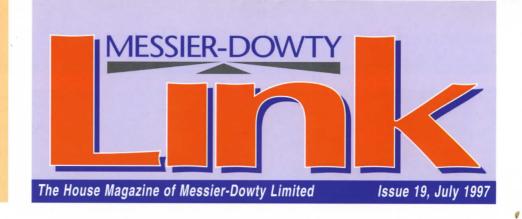
Also featured in this copy of Links Page 2 On yer bike Sue does it on grass! Horton Cup relinquished Page 3 Tony Edwards visits the ATC SATRO challenge the elements Horton Cup relinquished (continued) Pages 4 Project team update Football team success Page 5 Customer care Engineering education scheme Vintage bike ride Page 6 Investors in People Update Page 7 Toronto - Conquest of the West Gloucester Replanting Programme

Appointments, Farewells and Congratulations

Page 8





The new slogan for the Messier-Dowty stand at the recent Paris Airshow referred to our latest successes with customers, contracts, orders, aircraft — or all 4!

The Messier-Dowty stand and exhibits followed a similar theme to that at last year's Farnborough Airshow.

The display of landing gear represented each decade, beginning with our first gears, Messier's Farman 190 and Dowty's internally sprung wheel. Other exhibits included the Gloster Meteor main, Mirage 111 main, BAe 146 main, Concorde nose, Airbus A320 nose, Eurocopter Tiger main, McDonnell Douglas F/18 E/F nose, Dassault Rafale nose and the Airbus A340 main.

For the first time at Paris, both

Messier-Dowty and TI in Aerospace exhibited alongside each other on a combined stand. The companies kept their individual identities and separate displays, but together presented an extremely impressive presence, one of the biggest for an equipment supplier.

The Messier-Dowty stand also featured a large video wall showing a compilation programme of our historical landing gear applications, together with a section covering our recent successes.

An interesting anniversary was plucked from the record books and

highlighted in the chalet foyer. This was the signing of the Agreement between Messier and Dowty 30 years ago for the collaboration on the landing gear for the Anglo-French Jaguar aircraft programme.

The show opened under top security with a visit by M. Jacques Chirac, the French President. During the show, a number of VIPs visited the stand including: Margaret Beckett, President of the Board of Trade; Adam Ingram, Minister, Northern Ireland Office; and John Speller, Minister of State, MoD.

All involved considered the show to be extremely successful, with the level of visitors and activity much higher than the last few shows.

On Yer Bike!

We never cease to be amazed at what our employees involve themselves in to raise money for charity. John Schuck, machinist and Works Convener, is no exception.

John is a member of the Cotteswolde Lodge of The RAOB, a world-wide organisation whose main purpose is to raise money for charity. Each year a province leader is elected, who selects a charity to support for that year.

The Buffs (as they refer to themselves) have assisted a number of charities over the years, including helping children to go on holidays of a lifetime and supporting schools who have children with physical or mental disabilities, by providing books and equipment to encourage their learning and development.

This year they are supporting "Winston's Wish". The charity was started in Gloucester to provide support and help for children who are orphaned. "Winston's Wish help the children over the initial shock of bereavement, organising adventure and activity weekends in addition to counselling", explains John. "They work to help the children adjust back into a family environment, perhaps with grandparents or other relatives".

In May, The Buffs organised a sponsored bike ride with a difference – from Cheltenham to Gloucester and back again on a bicycle made for eleven! John managed to miss this excitement as he was on holiday.



On a bicycle made for 11!

However, he won't be getting off so lightly on 6th July when he joins a team of oarsmen to race the sea cadets from Sharpness to Gloucester Docks. And in September, he takes part in a charity football match against a team of under 17 year olds!

There will be an opportunity to see John and the 11-seater tandem in action in July when Buff members join the Cheltenham carnival procession dressed for this year's theme, "Full of Eastern Promise". We leave it to your imagination, but veils and yashmaks have been mentioned...

If anyone would like to know more about The Buffs, or offer support for their work, John would be pleased to hear from them on extension 1592.

HORTON CUP RELINQUISHED



Dave & Graham – individual prize winners
This year's Dowty Inter-Company Open
Golf challenge was held at Brickhampton
Court on Friday 2nd May, Teams from
DAAS, DAH, DAP and Messier-Dowty
took part in the Stableford points
competition, with all eight scores from
each team to count.

