

Company Number

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ROLLS-ROYCE LIMITED

**Annual Report
1984**

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Notice of Annual General Meeting

Notice is hereby given that the fourteenth Annual General Meeting of Rolls-Royce Limited will be held at 65 Buckingham Gate on Tuesday, May 21, 1985 at 12.30 pm for the following purposes:

1. To receive the Report of the Directors and the audited accounts for the year ended December 31, 1984.
2. To re-appoint Coopers & Lybrand, the retiring auditors, and to authorise the directors to fix their remuneration.

By order of the Board

Anthony Warrington
Anthony Warrington, Secretary
April 18, 1985

A member entitled to attend and vote at the above meeting is entitled to appoint a proxy to attend and, on a poll, to vote in his stead. A proxy need not be a member of the Company. To be effective, proxies must be received at 65 Buckingham Gate not less than 48 hours before the time fixed for holding the meeting.



ROLLS-ROYCE LIMITED

65 Buckingham Gate, London SW1E 6AT



Chairman's Statement



Sir Francis Tombs

Whilst 1984 turnover, at £1409 million, showed little change in real terms from the 1983 level, the second half of the year brought a steady growth in workload on civil business. This reflects a resumption of equipment procurement and increased flying as airlines emerge from the longest period of recession experienced in recent years. However, the fall in world fuel prices has reduced the relative economic benefits of the newer fuel-efficient aircraft, and caused many older aircraft to be retained in operation for much longer periods than assumed when the new models were launched: the average age of airline fleets has, therefore, increased and re-equipment is proceeding at a slower pace than might have been expected.

Military sales were slightly higher than last year, with the RB199 continuing to be the dominant programme. The Pegasus and Adour also made significant contributions to turnover, but helicopter engine sales were disappointing.

Our Industrial and Marine business was slightly down on the previous year, primarily as a result of the depressed power-generation market, but activity in gas and oil pumping and marine propulsion showed encouraging signs.

Despite a substantially unchanged turnover in real terms compared with 1983, I am pleased to report a significant improvement in operating profit to £162 million. This resulted in a profit on ordinary activities after tax of £21 million, compared with a loss in 1983 of £118 million. Much of this improvement can be attributed to civil business and a reduction of £30 million in net research and development expenditure, but all parts of the Company contributed.

Another encouraging aspect of the year's operations was the reduction in net borrowing from £350 million to £256 million.

Following three years of major contraction in manpower, employment in the UK fell by a further 1500 in 1984. Improvements in productivity and efficiency have to continue and, with signs of increasing activity in the civil business, the opportunity must be grasped of meeting any increased workload from existing resources.

The five-nation consortium, International Aero Engines, set up in October 1983 to develop a new 25 000 lb thrust engine, the V2500, for the 150-seat civil aircraft market, has made excellent progress. Airbus Industrie has selected the engine which is on target to make its first test run in February 1986. There is every indication that the future market for 150-seat aircraft powered by new turbofan engines of the size of the V2500 will be large, and Rolls-Royce participation in this programme is seen as an essential part of the Company's product strategy.

In the higher engine thrust range, the agreement announced in February of last year between General Electric (USA) and Rolls-Royce to participate in each other's high technology commercial engine programmes, the CF6-80C2 and RB211-535E4 respectively, is now well established. Valuable exchanges have taken place between the two companies, and this should lead to a growing contribution to our manufacturing workload as the world's airlines climb out of the recent recession.

1984 was a significant year for the RB211-535. On February 3 the more fuel-efficient and advanced version of the engine, the E4, flew for the first time; on October 4 it received its certificate of airworthiness from the Federal Aviation Administration, and a week later Eastern Airlines took delivery of their first Boeing 757 powered by the E4.

Meanwhile, the earlier version of the engine, the RB211-535C, continued in airline service to register



quite remarkable reliability statistics. Monarch Airlines completed its first year of engine operations in May without a single engine removal or in-flight shutdown in 16 000 operating hours, and by the end of the year all 535Cs flying had, together, accumulated 250 000 operating hours with a reliability record unprecedented for big fan engines. In February 1985 the 535 engine and the unique wide-chord front fan, which was first used on the E4 version of the engine, each received major Design Council Awards; this reflects the Company's continuing commitment to designing quality and reliability into all its products.

The 13 500 lb thrust Tay engine, which was launched in March 1983 for the Gulfstream IV executive jet, found a second aircraft application when, in July, Swissair became the first customer to order the engine for the new Fokker 100 airliner. We are proud that such a distinguished international airline has chosen this aircraft/engine combination which we believe will have a great future. The first engine runs of the Tay took place in August with the rated take-off thrust being comfortably achieved in a most successful series of tests.

On the military front, the first flight took place in May of the AMX tactical fighter being developed jointly by Italy and Brazil, and powered by the Mk 807 version of the well established Spey engine.

The RTM 322, a new helicopter engine which we are developing jointly with our French partners, Turbomeca, had its first test run in December. This engine, which is generating considerable interest both in Europe and America, also has potential for development as a turbofan or turboprop for aircraft applications, and is an important element in our future small engine activities.

I have already mentioned the significance of the RB199 to our current military activities. The Tornado aircraft programme with its RB199 engine was the largest single collaborative defence investment in Europe, and that for the proposed new European fighter is expected to be on a similar scale. The specification and choice of engine is, therefore, of vital interest to us in assessing our military business prospects into the next century.

Sir William Duncan's death last November was a grievous blow to the Company. In a short time he had established a clear strategy which will provide the basis for the Company's future prosperity.

Since 1971, the Company has been engaged in recovering its technical and financial strength in

circumstances made more difficult by world recession and airline retrenchment. This has involved many painful changes and extensive job losses, but determination at all levels of the organisation has produced a leaner and fitter Company.

Now that the aviation industry is moving slowly out of recession, we must not let that determination diminish. It is imperative to maintain our efforts if we are to retain the international position and reputation we desire.

Francis

Sir Francis Tombs

April 11, 1985

Tombs

Francis Tombs

Five-year Review

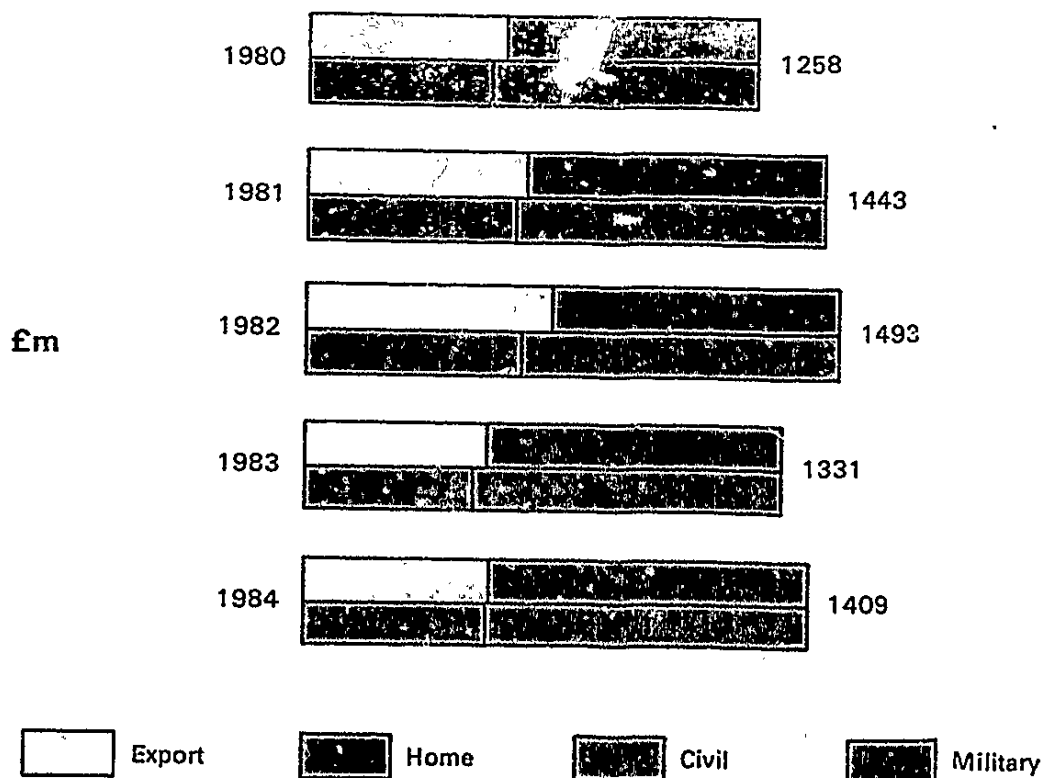
	1984 £m	1983 £m	1982 £m	1981 £m	1980 £m
Consolidated profit and loss account					
Turnover	1 409	1 331	1 493	1 443	1 258
Operating profit	162	74	122	152	89
Research and development (net)	(101)	(131)	(131)	(62)	(79)
Interest payable and similar charges	(35)	(55)	(82)	(72)	(34)
Share of losses in related companies	—	(2)	—	—	—
Profit (loss) before taxation	26	(114)	(91)	18	(24)
Taxation	(5)	(4)	(4)	(3)	(1)
Profit (loss) after taxation	21	(118)	(95)	15	(25)
Attributable to minority interests	(1)	(1)	(1)	(1)	(2)
Extraordinary item — net restructuring costs	—	(74)	(38)	(17)	—
Profit (loss) attributable to Rolls-Royce Limited	20	(193)	(134)	(3)	(27)

Consolidated balance sheet

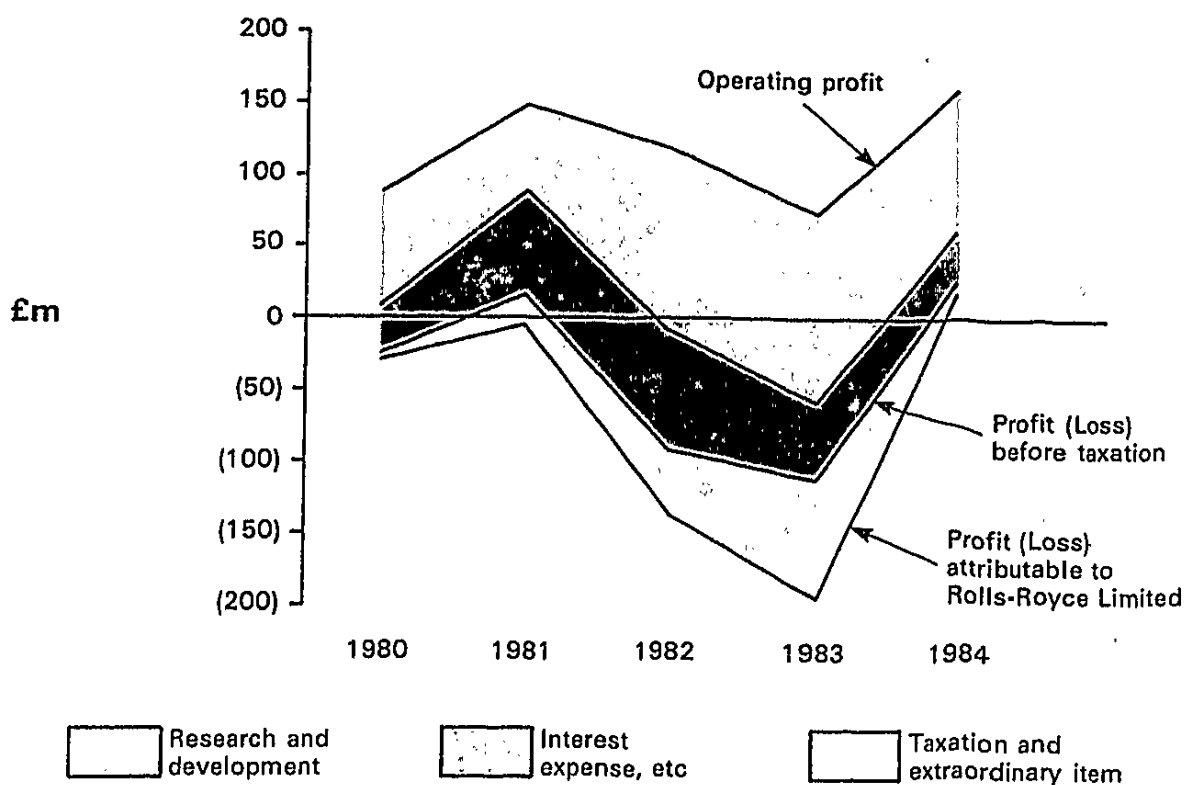
Fixed assets	303	312	314	303	299
Current assets	815	768	927	1 065	940
	1 118	1 080	1 241	1 368	1 239
Liabilities and provisions	(789)	(773)	(741)	(783)	(781)
	329	307	500	585	458
Share capital	508	508	508	458	328
Reserves	(184)	(206)	(13)	121	124
	324	302	495	579	452
Minority interests	5	5	5	6	6
	329	307	500	585	458

