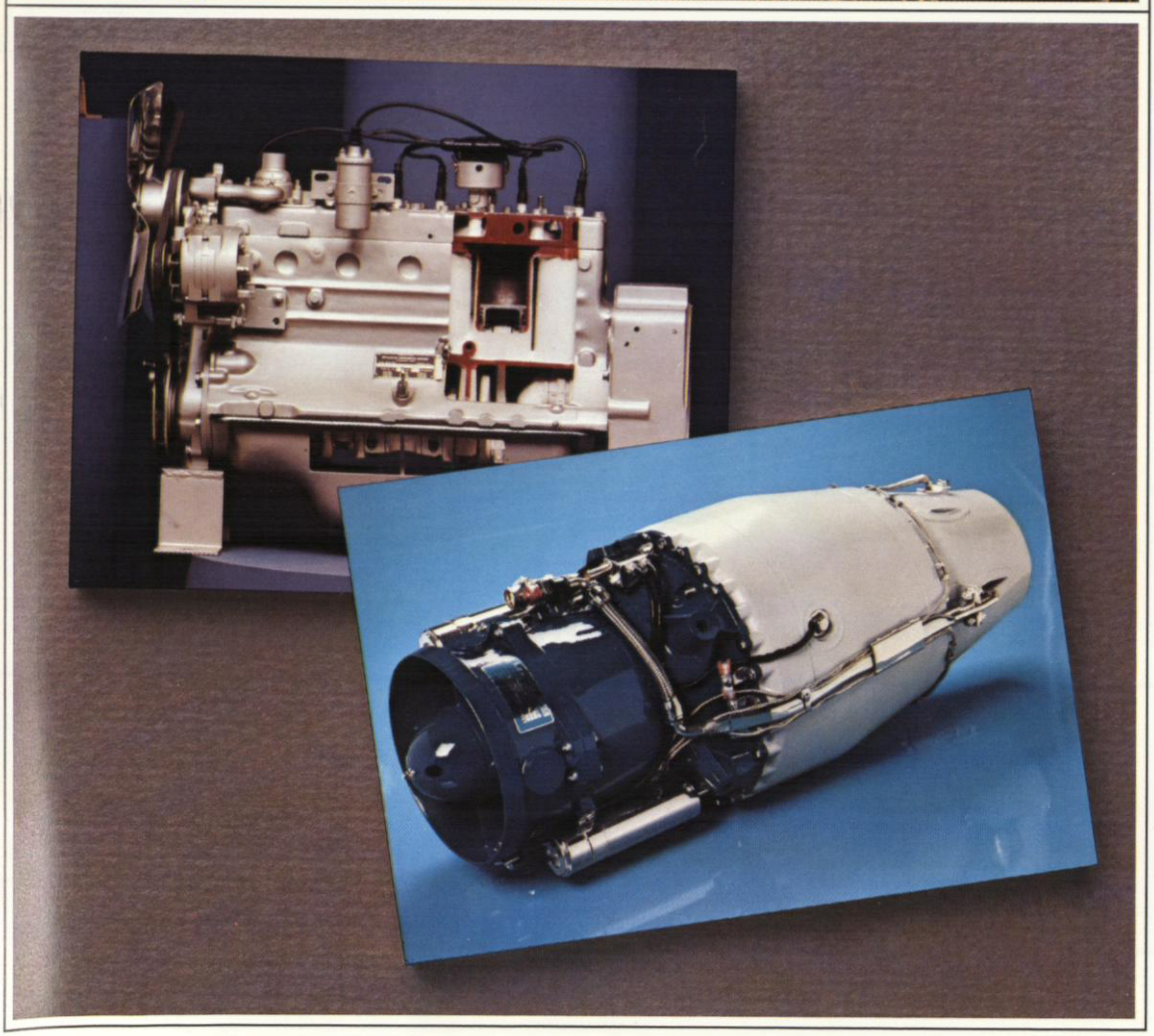
Among these are a number of advanced Teledyne Loran-C systems including Direct Ranging Loran-C that can give true position accuracies as good as 180 feet at ranges of 1000 miles from base stations.

Teledyne also produces receivers for the Omega system which permit ships to locate their position anywhere in the world to within one or two miles under most conditions.

Raydist is a proprietary Teledyne system used for ultra-precise radio positioning of vessels in near coastal areas. It permits repeatable position location to within ten feet at ranges up to 250 miles from base stations.



Top: Earliest-known illustrated advertisement for American maker of mathematical instruments, Salem Gazette, 1774, with early quadrant.
Bottom: Three Teledyne electronic navigational aids. From left: Raydist Navigator, Omega Navigator, Loran-C Marine Microlocator.



Engines

The idea of using the energy of heat to generate steam and then harnessing the steam to do useful work predated the American Revolution by many years. Thomas Newcomen had developed a practical engine in 1712 that used a steam cylinder and atmospheric pressure to run mine pumps, but there was only one in America at the time of the rebellion. James Watt had improved Newcomen's design by the 1770's, but none of his newer engines had reached the colonies at that time.

Steam engines eventually went on to power boats, trains, agricultural machinery and to run factories and mills of every description.

Today, surprisingly enough, steam is still the energy conversion medium used in modern nuclear power plants. It is generated by the heat of nuclear fission and runs modern steam turbines that turn the electrical generators.

Internal combustion engines, both gasoline and diesel, however, now outnumber all other types of engines, by far. In 1974 alone, some 14 million gasoline engines were produced, for purposes other than automotive, marine or air transportation. These engines represent well over 100 million horsepower of work capacity.

Teledyne produces a great variety of gasoline and diesel engines, both air and liquid cooled, up to 100 horsepower, for industrial use, and diesel engines in the 750 to 1500 horsepower range for heavy vehicle propulsion. Teledyne is also one of the top producers of piston engines for general aviation aircraft and makes a variety of small gas turbine engines for military aircraft and missile applications.

Top: First Newcomen atmospheric steam engine used in U.S.
Bottom: Left, Teledyne water-cooled industrial engine with cutaways showing internal structure. Right, Advanced, lightweight Teledyne turbojet engine used in the Harpoon missile.

Computing

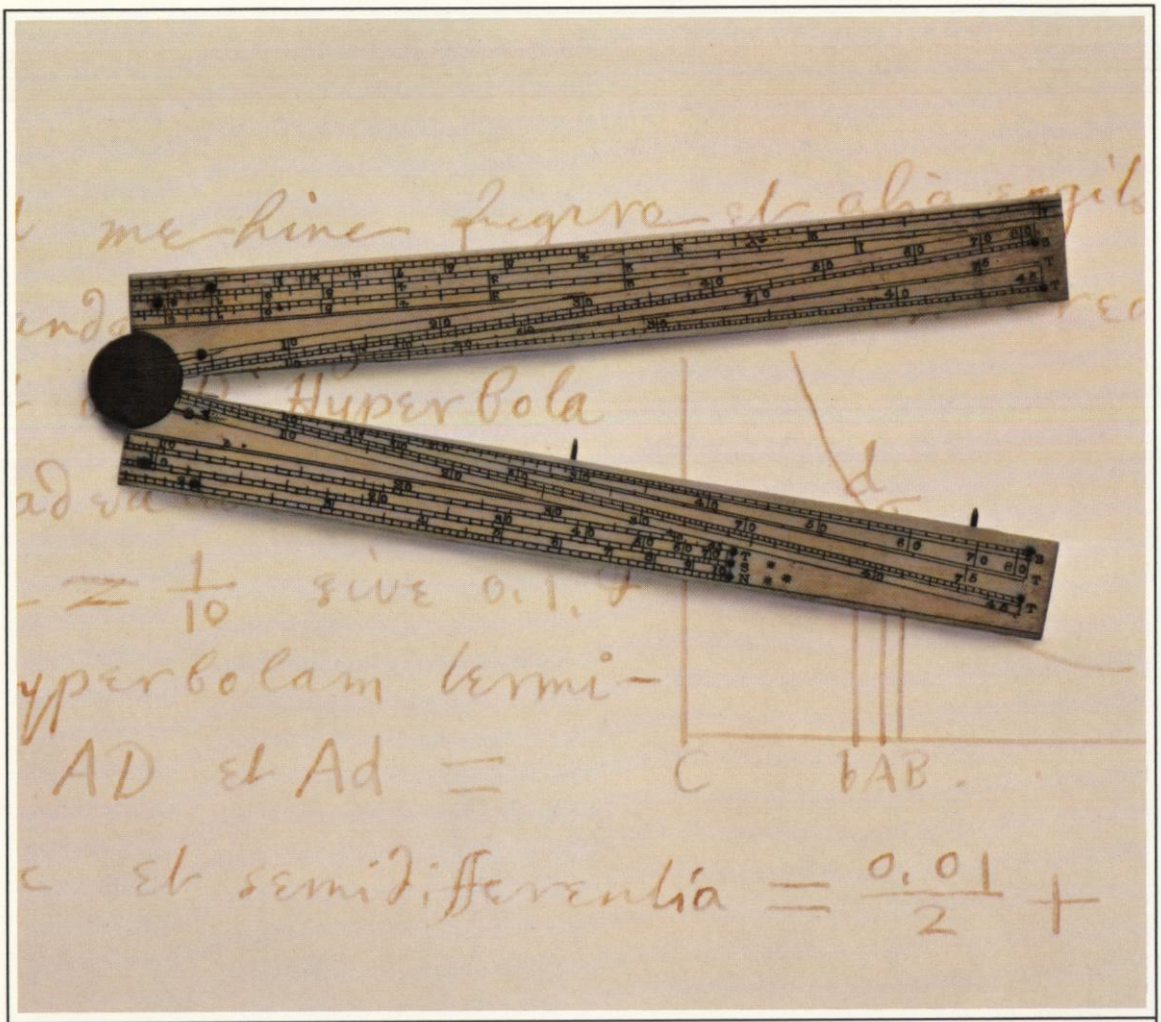
The average citizen in the 1770's had little need for complex mathematics. Long-hand arithmetic with chalk and slate was sufficient for calculating common measurements and keeping accounts. Surveyors and ship's navigators, however, faced more complex problems involving trigonometry and there was a great need for tables and instruments to simplify their calculations.

