

# ASD NEWSLETTER

*Summer  
Special*

AUGUST 1992

## FOREWORD

As I suggested in our last Newsletter I am proud to announce that after numerous meetings/discussions and burning the midnight oil, we finally received the order from IBM-ASIC for further development and manufacture of 44 AQS 903 systems. Working with IBM-ASIC is certainly different to working with MOD(PE) and I am pleased to say that relationships are extremely harmonious. We have completed successfully two major milestones, the Post Award Programme Audit (PAPA) and the Sub System Design Review (SDR). I would like to take this opportunity to thank everyone who has contributed to achieving these milestones. Over the next couple of years this will be an extremely important programme for the division - THANKS

Traditionally MOD(UK) has been our biggest customer and as the AQS 903 contract shows I have no doubt it will continue to be so over the next decade. However, to retain their custom and improve our competitive edge in the export market we have to look ahead. To this end we are concentrating our Private Venture money into improving our products by using new technologies, techniques and concepts. This includes developing the GEMMA Tactical Processor and using the AQS 905 development to expand the processing capability of AQS 903.

I am also pleased to announce the receipt of another order for our ACT 2 System from Boeing for the Update IV Programme. Obviously our US/Canada ACT 2 tour in January 90, by Peter Duckworth, Pat Keast and Graham Mills, is beginning to bear fruit. I am hopeful of receiving further orders in the near future for this training system.

Although we ran a competition for a Divisional Logo I'm afraid very few ideas were forthcoming. However, this did not stop Jon Anderson/Alex Graham "doodling" on the Apple Macs and examples of these will be available shortly.

I would like to pass on congratulations to the MASD Mixed Hockey Team who, once again, retained the GAV title beating CACD in the final. (I understand one DM scored a goal against the other DM and mutterings were heard - "Oh no she's scored" or words to that effect).

Finally I wish you and your families all the best and hope you enjoy the Bank Holiday Weekend.

*Sue Wood*

Sue Wood

## PROJECT REVIEW

### AQS 901

Work on the 5.1 software continues. We are only days away from freezing the package and starting the final integration testing. The team has worked long and hard with the Nimrod Software Team, RAF, Kinloss to resolve the outstanding problems.

At the end of this update the RAF will become responsible for future updates. However, we will remain the System Design Authority which will ensure our continued involvement with the AQS 901.

### AQS 902

#### Royal Navy Sea King Mk6

The long awaited Contract for the Software Update Issue 5 has still not arrived. The requirement is being amended to include the Sonar Interface Unit and Transmitter Unit modifications. We are hopeful the contract will be with us soon. A similar situation exists with the Video Tape Recorder installation.

Meanwhile the last few prime equipment and spare modules are progressing through production.

John Kimber is set to spend ten weeks with the Royal Navy in the Bahamas. Despite all that sun, sea and sand I expect he will manage to convince us through his visit reports that it was all work and no play. On the other hand, Phil Barnaba remains land bound in the West Country with his head stuck in Forward Equipment Racks.

#### Sweden

The Royal Swedish Navy has issued an ITT for a further system plus options for enhancements. The initial teething problems with the first four systems have been resolved and the systems are working well.

Another satisfied customer.

### AQS 901/902 PDS

The PDS Contract has been extended for a further year. Apart from the normal Design Custodianship and support of PDS rigs, some 87 tasks are being progressed. These range from Technical Publication queries through Defect Investigations and component obsolescence to replacement of Westrex printers.

#### FCD

Last February version 1.1 of the Test Set Software was delivered to FCD and has been reliable since.

In April, Alan Smith attended the formal FTP of the Primary Flight Computer which was witnessed by Boeing and FCD QA. The Test Set was used to run this FTP. FCD was very pleased that the full test ran 'hands off' automatically in 40 minutes, as opposed to the manual 2 day procedure when using their old 7J7 test set. This should make system regression testing, which was the primary aim of the new test set, less of a burden.

In July the 2.1 version of the test set software was delivered to FCD which includes numerous new features. An example of the new functionality is Symbolic Identifiers, the ARINC Bus identifiers that would normally look like 500/1/L-2-(2, 5) can now be replaced with 'Rudder'!

In response to a Boeing change, FCD had to re-design the ARINC interface cards which are used in the test set. As a result we are required to deliver a complete 2.2/2.3 package in November.

Everyone has been working hard to deliver the Right Lane Redundancy Management Software within very tight timescales, to the Integration Teams. The quality of software produced is some of the best we have seen to date. All teams are to be congratulated on their contribution to the project. Testing of the software by the RPFC ISTG and the Integration Teams is nearing completion.

The software will be delivered to Boeing this month.

## AQS 903

### MOD Development Contract

Since the last newsletter the AQS 903 Project has been divided into two programmes, IBM under Adrian White and the development programme under Phil Liddiard.

Work has concentrated on fulfilling the outstanding requirements for the development programme. To this end six major task areas exist:

The SIDT for the Operational Flight Program (OFF) "B".

The SIDT for OFF "C" (otherwise known as the Reconciliation Package).

Performance Testing.

Identifying additional tasks required to complete the development programme, otherwise known as Miscellaneous Testing.

Producing the final PE(CA) Form 6 submission.

