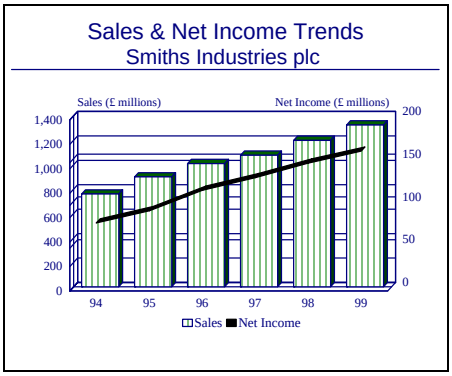
Smiths Industries plc - Archived 3/2002

Outlook

- The company continues to fund modestly sized acquisitions to fuel growth
- Could fund an acquisition in the realm of $1 billion
- Large candidates that fit Smiths Industries portfolio are difficult to come by



Headquarters

Smiths Industries plc
765 Finchley Road
Childs Hill, London, UK NW11 8DS
Telephone: (44 181) 458 32 32
Web site: http://www.smiths-industries.com

Smiths Industries Ltd began operations in 1851 as a small precision manufacturing company. It has evolved over its 131-year history into a multinational organization with over 50 subsidiaries. In July 1981, Smiths Industries Ltd re-registered as Smiths Industries plc in accordance with the Companies Act of 1980. Smiths Industries is today primarily manufactures electronics, medical systems, and light engineering products.

The company is structured in three major groupings: Aerospace, Medical Systems, and Industrial. The Industrial group is the remains of the original company. Each of these groups is treated as financially independent, responsible for its own product line and profit margins.

The Aerospace group manufactures a large array of products from weapons-aiming systems, to engine-control systems, to aircraft instruments. The other groups also develop and manufacture a wide range of products. The focus of this report will be primarily on the Aerospace operations, since this group is responsible for all defense contracts within the company. Smiths' worldwide market includes over 550 airlines and air forces operating more than 200 different types of aircraft in over 150 countries. The firm employs approximately 14,400 persons worldwide.

Structure and Personnel

Executive Directors

Keith Butler-Wheelhouse
Chief Executive
John Ferrie
Chairman, Aerospace Group
Lawrence Kinet
Chairman, Medical Systems
Einar Lindh
Chairman, Industrial Group
Alan Thomson
Financial Director

Senior Management

Aerospace Group

John Ferrie
Chairman, Aerospace Group
Brian Knight
Director & Group Controller
Doug Clark
President, Sensors & Components
Phil Collins
Director, Technology
Ian Donovan
Aerospace Group Director
George Donovan
VP, Government Liaison, USA
Robert Ehr
President, Information Management Systems
Michael Jones
Group Director, Operational Support
John Legg
Managing Director, Product Support
David Sheppard
Managing Director, Naval & Marine
Bill Mawer
Director, Marketing
Nick Wilton
Managing Director, Display & Control Systems

Product Area

Smiths Industries plc is a world leader in the broad fields of aerospace electronics, medical systems and specialized industrial products. The firm is structured into three major groups: the Aerospace Group, the Medical Group, and the Industrial Group. The company is organized as follows:

1. Aerospace Group
1.1 Smiths Industries Aerospace
1.1.1 Information Management Systems
1.1.2 Display & Control Systems
1.1.3 Naval and Marine
1.1.4 Detection and Protection Systems
1.1.5 Electro-mechnical Systems and Components
2. Medical Systems Group
2.1 Smiths Industries Medical Systems
3. Industrial Group
3.1 Electrical & Electronic Interconnect
3.2 Specialist Tubing & Polyurethane Technology

Aerospace Group. Through the Aerospace Group, Smiths' largest operating segment, the firm produces the following systems and components: flight control systems, including autopilot and autothrottle control, landing and take-off assistance, and emergency landing assistance; engine monitoring systems, which provide statistics regarding engine performance, fuel usage, and overall engine stability; weapons aiming systems; and display systems covering all head-up, head-down, flat panel, and digital readout displays. Smiths is most well known for its advanced display technology, in which it holds a strong market share.

Medical Systems Group. Through its Medical Systems Group, Smiths Industries plc manufactures surgical equipment, including sterilizers; surgical instruments and operating room equipment; and single-use disposable and needle-guard devices for safe disposal of hypodermic needles.

