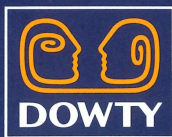




THE
CHANGING
SHAPE
OF
DOWTY



Dowty Group PLC

Arle Court, Cheltenham, Gloucestershire GL51 0TP
United Kingdom
Telephone 0242 221133. Telex 43176
Fax 0242 521054

APRIL 1990



A. N. Thatcher
Chief Executive

I'd like to introduce you to the latest changes in the Dowty Group. We have a name renowned for technical excellence which has gained us many friends over the years.

Over the last decade though, we have extended into new areas of business – notably information technology and professional electronics – and shed some of the businesses long-connected with the Dowty name, particularly mining and industrial hydraulic equipment. In other words we have repositioned Dowty in advanced technological areas with good growth prospects.

A further drive has taken place to establish ourselves in global markets. We have invested in target areas such as North America, Europe and the Far East so that we can provide a world-wide service to our international customers. Currently 58% of our revenue comes from sales overseas.

With these changes we have started along the path of becoming what we call the Preferred Partner. Our aim is to become the preferred partner of our customers and associates world-wide by providing competitive advantage to them through the quality of our products, performance and service.

That is how you will recognise any Dowty company. We are dedicated to listening to our customers, understanding their requirements and matching our solutions specifically to their needs.

As you can see from our new logo, improving customer service is our highest priority. Our objective is to make it a reality.

A handwritten signature in dark ink that reads "Tony Thatcher". The signature is written in a cursive style with a horizontal line underneath the name.

CHIEF EXECUTIVE

Dowty is a group of advanced technology companies creating innovative systems and products in electronics, mechanical and polymer engineering.

The customers they serve are largely in the aerospace, maritime, defence, professional electronics, information technology and automotive industries.

The solutions they provide to match customers' problems range from the largest civil landing gear in the world (for the Airbus A340) to minute but safety critical seals in automotive fuel injection systems; and from global computer networks for the world's leading banks to microchips which compress vast computer power into a few square centimetres.

Established in 1931, the group now has over 50 operating units, structured in four divisions, and based in 13 countries on four continents. It has a turnover of approximately £700 (US\$1,200) million, of which 65% is civil based and 35% defence.

Dowty employs almost 15,000 people around the world. The group actively supports the development and training of all staff. It encourages excellence in all endeavours and matches reward with effort and achievement. Individual companies develop training to meet their business needs; and training is arranged centrally for present and future directors, managers and various technologists.

The group's management development scheme has received a coveted National Training Award. An active school liaison policy also ensures that Dowty is an effective industrial partner to education, encouraging students to recognise the exciting challenges and rewards of advanced engineering.

The advanced systems developed by Dowty companies are the result of a long tradition of technical innovation. This tradition is supported by carefully focused research and development, collaboration between group companies, external links with universities and targeted acquisitions.

The aim is to keep Dowty at the leading edge of technology in its core businesses. This policy has resulted in the group obtaining 15 Queen's Awards for Export and Technological Achievement. Dowty also takes particular pride in the consistent awards it has received for the quality of its systems and service from its customers such as Ford Motor Company, Bosch, Boeing and IBM.

Board

Members

and

Executives

Dowty Board

Lord Harrowby
Chairman

Tony Thatcher
Chief Executive

Bruce Ralph
Deputy Chief Executive

Sir Thomas Kennedy
Non-Executive Director

Reg Moore
Financial Director

Roy Roberts
Deputy Chairman

Mike Spence
*Director of Strategic
Development*

Management Committee

Tony Thatcher
Chief Executive (Chairman)