The course was in very good condition with noticeable improvements having been made since the competition was held there last year. The lake at the side of the eighteenth has now been extended across the fairway and the course had been set up to be more difficult with pin positions on nine of the holes being within three feet of the edge of the greens.

Although we have retained the cup for the past two years, this year it was won by DAAS with 272 points – consider it on loan! Possessiveness aside, our congratulations to the DAAS team for a big improvement on last year when they were in last position.

Other team scores were Messier-Dowty 268, DAP 239 and DAH 227. Individual scores for our team were Graham Bradley

Sue does it on grass

Weekdays find a demure Suzanne Manners quietly and efficiently handling Human Resources administration. But weekends are a different story as Suzanne dons a pair of bright red overalls and heads for grease, dirt and speed.

For Suzanne is an active member of the Forest of Dean Autograss Club. Introduced to autograss racing by husband Jon, Suzanne enjoys few things more in life than a few laps round a grass track in an adulterated Toyota Starlet.

"The shell of the car is a Starlet, but the engine is a Ford Pinto 2 litre racing engine" explains Suzanne. "The car is shared between Jon and myself, and I race in Ladies Class 3. We can race all over the country but tend to stick to local meetings in the main".

Races normally involve 2 heats and a final and Suzanne, who is only in her second season, is already the proud owner of 1 trophy. "I aim to add more to my collection", says Suzanne. "Maybe after I've passed my driving test...". You mean, they might let you loose on public roads? Look out everyone!

P.S. - Since writing, Suzanne has passed her test - congratulations!

Tony visits the ATC

In the last edition of Link, we featured the Air Training Corps (ATC) 2322 Dowty Squadron, which is sponsored by the local Dowty Companies, including Messier-Dowty Ltd.

In April, Tony Edwards Chief Executive, Dowty Group, Chairman of Messier-Dowty and flying enthusiast, dropped in on one of the squadrons evening training sessions at their Arle Road Headquarters.

Tony saw a cross-section of the groups activities during his visit, including map reading and first aid training.

Tony was clearly enthusiastic about the work of the Squadron, and the link with Dowty. He said "I believe young people need to be encouraged to take an active role in the future of aviation and I am delighted Dowty can help in this way".



Tony Edwards presenting the Air League Certificate to Sergeant Craswell

At the end of the evening, Tony presented an Air League Certificate to the Squadron. The Squadron in turn presented Tony with a Dowty 2322 Squadron Plaque.

HORTON CUP RELINQUISHED

continued from Page 2

38 points, Steve Warrender 37, Hadyn Edwards 36, Mark Evans 35, Cleve Wilson 32, Dave Tallon 31, Denis Barnard 30 and Paul Bedney 29.

As winners of the competition DAAS are responsible for organising next year's event – that should knock a few points off their score!

Three of our team members also won individual prizes with Graham Bradley second best individual score, Paul Bedney nearest the pin on the third and Dave Tallon hit the longest drive on the twelfth.



Tony Edwards joins the Cadets for their map reading lesson

Challenge the Elements

Members of the Gloucester team, including Roger Goldby, Colin Thornton and Peter Hall, were invited to act as judges at this year's SATRO Challenge for Young People.

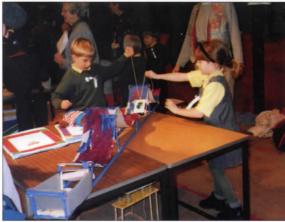
SATRO is the Science and Technology Regional Organisation which the company actively supports to help promote engineering as an attractive discipline for students to pursue.

The theme this year was "Challenge the Elements" and the event, which was held at Beaufort Community School Tuffley, took place during the national 'Science Week'.

The theme originated from SATRO's connection with the BT 'Global Challenge' round the world yacht race, and the hazardous conditions encountered by the crews.

The panel of judges assessed each school's entry for originality, scientific principles, craftsmanship and teamwork.





Some of the teams demonstrate their projects to the judges

The judges were particularly impressed with some of the younger children's enthusiasm – no doubt budding landing gear engineers of the future!