Completing all outstanding contract line items.

Two runs of the SIDT for OFF "B" have been completed. When several outstanding problems are resolved another SIDT will be undertaken.

Work on the Reconciliation Package is progressing in parallel with the SIDT for OFF "B". On initial evaluation the package looks promising. The final Reconciliation Package is dependent on completing the OFF "B" package.

Performance Testing is progressing as the software packages become more complete. Several tests have now been demonstrated to the customer. During July a Milestone was claimed against Performance testing.

Miscellaneous Testing is starting to take shape with the initial tests being scoped and procedures drafted for subsequent approval by the customer.

### IBM

At the beginning of July the division was awarded a contract by IBM-Aerospace Systems Integration Corporation, (IBM-ASIC) not to be confused with Application Specific Integrated Circuit.

The major tasks on the IBM program are to complete the development of the AQS 903 including productionising the design and supplying 44 Production Systems. The development changes include incorporation of colour into AQS 903 System and some weight reduction measures. The software development for this contract, due to complete in September 93, has begun with the SIDT planned for March 94. Delivery of the first production system is the end of 1994, a very tight timescale if the division is to meet its target.

To this end the programme has started well, the first two critical milestones Post Award Programme Audit (PAPA) and the System Design Review (SDR) were completed successfully at the end of July, and 19-21 August respectively. The next major milestones are the Quarterly Programme Management Review (PMR) and the Preliminary Design Review (PDR) is scheduled for November.

IBM-ASIC is very keen on Acronyms, further reviews such as SDR, PDR, CDR, PMR, TRR etc have to be held. This has led to personnel within the division identifying different interpretations. The best to date is Post Award Panic Attack. A reward (we assume by Adrian White) is being offered for the best interpretation of these Acronyms.

## GEMMA TACTICAL PROCESSOR DEVELOPMENT

The Tactical Processor Unit (TPU) forms the heart of the division's GEMMA System. Our expertise in developing tactical processor systems is demonstrated by the ASN 924 in the Indian Sea King Mk42 Helicopter. However, it is acknowledged that GEMMA will require considerably more processing power in the TPU than that afforded by ASN 924.

From February this year, the GEMMA TPU team has been busy adapting and expanding the ASN 924 design to rehost it onto a far more powerful processor system. Hardware for the system has been procured and has an established place in the Rig Area.

The new hardware environment consists of three 68040 processors operating within VME with a new Graphics Processor and an ARINC 429 interface card from MSS. The new cards are being integrated into the GEMMA TPU design by the Software Team.

The existing ASN 924 Systems and Software Specifications have been updated accordingly and the team is rehosting the code onto the new processor.

The Software Team is working on translating 140,000 lines of the existing ASN 924 software to a higher power processor.

Once complete, the TPU will be used as the development baseline for the GEMMA TPU requirements.

To reduce risk and consequently costs, the overriding requirement throughout this development has been to maintain the existing ASN 924 system and software design.

## AQS 905 DEVELOPMENTS

The AQS 905 development activities are being used by the Division to tackle some aspects of evolving the processing capabilities of AQS 903. These are based on the premise that future sales of AQS 930 will be required to process more buoys (number and type) and/or smaller buoys (physical size and weight).

To extend the Sonobuoy processing capabilities of AQS 930, the software group is developing the PDP software to process DICASS. Work is also underway to reduce the pipeline card count and enhance pipeline throughput by developing more powerful cards and data handling mechanisms.

Clearly these developments will impact on the Core Software and a study, proposed for later this year, will examine how the software can be upgraded to handle the additional load.

## ACT 2

Following the successful delivery of an ACT 2 to NADC, Warminster, USA, last January Grahame Mills took the opportunity to demonstrate the capabilities of ACT to Boeing Space and Defence Group in Seattle. The division has now received an order from Boeing for an ACT 2 to be used in conjunction with its Update 4 programme.

The division is in the process of preparing a Specification for IBM-ASIC for an ACT 2 Simulator/ Stimulator to be incorporated into the Full Scale Integration Rig at WHL.





## ROGUES GALLERY



**Ralph Jeffrey**  
Commercial  
Manager

Back in the mist of time when it was called Elliot Bros, I joined the Company, starting my career in the Accounts Department.

Looking back to those early days its hard to remember what it was like without the luxury of todays tools, calculators, computers etc. Slide rules were the norm with lengthy additions or calculations carried out by young ladies, known as comptometer operators.

However, I was engaged as Section Leader on the IDO Section, progressing some time later to the Managements Accounts Section. After a few years in Management Accounts I transferred to Baldwin Fluid Power, Dartford (a subsidiary of Elliot Bros.) as Financial Accountant. After a couple of years, for personal reasons, I transferred back to Rochester as the Cost & Budget Officer of ATE Division.

After some time in Cost and Budget I was seconded to the Contracts Department to help on the multi- national Tornado ATS

programme and to broaden my experience into the Contracts world. Subsequently, I was transferred formally to the Contracts Department (fee unknown) and appointed Contracts Manager a few years later. Two years later I took over from the retiring Commercial Manager.

For many years I was an active member of the Company Social Club Committee, which I thoroughly enjoyed. Contrary to what you may hear, playing pantomime parts such as an "ugly sister" and a "fairy" was not type casting!