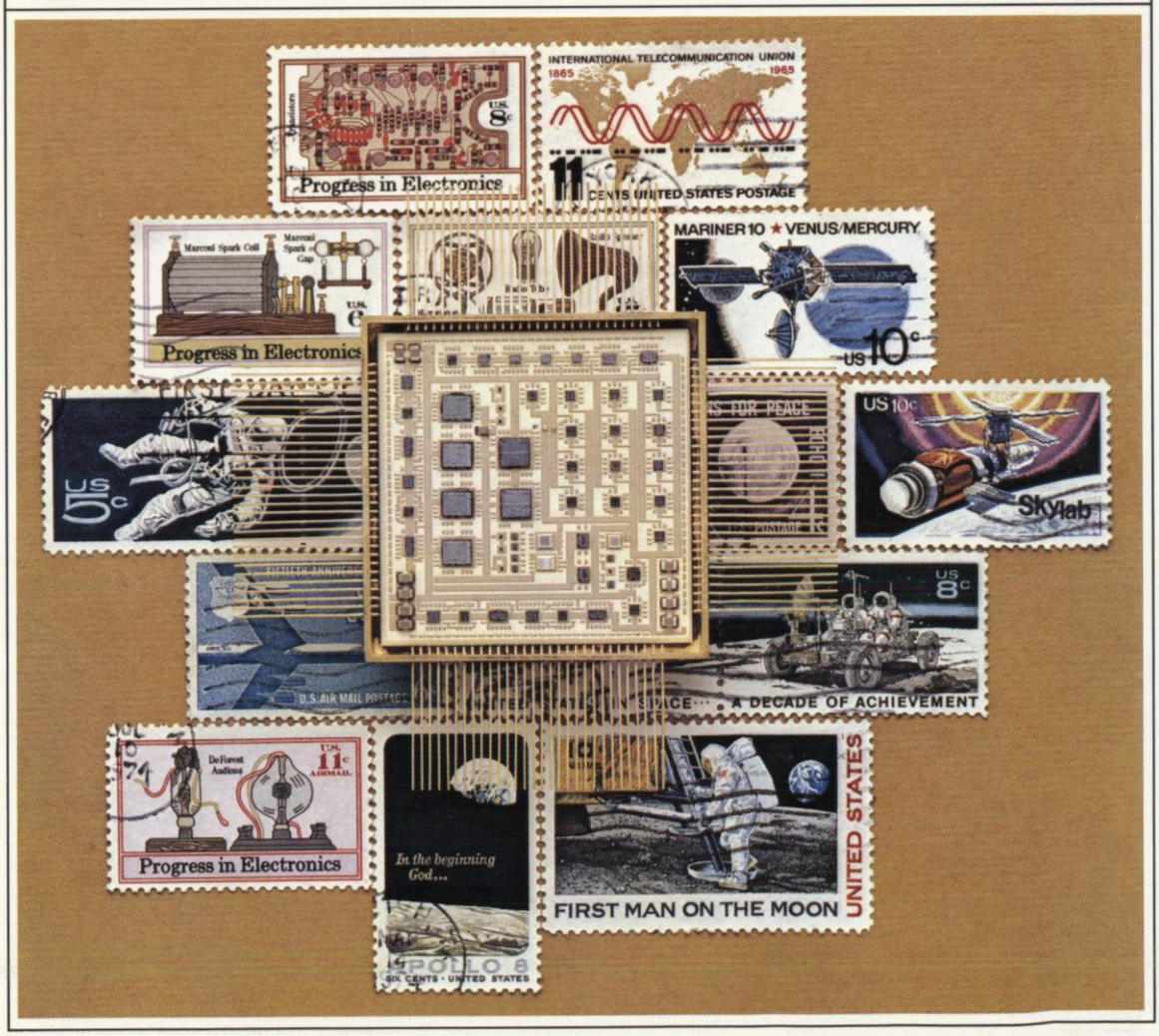
Logarithms had been invented in 1614 by Napier and made possible the slide rule, which was available in the latter part of the 18th century. Another instrument, the calculating sector, was used for solving various problems in navigation.

The mechanical calculating devices of Napier, Pascal, Babbage and others never really achieved the goal of accurate high speed calculation as we know it today. That had to await the invention of electronics and the world's first large-scale all-electronic computer, the ENIAC. It had 18,000 vacuum tubes, used 150,000 watts of electrical power and weighed about 30 tons.

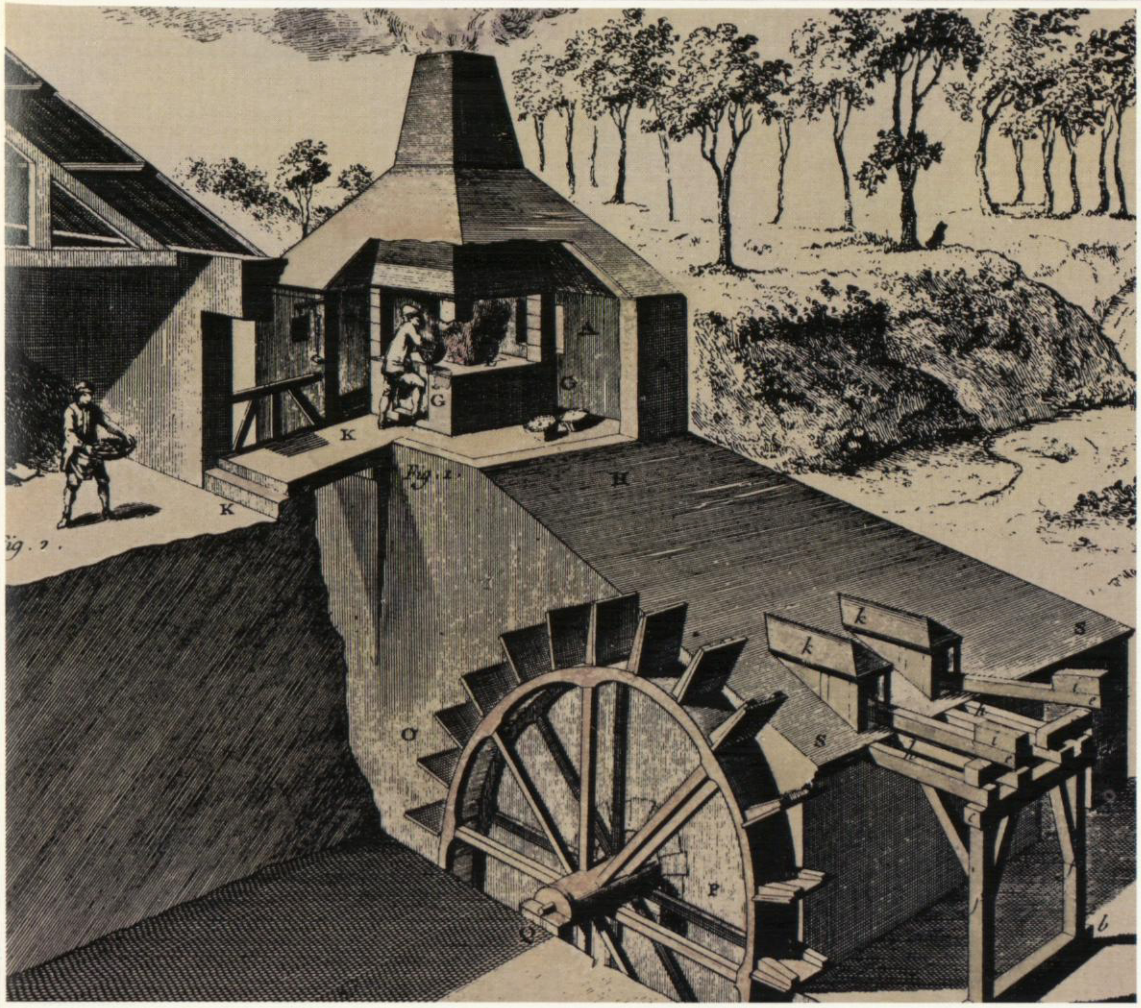
Even the electronic computer, however, was not practical until the invention of semiconductors. The quantum leap that this represented is illustrated by Teledyne's TDY-52 microelectronic hybrid computer, shown, complete on a ceramic wafer the size of a soda cracker. It has roughly fifty times the computing power of the first ENIAC and operates on about five watts of electrical power.

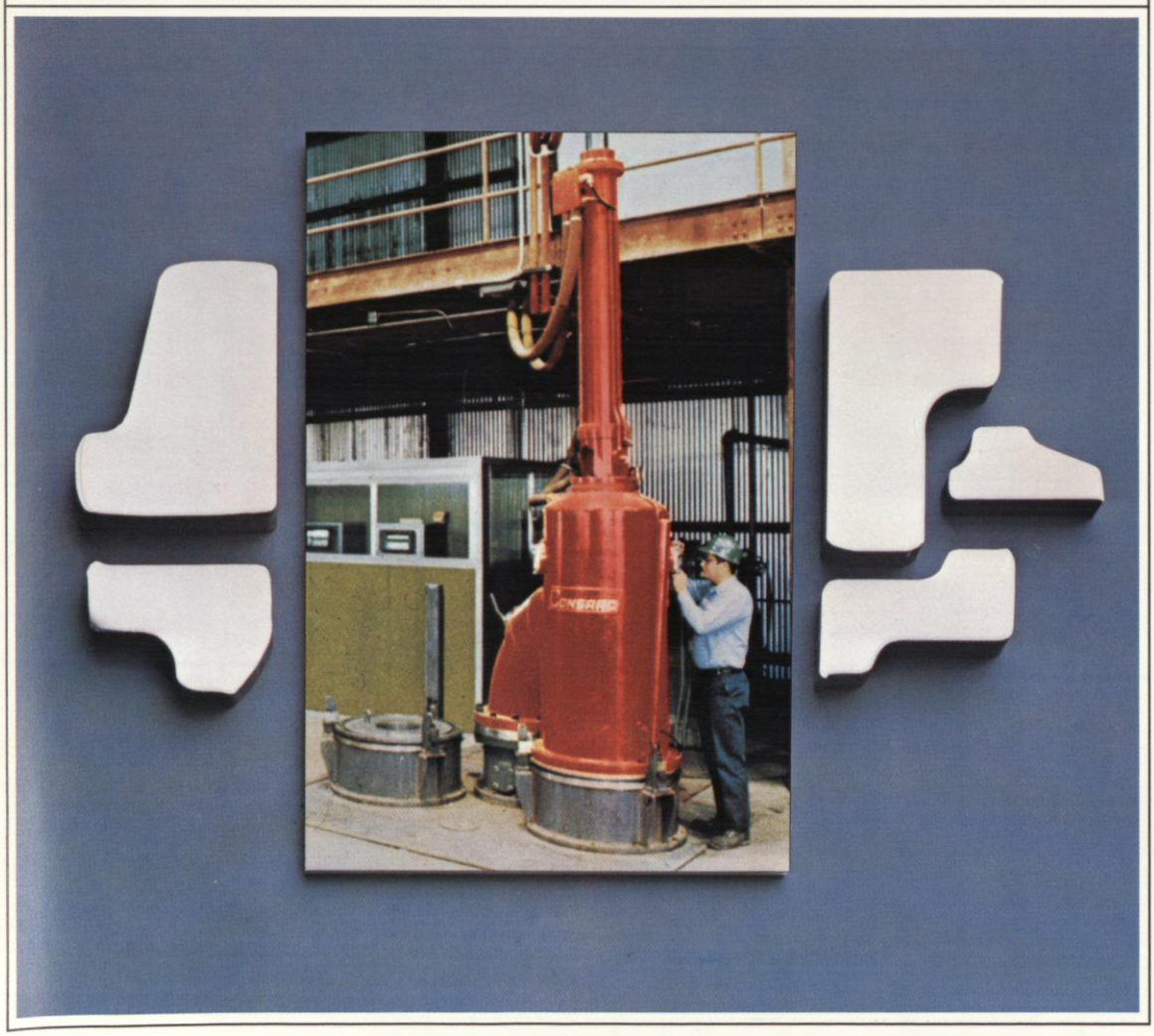
Teledyne produces the TDY-52 computer as well as a variety of other larger and more complex computers used to perform computations almost instantaneously for precision navigation, control and guidance applications.





Top: Early calculating sector.
Bottom: Teledyne's TDY-52 microelectronic hybrid microcomputer.





Metal

Brass, bronze, tin, lead, pewter and iron were all well known metals at the time the colonists were seeking their independence, but of them all, iron was the most vital to life. It was needed for tools, farm implements, horse shoes, nails, barrel hoops, wheel rims, cooking utensils, stoves, and myriad other items.

As early as the 1640's a complete iron smeltery, forge and rolling and slitting mill were built at Saugus, Massachusetts on the model of the latest European technology. Bog iron ore, a fluxing rock called gabbro, and huge volumes of charcoal were combined and burned in a simple blast furnace. Air was supplied by huge bellows powered by a water wheel.

There was little concept of the alloying effect of various ingredients which affected the properties of the iron produced, and production of usable iron depended on the skill and the "eye" of the iron maker who could tell by the color of the flames and sparks and the consistency of the metal, when it had reached its proper state.

In contrast, superalloys, produced by Teledyne for use where high strength is needed at temperatures approaching 2000° F., such as in jet engine turbines, are the epitome of modern, high precision metallurgy. Half a dozen or more ingredients are combined to form these alloys, with certain critical ingredients controlled with parts per million accuracy. These alloys are typically melted by electric induction and the consumable arc process under high vacuum to control impurities.

Teledyne also produces high quality tool steels, titanium, tungsten, zirconium, hafnium and other exotic metals.

