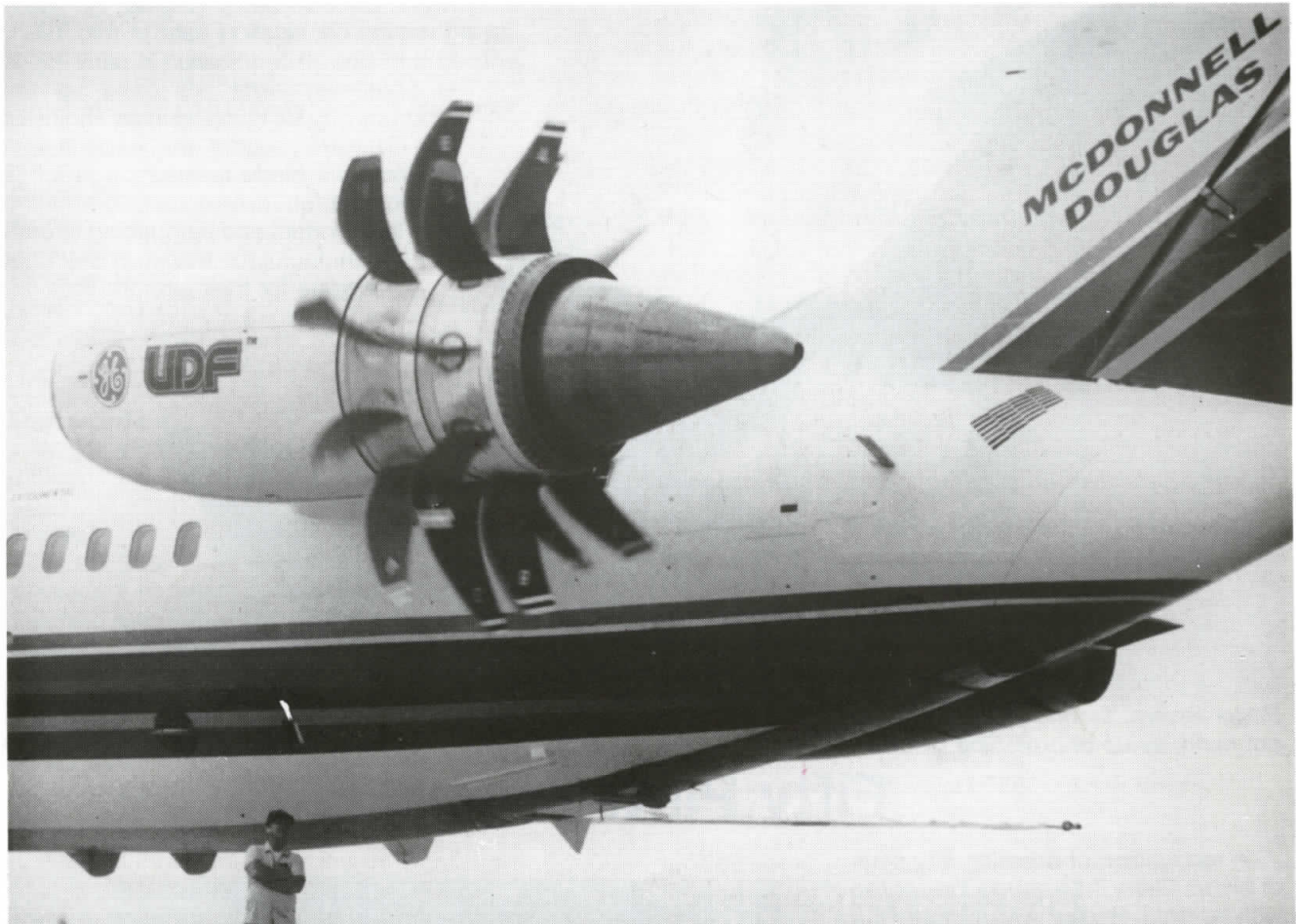


# DOWTY ROTOL NEWSLETTER

Issue 9  
January 1988



*McDonnell Douglas MD-80 Aircraft flight testing the GE UDF™ Engine*

## UDF Deal Signed

Dowty Rotol and GE (USA) have signed an agreement to collaborate on a joint programme covering the design, development and manufacture of composite Fan Blades for the GE36 Unducted Fan (UDF™) Engine.

The agreement was signed by Bruce Gordon, General Manager of the GE engine programme and Michael Spence, Managing Director of Dowty Aerospace Division. "We are delighted to be a chosen partner of GE on this exciting programme, which represents a major step forward for Dowty Rotol and a significant foothold in tomorrow's aircraft engine market" said Mr. Spence.