My hobbies include reading, sailing, ski-ing and lazing in the sun. Windsurfing may be added to these as in true mean Commercial Manager style I have bought a part-share in a windsurfer. The question is how do you get three on a board?

Whilst on hobbies I recall that one day while on the piste, snow that is, I took a tumble and fortunately only hurt my pride, but my salopettes (trousers to non-skiers) split fore and aft in the most embarrassing area. I leave it to your imagination but I skied down the rest of the mountain with two poles in one hand and the other clutching my clothing to protect my modesty and avoid frostbite in a sensitive region!

On a more serious, but belated note, I would like to thank all in MASD for making me feel welcome and at home. It is a pleasure to work with friendly people.

I am sure that the expertise and enthusiasm of the division will, even in these hard times, ensure that the division continues to prosper.



## WORKING WITH FCD AND BOEING

Kathy Damps  
Software Manager

MASD has been working with FCD on various aspects of the Boeing 777 Project since September 1989. Originally, MASD was subcontracted the software development for the Right Lane software. Therefore, we had to identify a tool set to use with the selected 80386 processor and produce an outline set of procedures for the tool set.

During 1989 and 1990, the main activity within FCD was centred on producing a requirement for the 757 variant of the aircraft with expandability, hopefully, to cope with the envisaged 777 requirements. The original aircraft requirement was produced by Boeing who identified the control laws for the aircraft but left FCD to add all other details concerning its product. Updates to the top level specification were received regularly from Boeing by co-ordination memo; all had to be included within the various levels of FCD system requirement and design.

During 1990 an MASD software team was created which commenced the software requirement activity for the Right Lane software. The MASD team of about 14 people, managed by Alan Smith and Steve Hulyer, tested out the bought-in 80386 tool set, and created utilities to fill in the holes identified by this activity. The tool set consisted of a PLM compiler, DB386 test environment, LDRA Static/Dynamic analysis tool for PLM and the BYRON documentation tool with 2167A templates. A large emphasis was placed on producing automated test tools. In addition, the MASD divisional software tools, CC2 and PRS were utilised. The PRS system was sold to FCD on the basis that it was a good way of controlling changes across three software teams, who were totally independent but working to one universal requirement. Regular

weekly progress meetings were held with FCD to ascertain the status of the FCD requirement activity and, based on this information, draw up plans for the MASD software team.

In March 1991, FCD requested that it take back management control of both the Right and Centre Lane software whilst we provided the manpower to produce the software. The Centre Lane team, previously manned by CACD, had moved on block to become FCD employees. Steve Hulyer, together with a core number of MASD employees, transferred to FCD, thereby ensuring that the Right Lane team retained direction and identity.

The FCD Requirement for the 757 one lane delivery arrived in the middle of 1991 and the pressure increased to achieve the deadline of handover to Integration during December 1991. Steve and the team put considerable effort into maintaining their procedures whilst also producing the software to the quoted deadline. A large number of Problems Records (PRs) were raised on the requirement to clarify and correct areas of ambiguity during this period. All three software lane teams were working to the same requirement and the same deadline. The first team to achieve handover to integration during the first weeks of January 1992 was the Right Lane team headed by Steve Hulyer.

From January to the current date, FCD has been producing the requirement for the final 777 deliveries whilst the software teams concentrated on the Redundancy Management delivery due this month.