Bruce Ralph
Deputy Chief Executive

Reg Moore
Financial Director

Mike Spence
*Director of Strategic
Development*

Bruce Brain
*Managing Director –
Information Technology
Division*

Shane Bruen
*Corporate Communications
Director*

Colin Cocks
*Managing Director –
Electronic Systems Division*

Dr David Grant
*Director of Group
Technology*

Jim Lightfoot
*Managing Director –
Aerospace Division*

Tim Page
*Group Personnel
Director*

Keith Tofield
*Managing Director –
Polymer Engineering Division*

Mike Walker
Company Secretary

Financial

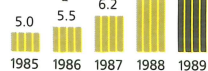
Highlights

Year ended 31st March:	1989		1988	
	£M	US\$M	£M	US\$M
Turnover	684.1	1156	624.8	1056
Operating profit	88.0	149	71.8	121
Interest expense	9.0	15	8.0	14
Profit before taxation	79.1	134	64.1	108
Tax charge	29.3	50	24.1	41
Extraordinary items	17.7	30	14.7	25
Retained profit	11.2	19	9.8	16
Shareholders' funds	251.4	425	233.5	394
Return on capital employed	26.0%	26.0%	22.9%	22.9%
Earnings per share	21.0p	35¢	18.7p	32¢
Dividends per share	8.0p	14¢	7.0p	12¢
Order book at year end*	662.4	1119	591.3	999
Average number of employees*	13,710	13,710	13,560	13,560

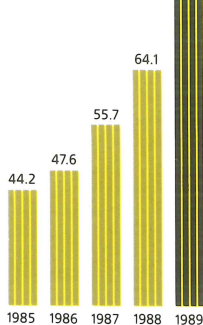
* These figures have been adjusted so that they reflect the continuing businesses after the disposal of the Mining Division and certain Industrial Hydraulics companies.

The figures have been translated at the 31st March 1989 exchange rate of \$1.69 = £1.

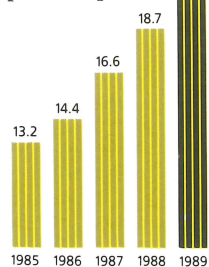
Dividends per share p



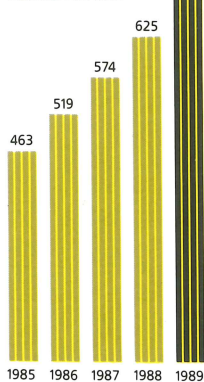
Profit before tax £M



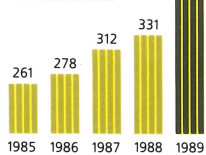
Earnings per share p



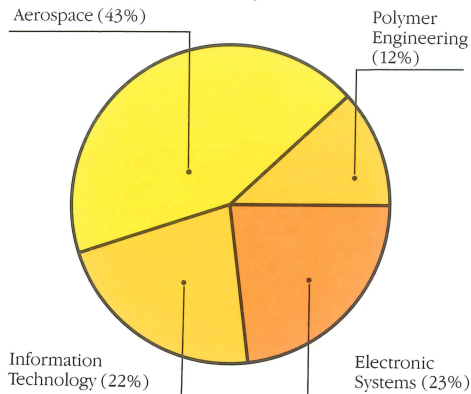
Turnover £M



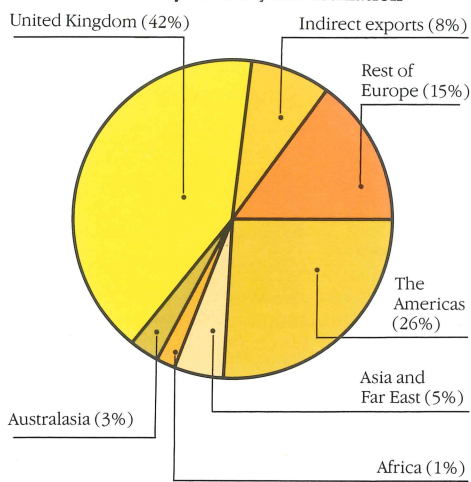
Non-UK sales revenue £M



Turnover by Division



Turnover by Territory of Destination



Aerospace

Division

DIVISIONAL

MANAGING

DIRECTOR

JIM LIGHTFOOT

TELEPHONE

0242 221133

Areas of Business

The division is one of the world's leading manufacturers of aircraft landing gear, flight control actuation systems and propellers and supplies most major aircraft manufacturers, including Airbus Industrie, Boeing, British Aerospace, Eurofighter, Fokker, Saab, McDonnell Douglas, Casa and Shorts. Civil projects, a growing proportion of the business, represents 66% of sales, 31% being on military programmes and 3% industrial. North America accounts for 42% of sales. In addition to manufacturing new equipment the division provides a comprehensive customer support service. The three main bases for repair and overhaul in the USA, UK and Singapore on Dowty and non-Dowty equipment form Dowty Aerospace Aviation Services. The repair business is growing rapidly and accounts for 19% of total aerospace sales. A new space projects operation designs and manufactures propellant tanks and control valves for spacecraft propulsion systems. The division's products are also prominent in the maritime market with winching systems, cable handling equipment and submarine hydraulic systems. The division is supporting 30 air forces and 300 civil operators in 90 countries. Dowty aerospace equipment and systems feature on more than 200 current types of aircraft.

