

landingmatters

INTERNAL NEWSLETTER Messier-Dowty Gloucester

Including the latest issue of *Leading Edge*, the Business Improvement newsletter for Messier-Dowty Gloucester



2010 INNOVATION CONTEST



CONGRATULATIONS TO THE OVERALL MDI WINNING ENTRY FROM GLOUCESTER AND ALL OTHER GLOUCESTER SITE WINNERS AND ENTRANTS

During December over 60 of the 116 Gloucester entrants in this year's contest attended a celebratory lunch and collected their MDI Innovation Contest prize.

Mike Platt congratulated all those involved for their time and effort in submitting a record 74 entries, including this year the overall Messier-Dowty International winning entry!

The implementation of this innovation provides a fully integrated software tool to

control the assembly inspection process with standardised acceptance criteria displayed visually at each step. The standardised sequencing error proofs the inspection process. The Landing Gear configuration is now validated within the process and Measures of Performance for improvement analysis can be generated automatically. The potential saving is over £150,000 per year through the elimination of rework and non-value added activity!

MDI's overall winner was the entry for an ELECTRONIC INSPECTION CHECK SHEET submitted by the team of:

- Phil Gee
- Stewart Busson
- Brian Roberts
- Sarah Williams
- Matt Roberts
- Graham Bradley

Pictured Gloucester entrants attending the celebratory lunch and the category winners collecting their prizes



Airbus opens A350 XWB Landing Gear Systems Test Facility in the UK

Airbus has opened the A350 XWB Landing Gear Systems Test Facility at its site in Filton in the UK, marking another important step forward in A350 XWB production.

Louis Gallois, chief executive officer of EADS, Airbus' parent company, and Sir Peter Westmacott, the UK ambassador to France, opened the building.

"Today we are not only opening an important new building, but we are also celebrating a closer step to the reality of the A350 XWB," said Louis Gallois. "This facility will play an important part in the

integration of the landing gear systems on the aircraft, which will fly around the world and carry millions of passengers in its lifetime."

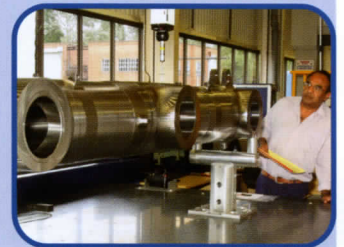
Construction of the €39m facility started in January 2009. Inside there is a large bay that will house: the landing gear systems integrated rigs; an avionics suite with test benches known as the Landing Gear Systems Functional Integration Benches; a control room from which all tests are co-ordinated; and a dedicated viewing area for visitors.

To support the event MD Gloucester installed the mock-up of the A350 main gear

The A350 main landing gear takes shape

The first A350 main gear, for the Airbus system rig, is making good progress towards its target delivery date of 15th February 2011. With the Critical Design Review with Airbus closed in November, and only a few small actions to be completed by year end, the gear is now becoming a reality.

All the A350 large titanium and steel parts have been designed and manufactured during 2010 and are expected to be delivered before the end of 2010. All suppliers were selected for supply of the medium and small parts. Most of the CATIA models will be released into the supply chain for manufacture by the end of the year. A number of audits have been completed by Airbus in Engineering, Program and Manufacturing with few major issues most of which have been closed.



New Gloucester assembly area

As we look ahead to the assembly of the first landing gear, the building and refurbishment of the new A350 assembly area is well advanced and ready for the build stations to be installed.

And the Aircraft also begins to take shape!

As progress is gathering pace at the equipment level, Airbus has also commenced production of the first aircraft in Germany, with the production of the first component, the upper wing shell, built from weight-saving carbon fibre reinforced plastic (CFRP) measuring almost 32m x 6m.



Fatigue testing of 787 main gear at Gloucester

B787 MLG fatigue test

The requirement is to complete a fatigue test that involves applying 220,000 flight cycles to the B787 main landing gear and associated aircraft structure, based on 44,000 flight cycles per life with a scatter factor of 5. The 2nd life fatigue testing has now restarted, having previously completed 44,000 flight cycles. Also successfully completed recently was a strain gauge survey, which required the attachment of strain gauges to the MLG and support structure. A series of different loads were then applied resulting in strain readings for approximately 700 test channels for analysis by MD, Boeing and their partners.