The UDF™ Engine is a revolutionary concept in aircraft propulsion systems and combines the best

features of today's turbofan and turboprop engines. It will give the medium range aircraft of the 1990s the advantage of both the higher subsonic speed of the turbofan and the lower fuel consumption of the turboprop. The engine comprises a gas generator which drives rear mounted contra-rotating fans by means of power turbines connected to each fan.

The composite Fan Blades are variable pitch with the pitch change mechanism housed within the fan hubs. The blades are constructed from advanced

*continued overleaf*



### UDF deal continued

carbon and glass fibre laminates to give them exceptional strength, low weight and great durability. The external surfaces of the blade are protected from erosion by a coating of polyurethane and an electro-formed leading edge guard.

Dowty Rotol will play a significant role in the development of the optimum Fan Blade configuration

and the advanced manufacturing process. During the development phase Rotol and GE will each supply blades for component testing, ground and flight test engines and spares requirements. The testing being carried out at Dowty Rotol includes structural, fatigue and spin tests.

The engine system has already completed flight testing on a Boeing 727 and is currently being tested on a McDonnell Douglas, MD 80 aircraft. Civil applications planned for the engine include the Douglas MD91/MD92 and Boeing 7J7 aircraft. US military applications are also being studied. GE has a target engine certification date of mid 1991, leading to aircraft certification in early 1992.

The agreement with GE gives us the opportunity to be involved in an engine of the future by using our expertise in composite blade technology. A lot of work has still to be done in developing this product and persuading aircraft manufacturers that it is the right engine for their aircraft.



*Roger Brown, Technologist in Product Development and Research carrying out hand lay-up of prototype blade.*

## Fifty Pints Award

In recognition of donating fifty pints of blood, Gerry Tucker was presented with a Gold Badge Award from the Transfusion Service by John Lawrence, Repair Controller. Gerry who works as a Spares Liaison Clerk in the Repair department also received his 25 Year Service Award from the company in December. He has been a blood donor since 1953.

The Gold Award highlights a long tradition amongst employees. Sister Betty McQueenie organises the twice yearly visits of the Transfusion Service. Betty estimates that between three and four hundred people donate blood each year.

This is one appeal where employees can give generously without spending any of their hard earned cash!

The picture shows Gerry Tucker (centre) with, from left to right, Sister Betty McQueenie, John Lawrence, Shanta Karadia and John Hepworth.





# Current Performance

## Sales Turnover

Detailed below is the regular update on our sales turnover showing the value of sales in the last 4 months:-

Month	Target	Achieved
September 1987	£10,478,000	£10,320,000
October 1987	£10,986,000	£11,014,000
November 1987	£ 9,596,000	£ 9,426,000
December 1987	£ 8,752,000	£ 9,671,000
4 months total	£39,812,000	£40,431,000
9 months total	£87,560,000	£84,835,000

We are still behind target and every effort will have to be made to ensure we make up the shortfall and reach our sales target of £117,816,000 for this financial year.

## Order Book

Month	Orders Received	Total Outstanding
September 1987	£ 5,351,000	£186,786,000
October 1987	£ 4,384,000	£180,156,000
November 1987	£18,682,000	£189,412,000
December 1987	£ 7,528,000	£187,269,000

## Major Orders

Major orders received in the last four months are as follows:-

Project	Equipment	Value of Order
Airbus A 320	Landing Gear & Hydraulics	£11,376,000
Airbus A 310	Landing Gear	£ 1,379,934
Fairchild Metro III	Propeller Equipment	£ 829,713
Marine	Hydraulics	£ 769,897
BAe Jetstream 31	Propeller Equipment	£ 736,042
Fokker 50	Propeller Equipment & Hydraulics	£ 653,259
Panavia Tornado	Hydraulics	£ 476,020
McAir AV8B	Hydraulics	£ 343,112
Textron LCAC	Propeller Equipment	£ 293,778

# Propeller Business Regained

One of the major orders shown above is for propellers for the Fairchild Metro III. This is a commuter aircraft seating up to 20 people with a range of 1,000 miles.

The order worth £829,713 is particularly encouraging as it is business which was regained against stiff opposition from an existing American supplier. The Metro III thus rejoins the growing list of aircraft using

advanced technology Dowty Rotol metal bladed propellers which includes the Gulfstream Jetprop Commander, Fairchild Merlin IV, CASA C-212 and the BAe Jetstream 31.

