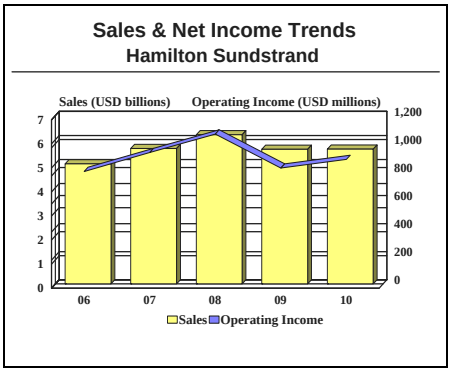
Hamilton Sundstrand

Outlook

- For 2010, Hamilton Sundstrand posted sales of $5.6 billion, relatively unchanged from 2009
- Boeing and Airbus both announced production rate increases in some of their product lines, which bodes well for the future
- Hamilton Sundstrand is aggressively moving into China via teaming and partnerships as it seeks to gain a foothold in that country's growing aerospace industry



Headquarters

Hamilton Sundstrand
One Hamilton Rd
Windsor Locks, CT 06096
Telephone: + 1 (860) 654-6000
Web site: www.hamiltonsundstrand.com

The company's roots date to 1929 when United Aircraft & Transport Corporation, the predecessor to today's United Technologies, consolidated Hamilton Aero Manufacturing and Standard Steel Propeller into the Hamilton Standard Propeller Corporation. In 1949, in an effort to expand its scope, Hamilton Standard broadened its interests beyond propellers to other aircraft components and accessories. As part of the diversification, the company eliminated the word *Propellers* from its official title and became known as Hamilton Standard Division, United Aircraft Corporation.

In the 1970s, United Aircraft (under the leadership of Harry Gray) was renamed United Technologies Corporation (UTC).

In 1999, UTC acquired Sundstrand, further bolstering its aircraft subsystem operations. Sundstrand was then combined with UTC's Hamilton Standard to create today's Hamilton Sundstrand.

Hamilton Sundstrand employs approximately 16,877 people.

This is a report on a subsidiary. For details on the parent corporation, please see the "United Technologies" report.

Structure and Personnel

Alain M. Bellemare
President, Hamilton Sundstrand
Lee Annecchino
Vice President, Quality
Robert J. Bailey
Vice President, Finance and Chief Financial Officer
Matthew Bromberg
Vice President & General Manager, Customer Service
Dave Carter
Vice President, Engineering & Technology
Danny Di Perna
Vice President & General Manager, Auxiliary Power Systems
John Doucette
President, Industrial
Michael Dumais
Vice President, Operations
Brent Ehmke
Vice President & General Manager, Kidde Aerospace & Defense
David Gitlin
President, Aerospace Customers & Business Development

Hamilton Sundstrand

Steve Peery
Vice President & General Manager, Engine & Control Systems
Tom Pelland
Vice President & General Manager, Air Management Systems
Robert Leduc
President, 787, Space Systems & U.S. Classified Programs
Joe Santos
Vice President & General Counsel
Tom Saxe
Vice President and General Manager, Actuation and Propeller Systems
Andreas Schell
President, Electric Systems
Tatsuo Shirane
Vice President, Human Resources
Lisa Szewczul
Vice President, Environment, Health and Safety
Larry Volz
Vice President, Information Technology & eBusiness

Product Area

Hamilton Sundstrand, a subsidiary of United Technologies, designs and manufactures aerospace systems for commercial, regional, corporate, and military aircraft, and is a major supplier for international space programs. Hamilton Sundstrand's business units are divided into three major areas: Aerospace, Industrial, and Space Systems. Operations are believed to be grouped as follows.

1. Hamilton Sundstrand
1.1 Aerospace
1.1.1 Actuation Systems
1.1.1.1 Claverham Group
1.1.2 Air Management Systems
1.1.2.1 Nord-Micro
1.1.3 Auxiliary Power Systems
1.1.3.1 Revima APU
1.1.4 Electric Systems
1.1.4.1 Page Aerospace Ltd
1.1.4.2 HS Elektronik Systeme GmbH
1.1.5 Engine & Control Systems
1.1.5.1 HS Marston
1.1.5.2 Precision Engine Controls
1.1.6 Kidde Aerospace & Defense
1.1.7 Propeller Systems
1.1.7.1 Ratier-Figeac
1.1.8 Space Systems
1.2 Industrial
1.2.1 Milton Roy Company
1.2.2 Sullair Corporation
1.2.3 Sundyne Corporation
1.3 Space Systems
1.3.1 Space Systems
1.3.1.1 Human Space
1.3.1.2 Extravehicular Activity (EVA)
1.3.1.3 Missile & Launch Vehicle Systems
1.3.1.4 Satellite Systems
1.3.2 Land Systems
1.3.3 Sea Systems
1.3.3.1 Submarine Systems
1.3.3.2 Underwater Propulsion
1.3.4 Homeland Security Systems

A sampling of the Aerospace division's products include electric power generating, distribution, management and control systems; fuel and special fluid pumps; engine control systems; gearboxes; primary and secondary flight controls and actuation systems; ram air turbine emergency systems; auxiliary power units; environmental control systems; propeller systems; torpedo propulsion systems; launch vehicle hydraulic power units; and electronic controls and components.