This is the first fatigue test on any MD landing gear test unit that has been controlled to apply loads on a flight by flight basis as they occur on the aircraft i.e. pre flight taxi, take off, in flight loading, landing & post flight taxi. The test will continue until 2014 before completion of the 5 lives of fatigue. Composite stays were fitted to the test unit in place of steel stays after completion of 1/2 of a life to clear the associated pins for the stay. The stays had previously been tested to clear them for flight by separate testing mentioned above

B787 Composite Stay tests

In August the latest fatigue test on a B787-8 composite side stay was completed. This test was carried out to enable specimens with greater design and manufacturing tolerances to be used for production purposes. Previous testing covered impact, fatigue & strength testing on over 150 test specimens, ranging from small elements up to a full drag and side stay assembly to enable certification clearance, thus allowing composite stays to be built onto the production aircraft. Over the next 2 years the Test department will be involved in carrying out further testing to clear a B787-9 version composite drag stay for use on production aircraft.



B787 Composite Brace Test



B787 MLG Test



Messier-Dowty presents cheque to Marling School to assist with its Build A Plane Challenge

Messier-Dowty together with Dowty Propellers/GE, recently presented a cheque to Marling School in Stroud which is participating in the "Schools Build A Plane Challenge"

The project is designed to spark interest in young minds by allowing them the opportunity to get hands-on involvement in this exciting build programme sponsored by Boeing and organised by the Royal Aeronautical Society (RAeS).

Using a Rans S6 plane kit the students will build the aircraft, get it certified to fly by the Light Aircraft Association (LAA), get a flight in it and eventually sell the plane to recoup the costs so that future projects can be funded at other schools. The project will help students gain experience not only in the mechanical and technical side of the build, but also with the commercial and sales environment. The lead school will coordinate the build with local schools and run projects for others, especially primary schools, to help spread the benefit of the project throughout the community.



Mike Platt commented at the handover: "To maintain our position as a world leader in our field and indeed for the UK Aerospace Industry to maintain its position as a worldwide technology leader, it is essential that we expand the UK's technical resource with the engineering leaders and technical experts of the future. To do this we need to develop a passion for engineering and the sciences in general throughout schools and colleges alike to ensure that students see manufacturing and engineering as an attractive career prospect.

One of the ways we can encourage this is through our involvement with projects such as the 'Schools Build A Plane Challenge' and we are pleased to present this contribution to Marling School to help them with the tools and materials necessary for the project."

Women in Aerospace



A group of seven female employees represented Messier-Dowty at the fourth 'Women in Aviation and Aerospace Conference', organised recently by the UK's Royal Aeronautical Society.

The Women in Aviation and Aerospace committee was set up to encourage more young women to consider aviation and aerospace as a worthwhile career and to support women already in the industry with their career development.

The Conference brought together over 200 delegates working in all sectors of aerospace and in all roles, ranging from apprentices through to women whose careers have already been successful, to listen to a series of lectures from inspiring speakers in line with this year's theme "Expanding Our Opportunities".

Francis Mer Visits

During his first visit to the Gloucester site, Francis Mer was given a detailed account of the site's core competencies and capabilities, with particular focus in Engineering and Production.

As part of the tour of the facility, members of the Gloucester team were able to demonstrate the excellent benefits delivered from a broad range of improvement activities across the site.

In his feedback from the visit, Francis expressed his pleasure with what he had seen and heard, and that he left with a very positive perception. In particular he was pleased to see our openness, alignment and engagement with our sister locations.

In support of his objective to ensure that the group delivers long term value to its shareholders, Francis emphasised the need to continue to invest in the site and the capabilities of our people.

The Gloucester team can take great pride in how it demonstrated its capabilities, commitment and dedication to improvement.

Francis Mer also visited Messier-Dowty's new production facility at Querétaro and the A400M Test Facility and Composites capability at Velizy.



During September, Francis Mer, Chairman of the Safran Supervisory Board and also Chairman of the Board's Strategy Committee visited a number of sites around Messier-Dowty.

Improvement at Gloucester in 2010

In 2010 the Gloucester site has achieved a series of notable improvement successes, and has also made strong progress in the development of our underlying capability to further accelerate the speed of improvement across the organisation.

Included in this final edition of **Leading Edge** in 2010 are the improvement highlights and headline numbers from the year which, in addition to countless local improvement actions, continue to build our collective credibility with our customers and Corporate stakeholders.

