

Also featured in this copy of Link:

- Page 2 Face the Challenge – Stay Number 1! cont...
Potential Boeing Programmes
- Page 3 Focus on Bidos
- Pages 4 Competition Winners
Foresight Action –
Ultra Reliable Aircraft (URA)
- Page 5 Equipment for Two '40s Aircraft – Delivered
Just In Time!
Air Training Corps – 2322 Dowty Squadron
- Page 6 Continuing Support for NSPCC
Rats Spotted in Restaurant!
- Page 7 SPC Spreads to MLG
Investing in Our Future
Small Change Leads to Big Saving
- Page 8 Appointments, Farewells and Congratulations

MESSIER-DOWTY Link

The House Magazine of Messier-Dowty Limited

Issue 18, March 1997

Face the Challenge...



In February, Andy Stevens delivered a presentation to the whole Gloucester team on the current position of our business and the challenges we face.

Link spoke to Andy to find out a bit more about the background to the presentation and the key messages.

Link: *Why did you decide to give the presentation?*

Andy: There were a number of reasons. Firstly, since returning to Gloucester, much of my time has been spent on external issues – predominantly re-establishing and strengthening relationships with customers. This has meant spending a lot of time off-site when I am aware that many of you have said you would like to see more of me.

Stay Number 1!

Secondly, I have received feedback about the cascade briefings suggesting that, if only one briefing was given to everyone, there would be no chance of the message getting diluted.

Calling the whole Gloucester team together seemed like a good way of dealing with these issues. Whilst it would not be feasible to do this every month (and indeed it would not be desirable as you lose the opportunity to discuss local issues), keeping people informed is tremendously important. So I took the decision to give this presentation.

Link: *The main areas the presentation covered were the market, programme successes, the Gloucester business performance and actions for 1997. If you had to summarise the most important message, what would it be?*

Andy: We are number one in an industry which is currently buoyant. Competition is more fierce than it has ever been, so to retain our position we must all work together to ensure we offer what our customers want in terms of price, quality and delivery. At the same time we must continue to deliver profit and cash in line with our shareholders' expectations.

continued overleaf...

Potential Boeing Programmes

Over recent months the name Boeing has been heard increasingly in our discussions about potential business.

On the military front, we reported recently our success on the Joint Strike Fighter (X32) and that two of our engineers are on temporary secondment in Seattle working on this project.

Within the Boeing Commercial Airplane Group, we have seen one programme come and go, with another entering the race. To date, Messier-Dowty's only direct business with Boeing has been through Messier-Dowty SAS. Our sister company in France supplies main gear components via Menasco for the Boeing 777 which entered service in 1995.

Over recent years, both Airbus Industrie and Boeing have been researching an 'ultra large transport' aircraft. Typically, this size of aircraft is intended to carry in the order of 600+ passengers and could be on the scene by 2003.



**Boeing 767-400ERX,
Maximum Take Off Weight 200,000 Kg
Passengers 303, Range 10,500 Km**

Airbus is confident that, with an all-new design, there will be a demand by 2020 for around 650 of this new ultra large aircraft.

Messier-Dowty is actively seeking opportunities on the A3XX programme through BAe, Aerospatiale and Airbus Industrie. Likewise, we have offered our capability for the Boeing project which has variously been named New Large Aircraft, 787 and 747X.

The Boeing 747X opportunity looked to be quite promising last Autumn when Boeing announced that it had started to offer the 500+ seat jet to the airlines. This was to be in the form of two stretched versions of the 747.



**Boeing 777, Maximum Take Off Weight 242,000 Kg
Passengers 375, Range 8900 Km**

The 747-500X was expected to carry 460 passengers and the 747-600X, 550 passengers.

Messier-Dowty already had begun discussions with Boeing about the landing gear for this aircraft when, in January this year, Boeing announced it had effectively stopped work on the programme, stating that market conditions did not justify a proposed larger version of the 747. Instead, the company plans to focus on new versions of the smaller widebodies the 767 and 777 to meet the rising demand for 'long-range, medium-sized aircraft'.

Subsequently, Boeing began offering a new version of the 767, the 767-400 ERX, with a first delivery date as early as 2000.

Design changes to the 767-400ERX will include a stretched fuselage and wing aerodynamic improvements, together with a new landing gear using 777 wheels & brakes.