Industrial Group. Smiths Industries' Industrial Group produces data transmission equipment such as cables for microwave transmissions and transmission connectors, and high-integrity electronic connectors for aerospace computers. This operating group also provides flexible hoses for liquid applications, suction and discharge hoses, home security products, spark plugs, fan systems for air circulation, and hydraulic equipment for industrial and automotive uses.

Facilities

Smiths Industries Aerospace, 765 Finchley Road, Childs Hill, London, NW11 8DS. Telephone: (44 181) 458 32 32. Web site: http://www.smithsind-aerospace.com This is the headquarters for the aerospace operations.

Display and Control Systems Division, Cheltenham, Gloscestshire, GL52 4ZA, United Kingdom. Telephone: (44 1242) 67 33 33. Cheltenham is Smiths Industries Aerospace's key facility in the UK.

Customer Services Division, Bishops Cleeve, Cheltenham, Gloscestshire, GL52 4SF, United

Kingdom. Telephone: (44 1242) 67 33 55. This operation provides maintenance and support for airframe constructors, airline operators and military forces.

Kelvin Hughes Ltd, New North Road, Hainault, Ilford, Essex, IG6 2UR, United Kingdom. Telephone: (44 20) 8500 10 20. Web site: http://www.kelvinhughes.co.uk This operation encompasses the company's Naval & Marine division and is responsible for all naval, marine, and radar products.

Smiths Industries Aerospace, Suite 1100, 1225 Jefferson Davis Highway, Arlington, VA 22202 USA. Telephone: (703) 416-9400. This is the company's US representative headquarters.

Smiths Industries Clearwater, PO Box 5389, 14000 Roosevelt Blvd, Clearwater, Florida 34622 USA. Telephone: (813) 536-1810. Major products include: cockpit displays, high-resolution mission data displays, and control display units; Graphics data processing; fuel management and measurement systems; and logistics support. Smiths Industries Product Support North America is also located at the Clearwater facility.

Smiths Industries Aerospace, 7-9 Vreeland Rd, Florham Park, NJ 07932 USA. Telephone: (973) 822-1300. The Florham Park facility develops and produces weapons control and management systems, airborne recording systems, digital communications equipment, data management systems, air data systems, prognostic and diagnostic systems, automated test systems, and electrical load management systems.

Smiths Industries Aerospace, Grand Rapids Division, 3290 Patterson Avenue, Grand Rapids, MI 49512 USA. Telephone: (616) 241-7000. This is the headquarters of the Information Management Systems Division operations. Key products include: flight management computer systems and the self-contained navigation systems; data transfer systems, flight recorders, and health and usage monitoring systems; compass attitude and heading reference systems and land navigation systems; stores management systems; and navigation attack systems.

Smiths Industries Aerospace, Malvern Division, 255 Great Valley Parkway, Malvern, PA 19355 USA. Telephone: (610) 296-5000. The Malvern site's products include AMLCD flat panel displays, advanced digital displays, fuel measurement systems and traditional analog flight instruments.

Corporate Overview

Smiths Industries is an engineering company focused on three sectors: advanced aerospace electronics, medical systems, and specialized industrial products. During the 1990s the company initiated a targeted acquisition program aimed at allowing Smiths Industries to expand it core businesses into units that are roughly equal in size. This has better prepared the company for the cyclical nature of some its industries, Aerospace in particular.

New Products and Services

New Airbus Flight Management System. In February 1999, British Airways joined a growing list of airlines to use the new Flight Management System (FMS), developed by Sextant Avionique and Smiths Industries, for Airbus Industrie. Other international airlines selecting this system include Air France, America West, Asiana, China Northwest, China Southwest, US Airways and one undisclosed US major. They have chosen the new FMS both for future production aircraft and for retrofit of existing Airbus Industrie fleets. These airlines will operate more than 1,000 (options included) A319/A320/A321 and A330/A340 aircraft, including those now in service and on order. The A330/A340 version will be certificated in year 2000. One of the most noteworthy features of the new FMS is Sextant Avionique's multifunction control and display unit (MCDU), featuring color active-matrix crystal display (AMLCD) technology. The system is compatible with all A319/A320/A321 and A330/A340 aircraft. According to the companies, Sextant's new MCDU means that airlines need only a single part number for all of these aircraft, providing significant inventory savings over the multiple part number MCDUs used in the current flight management system.