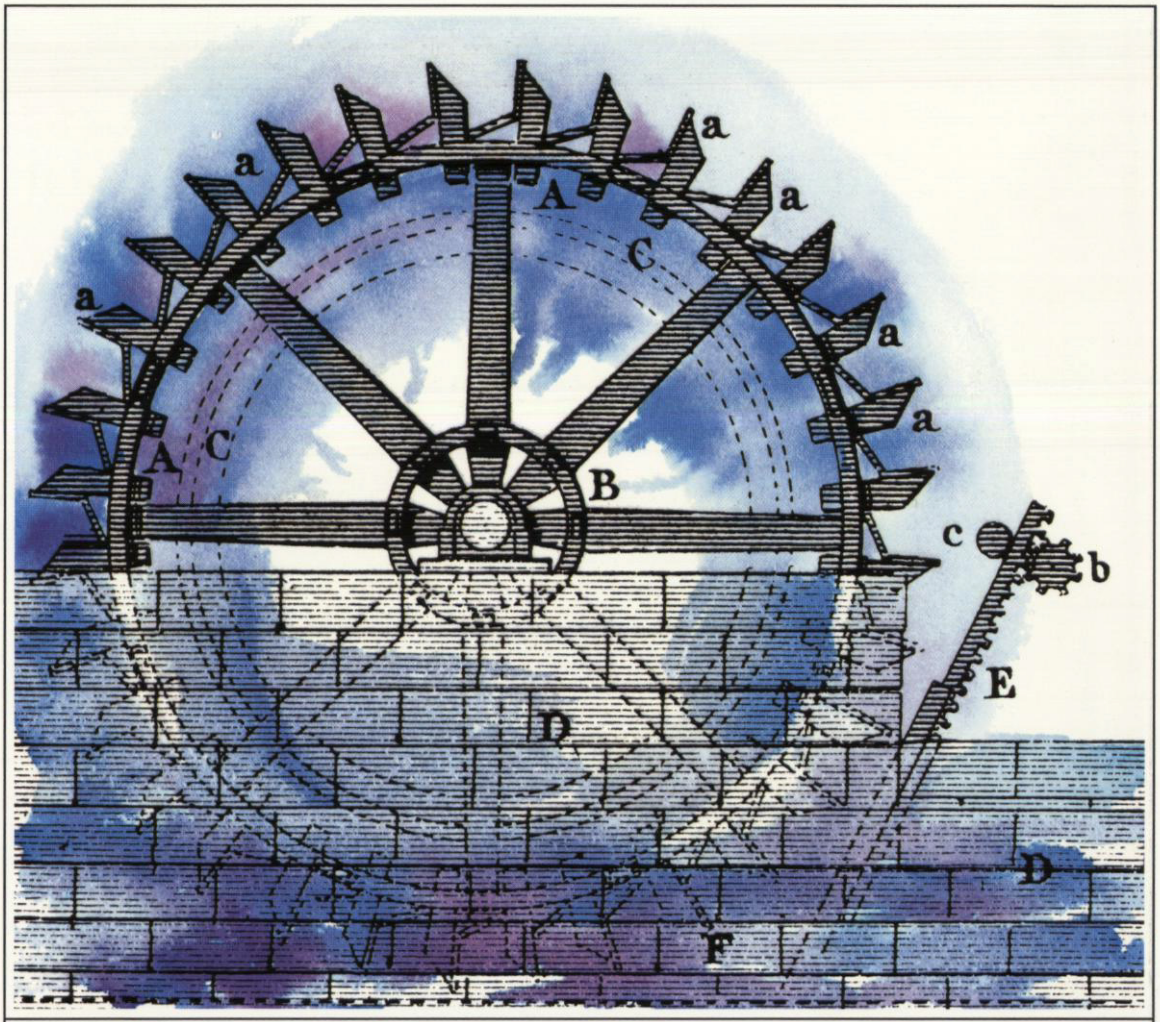
Top: Early American iron smelteries were based on European types such as this one.
Bottom: Teledyne vacuum consumable arc furnace surrounded by cut samples of superalloy bar.

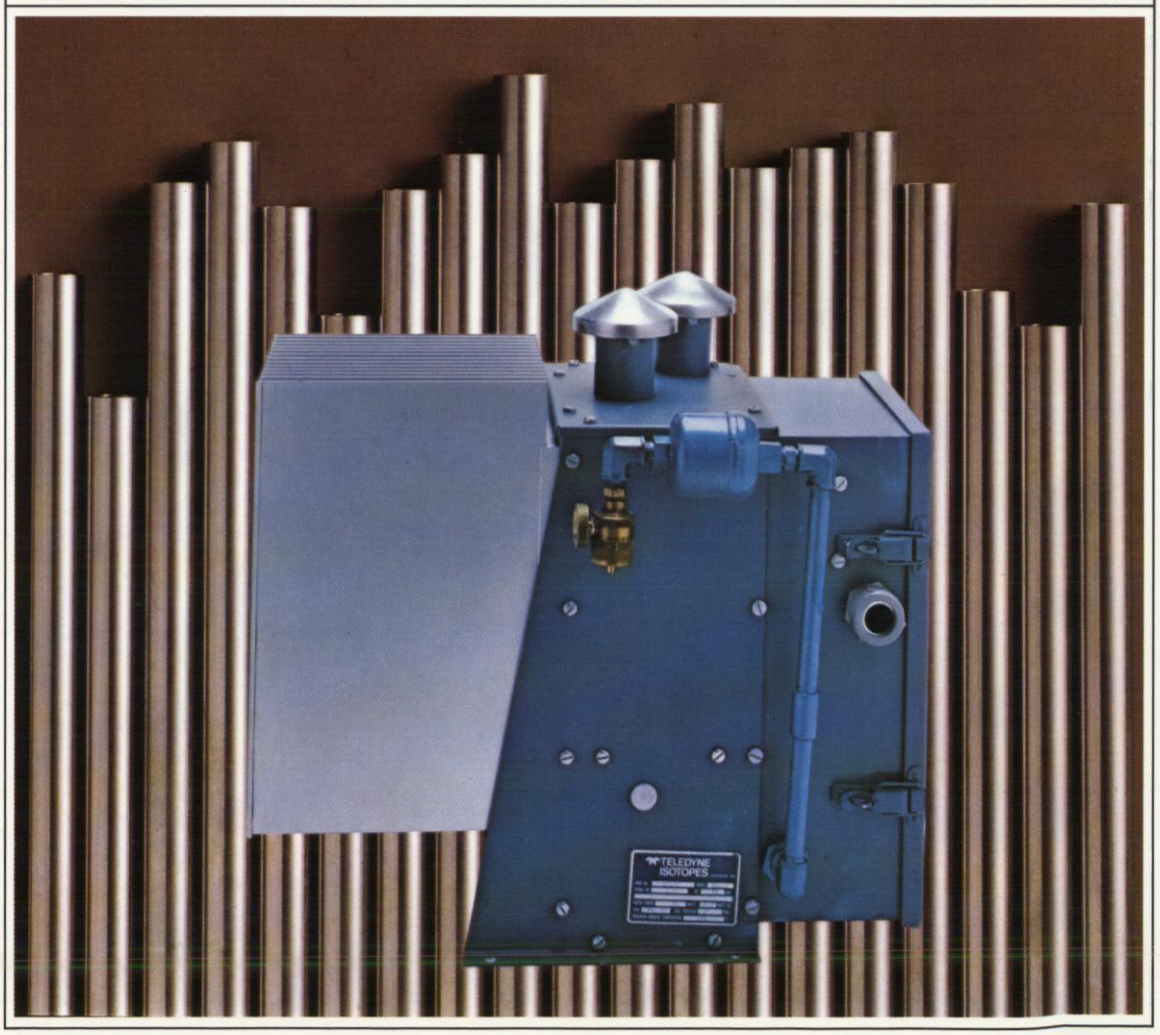
Energy

The woods, streams and winds of early America were the prime sources of energy available to the colonists outside of the strength of their own and their animals' muscles. Wood supplied little more than heat, for the steam engine, though invented, had been put to little practical application in America at the time of the revolution.

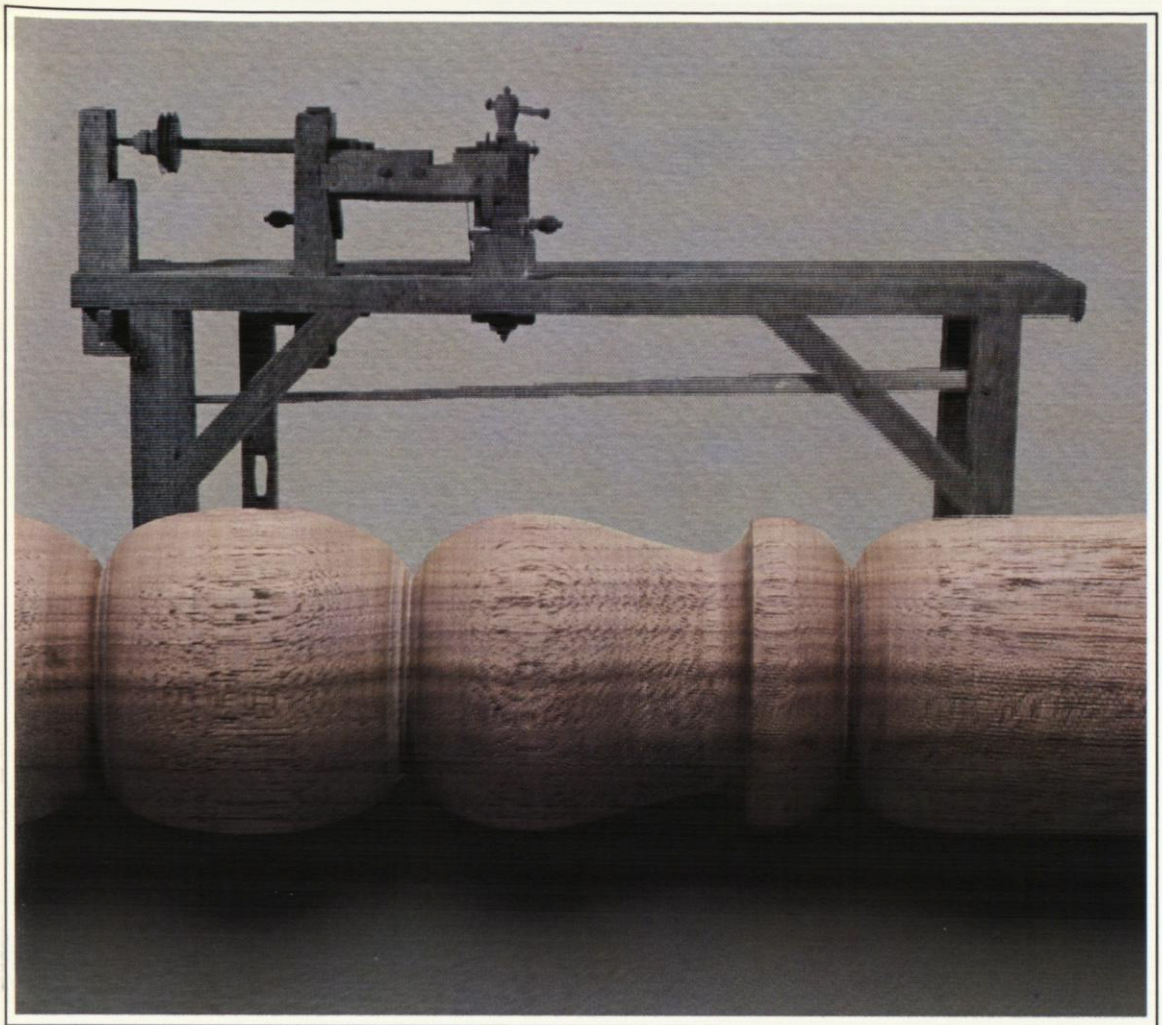
Wind, and particularly water, however, were harnassed to do a number of laborious tasks that required large amounts of rotary power —milling grain, pumping the huge bellows that provided air for smelting iron, lifting the huge trip hammers needed to forge it, and running textile machinery and saw mills.

