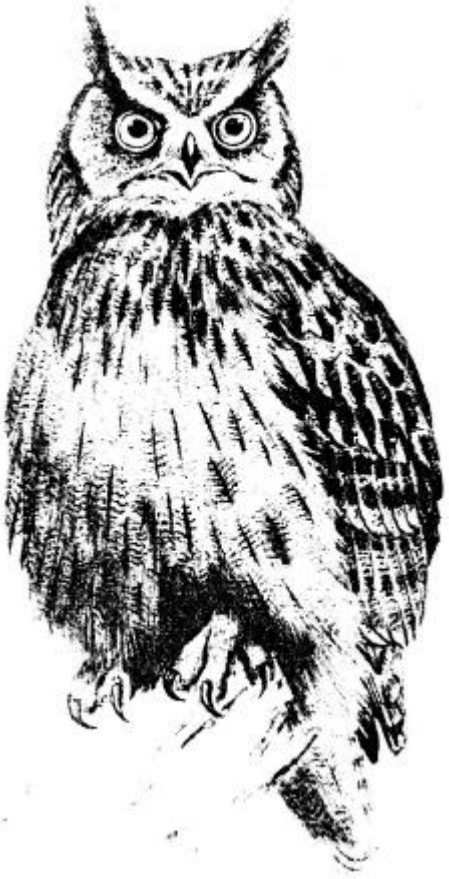
ALAM

Newsletter

Summer 2006



The Association of
Lecturers in Agricultural Machinery

www.alam.org.uk

Contents

ALAM Newsletter Summer 2006

2006 Conference

The 2006 conference at Sparsholt College, Hampshire, organised by Nigel Macpherson, was yet another good ALAM conference. Hondas, Helicopters, Transits and Training were all on the agenda, and the first reports are in this Newsletter. Many thanks to Nigel for putting it all together!

Engine Training Day

JCB are hosting a day all about their new engine project - there's full details and a booking form on page 3.

Committee Members

The list of contact details for your committee members is in this newsletter, and will be a regular page in every newsletter. There are a number of changes, updates and corrections this time, so please make sure you use the latest information.

ALAM Committee 2004-05

Any changes since the last Newsletter are in **bold type**.

Position	Name	Work			Home	
		Place	Tel	Email	Tel	Email
Chairman	Graham Higginson				01691 671817	graham.higginson @ntlworld.com
Secretary	Peter Walley	Warwickshire College	01926 318269	pwalley @warkscol.ac.uk	01926 640883	
Treasurer	David Heminsley	JCB Training	01889 591300	david.heminsley @jcb.com	01889 566882	
Conference Organiser 2005	John Gough	Walford College	01939 262100 ext 2158	j.gough @wnsc.ac.uk	01630 685942	gough.j @btinternet.com
Committee	Nigel Macpherson	Sparsholt College	01962 776441	nmacpherson @sparsholt.ac.uk	01980 862102	
	Duncan Wilson	Duchy College	01209 722100	duncan.wilson @cornwall.ac.uk	01326 376710	
	Brian Kessell	Duchy College	01209 722100	brian.kessell @cornwall.ac.uk		
	Ryan Roberts	Retired				mail@ ariel1965.freeserve.co.uk

ALAM ONE-DAY COURSE

The New JCB Engine

Wednesday, 25th October 2006

JCB Training are putting together a day all about the new JCB 444 4-cylinder engine, which was designed and is now being produced by the company.

No, this will not be a “how engines work” day.

The day will give delegates the opportunity to see the engine and its design features, but there will also be input from the people who led the project, established the manufacturing plant, and have supported the engine since it’s launch in January 2005.

At the time of going to press, the JCB Dieselmax project (see www.jcbdieselmax.com) has just taken a car powered by two of these engines to a new land speed record for a diesel powered car, reaching speeds of over 350 mph.

The whole idea of designing an engine from scratch and establishing a brand new production facility is not something which happens very often these days, so this should be a rare opportunity and a very interesting day.

The exact programme for the day will be confirmed and distributed to delegates nearer the time, but it will be based at JCB Training, Woodseat, Rocester.

To book your place, please supply the following details:

Name:..... E-mail.....

Address..... Telephone work.....

..... Telephone mobile.....

..... Telephone home.....

.....

Signature:..... Date: .....

The total conference fee will be £40 for members and £50 for non-members, including lunch.

Either - Cheque enclosed, payable to ALAM, for £_____

Or - Please invoice me at the address above.