Key Figures

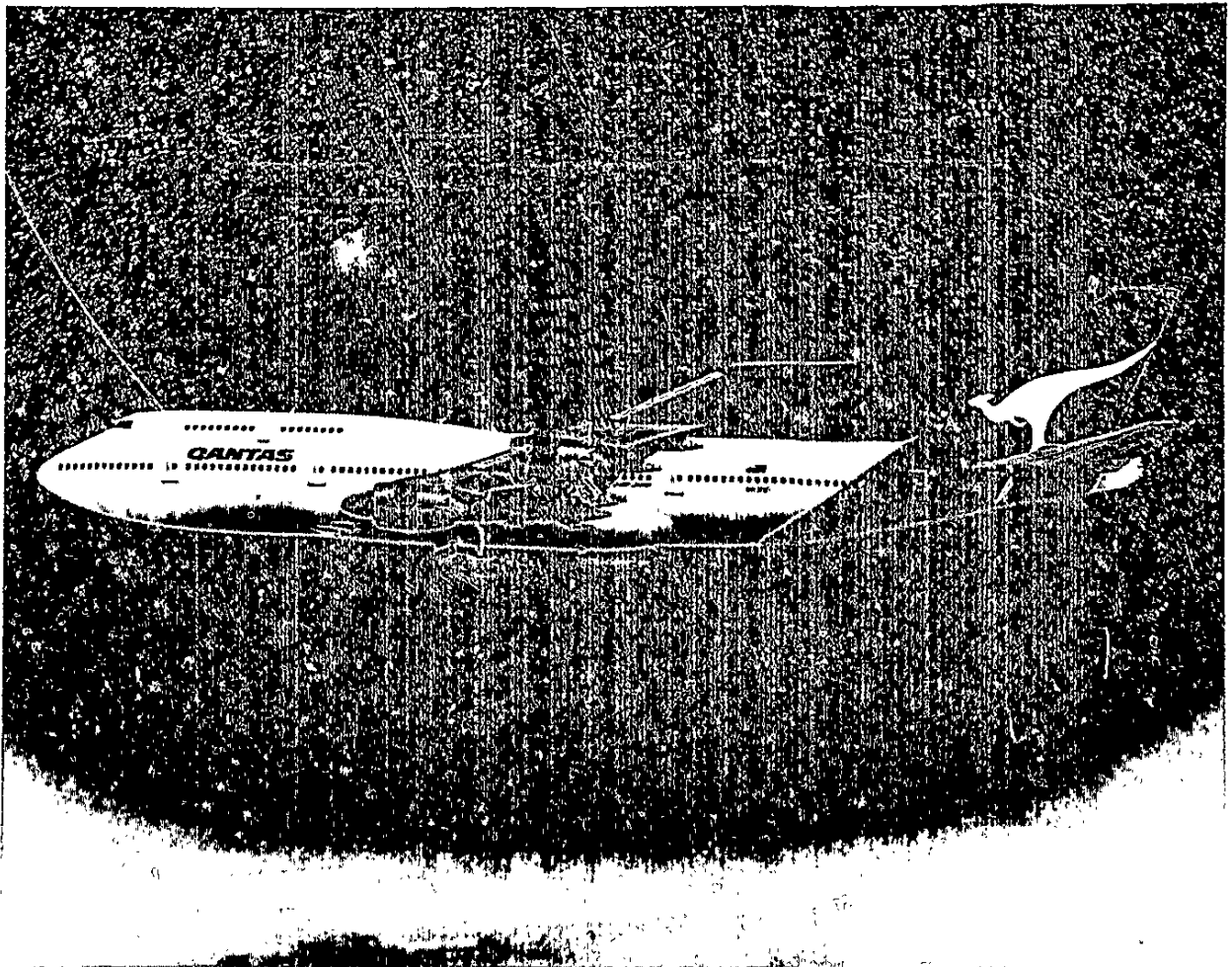
1 Turnover



2 Profits



Review of Activities



Civil Engine Group

In 1984 there was a welcome increase in orders for civil aircraft resulting from a growth in airline traffic and improved financial results of operators, with sales being made against a background of stable fuel prices and increasing pressure on airline costs.

The new generation of civil engines produced by Rolls-Royce will ensure a continuing competitive product range through improved reliability, low ownership costs and good environmental characteristics achieved by the application of advanced technology. Actions taken during 1984 to widen the range of civil engines through collaborative programmes will ensure that the Company is involved in a comprehensive product range well into the next century.

Tay

A highlight of the year was the launch order placed by Swissair in July for the new Fokker 100 airliner powered by Tay turbofan engines. Swissair ordered eight of these advanced airliners and placed options for six more. The Fokker 100 has been designed to carry up to 107 passengers and the new Tay engine

The RB211-524D-4 upgrade engine — powerplant for Qantas Boeing 747-300 aircraft, which entered service at the end of 1984 — has comfortably bettered its fuel efficiency guarantees.

which will power it is in the 13 500 lb thrust class. It is considerably more powerful and fuel-efficient than the RB183-555 engine from which it was derived, and is much quieter.

The Swissair order has generated considerable interest among other European airlines which may need an advanced airliner in the 100-seat class. Requirements for aircraft of this size are also emerging in the USA.

The Tay was first launched in the Gulfstream IV executive jet. Orders for this aircraft were buoyant in 1984 and over 75 have now been received; initial deliveries are planned for the end of 1986. The successful launch of the Fokker 100 and Gulfstream IV gives great confidence for the future of the Tay engine.

The first Tay engine was run ahead of schedule in August, with very encouraging results. Four more Tays joined the test programme later in the year and development is proceeding well towards the date planned for the engine's airworthiness certification in mid-1986.

RB211-535

The 535C engine represents the third generation of the RB211 family. By the end of 1984 it had accumulated nearly a quarter of a million operating hours with five operators in 37 Boeing 757s since entering service in January 1983. It has established an unequalled reputation for reliability. The engine is currently in service with Eastern Airlines, British Airways, Monarch Airlines, Air Europe and LTS.

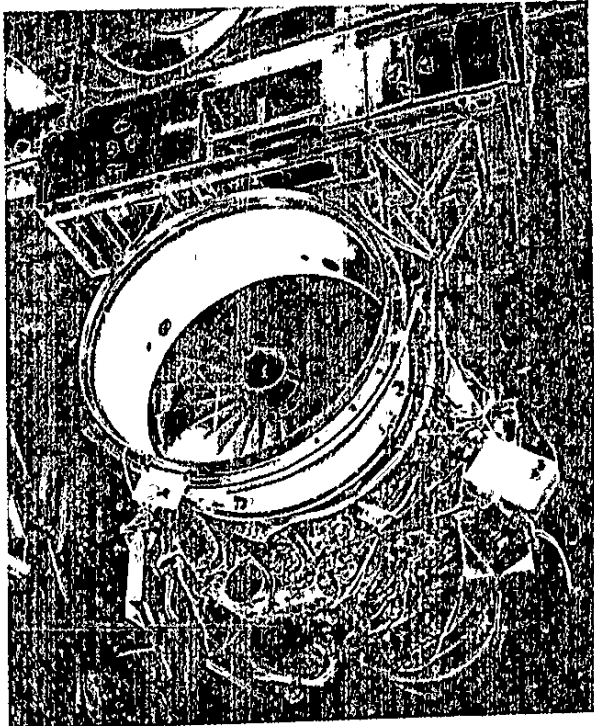
The major milestone in the 535 engine programme during 1984 was the entry into service of the advanced 535E4 version with Eastern Airlines. The engine is a further derivative of the RB211 family, based on the 535C, and improves the fuel consumption of the 757 by approximately ten per cent. The main new features of the 535E4 are its lightweight wide-chord fan, unique to Rolls-Royce, and an integrated final nozzle.

In addition to the large improvement in fuel consumption, the 535E4 is a very quiet engine. The Boeing 757 with 535E4 engines is the only airliner of its size to meet the stringent limits placed on night-time operations at Washington National Airport in the heart of the US capital.

RB211-524

Deliveries of the latest version of the most powerful and fuel-efficient RB211 engine, the 53 000 lb thrust 524D4 upgrade, began in September. The engine provides a cruise fuel consumption improvement of 2.6 per cent which was satisfactorily demonstrated in October during Boeing flight trials with the first stretched upper-deck Boeing 747-300

Among the highlights of 1984 was the launch order from Swissair for the Fokker 100 aircraft — to be powered by the Tay engine



to be delivered to Qantas. The upgrade modifications can also be applied as a retrofit package to all variants of the 524 engine already in service.

A large order for 524D4 upgrade engines was also placed during the year by Saudia, the national airline of Saudi Arabia. The engines were required for ten Boeing 747-300 airliners. Saudia already has a major fleet of TriStar and Boeing 747 aircraft powered by Rolls-Royce.

Cathay Pacific continued to expand its fleet of 524-powered Boeing 747s; the airline also operates TriStars and all its aircraft have Rolls-Royce engines.

The Company is offering further fuel-efficiency and thrust improvements on 524 engines, thus demonstrating its continued commitment to the support of current customers and its intention to gain further sales of these engines. As part of this continuing commitment, a new high-pressure turbine with a redesigned blade in directionally solidified material was launched in 1984. This improvement, giving advances in reliability and fuel consumption, will provide economic benefits to operators and it can be retrofitted to all versions of the 524 engine currently in service.

Collaboration

CF6-80C2: Between now and the end of the century the market for large turbofan engines is expected to move towards higher thrusts of 60 000 lb or above, coupled with further improvements in fuel consumption.

In order to participate economically in this sector of the civil market the Company signed an agreement with General Electric of the USA in May which provides for Rolls-Royce to share in their CF6-80C2 engine, initially to the extent of 15 per cent and then rising to 25 per cent. At the same time GE is taking a corresponding share in the 535E4 engine.

V2500: Rolls-Royce has a 30 per cent work share in a five-nation collaborative programme to develop and manufacture the V2500 engine, which is in the 25 000 lb thrust class. Other companies in the programme are Pratt & Whitney (a unit of United Technologies Corporation) with a 30 per cent share; the Japanese Aero Engines Corporation (JAEC), 23 per cent; Motoren-und Turbinen-Union (MTU) of West Germany, 11 per cent; and Fiat Aviazione of Italy, 6 per cent.

The V2500 is directed by International Aero Engines (IAE), which is responsible for programme management and co-ordination, marketing of the engine and acting as the link with airframe manufacturers and customers.

The programme was formally launched in January 1984 and is initially directed towards the Airbus A320 airliner which will enter service in early 1989. Engine certification is scheduled for the start of 1988 with delivery of flight certification powerplants soon after. A Memorandum of Understanding has also

been agreed with McDonnell Douglas relating to installation of the V2500 in the MD89 airliner. This installation requires certification and delivery of flight engines in the same time-scale as for the A320.

Dart and Spey

Sales of the well-established Dart turboprop engine continued during 1984 for both the Fokker F27 and BAe 748; there are now some 7000 Darts in service.

During the year the Dart Mk 551 engine received its airworthiness certification and deliveries of production engines began. This version provides considerable improvements in fuel economy over earlier Darts. A further improvement in fuel consumption will be provided by the Dart Mk 552 which is due for airworthiness certification in mid-1985; engines already in service can be converted to this new standard.

Over 100 new Spey and RB183 engines were delivered in 1984 for Gulfstream III and Fokker F28 aircraft. The Spey engine family has been very successful and covers a range of civil and military applications. More than 4400 Spey engines are in service.

The latest new aircraft to be powered by the Spey made its first flight in 1984. This is the Italian/Brazilian AMX close-support fighter which has the latest Spey version, the Mk 807.

Trials of the Spey Mk 807-powered AMX aircraft began in 1984 and are progressing satisfactorily

Military Engine Group

The Military Engine Group is responsible for a wide range of military engines — over 10 000 in operation world-wide — developed independently by Rolls-Royce or in co-operation with partners in other countries.

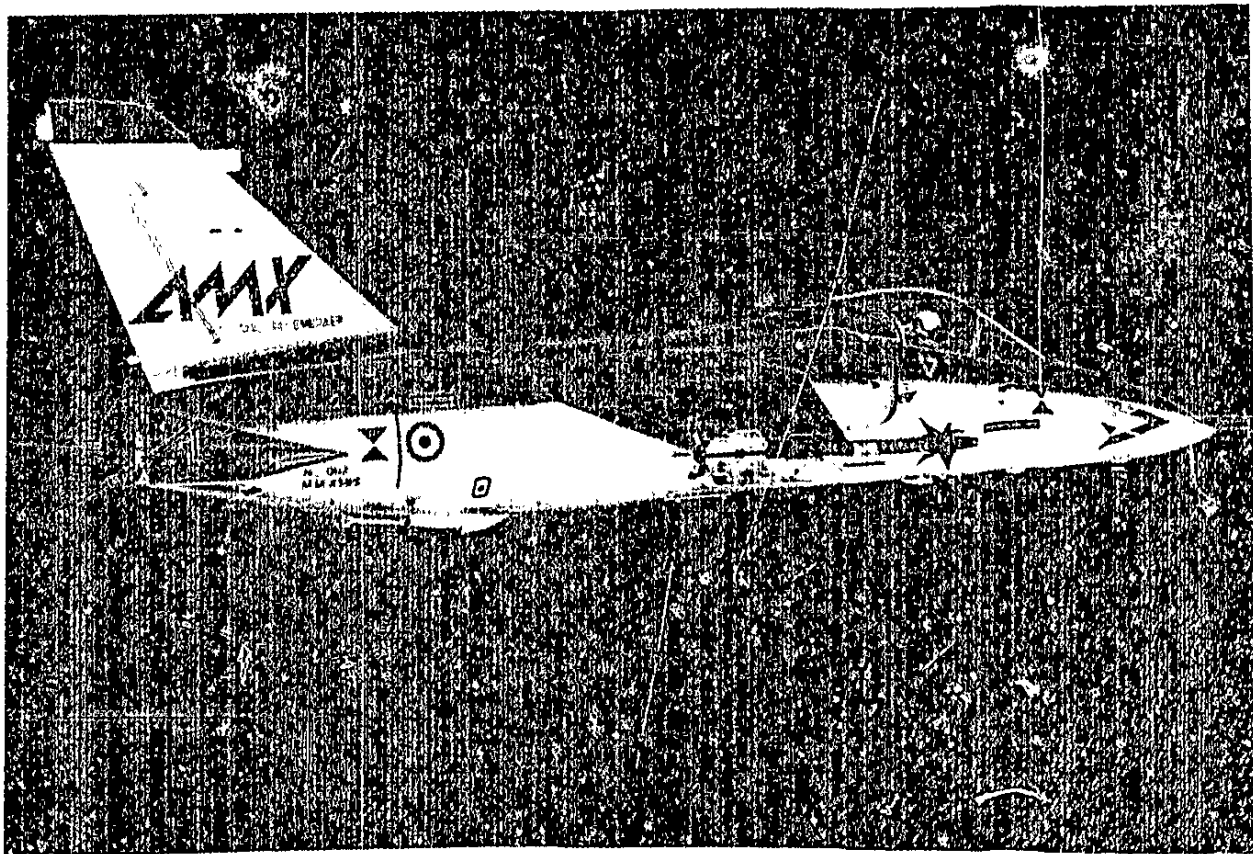
RB199

Supply of RB199 engines for Tornado aircraft continued to be one of the Group's main activities during 1984. The Turbo-Union RB199 was jointly developed by Rolls-Royce, MTU in West Germany and Fiat Aviazione in Italy and manufacture of the engine is shared by the three companies. It is the biggest military engine programme ever undertaken in Europe and the total requirement is now for over 2000 engines for delivery by the end of 1987. In April 1984 the 1000th engine to be produced by this European consortium was delivered.

Good progress was made during the year on the development of the Mk 104 extended-reheat version of the RB199 for the air-defence Tornado; certification testing of the engine was completed on programme.

Adour

The Adour engine powers Jaguar, Hawk and Japanese T-2 and F-1 aircraft and over 2000 engines — which have built up two million hours of service experience, including over 250 000 hours in Hawk trainers — are currently in service with 13 customers.