Plant Expansion/Organization Update

New Divisional Structure. In March 1998, Smiths Industries reorganized its Aerospace division along product lines. Under the new structure, Smiths Industries Aerospace will comprise five divisions: Information Management, Displays & Control Systems, Sensors & Components, Naval & Marine, and Product Support. These new units replace existing divisions dealing separately with civil and defense. According to the company, the old structure was no longer appropriate at a time when technologies developed for commercial aircraft are being applied increasingly to military equipment.

Mergers/Acquisitions/Divestitures

Aerospace Acquisitions. In February 2000, Smiths Industries acquired the Actuation Systems subsidiary of BAE Systems North America for $100 million (£63 million) in cash. This follows the $175 million acquisition of the aerospace division of Invensys plc, completed at the end of January. Together, these deals support the development of a key product area for Smiths Industries Aerospace – the control and management of aircraft utilities.

The acquisition of Actuation Systems extends Smiths Industries' control technologies into systems located throughout the aircraft. Through its growing involvement in these utilities, the company aims to strengthen its position as a first-tier supplier of highly integrated systems to the aircraft prime manufacturers. Actuation Systems is a US supplier of electrically operated actuators that provide control for utility systems on commercial and military aircraft, and military land vehicles. The company, Marconi Actuation Systems Inc, employs 290 people located at Whippany, New Jersey, and joined BAE Systems last year. Sales by Actuation Systems for the year to March 31,1999 were $46.8 million, on which it earned profits of $9.4 million before interest and tax.

Prior to this purchase, Smiths Industries bought Invensys plc for a total of $175 million (£109 million) in December 1999. The business, based in the United States, specializes in products for electrical power management and aircraft utilities. The most widely recognized trading name in the acquisition is Barber-Colman Aerospace, which makes complete environmental control systems for aircraft. This capability is a logical extension to the total utilities management systems supplied by Smiths Industries for both civil and military aircraft. Other units within the business being acquired include: Aerospace Avionics, making power conversion units and cockpit warning panels, primarily for military applications; Lambda Advanced Analog, making hybrid circuit power supplies for spacecraft, military and industrial use; Lambda Novatronics, making special-application electronic power systems; and Tech Development, making turbine air motors. The business being acquired employs 850 people at four main locations in New York, Illinois, Ohio and California. Sales and profits (before interest and tax) recorded by the Invensys aerospace division, in the 12 months ending September 30, 1999, were $120 million and $19 million, respectively.

ETG Acquired. In June 1999, Smiths Industries announced its intent to acquire Environmental Technologies Group Inc (ETG), a US manufacturer of sensors and integrated systems that detect harmful biological and chemical substances. ETG is a privately owned company which was purchased for $14 million in total, including net debt and assumed liabilities of $5.6 million. Based in Baltimore, Maryland, ETG employs 100 people. According to Smiths Industries, this is the first acquisition by Smiths Industries in this product area in North America, and builds on the monitoring equipment activities of Graseby Dynamics, based in Watford, Herts. This acquisition strengthens its market position internationally, notably its on-shore market access in the USA. Both ETG and Graseby Dynamics hold significant contracts with the US Department of Defense.

Strategic Technology Systems Acquired. In May 1999, Smiths Industries completed its $14.5 million acquisition of Strategic Technology Systems Inc (STSI), following receipt of US regulatory approval. STSI supplies health and usage monitoring systems (HUMS), principally for helicopters, and onboard stores management products for military aircraft. HUMS continuously check the performance of safety-critical components, improving safety by providing advance warning of potential equipment failures. Stores management provides electronic control of aircraft weapon systems. Based in Trenton, New Jersey, STSI employs 80 people, and will be managed by Scott Gravelie, who is VP Mission Management Business Operations for Smiths Industries Aerospace, Information Management Systems division.

Entraco Acquired. In December 1998, Smiths Industries acquired Entraco (Engineered Transitions Company Inc), based near San Francisco, California. Entraco was a privately owned company manufacturing electrical interconnect systems and components. It was acquired for $7.7 million, including assumed debt of $2.6 million. Entraco supplies rugged cable and conduit assemblies, fittings, and connectors used principally in military and civil transport applications.

