

# M.A.D Times

September 1996

Issue 1

## Intro from Mike Sweeney

I would like to take this opportunity to welcome you to the first edition of M.A.D Times.

As you are all aware, the Division has undergone significant restructuring in recent months to improve business efficiency and focus our operation. The relocation of staff at Rochester is nearing completion with a target date of the end of August. Thank you for your support and patience.

As part of the Investors in People process my Five Year Plan presentation will continue over the next two months to ensure all M.A.D staff are fully briefed on our strategies and objectives for the future.

The Division faces many challenges but I am confident we can meet them and with your support achieve our ultimate goals of World Class performance and Market Leadership.

### BUSINESS NEWS

#### **EF2000 Business Group**

"The EF2000 Business Group amalgamates almost all of MAD's activities associated with the Eurofighter into one organisation. The only EFA equipment not produced within this business group is the Head Equipment Assembly (HEA). The groups activities span a total of seven equipments for both the Eurofighter and Eurojet consortiums. This involves a total of:

- 1 Financial person
- 5 Commercial people
- 7 Program Managers.

Almost all equipment for the EFA programme is produced on a multi-national workshare basis typically involving companies in the UK, Germany, Italy and Spain. In the case of the Air Data Transducer (ADT) a company in France is also involved. The groups projects involve not only the ADT which is used to provide flight attitude data to the Flight Control System (FCS) but also the Head Up Display (HUD) which displays flight information in the pilots line of sight, the Computer Symbol Generator (CSG) which generates the display formats seen on the head-up and head-down displays, the Cockpit Interface Unit (CIU) which controls all of the various data buses, the Wing Pylon Station Unit (WPSU) which interfaces external stores to the aircraft systems, the Engine Monitoring Unit (EMU) which records and distributes engine data and development of the power supply for the Defensive Aids Sub-System (DASS).

Malcolm Homan

#### **MissionComputers Group**

At the start of this year, Mission Computers Group was faced with the challenge of moulding together a number of individual and very different business areas into a co-ordinated business group with realistic plans and budgets for the future. These business areas included:

- \* Tornado (Displays and Mid Life Update)
- \* Gyros
- \* Engine Management Systems
- \* Jubilee Line Extension Software
- \* Missior Planning
- \* Stores Management Systems
- \* Power Supplies
- \* Hawk

Over the last six months, the group has successfully performed against its budget and has put together a five year plan to show how these business areas, together with mission computers, will be managed.

Notable achievements for the group include:

- \* Award of the HACLCS II contract
- \* Negotiation of further funding for the Jubilee Line Extension Software
- \* Award of the Tornado Augmented Logistics Support Contract (ALS)
- \* Further orders for Tornado and Hawk Equipments

Rationalisation of Mission Computer Group's business areas has been a significant part of our planning. This has led to:

- \* The transfer of the Engine Management Business to Flight Systems Division
- \* The formation of two new, more focussed, Business Groups namely:
  - \* **Tornado Aircraft Group** managed by Geoff Richmond
  - \* **Mission and Displays Group** managed by Stuart Forsyth

Watch this space for further news of the progress of these new business groups.

Tony Fordham

#### **Helmet Group**

Helmet Displays Group encompasses Mission Avionics Division activities at both the Rochester and Edinburgh sites in two primary product areas:-

- Helmet Mounted Displays
- Night Vision Goggles

Historically Helmet Mounted Display activity has been predominantly associated with the development and supply of one off systems in support of research and flight demonstration programmes for both fixed and rotary wing aircraft. This has provided GEC Marconi with the opportunity to demonstrate its capability across the UK, Europe and USA with respect to Helmet Mounted Display technology.

## BUSINESS NEWS Continued

The group is presently under contract for two development programmes which are targeted at production aircraft programmes both providing an opportunity for significant potential orders. For rotary wing application the Knighthelm system is being developed for the German Tiger aircraft. The development of the system is well advanced with qualification due this year.

In the area of fixed wing applications the group is currently performing an initial risk reduction programme for the EF2000 Helmet Equipment Assembly. The full scale development contract is due for release this financial year.

Both Edinburgh and Rochester have an established customer base for Aviators Night Vision Goggles with Night OP/ Night Bird and Cats Eyes products respectively. The primary activities in these areas are associated with additional supply and support of these products to our existing customer base.

In addition to Aviators Night Vision equipment a system for Ground Forces has been developed. The system, marketed as Ground Owl adopts a modular approach providing the user with a range of capabilities from a simple hand held monocular assembly to a full helmet mounted binocular system.