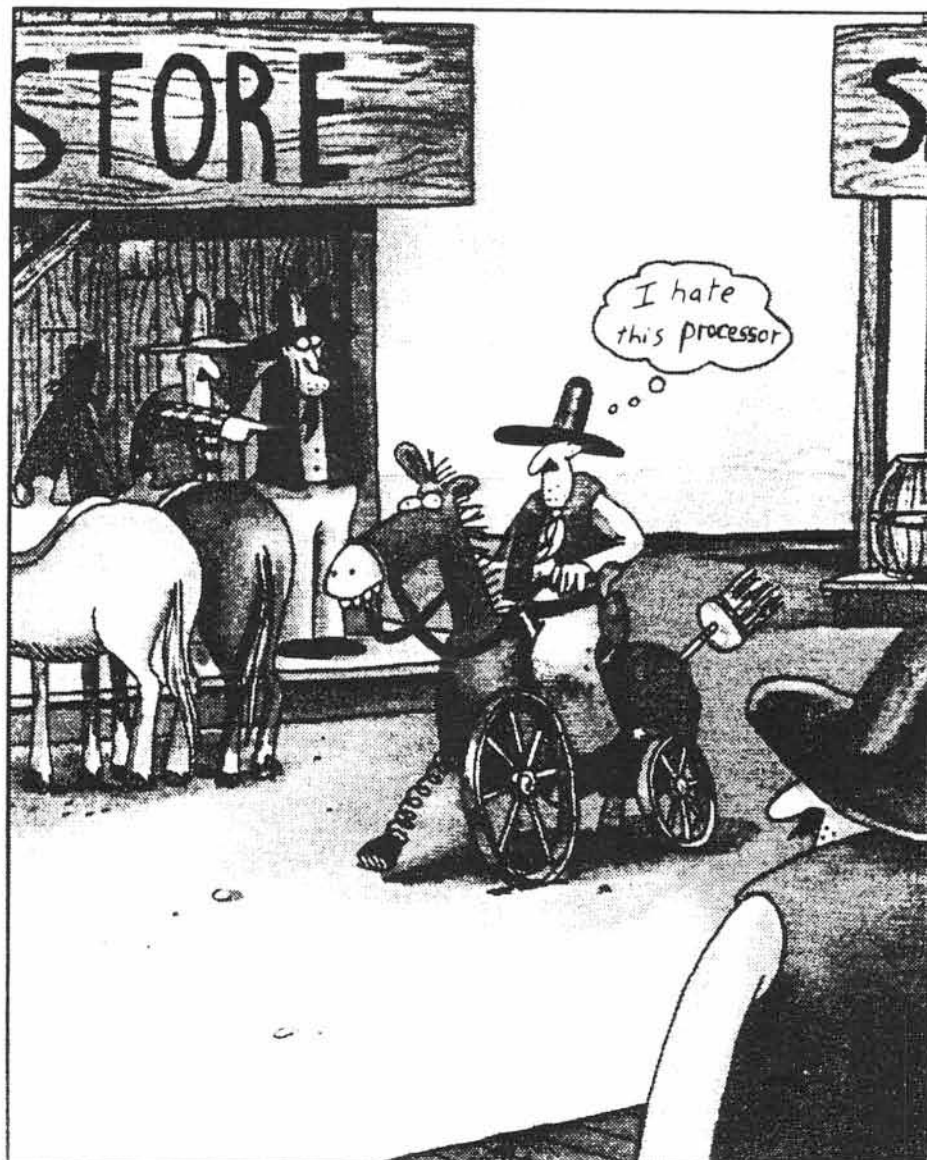
In early 1990, MASD was asked to provide a team to produce and integrate the software for the FCD Test Set. The Test Set was to provide the capability to integrate and rapidly carry out the Acceptance Test Procedures of the deliveries of Primary Flight Computers to Boeing. A small team, headed by Steve Nichols, commenced the production of the System Design specifications and Functional Requirement specifications for

FCD. The hardware was produced and ordered by FCD; the software was written in ADA using a VME 68020/30 rack with a PC Test Set host.

The MASD Test Set team has been managed by Alan Smith since March 1991. Three deliveries of the Test Set have been made; the initial delivery in January 1992, followed by an update in February 1992 with the latest delivery in July 1992. Each delivery has added the functionality needed to test the next Primary Flight Computer updates.

Alan, as manager, is in the unenviable position of reporting both to MASD and FCD (Duncan Buchanan) and from time to time probably feels as if he is caught in the proverbial "cleft stick".

The work with FCD has not always been straight forward or easily containable within the expected timescales. My congratulations to all involved for their dedication and success in achieving the deliveries to dates (and hopefully in the future!).



Preparations are now well advanced for Farnborough 92. As well as exhibiting on the main GEC-Marconi Stand we have an allocation on the Merlin (IBM-ASIC) Stand. Sounds simple enough doesn't it? Like everything else it isn't at all straightforward. Agreements on common design for the stand, cost sharing, equal exposure for contractors, defining what can and cannot be advertised and agreement on video content all take time and effort to resolve. Already we have seen the results of some of our efforts at the Middle Wallop exhibition where the Merlin was featured.

This year the GEC-Marconi Stand concentrates on specific products and the Attack Helicopter demonstrator is strongly featured. MASD products, GEMMA and OASYS, are covered. We will be emphasising the fact that we won the Merlin contract.

Videos will again be featured. Jon Anderson has been "ringmaster" in providing a new video for our products. Rumour has it he has bought a new pair of dark glasses and a director's chair.

Once Farnborough is over we will be showing the video within the division.

For those of you who intend to visit Farnborough can I ask that you all keep your eyes and ears (and minds) open. Snippets of information on competitors products, new technology or new ideas can be invaluable.

Currently three demonstrators are being produced by the analysis group under Private Venture (DA) funding:

a) A Tactical MMI Demonstrator has been developed on a VAX station. The package shows the sort of MMI techniques we are proposing for GEMMA MKII Systems for the Australian P-3 and UK Replacement MPA programmes.

b) An Advanced Signal Processing and Operator Aiding Demonstrator has been used to produce a range of algorithms which enhance detection of both broad band and narrow band signals, and ease operator workload.

c) A Transient Demonstrator has been used to produce a suite of algorithms to detect 'Transient' signals (basically submarine sounds not detected on a conventional lofargram!). Development of a realtime (single channel) version of the system on a powerful workstation is underway.

This year's successful demonstrations have been given to MOD (UK), DRA (Farnborough), JAAC, RAF and RAAF personnel, in addition to companies such as Lockheed. Further demonstrations are planned over the next few months, in particular during the Fincastle Competition at RAF Kinloss in October and in Australia.

**Guess who will be at  
Farnborough on her Fortieth ?**



## VISITS AND DEMONSTRATIONS

Mike Ryder  
Marketing Manager

You may have noticed that there has been a great deal of activity in improving our demonstration facilities within the division. The difference is marked, has cost next to nothing and resolved a few problems, "Marketing getting in the way of Engineers getting in the way of Works Engineering". We now have a 'demo area' where our products are presented to best effect and customers feel comfortable. Dare I mention 'ringmaster Anderson again!'.