Stewart Hughes Acquired. In November 1998, Smiths Industries acquired Stewart Hughes Ltd, based in Eastleigh, Hampshire – a company specializing in the design and development of diagnostic systems for the aerospace industry. Stewart Hughes will add to the range of technologies used in health & usage monitoring systems (HUMS) for helicopters and fixed-wing aircraft, an important growth area for Smiths Industries Aerospace. Stewart Hughes, which employs 55 people, was acquired for £8.3 million in cash.

Transtector Systems Acquired. In October 1998, Smiths Industries added to its range of Interconnect businesses with the acquisition of Transtector Systems Inc, a US manufacturer of devices to protect sensitive electronic equipment from surges in power. Smiths Industries paid $35.5 million for the business, in cash, including the assumption of debt of $3.5 million. Based

in Hayden Lake, Idaho, Transtector employs 155 people who design and manufacture of surge suppressers, principally for AC power protection but also to safeguard data-lines and telephone circuits.

Biochem Int'l Acquired. In October 1998, Smiths Industries agreed to acquire Biochem International Inc (BCI) for $83 million. BCI is a major US manufacturer of non-invasive, vital signs monitoring equipment and a leader in the field of hand-held pulse oximeters. The acquisition will expand Smiths Industries Medical Systems business.

SPS Acquired. In September 1998, Smiths Industries expanded one of its key aerospace activities, the development and supply of health & usage monitoring systems (HUMS), through the acquisition of the Signal Processing Systems division (SPS) of Global Associates Ltd. Based in San Diego, California, and employing 160 people, SPS is a specialist manufacturer of diagnostic systems and acoustics & monitoring equipment for the aerospace industry. The purchase price for SPS was approximately $10 million in cash.

Non-Core Graseby Units Sold. In March 1998, Smiths Industries plc reached agreement to sell its Graseby Product Monitoring and Environmental Divisions to Thermo Electron Corporation for £44 million in cash. The Product Monitoring Division comprises Graseby's contaminant detection and contact coding businesses, while the Environmental Division includes the infrared and the environmental monitoring instruments businesses. The sale was completed in June 1998.

Teaming/Competition/Joint Ventures

RADA Electronic Industries. In July 2000, Smiths Industries Aerospace and RADA Electronic Industries Ltd signed a Memorandum of Understanding to develop a teaming agreement for the development, production and marketing of a Data Acquisition System/Voice and Data Recorder (DAS/VADRr) and associated ground support systems. This effort will form the basis of a Data Center/Aircraft Information Management Network (AIM Net) that will be offered for military aircraft throughout the world. The two companies' initial target for the DAS/VADRr will be the F-16 Peace Marble V program for the Israel Air Force. The initial program includes 50 F-16I aircraft with an option for 60 more. Bench and flight tests for the program will take place in 2002, with deliveries in 2003.

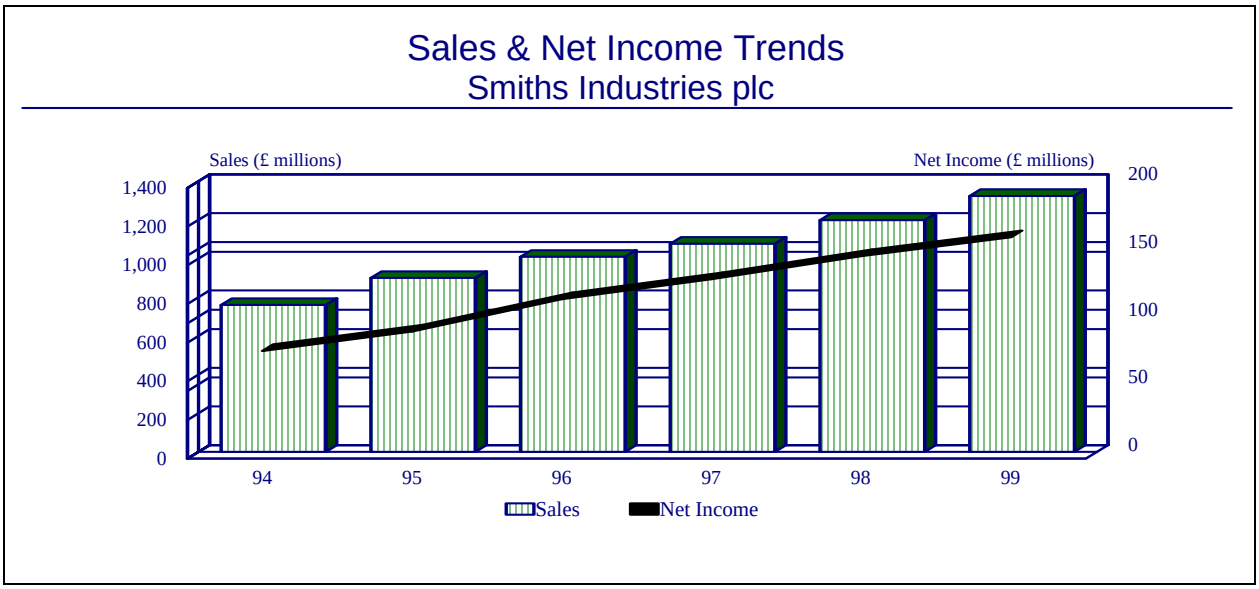
GSS Sealand Ltd. In September 1996, GEC-Marconi, Smiths Industries Aerospace, and SERCo formed a joint venture company, GSS Sealand Ltd, which has prepared and submitted a competitive bid for the operation and management of RAF Sealand, located near Chester, on Deeside. The joint venture brings together UK providers of avionics maintenance, test equipment and facility management. The contract involves the transfer of well-qualified (existing) staff and extensive facilities.