A common factor that has been consistently recognised and appreciated by visitors to the site has been the enthusiasm and energy of the Gloucester team, including in 2010 Jean-Paul Herteman, Safran Chairman & CEO and Francis Mer, Chairman of the Safran Supervisory Board. This aspect is one that we can all take pride in, and recognise as a foundation stone for securing the long term growth and development of our business.

Managers have the on-going responsibility to ensure that this key asset is fully utilised by providing the appropriate environment and infrastructure to allow everyone to contribute to improvement initiatives. We already have best practice examples at Gloucester of employee ideas capture, process performance review and proactive problem solving. The objective for 2011 must be to ensure that these capabilities are fully established in all areas of the site, to maximise our potential as the world leader in take-off and landing solutions.

Andy Margrie – Gloucester Master Black Belt

Gloucester Wins the 2010 Messier-Dowty Innovation Contest



Pictured L-R: The Electronic Check Sheet Team - Phil Gee, Sarah Williams, Matt Roberts, Stewart Busson, Graham Bradley & Brian Roberts

**74 Entries from
116 Employees.
A 28% Increase on
our Previous Best!**

Green & Black Belt DMAIC Projects



Pictured: Gloucester's Certified Lean-Sigma Green Belts

**23 Completed Projects
20 Green Belt Certifications
£4.3M of Cost Avoidance
79 Projects in Progress
216 Employees
Involved**

Site Wide Improvement Initiatives

Employee Ideas
Over 300 Ideas
From Employees
in 11 Departments



28 Green Belts & 5
Black Belts Trained in 2010

GearUp
93 Employees Have
Contributed to AS-IS
Process Mapping,
BPR Workshops
& Data Cleansing



30 National Vocational Qualifications
in Business Improvement Techniques
Awarded

**Messier-Dowty
Production System
Assessments
in 9 Areas**



Lean Deployment in the
Customer Services Warehouse

2010 Safran Corporate Visits to Gloucester



Jean-Paul Herteman visited Gloucester in January 2010. Pictured left-right: Greg Nash presenting the Pin Group relocation plan, Rob Fortey presenting the A350 Assembly plan and Steve Bevan presenting the strategy for Large Landing Gear Machining.



Francis Mer visited Gloucester in September 2010. Pictured left-right: Phil Phelps presents the Medium Landing Gear Honing Section DMAIC project, Chris Morgan & Paul Greenwood present progress on the A350 programme and Matthew Sexton presents current R&T projects.

Looking Forward to 2011

**“Thank You to Everyone who has contributed to the improvement of our business in 2010.
We look forward to your continued support in raising the bar to new levels of excellence in 2011.”**

The Gloucester Site Directors: Mike Platt, Rebecca Wassell, Chris Wilson, Neville Kite,
Chris Morgan, Nigel Woodford, Matthew Sexton, Richard Ashford, Andy Baxter & Mark Evans

Jaguar Nose Landing Gear

The 1st unit of the Jaguar Nose Landing Gear built at Messier-Dowty since 1999 was despatched to H.A.L (India) on 15th October. The second and final 2010 Landing Gear was despatched in November.

The Military & Commuter Spares Team

pictured from left to right
 Aub Hann, Bob Hawkes
 Steve Goode, Dave Hickman
 Dave Thompson

Not in photo

Alec Greig, Bob Hudson
 Dave Scourfield, Ken Bowkett
 and Steve Gibbons.



Electronic MERF (Manufacturing Engineering Request Form) System

MERF (Manufacturing Engineering Request Form) is an electronic system developed to process a request for change, update or modify any manufacturing documentation, process or procedure within the control of manufacturing engineering department. This replaced a paper based system which suffered from lack of visibility and reporting functionality.

A MERF can be raised by anybody in Messier-Dowty who has access to Intranet and Microsoft InfoPath on their system. A MERF request can be submitted electronically using a user-friendly form.