Please return your application to:

David Heminsley, JCB Training, Woodseat, Rocester, Staffordshire, ST14 5BW

Or (preferably!) e-mail the above information to david.heminsley@jcb.com

Classified Advertisements

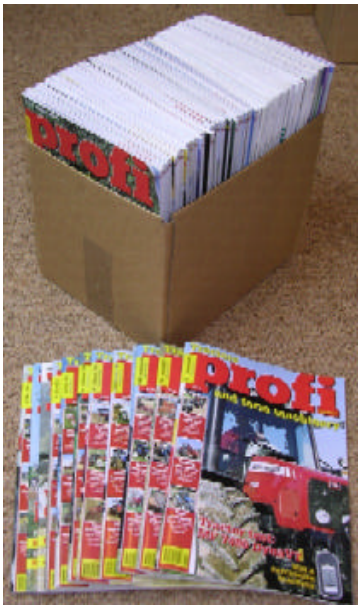
Parts Offer

John Gough has a range of warranty return items sourced from JCB, which are available for colleges to use for teaching.

For full info about what is available, contact John by email at:

gough.j@btinternet.com - **note this is a new email address**

Phone - **01630 685 942 - evenings 7 to 10pm**, please.



PROFI magazines

September 1996 to present,

approx 100 magazines.

Good condition

Cover price now £3.50 each.

Will sell whole set for £100.

Ideal for the college library??

Contact David Heminsley

01889 566882 or 07971 273725

ALAM ANNUAL TECHNICAL CONFERENCE 2006

Claas Machinery

Hosted by Will Helen

This report is Claas-ified!!

Imagine my surprise – I blame Jonty Rostron for not warning me; as a completely new member of ALAM, being asked to write a session report minutes before the event. Still; it's probably the way most of us work these days, you know the saying - "works well under pressure!!!"

Being new to Conference I was relaxing in the foyer of the magnificent Sparsholt conference venue – the Wessex Centre, as the Committee held a meeting and marvelled at the range of Claas equipment being driven, around the Campus, thoughts of "how does Sparsholt manage to afford such resources" and "chance would be a fine thing if we could raise the cash for such equipment". It's all about money with us isn't it? Every Campus visit I've ever been on – it's always the Engineers asking first; "well how much did that cost then??

It soon became apparent as Will lined up the machines in the car park that they were there for us to examine and admire. Suddenly I didn't feel so inadequate!!!

Will began his session by introducing himself and, as a recent escapee from the lecturing profession, acquitted himself rather well. As Commercial Manager for the company, Southern Harvesters, he outlined the formation of the organisation within the Claas group and the strategy surrounding the four "harvesting area companies" directly controlled through Claas, accounting for some 60% of machinery sales, with the remainder of the country covered by a well established dealer network. A very impressive sales target of £100million was aimed for.

Claas being the largest manufacturer of its own product in the world operates from an extensive base in Harswinkel, Germany where approximately 66% of its products are made. The plant in Harswinkel is almost an open house for engineers, I know from experience the welcome students get, as we have been fortunate enough to arrange visits there. It was clear from Will that the family atmosphere still pervades throughout the Company.

The range of products supported through Claas and its network is vast – we looked at four ranges of equipment:-- Combines, Foragers, Lift Trucks and Tractors. Currently, market penetration for Combines runs at 42% and Foragers between 50 & 60%. The lift truck market is expanding with the "Kramer/Sandersonr" link with some 200 units now in the country. And, along with the (Renault) tractor range Will coined the phrase, that these "acquired" ranges, are undergoing "Claas-ification"

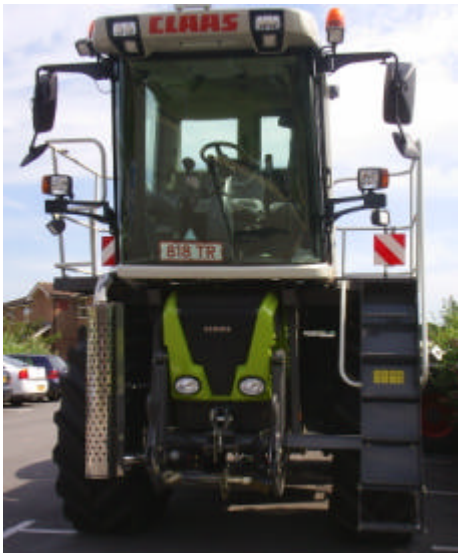
Claas tractor sales represent 80% of the market in France and since its acquisition from Renault, have managed a 50% increase in business over two years. The range is undergoing Claasification and so far over 50 Claas units have been delivered this year in the UK.