Project Team Update

In the Christmas Link, we featured the three Business Improvement Project Teams, which were launched to look at key areas of the business. We now have an update on the work that these teams have been doing.

MANAGE PROGRAMMES

The Manage Programmes Team was set up with the main objective of improving programme management.

The team members are Derek Shiells, Donna Edwards, George Elwin, Mark Evans and Andy Wilks. The main activities they have undertaken are:

- Identification of key elements and objectives of programme management.
- Gathering a wide range of views from across the Company as to the good and bad points of our current system.
- Benchmarking our processes against those of other companies.
- Preparation of a report covering the results of the investigation and proposals for improvements. This report is currently being reviewed by the Directors.



Manage Programme Team

WASTE ELIMINATION

The Waste Elimination Team's key objective was to identify the main areas of waste within the business and to propose ways of reducing it.

The team members are Ian Perry, John Gifford, Paul Fletcher, Brian Churchill, Adam Williams, Steve Beard and Greg Nash. The activities they have undertaken are:

- A review of the main areas of waste in the business which revealed that warranty, scrap and rectification have cost the business dearly in the last 5 years.
- Identification of 3 areas which are the major contributors to this and are as follows:
 - Customer Complaints: having sought views from around the business, it became clear that



Waste Elimination Team

there is inconsistency about what we consider a customer complaint to be. The team now has to consider how complaints should be handled and corrective actions put in place.

- How we manufacture our products and ensure that mistakes are not repeated. The team found that the Manufacturing and Final Deviation Reports (MDR/FDR) are good systems but there is a problem with corrective actions not being completed due to the number generated.
 - The team now has to suggest solutions to this.
- How we plan and manage our internal processes. The team found that we have equipment and systems that do not do the job we want, so we have to
 build in extra checking operations to ensure quality standards are met. The team is considering the required action to improve this.

ON TIME DELIVERY

The On Time Delivery Projects objective is very simple – 100% Original Equipment (OE) on time delivery to due date.

The team members are Steve Gunyon, Matthew Sexton, Bob Hawkes, Colin Thornton, Richard Clarke and Chris Morgan.



On-Time Delivery Team

Activities they have undertaken are:

- Initial research, indicating that two key areas need addressing the identification of current OE processes including looking at inputs and outputs and measures of performance (MOP's). Also the assessment of gaps in the initiatives already underway to improve performance.
- Current OE processes mapped, and gaps in MOP's identified.
- Information gathered leading to the conclusion that the issue of change management within the business needs reviewing (to be followed up outside the project team).
- Initial report on findings drafted. The team will now complete detailed proposals and conduct a causal analysis into the reasons for late delivery.

WINDSOR DRIVE SUCCESS

Congratulations to Windsor Drive AFC who have achieved the double, winning the Sunday Premier League and the Senior League Cup.

The Gloucester Sunday League Club are sponsored by Messier-Dowty.

John Nichols from DAAS, joint manager of the team, is ably assisted in running the club by our own Alex Greig of Assembly and Wayne Brown of MLG.

Well done to all involved!



Customer Care Workshops Review

As nearly everyone has now participated in a Customer Care Workshop, we thought the time was ripe for a review of what had happened to all the opinions and questions you raised. Steve Beard from Quality, who has been running the workshops, brings us up to date.

Each group of employees attending the workshop gave open, honest and valid opinions and observations of customer care within the company and I would like to thank everyone for their co-operation and input to the sessions.

The information gathered from the workshops has been collated under seven headings – Business Culture, Human Resources, Manufacturing, Engineering, Materials, Quality and All Departments. Each group contains repeated observations and concerns and these have been passed to our management team for discussion.

Those of you who attended the later sessions will have noticed that a director or manager attended part or all of the workshop to try and answer your questions directly.

The information was also passed onto the three project teams investigating 'On Time Delivery', 'Waste Elimination' and 'Manage Programmes'.