Actuation Systems supplies electric- and hydraulic-powered actuation systems, including high-lift systems, horizontal stabilizer actuators, and utility actuation systems for both commercial and military applications.

Air Management Systems provides air management systems and fans. Air Management products include air conditioning systems, liquid cooling systems, temperature control systems, pressurization control systems, ventilation control systems, electric fans, ice protection, humidification, and fuel-tank inerting systems.

Auxiliary Power Systems designs and manufactures a variety of products for commercial and military aircraft. Products include airborne auxiliary power units and ground power units, small expendable and recoverable turbojet propulsion systems, as well as fans and vapor cycle cooling systems.

Electric Systems produces electric power systems for commercial, regional, business, and military aircraft. Products include main and emergency power generation, power conversion and motor control, power distribution, and aircraft utilities management.

Engine & Control Systems provides complete engine externals packages. Products include fuel systems, engine control systems, and gearbox and lube systems.

Kidde Aerospace & Defense is responsible for fire protection and safety systems for commercial and military aviation and for commercial and military ground vehicle applications.

Aerospace

Propeller Systems designs and produces complete propeller systems for commercial turboprop aircraft. Through Ratier-Figeac, the unit also produces cockpit controls and provides door dampers, propeller and rotor brake systems.

Space Systems provides integrated system solutions to support NASA, the U.S. Military, and Department of Homeland Security. The unit manufactures and maintains the U.S. space suit and a large variety of equipment for the Space Shuttle. Systems integration applications include the complete thermal, environmental, and life support, and electric power distribution and control systems for the new Orion Crew Vehicle.

Industrial

This unit comprises three companies: the Milton Roy Company (metering pumps and systems), Sullair Corporation (compressors), and Sundyne Corporation (pumps).

Space Systems

The Space Systems segment provides integrated systems used in marine, land, missile, expendable and reusable launch vehicles, and human space exploration, as well as unmanned satellites and spacecraft.

Space Systems focuses on technologies utilized in human space flight, including space suits, launch systems, surface habitats, in-situ resource utilization, and human/robotic systems integration. The unit also develops missile and launch vehicle systems such as thrust vector control actuation systems, propellant storage and management assemblies, turbine power systems, power generation, control & distribution systems, and flight control actuation systems. Finally, the unit also provides satellite systems components.

Land Systems leverages technologies developed for NASA to provide fresh solutions for both military and civilian applications. Current programs range from water generation systems to solar power energy systems.

Sea Systems produces submarine environmental systems as well as propulsion systems for torpedoes.

Homeland Security Systems supports the Department of Homeland Security (DHS) in the Chemical and Biological Countermeasures arena. It produces chemical and biological sensor systems and is developing a prototype multi-vehicle mobile chemical detection laboratory that includes analytical equipment for chemical warfare agent (CWA) and toxic industrial chemical (TIC) analysis.

Facilities

Hamilton Sundstrand, One Hamilton Rd, Windsor Locks, CT 06096. Telephone: + 1 (860) 654-6000. Most of the company's operations are located at this campus.

Web site: www.hamiltonsundstrand.com

Hamilton Sundstrand Electric Systems, 4747 Harrison Ave, Rockford, IL 61125. Telephone: + 1 (815) 226-6000.

Hamilton Sundstrand Power Systems, 4400 Ruffin Rd, San Diego, CA 92186-5757. Telephone: + 1 (858) 627-6565.

Web site: www.hs-powersystems.com

HS Marston Aerospace Ltd, Wobaston Rd, Fordhouses, Wolverhampton, WV10 6QJ, England, U.K. Telephone: + 44 0 1902 572777.

Web site: www.hsmarston.co.uk

Ratier-Figeac, Route de Cahors, BP 2, 46101 Figeac Cedex, France. Telephone: + 33 0 5 65 50 50 50.

Web site: www.ratier-figeac.com

Nord-Micro AG & Co OHG, Victor-Slotosch-Strasse 20, Frankfurt/Main, 60388, Germany.