Delivery of the first of 33 aircraft sets will commence early this year to support production of the Metro III at Fairchild's San Antonio USA facility.





## Long Service Awards



Thirty four employees were presented with their twenty-five year's service gifts at the Hayden Court Hotel on 10th December 1987.

Wives and husbands were invited to the buffet lunch which was held on one of the coldest days of 1987. Despite the fog and icy roads, the gifts, ranging from cutlery sets to cameras, were safely transported.

Fortunately, all the right gifts were presented to the right people, although this complex process was not

assisted by Machine Shop Superintendent, Neville Lodge, who had difficulty in agreeing with his wife what he wanted!

There was a steady flow to the bar during the proceedings which may have been due to the cold or the fact that someone forgot to stop the free bar.

Our thanks and congratulations go to all those who achieved a quarter of a century with the company last year.

## More Bright Ideas

Recent ideas put forward by employees through the Company Suggestion Scheme have met with some considerable success. Several major awards have been made, the highest of £500 going to David Thompson who is a Fitter in No. 1 Assembly. David's suggestion related to the assembly of parts on the A320 Landing Gear.

His idea was to fit an electrical harness to a sliding tube at the Fitter's bench instead of trying to fit it on the main assembly. Fitting to the main assembly involved a time consuming and uncomfortable operation for the Fitter since it had to be carried out lying down!

Congratulations to David on a first class idea. The picture shows him receiving his cheque from Andy Stevens, Executive Director — Works.



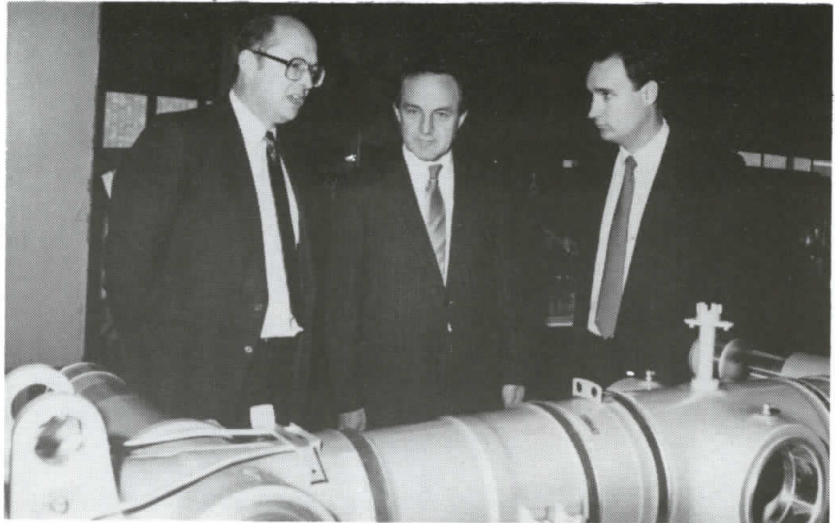


## Visit by Defence Secretary

Secretary of State for Defence, Mr. George Younger, visited Dowty Rotol and the Dowty Group in November 1987. The visit was part of his programme of fact finding tours to UK Defence Manufacturers.

During his visit to the Rotol Site, Mr. Younger toured the assembly area and No. 2 Shop. The visit underlines the important role the company plays as a supplier of specialised equipment to the Ministry of Defence.

*The picture right shows Jim Lightfoot (left) describing the Airbus A310 landing gear bogie to George Younger (centre) with Andy Stevens (right), during a tour of the large landing gear facility.*



## Quality Award

As part of our continuous drive towards better quality, we have introduced a new annual award for sub-contractors. The first winners of the Sub-Contract Award for Excellence are Chiltern Instruments.

Based in Chesham, Buckinghamshire they supply us with a variety of sophisticated hydraulic components including valves, valve seats, spools and sleeves.

All sub-contractors are monitored on a quarterly basis by the Quality Assurance department. The award is based not only on the high quality of the product but also on timely delivery which is essential for us to be able to deliver to our customers on time.

We operate a system of assessment for sub-contractors and the rating they receive places them in one of three categories, Good, Average or Low. Those suppliers who fall within the Average category are required to notify us within 30 days of the corrective action they intend to take. Any suppliers in the low category receive a visit from a Quality Assurance Engineer who audits aspects of the manufacturing process related to previous rejections and agrees with the sub-contractor areas where improvements are required.