Bob Gee

## Airborne Computers Group

Airborne Computers Group (ACG) handles two product areas; Head Up Displays (HUDs) and Air Data Computers (ADC's). These products are produced at both our Rochester and Edinburgh facilities, and the group has an annual turn over in excess of £26 million.

ACG is the market leader with the world's most advanced military HUDs, fitted to aircraft including the F16, C17, F-5, Tornado, and now EFA and F-22. We are also the world's largest supplier of military ADCs, for both rotary and fixed wing aircraft. Our most recent contract is for the helicopter air data system for the Apache AH64D which will be for several hundreds of aircraft.

Key areas for the future of ACG are the establishment of the latest Air Data product the Higher Integrated ADC (HIADC) in the market place, and the move towards a successful Civil HUD business. In the area of military HUDs the F-22 and EFA programmes continue our domination of the market (EFA HUD actually forms part of the EF2000 Business Group), although to sustain our position in the future there will be more emphasis on the retrofit programmes to existing aircraft.

The group consists of over one hundred dedicated personnel, consisting of Engineers, Commercial, Marketing and Management staff, who are now co-located at Rochester, with production at both Edinburgh and Rochester.

Rob Lindsay

## INVESTORS IN PEOPLE

It is a few months now since the awareness presentations and we are getting mixed feedback via the Communications team. Some people are saying "what is happening with IiP" while others are commenting on the fact that there are noticeable changes. For example team briefs are being carried out very thoroughly in some areas while not at all in others. A high percentage of people have had appraisals this year - but not everybody.

We did say during the presentations that culture change does not happen overnight - it is happening though.

We now have a written statement of mutual expectations, the employee charter, we are close to finalising an MAD training plan, a new induction procedure is now in place, Mike Sweeney has given his 5 year plan presentation to almost all MAD staff, Communications are improving by noticeboards, this newsletter, our Communications group, MAD home page and by progressively increasing the use of team briefs.

Progress against the IiP 11 point action plan can be seen on the noticeboards and a Mid term review by an independent assessor will take place on the 10th 11th of October. This pre-assessment will be by an independent body of consultants (a company called P.I.) and will be based on a full assessment against the IiP standard. Our portfolio of evidence, in it's current state, will be submitted to P.I, for review, a week before the assessment. Kent TEC will select approximately 60 people from our workforce for interview by the assessors. This selection will be across all levels and areas of the Rochester site and the interviews will be strictly confidential. **The purpose of the interviews is to understand your perception of whether we have moved forward in relation to the IiP standard.** The results of the pre-assessment will be an independent measure of whether we are progressing satisfactorily against our action plan, and whether or not our culture is seen to be changing. Substantial amounts of training are taking place including a workshop for 500 managers and supervisors to establish best practice with regard to people issues and the employee charter.

Thank you for your response to the questionnaires. So far we have received approximately 400 replies and we are compiling the results to provide some statistics which we will feedback to you as soon as possible.

Finally please try not to be too parochial, I know some people are not experiencing the benefits of IiP yet, but this is why the Communications group is there - to help seek out these areas. That doesn't mean that the Communication group has a quick fix for problems, but by flagging them up corrective action can gradually be taken. Don't forget IiP is not a "cure all" for our problems - use the "Acid test" to see whether you are really considering IiP issues. The "Acid Test" will soon be appearing on the IiP noticeboards and the MAD home page for those who have access to the Internet.

Paul Davis

## Last Social Function Write Up

### Family Fun Day

Sunday 14th July 1996

On Sunday 14th July was the third annual Family Fun Day at the GEC Social Club Hoo. Once again there was an excellent turn out for all the different sports events which included, Five-a-side Football, Netball, Bowls, Tug-of-War and of course the Now legendary "It's a Knockout" Tournament.

As well as these events, for the real children, there were Ju Jitsu, Keep Fit and Majorette displays. There was also a Magician and a Punch and Judy show, and the ever popular GEC Marconi Avionics Brass Band. All this was an addition to free rides for the children, a Bouncy Castle and the essential free ice-cream.

For those who didn't have the energy for any of the physical stuff, there were craft stalls and Model Railway Exhibition and of course a Bar that was open all day.