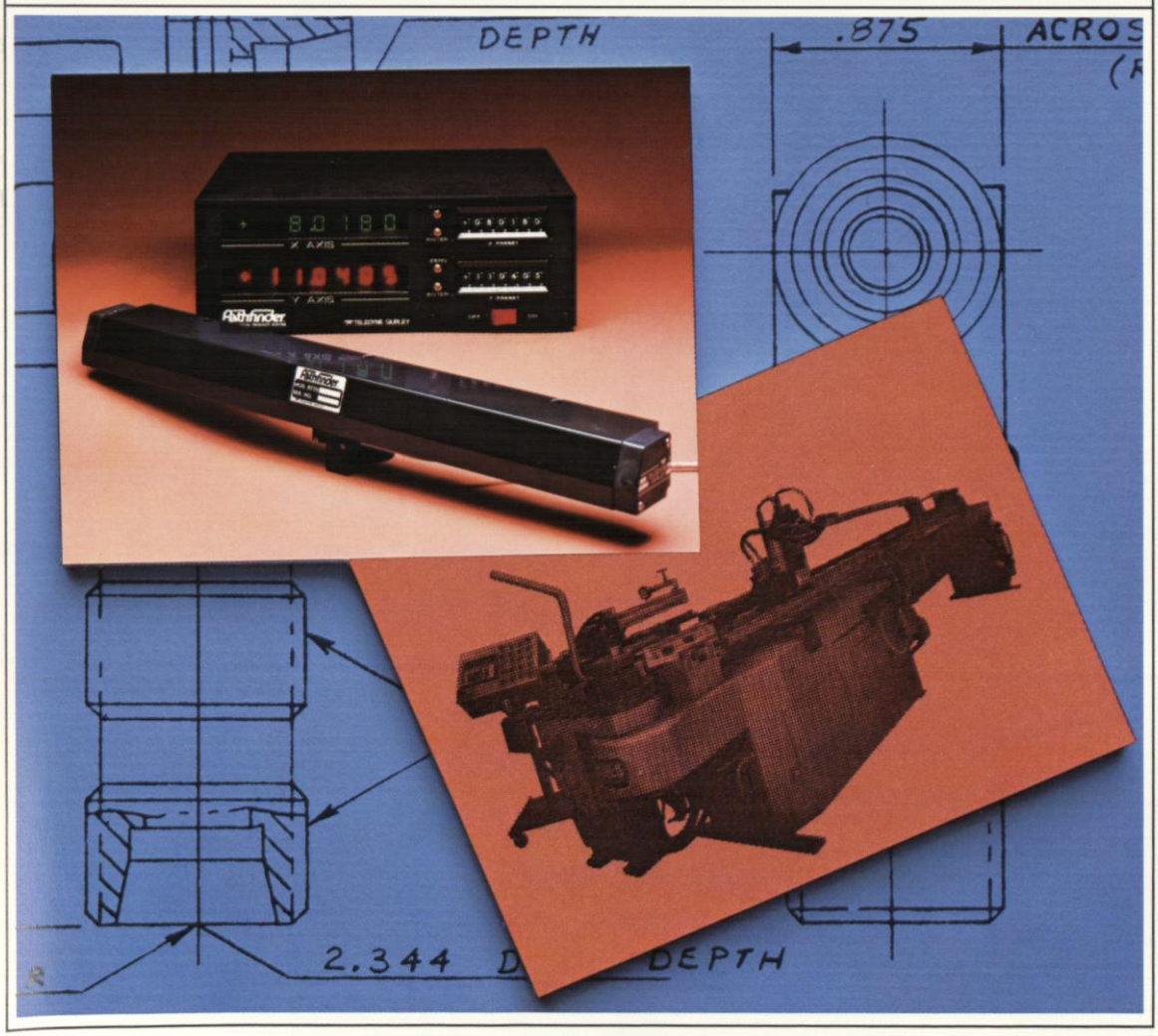
Today the silent power of the splitting atom is being put to work driving modern steam turbines to produce electricity, our most convenient and most diversely-used form of energy. Teledyne makes two essential metals, zirconium and hafnium, used in the fuel tubes and control rods of many reactors. Teledyne also builds thermoelectric generators that operate on a smaller scale to convert heat energy directly into electricity without moving parts. These thermoelectric generators can be powered by the energy of decay of radioisotopes to provide a continuous source of electricity for many years without refueling. Other thermoelectric generators powered by heat from propane or natural gas provide a reliable source of electrical energy for remote areas. These fossil fuel powered generators can operate unattended for many months on a single fueling, limited only by the size of the fuel tank provided.





Top: Early undershot water wheel.
Bottom: Teledyne thermoelectric generator, with zirconium fuel tubes for nuclear reactor in background.





Machine Tools

Lathes for turning wood and metal, machines for boring holes and cutting screws were all in existence at the time of the revolution, but most were of European origin. Tools of this day were powered by hand-cranked flywheels, by foot treadles, and some of the larger machines, such as those for boring cannon barrels, were driven by water power. In spite of this, most shaping and fabrication of materials was done by hand tools in early America.

It wasn't until the 1800's that the development of machine tools, approaching our modern concept of them, took place. Once it started, however, machines were invented, developed and manufactured by the hundreds to perform special tasks of every imaginable purpose.

Teledyne's diverse line of machine tools is typical of today's technology. Efficient electric motors provide tireless power, and highly-specialized machines permit operators to mass-produce parts in great quantities with speed and precision. Some of these machines are numerically-controlled by tape-programmed computers that further increase production and precision. Teledyne's machine tool line includes a variety of precision machines for cutting and rolling threaded parts and gears, for pipe and tube cutting, and for automatically bending complex tubing shapes such as automotive exhaust systems. Other equipment includes presses, automatic feed and transfer systems, can making machines and optical readouts for machine tools. Teledyne also produces machine tool supplies including high speed tool steel and carbide cutters, dies and other consumable parts.

Top: Early wood-bed lathe.
Bottom: Left, Teledyne electro-optical linear digital readout for machine tools. Right, Teledyne numerically controlled precision pipe bending machine.

Letter to Shareholders:

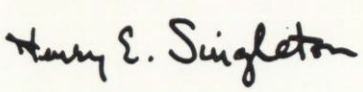
Teledyne's net income for the year ended December 31, 1976 rose to $134.9 million from $101.7 million in 1975. Earnings per share in 1976 were $10.79 compared to $5.91 in 1975, when a larger number of shares were outstanding. Sales of consolidated companies were $1.94 billion, up from last year's $1.71 billion.

For the fourth quarter of 1976 net income was $35.3 million, a gain of 14% over last year's fourth quarter net of $31.1 million. Fourth quarter earnings per share in 1976 were $3.03 versus $2.03 in 1975. Consolidated fourth quarter sales rose to $515 million in 1976 from $419 million in 1975.

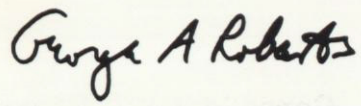
A consolidated summary of operations covering the past five years is presented on page 28 of this Report. The 1976 consolidated sales increase over 1975 of approximately 13% is principally due to increased demand for our products and to price increases. Revenue by line of business, presented on page 30 of this Report, shows increases in 1976 in industrial products, specialty metals and consumer products. More effective cost controls and an improved sales mix resulted in increased gross profits in both 1976 and 1975.

Interest expense decreased in 1976 largely as a result of repurchases of debt, including the redemption of the 3½% subordinated debentures in April, 1976. It was unnecessary in 1976 and 1975 to continue to provide for the estimated effect of changes in exchange rates applicable to long-term debt payable in foreign currencies, since such debt has been either repaid or effectively hedged. The substantial increases in income tax provisions in 1976 and 1975 resulted primarily from the gains in pre-tax income.

All of our product lines contributed to the 1976 earnings improvement, with aviation and electronics, specialty metals and consumer products showing especially significant gains. The 1976 improvement in equity in net income of unconsolidated subsidiaries resulted principally from a decrease in realized losses on sales of investments. In 1975, the results of the casualty insurance group improved over 1974, but continued to reflect losses in general lines such as property, automobile, homeowners, and workers' compensation. Although this group did poorly again in 1976, we believe that by year end the group's major problems had been substantially eliminated.



Chairman of the Board of Directors



President

Consolidated Statements of Income

For the Years Ended December 31, 1976 and 1975

	1976	1975
Consolidated Sales	$1,937,556,000	$1,714,972,000
Consolidated Costs and Expenses:		
Cost of sales	1,437,169,000	1,323,703,000
Selling and administrative expenses	254,606,000	211,485,000
Interest expense (Notes 5 and 12)	18,756,000	22,254,000
Interest income	(9,230,000)	(10,389,000)
Provision for income taxes (Note 11)	123,000,000	85,300,000
	1,824,301,000	1,632,353,000
Income of Consolidated Companies	113,255,000	82,619,000
Equity in Net Income of Unconsolidated Subsidiaries, after allocated interest expense and income tax credits (excludes equity in unrealized appreciation on marketable equity securities of $43,317,000 in 1976 and $10,746,000 in 1975) (Notes 5 and 12)	21,624,000	19,087,000
Net Income	$ 134,879,000	$ 101,706,000
Net Income Per Share (Note 3):		
Primary	$10.79	$5.91
Fully Diluted	$10.52	$5.85

Consolidated Statements of Retained Earnings

For the Years Ended December 31, 1976 and 1975

	1976	1975
Balance, Beginning of Year	$ 379,894,000	$ 297,414,000
Net income	134,879,000	101,706,000
Fair value of common stock dividends (Note 7)	(17,619,000)	(5,704,000)
Cash dividends on preferred stock	(2,365,000)	(2,651,000)
Difference between cost and book value of Unicoa treasury stock	(444,000)	—
Redemption of Series B preferred stock, including retirement of shares held in treasury	—	(10,871,000)
Balance, End of Year	$ 494,345,000	$ 379,894,000

The accompanying notes are an integral part of these statements.

Consolidated Balance Sheets

December 31, 1976 and 1975

Assets

	1976	1975
Current Assets:		
Cash	$ 42,256,000	$ 40,432,000
Marketable securities, at cost which approximates market	190,382,000	169,693,000
Receivables, less reserve of $10,784,000 in 1976 and $9,317,000 in 1975	211,124,000	170,284,000
Inventories (Note 4)	144,274,000	148,984,000
Prepaid expenses	6,414,000	7,333,000
Total current assets	594,450,000	536,726,000
Investments in Unconsolidated Subsidiaries (Note 12):		
Unicoa Corporation (Note 13)	233,219,000	199,883,000
Argonaut Insurance Company (Note 14)	94,734,000	99,605,000
Other	3,806,000	4,380,000
	331,759,000	303,868,000
Property and Equipment, at cost (Note 5):		
Land	16,808,000	16,646,000
Buildings	109,409,000	108,736,000
Equipment and improvements	378,937,000	409,949,000
	505,154,000	535,331,000
Less accumulated depreciation and amortization	270,910,000	282,017,000
	234,244,000	253,314,000
Other Assets:		
Cost in excess of net assets of purchased businesses (Notes 10 and 12)	30,419,000	34,508,000
Other	13,911,000	10,063,000
	44,330,000	44,571,000
	$1,204,783,000	$1,138,479,000

The accompanying notes are an integral part of these balance sheets.