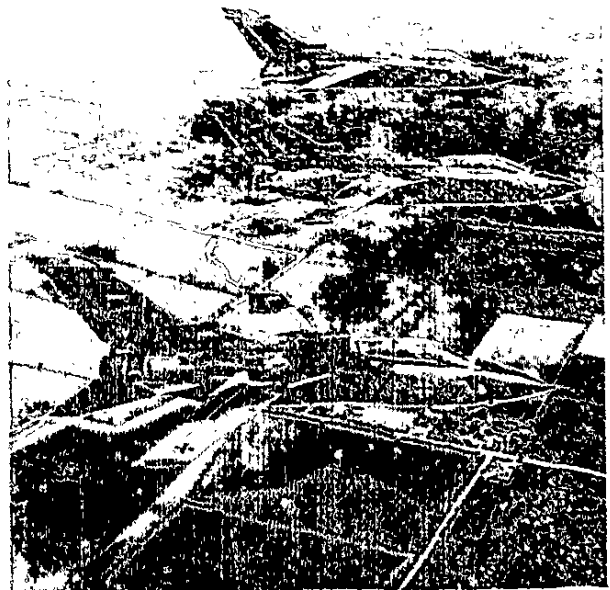


During 1984 the Mk 871 uprated version was launched which will give a 14 per cent thrust increase in hot-day take-off conditions as well as extra thrust at sea level. It will power the Hawk 200 single-seat fighter which has been developed from the initial two-seat trainer/light attack aircraft and is scheduled for certification in mid-1987 with entry into service the following year.

Pegasus

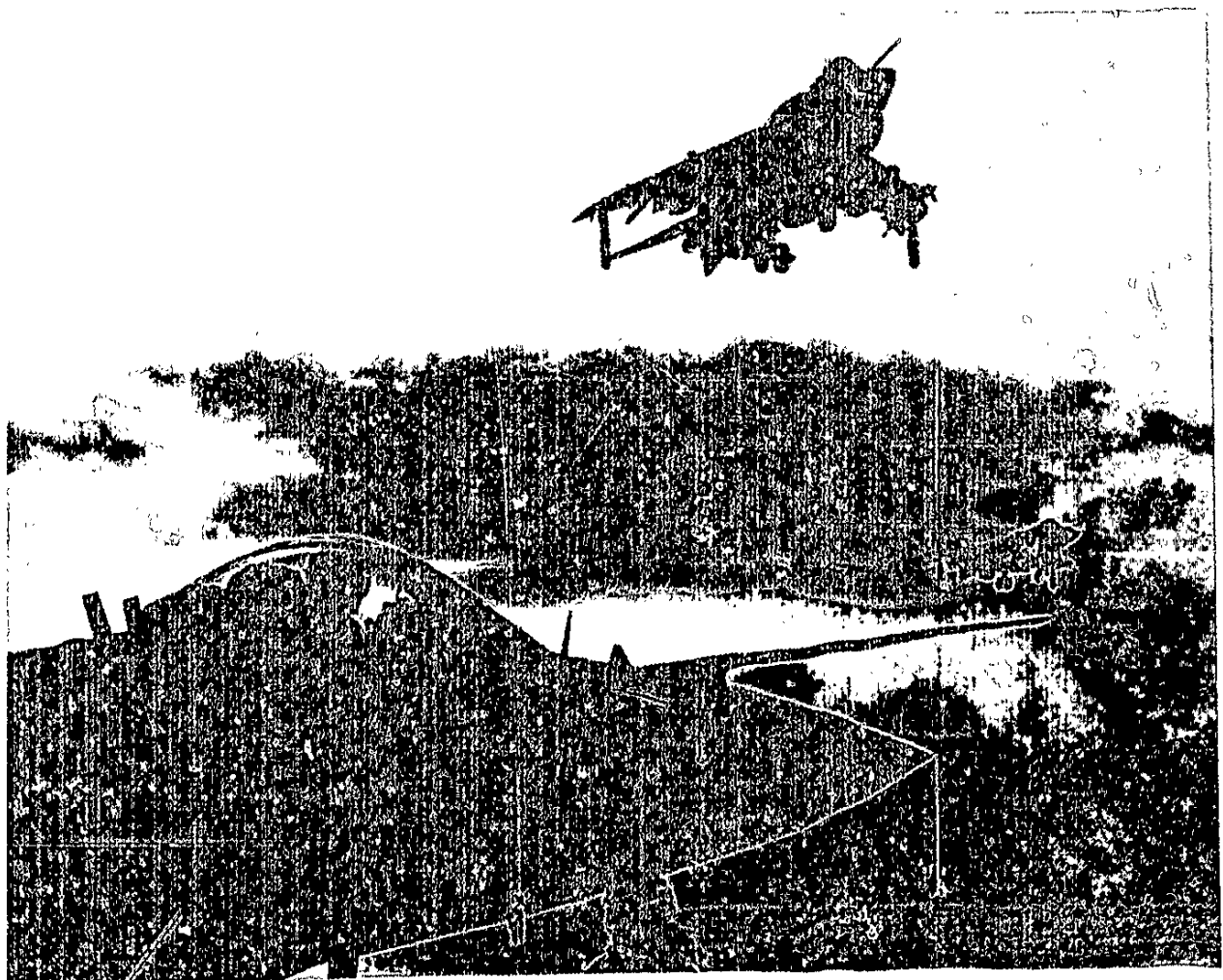
Production of Pegasus vectored-thrust engines continued in 1984 for the AV-8B Harrier II programme and to meet orders from the Royal Navy and the Indian Navy. The Pegasus is in service with five Harrier customers — the Royal Air Force, Royal Navy, United States Marine Corps and the Indian and Spanish navies. In September an order was announced for nine more Sea Harriers for the Royal Navy which will bring its Harrier strength to almost 50 aircraft.

Pegasus production is being increased to meet the demand for engines for the AV-8B for the US Marine Corps and the Harrier GR Mk 5 for the RAF. Orders are expected for 388 aircraft, including 60 for the RAF.



Above: Iconvades from the Tri-national Training Establishment in the leaves of the three participating nations.

Below: Royal Navy Sea Harriers



Production deliveries of the Harrier II began in January 1985 and aircraft are now flying with a US Marine Corps training squadron at Cherry Point, North Carolina. The technical and operational flight evaluations associated with the entry of a new aircraft/engine combination into US military service have proceeded satisfactorily.

Viper

The latest Viper engine in the 600 series, the Mk 680, has completed its type approval test. It provides a 10 per cent increase in take-off thrust over current engines and up to 14 per cent in flight. The engine will power an improved version of the Macchi MB339 light strike aircraft and the single-seat Veltro 2 aircraft.

During 1984 approval testing was completed on the re-heated version of the Viper which will be built under licence in Yugoslavia and Romania; it will power their Orao and IAR 93 aircraft. This version will extend the successful Viper programme in these countries which began in the 1960s and has involved the manufacture of Viper engines under licence since 1972.

Over 4000 Viper engines are now in service with 29 air forces. Total Viper flying time in service exceeds eight million hours.

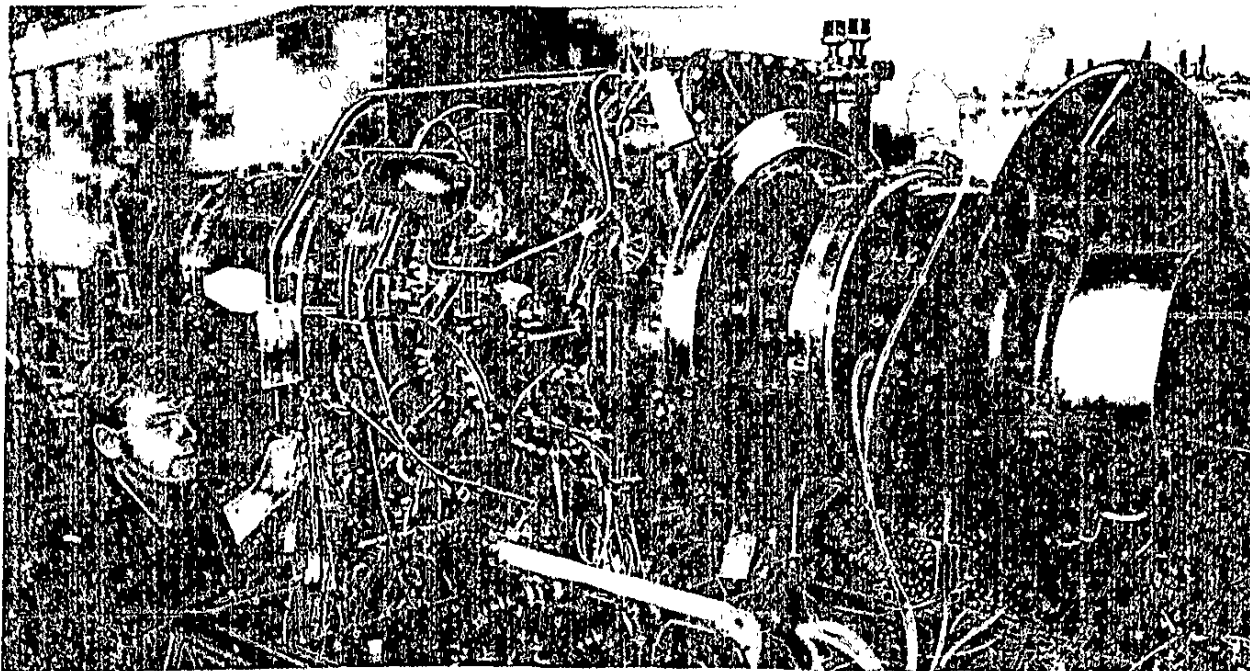
Helicopter engines

The Gem 2 engine has been specified for series production of the new Agusta A129 Mangusta anti-tank helicopter. This is being developed for the Italian army and export customers. Powered by two Gem engines, the Mangusta (Mongoose) is the first anti-tank helicopter to be developed specifically for this purpose in Europe.

The new RTM 322 turboshaft engine, which made its first run in December, is being developed as a joint venture with Turbomeca. It has potential applications in a wide range of advanced helicopters including the replacement to be selected for the existing RAF Puma and Wessex fleet. It could also be installed in the Anglo-Italian EH101 and in future developments of the Westland 30.



Above The Gem-powered Agusta A129 Mangusta anti-tank helicopter
Below The first RTM 322-01 is made ready for test



Industrial and Marine Group

A significant event for the Group during 1984 was the formation of a new company to market gas turbine electrical generating sets world-wide. The new company, GEC Rolls-Royce (Power Generation) Limited, was formed by merging the gas turbine power generation businesses of Rolls-Royce and GEC UK.

Each parent company owns 50 per cent of the shares in the joint company which is aiming at the electrical market above 10 MW; its first contracts are now being negotiated. It can call on experience of over 10 000 MW of gas turbine generation equipment installed world-wide by the parent companies during the past 20 years.

The new company complements the successful Cooper Rolls organisation, a company jointly owned by Cooper Industries of the USA and Rolls-Royce. Cooper Rolls was formed to sell to the gas and oil markets and is now the world leader in its power range, having supplied over 100 machines in the five years since its formation.

The sale of two Spey-powered generating sets, the first order for Speys to produce electrical power, took place in 1984. The contract — with the People's Republic of China — confirms the versatility of the Spey, which has been sold for civil and military aircraft, marine propulsion, oil and gas industry applications and, now, power generation.

The 1000th industrial Avon was delivered in 1984, a world first for aero-derived industrial gas turbines. Avons are now in service in 36 countries with 100 industrial operators. During its 20-year history the engine has established more performance records

than any other industrial gas turbine and, in 1984, reached one million hours of service on the Trans-Alaska oil pipeline.

A new Olympus development during the year reflects the increasing emphasis on efficiency in energy usage and the development of alternative forms of energy. A 30 MW Olympus generating set entered service in 1984 in Scotland operating on gas derived from coal.

The project was sponsored by the European Economic Community and has been awarded a £330 000 contract by the Electrical Producers' Research Institute (EPRI) for development studies on the use of coal as a gas turbine fuel for power generation. The first commercial contract on such a coal gasification scheme could be in the North of England, where a study is being conducted on a combined heat and power project using Olympus sets.

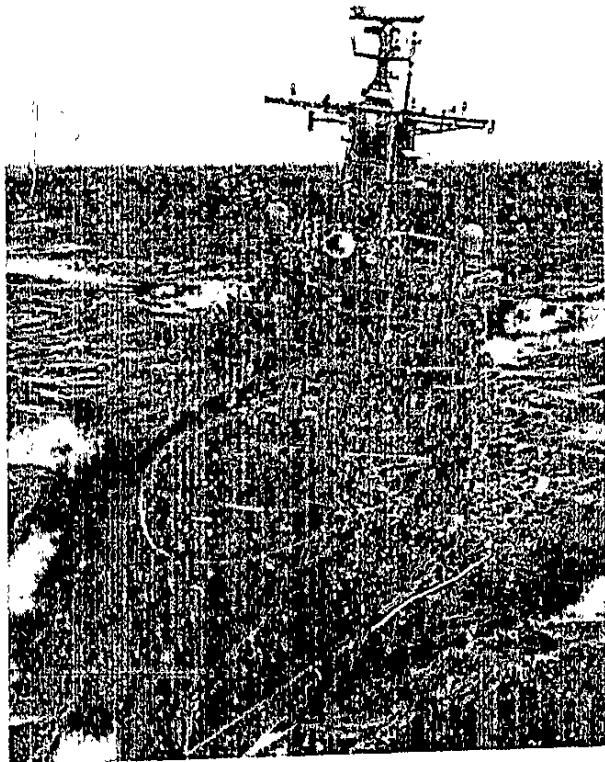
In the oil and gas market Cooper Rolls retained the leading position in its power range, with 1984 sales representing 32 per cent of the total world market. Orders were received from the Norwegian offshore and Alaskan markets for the industrial RB211. Following the latest offshore orders, Rolls-Royce will have gas turbine power equipment on platforms in ten countries ranging from South America to the Far East.

The Group's naval business achieved further success with the highly efficient marine Spey. This engine was chosen for a second class of warship by the Japanese Defense Agency, and Holland confirmed that the Spey would power their new 'M' class frigates. Orders have been received for 69 marine Speys.

To ensure its continued success as a warship engine, an updating programme has been committed to increase the power from 14 to 18 MW. Future naval requirements call for a marine gas turbine at this higher power.

A possible further development of the marine Spey is an inter-cooled regenerative (ICR) version. A project design contract was received in 1984 from the USA for the ICR version which will provide an estimated 30 per cent fuel saving on a typical ship mission.