*The picture below shows representatives from Chiltern Instruments receiving the Award.*

*Pictured left to right are: Tim Davis (Executive Director-Production); Mr. A. G. Clements, Mr. J. McQuitty and Mrs. C. D. Bailey (Chiltern Instruments) and Mike Blanch (Quality Manager).*





# Apprentices Welcomed to Rotal



The annual apprentice indenture presentation and prize-giving was held on December 15th in the canteen. Managing Director, Jim Lightfoot, formally welcomed 44 ex-apprentices who joined the company in the last 12 months.

This year's guest speaker was Keith Anderson, Chief Education Officer for Gloucestershire. In his address, he spoke of the need for better and closer relationships between local employers and educational establishments and paid tribute to the Dowty Group for its support to local schools and colleges. He advised the ex-apprentices, as they pursued their careers, to keep at the forefront of their minds three important attributes — **QUALITY, COMMITMENT AND INITIATIVE**. He concluded by

reminding the audience of the famous quote from Mark Twain who defined a 'crank' as 'a man with a new idea—until it succeeds!'

After the presentations the ex-apprentices were able to show their families and friends parts of the factory and an exhibition of our products was on display in the canteen.

Six of the ex-apprentices received prizes awarded by the Dowty Group for outstanding achievement during their apprenticeship. The picture above shows Keith Anderson (centre left) and Jim Lightfoot (centre right) with the prizewinners (left to right) Ian Ephgrave, Steven Powell, Neil Adams, Nicholas Gore, Andrew Monaghan and Neil Garner.

## Intrepid Travellers

Undeterred by a recent accident, David and Ellaine Pocock continue to make their way to work in an unusual way.

Most mornings they jump onto their deluxe model Tandem and cycle to work. Their latest "machine" has 15 gears, 3 sets of brakes and can reach 30 miles an hour on a flat road. The weather is no deterrent; only very thick snow or bad ice prevents them making their daily journey to and from work on the tandem.

David and Ellaine own a car but say they prefer to use the Tandem as it is cheaper and more fun.

The picture shows the husband and wife team arriving for work.





## Pools Jackpot



Just after the last Newsletter went to print, five employees in the Tool Stores shared a £218,839 payout from Littlewoods Pools. The lucky five were presented with their cheque at a reception at the Draganora Hotel in Bristol. The win was particularly remarkable as it was achieved just six weeks after the syndicate was started. It was the syndicate's second success, the previous win being worth £135.

The numbers to be entered are drawn from a hat each week. Peter Tambling then completes and posts the coupon.

The story doesn't end there. Yes, you've guessed it, the week after their jackpot the syndicate scored their third success in seven weeks with a win of £30.

*Pictured above are the syndicate members carrying Page Three Girl, Erica Preston. Left to right: Peter Tambling, John Hale, Frank Durrant, Paul Hamblett and Robert Whitehouse.*

*Holding the cheque are Peter Tambling's wife, Gaynor and Bristol City Footballer, Gordon Oweq.*

## A Song for Christmas

Every year Christmas Lunch in the canteen is livened up by songs and carols from Fred Hunt and his band. Pictured right with Fred are his daughter Penny and another Dowty Rotol employee John Davis on bass guitar. The mixture of popular songs and carols certainly added to the Christmas spirit and their effort was very much appreciated by the diners.





## Appointments



**Nigel Smith** — Executive Director — Product Support

Nigel Smith started with the Dowty Group as a Commercial Apprentice in 1972 and joined our Personnel Department in 1976. He was appointed Site Personnel Manager in 1984, and early last year became Manager of the Product Support Division.

The last 12 months have proved eventful for Nigel. As well as the birth of his second daughter, Rebecca, he was fortunate enough to win the £1,000 Sports and Social Prize Draw.



**John Herring** — Production Engineering Manager

John Herring joined the Dowty group in September 1973 as a Student Apprentice. After gaining a first class honours degree he worked for 9 months as a Machinist with Dowty Fuel Systems before moving into their Production Engineering Department.

He spent a year as Training Manager for Dowty Group Services before joining Dowty Rotol in November last year.

John is married with two children and lives in Cheltenham.

## Long Service Retirement

After 48 year's service Joe Taylor started a well earned retirement on 28th October 1987. Joe started his career with Rotol Airscrews in January 1939, as a Chargehand in the Despatch department. He re-joined the company after a period of war service in the RAF and ended his career as Shipping Manager.

Joe's "real name" is Ronald. However, he was christened Joe at the start of his employment and we are told that this was a common nickname given at the time to anyone involved at the end of a process or chain of events.

Our best wishes to Joe for a long and happy retirement.