It is perhaps difficult to attribute improvements directly to the customer care workshops because a number of the issues raised were already being addressed. However, the workshops helped to raise the profile and prioritise these issues. The improvements which have taken place, and those which we still need to make happen, are as follows:

IMPROVEMENTS

- Cascade briefings the written information and spoken communication have improved. Directors and Managers are crossing into other areas to give briefings. Andy Stevens gave the February cascade in which he stressed the outside pressures on our business and the need for good customer care.
- Listening skills seem to be improving. Individuals now stop and ask "What do you actually require?"
- Team working Process and Assembly teams in particular now run their own meetings.
- House keeping throughout the site is better. Alan Locke and his team are doing a good job to the exterior. Demolition of old buildings, tidying the grounds, the new car park and resurfacing of internal roadways have

- greatly improved the site, but we must remember that we are all responsible for general housekeeping.
- Sign posts at the entrance to every department are now in place.
- Use of the Customer Training School for internal training is being addressed.
- Investments in the company are now being communicated through Link.
- Support to the Drawing Retrieval System and Manufacturing Drawing System is improving on an on-going basis.
- Engineering is making a real effort to action outstanding query forms.
- Good work is evident in the Laboratory and Processing areas to improve support to Manufacturing, and likewise in the Manufacturing areas to support Assembly.

ROOM FOR IMPROVEMENT

- On the whole, communication can still be improved within the company. This will reduce problems such as unnecessary duplication of effort.
- Fire fighting still happens at times. This can cause imbalances in workload in key areas.
- We could sharpen up the way we capture good ideas and process them to conclusion.

As a company we all need to get closer to both our internal and external customers. We must improve our understanding of their needs so that we can meet them better than before.

This is the one way to beat the intense competition from our competitors, whose priority is also customer satisfaction.

Engineering Education Scheme

During this academic year, Messier-Dowty has supported two local schools with separate projects under this scheme.

The Engineering Education Scheme encourages Year 12 (Lower Sixth Form) students to consider a career within the engineering industry, by providing contact and working experience with engineering companies.

Daniel Godzisz, Design Engineering, liaised with Cheltenham Bournside School on a 'Landing Gear Seals Project'. The students were Samantha Roberts, Christopher Thomas and Thomas Watson, with contact teachers Celia Collier and Ian Mudge.

The project investigated the use and behaviour of high performance seals in demanding applications on landing gear units, and aimed to understand and provide solutions to problems of fluid leakage, rapid seal wear and high friction.

Richard Newley, Materials Laboratory, liaised with Marling School on 'In-furnace Monitoring of Aluminium Conductivity'. The students



Daniel with Bournside students

were Matthew David, Graham Day, Peter Kay and Desmond Weller, with contact teacher Amanda Yates. The aim of the project was to improve the control of ageing high strength aluminium alloys by devising a method of monitoring the changes in electrical conductivity during the ageing process.

Both teams successfully completed their projects, which were displayed at the Presentation and Assessment Day during April at Yeovil, Somerset.

The teams have also been put forward for CREST Awards, with results expected in early June.

Life in the Slow Lane!

In this age of high technology, many of us still dwell on the good old days. And when it comes to motorbikes, a number of our employees definitely prefer the technology of yesteryear. Link spoke to a couple of our vintage bike enthusiasts to try to find out what makes a man spend his life in the garage up to his elbows in grease.

Mike Roberts, a machinist in Medium Landing Gear, has been "messing with BRITISH bikes", as he puts it, for nearly 30 years. "I've always been one for taking things apart and putting them back together," he explains. "I started with push bikes and moving onto bikes with engines was a natural progression for me".

Mike has rebuilt two vintage bikes from scratch, recently completing the restoration of a 1960 350 AJS. "Restoring bikes is my reply to the way the British motor cycle industry allowed the Japanese to take over. I don't really like Japanese bikes – I prefer the rugged old engineering of vintage bikes. Classic bikes are cheap to run (no tax if they are at least 25 years old). They are slow and safe, they lack the sporty sex appeal of the oriental bikes. But a lot of people agree that there's nothing like the sound of a good old British thumper".

Weekends find Mike searching for parts at auto-jumbles or with his sleeves rolled up in the garage. "During the recent restoration project my wife at times wondered who I loved most as it meant many hours in the garage. But I have a real desire to own a piece of British motorcycle history for myself".

After 20 years involvement, will Mike ever hang up his helmet? Certainly not! "I hope to still be riding when I'm old and decrepit", says Mike.