Rockwell. The most recent teaming is that of Smiths' Aerospace Group with Rockwell International's Collins Avionics & Communications Division, Cedar Rapids, Iowa, USA, with the aim of developing integrated flight deck avionics for commercial transports. The teaming comes in the wake of both companies' unsuccessful bid to develop the Boeing 777 flight deck. Smiths will merge its experience in providing flight management systems for both the Boeing 737 and Airbus A310 with Collins' experience in producing flat panel cockpit displays, which also complement Smiths' smaller line of flat panel instrumentation.

Financial Results/Corporate Statistics

Smiths Industries posted 1999 income of £163.5 million on sales of £1.3 billion. Latest year statistics are provided below. US dollar figure translated as a 1999 average at the rate of £1 = US $1.6182.

Y/E July 31	1995	1996	1997	1998	1999	1999
(£ millions)						**US$**
Net Sales	899.3	1008.4	1076.2	1198.5	1323.9	2142.3
Net Income	93.9	117.8	132.6	149.6	163.5	264.6
R&D Expenditures	119.0	107.0	104.3	118.5	127.0	205.5

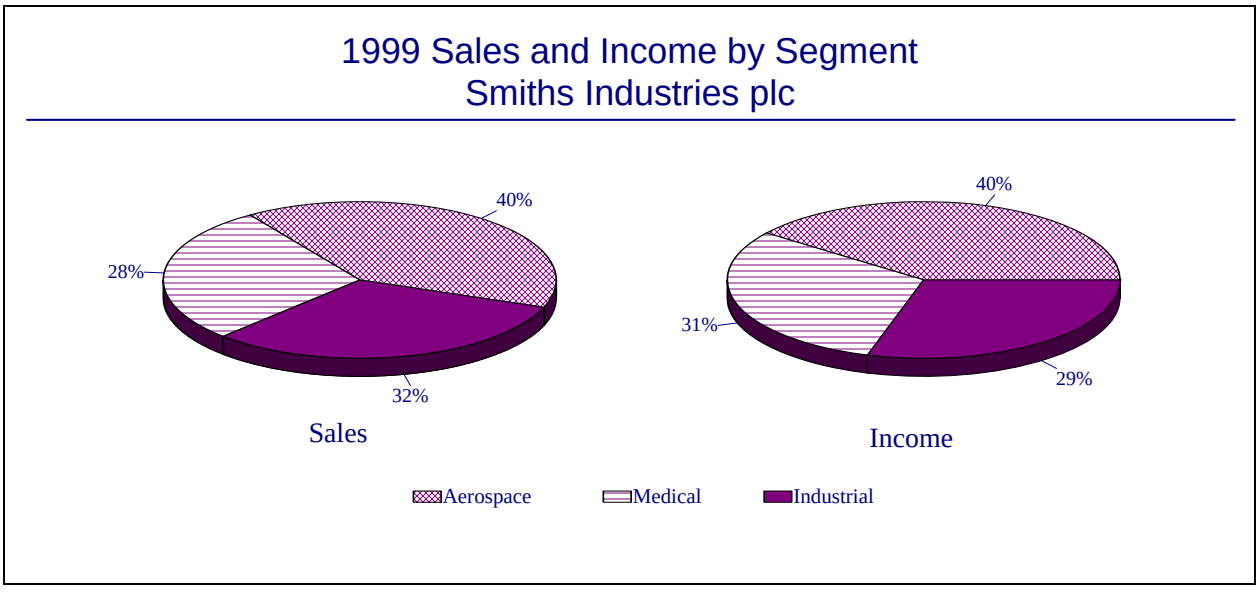


Industry Segments

A breakdown of Smiths Industries' sales by major market segment for the past five years is given below.

SALES	1995	1996	1997	1998	1999
(£ millions)					
Aerospace	374.2	377.1	413.5	463.0	528.5
Medical Systems	275.4	303.3	306.4	344.4	376.2
Industrial	249.7	328.0	356.3	391.1	419.2
TOTAL	**899.3**	**1008.4**	**1076.2**	**1198.5**	**1323.9**

OPERATING INCOME	1995	1996	1997	1998	1999
(£ millions)					
Aerospace	40.3	45.3	59.3	77.0	98.5
Medical Systems	63.0	73.1	74.7	74.7	76.0
Industrial	37.6	49.7	60.6	72.5	73.0
TOTAL	**140.9**	**168.1**	**194.6**	**224.2**	**247.5**



Strategic Outlook

Few companies have performed as well as Smiths Industries plc has in the past decade. The company continues to be a leader in the markets of military and civilian aerospace electronics, medical supplies, and large industrial projects such as ducting. Due to this diversified product base the company has consistently posted a profit, even in some of the worst years of the global aerospace industry.

Over the past few years, the company has embarked on a series of modestly sized acquisitions to fuel growth. These deals have been focused in the niche areas where the company excels, especially chemical agent detection and health and usage monitoring systems (HUMS) for aircraft. Not only has the company strengthened its position in the markets but it has also solidified its presence in the US, where most of this acquisition activity has taken place.