Since the last Newsletter we have had a constant stream of visitors, many for the first time, some may become partners in our quest for future business.

India. Among the many other visits abroad, a visit to India always provides interest and revives a few memories. The visit, originally planned for January, eventually took place at the end of June. (A time when ex colonials head for hills to keep cool).

Temperature on arrival at New Delhi was 34°C which is fairly high for 3.00 am. On the previous day a dust storm from the Rajasthan desert prevented any aircraft landing and all Euro-India flights terminated at Karachi. The gloom hung over Delhi throughout our three day visit but it kept the temperature down to a humid 40°C.

On the business front things are going well. The Navy is delighted with the

performance and reliability of our Mission System in the Sea Kings Mk42B and showed considerable interest in our proposals to supply further equipment for their new Helicopter (ALH).

The next stop - Bangalore - was reached with only a minor mishap when the plane (Airbus) lost 3000 ft very quickly due to a cabin pressure failure. One could not see outside for the resultant dust storm in the aircraft but it entailed a swift return to Delhi where another Airbus was wheeled out - no problem.

Business again went well in Bangalore. A city 3000 ft above sea level, where the climate is always very pleasant and which misses the worst of the monsoon. Thirty hours in Bangalore (mostly Saturday) then on to Cochin Sunday am. Cochin does not miss any of the monsoons. Two inches of rain in half an hour and half an hour later the ground is dry and humidity at an uncomfortable level.

The Sea Kings MK42B were much in evidence and many acquaintances were renewed with ex IN members of the DISK team. All were very complementary about our equipment but with one little problem - TPU 019...

More presentations and discussions in Cochin were followed by a return visit to New Delhi via Goa (unable to alight during the 45 minute stop) to catch the return flight home.

The Indian's quaint use of English is interesting. We were advised "GEC may review its prices".

There may be considerable business for us in India (or there may not).



## SEA-AIR-SPACE 92

Jon Anderson

The Sea-Air-Space Exhibition is the premier America showcase for industrial talent, and a prime opportunity for everyone involved in naval defence to view the latest in advanced technology.

As you can imagine with over 100 companies housed in the Washington Sheraton Hotel basement the condition were both cramped and stuffy. Despite the less than inviting surroundings the overall exhibition attendance figures were high.

The GEC-Marconi empire was represented by Marconi Underwater Systems, GEC Ferranti, GEC Sensors, Lear Astronics and ourselves. The GEC Avionics exhibition stand was supervised by representatives from GSD, CACD, ISD and MASD.

MASD was promoting the Acoustic Data Vessel Identification Classification Expert (ADVICE) demonstrating the latest advances in Man Machine Interface and the benefits on coloured acoustic displays, and the ASW Crew Trainer.

Much attention was focused on working equipment simulations and many visitors to our stand showed great interest in ADVICE and our ASW training ideas.

Once again UK Maritime companies were vastly outnumbered by our US competitors. This is one of the factors that helps the US to sustain its strangle-hold on the UW ASW market, making it extremely difficult for outside companies to penetrate.

## 20 = Q IN TQ (QUESTIONS IN THIS QUIZ)

The answers to the last challenge are given below. The competition was won by Alan Hodge (had nothing better to do!) who donated his winnings to the Scanner Appeal.

3 = W on my W  
7 = W of the W  
18 = H on a GC  
10 = DS  
24 = B in a P  
6 = HW (TLTH)  
1 = T of the P  
80 = DA the W  
100 = Y0 (T from the Q)  
100 = YW  
041 = DC for G  
3 = S to H (EC)  
8 = H (K of E)  
1812 = 0 (T)  
39 = S (JB)  
7 = C in the W  
37 = NBT (C)  
1000 = MM in a M  
1728 = CI in a CF

3 = Wheels on my Wagon  
7 = Wonders of the World  
18 = Holes on a Golf Course  
10 = Downing Street  
24 = Birds in a Pie  
6 = Henry's Wives (Two Lost Their Heads)  
1 = Top of the Pops  
80 = Days Around the World  
100 = Years Old (Telegraph from the Queen)  
100 = Years War  
041 = Dialling Code for Glasgow  
3 = Steps to Heaven (Eddie Cochran)  
8 = Henry (King of England)  
1812 = Overture (Tchaikovsky)  
39 = Steps (John Buchanan)  
7 = Continents in the World  
37 = Normal Body Temperature (Centigrade)  
1000 = Millimetres in a Metre  
1728 = Cubic Inches in a Cubic Foot

## EVERY CLOUD HAS A "SYLVIA" LINING

PAT WARNER

Brian Lloyd

A terrible pun, but Sylvia Freeman with her cheery disposition, has been the silver lining to many a local storm cloud over the FSRs and PDS Staff. Sylvia retired on the 30th July, a sad day for those who relied on her. However, we hope it is the start of many happy days for her and her husband, who also retired recently. Talking about her husband, Sylvia was heard to say, "I'll not take him shopping again". As a fellow sufferer I suggest he gets that in writing and quickly.