Well anyway here's a summary of the results:

#### Football

- 1st FSD (3)
- 2nd MAD (Raving MAD)
- 3rd MAD (Colin Wilde)
- 4th FSD (1)

#### Netball

- 1st MADonna with the BIG BOOBIES
- 2nd CLUB
- 3rd SD(R)
- 4th MAD (MAD Goal Machine)

#### Bowls

- 1st Untouchables (MAD)
- 2nd Tomadoes (FSD)
- 3rd Mad Hatters (MAD)
- 8th Gold Diggers (MAD)
- 9th Simply Mad II (MAD)

#### Tug-of-War

- 1st FSD
- 2nd MAD (Computer Services)
- 3rd SD(R) (The Winning team)

and finally; The MAD Cows stormed a gorgeous gold for MAD on the Its a knockout

- 1st The MAD Cows
- 2nd SD(R) (Support the Winning Team)
- 3rd FSD
- 4th MADonna with the BIG BOOBIES
- 5th MAD (Computer Services)
- 6th QGR (MAD)
- 7th MAD Spurt
- 8th Club those Firemen

To all those who took part, I'd like to say a Big Thankyou and hope you had a great day!

Fran Simpson

## Continuous Improvement

Continuous Improvement (C.I.) is not another new initiative but more a way of thinking which very often just needs rekindling in most people. It is a natural trait in mankind that has taken us from living in caves to the high-tec. world that we now live in. So how does this practically relate to the workplace?

To remain a viable business in a highly competitive world we must not only become more efficient, but also more effective. Many people confuse efficiency with effectiveness, but there is a clear difference between the two. You can efficiently climb a ladder, but are still ineffective if the ladder is leaning against the wrong wall! Relating this back to C.I. in the workplace, it should become apparent that we ought to be looking at our processes from more than one perspective, i.e. do we need the process at all?, and if we do how can we make it both more effective **and** more efficient?

I am sure most people can think of numerous sytem or procedures to which we currently operate that cause both frustration and delay. These are the areas we need to target as part of our C.I. culture to truly make us a World Class organisation. At Toyota in Japan employees provide 1.5 million suggestions a year, and 90% of them are put to practical use. At Matsushita Electric, in recent years, employees have submitted approximately 6.5 million ideas annually - how many do we at GEC submit? The challenge therefore is to create a Continuous Improvement culture that encourages all employees to participate in building a sustainable future for all of us. In the next article I shall discuss how we can practically implement this, and how we can link C.I. to business objectives.

Paul Davis  
Business Efficiency Manager

## Software Process Improvement

The MAD (R) PIG (software process improvement group) is still conducting assessments of the various projects within MAD (R) to produce a definitive list of improvement actions for the division. Additionally work is being carried out on a set of "Framework Documents" these documents will provide solutions to many of the required improvement actions for Software Engineering Institute Capability Maturity Model (SEI CMM) level 2 and 3. Work is also underway to produce a common set of MAD work instructions by merging the "ISG" and "DSG" Instructions.

Phil Thompson

## Any Ideas contact

If you have any ideas for items in further issues of this newsletter please contact  
Jane Hales x3848  
Tower 3 Floor 2  
email: HALES\_J@AM@CSD06V

## On the lighter side

Rules for programming the computer:

- If a programme is useful, change it.
- Any given programme is obsolete.
- If a programme seems useless, document it.
- The value of a programme is proportional to the weight of its output.
- Programme complexity grows until it exceeds the capability of the programmer.

## FORTHCOMING SOCIAL EVENTS

Friday 15th November 1996  
Beer & Brains

For more information on forthcoming events please contact Fran Simpson  
x 3771

## BRAIN TEASER

### Air combat tennis

Opposing fighter planes (A and B) were speeding towards each other, each travelling at 800 mph in windless conditions. When they were exactly 500 miles apart, plane A launched a target-seeking missile at plane B at 2000 mph. When the missile reached the target area the sophisticated electronics on plane B turned the missile round and directed it back at plane A. But plane A had the same technology and returned the missile towards plane B.

The projectile's flight continued backwards and forwards in this way until the two planes collided head-on at the same time as the missile exploded, causing a rain of fine metal fragments.

Ignoring the turning time, how many miles did the missile travel before that disastrous conclusion?

Look out for the answer on the  
IIP noticeboards

## ENTERTAINMENT

GMAv Rochester Sports & Social Club  
Every Week

Sunday - Bingo 7.30 pm  
Monday - Stretch and Shape 7.30 pm  
Tuesday - Karate Lessons 5.30 pm to  
7.00 pm  
Wednesday - Fitness 2000 7.30 pm  
Sub Aqua 8 pm

### September Events

Saturday 28 September 1996  
Disco The Downtown Road Show  
7.30 to 11.15 pm



*WORKING TOWARDS*  
**INVESTORS IN PEOPLE**