We have offered engineering support on this project as a means of keeping a dialogue going between us and to maintain the excellent contacts made during the discussions on the 747X project.

Other new aircraft under consideration include a larger and longer range version of the 777,

capable of non-stop flights approaching 16,000Km, such as Singapore to Los Angeles.

Boeing has said, however, that it will continue to study the market requirements for a 'super jumbo' so that, when the market develops for such an aircraft, they will be ready.

Face the Challenge...

continued from page 1

Link: *What about feedback – was the presentation well received?*

Andy: As you might expect, reaction has been varied. Some people have said that they thoroughly enjoyed it, that the message was clear and that they are excited at having the opportunity of contributing. Although it should not have come as a surprise, some have expressed concern about the activities of our competitors and the real threat to us as a business.

Some of the comments that have come back show that we still have some way to go to convince all employees that everyone has a part to play in ensuring our continued success.

Link: *Is this type of presentation going to be a regular event?*

Andy: Yes. I think it is important to help us remember that we are all one team and are all working towards the same goals. I aim to give an update approximately every six months.

Focus on Bidos

Situated in the shadow of the Pyrenees near the town of Oloron lies the Messier-Dowty SAS Bidos factory.

The Bidos factory has been in operation for some 53 years. It was first established in 1938, employing around 200 people and producing 25 to 30 gears per month, but was closed during the period 1940 to 1945.

Today, the Bidos factory employs around 750 people and is a similar area to this site, 40,000m² (Gloucester is 44,000m²). Activities at Bidos are focused on manufacturing, processing, assembly and test.

The engineering and commercial activity is carried out at Vélizy.

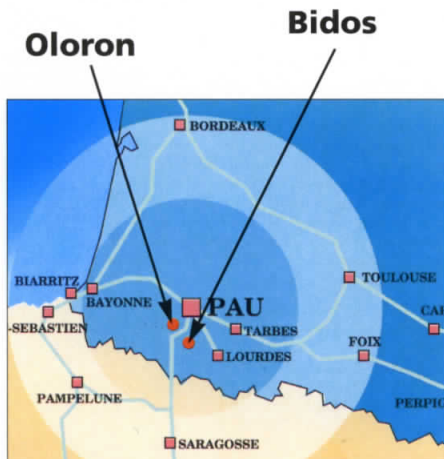
André Broudeur is the Director responsible for the Bidos site:



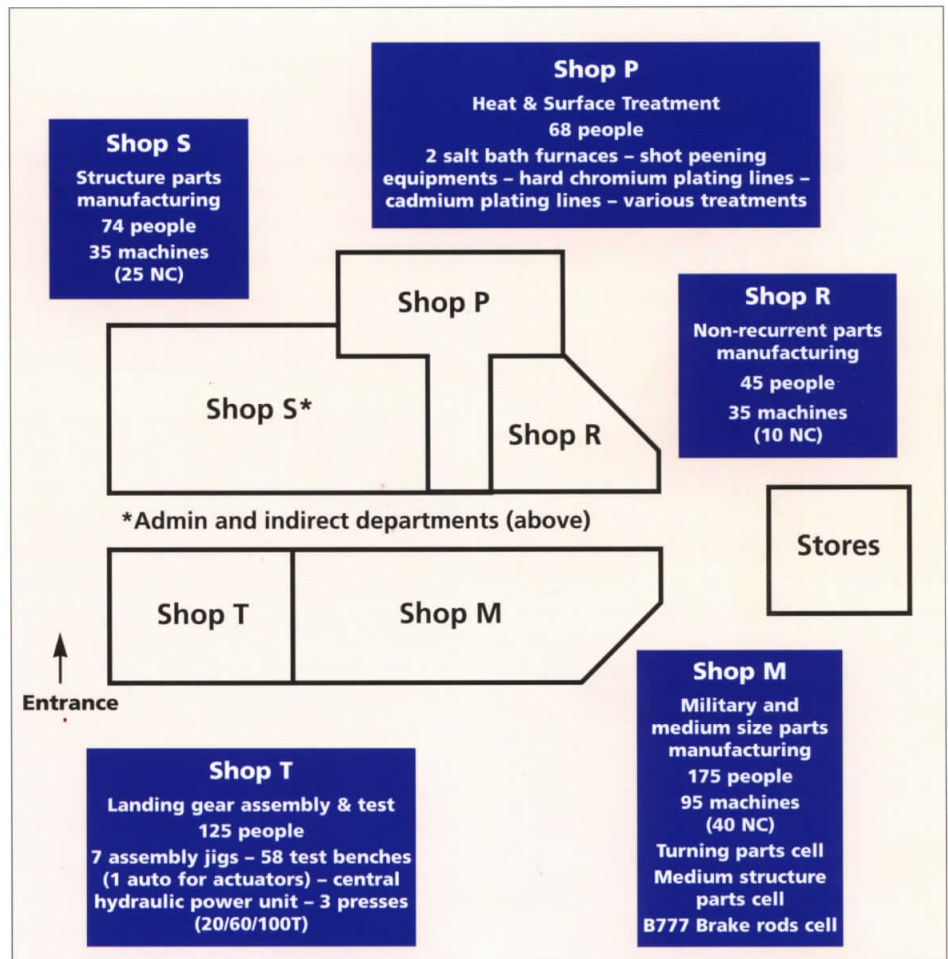
André Broudeur – Director

“Today, Bidos production is mainly based on commercial, business and commuter aircraft. Aircraft programmes include Airbus A300 and A310 main and nose gears, Airbus single aisle range (A319, 320, 321) nose gears, Boeing 777 main gear components, Falcon 10, 50 900 and 2000, ATR 42 and 72, Dornier 328 and N-250 gears. Military aircraft programmes include Mirage 2000, Rafale and helicopters such as Super Puma, Dauphin and Tigre”.

Bidos is situated near Pau, known as the capital town of the Atlantic Pyrenees, see the maps below



Pictured above is the Bidos factory and, below, the factory layout and activities



Like us, recognising the competitiveness of our market place, Bidos also is involved in a number of continuous improvement initiatives:

- rationalising manufacturing into core competences
- modification of internal organisation
- procurement and subcontract initiatives

Landing gear production and assembly



Competition Winners

Many thanks to everyone who sent in entries for the Caption Competition, which gave the Editorial Team more than a few giggles. Also, thanks to Andy Stevens and Geoff Smith for acting as judges. Shown below are the 'wine winning' captions, plus a few more of the Editorial Team's favourites.

Congratulations also go to Mark Wood, Stores/Despatch, who had the highest score on the Christmas Quiz.



Winner: "Some bugger's nicked my accordion!" Gareth Hughes – Processing

Best of the Rest

Girl thinking: "If I watch that paint on that gear much longer, it will probably dry!"

Geoff: "I think I've lost the bird on my left – she's miles away!"

Geoff: "Once I get hold of a customer like this, I find his heart and mind soon follow!"

Man on right: "If I'd wanted to hear about vegetable marrows, I'd have gone to the Chelsea Flower Show!"

Geoff: "I had to put a special order into the quarry to get a piece of chalk this big so that my tailor could put the stripes on my suit!"



Winner: "Keep it quiet, but Richard Clarke's bidden the ball up his jumper!" Terry Wedgbury – Tech Pubs

Best of the Rest

"We don't care – we're not playing in the rain!"

Richard Clarke: "I thought I told you lads – this month's calibration colour is blue!"

"I'm all in favour of being flexible, but that's ridiculous!"



Winner: "Don't worry Mum, I'll pass next time!" David Rye – Processing

Best of the Rest

"I don't know why Andy's laughing, he didn't pass his cycling proficiency test!"

Andy: "I don't know what that chap on the end's on, but I'd certainly like some!"

Andy: "Whoever arranged this and forgot my diploma is for it!"



Winner: "I'm telling you straight – my label said machine wash, not band rinse!" Paul Dembenski and Graham James – MLG

Best of the Rest

"Sorry lads, I had a curry last night!"

"This dance routine's a bit hard – best leave it to the Maoris!"

Hooker to Prop: "I thought you'd asked him to stop doing that!"

Prop to Hooker: "If he does that just once more, I'm off!"

Middle guy: "I hear the second row will be from the ladies' team next year!"