With such tight management and a clear strategy for the future, the outlook of Smiths Industries plc remains stable. Due to the firm's diversity, it is well-cushioned against any drop in defense spending. However, to increase profits further, the company may have to step up its efforts in the markets it serves. The company sales and income have maintained a comfortable stability over the past five years. To grow substantially, Smiths would have to take a more aggressive stance and more vigorously pursue larger acquisitions.

Prime Award Summary

Unavailable

Program Activity

Business Interests. Smiths Industries is involved in the following areas of business:

- Aerospace/Defense Systems
- Flight Control Systems
- Engine Systems
- Weapon Aiming Systems
- Display Equipment
- Medical Systems
- Anesthesia Analysis Kits
- Sterilizers
- Surgical Instruments
- Operation Theater Equipment
- Industrial Systems
- Data Transmission Equipment
- Microcircuitry
- Ceramics
- Environmental Control Equipment
- Measuring Equipment
- Hydraulic Equipment
- Industrial Rubber & Plastic Material

Aircraft Subsystems

Flight management systems, automatic flight control systems, engine control and monitoring systems, flight deck and cockpit displays, attitude and heading reference systems, aircraft instrumentation head-up displays, weapon aiming systems, communications and lighting equipment, and data management systems for the following aircraft are made by Smiths Industries Aerospace and Defense group: F-22, C-130, F-4, F-14, F-18, A-6, E-2, C-2, EA-6, F-15, Hawk 100/200, Jaguar, A-7, JA-37, Tornado, EH-101, Black Hawk, Sea King, Apache Longbow, all Boeing transports from the 727 to the 777, ATP, A300, A310, A320, MD-10, MD-80, BAe 146, Concorde, F-28, F-50, and F-100. Not all subsystems mentioned above are fitted on all aircraft listed, such as a weapon-aiming system on a commercial aircraft. Some of the more unique subsystems are explained below.

New head-up, head-down, and weapon-aiming systems are being fitted to BAe Hawk fighters and trainers. Smiths produces multifunctional head-down displays for the AV-8B and F-18, and has begun work on a multifunctional head-down color display for the Italian/ Brazilian AMX fighter.