Probably the most reassuring aspect of the session came in the discussion regarding after sales support. It is clear that Claas places this area of work very highly in its philosophy. Good news for us that there is still a demand for our product. With apologies to Joe Bamford who said it first (I think); "it will be the Sales Department that sells the first machine, but it's the Service Department that sells the second one!!"

A quick examination of the technology in the Lexion Combine range followed with its option of conventional straw walkers or threshing system, vario, forward cutterbar technology, particularly useful in rape cutting. Laser technology is used in swath edge guidance systems (a must when dealing with 30 ft headers!!) and along with teflon coated two way cutter bar cylinders, ground pressure is controlled more efficiently for the range of attachments. The Combine air system benefits form a Jet Stream ducting system and coupled with the 3D operation of the sieves ensures 100% coverage over their width. Field mapping and yields are measured via the grain lifter into the tank and an issue here was that chain shortening (due to wear) was no longer advisable as calibration would be affected.

The forager range topped out in the 600hp Jaguar and we looked at the corn cracker attachment and its quick coupling operation allowing up to 100acres of maize a day to be harvested. Perhaps one of the biggest worries here is the ability of the farm to handle the crop coming off at such a rate, infrastructure problems with trailer capacity and clamping operations need to be addressed. The operation of the off-set drum blades was well covered with its inherent balance and even wear characteristics – coupled to the auto sharpening system, stainless steel spout liner and laser swath guidance, the forager could operate at a 50kph.

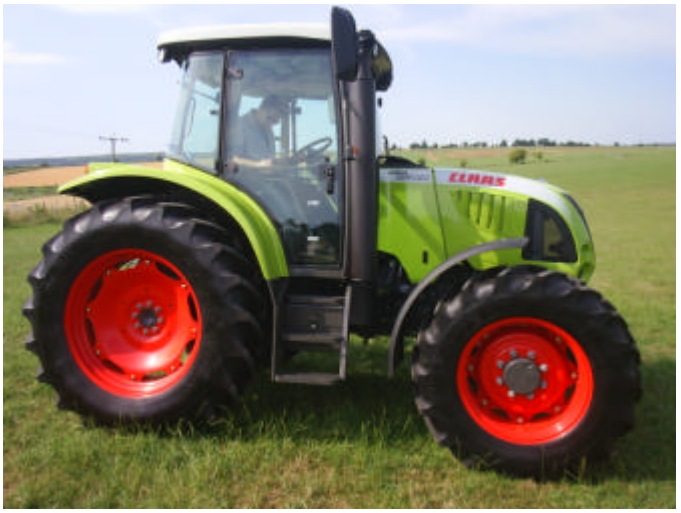
Now: remember the kit that we saw being delivered; well, we got to operate them. A very impressive Xerion with front mounted cab, the Celtis tractor and Scorpion lift truck.

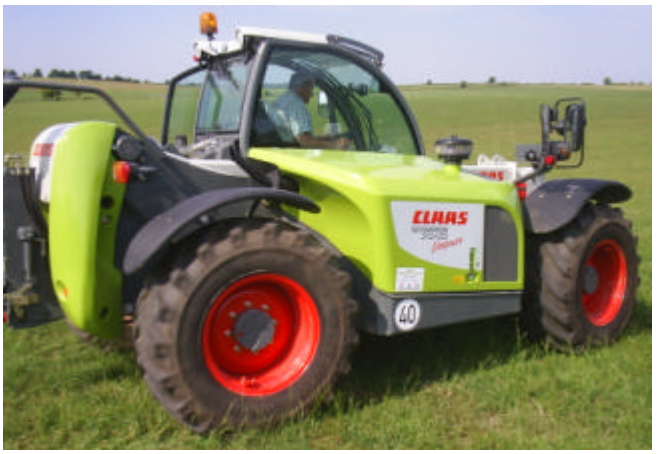


The view from the air conditioned Xerion cab belied its outward appearance. You did not feel as if you were “10 feet in the air”. Transmission controls lay comfortably to hand and under Will’s expert guidance, we were soon evaluating the CVT transmission, active steering and 30 tonne capability. Only problem is, it’s too big for our roads when fully loaded.

The eight, programmable hydraulic services offer up to 90Kw of power with the optional pack specified. It was observed that the sheep in the field were largely unimpressed with the behemoth trundling about and sought shelter from the sun under the mini bus, the same can’t be said for the rest of us as we queued in the sweltering heat to savour the climate controlled environment at the top of the seven rung ladder!!