The year ended with the 25th anniversary of the introduction of aero gas turbine engines for industrial applications. The first engine to be used in this way was a Proteus, originally developed as a turboprop engine for the Bristol Britannia airliner. A 2.5 MW electrical generating set powered by a Proteus entered service on December 11, 1959 and is still producing electrical power for the South Western Electricity Board in Devon.



Type 22 frigate; the latest version will be powered by Spey and Tyne machinery.

Supply Group

After several years of continuing reductions in the manufacturing workload, the Company's supply requirements turned upward in 1984.

Further progress was made in the application of the latest manufacturing technology and in rationalising the range of components to be made within the factories. Existing and new equipment is being drawn together to create manufacturing centres to produce families of parts.

Following installation in 1983, a fully integrated flexible grinding centre has been successfully commissioned in the Derby turbine blade facility. The introduction of flexible production techniques for the manufacture of turbine blades using a fully computer-controlled creep-feed grinding centre enables up to 12 grinding operations required on each blade to be completed within a cycle time of less than three minutes. Also at Derby, the automated integrated manufacturing system (AIMS) for wheels and discs is on plan with robot trucks due for installation and commissioning in 1985.

At Hillington, compressor blade manufacture is being optimised by improving the way forgings are made and fully utilising the automatic broach lines. A new automated manufacturing system is also being introduced for variable guide vanes needed for the CF6-80C2 and the V2500.

Sunderland is extending a cell for making high pressure compressor casings and work is well in hand to establish a disc manufacturing cell.

Barnoldswick is concentrating on development and manufacture of the wide-chord fan blade. The 535E4 facility is now almost complete, representing an investment of £1.8 million. In 1984 the V2500 wide-chord fan blade programme was introduced. Manufacture of the development blades has already begun, the first batch being due for delivery to Japan in September 1985. A manufacturing unit for production blades is currently being established at the Barnoldswick factory involving a further investment of £1.7 million.

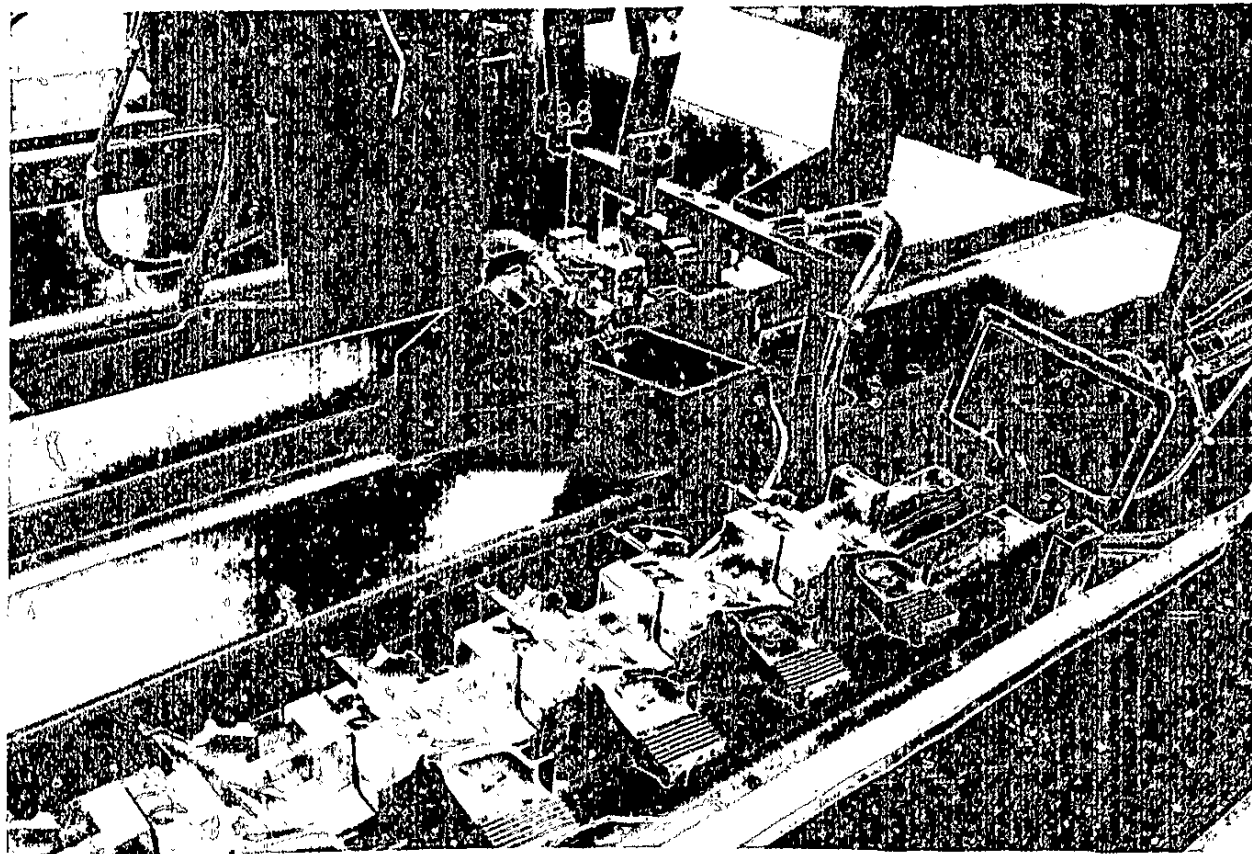
In the fabrications facilities at Hucknall and Mountsorrel, a bearing housing cell is being created and a policy of producing a single-level fabrications assembly has been initiated.

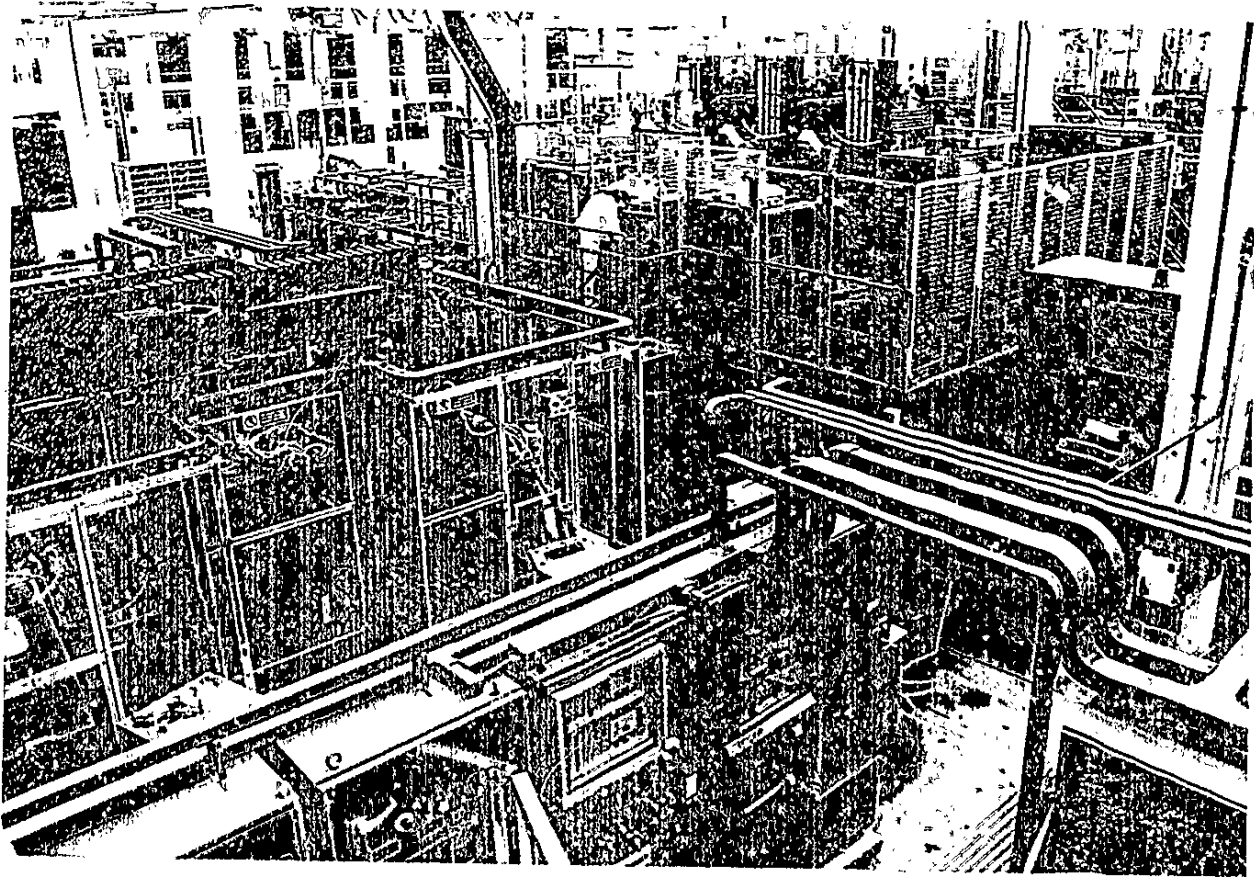
At Coventry, a Cincinnati machining centre is on order to complete a light alloy cell and there will be a further development of the wheel and disc facility.

An advanced 360 degree electro-chemical machining installation has commenced operations at Bristol. This produces, in a totally automated form, thin aerofoil compressor blades for the Pegasus and Gem engines. Also on plan is the full integration of a Yamazaki cell for large structural components for military engines.

Investment in advanced machine tools is increasing throughout the factories ensuring consistency of manufacture and reducing scrap. As part of a

The first and, to date, the only operational creep-feed grinding centre in the world was installed in Derby's No. 12 shop during the year.





continued drive to improve quality and reliability of the Company's products a major initiative has been launched to reduce process variability. Closer links are being created between design and manufacturing to ensure that the design specification for a component is compatible with the capability of the manufacturing method. Supplier involvement in this initiative was committed at a series of manufacturing, quality and technology symposia held for Rolls-Royce suppliers during 1984. The initial results from this project are encouraging and subsequent development in 1985 is expected to have a significant impact on productivity as well as the quality of the Company's products.

Action to shorten production lead times and improve stock turn has resulted in stock levels being contained despite a work load increase towards the end of 1984; this is directly related to an increased output requirement from the Civil Engine Group in 1985.

All facilities have been involved with manpower reduction programmes, primarily aimed at matching work schedules and improving effectiveness. This has necessitated significant redeployment and retraining activities throughout the Group and a centralisation of resources from off-site locations.

Changes of this nature can only be brought about with the understanding and co-operation of all employees within the Supply Group and 1984 was notable for the very low level of time lost through disputes in a period of major readjustment.

Above This fully-automated manufacturing system for small compressor blades is operating at Bristol

Below Barnetsworth's Cincinnati machining centre — similar equipment is on order for the Coventry plant



Corporate Engineering Group

Corporate Engineering oversees the application of the Company's engineering resources prior to an engine programme being launched by the relevant business group. This involves research, technology, design and advanced engineering programmes for the Company's present and future business. Considerable emphasis is placed on the economical application of technology with commonality between military and civil programmes.

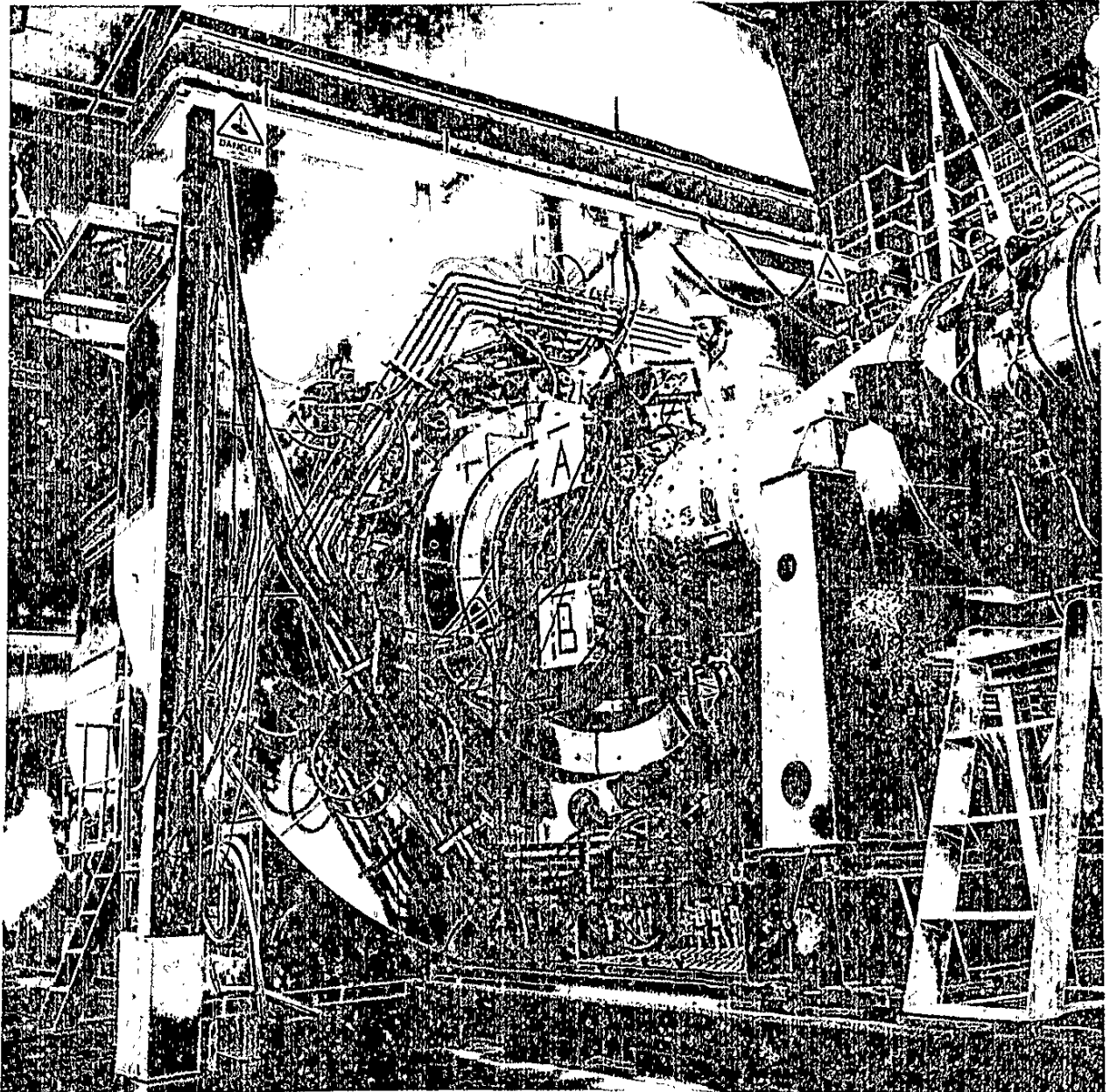
To sustain a competitive technology base the requirements include basic research on models, rig tests of engine components, testing of demonstrator spools or engines together with complex and expensive facilities to support these activities. One example of these facilities is the advanced compressor