Sylvia was with the Division for 17 years. During that time she was the main contact point for the Field Support Representatives (FSRs), carrying out all administrative tasks they were not around to perform themselves. All have asked me to say how much they appreciated the help they received. Part of Sylvia's time was dedicated to Post Design Services (PDS), where she successfully carried out many varied tasks, she will be a hard act to follow.

Pauline and Carol have lost a member of their lunchtime group "The Crossword Queens" (For some reason ABBA springs to mind at this point). They will never complete the Crossword in their lunch breaks now! (It is alleged that they've been doing the same crossword since Sylvia left).

Sylvia's presence will be missed and on behalf of the Division I wish her all the best for the future.

Pat Warner who joined the company in 1966 will be retiring in September to enjoy a well earned rest with hubby Rusty. Until 1990 Pat had been employed in Production starting life as a trainee assembler. Following several promotions she became Head of Scheduling. Her achievements in production were achieved by a delicate balance of charm, humour and nagging. When production moved to CACD Pat remained with us as a PAO in Engineering.

Throughout her time in the company Pat has always been a caring person helping the disadvantaged and those with problems. Many of our colleagues, past and present, have reason to be grateful for her assistance.

As MASD's "collection queen" she has been at the forefront of appeals for the Molly Wisdom Hospice, the Baby Unit at All Saints Hospital and the Scanner Appeal. Many is the time she has emptied my pocket for a good cause.

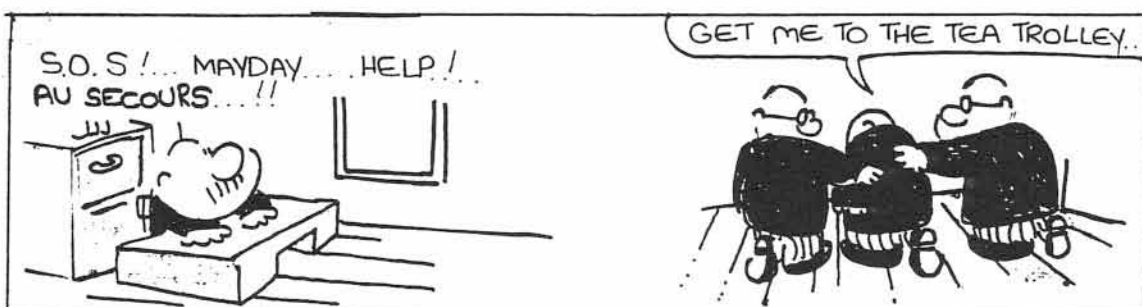
To John Goodhand, ex Production Manager, she will always be known as the Purveyor of Knickers. He is still wearing the last pair, silk embroidered, she persuaded him to buy.

On behalf of the Division many thanks for your hard work and in particular for the help you have given your colleagues.

I wish you and Rusty a long and happy retirement.

Best Wishes

'Ed'



## WORKING WITH CACD

Ron Scriven  
Production Project Manager

This story begins back in June 1990 when Management decided to merge the Production Departments of MASD and CACD to form an integrated Production Department within CACD. The reason stated was 'to enhance our competitive position and to make better use of our Production facilities and resources'.

I was given the job of managing the interface between the two divisions, to ensure that all Production Programmes were maintained and equipment manufactured and delivered in accordance with contractual delivery dates.

I am assisted in this job by two very dedicated 'ex-members' of the MASD Production Department.

Don Cocker is responsible for managing repairs, his motto 'You Bend-um we Mend-um'. He is one of CACD's customers and able to call the shots from outside the Production Department, ensuring that turn around times are met and his customers (MASD's) satisfied.

Don spent a good many years in the RAF on the Hardware Engineering side as well as taking an Open University degree in Computer Engineering. He is able to converse in both disciplines with our customers; very useful where repairs are concerned.

Derek Beard, the ex-Foreman of the MASD Production Test Department, has brought a wealth of knowledge with him. He is a 'provider' to the 'Engineers', he 'begs, borrows and sometimes buys' material to help the development activities along, as well as keeping the CACD Pre-Production assembly area loaded with work. In between time he slips in an occasional boat trip up the Nile, Egypt, to check on the Pyramids, in case, like our Test Equipment, some Engineer has moved them without telling him!

Most pundits predicted many months of teething troubles during the initial period of working with CACD. Well two years on and we are now beginning to work together as a unit, though some would still question 'work' and 'together'.

Firstly the product line was alien to CACD, MASD technology was well ahead, so new practices had to be learnt quickly. Fortunately some key MASD Production personnel, Dave Betts, Sue Forster, Mick Wilson and Chris Gibbons, to name but a few, were transferred to CACD and, in the majority of cases, slotted into similar jobs. This helped provide the necessary job knowledge and education for the CACD personnel working on our products.

Many meetings were held to iron-out the 'nitty-gritty' of production planning and managing.

Paul Adam and John Williams spent hours, either talking or listening, sending out Drawing Changes, Part Numbers, Configuration differences etc.

They were the 'key players' in the 'K suffix saga'. Most MASD Hardware Engineers will be familiar with this strange phenomena but to the uninitiated it is a way of recording device types from many sources on parts lists, instead of listing all the many suppliers; it saves lots of 'trees and time'.