Foresight Action – URA



In response to the the Department of Trade and Industry's Foresight Action initiative, the Society of British Aerospace Companies has identified a number of projects that it considers to be deserving of funding and which it has collectively called

the Foresight Action Programme. The three pilot projects are the:

- **Powered Wing Project**
- **Flight Crew Environment Project**
- **Ultra Reliable Aircraft (URA) Project**

Each of these projects is aimed at improving the UK aerospace's global competitiveness in the face of aggressive marketing and costing. Link spoke to Andy Baxter – Aircraft Engineering Manager, to find out about our involvement.

Andy: In the URA Pilot Study, operators have identified that despatch, reliability and availability are key factors in measuring the 'hurt' that unreliability causes. Poor equipment reliability results in lost missions and costly unscheduled maintenance activities.

To a civil operator, the consequences of unscheduled delays and their rectification typically exceed £1m per aircraft per annum; the MoD maintenance bill for defence equipment is some £1bn per annum.

An investigation of the impact of factors influencing Life Cycle Costs (LCC) shows reliability to be the major

contributor and the area that could deliver the most significant savings.

As you may appreciate, there is a perception that if the causes underlying the unreliability can be identified and processes implemented to overcome them, there will be great benefit to the industry in general.

As members of SBAC, we have undertaken to co-ordinate the Process Group within URA. This has meant involvement from John Lindley, Geoff Haines, Phil McCarthy, Julia Payne and myself. Other companies within the partnership include all three BAe airframe divisions, GKN Westlands, Rolls-Royce, Lucas and others.

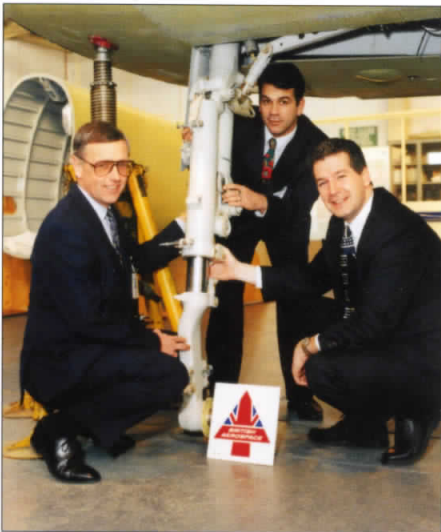
The pilot study is due to be completed in April '97 and it is hoped that funding will have been secured for the Main Phase at that time. The Main Phase activity is programmed for a period of 3 to 4 years and will involve the present partnership of companies plus a few more!

Link: Thank you Andy. We would be grateful if you would keep us updated as the project develops.

Equipment for '40s aircraft – delivered JIT!

Following the restoration work we have undertaken over recent months on the Sea Fury the official 'hand over' of the landing gears was carried out recently at BAe Brough.

The main and nose gears have been refurbished to flight worthy standard with the assistance of DAAS and DAH. The Hawker Sea Fury will join the Royal Naval Historic Flight at Yeovilton and is due to fly in May or June this year.



Pictured with Sea Fury gear are Simon Luxmoore (left), Chris Evans (centre) and David Allott, BAe Brough Site Director.

Another recent restoration project to which we have contributed jointly with Dowty Aerospace is an Avro Anson.

The Anson which is fitted with 'Dowty' landing gears and propellers was restored at Avro's Woodford factory. They plan to fly the aircraft later this year.



Andy Stevens is pictured with the restored Anson together with Graham Grieve (left), Avro's Procurement Director and Alastair McDicken (right), Head of Flight Test at Avro.

ATC – 2322 Dowty Squadron

Sir George Dowty opened the headquarters of the Air Training Corps (ATC) 2322 Dowty Squadron in Arle Road in 1964.

The Dowty companies in the area, including Messier-Dowty still provide support to the Squadron, and Dave Thompson from Medium Landing Gear Assembly is one of the enthusiastic leaders.

Link spoke to Dave to find out a bit more about the activities of the ATC.

Dave: Membership is open to boys and girls aged 13 and over. The ATC building is in the grounds of the Territorial Army Headquarters in Arle Road, Cheltenham.

We meet on Mondays and Fridays between 7.15 pm and 9.45 pm. Activities include rifle range training, annual camps and excursions to places such as the Cotswolds, Brecon Beacons

and Snowdon. We also arrange for the cadets to experience different types of flying, for example propeller driven aeroplanes, gliding and flight refuelling with the RAF.