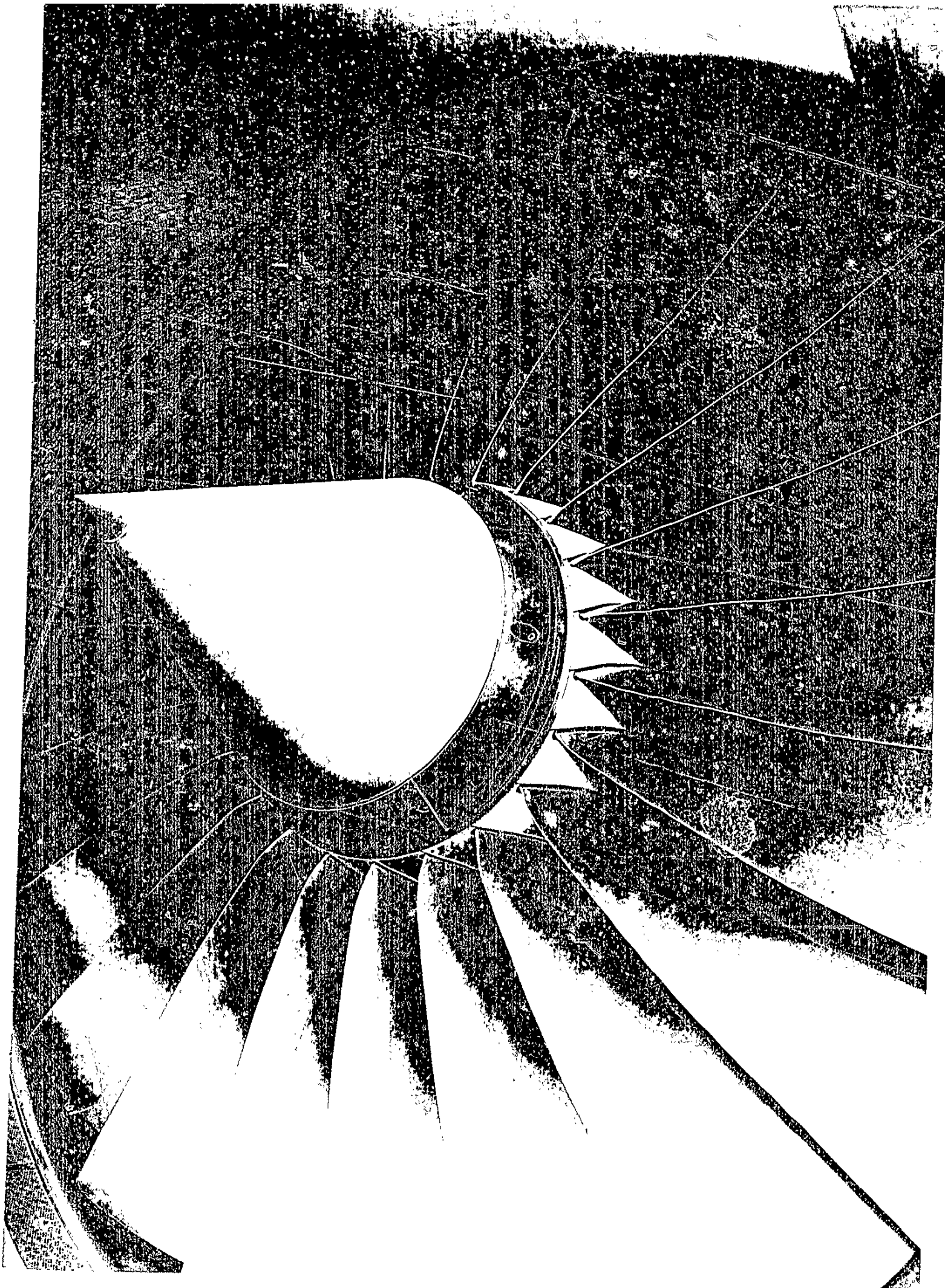
test rig opened at Derby in March, 1984 by Mr. Norman Tebbit, the Secretary of State for Trade and Industry. This facility, costing more than £9 million, permits new compressor designs to be tested more rapidly and with greater accuracy than in the past.

The overall balance of activity within the Company's research and development programmes has been undergoing a basic change with the preparatory spend increasing while that on launched engine programmes has begun to reduce. Engine technology is now proved at a much earlier stage. This is bringing considerable overall benefits and it is already clear that future engine development programmes can be achieved at a significantly reduced cost.

Right: The Rolls-Royce award-winning wide-chord fan in service with the RB211-535E4 engine. This technology has been adapted for the Tay and is planned for the V2500 powerplant.

Below: Derby's advanced compressor test rig facility.





Repair and Overhaul

During 1984 the Company took steps to consolidate its repair and overhaul activities and a business management team was formed to develop this sector of Rolls-Royce business. Activities in the UK account for about three-quarters of the Company's repair business and employ some 3500 people of which support for the British armed forces represents more than half.

The management team is based at East Kilbride in Scotland where the Company's airmotive operation is the largest of its kind in Europe. Activities at East Kilbride, in conjunction with Company repair facilities at Ansty, Bristol, Derby and Leavesden, plus Rolls-Royce (Canada) at Montreal and Motores Rolls-Royce in Brazil, contributed more than £120 million to the Company's turnover in 1984.

The extensive resources and technology of the Company, coupled with its experience in overhauling commercial gas turbines, have put Rolls-Royce in a good position to respond to the competitive tendering policy introduced by the Ministry of Defence for overhaul business for the armed forces.

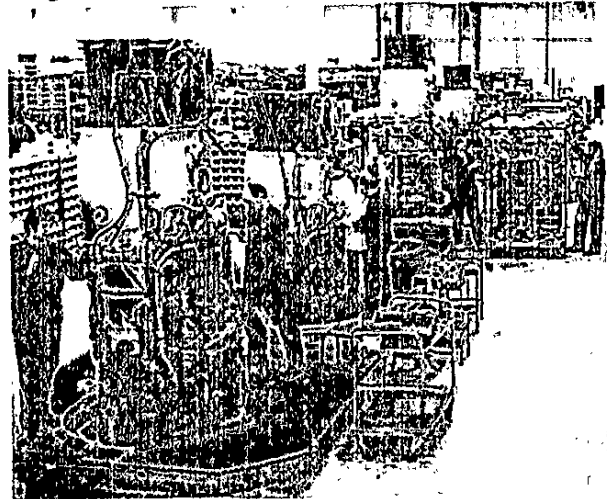
Nuclear

The Company is involved in the Royal Navy's nuclear propulsion programme through its subsidiary company Rolls-Royce and Associates Limited and its reactor core manufacturing facility at Derby. The main business of Rolls-Royce and Associates, formed in 1959, is the design, development, procurement and support of nuclear steam-raising propulsion plant for Royal Navy submarines. With the commissioning of the second Trafalgar class submarine HMS Turbulent in August 1984, there are now 13 hunter-killer and four Polaris submarines in service. The Company's task in supporting these submarines has increased significantly over recent years as the number of boats in service has grown; the work is centred at Derby

and on site at the three nuclear submarine bases — Devonport, Faslane and Rosyth.

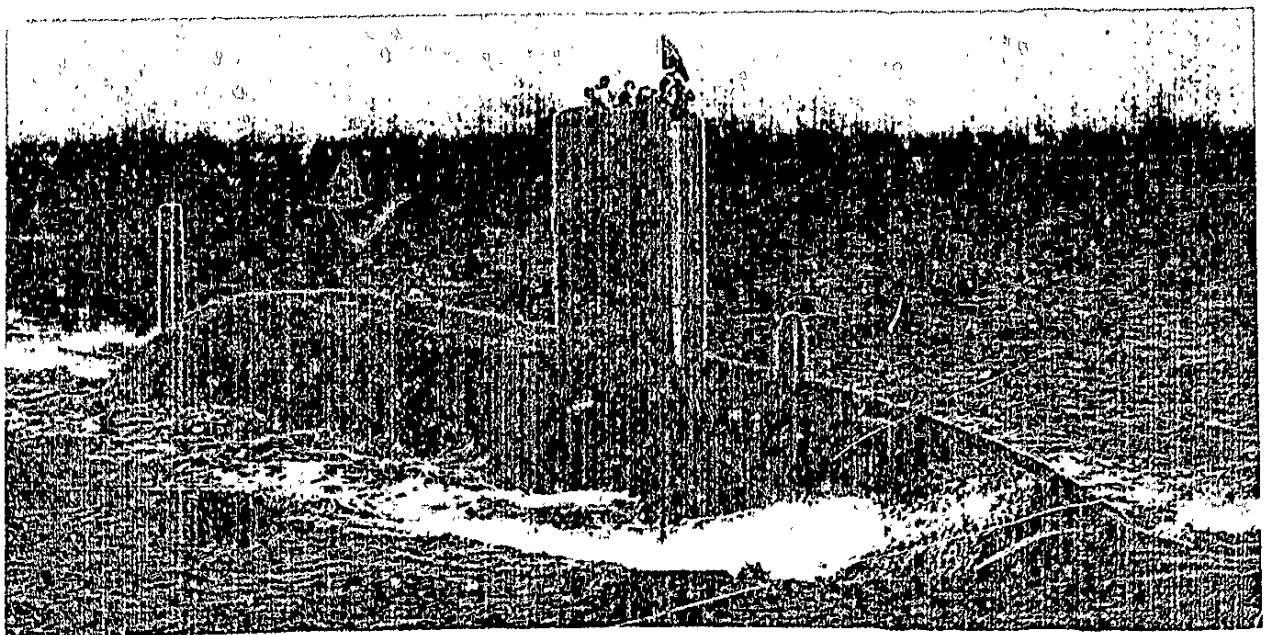
Four more Trafalgar class submarines are being built and fitted out at Vickers Shipbuilders and the Company is also engaged in procurement of long-lead items for the next class of boats. Associated with these is the next-generation powerplant which is under construction at Barrow before installation in a special test facility at Dounreay in the north of Scotland. During 1984 Dounreay completed 20 years of operation with the original prototype powerplant.

Rolls-Royce and Associates is now engaged on an extensive programme to confirm that the new powerplant will operate in conformance with stringent nuclear safety standards. Technical work also continues at Derby in support of submarine powerplants now in service and on more advanced designs for the future.



Above: Overhauling Spey Mk 202 engines at the East Kilbride repair and overhaul facility.

Below: Trafalgar class hunter-killer submarine HMS Turbulent.



Personnel and Employee Involvement

Training: The development of employees in order to realise their full potential in managerial, professional and technical fields continues to be a cornerstone of Rolls-Royce personnel policy.

In-house training resources have been substantially reorganised and are now managed on a corporate basis. This has provided the opportunity to review training facilities and priorities on a Company-wide basis and to eliminate duplication.

A significant development has been the introduction of 'training to standards' for engineering apprentices following the agreement between the Engineering Employers' Federation and the Confederation of Shipbuilding and Engineering Unions.

Joint Committees: The Company has a tradition, stretching over many years, of encouraging employee participation. Joint committees are established for the promotion of productivity and informed consultation. Committees involve a two-way communication of ideas and information between senior management and union representatives on the general business situation, topical specialist subjects, and issues relevant to local working areas.

Quality Circles: Also referred to as 'accountable teams' and 'task forces', quality circles are designed to improve quality and reduce non-conformance. They consist of small teams, set up at shop floor level and usually led by a supervisor. Using their collective experience and with access to specialists, their effort is directed towards overcoming a specific problem.

Rolls-Royce Managing Director, Mr Ralph Robins, is pictured with winners of the Hives and Lombard Awards for apprentices.

Youth Training Scheme: The Company has given work experience to over 300 young people under the YTS scheme which started two years ago. The scheme is proving very successful with most participants gaining full-time employment after their 12 months training, some with Rolls-Royce.

Suggestion Scheme: The suggestion scheme enables works employees to be rewarded financially for putting forward cost and time saving ideas. All suggestions are evaluated and if found feasible the employee receives a maximum of £2000, dependent on the projected financial benefit to the Company.

Employees' Pension Funds: Membership of either the works or staff pension funds is a condition of employment. Four trustees are elected by the members of each of the works and staff pension funds and four trustees and a Chairman are appointed by the Company.

Rolls-Royce News: The Company newspaper is published monthly and made available in bulk at all locations. In addition to keeping employees updated on all major developments within the Company and the aero-engine industry, the newspaper also provides coverage of employees' activities.

Health and Safety: The Company has developed a structure of safety committees covering all operating units to ensure full consultation with the employees' representatives on health and safety issues. The committees' activities centre largely around the maintenance of safe systems of work and control of the environment. A major input to this work results from the activities of the trade unions' safety representatives who act for both manual and staff employees.



Overseas Activities

Rolls-Royce engines provide the power for aircraft of more than 300 airlines, 114 armed forces and 660 corporate operators. Derivatives of Rolls-Royce aero-engines are in service for electricity generation, oil and gas pumping and marine propulsion. The company supports its activities in this world-wide market place through a network of overseas subsidiary companies and regional offices. In addition, Rolls-Royce employs more than 300 service representatives and operates or supports over 70 repair bases.

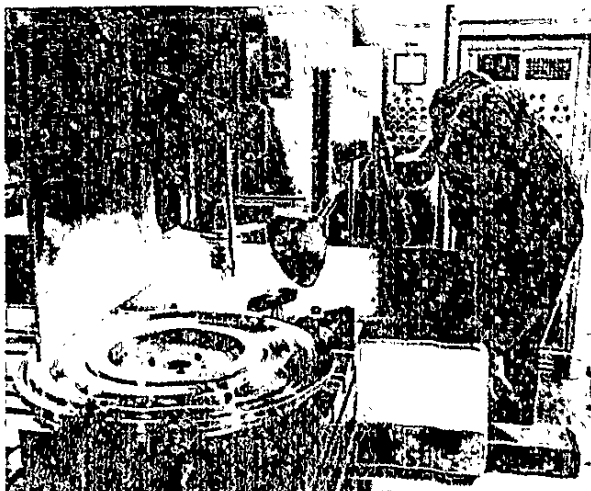
In the United States the wholly-owned subsidiary, Rolls-Royce Inc. has offices in key locations throughout North America with its headquarters at Greenwich, Connecticut.