Liabilities

	1976	1975
Current Liabilities:		
Accounts payable	$ 95,889,000	$ 73,132,000
Accrued liabilities	132,211,000	123,640,000
Accrued income taxes (Note 11)	88,100,000	9,300,000
Current portion of long-term debt (Note 2)	4,709,000	4,853,000
Total current liabilities	320,909,000	210,925,000
Long-Term Debt (Notes 2 and 5)	315,457,000	370,662,000
Deferred Income Taxes (Note 11)	65,000,000	55,600,000
Other Long-Term Liabilities	9,863,000	9,983,000
Commitments and Contingencies (Note 8)		
Shareholders' Equity:		
Preferred stock (Note 7)	516,000	516,000
Common stock (Notes 6 and 7)	32,340,000	32,340,000
Additional paid-in capital	432,360,000	407,689,000
Retained earnings (Note 5)	494,345,000	379,894,000
Equity in unrealized depreciation on marketable equity securities of unconsolidated subsidiaries (Note 12)	—	(11,050,000)
	959,561,000	809,389,000
Less treasury stock, at cost (Note 7)	466,007,000	318,080,000
Total shareholders' equity	493,554,000	491,309,000
	$1,204,783,000	$1,138,479,000

Consolidated Statements of Changes in Financial Position

For the Years Ended December 31, 1976 and 1975

	1976	*1975*
Working Capital was Provided by:		
Net income	$134,879,000	$101,706,000
Equity in net income of unconsolidated subsidiaries before allocated expenses	(7,557,000)	(6,860,000)
Depreciation and amortization of property and equipment	47,282,000	49,699,000
Other amortization and charges not affecting working capital	6,128,000	2,490,000
Change in deferred income taxes	9,400,000	31,100,000
Working capital provided from operations	190,132,000	178,135,000
Conversion of 3½% subordinated debentures	21,381,000	—
Dispositions of property and equipment	9,043,000	3,998,000
Issuance of common stock for employees' stock purchase and option plans	4,204,000	5,698,000
Increase in long-term debt	4,512,000	23,243,000
	229,272,000	211,074,000
Working Capital was Applied to:		
Acquisition of treasury stock	166,947,000	91,818,000
Reduction in long-term debt	61,012,000	31,090,000
Additions to property and equipment	37,255,000	38,932,000
Investments in and advances to unconsolidated subsidiaries	9,728,000	—
Dividends on preferred stock	2,365,000	2,651,000
Redemption of Series B preferred stock	—	12,296,000
Other, net	4,225,000	774,000
	281,532,000	177,561,000
Increase (Decrease) in Working Capital	$(52,260,000)	$ 33,513,000
Working Capital Increase (Decrease):		
Cash	$ 1,824,000	$ 5,539,000
Marketable securities	20,689,000	115,558,000
Receivables	40,840,000	(33,853,000)
Inventories	(4,710,000)	(37,116,000)
Income tax refund receivable	—	(21,100,000)
Prepaid expenses	(919,000)	(3,341,000)
Accounts payable	(22,757,000)	24,798,000
Accrued liabilities	(8,571,000)	(6,637,000)
Accrued income taxes	(78,800,000)	(9,300,000)
Current portion of long-term debt	144,000	(1,035,000)
	$(52,260,000)	$ 33,513,000

The accompanying notes are an integral part of these statements.

Consolidated Statements of Capital Stock, Additional Paid-In Capital and Treasury Stock

For the Years Ended December 31, 1976 and 1975

	Preferred Stock ($1 Par Value)	*Common Stock ($1 Par Value)*	*Additional Paid-In Capital*	*Treasury Stock*
Balance, December 31, 1974	$692,000	$32,340,000	$413,387,000	$242,040,000
Stock issuance:				
Common stock dividend (496,058 shares)	—	—	(2,521,000)	(8,222,000)
Stock option and purchase plans (416,939 shares)	—	—	(1,320,000)	(7,018,000)
Conversions of preferred stock (including 10,000 shares of Series B held in treasury – 12,718 net common shares issued)	(15,000)	—	(209,000)	(154,000)
Purchase of common (3,830,291 shares) and preferred stock	—	—	—	71,020,000
Exchange of debentures for common stock (1,884,500 shares)	—	—	—	20,798,000
Redemption of Series B preferred stock, including retirement of 6,575 shares held in treasury	(161,000)	—	(1,648,000)	(384,000)
Balance, December 31, 1975	516,000	32,340,000	407,689,000	318,080,000
Stock issuance:				
Conversion of 3½% subordinated debentures (445,730 shares)	—	—	12,656,000	(8,725,000)
Common stock dividend (347,130 shares)	—	—	10,790,000	(6,836,000)
Stock option and purchase plans (163,720 shares – Note 6)	—	—	972,000	(3,227,000)
Exercise of warrants (11,150 shares – Note 6)	—	—	258,000	(227,000)
Conversion of $6 series preferred stock (273 common shares issued)	—	—	(5,000)	(5,000)
Acquisition of common (3,161,929 shares) and preferred stock (209,212 shares) (Note 7)	—	—	—	166,947,000
Balance, December 31, 1976	$516,000	$32,340,000	$432,360,000	$466,007,000

The accompanying notes are an integral part of these statements.

Auditors' Report

To the Shareholders and
Board of Directors, Teledyne, Inc.:

We have examined the consolidated balance sheets of Teledyne, Inc. (a Delaware corporation) and subsidiaries as of December 31, 1976 and 1975, and the related statements of income, capital stock, additional paid-in capital and treasury stock, retained earnings and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. The consolidated financial statements of Unicoa Corporation and subsidiaries (Note 13) were examined by other auditors whose reports thereon have been furnished to us. Our opinion expressed herein, insofar as it relates to the amounts included for Unicoa Corporation and subsidiaries, is based solely upon the reports of the other auditors. Teledyne's investment in Unicoa was 19 percent in 1976 and 18 percent in 1975 of consolidated assets and its equity in Unicoa's net income, after allocated interest expense and income tax credits as described in Note 12, was 12 percent in 1976 and 8 percent in 1975 of consolidated net income.

In our opinion, based upon our examinations and the reports of other auditors referred to above, the accompanying consolidated financial statements present fairly the consolidated financial position of Teledyne, Inc. and subsidiaries as of December 31, 1976 and 1975, and the results of their operations and changes in their financial position for the years then ended, all in conformity with generally accepted accounting principles applied on a consistent basis after giving retroactive effect to the change (with which we concur) in the method of translating foreign currency transactions and foreign currency financial statements, as explained in Note 2 to the consolidated financial statements.

ARTHUR ANDERSEN & CO.

Los Angeles, California,
January 20, 1977.

Notes to Consolidated Financial Statements

(1) Summary of Significant Accounting Policies. *Principles of Consolidation.* The consolidated financial statements of Teledyne, Inc. include the accounts of all its subsidiaries except its insurance and finance companies. The investments in unconsolidated subsidiaries, which include advances, are accounted for by the equity method. All material intercompany accounts and transactions have been eliminated.

Currency Translation. All assets and liabilities of foreign subsidiaries and other foreign currency assets and liabilities are translated at current rates with the exception of inventories, property and equipment and prepaid expenses which are translated at historical rates. Net translation gains and losses are included in operations in the period in which they occur.

Inventories. Inventories are stated at the lower of cost (last-in, first-out and first-in, first-out methods) or market, less progress payments received. Costs include direct material and labor costs and applicable manufacturing and engineering overhead. Sales and related costs are recorded as products are delivered and as services are performed, including products and services under long-term contracts. Costs of products delivered and services performed under such long-term contracts are removed from inventory and charged to cost of sales at amounts approximating actual cost. Any foreseeable losses are charged to income when determined.

Depreciation and Amortization. Buildings and equipment are depreciated on straight-line and declining balance bases. Estimated useful lives are 5 to 45 years for buildings, and 3 to 20 years for machinery and equipment. Leasehold improvements and patents are amortized on a straight-line basis over the life of the lease or patent. Maintenance and repairs are charged against income as incurred and betterments and major renewals are capitalized. Cost and accumulated depreciation of property sold or retired are removed from the accounts and the resultant gain or loss is included in income.

Cost in Excess of Net Assets of Purchased Businesses. Except for an immaterial amount being amortized, cost in excess of net assets of purchased businesses relates to businesses purchased prior to October 31, 1970 and is not being amortized.

Research and Development. Company funded research and development costs are expensed as incurred. Costs related to customer funded research and development contracts are charged to income as sales are recorded.

Pension Expense. Pension expense is accrued at amounts equal to normal cost plus a portion of prior service costs.

Income Taxes. Provision for income taxes includes state, Federal and foreign income taxes. Deferred income taxes are provided for timing differences in the recognition of income and expenses, income of the domestic international sales corporation not currently taxed, and undistributed earnings of subsidiaries, except for a portion of the earnings of life insurance subsidiaries. Investment tax credits are amortized over the estimated lives of the related assets.

(2) Change in Accounting Principle. In 1976, the Company changed its method of translating foreign currency transactions and foreign currency financial statements in accordance with Statement of Financial Accounting Standards No. 8. The principal effect of the change is to translate foreign currencies held and long-term debt payable in foreign currencies at current rates rather than historical rates. The December 31, 1975 balance sheet and statement of changes in financial position have been restated for this change. The effect of the change on the results of operations is not material for any period and, accordingly, the statement of income for the year ended December 31, 1975 has not been restated.

(3) Net Income Per Share. Primary net income per share is based on the weighted average number of shares of common stock and common stock equivalents outstanding during each year (12,317,279 in 1976 and 16,815,639 in 1975), including all convertible debt, Series B preferred stock and dilutive options and warrants. Each common stock equivalent has been considered outstanding from the beginning of each year or date of issuance, and the related dividend requirement or interest has been eliminated. Fully diluted net income per share includes the potential dilution of the $6 series convertible preferred stock and the maximum potential dilution of outstanding options and warrants.

(4) Inventories.

	1976	1975
Last-in, first-out method	$170,038,000	$171,303,000
First-in, first-out method	34,871,000	34,506,000
	204,909,000	205,809,000
Less progress billings	60,635,000	56,825,000
	$144,274,000	$148,984,000

Inventories related to long-term contracts were $52,288,000 and $53,511,000 at December 31, 1976 and 1975, respectively. Progress payments related to long-term contracts were $53,651,000 and $47,675,000 at December 31, 1976 and 1975, respectively.

Inventories stated on a last-in, first-out basis were $102,856,000 and $91,229,000 less than their first-in, first-out values at December 31, 1976 and 1975, respectively. During 1976 and 1975, inventory quantities were reduced, resulting in liquidations of last-in, first-out inventory quantities. These inventories were carried at the lower costs prevailing in prior years as compared with the cost of current purchases. The effect of these last-in, first-out inventory liquidations was to increase net income by approximately $4,725,000, or $0.38 per share ($0.37 fully diluted), in 1976, and by approximately $6,150,000, or $0.37 per share ($0.35 fully diluted), in 1975.

(5) Long-Term Debt. At December 31, 1976, the Company's long-term debt was as follows:

10% Subordinated Debentures, due 2004, SeriesA, $5,452,000 payable annually commencing in 1994 (net of unamortized discount of $31,650,000)	$ 77,388,000
7½% Term Notes, due 1982, $15,000,000 payable annually commencing in 1979	75,000,000
7¼% Bonds, due 1988, payable in German Marks in annual installments commencing in 1979 (Note 2)	40,598,000
7% Subordinated Debentures, due 1999, $1,871,000 payable annually commencing in 1989	36,077,000
7⅞% Sinking Fund Debentures, due 1994, $1,400,000 payable annually	22,307,000
7% Promissory Notes, due 1989, $1,500,000 payable annually	19,750,000
6½% Sinking Fund Debentures, due 1992, $1,350,000 payable annually	19,589,000
6½% Subordinated Debentures, due 1983, $7,500,000 payable annually commencing in 1979	15,028,000
Other (including $7,222,000 secured by land and buildings), due in various installments to 1991	14,429,000
	320,166,000
Less current portion	4,709,000
	$315,457,000

Long-term debt is payable $4,709,000 in 1977, $4,854,000 in 1978, $20,145,000 in 1979, $24,768,000 in 1980 and $24,163,000 in 1981, net of long-term debt repurchased to meet sinking fund requirements. Interest expense was $31,260,000 in 1976 and $34,980,000 in 1975, of which $12,504,000 in 1976 and $12,726,000 in 1975 was allocated to unconsolidated subsidiaries.