Engine-monitoring equipment is being fitted to the Super Puma helicopter, and variants of this system are applicable to all types of airframes and engines.

Navigation computation systems, such as the Self-Contained Navigation System, are being made for the USAF C-130 Hercules. Work has also been completed on an automatic flight control and flight instrumentation system for the EH-101 helicopter.

Traffic Alert and Collision Avoidance System (TCAS II), produced by Smiths, is used in many commercial and military aircraft to avoid mid-air collisions. Public Law 100-223 requires all aircraft with 30 or more seats that fly over American airspace to be equipped with TCAS II.

Fuel-quantity-indicating systems which were previously installed on Lockheed C-130 and Boeing 737/747 aircraft are now being retrofitted on older aircraft. For example, in 1987, retrofitted digital fuel quantity indicating systems were installed on the USAF's F-4 Phantom aircraft, with over 1,700 units shipped.

Stores management systems, used on combat aircraft to manage the release of bombs, missiles and pods, have been fitted to F/A-18, F-14D, and AV-8B/GR5. These systems not only inventory stores, but also provide Built-in-Test (BIT) for assessment of the operational status of the system.

Smiths has been awarded the contract to provide integrated electrical load management systems and fuel-quantity-indicating systems for Boeing's 777 family.

The BAe Jetstream 41 is being equipped with the new solid-state engine instrumentation and fuel-measurement systems.

Space Subsystems

Smiths provides five subsystems for the Space Shuttle: the Engine Interface Unit, mission timers, event timers, FM signal processor, and ground control interface logic controller. The Engine Interface Unit (EIU) uses triple digital processing to interface between the shuttle's general-purpose computers and the engine controllers. Three EIUs are used for the three main shuttle engines. The mission and event timers are used to measure time before launch and during mission, and also to provide timing for preflight and flight events. The FM signal processor works directly with the ground control interface logic controller to maintain communication in all video, digital and analog formats between the shuttle and Earth.

Vehicle Subsystems

The vehicle navigation aid system (VNAS) is another product manufactured and developed by Smiths Industries. VNAS is a gyro-based navigation system which requires no external signals or references, and is used in such vehicles as the M1 and M60 tanks, the M2 Bradley, the M113 Personnel Carrier, the Light Armored Vehicle (LAV), and Fast Attack Vehicles (FAV) under combat speeds both day and night.

Inertial navigation systems built by Smiths have been installed in the M1A2 tank. These systems will give the driver a display with destination and way-points and a "drive-to" indication. The driver will no longer have to navigate the tank remotely.

Naval Subsystems

Smiths produces instruments and navigational equipment to fit ships as well. Naval defense systems, navigation systems, electronic displays, and weapon systems are among its products. SNAPS (Ship Navigation and Processing Systems) have been selected as the standard fit for the Royal Navy surface ships and submarines. VIPU (Versatile Instrument Panel Unit), a solid-state digital display, is also used on submarines.

Radar

Smiths is currently working on a River Radar which was developed by Kelvin Hughes Ltd, a leader in naval radar systems. This new radar will aid Dutch and German barge operators in navigating the Rhine and Danube.

The Concept Navigation Radar with an automatic plotting aid, also called standard navigation plotting table, has been sold to commercial marine fleets, including Eastern Europe, and to the Royal Navy, and is being investigated by the US Navy.

Support

A Computer Aided Logistic Support (CALS) is a system which is designed to support equipment such as head-up displays, and is now a contractual requirement for major US Defense Department projects.

Medical Systems

The Medical Systems Group offers a large array of products which fall mainly under the category of "single-use" products. Among the products offered by this division are the following: endotracheal and tracheotomy tubes and connector systems; breathing and resuscitation systems; epidural anesthesia kits; thoracic and general wound drainage devices; foley and specialized balloon catheters; operating tables; electrosurgery and suction systems; steam autoclaves for hospitals and dental surgeries; blood pressure transducers; and single-use needle guards for hypodermic needle disposal.

Industrial

Smiths Industries plc produces and installs the following industrial products: flexible ducting; air-conditioning and ventilation; conduit systems for cable protection; home security and lighting products;

electrical and electronic time switches; fan systems for domestic appliances and ventilation systems; hydraulic power packs for industrial and automotive use; specialized polyurethane products for printing and other applications; and ignition products and isostatic presses for the manufacture of ceramic products and spark plugs.

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