To CACD's Production Configuration it was a 'mystery' and a 'typical Engineering way of doing things'. Eventually after much discussion and 'Bear baiting' CACD has agreed it makes sense and is preparing to use it; unless they can think of a better method!

Andy Moon was given the task of merging the two quality philosophies into a Production Quality Plan. Although both MASD and CACD manufactured equipment to Military standards, it soon became apparent that standards differed. It took time and many discussions to reach acceptable quality levels!



The two Commercial Departments formed a good commercial working relationship that benefited both divisions and maintained profits.

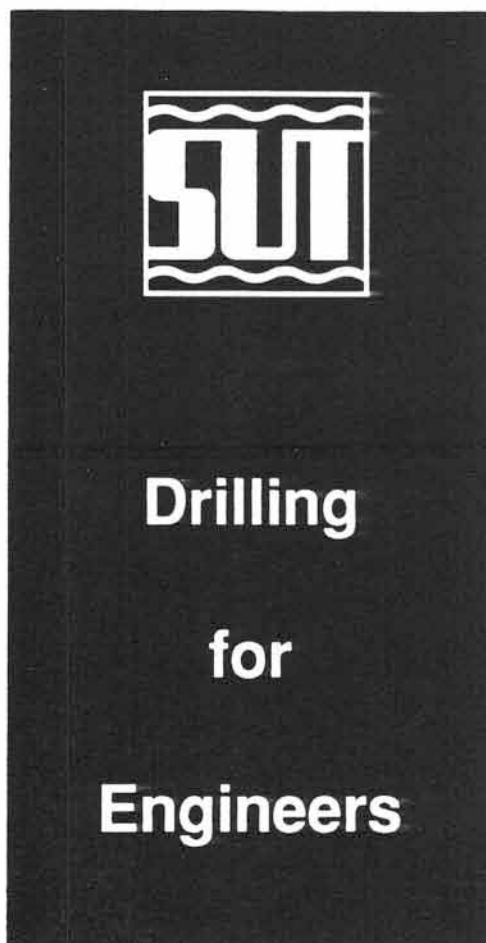
Gerry Wood arranged for the Capital Assets from MASD Production to be transferred to CACD Production and disposed of the surplus, a task that is still in hand.

Throughout the period Sue Wood held regular meetings with divisional, CACD, and GAV Management Staff to ensure the smooth transfer of the Production

activity, materials and resources. Initially it was a case of 'them and us' but eventually, with Sue's 'persuasive powers', we began to believe we were all part of the same team.

Now we are looking forward to the 'Merlin' programme. The working relationships between CACD/MASD have 'gelled'. Requirements are still taking place but in the main our products are being produced on time and within budget and I am able to keep my golf handicap 'respectable'.

STILL WAITING FOR  
THE FIRST STRIKE.



#### SOCIAL COMMITTEE

Since the last newsletter, the new social committee has been busy organising events and competitions. However it has not been an easy time, especially as the Chairman keeps forgetting to call any meetings, and then blames the oversight on his Secretary, Clare.

On a more serious note, the committees has been busy over the last few months. A number of competitions are in the pipeline. These include pool singles and doubles, 10 pin bowling and five-a-side football which are due to start in the Autumn. The pitch 'n' putt competition is now well under way, with Sue and Pauline looking like winning it for the second year in a row. Is there no one out there prepared to take on the DM and win?

After the success of the last quiz evening, we have pencilled in the next one for the Autumn. Keep an eye on the notice boards over the next couple of months for one of the most popular Divisional events.

## MASD GOLF DAY

Roger Griffin

The first MASD golf tournament took place at Upchurch River Valley Golf Club on the afternoon of 29 June. A total of sixteen participants enjoyed the Stableford competition and experienced mixed fortunes on the course.

The winner was Ian 'Bandits' Atkins with 39 points (no mean feat bearing in mind he failed to score on the last hole). His handicap, needless to say has been adjusted severely in a downward direction! The nearest the pin prize on the 13th hole was won by Mark Hadfield with 8 feet 6 inches. Furthest from the pin booby prize went to Andy Bulford, whose tee shot, to be tactful, lacked only direction and distance. Longest drive on the 14th hole was won by Mike Wood, standing in for Sue at short notice, and the shortest by Chris Paul.

Other notable events on the day included:

- a) Lee Thompsons's tee shot on the 14th hole, bouncing around on the drive of the adjacent cottages - much to the annoyance of the owners (and to the terror of Lee who immediately denied anything to do with it).
- b) Kev Golding hitting a booming drive 250 yards on the first hole, unfortunately straight out of bounds.

The day was rounded off by 'a few beers', a meal in the clubhouse and the presentation of prizes. The general consensus was that a good time was had by all. We hope the tournament will become a regular event.

## GAv MIXED HOCKEY

Jim Sharp (Captain)

The GAv Mixed Hockey Team has just completed its second season in the Anchorians Summer League, Division 3. Under new management, the target was to improve on last seasons league position, bottom. After a shaky start, losing the first two games 2-1, the team pulled together and by virtue of not losing another game, secured a commendable fourth place from nine teams. This included a sweet 2-1 victory over the favourites for the title, the host team Anchorians.