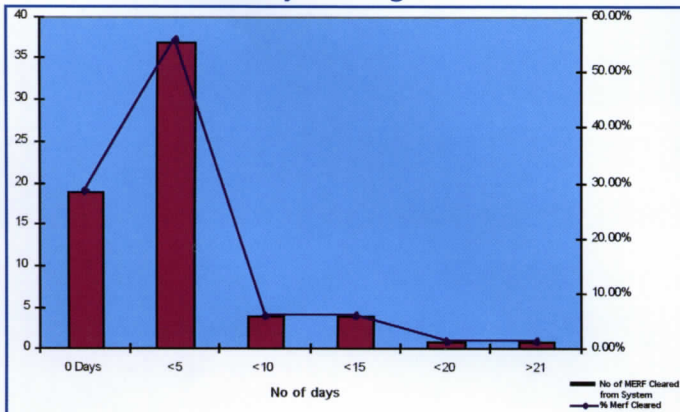
This system improves the visibility of information across the business, how to raise MERFs, approving their submission, processing them through Manufacturing Engineering and feedback status to the originator.

Benefits of MERF System

- Reduced paper storage - removal of previous paper based system.
- Improved retrieval time - obtaining paper from storage or an archive is typically slower than electronic retrieval of documentation. Along with the improved retrieval time comes the ability to perform searches for similar information.
- Efficient reporting system allowing for full visibility of departmental performance. (See reporting graphs)
- Improved security through a single secure location for documents and ensuring that the right people are able to access the right documents
- Removes the need for storing and archiving a paper based MERF system.
- Improved response time to the internal customer through completion of MERF with in a required timescale.

Mubashir Hussain, Manufacturing Engineering

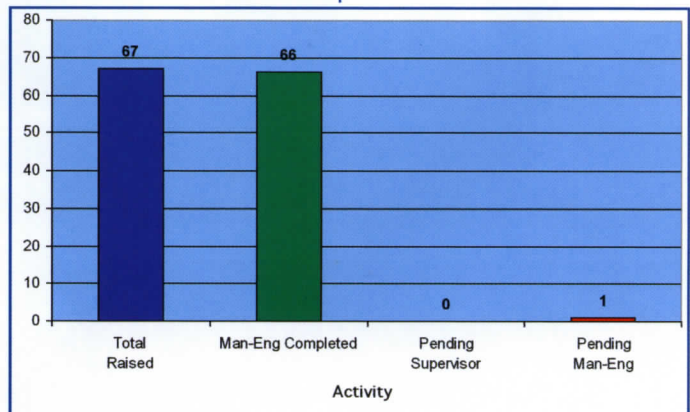
MERF Analysis Aug-Nov 2010



Summary

- Total MERF raised are 67 between Aug to Nov 2010
- Total MERF cleared by Man Eng were 66 and 1 pending in the system

MERF Response Time



Summary

- 85% of MERF cleared in less than 5 days from the system
- 98% of MERF cleared or completed in less than 20 days



Apprentices help promote Manufacturing & Engineering



Industry leaders took time to meet the workforce of the future at Tewkesbury's vocational college.

Schoolchildren from across Gloucestershire attended the event, which was staged by MP Laurence Robertson to promote manufacturing and engineering.

Messier-Dowty participated, with Apprentices James Allcoat and Luke Talbot addressing the audience with their own experiences of pursuing a career in industry.

Other companies participating included Boeing, Airbus, EON, EDF, L3 Communications, Moog and GE Aviation.

Mr Robertson said: "I used to work in manufacturing, but have become increasingly concerned about the loss of jobs in the industry. I'm also concerned that many young people overlook manufacturing and engineering as a career choice, perhaps because they see the industries as oily, dirty and dangerous.

However, I know from visiting many local companies that there are very many great careers to be had in these industries. The day was about bringing young people together with major companies to discuss the opportunities."

Well done James and Luke!

ROYAL AERONAUTICAL SOCIETY

Recruitment Fair London

Members of Engineering and HR attended the Royal Aeronautical Society Recruitment Fair in October. The event was very well attended, with around 500, in the main young people, attending including many University Graduates and Under-Graduates. At the beginning of the day people were queuing outside the front door which kept the team very busy all day.

The aim in attending this particular fair was to support the recruitment requirements for the Company and spread the word amongst this prime group of potential candidates that Messier-Dowty is a leading choice for an Engineering career.

Other companies participating included BAe Systems, Royal Navy, Boeing, Augusta Westland, Lockheed, Cobham, Airbus, Astrium, Atkins, Cranfield University.

Walk to d'feet Motor Neurone Disease

In 2009 my Dad was diagnosed with Motor Neurone Disease, a progressive neurodegenerative disease that attacks the upper and lower motor neurones.

On Sunday 3rd October 2010, despite the grey clouds and unpleasant rainfall, Rachel McGlothlen, Sarah Powell, Lisa Darby and Laura Wiacek joined myself and 24 other optimistic walkers on a charity walk to show support for the Motor Neurone Disease Association.