In order to meet current and future sinking fund requirements, the Company repurchased $18,389,000 and $20,142,000 face amount of its long-term debt in 1976 and 1975, respectively. In addition, in 1976, the Company redeemed its 3½% subordinated debentures. The resulting gains and losses were included in the results of operations in selling and administrative expenses. These transactions resulted in a decrease in net income of $1,181,000, or $0.10 per share ($0.09 fully diluted), in 1976, and an increase in net income of $3,362,000, or $0.20 per share ($0.19 fully diluted), in 1975.

Under various borrowing agreements, the Company has agreed to maintain minimum amounts of working capital and net worth, and has agreed to certain restrictions with respect to borrowing, purchase and sale of assets and capital stock and payment of dividends. At December 31, 1976, these agreements were complied with, and retained earnings of $96,150,000 were not restricted by these agreements as to payment of dividends.

(6) Stock Options and Warrants. At December 31, 1976, 47,481 shares of common stock were reserved for issuance under outstanding options at prices from $15 to $20 per share (options for 44,090 shares were exercisable) and 559,388 shares of common stock were reserved for the granting of additional options. At December 31, 1975, 145,987 shares of common stock were reserved for issuance under

outstanding options and 556,567 shares of common stock were reserved for the granting of additional options. During 1976, no options were granted, options to purchase 98,010 shares were exercised and options to purchase 2,814 shares were cancelled.

At December 31, 1976, 162,764 shares of common stock were reserved for issuance under warrants, each of which provides for the purchase of 11.53 shares at $43.42 per share until October, 1978.

(7) Capital Stock. At December 31, 1976 and 1975, the Company's capital stock consisted of the following shares:

	Authorized	*1976*	*1975*
Cumulative convertible preferred stock, $1 par value	15,000,000		
$6 series – Issued		**515,932**	516,136
– Outstanding		**290,020**	499,436
Common stock, $1 par value	60,000,000		
Issued		**32,339,685**	32,339,685
Outstanding		**11,418,004**	13,611,930

At December 31, 1976 and 1975, the Company's treasury stock was as follows:

	1976		*1975*	
	Shares	*Cost*	*Shares*	*Cost*
Cumulative convertible preferred stock – $6 series	**225,912**	**$ 21,880,000**	16,700	$ 1,024,000
Common stock	**20,921,681**	**444,127,000**	18,727,755	317,056,000
		$466,007,000		$318,080,000

The 1975 financial statements and related notes, except for shareholders' equity, have been restated to reflect a 3% common stock dividend paid in May, 1976.

The holders of the $6 series preferred stock are entitled to voting rights and cumulative annual dividends at the rate of $6.00 per share. Such stock is redeemable at the Company's option at $100.00 per share after April 22, 1978, and is convertible at any time into 1.34 shares of common stock. The Company has reserved 388,627 shares of common stock for conversion of the preferred shares. The liquidation preference ($18,271,000 at December 31, 1976) of the preferred stock exceeds the par value; such excess does not impose any restrictions on retained earnings.

(8) Commitments and Contingencies. Total rental expense was $17,387,000 and $17,662,000 in 1976 and 1975, respectively. Annual rentals under long-term leases are $7,750,000 in 1977, $6,633,000 in 1978, $4,807,000 in 1979, $3,923,000 in 1980 and $2,934,000 in 1981. Aggregate rentals are $6,090,000 for 1982 through 1986, $1,784,000 for 1987 through 1991, $387,000 for 1992 through 1996 and $360,000 in total thereafter.

Four lawsuits have been filed in United States district courts in California and Michigan, alleging that the Company violated Federal securities laws and state laws in connection with certain repurchases or redemptions of its stock. The Company believes that the allegations made in these complaints are not meritorious and that the Company has in all instances adequate legal defenses. The claims seek money damages aggregating more than $425,000,000, and punitive damages in excess of $500,000,000.

(9) Pension Plans. Total pension expense was $31,215,000 and $27,049,000 in 1976 and 1975, respectively. The Company contributes accrued pension cost on a current basis. As of December 31, 1976, the actuarially computed value of vested benefits exceeded the total of the pension fund assets and balance sheet accruals by approximately $17,100,000. The actuarially computed value of prior service costs exceeded such assets and accruals by approximately $36,700,000.

(10) Other Costs and Expenses. Company funded research and development costs of $24,600,000 and $21,150,000 were charged to costs and expenses in 1976 and 1975, respectively.

In 1976, $3,702,000 of cost in excess of net assets of purchased businesses was charged to income since such excess represented no further value to the Company.

(11) Income Taxes. The provisions for income taxes for the years ended December 31,1976 and 1975 were as follows:

	1976	1975
Federal	$106,500,000	$ 71,200,000
State	13,700,000	9,400,000
Foreign	2,800,000	4,700,000
	$123,000,000	$ 85,300,000

Such provisions consisted of the following:

	1976	1975
Current	$116,200,000	$ 76,700,000
Deferred	8,400,000	9,500,000
Investment credits	(1,600,000)	(900,000)
	$123,000,000	$ 85,300,000

Deferred taxes arise principally as a result of the income of the domestic international sales corporation, gain on retirement of debt and deferred investment tax credits. The effective tax rate differs from the statutory U.S. Federal income tax rate of 48% principally due to state and local income taxes and costs and expenses not deductible for Federal tax purposes.

(12) Investments in Unconsolidated Subsidiaries. Equity in net income of unconsolidated subsidiaries, after allocated interest expense and income tax credits, for the years ended December 31, 1976 and 1975, was as follows:

	1976	1975
Equity in net income (loss) of –		
Unicoa Corporation	$ 19,196,000	$ 11,050,000
Argonaut Insurance Company	(10,969,000)	(4,073,000)
Other	(670,000)	(117,000)
	7,557,000	6,860,000
Allocated interest expense	(12,504,000)	(12,726,000)
Income tax credits	26,571,000	24,953,000
	$ 21,624,000	$ 19,087,000

The income tax credits consist of amounts ($6,377,000 in 1976 and $6,500,000 in 1975) related to allocated interest and amounts ($20,194,000 in 1976 and $18,453,000 in 1975) related to losses of unconsolidated subsidiaries which are recoverable in Teledyne's consolidated tax return but which are not available to the unconsolidated subsidiaries on a separate return basis. The effective tax rate used in computing the income tax credits related to losses of unconsolidated subsidiaries differs from the statutory U.S. Federal income tax rate of 48% principally because of tax exempt investment income.

Interest expense was allocated to unconsolidated subsidiaries based on the ratio of the Company's average investment in unconsolidated subsidiaries to the Company's average total capital.

The Company's equity in the net assets of its unconsolidated subsidiaries, including advances, was $135,115,000 in 1976 and $107,491,000 in 1975, including its equity of $65,067,000 and $56,472,000, respectively, in their retained earnings. In consolidation, a portion of the difference between the Company's investments in purchased subsidiaries and the book value of their assets has been allocated to bonds and stocks and amortized over the applicable maturity of the bonds or charged or credited to income upon their disposition. The Company's investment exceeded its equity in net assets by $196,644,000 in 1976 and $196,377,000 in 1975. Such excess is in addition to the excess shown in the consolidated balance sheets and is not being amortized since, in the opinion of management, there has been no diminution in its value. The Company's equity in net income of its unconsolidated subsidiaries includes net realized losses on sale of investments of $6,874,000 in 1976 and $9,435,000 in 1975.

The Company's unconsolidated subsidiaries carry marketable equity securities at the lower of aggregate cost or market. The Company's equity in the gross unrealized gains and the gross unrealized losses, which are not included in the determination of the results of operations, were $44,773,000 and $12,506,000, respectively, at December 31, 1976. The equity in unrealized depreciation on marketable equity securities of unconsolidated subsidiaries of $11,050,000 at December 31, 1975 was recovered during 1976. Changes in unrealized depreciation have no effect on net income.

Notes to Consolidated Financial Statements

(13) Unicoa Corporation and Subsidiaries. The following condensed statements summarize the consolidated financial position and operating results of Unicoa Corporation and subsidiaries. Teledyne owned 95.3% and 91.6% interests at December 31, 1976 and 1975, respectively.

Consolidated Balance Sheets

	December 31,	
	1976	*1975*
Assets:		
Investments:		
Bonds, at amortized cost (market: 1976 – $239,000,000; 1975 – $259,000,000)	$242,885,000	$283,634,000
Stocks, principally at lower of aggregate cost or market (market: 1976 – $232,311,000; 1975 – $81,000,000)	214,333,000	83,155,000
Mortgage loans on real estate	121,077,000	136,194,000
Real estate, at cost, less accumulated depreciation	46,350,000	45,011,000
Loans to policyholders	15,548,000	14,664,000
Invested cash	1,960,000	9,000,000
Total investments	642,153,000	571,658,000
Cash	2,756,000	5,727,000
Uncollected premiums	22,744,000	29,973,000
Deferred policy acquisition costs	110,290,000	94,508,000
Cost in excess of net assets of purchased businesses	26,234,000	26,713,000
Other assets	23,362,000	17,519,000
	$827,539,000	$746,098,000
Liabilities:		
Policy reserves and liabilities	$595,088,000	$556,800,000
Notes payable	16,300,000	—
Mortgage loan payable	7,466,000	8,135,000
Subordinated debentures	18,142,000	17,944,000
Other liabilities	55,950,000	54,478,000
Shareholders' equity	134,593,000	108,741,000
	$827,539,000	$746,098,000

Consolidated Statements of Income

	Year Ended December 31,	
	1976	*1975*
Income:		
Premiums and other insurance income	$262,667,000	$258,730,000
Investment income less expenses	34,565,000	32,729,000
Other income	5,817,000	2,960,000
	303,049,000	294,419,000
Expenses:		
Benefits paid or provided	162,661,000	144,870,000
Insurance expenses	111,777,000	120,051,000
Provision for income taxes	5,597,000	7,659,000
	280,035,000	272,580,000
	23,014,000	21,839,000
Loss on Sale of Investments, less applicable income taxes (excludes unrealized appreciation on marketable equity securities of $28,935,000 in 1976 and $5,194,000 in 1975)	3,125,000	12,644,000
Net Income	$ 19,889,000	$ 9,195,000

The above statements have been prepared on the basis of generally accepted accounting principles which differ from statutory insurance accounting practices. Unicoa recognizes revenues from life insurance premiums when they become due and revenues, benefits and expenses on accident and health insurance over the period to which the premiums relate. Deferred taxes are provided for timing differences in the recognition of income and expenses.

Marketable equity securities are carried at the lower of aggregate cost or market. Any valuation allowance necessary to reduce these securities from cost to market, if lower in the aggregate, is

reflected in the consolidated financial statements as a reduction in shareholders' equity; any changes thereto have no effect on net income. The net unrealized depreciation on marketable equity securities of $11,207,000 at December 31, 1975 was recovered during 1976.

A portion of life insurance income is not subject to Federal income tax until such amount exceeds certain limitations or is distributed to stockholders as dividends. At December 31, 1976, up to $54,000,000 (at current tax rates) would be required for possible Federal income taxes which might become due, in whole or in part, in future years if any portion of $111,000,000 of the gains from operations since January 1, 1959 (which includes $3,000,000 from 1976 and $4,000,000 from 1975) becomes includable in taxable income as a result of such limitations, including distributions in excess of $8,500,000 as dividends.

(14) Argonaut Insurance Company and Subsidiaries. The following condensed statements summarize the consolidated financial position and operating results of Argonaut Insurance Company and subsidiaries.