MASD often provided the core of the team. This included Sam Holder for the ladies, and for the men, Jon Anderson, Nick Haselden, leading goal scorer Steve Mann, and Ian Smythe in goal. I would like to thank all for their support and enthusiasm, and for making every game enjoyable.

The summary of the GAv teams league record is:

<u>P</u>	<u>W</u>	<u>D</u>	<u>L</u>	<u>GF</u>	<u>GA</u>	<u>PT</u>
8	4	2	2	17	12	14

## CHRISTMAS DINNER

The committee has booked the GEC Avionics (Alexandra's) Restaurant at Hoo for our Christmas Dinner - date 18th December 92. Cost will be approximately £12 a head, to be confirmed later, so start saving your pennies.

### THREE IN A ROW

Jon Anderson

After a long and strenuous hockey season preparing for the "1992 GAV Inter-Divisional Hockey Tournament" MASD again proved its total domination of the sport by peaking at the precise time. All the months of physical training - sitting in the bar being forced to drink pint after pint - paid off again in one of the most successful tournaments ever held.

MASD, in Pool A, were drawn against ISD, GSD, CACD and MCD. After several hours of training, and a vital practice match - more drinking - the selection committee met and many hours later the team list appeared for our first venture against ISD.

A mixture of apprehension filled the ladies dressing room, and the smell of Nick Haselden's aftershave filled the men's room. The Team Captain, Ian Smythe, gave a short team talk and an hour later the game started. A confident MASD side strolled home victorious (6-0).

Our next opponents, GSD, could have proved trickier with its superstars in the guise of Tony "fat boy" Herritage and Charlie Hewitt. But after a week of psychological warfare between the two divisions we were mildly confident. The game started well with MASD playing some excellent flowing hockey, which demonstrated our superiority. The end result going in MASD's favour 3-0.

After the GSD defeat, and ADD's failure to qualify for the semi-finals there was only one thing for it - a merger - to make a stronger hockey team.

And so onto our next victims, oops sorry, opponents. Probably our toughest pool game, CACD, with arch rival Ray Dennis (CACD Divisional Manager) in goal. During the team talk a carrier pigeon landed. Oh look a message from Sue Wood at IBM-ASIC in Portsmouth.

"Sorry I cant be with you, a little busy at the moment!  
Good Luck to you all and make sure you win"

With the inspirational works driving us on we started confidently and soon found ourselves 3-0 up. Qualification almost assured.

Onto Mr Tester's old division. With a rousing display of teamwork, communication and all those other TQM aspects we romped to a 5-0 victory.

Oh, what joy! MASD was pleased, or should I say, ecstatic to learn that we were to play FCD in the semi-final. This match proved to be our poorest performance and we only managed a 1-0 win.

Could MASD make it 'three in a row'.

The day of the final arrived. There was both a nervous and over confident atmosphere in the MASD camp. Having played CACD earlier in the competition we now faced them again.

Knowing that CACD would be fielding several senior members, MASD thought it only fair to wheel out one of our own. Divisional Manager v's Divisional Manager. The Clash of the Titans.

The final, as expected proved to be a fiercely contested battle, with both sides having an equal share of the play. As the match progressed we found ourselves on top with both Kenny Watkins and Sue Wood scoring, much to the annoyance of Ray, to put us 2-0 in the lead.

Despite CACD snatching a late consolation goal, MASD completed a hat-trick of tournament wins.

Thanks to all who participated in making the tournament so enjoyable and to the smooth organisation of the event by Adrian Kerney.

## HATCHES, MATCHES AND DESPATCHES

Congratulations and good wishes on the occasion of their marriage to:

Clare Deans (Engineering) and  
Mick MacTaggart

Lynda Pankhurst (Software) and  
Graham Collins

Congratulations to:

Alison and Peter Norrington on the birth of their daughter Hannah

Pam and John Page on the birth of their daughter Sarah

Janet and Graham Finneral on the birth of their daughter Rachel

Irene and Martin Broodbank on the birth of their daughter Stephanie

Our congratulations and best wishes to Trudi Rough (Software) and Dave Chronnell (FCD) on their recent engagement.

We are losing two of our ladies to a life of leisure. Sylvia Freeman and Pat Warner are taking the opportunity to join their hubbies in retirement. We wish them every happiness.

## GOLF COMPETITION

We will be holding another golf competition at the Weald of Kent Golf Club on 21st October. The cost will be £21 a head to cover:

Coffee on arrival  
18 Hole Competition  
3 Course Dinner  
Prizes.

The outing is being organised by Roger Griffin Ext 4594 who will be finalising details later. If you wish to pay please contact him and be prepared to pay a 10% deposit.

## EDITOR'S NOTE

As another newsletter hits the street my thanks to Clare MacTaggart, nee Deans, who at very short notice turned my scribbles and notes into readable articles. My thanks also to the ladies in the Library for their assistance and to all those authors who subscribed to the summer edition.

It is our intention to issue the next newsletter in December. If you have any new ideas, articles or comic strips they will be welcome. This is your newsletter and we are trying to expand the subject matter.

Enjoy the Bank Holiday break.