Web site: www.nord-micro.de

Kidde Aerospace & Defense Corporation, 4200 Airport Dr, Wilson, NC 27986. Telephone: + 1 (252) 237-7004.

Web site: www.kiddeaerospace.com

Precision Engine Controls, 11661 Sorrento Valley Rd, San Diego, CA 92121. Telephone: + 1 (858) 792-3200.

Web site: www.precisioneng.com

Claverham Limited, Claverham, Bristol, BS49 4NF, United Kingdom. Telephone: + 44 0 1934 835224.

Web site: www.claverham.com

Revima APU, 1, Av. du Latham 47, BP 12, 76490 Caudebec-en-Caux, France. Telephone: + 33 0 2 35 56 35 00.

Web site: www.revima-apu.com

Corporate Overview

Hamilton Sundstrand is one of the six principal businesses of United Technologies Corporation (UTC). Its business area encompasses aerospace systems for commercial, regional, corporate and military aircraft, as well as systems for space programs. Industrial products serve industries ranging from hydrocarbon, chemical, and food processing to construction and mining.

New Products and Services

Boeing KC-46 Components. In June 2011, Boeing selected Hamilton Sundstrand to supply the KC-46's environmental control system, electric power generation system, emergency ram air turbine system, fans and engine bleed air system, engine controls and accessories, bleed air leak detection system, and the engine/auxiliary power unit fire detection and overheat detection system. The KC-46 multimission tanker is based on the Boeing 767 commercial transport. Hamilton Sundstrand's hardware is identical to, or largely based on, the systems that the company supplies to the Boeing 767-400. Software modifications will be necessary in certain systems to accommodate the needs of the KC-46 and its multirole air refueling mission. Initial flight is scheduled for 2014, with delivery of the first 18 aircraft projected to occur by 2017.

Global 7000 & 8000 Systems. In June 2011, Hamilton Sundstrand was selected by Bombardier to provide key systems content on the new Global 7000 and Global 8000 business jets. Hamilton Sundstrand will provide the aircraft's electric system, including generation and distribution, the high-lift actuation system and the auxiliary power unit system.

C919 Components. In January 2011, Hamilton Sundstrand was selected to provide the Ram Air Turbine emergency system for the Commercial Aviation Corporation of China's (COMAC's) C919 narrowbody commercial aircraft. In November 2010, Hamilton Sundstrand announced a joint venture with China's AVIC Electromechanical Systems Company Limited to design and manufacture the C919's electric power system, including generation and distribution In July 2010, Hamilton Sundstrand's Ratier-Figeac was selected to provide the pilot controls for C919 aircraft. In addition to this award, COMAC previously selected Hamilton Sundstrand's Electric Systems business to provide the C919's electric power generation and distribution systems. Hamilton Sundstrand's Kidde Aerospace & Defense business was also selected to provide the C919's integrated fire and overheat protection systems. The combined value of these awards is estimated to be worth more than $1.5 billion in revenue over the program's life.

MC-21 Components. In August 2009, Hamilton Sundstrand was selected to supply multiple systems for Irkut's MC-21 commercial aircraft family. Hamilton Sundstrand will develop the advanced electric power generating system, secondary electrical power distribution, auxiliary power unit, and the wing anti-ice and bleed air conditioning for the Nitrogen Generation System. In addition, Hamilton Sundstrand will jointly develop the integrated air management system together with its partner NPO Nauka, while Kidde Aerospace & Defense has been selected to supply the fire detection and suppression system. The award is expected to be worth approximately $2.3 billion over the life of the program.

CBMS II. In April 2009, the U.S. Department of Defense Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD) awarded Hamilton Sundstrand a contract to provide up to 156 Chemical Biological Mass Spectrometer II (CBMS II) devices. Hamilton Sundstrand's CBMS II is a fully militarized, mass spectrometer-based system capable of detecting chemical warfare agents from reconnaissance vehicles without the need for reagents or other consumables. The contract is valued at nearly $40 million.

A350 XWB Components. In January 2009, Honeywell selected Hamilton Sundstrand's Kidde Aerospace & Defense to supply the overheat detection system for the Airbus A350 XWB (Extra Wide Body) family of aircraft. The A350 XWB overheat detection system monitors the aircraft environmental control system's bleed air ducts for overheat conditions caused by failures. The system features the linear thermal sensors, interconnecting cable assemblies, and electronic controls residing within the Honeywell bleed overheat monitoring unit. Hamilton Sundstrand was previously selected by Airbus to provide the A350 XWB's Ram Air Turbine and electric power generation system. Through ECE, a Zodiac company, Hamilton Sundstrand will also provide the solid-state power controllers for the aircraft's electric power distribution system.