New members are always welcome. Anyone wishing to find out more about the Squadron can contact me on Extension 1376.

On 15th October 1996 a group of Cadets accompanied by Pilot Officer Hooper and Dave Thompson set off for RAF Lyneham – and a trip on a Hercules aircraft.

The trip was being used for Pilot training, and consisted of tactical landings and take offs with a circuit in between. Each of the Cadets had the opportunity of being in the cockpit for a take off and landing.

The trip was obviously a great success, with cadet Matt Houghton describing it as "one of the best experiences of my life".

The party of Cadets is pictured at RAF Lyneham with Hercules planes in the background.



Continuing Support for NSPCC

The Joint Stewards Council has again successfully boosted the funds of the NSPCC with their annual collection. At the end of last year, they handed over a cheque for £750 which represented donations from ourselves, DAH, DAP and DAAS.

NSPCC appeals manager, Marilyn Peachy, said, "*For many years, Dowty has supported us and the staff have become real friends. We rely on their tremendous support – they are wonderful*".

The picture shows John Schuck presenting the cheque to Marilyn under the watchful eyes of Processing's Derik Jones (left), John Curwock (DAH) and Postman Pat.

In addition, a further £90 was sent to the charity in February. This money was donated by MLG-Assembly who held a raffle to find a new owner for a spare tool box.

The NSPCC would like to send a big thank you to everyone who has dipped into their pockets for them recently.

Thought for the Day

This is a story about four people who were called Everybody, Somebody, Anybody and Nobody

There was once an important job that had to be done.

Everybody felt sure that **Somebody** would do it.

Anybody could have done it, but in the end **Nobody** did it.

Somebody was angry about that because it was really **Everybody's** job.

Everybody thought that **Somebody** should do it, but **Nobody** realised that **Everybody** would not do it.

It ended up with **Everybody** blaming **Somebody** because **Nobody** had done what **Anybody** should have done.



John Schuck presents the cheque to Marilyn... watched by Postman Pat

RATS spotted in Restaurant!

Calm down! We're talking about The Crag Rats, not the furry vermin type.



The Crag Rats are a theatre group who specialise in educational work. They have run successful events for London schools covering self-esteem and confidence building for children. On March 10th the Crag Rats borrowed our restaurant facility to run a Life Skills Event for pupils of Monkscroft school.

The school feels that if lack of confidence, low self-esteem and lack of basic social and life skills are not tackled at a young age, it can show itself later on through hooliganism, petty crime or other anti-social behaviour.

The Crag Rats Event aims to help deal with these issues.

The pictures show pupils enjoying the workshop





Dave Morgan who has been co-ordinating the SPC work in MLG with Aluminium Cell Machinist, Mike Jones.

SMALL CHANGE LEADS TO BIG SAVING

A small, seemingly insignificant change can make a big difference, as Phil Hook (below) from Fabrication in LLG-Assembly knows.



Phil, who runs the N.C. pipe bender, noticed that there was always unnecessary waste when cutting titanium pipe lengths.

Phil told Link, "After examining the way pipes are made on the N.C. machine, I found that the cut billet length we ordered could be reduced by anything up to 20 inches".

At 32p per inch on average, the cost of wasted titanium quickly added up!

Phil's attention to detail has already saved us £20,000 of raw materials against known orders.

Congratulations and thanks, Phil!

SPC (Statistical Process Control) is about collecting and analysing data about processes to help us understand them, bring them under control and improve them. This can save us both time and money as Medium Landing Gear have been finding out.

Due to a high level of non-conformance records (NCRs) and a risk analysis review, the Aluminium Cell was highlighted as an area of the factory that could benefit from running SPC.

"SPC has helped to sort out a number of problems we've had with our processes", says Machinist, Mike Jones. For example, SPC identified that the single point boring process needed improvement.

"It revealed that we were trying to produce components to tolerances which the machine and the tooling couldn't manage", Mike explains. As a result, a number of new measures have been introduced to ensure that the cell can reliably achieve the high standards required.

These include introducing permanent tool setting, installing a new tool setter, buying new tooling and increasing machine maintenance. Proof of the value of these changes is evident in that NCRs have fallen from

INVESTING IN OUR FUTURE

We are all aware of the fiercely competitive nature of our industry and the need to capitalise on opportunities to continually improve our performance. This includes making sure we have the right equipment to achieve the best performance.