We made our way across numerous muddy fields and climbed to the top of Chosen Hill (which led to a rather slippery and interesting descent!), and completed the route in 3 hours 11 minutes.

An amazing £1507.00 was raised, and presented to the Gloucestershire branch of the MNDA. The Motor Neurone Disease Association has a vision of 'A World free of MND'. Their mission is to fund and promote research to bring about an end to MND. Until then they will do all that they can to enable everyone with MND to receive the best care, achieve the highest quality of life possible, and die with dignity. They will also do all that they can to support the families and carers of people with MND.

Thanks for your support ladies!

Heidi Beal, Human Resources



Andraz Vatovec gave two presentations which were very well received and gave the opportunity for people to ask more detailed questions about our products.



Recollections from my Cotswold Way walk

Some of the daftest ideas are hatched over a pint and as I was to find out this one was no exception! The idea being to raise some money for Dorothy House and MacMillan Support, two charities supporting my friend's father cope with terminal cancer.

Four of us set off from Chipping Campden at 6.00 am Friday 5th November to walk the beautiful, meandering and undulating Cotswold Way that stretches 105miles to Bath. The support of family and friends along the way was invaluable in keeping our spirits up and in total 30 people walked 611miles over the weekend.

We arrived in Bath Sunday evening tired and jubilant with blisters and aching muscles having walked 45miles, 35miles and 25miles on 3 consecutive days. Talking to many walkers this was a challenge not many would attempt let alone complete. The scenery was beautiful, the views from Broadway Tower and Tinsdale Monument above North Nibley are stunning, the company was excellent and overall it was a memorable experience shared with friends leaving us with a great sense of satisfaction that we've supported such worthy charities that touch so many of our lives.

Tim Baker

Systems Integration & Test



Start 6-00am, Chipping Campden 5th Nov



Finish at Bath Abbey, 7pm 7th Nov

Midnight Beach Walk

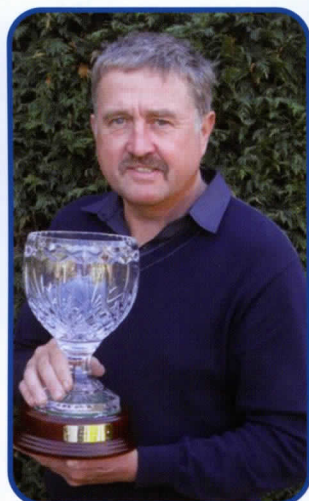
On Saturday 18th September 2010, along with my Mum and sister I completed a Midnight Beach Walk in Weston-Super-Mare to raise funds for Weston Hospicecare, which provides palliative care for people living with life-threatening illnesses that are no longer responding to curative treatment. Earlier this year it was a great shock to us all when my Dad was diagnosed with Sarcomatoid Mesothelioma. His subsequent decline was very rapid, ultimately resulting in him being cared for at the hospice in the last month of his life. Their support was invaluable and I would therefore like to say a very big 'thank you' to everyone who generously sponsored me and helped to raise £1,025 towards funding the hospice's ongoing services. I would also like to take this opportunity to thank everyone for their kind words and support during what has been a very difficult year.

Karen Jones, Value Creation

Match Fishing

Steve Sadler who works in the Shot Peen team within the Process Group recently took part in the biggest fishing festival in Southern Ireland winning the 30th Cootehill fishing festival in County Cavan beating 93 other anglers with a winning weight of 70kgs catching Roach & Bream over a period of 5-days.

Steve has been fishing for a total of 48 years



Births

- Paul Empson and his wife Jennifer are the proud parents of a new baby boy called George Austin who arrived on 17th August weighing 7lbs and 15oz.
- Sam Ind and husband George celebrate the arrival of their son Toby, brother to Lewis, on 2nd November weighting 10lbs 12oz
- Emma Henshaw and husband Simon celebrated the birth of their son Angus, born on 4th July weighing 9lbs 11 oz

Retirees

- Brian Dickson, Medium Landing Gear retired on 29th November after 32 years' service
- Terry Adams, Large Landing Gear retired on 19th December after 8 years' service
- John Clifton, Finance Department, retires on 31st December after 41 years' service
- Jo Warnock, Design & Analysis, retires on 31st December after 4 years' service