Products and Services

- Landing gear
- Hydraulics
- Propellers
- High lift systems
- Flying controls
- Maritime hydraulic systems
- Landing gear electronic controls and other systems
- Aircraft product support for components and airframes
- Actuators

- Landing gear, hydraulics and propeller overhaul and repair
- Thrust reverser systems
- Precision machining
- Spacecraft propellant tanks and control valves
- Control valves
- Gearboxes
- Servo valves
- Linear velocity displacement transducers

Companies

Dowty Aerospace Gloucester	UK
Dowty Aerospace Wolverhampton	UK
Dowty Aerospace Los Angeles	USA
Dowty Aerospace Yakima	USA
Dowty Aerospace Toronto	Canada
Dowty Aerospace Isle of Man	Isle of Man
Dowty Aerospace Aviation Services	USA
Dowty Aerospace Aviation Services	UK
Dowty Aerospace Aviation Services	Singapore
Accessories & Components Company (30%)	Saudi Arabia
Norson Power (50%)	UK
Dowty Aerospace Peterborough	Canada



Dowty composite propeller for Saab 2000



Boeing 737 (top) and Airbus A330 and A340 aircraft (below)



Dowty has put forward a range of advanced technology products for the European Fighter Aircraft

Electronic Systems Division

**DIVISIONAL
MANAGING
DIRECTOR**

COLIN COCKS

TELEPHONE

071-931 9855



Flight trials on a CF-18 have proven Dowty's High Pressure Pure Air Generator Hi-PPAG 320 for missile seeker cooling. The F-18 aircraft also uses Dowty's vapour core pump technology in its afterburner control

Areas of Business

The division focuses electronic and hydromechanical skills on aircraft and engine control, underwater, surface ship ASW, land and missile systems markets. The division has won a major contract to supply its Successor command system, employing the latest ASIC technology for the Royal Navy's Type 23 frigates and AORs. Having already won the submarine command system, Dowty is now the clear UK leader in future naval command systems. Other contracts include the world's first full authority digital engine control for single engine fighters; the world's third largest sonobuoy manufacturer; the world's first floating glass-reinforced plastic drive-in magnetic submarine treatment facility. International success continues: digital engine controls for Pratt & Whitney Canada's PW305 business jet engines; sidescan sonar systems for the US Navy's COOP MCM role; flight trials of its pure air generator for Sidewinder's IR seeker cooling with the US Navy on a CF-18 and sonobuoy receivers for the P-3 Update IV, P-7A, EH 101 and US CV Helo ASW programmes.

Products and Services

- Submarine and surface ship command and control systems
- Aircraft and engine electronic control systems
- Sonobuoys and sonobuoy receivers
- Acoustic countermeasures
- Fighting vehicle controls
- Towed array, sidescan and dipping sonars; sonar products
- Electronic components including batteries, circuits and electronics
- Torpedo propulsion systems
- Infra-red cooling systems for missiles, helicopters, fighting vehicles and navy applications

- Magnetic treatment facility; open sea, harbour entrance and transportable magnetic measurement ranges
- Missile guidance control maintenance

Companies

Dowty Fuel Systems	UK
Dowty Controls	UK
Dowty Weapon Systems	UK
Dowty Magnetics	UK
Dowty & Smiths Industries Controls (51%)	UK
Dowty & Smiths Industries Controls (51%)	USA
<i>(All part of Dowty Defence and Air Systems)</i>	
Dowty Maritime	UK
– Ocean Systems	UK
– Command and Control Systems	UK
– Sonar and Communication Systems	UK
Dowty Avionics	USA
Dowty Sema (50%)	UK
<i>(All part of Dowty Maritime)</i>	
Dowty Electrics	UK
Dowty Batteries	UK
Dowty Circuits	UK
<i>(All part of Dowty Electronic Components)</i>	