The company is responsible for co-ordination of day-to-day Rolls-Royce activities in the USA, Mexico, the Caribbean and Central America. This includes customer support for current engines operating in, or on services to, North America. Product support teams are maintained at the bases of major airline customers and the company also operates a spares centre at Herndon near Washington which was opened in 1978 to support RB211 operators in the United States.

The company's machining facility at Miami was set up in 1981 for the manufacture of turbine and compressor discs and also undertakes high quality general machining work for a number of US customers.

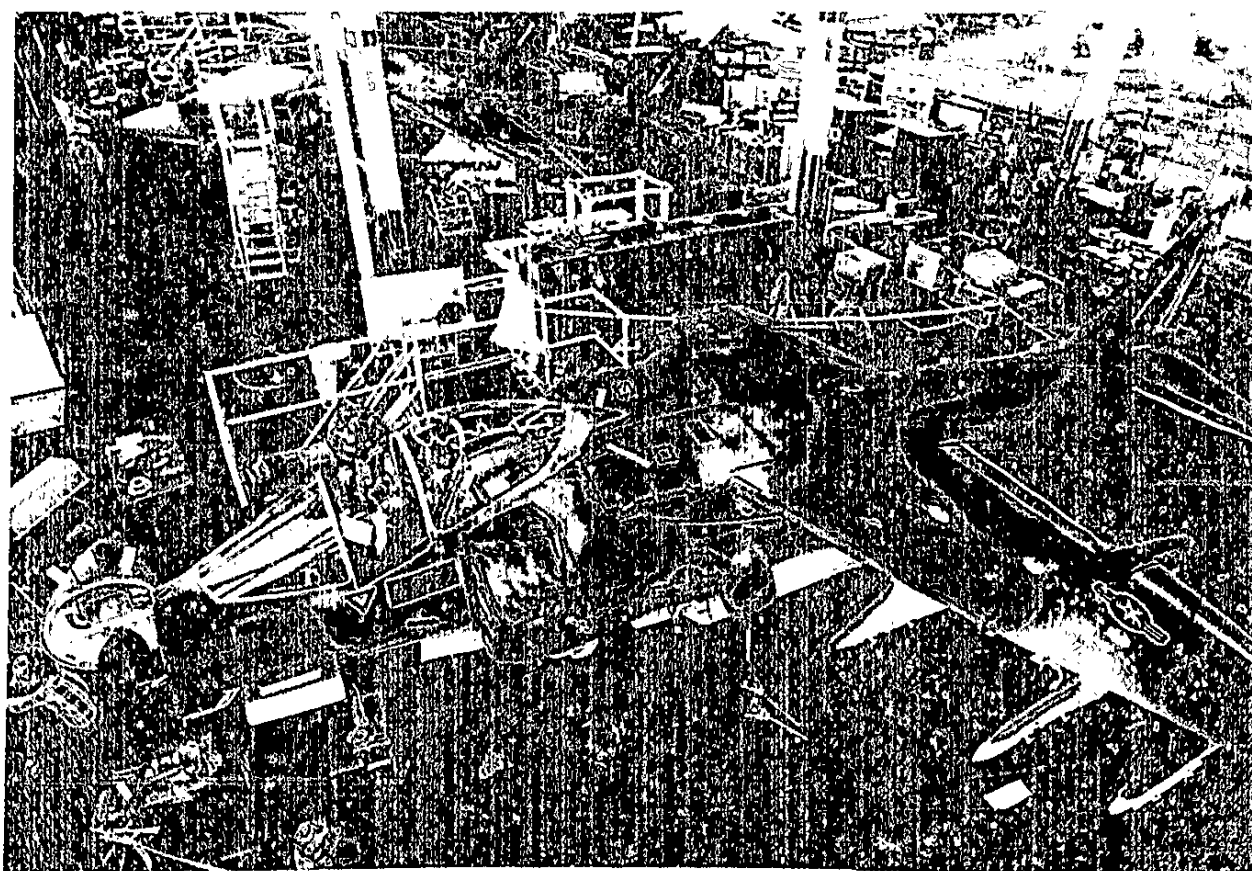
The company which employs British and American engineers, also has an engineering group in Atlanta. This group bids for US government research contracts and was awarded its first in September 1981.

Other activities include marketing support in North America for the complete range of Rolls-Royce gas turbines and the local management of US military marketing programmes via the company's Washington office.



Above: Rolls-Royce Inc's Miami facility

Below: Production of Harrier AV-8Bs for the US Marine Corps at McDonnell Douglas St Louis Missouri



The Washington office works closely with the US Air Force, US Navy and US Marine Corps in support of the A-7, T-45 and Harrier programmes. Resident representatives are located at major US airframe companies and the engine manufacturers which have co-operative programmes with Rolls-Royce.

A new market opportunity has been created by recent US legislation which permits industrial operators of cogeneration plants to sell their surplus electrical power to local utilities. The first US application based on a Rolls-Royce engine will enter service in 1986 in Florida using an industrial Olympus developing 25 MW.

For the Canadian group of companies 1984 was a year of change and consolidation. The recession which affected North American industry caused problems, but the varied nature of company activity in Canada permitted the group's performance to be insulated from the full effects of the decline in the repair and overhaul business for engines and airframes.

During 1984 Bristol Aerospace Limited at Winnipeg saw the phase-out of the F-101 Voodoo repair and overhaul programme and the transfer of resources from intake-duct manufacture for Lockheed TriStars. There was also a lower volume of work on afterburner and jetpipe repair. The resultant reduction in revenue was replaced by growth in the manufacture of components for engines, airframes, nuclear reactors and rocket and space products.

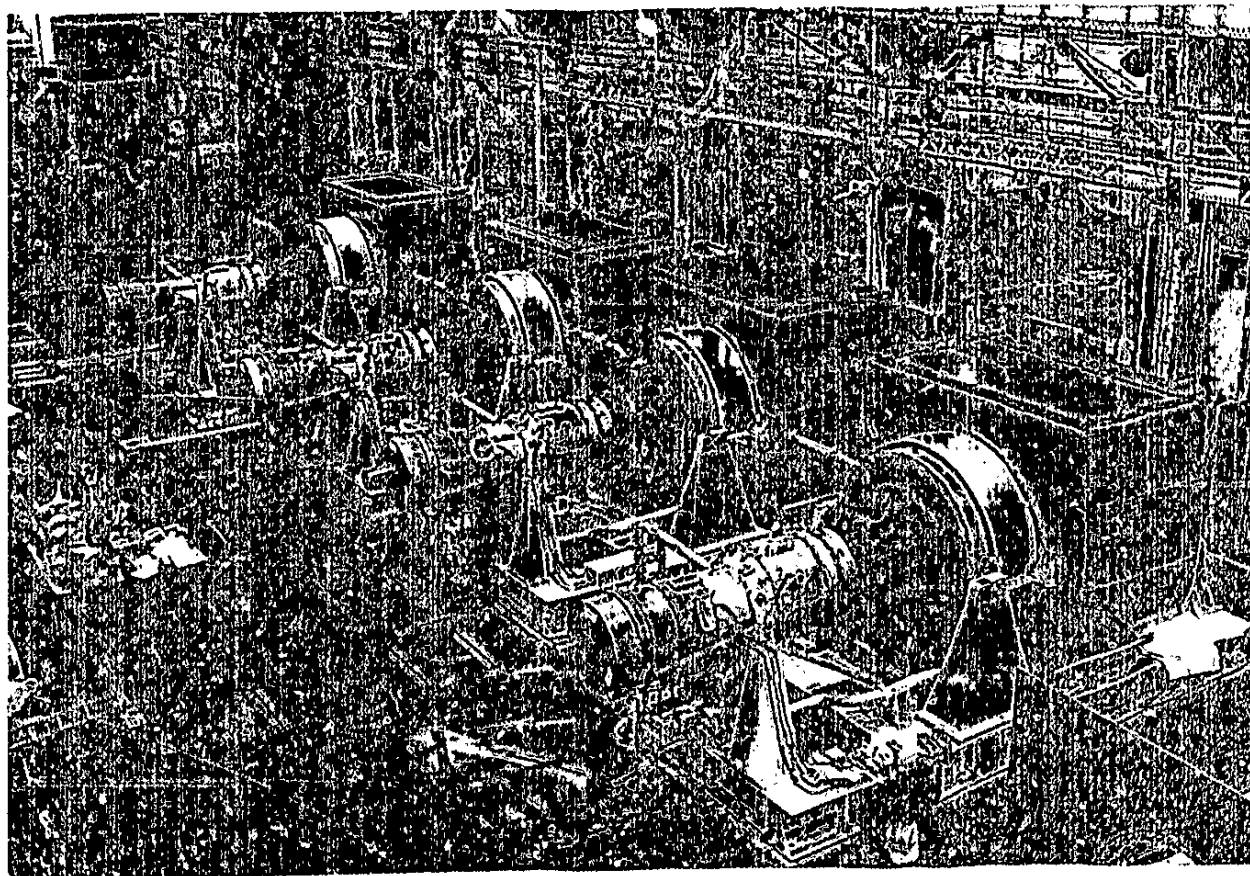
Bristol Aerospace is the largest of the Rolls-Royce operating companies in Canada and has 1300 employees.

Rolls-Royce (Canada) Limited employs 700 people predominantly on the repair and overhaul of aero-engines for commuter airlines and operators of corporate aircraft. The number of customers has grown as a result of deregulation in the USA and despite intense competition from US-based airmotive companies, the Rolls-Royce (Canada) share of the business on the most significant engine types has increased. The company also continues to repair and overhaul military aero-engines, predominantly for the Canadian Forces, and to produce industrial gas turbines for oil and gas industry applications.

Rolls-Royce Industrial & Marine Limited completed its first full year as a trading company in Canada with new orders for applications in Egypt, Germany, the North Sea, Norway and the USA.

The 1000 Rolls-Royce engines in service with South American operators are, for the most part, supported by Motores Rolls-Royce Limitada in São Paulo; this wholly-owned subsidiary company employs 430 people and celebrated its silver jubilee in 1984. During the year, the Italian/Brazilian AMX close-support fighter programme, which uses the Spey Mk 807, got under way, and industrial Avon-powered generating units went into service with Petrobras.

Four SK30 generating sets constructed in Canada for Ontario Hydro.



Report of the Directors

Principal activities

The Company's principal business is the design, development, manufacture and sale of gas turbine engines and ancillary equipment for aircraft and for industrial and marine applications.

Subsidiary companies include Rolls-Royce and Associates Limited which designs, develops, procures and supports nuclear steam-raising plant for naval purposes. Other subsidiary companies are mainly involved in the manufacture of aerospace and related products, and in providing sales and service support of the Company's products overseas.

Results for the year

Turnover for the year was £1 409m (1983 £1 331m), including direct exports of £519m (1983 £513m).

Profit before taxation was £26m (1983, loss £114m). The directors do not recommend the payment of a dividend and the net profit of £20m (1983, loss £193m) has been retained.

A review of the year's operations, research and development activities and future prospects is contained in the Chairman's Statement on pages 2 and 3 and in the Review of Activities.

Fixed assets

Expenditure on fixed assets during the year amounted to £17m (1983 £30m), mainly in respect of gas turbine manufacturing and engineering facilities.

The professional valuation of the Company's land and buildings at December 31, 1980 has been updated to the end of 1984 and suggests a value £9m greater than the figure shown in the accounts.

Employees

The number of Group employees at the end of the year was 40 900 (1983 42 300).

Employee involvement

Company policy on employee involvement is stated in the Review of Activities.

Disabled persons

The Company's policy is to provide, where possible, employment opportunities to disabled people, to look after employees who become disabled and to make the best possible use of their skills and potential.

Donations

No political donations were made by the Company or its subsidiaries. Charitable donations amounted to £45 000 (1983 £51 400).

Directors

Apart from Mr J. O. Keir, who was appointed to the Board on November 9, 1984, the directors listed on page 21 were in office throughout 1984.

Mr A. G. Newton retired on March 31, 1984 and the Chairman, Sir William Duncan, died on November 5, 1984.

None of the directors of the Company at December 31, 1984 had, during the year, any interests in the shares or debentures of the Company or any of its subsidiaries.

Auditors

A resolution to re-appoint the auditors, Coopers & Lybrand, will be proposed at the Annual General Meeting.

Anthony Warrington

By order of the Board

Anthony Warrington
Secretary
April 11, 1985

Board of Directors

as at April 11, 1985

Chairman

Sir Francis Tombs

Managing Director

R H Robins

Executive Directors

S L Higginbottom CBE

Chairman and President
Rolls-Royce Inc

J O Keir

Director, Civil Engines

P J Molony

Director, Military Engines

J A Rigg

Director, Finance

F T Salt CBE

Director, Supply

J D Wragg

Director, Corporate Engineering

Non-Executive Directors

Sir St John Elstob CBE

Sir Arnold Hall

Air Chief Marshal Sir Douglas Lowe GCB, DFC, AFC

Sir Peter Thornton KCB

Secretary

Anthony Warrington

Registered office

65 Buckingham Gate,
London SW1E 6AT

Auditors

Coopers & Lybrand
Abacus House, Gutter Lane,
London EC2V 8AH

Solicitors

Freshfields
Gardai House, 25 Newgate Street,
London EC1A 7LH

Bankers

National Westminster Bank PLC
15 Bishopsgate,
London EC2P 2AP

Barclays Bank PLC
54 Lombard Street,
London EC3P 3AH

Consolidated Profit and Loss Account

for the year ended December 31, 1984

	Notes	1984 £m	1983 £m
Turnover	1.	1 409	1 331
Cost of sales		(1 104)	(1 111)
Gross profit		305	220
Commercial, marketing and product support costs		(71)	(67)
General and administrative costs		(72)	(79)
Operating profit		162	74
Research and development (net)	2	(101)	(131)
Interest payable and similar charges		(35)	(55)
Share of losses in related companies		—	(2)
Profit (loss) on ordinary activities before taxation	3	26	(114)
Taxation	6	(5)	(4)
Profit (loss) on ordinary activities after taxation		21	(118)
Attributable to minority interests		(1)	(1)
Extraordinary item — net restructuring costs		—	(74)
Profit (loss) attributable to Rolls-Royce Limited		20	(193)

		1984 £m	1983 £m
Accumulated deficit			
At January 1		(341)	(151)
Profit (loss) for the year		20	(193)
Foreign currency translation adjustments		2	—
Transfer to revaluation reserve of depreciation charge attributable to revaluation surplus	7	3	3
At December 31		(316)	(341)

The Company profit and loss account is not shown — Section 149(5) of Companies Act 1948.