Consolidated Balance Sheets

	December 31, 1976	December 31, 1975
Assets:		
Investments:		
Bonds, at amortized cost (market: 1976 – $394,000,000; 1975 – $490,000,000)	$401,955,000	$576,419,000
Stocks, principally at lower of aggregate cost or market (1976 market – $311,594,000; 1975 cost – $77,101,000)	293,492,000	76,428,000
Invested cash	26,636,000	14,001,000
Total investments	722,083,000	666,848,000
Cash	18,172,000	19,044,000
Agents' balances and uncollected premiums	45,011,000	56,853,000
Other receivables	32,803,000	37,664,000
Deferred policy acquisition costs	11,975,000	11,144,000
Property and equipment, at cost, less accumulated depreciation	4,392,000	4,840,000
Cost in excess of net assets of purchased businesses	4,783,000	8,589,000
	$839,219,000	$804,982,000
Liabilities:		
Loss and claim reserves	$574,152,000	$522,447,000
Accrued loss adjustment expenses	97,938,000	94,082,000
Unearned premiums	90,968,000	106,334,000
Other liabilities	36,572,000	32,234,000
Shareholder's equity	39,589,000	49,885,000
	$839,219,000	$804,982,000

Consolidated Statements of Operations

	Year Ended December 31, 1976	Year Ended December 31, 1975
Income:		
Net premiums earned	$331,257,000	$394,364,000
Investment income less expenses	38,316,000	41,081,000
	369,573,000	435,445,000
Expenses:		
Losses and loss adjustment expenses	279,941,000	328,677,000
Underwriting expenses	94,112,000	111,054,000
Federal income taxes	2,354,000	—
	376,407,000	439,731,000
	(6,834,000)	(4,286,000)
Gain (Loss) on Sale of Investments (excludes unrealized appreciation on marketable equity securities of $16,045,000 in 1976 and $5,988,000 in 1975)	(4,135,000)	213,000
Net Loss	$(10,969,000)	$ (4,073,000)

The above statements have been prepared on the basis of generally accepted accounting principles which differ from statutory insurance accounting practices. Premium income, policy acquisition costs, and policyholder dividends are recognized ratably over the period to which the premiums relate. Losses and loss adjustment expenses are provided at the estimated amounts necessary to settle incurred claims. Deferred taxes are provided for timing differences in the recognition of income and expenses to the extent such deferred taxes are determined to be recoverable. Certain amounts in the 1975 consolidated financial statements have been reclassified to conform with the 1976 presentation. In 1976, $3,806,000 of cost in excess of net assets of purchased businesses was charged to operations since such excess represented no further value to the Company.

Investments in stocks includes $40,032,000 in 1976 and $34,287,000 in 1975 of investments in the common stock of unconsolidated subsidiaries accounted for by the equity method. Shareholder's equity includes $20,000,000 of certificates of contribution issued in 1975 to Teledyne in exchange for $20,000,000 of Teledyne's 10% subordinated debentures (included in bonds in the above consolidated balance sheet).

Marketable equity securities are carried at the lower of aggregate cost or market. Any valuation allowance necessary to reduce these securities from cost to market, if lower in the aggregate, is reflected in the consolidated financial statements as a reduction in shareholder's equity; any changes thereto have no effect on the results of operations. The net unrealized depreciation on marketable equity securities of $673,000 at December 31, 1975 was recovered during 1976.

Subsequent to December 31, 1976, Argonaut sold one of its wholly-owned insurance subsidiaries to Teledyne for cash.

Taxable income of Argonaut and its subsidiaries is included in the consolidated income tax returns of Teledyne. Certain of Argonaut's subsidiaries reimburse Teledyne for their portion of Teledyne's consolidated Federal income tax liability. No income tax credits have been included in Argonaut's consolidated financial statements since the losses for tax purposes could not be carried back to recover prior years' taxes on a separate return basis.

(15) Fireside Securities Corporation and Subsidiaries. The following condensed statements summarize the consolidated financial position and operating results of Fireside Securities Corporation and subsidiaries. Fireside Securities Corporation is a wholly-owned subsidiary of Argonaut Insurance Company.

Consolidated Balance Sheets

	December 31,	
	1976	*1975*
Assets:		
Cash	**$ 1,979,000**	$ 371,000
Bonds, at amortized cost (market: 1976 – $18,705,000; 1975 – $21,078,000)	**19,119,000**	21,518,000
Loans receivable	**117,211,000**	103,303,000
Premises and equipment, at cost, less accumulated depreciation	**1,262,000**	1,286,000
Other assets	**1,829,000**	1,735,000
	$141,400,000	$128,213,000
Liabilities:		
Investment certificates	**$116,739,000**	$109,025,000
Amounts due Teledyne, Inc.	**5,458,000**	2,176,000
Other liabilities	**1,470,000**	1,475,000
Shareholder's equity	**17,733,000**	15,537,000
	$141,400,000	$128,213,000

Notes to Consolidated Financial Statements

Consolidated Statements of Income

	Year Ended December 31, 1976	Year Ended December 31, 1975
Revenues:		
Interest on loans	$ 20,413,000	$ 17,718,000
Other income	3,438,000	4,716,000
	23,851,000	22,434,000
Expenses:		
Interest on investment certificates	7,752,000	7,457,000
General and administrative	11,013,000	9,960,000
Provision for losses on loans receivable	1,482,000	1,906,000
Provision for income taxes	1,408,000	1,069,000
	21,655,000	20,392,000
Net Income	$ 2,196,000	$ 2,042,000

The consolidated financial statements of Fireside Securities Corporation include the accounts of all its subsidiaries except an immaterial subsidiary which was sold during 1976. Loans receivable are stated net of unearned discount. Deferred income taxes are provided for timing differences in the recognition of income and expenses.

Taxable income of Fireside Securities Corporation and its subsidiaries is included in the consolidated income tax returns of Teledyne.

(16) Selected Quarterly Financial Data (Unaudited).

	Quarter Ended March 31, 1976	Quarter Ended June 30, 1976	Quarter Ended September 30, 1976	Quarter Ended December 31, 1976
Consolidated sales	$459,950,000	$481,877,000	$480,993,000	$514,736,000
Consolidated gross profit	$111,445,000	$120,593,000	$126,632,000	$141,717,000
Income of consolidated companies	$ 23,481,000	$ 27,611,000	$ 29,457,000	$ 32,706,000
Equity in net income of unconsolidated subsidiaries	9,827,000	4,261,000	4,910,000	2,626,000
Net income	$ 33,308,000	$ 31,872,000	$ 34,367,000	$ 35,332,000
Average shares outstanding:				
Primary	13,988,340	12,016,484	11,747,900	11,516,229
Fully diluted	14,668,955	12,582,509	12,145,195	11,909,385
Net income per share:				
Primary	$2.34	$2.61	$2.89	$3.03
Fully diluted	$2.28	$2.53	$2.83	$2.97

During the quarter ended December 31, 1976, the Company and an unconsolidated subsidiary charged to operations amounts representing costs in excess of net assets of purchased businesses since such excess represented no further value to the companies. This resulted in a decrease in net income for the quarter of $7,508,000.

(17) Supplemental Information on Replacement Cost (Unaudited). The impact of inflation on the costs of goods and services varied among the lines of business. The effects of such inflation, and the related effects on selling prices, are generally reflected in the results of operations over a relatively short period of time. The impact of inflation on the replacement cost of productive capacity, however, is usually more long-term in nature. In compliance with the rules of the Securities and Exchange Commission, the Company has calculated certain estimated replacement cost information for inventories, cost of sales, property and equipment and the related depreciation and amortization. This information will be presented in the Annual Report on Form 10-K of Teledyne, Inc. for the year ended December 31, 1976.

Consolidated Summary of Operations

For the three years ended December 31, 1976, and the two years ended October 31, 1973
(000's omitted except per share amounts)

	Year Ended December 31,			Year Ended October 31,	
	1976	*1975*	*1974*	*1973*	*1972*
Consolidated sales	$1,937,556	$1,714,972	$1,699,987	$1,455,499	$1,215,991
Consolidated gross profit	$ 500,387	$ 391,269	$ 328,793	$ 284,661	$ 236,327
Consolidated interest expense (Notes A and C)	$ 18,756	$ 22,254	$ 22,561	$ 22,166	$ 12,781
Consolidated provision for currency translation (Note A)	$ –	$ –	$ 5,110	$ 6,275	$ –
Consolidated provision for income taxes (Note B)	$ 123,000	$ 85,300	$ 64,200	$ 39,400	$ 29,300
Income of consolidated companies (Note E)	$ 113,255	$ 82,619	$ 62,826	$ 38,640	$ 30,833
Equity in net income (loss) of unconsolidated subsidiaries, after allocated expenses and income tax credits (Notes A and C)	21,624	19,087	(31,321)	27,343	28,452
Net income (Note E)	134,879	101,706	31,505	65,983	59,285
Dividend requirements of preferred stock	2,365	3,425	3,662	3,684	3,791
Net income applicable to common shareholders	$ 132,514	$ 98,281	$ 27,843	$ 62,299	$ 55,494
Net income per share (Note D):					
Primary	$10.79	$5.91	$1.27	$2.33	$1.54
Fully diluted	$10.52	$5.85	$1.27	$2.33	$1.54

The Company has paid 3% stock dividends applicable to the common stock during each of the years presented above; no cash dividends have been paid on the common stock. Management's discussion and analysis of the summary of operations is included in the letter to shareholders on page 14 of this Report.

Notes to Consolidated Summary of Operations

(000's omitted except for average share and per share amounts)

(A) Interest expense was $31,260 in 1976, $34,980 in 1975, $37,785 in 1974, $37,104 in 1973 and $20,618 in 1972, of which $12,504 in 1976, $12,726 in 1975, $15,224 in 1974, $14,938 in 1973 and $7,837 in 1972 was allocated to unconsolidated subsidiaries. Interest expense on long-term debt approximated total interest expense for all periods presented. In 1974 and 1973, the Company provided for the estimated effect of changes in exchange rates applicable to long-term debt repayable in foreign currencies; no such provision was required in other periods presented.

(B) The consolidated provisions for income taxes include the following:

	1976	*1975*	*1974*	*1973*	*1972*
Federal	$106,500	$71,200	$51,300	$30,800	$24,400
State	13,700	9,400	8,400	5,000	3,300
Foreign	2,800	4,700	4,500	3,600	1,600
Total	$123,000	$85,300	$64,200	$39,400	$29,300

	1976	*1975*	*1974*	*1973*	*1972*
Current	$116,200	$76,700	$55,100	$41,200	$26,000
Deferred	8,400	9,500	10,700	(400)	4,500
Investment credits	(1,600)	(900)	(1,600)	(1,400)	(1,200)
Total	$123,000	$85,300	$64,200	$39,400	$29,300

(C) Interest expense was allocated to unconsolidated subsidiaries based on the ratio of the Company's average investment in unconsolidated subsidiaries to the Company's average total capital. The Company's equity in net income of its unconsolidated subsidiaries includes net realized losses on sale of investments of $6,874 in 1976, $9,435 in 1975, $19,199 in 1974, $624 in 1973 and $1,071 in 1972.

The Company owned 95.3% of Unicoa Corporation at December 31, 1976, 91.6% at December 31, 1975, 90.9% at December 31, 1974, 90.2% at September 30, 1973 and 85.1% at September 30, 1972. The Company owned 100% of Argonaut Insurance Company for all periods presented.

(D) Primary net income per share is based on the weighted average number of shares of common stock and common stock equivalents outstanding during each year (12,317,279 in 1976, 16,815,639 in 1975, 23,080,029 in 1974, 27,448,442 in 1973 and 37,225,154 in 1972), including all convertible debt, Series B preferred stock and all dilutive options and warrants. Each common stock equivalent has been considered outstanding from the beginning of each year or date of issuance, and the related dividend requirement or interest has been eliminated. Fully diluted net income per share includes the potential dilution of the $6 series convertible preferred stock and the maximum potential dilution of outstanding options and warrants.

(E) In 1976, the Company changed its method of translating foreign currency transactions and foreign currency financial statements in accordance with Statement of Financial Accounting Standards No. 8. The principal effects of the change are to translate foreign currencies held and long-term debt payable in foreign currencies at current rates rather than historical rates. The effect of the change on the results of operations is not material for any period and, accordingly, the summaries of operations have not been restated.

In 1974, the Company extended its use of the last-in, first-out method of valuing inventory in order to reflect more accurately the results of operations by matching current costs against current revenues. As a result, income of consolidated companies and net income were reduced by $6,400, or $0.29 per share in 1974. Since inventories at the beginning of 1974 are the base inventories under the last-in, first-out method, there is no effect on the results of operations of prior years.