CH-53K Components. In July 2008, Sikorsky chose Hamilton Sundstrand to supply the Utility Management System (UMS) for the CH-53K heavy-lift helicopter, which is under development for use by the U.S. Marines. Hamilton Sundstrand was previously selected to supply the CH-53K helicopter's secondary power

systems – consisting of the environmental control system, auxiliary power unit, and main engine start system. The company also was chosen to develop the helicopter's fly-by-wire flight control system, which includes triple redundant computers and its main and tail rotor actuators.

Mitsubishi Regional Jet Components. In December 2007, Mitsubishi Heavy Industries Ltd (MHI) selected Hamilton Sundstrand to provide several major systems for its proposed Mitsubishi Regional Jet. Hamilton Sundstrand's suite of systems for each MRJ includes the electric system (including emergency power), fire detection and suppression system, air management system, APU, and flap/slat actuation system.

787 Dreamliner Components. All told, Hamilton Sundstrand was chosen by Boeing to provide the 787's environmental control system, electric power generation and start system, remote power distribution system, auxiliary power unit, primary power distribution system, high-voltage DC equipment racks, emergency power system, nitrogen generation system, and electric pump subsystem. Kidde Aerospace, which recently joined Hamilton Sundstrand, is supplying Boeing with the complete fire protection systems package for the 787. Together, these systems represent a potential program value of more than $8 billion over the life of the 787 program.

Plant Expansion/Organization Update

UTC Reorganizes. Following quickly on the heels of United Technologies' September 2011 acquisition of Goodrich Corporation, the company announced a new organizational structure that groups some of the company's businesses into new aerospace and commercial organizations.

Alain Bellemare is now president and chief operating officer of UTC Propulsion and Aerospace Systems. He will have operating responsibility for Pratt & Whitney and Hamilton Sundstrand with the presidents of both units reporting directly to him. Bellemare, in turn, will report to Marshall Larsen, chairman, president, and CEO of Goodrich, who will become chairman and CEO of the combined UTC Aerospace Systems unit.

Beginning in 2012, the new UTC Aerospace Systems unit is expected to be structured as follows:

1. Aerospace Systems
1.1 Sikorsky
1.2 Propulsion and Aerospace Systems
1.2.1 Goodrich
1.2.2 Hamilton Sundstrand
1.2.3 Pratt & Whitney

Airplane Power System Integration Facility. In July 2006, Hamilton Sundstrand officially opened its Power System Integration Facility in Rockford, Illinois. Through high-speed datalinks with Boeing and with other Hamilton Sundstrand facilities in Connecticut and California, the facility will operate as a virtual workspace. According to the company, engineers thousands of miles apart will have the ability to test and verify systems in a real-time, collaborative environment, simplifying the aircraft development process. The facility is initially focused on the Boeing 787.

Mergers/Acquisitions/Divestitures

Microtecnica Sold. In mid-2008, Hamilton Sundstrand sold Italian flight actuation systems manufacturer Microtecnica for an undisclosed amount. The operation was purchased by the U.K.-based private equity firm Stirling Square Capital Partners. Microtecnica employed 680 in Italy and had sales of $195 million in 2007.

Marelli Pumps Acquired. In July 2008, Hamilton Sundstrand acquired Marelli Pumps, a producer of heavy-duty centrifugal pumps. Terms of the deal were not disclosed. Marelli, based in Illescas, Toledo, Spain, supplies a wide range of centrifugal pumps for customers in the oil, petrochemical, chemical, industrial process, water, and firefighting industries. It has approximately EUR30 million in annual sales and operates in Spain, Southern Europe, and the Middle East. It will become part of Sundyne, one of Hamilton Sundstrand's three industrial companies.

Revima APU Acquired. In July 2008, Hamilton Sundstrand purchased the remaining 49 percent interest of Revima APU. This interest had been held by EADS Sogerma – a business unit of EADS – since it entered into a joint venture agreement with Hamilton Sundstrand in 2004. Revima APU is now a wholly owned Hamilton Sundstrand overhaul and repair facility that services aircraft APU systems and accessories for customers worldwide. Revima APU is located in Caudebec-en-Caux, near Rouen, France, and employs 230 people.

Hamilton Buys Dosatron International. In February 2007, Hamilton Sundstrand signed an agreement to acquire Dosatron International, a designer and manufacturer of specialized dosing/metering pumps. Dosatron is a privately held company, and terms of the deal were not disclosed. The transaction was subject to regulatory approval. Dosatron, based in Tresses, France, supplies advanced water-powered dosing pump systems and accessories for customers in agricultural, irrigation, and industrial business segments. It was to become part of Milton Roy, one of Hamilton Sundstrand's three industrial companies.