Many of Mike's sentiments are echoed by Martin Hignett, our Large Landing Gear machine shop manager. Martin has been involved with motorbikes from a young age, originally modern Japanese models.



Martin on tour



Then he restored a classic car. He began to think about undertaking a second similar project but found that cars take up a lot of space. Moving to vintage bike restoration seemed like a perfect way to overcome the space problem but maintain the interest in motorbikes.

Martin started by rebuilding a 1960's velocette and, over the years, has steadily regressed to his latest pride and joy, a 1919 Sunbeam. Having rebuilt it from scratch, Martin recently took his Sunbeam on a 400 mile round Ireland tour with the Vintage Motor Cycle Club.

"The bike has a 3 speed hand gear change and bicycle brakes. It has a 500cc engine but only generates 3½ h.p.!" Martin told **Link**.

(Left) Before... ...and (below) after!



With a top speed of only 40 m.p.h., 400 miles must have felt like a long way!

But Martin's problems weren't limited to lack of speed. The bike has no electrics. "The lights are gas-powered, giving out a glow no better than a candle which made for some interesting night riding on the trip!". Martin reports. Why does Martin do it? – just for fun! "I'm now on the look out for a side car for my two year old...".

Investors in People Update

Three years ago we successfully achieved our Investors in People Award. This August we are due to be re-assessed. Link spoke to Roger Goldby, H.R. Manager, to find out what is required to ensure that we retain I.I.P. recognition.

Link: What is required of the company to retain our I.I.P. recognition?

Roger: There are four key criteria which we must meet:

- i Commitment this we show via policies, procedures, budget and resources such as training staff and training facilities.
- ii Planning we must identify training and development needs and show that we have plans to meet these. This we do via our Training Policy and Appraisals.
- iii Action we must be able to demonstrate that we carry out the plans we make.
- iv Evaluation we must evaluate the benefits to our company of our training and development activities.

Link: How will the assessor make an assessment of us?

Roger: Their approach will be to examine how we have developed our training and development systems and to see how these match our business needs. Two examples of where large numbers of our employees have received training in support of our business needs are:

- i Financial Awareness it is a fact of life that our success is measured in financial terms. To support this, half day workshops have been held covering financial business measures.
- ii Customer Care this is an area in which we are continually working to improve. Workshops are still being held to discuss problems and to attempt to improve performance. In addition, personal development training to increase skill capability and flexibility continues to be a focus for us.

Link: When will the assessment take place and how long will it take?

Roger: At the moment we do not have a precise date. However, it is likely to take up to eight days and will involve the assessor talking directly to a large number of employees.

Toronto: the Conquest of the West

Toronto (or more precisely, Ajax) together with Montreal and Peterborough constitutes the Canadian subsidiary company of Messier-Dowty. The buildings in Toronto, which are located on 20,000m2, are less than 20 years old and house design, research and development, production and test. In the last 2 years, the staff has increased from 300 to 450 due to the increase in workload.



OVERVIEW OF NORTH AMERICA

Situated close to the USA, on the other side of lake Ontario, the Toronto operation acts as a prime contact for Messier-Dowty in North America. The development contracts recently won from Boeing (for the Bell-Boeing 609) and Raytheon (for the Hawker 4000 horizon) are evidence of this.

COMPLETE SYSTEMS ENGINEERING

For these 2 programs, like the Global Express, Toronto will supply the complete landing gear system. This includes the landing gear and also the wheels, brakes, braking and steering systems and door actuation. The principles of concurrent engineering will be employed on these development contracts and will involve



companies within the group.

"MAKE OR BUY"

Component manufacture is organised in 3 cells for machining cylindrical parts, 'prismatic' parts (main fitting, bogie beam) and aluminium parts.

A 'Make or Buy' policy has led to rationalisation and the optimisation of industrial resources. For example, Toronto produce only 90 principal parts (whereas Bidos produce about 400). Surfaçe Treatment and Heat Treatment operations currently sub-contracted out will, in a few months, be brought in to Montreal, where new facilities are being installed.

ENCOURAGING OUTLOOK

Buoyed up by recent successes, Toronto, presided over by Ken Laver, sees a bright future: "We have fulfilled our targets for 1996. Our position in the markets will be stronger in 1997 through the improvement of our company image in the eyes of our customers."