Successful flight trials of the Pratt & Whitney Canada PW305 engine with DSIC's FADEC



Dowty-Sema's Successor command system will be fitted to RN submarines of the 1990s and Type 23 frigates

Information

Technology Division

DIVISIONAL

MANAGING

DIRECTOR

BRUCE BRAIN

TELEPHONE

0225 891881

Areas of Business

The division was created in 1987 from existing Dowty businesses and designs and manufactures advanced network systems, modems, multiplexers, VDU terminals, computer graphics, instrumentation and industrial systems, customized design and assemblies and power supplies for the growing IT markets of the world. CASE has an enviable reputation in networking to handle local or international data communications. Innovative design, high quality manufacturing standards and extensive experience of configuring world-wide networks, provides customers with data communications systems that meet their specific requirements.

A significant growth area for other companies in the division is mobile communications. Dowty supplies systems to a range of customers including the RAC and the emergency services. Another is the market for modems, in which Dowty ranks as one of the largest European manufacturers just four years after entering the field. The increasing use of digital circuits is also providing excellent opportunities for Dowty's range of multiplexers.

Products and Services

- Modems
- Multiplexers
- Message handlers
- Packet switching
- Local area networks
- Computer-based command and control systems
- Mobile data systems
- Voice and data integration
- Computer graphics
- Power conversion products and safety devices
- Electronic assemblies
- Temperature controllers
- Calibration systems



Dowty is a leading supplier of dial up modems in Europe

- Magnetics
- Protective relaying
- Power line carrier systems

Companies

Dowty Information Systems	UK
Dowty Systems Integration	UK
CASE Communications	UK
Comms Direct	UK
Dowty Custom Electronics	USA
Dowty Microtechnologies	USA
Dowty Power Electronics	UK, West Germany
Dowty Control Technologies	USA
CASE/Datatel	USA
Dowty Information Systems Cherry Hill	USA
Dowty Communications and Networking	Dubai, France, Hong Kong, Japan, Singapore, Sweden
CASE Communication Systems (Aus)	Australia
CASE OEM Systems NZ	New Zealand
CASE Cabling	UK



The largest UK trunked radio data network is being installed for the RAC by Dowty



Information Technology in the City

Polymer Engineering Division

**DIVISIONAL
MANAGING
DIRECTOR**
KEITH TOFIELD
TELEPHONE
0242 221133



Armourshield manufactures textile and polymer based body armour for armed forces and police across the world

Areas of Business

The division provides sophisticated polymer technology products and services to a wide range of industries throughout the world. The companies design and manufacture high integrity seals for major automotive companies, for military and civil aerospace customers and the fluid power industries. Particular strengths are in safety critical applications in fuel control, braking and climate control systems and in high performance hydraulic actuators and potable water systems. Specialist materials and services are provided for aircraft, maritime and territorial equipment for signature management, ballistics protection and noise, vibration and temperature control and personal security products include body armour and smoke protection devices. Advanced materials and manufacturing skills are also employed in flexible and rigid composites for aerospace and maritime structures and for airbags for automotive safety.

Products and Services

- Precision O rings
- Vehicle brake components
- Elastomer composite diaphragms
- Engine gaskets and rotary shaft seals
- Electromagnetic interference shielding components
- Hydraulic cylinder sealing systems
- Precision elastomer mouldings
- Precision bondings
- Flexible composite fabrications
- Rigid composites
- Fire resistant foam
- Body armour
- Signature management
- Ballistics protection

Companies

Dowty Seals	UK
Dowty Woodville Mouldings	UK
Dowty Woodville Polymer Fabrications	UK
Dowty Energy Control Products	UK
Dowty Signature Management	UK
Dowty Fluoro Precision Coatings	UK
Dowty Environmental and Safety Products	UK
Dowty Armourshield International	Malta
Dowty Palmer-Chenard Inc	USA
Dowty Polypac SpA Sealing Systems	Italy
Klößner-Dowty GmbH	West Germany
Dowty SA	France



Fabrication skills used in safety air bags



Fluid seals for automotive industry