Precision Engine Controls Acquired. In February 2007, Hamilton Sundstrand acquired the privately held Precision Engine Controls Corp (PECC), a designer and manufacturer of industrial and marine engine controls and services. Terms of the deal were not disclosed. PECC, based in San Diego, California, supplies valves, electric actuators, and control systems for use in gas turbines in the energy and marine business segments. The company employs approximately 125 people at its San Diego facility.

WFEL Business Sold in U.K. In December 2006, Hamilton Sundstrand sold its WFEL business to a group led by the private equity firm Dunedin Capital Partners Ltd. Terms were not disclosed. WFEL, based in Stockport, U.K., manufactures and designs tactical military bridges. The WFEL business was a component of Hamilton Sundstrand's Kidde Aerospace & Defense segment, which United Technologies purchased as part of the Kidde acquisition in 2005.

Hamilton Acquires Page Group. In December 2006, Hamilton Sundstrand acquired Page Group Ltd, a U.K.-based designer and manufacturer of aerospace lighting and cockpit controls. Page supplies advanced, electronically controlled light-emitting diode (LED) lighting and related power systems, warning panels, and cockpit controls. The company employs approximately 200 people and had 2005 revenues of GBP23 million ($43 million).

Kidde Acquisition Completed. In April 2005, United Technologies completed its acquisition of Kidde, a global fire safety company. Following the purchase, the company renamed the Chubb operating segment UTC Fire & Security. Kidde's Industrial Fire Protection and Residential & Commercial fire safety segments joined Chubb to create a business with 52,000 employees in approximately 30 countries, and expected 2005 revenues exceeding $4 billion. Under the acquisition, Kidde's Aerospace & Specialist Equipment business was to become part of UTC's Hamilton Sundstrand. UTC acquired Kidde for approximately $3 billion, including debt, after announcing an agreement with Kidde's board in December 2004.

Falk Corporation Divested. In April 2005, Hamilton Sundstrand sold its Falk Corporation industrial company to Rexnord Corporation of Milwaukee, Wisconsin, for $295 million. Falk and Rexnord are both headquartered in Milwaukee. Falk is a supplier of gears and couplings, with annual revenues of about $200 million. It employs approximately 1,100 people, including about 900 in Wisconsin. Rexnord is a worldwide manufacturer of mechanical power transmission components, with annual revenues of approximately $800 million.

Haskel International Acquisition. In September 2004, Hamilton Sundstrand agreed to acquire Haskel International Inc, a manufacturer of pneumatically driven, high-pressure pumps and valves for industrial businesses. Financial terms were not disclosed. Haskel is headquartered in Burbank, California, and employs 325 people at facilities in the United States, Europe, and Asia. The company was to be operated as part of Milton Roy.

Teaming/Competition/Joint Ventures

AVIC. In August 2011, Hamilton Sundstrand officials representing United Technologies Corporation signed a Memorandum of Understanding (MoU) with Aviation Industry Corporation of China for cooperation on leadership training for AVIC's commercial aviation businesses, including project management training and Achieving Competitive Excellence training. The training programs, a collaboration among United Technologies Corp aerospace companies Hamilton Sundstrand, Pratt & Whitney, and Sikorsky together with AVIC will provide targeted curriculum for senior executives, mid-level managers, and high-potential employees from AVIC's commercial aviation businesses.

AVIC EM. In July 2011, Hamilton Sundstrand and AVIC Electromechanical Systems Company Limited (AVIC EM), a subsidiary of Aviation Industry Corporation of China, laid the cornerstone of the facility to co-develop and manufacture the electric power system for the new COMAC C919 jetliner. Earlier, in March 2011, Hamilton Sundstrand and AVIC EM announced a joint venture agreement to develop the C919 jetliner electric system. In November 2010, the two firms signed a joint venture framework agreement to build vapor cycle cooling systems in China.

AVIC Engine Holdings. In July 2011, Hamilton Sundstrand and AVIC Engine Holdings reached an agreement to form a partnership supporting the launch of a new auxiliary power unit (APU) for the commercial aircraft segment. Hamilton Sundstrand is launching the design and development of a new generation "common-core" family of APU engines for commercial single-aisle aircraft. As part of the partnership, AVIC will design and develop certain non-hot section components for the APU in support of Hamilton Sundstrand's design and development of the overall APU. The partnership is targeting future APUs for the growing worldwide commercial aircraft needs. In addition, both parties have agreed to collaborate on several other commercial APU programs and aftermarket service opportunities.