The notes on pages 28 to 41 form part of these accounts.

The auditors' report is on page 27

Consolidated Balance Sheet

at December 31, 1984

	Notes	1984 £m	1983 £m
Fixed assets			
Tangible assets	9	202	312
Investments in related companies	11	1	—
Current assets			
Stocks	12	521	513
Debtors	13	263	240
Cash at bank and in hand		31	15
		<u>815</u>	<u>768</u>
Creditors — amounts falling due within one year			
Bank loans, overdrafts and other borrowings	14	(101)	(191)
Other creditors	15	(345)	(227)
Net current assets		<u>369</u>	<u>350</u>
Total assets less current liabilities		<u>672</u>	<u>662</u>
Creditors — amounts falling due after more than one year			
Bank loans and other borrowings	16	(186)	(174)
Other creditors	17	(41)	(54)
		<u>(227)</u>	<u>(228)</u>
Provisions for liabilities and charges	18	<u>(116)</u>	<u>(127)</u>
		<u>329</u>	<u>307</u>
Capital and reserves			
Called up share capital	19	508	508
Revaluation reserve	7	132	135
Profit and loss account	8	(316)	(341)
		<u>324</u>	<u>302</u>
		<u>5</u>	<u>5</u>
Minority interests		<u>329</u>	<u>307</u>

The notes on pages 28 to 41 form part of these accounts.

The auditors' report is on page 27.

Parent Company Balance Sheet

at December 31, 1984

	Notes	1984 £m	1983 £m
Fixed assets			
Tangible assets	10	240	271
Investments:			
Shares in group companies	20	38	20
Shares in related companies	11	1	—
		<u>39</u>	<u>20</u>
		279	291
Current assets			
Stocks	12	450	449
Debtors	13	242	221
Cash at bank and in hand		10	5
		<u>702</u>	<u>675</u>
Creditors — amounts falling due within one year			
Bank loans, overdrafts and other borrowings	14	(54)	(92)
Other creditors	15	(334)	(297)
		<u>(388)</u>	<u>(389)</u>
Net current assets		314	286
Total assets less current liabilities		<u>593</u>	<u>577</u>
Creditors — amounts falling due after more than one year			
Bank loans and other borrowings	16	(184)	(171)
Other creditors	17	(41)	(46)
		<u>(225)</u>	<u>(217)</u>
Provisions for liabilities and charges	18	(105)	(116)
		<u>263</u>	<u>244</u>
Capital and reserves			
Called up share capital	19	508	508
Revaluation reserve	7	127	130
Profit and loss account	8	(372)	(394)
		<u>263</u>	<u>244</u>

Francis Tombs
J A Rigg

} Directors

Francis Tombs
J A Rigg

April 11, 1985

The notes on pages 28 to 41 form part of these accounts

The auditors' report is on page 27

Consolidated Statement of Source and Application of Funds

for the year ended December 31, 1984

	1984		1983	
	£m	£m	£m	£m
Source of funds				
Profit (loss) after extraordinary item but before taxation		26		(188)
Adjustments for items not involving the movement of funds:				
Depreciation	32		32	
Exchange adjustments — tangible fixed assets	(6)		(3)	
(Decrease) increase in provisions for liabilities and charges	(11)		34	
		15		63
		41		(125)
Increase (decrease) in loans		12		(50)
Miscellaneous items		1		2
		54		(173)
Application of funds				
Capital expenditure	(17)		(30)	
(Decrease) increase in creditors falling due after one year	(13)		5	
Tax paid	(4)		(5)	
		(34)		(30)
		20		(203)
Decrease in net current assets:				
Increase in current creditors excluding corporate taxation	117		14	
(Increase) decrease in stocks, net of progress payments	(8)		133	
(Increase) decrease in debtors	(23)		23	
		86		170
		106		(33)
Change in net liquid funds				
Represented by:				
Increase (decrease) in cash balances		16		(3)
Decrease (increase) in bank loans, overdrafts and other borrowings		90		(30)
		106		(33)

The auditors' report is on page 27

Accounting Policies

Basis of accounting

The accounts on pages 22 to 41 have been prepared on the historic cost basis, modified to include the revaluation of land and buildings at December 31, 1980.

The Group's share of profits or losses of related companies is included in the consolidated profit and loss account.

Turnover and trading profit

Turnover excludes value added tax and comprises:

- (i) Amounts invoiced to customers, including any foreign exchange effect of products priced in currencies other than sterling.

- (ii) Estimated sales values, where prices have not been agreed with customers.

- (iii) Income from licences and management fees.

Trading profit is taken at the time of sale; in the case of long-term contracts, profit is arrived at by reference to the estimated overall contract profitability.

Foreign currencies

(i) Parent Company accounts

Assets and liabilities in foreign currencies are translated into sterling on the following bases:

- (a) Borrowings and loans to subsidiary companies at the exchange rates ruling at the year end.

- (b) With effect from January 1, 1984, the Company designated certain foreign currency borrowings as a hedge against investments in overseas subsidiaries and consequently, from that date, such borrowings and related overseas investments are treated as foreign currency items. Accordingly, at each balance sheet date, the borrowings are restated at the sterling equivalent. The movement in the sterling cost of acquiring the relevant subsidiaries since January 1, 1984 is similarly restated in the Company's balance sheet.

- (c) Assets and other liabilities at the estimated sterling equivalent, account being taken of forward exchange contracts.

Differences, other than those referred to in (b) above, are charged or credited in determining profit on ordinary activities before taxation.

(ii) Consolidated accounts

- (a) Assets and liabilities of overseas subsidiaries are translated into sterling at the exchange rates ruling at the year end.

- (b) Turnover and profits or losses of overseas subsidiaries are translated at the average exchange rates for the year.

- (c) On consolidation, differences on exchange arising from the retranslation of the opening net investment in subsidiary companies, and from the translation of the profits or losses of those companies at average rate, are taken to reserves.

- (d) To the extent that foreign currency borrowings by the Parent Company act as a hedge against the net assets of overseas subsidiary companies, the differences on exchange arising from the retranslation of those foreign currency borrowings are taken to reserves.

(iii) General

- (a) All other exchange differences are charged or credited in determining profit on ordinary activities before taxation.

- (b) The elements of the accounting policy for foreign currencies set out in (ii) (c) and (d) above represent changes from previous years. However, results for the year ended December 31, 1983 and reserves have not been restated as the effect of the changes is not material.

Taxation

Provision is made at the rate for the year for United Kingdom corporation tax, for overseas taxation on profits of overseas subsidiaries and for deferred taxation where a liability is expected to arise in the foreseeable future.

Research and development

Capital expenditure on research laboratories and plant is written off over its expected working life. All other research and development expenditure borne by the Company, net of contributions from Her Majesty's Government, is charged in the year of expenditure.

Stocks

Stocks are valued at cost of material, labour and relevant manufacturing overheads, less provisions for obsolete and surplus items and, where necessary, provisions to reduce cost to estimated realisable value.

Progress payments received are deducted from stocks up to the limit of the relevant work in progress. Other advance payments and deposits are included in creditors.

Depreciation

(i) Properties

Depreciation is provided on the valuation of properties adopted at December 31, 1980 and is

Accounting Policies

calculated on the straight-line basis over estimated lives agreed with the Group's professional valuers. Depreciation is not provided on the valuation of land.

The estimated lives are:

- (a) Freehold buildings
10 to 45 years (average 28 years).
- (b) Leasehold buildings
lower of valuers' estimate or period of lease.

(ii) Plant

Depreciation is provided on the original cost of plant and is calculated on the straight-line basis over estimated lives in the range 5 to 14 years.

Provisions

Provisions are made for:

- (i) Likely future expenditure on warranties relating to sales up to the year end.
- (ii) Anticipated losses on current contracts and projects.

Report of the Auditors

To the members of Rolls-Royce Limited

We have audited the accounts on pages 22 to 44 in accordance with approved Auditing Standards. The accounts on pages 22 to 41 have been prepared under the historical cost convention, as modified by the revaluation of certain fixed assets, and the supplementary accounts on pages 42 to 44 have been prepared under the current cost convention as described in Statement of Standard Accounting Practice No. 16.

In our opinion the accounts on pages 22 to 41 give a true and fair view of the state of affairs of the Company and the Group at December 31, 1984 and of the profit and source and application of funds of the Group for the year then ended and comply with the Companies Acts 1948 to 1981.

In our opinion the supplementary current cost accounts on pages 42 to 44 have been properly prepared in accordance with the policies and methods described in Notes 1 to 5 to give the information required by Statement of Standard Accounting Practice No. 16.

London
April 11, 1985

Coopers & Lybrand
Chartered Accountants

Notes to the Accounts

1. Turnover

	1984 £m	1983 £m
Geographical analysis:		
North America	332	264
Europe	400	394
Asia	168	145
Africa	25	50
Other countries	60	42
	<hr/> 985	<hr/> 895
Overseas activities		
United Kingdom	424	436
Total turnover	<hr/> 1 409	<hr/> 1 331
Overseas activities:		
Exports from the United Kingdom — Direct	519	513
— Indirect	370	300
	<hr/> 889	<hr/> 813
Sales by overseas subsidiaries	138	123
Parent Company sales to overseas subsidiaries	(42)	(41)
	<hr/> 985	<hr/> 895

2. Interest payable and similar charges

Interest payable on:		
Borrowings repayable within five years		
otherwise than by instalments	16	17
Other loans	16	12
	<hr/> 32	<hr/> 29
Less interest received	4	3
	<hr/> 28	<hr/> 26
Financing costs of leased assets (included in Note 3 below)	6	5
Exchange differences on dollar borrowings	1	24
	<hr/> 35	<hr/> 55

3. Profit (loss) on ordinary activities before taxation is after charging

Depreciation (tangible fixed assets)	32	32
Charges for leased assets	17	16
Hire of plant and equipment	8	9
Auditors' remuneration (1984 £0.6m; 1983 £0.5m)	<hr/>	<hr/>

Notes to the Accounts

4. Emoluments of directors and senior employees

The emoluments of directors, charged before arriving at operating profit, were:

	1984 £	1983 £
Fees	41 000	26 500
Other emoluments, including pension contributions	501.400	495 800

The emoluments of directors and senior employees working wholly or mainly in the United Kingdom, excluding pension contributions, were:

	1984 £	1983 £
Chairman:		
Sir William Duncan	125 900	96 900
Sir Arnold Hall	4 000	—
Lord McFadzean	—	20 900

Directors (other than the Chairman):

Emoluments £	1984 Number	1983 Number
Nil to 5 000	—	5
5 001 to 10 000	6	1
20 001 to 25 000	1	—
35 001 to 40 000	—	1
40 001 to 45 000	1	2
45 001 to 50 000	1	3
50 001 to 55 000	2	—
55 001 to 60 000	1	—

Senior employees:
Emoluments
£

	Number	Number
30 001 to 35 000	24	22
35 001 to 40 000	21	12
40 001 to 45 000	5	1
45 001 to 50 000	1	—

5. Employee information

	Consolidated 1984 £m	1983 £m
Staff costs		
Wages and salaries	418	424
Social security costs	33	36
Other pension costs	34	35
	<u>485</u>	<u>495</u>

Number of employees in the Group

The average weekly number of employees during the year was:

	Number	Number
United Kingdom	38 900	43 200
Overseas	2 900	3 100
	<u>41 800</u>	<u>46 300</u>

Notes to the Accounts

6. Taxation charge

	Consolidated	
	1984 £m	1983 £m
Overseas taxation	<u>5</u>	<u>4</u>

Deferred taxation of £1m (1983 £1m) has been provided by subsidiary companies.

A potential deferred taxation liability of £33m has not been provided in respect of the surplus arising on the revaluation of land and buildings as there is no present intention to dispose of any land and buildings. No other potential deferred taxation liability existed at December 31, 1984.

7. Revaluation reserve (non-distributable)

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
133	130	At January 1	135	138
(3)	(3)	Depreciation charge attributable to revaluation surplus	(3)	(3)
<u>130</u>	<u>127</u>	At December 31	<u>132</u>	<u>135</u>

8. Profit and loss account

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
(195)	(394)	At January 1	(341)	(151)
(202)	19	Profit (loss) for the year	20	(193)
—	—	Foreign currency translation adjustments	2	—
3	3	Transfer to revaluation reserve of depreciation charge attributable to revaluation surplus	3	3
<u>(394)</u>	<u>(372)</u>	At December 31	<u>(316)</u>	<u>(341)</u>

Notes to the Accounts

9. Tangible fixed assets — Consolidated

	Land & buildings	Plant & machinery	Fixtures & fittings	In course of construction	Total
	£m	£m	£m	£m	£m
Cost or valuation:					
At January 1, 1984	202	317	9	13	541
Exchange adjustments	3	8	—	—	11
Additions at cost	3	5	1	8	17
Completed assets brought into use	1	12	—	(13)	—
Disposals	—	(8)	—	—	(8)
At December 31, 1984	<u>209</u>	<u>334</u>	<u>10</u>	<u>8</u>	<u>561</u>
Accumulated depreciation:					
At January 1, 1984	21	203	5	—	229
Exchange adjustments	1	4	—	—	5
Provided during year	7	24	1	—	32
Disposals	—	(7)	—	—	(7)
At December 31, 1984	<u>29</u>	<u>224</u>	<u>6</u>	<u>—</u>	<u>259</u>
Net book value at December 31, 1984	<u>180</u>	<u>110</u>	<u>4</u>	<u>8</u>	<u>302</u>
Net book value at December 31, 1983	<u>181</u>	<u>114</u>	<u>4</u>	<u>13</u>	<u>312</u>

The original cost of assets fully written off, but still in use and included in the consolidated figures above, amounts to £126m (1983 £121m).