In order to meet current and future sinking fund requirements, the Company repurchased some of its long-term debt ($18,389 in 1976, $20,142 in 1975 and $59,071 in 1974). In addition, in 1976, the Company redeemed its 3½% subordinated debentures. The resulting gains and losses were included in the results of operations. These transactions resulted in an increase (decrease) in net income of $(1,181) or $(0.10) per share ($(0.09) fully diluted) in 1976, $3,362 or $0.20 per share ($0.19 fully diluted) in 1975 and $2,555 or $0.11 per share in 1974. In 1974, the Company realized a gain of $12,196 or $0.53 per share, after taxes, on the sale of assets of consolidated companies.

During 1976 and 1975, inventory quantities were reduced, resulting in liquidations of last-in, first-out inventory quantities. The inventories were carried at the lower costs prevailing in prior years as compared with the cost of current purchases. The effect of these last-in, first-out inventory liquidations was to increase net income by approximately $4,725 or $0.38 per share ($0.37 fully diluted) in 1976, and by approximately $6,150 or $0.37 per share ($0.35 fully diluted) in 1975.

Stock Price and Dividend Summary

Quarters	*1975 1st*	*2nd*	*3rd*	*4th*	*1976 1st*	*2nd*	*3rd*	*4th*
Common Stock*								
High	14⅛	24½	23⅞	22⅞	52⅛	68⅛	80½	78
Low	9⅝	9¼	16⅞	18¾	21½	41⅝	66½	58⅝
Dividend		3% Stock Paid in May				3% Stock Paid in May		
Preferred Stock								
$6 Cumulative Convertible Preferred Series								
High	57¼	58	62½	62	85¾	105	115	111½
Low	48¾	50	57¼	58	62	79	105	102
Dividend	$1.50	$1.50	$1.50	$1.50	$1.50	$1.50	$1.50	$1.50

**Prices have been adjusted for common stock dividends paid through May 27, 1976. Teledyne Common Stock and $6 Cumulative Convertible Preferred are listed on the New York and Pacific Coast Stock Exchanges.*

Revenue by Line of Business

(000's Omitted)

	Year Ended December 31,			Year Ended October 31,	
	1976	*1975*	*1974*	*1973*	*1972*
Industrial	$ 701,816	$ 613,347	$ 599,604	$ 487,775	$ 404,262
Aviation and Electronics	453,383	460,255	433,180	408,899	366,515
Specialty Metals	508,255	455,003	487,013	375,706	287,152
Consumer and Other	274,102	186,367	180,190	183,119	158,062
Consolidated Sales	1,937,556	1,714,972	1,699,987	1,455,499	1,215,991
Insurance and Finance	703,670	758,003	732,318	601,488	512,621
Total	$2,641,226	$2,472,975	$2,432,305	$2,056,987	$1,728,612

Net Income by Line of Business

(000's Omitted)

	Year Ended December 31,			Year Ended October 31,	
	1976	*1975*	*1974*	*1973*	*1972*
Industrial	$ 39,699	$ 36,788	$ 31,731	$ 13,374	$ 14,875
Aviation and Electronics	25,138	17,709	10,098	12,154	7,705
Specialty Metals	28,847	15,046	21,687	15,151	7,405
Consumer and Other	19,571	13,076	(690)	(2,039)	848
Consolidated Companies	113,255	82,619	62,826	38,640	30,833
Insurance and Finance	21,624	19,087	(31,321)	27,343	28,452
Total	$ 134,879	$ 101,706	$ 31,505	$ 65,983	$ 59,285

Industrial

Teledyne offers a wide variety of products, services and expendable materials that are used for industrial purposes. A major activity is the manufacture of air and water-cooled gasoline and diesel engines. These range from small, lightweight units widely used in lawn mowers, garden tractors and generators, to heavier units used in construction machinery and materials handling vehicles. The largest engines produced are heavy-duty, high-performance types used in military vehicles.

Another major category includes machines and related tooling for thread cutting, grinding, cut-off, gear-rolling, tube bending and forming, pressing, can-making, assembly of complex products, and manual and automatic welding of various types. Other types of automatic equipment are made for the bakery and chemical industries. In addition, Teledyne produces many types of dies, tool bits and other expendable tooling, as well as a complete line of welding rod and wire in various alloys.

Teledyne is active in the area of geophysics, providing instruments and services for seismology, oceanography, meteorology, pollution monitoring, rock and soil mechanics, and structural dynamics. One specialty is geophysical exploration on land and at sea to locate oil deposits for major oil companies. Teledyne also provides off-shore drilling services, as well as the fabrication and emplacement of off-shore oil production platforms.

Other miscellaneous industrial products and services include molded rubber products other than tires for the automotive industry, as well as solid rubber tires for materials handling equipment. In the nuclear field, Teledyne provides instruments and services for the detection, monitoring and analysis of radioactive materials, and thermoelectric generators for space and terrestrial use.

Aviation and Electronics

Teledyne is a leading producer of piston engines for the general aviation industry. In addition the company manufactures small turbojet engines for use in manned and unmanned aircraft, and in recently-developed turbojet-powered missiles.

The company designs and manufactures unmanned remotely piloted aircraft which are widely used as military target systems and in aerial surveillance, and provides support services for these products.

A broad range of products is made for commercial, military and general aviation aircraft. Among these are batteries, avionic devices and instrumentation, hydraulic fittings and hydraulic and pneumatic actuating systems, explosive-energy actuating devices and emergency aircraft escape systems.

Electronic activities include the manufacture of solid-state semiconductor components ranging from individual semiconductor integrated circuits through larger micro-electronic assemblies which may encompass the complete functions of a micro- or mini-computer. Other electronic components include traveling wave tubes and amplifiers, related microwave components, wire, cable harnesses and hardware.

Electronic systems for navigation, guidance, control, reconnaissance, information processing, electronic counter measures, computing, automation, monitoring, communications, radiolocation and telemetry are also designed and manufactured by Teledyne.

Specialty Metals

Teledyne produces specialty metal alloys that have precise metallurgical properties for use in various critical applications. Among these are zirconium and hafnium for use in the nuclear power generating industry. Zirconium is also used as the active agent in photographic flash bulbs and in corrosion resistant applications in the chemical industry.

Teledyne produces tantalum for use in the manufacture of electrical capacitors, and columbium for various aerospace applications. Molybdenum and vanadium are widely used as alloying ingredients in various types of high quality steel.

Titanium is produced as ingot, billet, bar and coil and finds widespread use in the aerospace industry where its strength and light weight are important.

Teledyne is also a specialist in the development and production of high speed and alloy steels for tools, dies, bearings, gears and specialized aerospace hardware.

Double vacuum-melted superalloys are produced for applications where high strength at high temperatures is required. The major use of these alloys is in aircraft jet turbine blades and related parts.

Sintered carbides of tungsten and other metals are produced for use in cutting tools, dies and wear-resistant surfaces in metal-working, mining and other industries.

In addition to producing metals, Teledyne also reduces various ferrous and non-ferrous alloys to finished forms, such as thin and ultrathin rolled metal strip, cold-finished bar and shafting, cold-drawn seamless and welded tubing, roll-formed shapes, forgings and castings.

Consumer and Other

Consumer product activities of Teledyne range from product development and manufacture to retailing and servicing.

Teledyne produces and markets the Water Pik* Oral Hygiene device and the Shower Massage by Water Pik, a shower head that can be adjusted to give a conventional or a pulsating spray of water. Under the name of Olson Electronics, Teledyne operates a chain of 83 stores in 15 states and a mail-order service for the retailing of electronic products to the consumer for home use. Teledyne Service Company has centers in 16 states for the servicing of electronic home entertainment products and appliances.

Other consumer activities include the manufacture of AR speakers by Teledyne Acoustic Research for sale in the domestic and international markets. Teledyne Laars manufactures swimming pool heaters and other equipment to heat buildings and supply hot water for commercial users.

Dental equipment, instruments and consumable products used by dentists, dental laboratories and dental schools are also manufactured and supplied by Teledyne.

Insurance & Finance

Argonaut Insurance Company and Teledyne's other casualty insurance companies write a broad line of insurance including workers' compensation, liability, automobile, homeowners, and fire insurance.

Unicoa Corporation, 95% owned by Teledyne, writes life and health and accident insurance. Fireside Thrift, a consumer finance company, operates in the states of California and Hawaii.

*Trademark

Historical Summary

	Consolidated Sales	Net Income	Net Income Per Share	Consolidated Assets	Shareholders' Equity	Average Common Shares
1976	$1,937,556,000	$134,879,000	$10.79	$1,204,783,000	$493,554,000	12,317,279
1975	1,714,972,000	101,706,000	5.91	1,138,479,000	491,309,000	16,815,639
1974	1,699,987,000	31,505,000	1.27	1,132,913,000	501,793,000	23,080,029
1973	1,455,499,000	65,983,000	2.33	1,232,408,000	537,815,000	27,448,422
1972	1,215,991,000	59,285,000	1.54	1,128,809,000	484,960,000	37,225,154
1971	1,101,872,000	57,425,000	1.44	1,066,772,000	608,118,000	38,537,709
1970	1,216,448,000	61,864,000	1.59	960,607,000	584,349,000	37,727,833
1969	1,294,775,000	58,119,000	1.57	938,133,000	501,961,000	36,310,205
1968	806,747,000	40,289,000	1.28	602,428,000	316,469,000	31,584,687
1967	451,060,000	21,256,000	0.88	336,714,000	152,603,000	24,702,866
1966	256,751,000	12,035,000	0.66	170,369,000	90,205,000	18,233,866
1965	86,504,000	3,402,000	0.36	66,544,000	34,765,000	9,167,605
1964	38,187,000	1,441,000	0.24	35,040,000	13,672,000	5,695,104
1963	31,925,000	731,000	0.14	23,901,000	8,629,000	4,665,260
1962	10,438,000	157,000	0.04	10,844,000	3,527,000	3,696,426
1961	4,491,000	58,000	0.02	3,731,000	2,477,000	2,765,827

As reported in the Company's annual reports, adjusted for stock dividends and stock splits. Years 1967 through 1975 are restated for certain accounting changes. Average common shares include common stock equivalents.

TELEDYNE, INC.

Board of Directors

HENRY E. SINGLETON, *Chairman and Chief Executive Officer, Teledyne, Inc.*

ROBERT C. JACKSON, *Honorary Chairman, Teledyne Ryan Aeronautical*

GEORGE KOZMETSKY, *Dean of the College of Business Administration of the University of Texas*

GEORGE A. ROBERTS, *President, Teledyne, Inc.*

ARTHUR ROCK, *Private Investor*

CLAUDE E. SHANNON, *Donner Professor of Science at Massachusetts Institute of Technology*

Officers

HENRY E. SINGLETON, *Chief Executive Officer and Chairman of the Board of Directors*

GEORGE A. ROBERTS, *President*

ROBERT S. BELL, *Vice President*

A. V. HOLMLUND, *Vice President*

JERROLD V. JEROME, *Vice President*

FREDERICK A. KAUFMAN, *Vice President*

RUSSELL L. KIERNAN, *Vice President*

LEO W. KILLEN, *Vice President*

J. SPENCER LETTS, *Vice President and Secretary*

G. WILLIAMS RUTHERFORD, *Vice President*

BARRY J. SHILLITO, *Vice President*

TECK A. WILSON, *Vice President*

CHARLES E. RINSCH, *Treasurer*

Corporate Offices

1901 Avenue of the Stars

Los Angeles, California 90067

Transfer Agents

Bank of America N.T. & S.A.

Corporate Agency Service Center

P.O. Box 37002

San Francisco, California 94137

United States Trust Company of New York

45 Wall Street

New York, New York 10005

Registrars

Security Pacific National Bank

One Embarcadero Center

San Francisco, California 94111

Citibank, N.A.

111 Wall Street

New York, New York 10015

TELEDYNE, INC.