HISTORY

The name 'Toronto' comes from the Indian Iroquois "Toron-to-Hen" (Wood in the water). The town was founded in 1794 and was originally named "York" in honour of the Duke of York, son of George III King of England and took the name "Toronto" in 1834.

Gloucester Replanting Programme

You may have noticed that the Poplar trees along the boundary between our site and Hatherley Lane have been felled. Over the last few months, we have had one whole tree blow down, and two occasions when large limbs have blown off - one of which landed in our car park (fortunately on a Bank Holiday).

This prompted us to get a tree surgeon to examine the remaining trees, and as a result of the findings, the Forestry Commission advised us that the trees are diseased and should be removed immediately. The trees will be replaced with two different types of Mountain Ash, which will be planted in the Autumn.

THE MAIN PROGRAMMES AT TORONTO		
CUSTOMERS	PROGRAMS IN DEVELOPMENT	CURRENT PRODUCTION PROGRAM
McDonnell Douglas	F18 E/F (Nose landing gear)	F18 C/D (Main landing gear)
Bell-Boeing	BB 609 (Civil derivative of V22)	V22 (Military aircraft vertical take off)
Raytheon	RAC Hawker 4000 Horizon (Business aircraft Falcon type)	
Airbus		A340 (Central landing gear)
Bombardier (Canada)		Canadair CL 601, CL 604 Global Express, De Havilland Dash 8-100/200/300 Canadair Regional Jet

Appointments and Farewells

You may have noticed a few familiar faces around the site again with two more former employees rejoining us.

We welcome back Tony Jordan and Kevin Hemming. Tony left us in 1991 to go back-packing around Australia. A good holiday and a couple of jobs later he re-joined us in May as a Fitter in Assembly – Large Landing Gear.

Kevin also left us in 1991. Having run his own haulage company and then spending three years working for Social Services, he also re-joined us in May as a Process Operator in Large Landing Gear.



Welcome back, Kevin and Tony

Three other familiar faces to re-appear are Sarah Powell, Julie Wilkins and Beverley Badaloo who have returned to work in recent months following maternity leave. Welcome back, ladies!

We also welcome some fresh blood to the company in the form of Roy Mann and David Haile. Roy joins us from a civilian role in the RAF to become a Production Assistant in Large Landing Gear. David leaves the motor industry and is now a Fitter for us in Assembly – Large Landing Gear.



New faces, Roy and David

Three of our employees have completely new careers with Lyn Prystajeckyj moving from Finance to Marketing and Sales, Paul Cusick



All change! Greg, Phil, Lyn and Paul

moving from Plating to SFDC Administration and Phil Perry due to move imminently from SFDC Administration to a Computer Operator post.

Our congratulations go to Greg Nash who has been promoted to Cell Leader in Medium Landing Gear. We wish all four every success in their new roles.



Trading places - Mike and Mike

We have also seen two employees swop departments with Mike Whitehead moving from Product Support to Engineering and Mike Stefanyszyn moving in the opposite direction!

Finally, we bid farewell to two long serving employees who have chosen to retire. Ray Orchard joined us as a Capstan Operator Trainee nearly 40



Ray enjoys a drink on retiring

years ago and now leaves his post as Inspector, preferring life in a Cornish cottage to his role in Medium Landing Gear – and who can blame him!

Geoff Haines joined us as a Stressman back in 1960. He held a number of engineering roles en route to his final post as Research Manager. Geoff left us in May. We wish both Geoff and Ray a long and happy retirement.



David thanks Geoff on his retirement

Congratulations!

To proud parents...

- Dave Brown (Samuel born 14.03.97)
- Diane Cockshull (Ben born 20.03.97)
- Andy Paddock (Alice born 21.03.97)
- Nicky Clemmens (Molly born 05.04.97)
- Jerry Fisher (Chloe born 08.04.97)
- Nick Stadnyk
 (Molly born 21.04.97)
- Dave Symes (April Louise born 24.04.97)
- Keith Baker (Timothy born 14.05.97)

And to newly weds...

- Phil Perry who married Shirley on 26.04.97
- Craig Pilling and Lindsay Welbourne who married on 31.05.97
- George Elwin who married Alex on 17.05.97

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