EADS. In July 2002, the European Aeronautic Defence and Space Company (EADS) and Hamilton

Sundstrand signed a Memorandum of Understanding regarding sourcing. This MoU paved the way for enhanced performance in the relationship between Hamilton Sundstrand as a supplier and EADS as a customer to better meet end-market requirements. The resulting improvements are cornerstones for the implementation of a "competitive partnership" between EADS and Hamilton Sundstrand in the sourcing area.

Fuel Accessory Service Technologies. In June 1998, SIA Engineering Company and Hamilton Standard formed a joint venture company to serve the region's repair and overhaul market for engine fuel components. Under the JV agreement, Hamilton Standard would hold 51 percent of the shares of the new company, Fuel Accessory Service Technologies Private Ltd (FAST). SIAEC would hold the remaining 49 percent. FAST repairs and overhauls engine fuel components and accessories on JT9D, PW4000, and CFM56 engines, and the PWC901 APU.

Website: www.fast.com.sg

HS-Nauka. This joint venture develops and manufactures aluminum heat exchangers for commercial aircraft air management systems and for the worldwide commercial aftermarket. Hamilton Sundstrand holds the majority share in this joint venture with HS-Nauka, a Russian company located in Moscow.

Web site: www.hsnauka.com

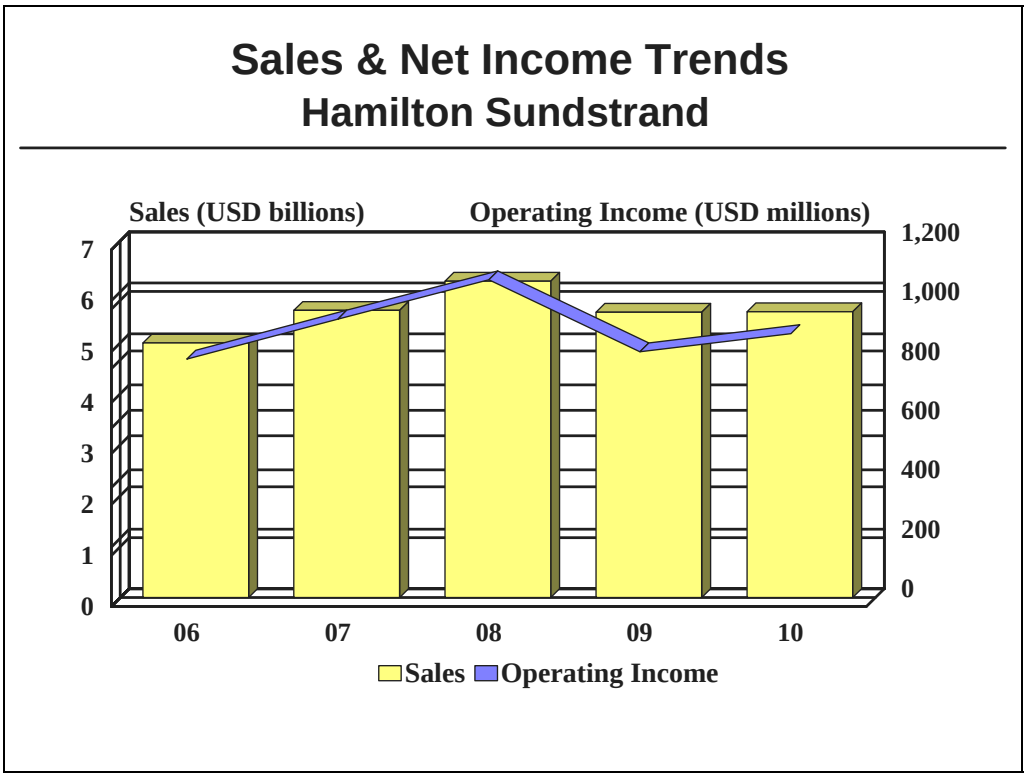
IHI Corporation. In November 2002, Hamilton Sundstrand entered into a teaming agreement with IHI of Japan to support development of the HS engine control system for the Rolls-Royce Trent 900 engine. In November 2001, Hamilton Sundstrand became a partner with Rolls-Royce on the Trent 900, a 76,500-lbst engine under development for initial application on the Airbus A380 aircraft.

Financial Results/Corporate Statistics

Hamilton Sundstrand's financials are reported under its parent company, United Technologies Corporation. For 2010, Hamilton Sundstrand posted sales of $5.6 billion, relatively unchanged from 2009. Hamilton Sundstrand accounted for 10 percent of UTC's sales in 2010. Available financial data are detailed below.