Notes to the Accounts

9. Tangible fixed assets — Consolidated (continued)

Land and buildings comprise:

	Freehold	Leasehold		Total
		Long	Short	
	£m	£m	£m	£m
Cost	23	2	1	26
Valuation 1980	165	11	7	183
	188	13	8	209
Aggregate depreciation	(24)	(2)	(3)	(29)
Net book value at December 31, 1984	164	11	5	180
Net book value at December 31, 1983	165	11	5	181

The historic cost and related depreciation of land and buildings are:

	£m
Cost	111
Aggregate depreciation*	(67)
Net book value at December 31, 1984	44
Net book value at December 31, 1983	43

*Depreciation is calculated on the straight-line basis over the following estimated lives:

Freehold buildings and long-term leases — 20 years

Short-term leases — period of lease

Depreciation is not provided on the cost of land

Notes to the Accounts

10. Tangible fixed assets — Company

	Land & buildings	Plant & machinery	Fixtures & fittings	In course of construction	Total
	£m	£m	£m	£m	£m
Cost or valuation:					
At January 1, 1984	181	277	6	13	477
Transfer to subsidiary company	—	—	—	(11)	(11)
Additions at cost	3	2	—	2	7
Completed assets brought into use	1	1	—	(2)	—
Disposals	—	(7)	—	—	(7)
At December 31, 1984	185	273	6	2	466
Accumulated depreciation:					
At January 1, 1984	18	184	4	—	206
Provided during year	7	19	—	—	26
Disposals	—	(6)	—	—	(6)
At December 31, 1984	25	197	4	—	226
Net book value at December 31, 1984	160	76	2	2	240
Net book value at December 31, 1983	163	93	2	13	271

10. Tangible fixed assets — Company (continued)

Land and buildings comprise:

	Freehold	Leasehold		Total
		Long	Short	
	£m	£m	£m	£m
Cost	11	1	1	13
Valuation 1980	158	7	7	172
	169	8	8	185
	(21)	(1)	(3)	(25)
Aggregate depreciation				
	148	7	5	160
Net book value at December 31, 1984				
	151	7	5	163
Net book value at December 31, 1983				

The historic cost and related depreciation of land and buildings are:

	£m
Cost	93
Aggregate depreciation*	(59)
Net book value at December 31, 1984	34
Net book value at December 31, 1983	35

*Depreciation is calculated on the straight-line basis over the following estimated lives:
 Freehold buildings and long-term leases — 20 years
 Short-term leases — period of lease
 Depreciation is not provided on the cost of land

11. Investments in related companies

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
2	2	Shares at cost:	2	2
—	1	At January 1	1	—
		Additions during year		
<u>2</u>	<u>3</u>	At December 31	<u>3</u>	<u>2</u>
		Provision for share of post-acquisition losses:		
—	(2)	At January 1	(2)	—
(2)	—	Charge for year	—	(2)
<u>(2)</u>	<u>(2)</u>	At December 31	<u>(2)</u>	<u>(2)</u>
<u>—</u>	<u>1</u>	Net book value	<u>1</u>	<u>—</u>

12. Stocks

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
78	60	Raw materials	68	86
281	337	Work in progress, jigs and tools	381	308
343	329	Finished parts and engines	358	384
17	14	Payments on account	14	13
<u>719</u>	<u>740</u>		<u>821</u>	<u>791</u>
(270)	(290)	Progress payments against stocks	(300)	(278)
<u>449</u>	<u>450</u>		<u>521</u>	<u>513</u>
		Current replacement cost exceeds historic cost of stocks by		
<u>20</u>	<u>21</u>		<u>33</u>	<u>29</u>

Notes to the Accounts

13. Debtors

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
149	142	Amounts falling due within one year	206	190
		Trade debtors	—	—
14	11	Amounts owed by:	—	—
25	29	Group companies	30	26
5	5	Related companies	11	11
5	7	Other debtors	8	8
		Prepayments and accrued income	—	—
<u>198</u>	<u>194</u>		<u>255</u>	<u>235</u>
4	5	Amounts falling due after more than one year	5	4
18	40	Trade debtors	—	—
1	—	Amounts owed by group companies	—	1
—	3	Other debtors	3	—
		Prepayments and accrued income	—	—
<u>23</u>	<u>48</u>		<u>8</u>	<u>5</u>
<u>221</u>	<u>242</u>	Total debtors	<u>263</u>	<u>240</u>

14. Bank loans, overdrafts and other borrowings — amounts falling due within one year

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
92	54	Bank loans and overdrafts	54	92
—	—	Other borrowings	47	99
<u>92</u>	<u>54</u>		<u>101</u>	<u>191</u>

Notes to the Accounts

15. Other creditors — amounts falling due within one year

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
97	105	Trade creditors	121	110
		Amounts owed to:		
106	60	Group companies	—	—
—	2	Related companies	2	1
32	110	Payments received on account	123	33
—	—	Corporate taxation	2	1
11	11	Other taxation and social security	12	13
47	37	Other creditors	62	56
4	9	Accruals and deferred income	23	13
<u>297</u>	<u>334</u>		<u>345</u>	<u>227</u>

16. Bank loans and other borrowings — amounts falling due after more than one year

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
		Unsecured		
170	183	Bank loans repayable 1987 to 1991 (interest rates 8¼% to 13%)	183	170
		Secured		
		Loans repayable 1985 to 1998, secured by charges on related buildings (interest rates 7¾% to 10½%)	3	4
<u>1</u>	<u>1</u>		<u>186</u>	<u>174</u>
171	184			
		Repayable by instalments:		
52	95	Element repayable within five years	97	53
94	64	Element repayable in more than five years	64	96
<u>146</u>	<u>159</u>		<u>161</u>	<u>149</u>
		Repayable otherwise than by instalments:		
25	25	In more than five years	25	25
<u>171</u>	<u>184</u>		<u>186</u>	<u>174</u>

Notes to the Accounts

17. Other creditors — amounts falling due after more than one year

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
15	13	Payments received on account	13	15
31	28	Accruals and deferred income	28	39
<u>46</u>	<u>41</u>		<u>41</u>	<u>54</u>

18. Provisions for liabilities and charges

Company			Consolidated	
1983 £m	1984 £m		1984 £m	1983 £m
—	—	Deferred taxation	6	5
116	105	Other provisions, including principally warranty and estimated future losses on contracts.	110	122
<u>116</u>	<u>105</u>		<u>116</u>	<u>127</u>
Movements on other provisions were:				
85	116	At January 1	122	89
65	35	Charge to profit and loss account	36	68
(29)	(44)	Utilised	(45)	(30)
(5)	(2)	Released	(3)	(5)
<u>116</u>	<u>105</u>	At December 31	<u>110</u>	<u>122</u>

Notes to the Accounts

19. Share capital

	Consolidated and Company	
	1984 £m	1983 £m
Authorised		
At December 31	<u>600</u>	<u>600</u>
Issued ordinary shares of £1 each fully paid		
At December 31	<u>508</u>	<u>508</u>

20. Investments in group companies

	Company	
	1984 £m	1983 £m
The investment in subsidiaries is made up as follows:		
Shares at cost:		
At January 1	21	20
Additions during year	1	1
Foreign currency translation adjustments (see Accounting Policy on page 26)	<u>17</u>	<u>—</u>
At December 31	39	21
Post-acquisition losses:		
At December 31	<u>(1)</u>	<u>(1)</u>
Net book value	<u>38</u>	<u>20</u>

The principal subsidiary and associated companies are listed on page 41.

Rolls-Royce Finance Limited, a wholly-owned subsidiary, has not been consolidated. The Company, through this subsidiary, has entered into arrangements for the financing of purchases by certain customers. The circumstances relating to these arrangements are such that the subsidiary operates under restrictions imposed by lenders. The control of the subsidiary by Rolls-Royce Limited is significantly impaired and, in the opinion of the directors, it would be misleading to consolidate it.

The following information is provided with regard to Rolls-Royce Finance Limited:

	1984 £m	1983 £m
Net assets at December 31	4	4
Net aggregate profits attributable to Rolls-Royce Limited, dealt with in the accounts of the Parent Company:		
(i) net profit for the year	—	—
(ii) accumulated profits	<u>1</u>	<u>1</u>
Amounts owing to Parent Company	5	5
Amounts due from fellow subsidiary		

Notes to the Accounts

21. Pension funding

The several pension schemes of the Company and its subsidiaries are administered by trustees and the assets of the schemes are invested by them independently of the finances of the Group. The schemes are funded by annual contributions based upon professional valuations carried out not less than once every three years.

22. Future capital expenditure

Company			Consolidated
1983 £m	1984 £m		1984 £m
		Future capital expenditure for which no provision has been made in the accounts:	
9	2	Contracted	16
7	2	Authorised but not contracted	11

23. Contingent liabilities

Company			Consolidated
1983 £m	1984 £m		1984 £m
5	7	Guarantees, custom bonds and other matters estimated at	8
102	104	Outstanding guarantees in respect of financial obligations of subsidiary companies	

Contingent liabilities exist in respect of performance and reliability guarantees which have arisen in the ordinary course of business. In the opinion of the directors, the claims, if any, arising under such guarantees will not be significant in relation to the Company's future activities.

Principal Subsidiary and Associated Companies

Subsidiary Companies

Registered in England:

	Percentage of equity
Rolls-Royce and Associates Limited (25% A shares 100% B shares)	43
Rolls-Royce (China) Limited	100
Rolls-Royce (Far East) Limited	100
Rolls-Royce Finance Limited	100
Rolls-Royce (France) Limited	100
Rolls-Royce India Limited	100
Rolls-Royce Leasing Limited	100
Rolls-Royce Plant Leasing Limited	100
Sawley Packaging Company Limited	100

The interest in Rolls-Royce and Associates Limited is held by RNC Nuclear Limited, a wholly-owned subsidiary.

Incorporated overseas:

Australia	— Rolls-Royce of Australia Pty. Limited	100
Brazil	— Motores Rolls-Royce Limitada	100
Canada	— Rolls-Royce Industries Canada Inc.	100
	— Bristol Aerospace Limited	100*
	— Rolls-Royce (Canada) Limited	100*
	— Rolls-Royce Industrial & Marine Limited	100*
USA	— Rolls-Royce Holdings Inc.	100
	— Rolls-Royce Inc.	100**
	— Rolls-Royce Credit Corporation	100**
	— Rolls-Royce Capital Inc.	100
Saudi Arabia	— Rolls-Royce Industrial Turbines (Saudi Arabia) Limited	51

*The interests in companies marked * are held by Rolls-Royce Industries Canada Inc.*

*The interests in companies marked ** are held by Rolls-Royce Holdings Inc.*

Associated Companies

Registered in England:

	Percentage of equity
GEC Rolls-Royce (Power Generation) Limited	50
Rolls-Royce and Japanese Aero Engines Limited (100% A shares)	50
Rolls-Royce Turbomeca Limited (100% B shares)	50
Turbo-Union Limited (40% ordinary shares 37.5% A shares)	40
Deeside Titanium Limited	20

Incorporated overseas:

USA	— Cooper Rolls Inc.	50
Switzerland	— IAE International Aero Engines AG	30

Current Cost Profit and Loss Account

for the year ended December 31, 1984

	Notes	1984 £m	1983 £m
Turnover		1 409	1 331
Operating profit on the historic cost basis	2	162	74
Current cost operating adjustments		(54)	(44)
Current cost operating profit		108	30
Research and development (net)	3	(101)	(131)
Gearing adjustment		19	15
Interest payable and similar charges		(35)	(55)
Share of losses in related companies		—	(2)
Current cost (loss) on ordinary activities before taxation		(9)	(143)
Taxation		(5)	(4)
Current cost (loss) on ordinary activities after taxation		(14)	(147)
Attributable to minority interests		(1)	(1)
Extraordinary item		—	(74)
Current cost (loss) attributable to Rolls-Royce Limited		(15)	(222)
Reserves		51	255
At January 1		(15)	(222)
Current cost (loss) for the year		32	18
Movements on current cost reserve		2	—
Foreign currency translation adjustments		—	—
At December 31		70	51

Current Cost Balance Sheet

at December 31, 1984

		£m	£m
Fixed assets	4	523	540
Current assets		849	797
Creditors — amounts falling due:			
(i) Within one year		(446)	(418)
(ii) After more than one year		(227)	(228)
Provisions for liabilities and charges		(116)	(127)
		583	564
Called up share capital		508	508
Current cost reserve	5	522	490
Other reserves		(452)	(439)
		578	559
Minority interests		5	5
		583	564

The auditors' report is on page 27

Notes to the Current Cost Accounts

1. Accounting policies

The accounting policies adopted in the current cost accounts are similar to those set out on pages 26 and 27.

The current cost operating profit arises from the ordinary activities of the business. It is determined after allowing for the impact of price changes on the funds needed to maintain the net operating assets of the business, but takes no account of the manner in which these assets are financed.

The current cost loss attributable to Rolls-Royce Limited is the deficit after allowing for the impact of price changes on the funds needed to maintain the shareholders' proportion of net operating assets and after adjustment for gearing.

Fixed assets are included in the balance sheet at current cost, net of depreciation.

2. Current cost operating adjustments

	1984 £m	1983 £m
Working capital	28	26
Depreciation	26	18
	<u>54</u>	<u>44</u>

Working capital, which comprises net current assets other than bank borrowings, has been adjusted by means of published indices to reflect the effect of changes in input prices of goods and resources used during the year.

3. Gearing adjustment

A proportion of the net operating assets is financed by borrowing, repayment of which is fixed in monetary amount irrespective of price changes on the proportion of assets so financed. The gearing adjustment, as applied in the current cost profit and loss account, abates the current cost operating adjustments by the average gearing proportion in the year.

4. Fixed assets

The current cost of fixed assets has been determined as follows:

- (i) Land and buildings at the professional valuation at December 31, 1980, with subsequent additions at cost.
- (ii) Plant by the application of suitable indices to historic cost, or by internal valuation.

The net current cost of fixed assets at December 31, 1984 was:

	Gross £m	Depreciation £m	Net £m
Land and buildings	209	29	180
Plant	1 009	666	343
At December 31, 1984	<u>1 218</u>	<u>695</u>	<u>523</u>
At December 31, 1983	<u>1 159</u>	<u>619</u>	<u>540</u>

Asset lives of land and buildings are as advised by the Group's professional advisers and average 28 years.
Asset lives of plant are estimated at 5 to 25 years.

Notes to the Current Cost Accounts

5. Current cost reserve

	1984 £m	1983 £m
At January 1	<u>490</u>	<u>472</u>
Revaluation surpluses reflecting price changes:		
Fixed assets	19	10
Working capital	32	23
Gearing adjustment	(19)	(15)
	<u>32</u>	<u>18</u>
At December 31	<u>522</u>	<u>490</u>
Of which:		
Unrealised	254	257
Realised	268	233
	<u>522</u>	<u>490</u>