Although any expenditure we make must be carefully considered in terms of financial payback, we believe strongly in investing in our own future. The list below illustrates some key investments we have made over the past year.

- Giddings & Lewis MC60 Machining Centre (£750,000)
- Hewlett Packard Computer Servers and associated software (£600,000)
- Catia workstations and associated software (£200,000)
- Manufacturing Documentation System (£200,000)
- Engineering Drawing Retrieval System (£200,000)
- Large Landing Gear I.T.S. Boring System (£90,000)
- ICI Vapour Degreasing Plant (£70,000)
- Vacublast Etching Machine and modifications to Aluminium Processing Cabinet (£60,000)
- Refurbishing furnaces in Processing (£60,000)
- Colchester CNC Lathe (£50,000)

These are specific examples of recent expenditure. Last year we made investments in plant, systems and machinery in excess of £2 million and expect this to increase in the future.

4.5 to only 1.5 per month. "SPC has helped to relieve some of the headaches that we used to put up with from day to day", says Mike.

Another major benefit from SPC is being appreciated site-wide. This is the increased calibration period for gauges. From one month to three! This extension was only allowed as a result of data being collected to enable us to understand the process of wear of gauges. It was identified that the 'most used' gauge in the factory would not wear out of tolerance during three months. The extension was therefore introduced.

Appointments and Farewells

A warm welcome back to seven employees who have re-joined us in recent months having previously worked for the Dowty Group.

Les George was appointed Industrial Director in January, having previously been a Director for Dowty Aerospace Gloucester, Propellers and M-D at Vélizy. **Keith Griffin**, who joined us in December as an N.C. Electronic Engineer, used to work for Dowty Fuel Systems. **Steve Pugh**, **Paul Hailwood** and **Chris Goodman** all returned to our Plating Shop in January. In February **Clive Gill** moved from Dowty Aerospace Propellers back into sheet metal working for LLG-Assembly and **John Smith** joined us from Dowty Aerospace Hydraulics as a Manufacturing Engineer.



Moving in... Colin

We also welcome **Colin Sirett** who joined us as Head of Marketing in February. Colin previously worked for Lucas Diesel Systems.



Moving up... Paul, Nigel and Chris

Our congratulations go to **Paul Chandler**, MLG-Assembly, **Jeremy Bird**, Design, **Nigel Woodford**, Aircraft Engineering and **Chris Smith**, M.L.G. Paul and Jeremy have



Keith, John, Chris, Clive and Paul (not pictured, Steve and Les) return to the fold

been promoted to Team Leader and Engineering Group Leader respectively. Nigel Woodford has been promoted to Engineering Manager and Chris has moved off the machines to become a Manufacturing Engineer for Medium Landing Gear.

Further congratulations go to Paul Fletcher who was promoted to Purchasing Team Leader at the start of this year.



Paul is pictured above with his Manager, Philip Pleass whose own role has broadened to Purchasing and Supply Manager.

Malcolm Stennett, Commercial Manager, CSC, retired in January after more than 40 years of service. Malcolm, who joined Rotol as an engineering apprentice in 1956, worked for 7 different companies within the group. We wish Malcolm a well-earned retirement.

Finally, John Feeley, Manufacturing Engineer also retired in January. John joined us in 1953 as a junior in Postal and Filing before moving onto the

shop floor as a Grinder. He was promoted to Foreman in the Tool Room before moving into Work Study in 1978. We wish him a happy retirement.



Malcolm Stennett and wife Elaine look forward to retirement

Congratulations!

To proud parents...

- **Sarah Powell**
(Sam born 30.10.96)
- **Julie Wilkins**
(Amy born 19.11.96)
- **Beverley Badaloo**
(Troy born 5.12.96)
- **Andy Harris**
(Lee born 16.1.97 – Andy's third!)
- **Andy Price**
(Kathryn May born 10.2.97)

And to newly weds...

- **Jacqui Bourke** (née Bubb) who married Patrick on 21.2.97
- **Nick Hancock** who married Sally-Ann on 31.12.96

Rachel Norfolk (ext 1297) would be delighted to hear from you if you would like to announce your happy event in future editions of Link