Y/E December 31	2005	2006	2007	2008	2009	2010
(USD millions)						
Net Sales	4,382	4,995	5,636	6,207	5,599	5,608
Operating Income	675	832	967	1,099	857	918
Backlog	3,700	4,527	5,152	5,226	5,077	5,119

Hamilton Sundstrand



Strategic Outlook

Because Hamilton Sundstrand is a subcomponent manufacturer, its fortunes are inexorably linked to those it supplies.

The economic woes of the recent past have been reflected in the company's sales. Now, if the economy can avoid a double dip recession, the company should continue its slow improvement. The big two airframers, Boeing and Airbus, both announced production rate increases in some of their product lines, which bodes well for the future.

Further, Hamilton Sundstrand has successfully promoted its systems on a number of new international aircraft projects in Russia and China. As such, demand for Hamilton Sundstrand's products is expected to remain steady, albeit at somewhat lower levels than in the past. In addition, the company's aftermarket business is growing and has garnered more than $1 billion in long-term support agreements with various airlines over the past few years.

With parent company UTC's purchase of Goodrich, Hamilton Sundstrand has been folded into a new Propulsion and Aerospace Systems division, which in turn is part of a new overall Aerospace division with UTC. This new structure is aimed at capitalizing on the record order books of both Airbus and Boeing. Combined, the operations of Goodrich, Pratt & Whitney, and Hamilton Sundstrand are expected to offer a major amount of content – one-stop shopping – for commercial aircraft manufacturers.

Prime Award Summary

Unavailable

Program Activity

Some important aerospace and government programs currently under way at Hamilton Sundstrand and its subsidiaries are listed below. The following are the company's business interests:

- Aircraft Components
- Auxiliary Power Units
- Missile Components
- Space Systems
- Systems Integration

Aircraft Programs

While not a prime aircraft manufacturer, Hamilton Sundstrand provides numerous subcomponents for military and civilian aircraft. These include electrical power generation and distribution systems, engine and flight controls, propulsion systems, environmental control systems, auxiliary power units, fire protection systems, and LED lighting for aircraft, space vehicles, and military ground vehicles.

Engine Programs

Gas Turbine APUs and Ground Power Units

The Power Systems unit of Hamilton Sundstrand provides the aerospace and defense industries with gas turbine APUs and ground power units (GPUs) for civil aircraft, military fixed-wing aircraft, and helicopters, and with battlefield power systems for radars and communications systems. Systems range from 28 to 350 horsepower. Some of the aircraft and systems using Hamilton Sundstrand APUs are F-16s, Black Hawks, Chinooks, KC-135Rs, Citation IIIs, and Patriot and Tomahawk ground-launched cruise missiles. Hamilton Sundstrand is currently under contract with the U.S. Army to provide an advancement in small-engine technology. In the late 1980s, the company entered the commercial aircraft APU market. In doing so, Hamilton Sundstrand formed the joint venture Auxiliary Power International Corporation (APIC) with Labinal Inc, a French company, to increase overall market coverage. However, in 1996, Hamilton Sundstrand bought Labinal's share of APIC and became sole owner. Work on these programs is carried out by Hamilton Sundstrand Power Systems.

APIC APS 500

This is a small, single-shaft, centrifugal-flow gas turbine machine/airborne APU for light/medium fixed-wing commercial and business jet aircraft. The designation APS 500 now comprises several models of the Sundstrand T-62T-40C series machines.

APIC APS 1000

This is a small, single-shaft, centrifugal-flow gas turbine machine/airborne APU for medium-weight fixed-wing commercial aircraft. The APS 1000 is the commercial designation of several models of the T-62T-46C series machines.

APIC APS 2000

This is an advanced-technology modular-design airborne APU designed for medium/heavy fixed-wing commercial and military aircraft.

APIC APS 3200

The APS 3200 is a high-performance, modular-design, low-weight APU for new-build aircraft, as well as for retrofit on existing aircraft.

Hamilton Sundstrand Titan T-62T

This is both an APU and a GPU. The machine series is also referred to as the T-62 Titan, T-62T Titan, and simply T-62. (The designation T-62T is now applied to military APUs only; commercial T-62Ts fall under the responsibility of APIC). The system remains in production.

Hamilton Sundstrand TJ-50/TJ-120

This is a 50-lbst miniature turbojet engine for air vehicles. The TJ-50 was selected for the Miniature Air-Launched Decoy (MALD), P-LOCAAS, and Ferret unmanned vehicles. The more powerful TJ-120 has also been developed and has a firm application, Raytheon's Miniature Air Launched Decoy (MALD).

Space System Programs

International Space Station

The International Space Station is an orbiting, crewed research and work center. Boeing is the ISS prime contractor and is working under a $9 billion cost-plus-award-fee/fixed-fee contract. Hamilton Sundstrand is one of hundreds of contractors involved in this undertaking.

Orion Crew Exploration Vehicle

The Orion Crew Exploration Vehicle (CEV), while resembling a larger version of the Apollo crew capsule, is a replacement for the Space Shuttle and is expected to eventually take humans back to the moon and to Mars. It will be launched by the Ares I Crew Launch Vehicle (CLV), which is still in development. Hamilton Sundstrand is providing various systems, including a detection and suppression system, a pressure control system, an atmospheric monitoring system, a cabin air ventilation system, and potable/cooling storage systems. Lockheed Martin is the prime. As part of the Constellation program, Orion was terminated in the FY11 budget proposal that NASA submitted to Congress in February 2010. However, canceling the program proved controversial, and it now appears NASA will continue to develop an in-house manned spacecraft. Since large amounts of money have already been spent on the Orion, it is the most likely candidate to continue to receive development funding in the future.

U.S. Contract Awards

Below is a listing of major contracts awarded to Hamilton Sundstrand from the U.S. government as of press date.

Hamilton

Date	Award (USD millions)	Contract #	Description
2007			
12/19/07	262.5	FA8208-05-D-0004	Spares & services in support of secondary power systems, airborne generators, constant speed drive components, and other systems for the Air Force & Defense Logistics Agency.
2008			
5/21/08	11.8	N65540-08-D-0017	Acquisition of various quantities of gas turbine electrical start systems for installation on U.S. Navy surface combatant ships.
6/27/08	7.9	W15P7T-08-D-B411	CP-1446/A advanced flight control computers.
9/26/08	9.1	N65540-08-D-0022	Services in support of the SSN-21, SSN-774, SSN-688 & SSN-726 class submarines.
2009			
1/9/09	6.2	FA8104-08-D-0002	Repair/overhaul of digital electronic engine controls, engine diagnostic units & associated parts for F15 & F16 aircraft.
4/22/09	6.1	SPM400-04-D-9432	Supply of blades in support of C-130 aircraft.
8/26/09	5.7	N65540-09-C-0018	Central Atmosphere Monitoring Systems (CAMS) IIA units, hardware kits, associated engineering services & technical data.
9/1/09	11.4	SPRTA1-09-C-0201	Spare replenishment supplies.
9/17/09	25.0	SPRTA1-09-C-0202	Replenishment supplies.
10/1/09	43.4	SPRRA1-09-D-0060	Contract for parts.
12/14/09	7.4	N65540-10-D-0005	Services in support of the oxygen-generating plant/gas management system, electrolytic chlorine generator, central atmospheric monitoring system, and integrated low-pressure electrolyzer installed on various submarines.
2011			
1/25/11	24.6	N00019-11-D-0008	Procurement & installation of electronic propeller control system kits into the C-130T aircraft for the Navy Reserves (up to 20) & the LC-130H aircraft for the Air Force National Guard (up to five).
4/8/11	42.0	SPM400-05-D-0004	Various sole-source, commercial items on various sub-assemblies of major end items/military aircraft.
6/3/11	454.0	SPM4AX-09-D-9405	Award is a FP/EPA contract with a maximum $454,000,000 for aircraft propeller systems.
7/20/11	6.6	N65540-11-C-0015	Design & manufacture an advanced carbon dioxide removal device capable of qualification for use on a submarine.
7/21/11	37.7	SPRRA1-11-D-0064	Control indicators.

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Date	Award (USD millions)	Contract #	Description
2007			
3/19/07	7.4	W56HZV-07-C-0275	Automatic fire suppression kits for the Marine Corps' Light Armored Vehicle fleet.
2008			
1/18/08	5.7	W56HZV-08-C-B001	Stryker tire fire suppression kits.
10/3/08	13.5	W56HZV-08-C-B001	Stryker tire fire suppression kits.

Date	Award (USD millions)	Contract #	Description
2009			
4/8/09	35.2	W56HZV-06-D-0116	Automatic fire extinguishing kits for the HMMWV.
6/15/09	8.2	?	Automatic fire extinguishing kits for the HMMWV.
7/22/09	27.2	SPRDL1-09-D-0004	Fire suppression system.
8/3/09	12.5	W56HZV-09-C-0577	Automatic fire extinguishing kits for the Armored Security Vehicle.
2011			
3/14/11	13.4	W56HZV-11-C-0225	1,290 automatic fire extinguishing retrofit kits.

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