The tractor cab and controls were well laid out and the performance was impressive, with stepped transmission control. The only problem I encountered was that it appeared to hold that last selected range/ratio after it was stopped. This could mean some shifting work down the range to achieve what I would determine as a “non slip” start. Are all modern transmissions like this? Perhaps a guaranteed neutral position on start up with access to all ranges – discuss!





The Scorpion lift truck had benefited from Claasification. The upwardly curved screen provided good visibility of the boom at full reach at just over seven metres. Hydraulics were very responsive and were well balanced and good use made of the “joystick” with its multiple functions including direction control and diff lock operation. Manoeuvrability was impressive with 2 and 4 wheel steering options and stability was maintained in full lock. A minor electrical problem apparently ruled out the crab steering option but again definition in the instrument cluster was good and easily read.

The session rounded off with a sincere and appreciative vote of thanks to Will and Southern Harvesters for taking the time to provide us with the opportunity to examine their products. Particularly so as the conditions for harvesting were ideal and you can imagine the pressure under which Will and his staff were working making sure their clients were fully supported.

Personally I’d like to thank Conference for a warm welcome to the ranks – I really don’t know why I didn’t join 18 years ago. Yes I do; it’s that Jonty Rostron again – just not forceful enough!!!!

Hope to see you all again next year.

Ed Rowbury

July 2006

ALAM ANNUAL TECHNICAL CONFERENCE 2006

HMS Sultan

Wednesday 19th July.

Wednesday morning saw us starting out from Sparsholt college at 8am prompt to visit another military establishment, this time at Portsmouth, called HMS Sultan where the navy have their marine engineering training school. We were met at the main gate at 9.15am prompt by Chief Petty Officer Patrick Morris who issued us with security passes before escorting us onto the premises. We were taken to the main administration building where we were given an introductory presentation which included historical background and current training practices/ patterns by the training school manager.

This site was originally used for training aircraft engineers and was managed from RAF Cosford in the Midlands but has now been used for its marine training purpose for over 20 years and management and operational decisions are all taken on site.

The school caters for both naval rating and officers who the service hope will stay with them for a 30 year career Experience has shown that there are two distinct career patterns, the first which is about ten years where operational technician level is attained and the second which is 20 to 30 years service where advanced specialist skills are developed and used. It is this latter grade of personnel which is crucial to the operational capability of the service.

Initial training for new entrants at 16 to 18 years of age consists of a 33 hour training week broken up into 50 minute sessions. Class sizes are from 8 to12, which is recognised may not appear efficient at first glance but has over time proved to be much more effective. Most of the training is delivered through practical application which is then reinforced with the related academic specifics. All groups are supported throughout their training and are regularly monitored for progress and achievement by written and competence based exams where everything is assessed.

This establishment also comes under the scrutiny of the Adult Learning Inspectorate!

Training has also been carried out for outside companies when spare capacity has been identified; Network Rail being one example, who send 320 trainees each year. This venture created a fairly steep learning curve for all parties concerned and the drop out rate has now been reduced from 40 to 12% with fitness training now being built into the programme! Initially there were also considerable cultural differences as illustrated by this anecdote. As you can probably imagine this military establishment, like others, has some fairly clear cut rules on conduct and behaviour. The arrival of these outside trainees caused a sharp intake of breath from the staff when they were confronted with behaviour such as swearing and spitting. Urgent contact was made with the employer who sent them and an agreement was reached. The new trainees were to be subject to similar rules and conduct to their military counterparts during their stay and so received the bonus of additional remedial training at no extra cost!

Following our host we then visited the electrical training dept where we were briefed by their chief instructor who told us that this was known as “The Grey Box Dept” as most electrical equipment on board was represented here, etc! In the past the navy have used the technique of JES JIT for training, just enough subject just in time, but found that a more thorough approach was less dangerous particularly in this area! The department has to provide training for both the current range of ships in service, Type 45 at 4.5KV and those which are about to enter service which are new full electric drive ships working on up to 6.6 KV (6600v) Most equipment on board works on 400 cycles/sec. Trainees spend 6 weeks here where they work towards an Eng Tech Qualification. The training workshops have a wide variety of mock up cabins/work areas fitted with typical equipment and fittings which can be rigged with faults and safety hazards so that realistic practical training can be given. Towards the end of the course extra pressures are applied to the trainee during fault tracing and repair, in the form of an officer breathing down their neck wishing to use the equipment for urgent reasons and

impatiently seeking answers. The department also has a type 42 switchboard simulator on which training can be delivered. We also were able to see the operation and working parts of high power contact breakers and starters which operate up to 1000amps. The training is designed to deliver a technician who can work under pressure in a logical and safe manner, carry out reliable repairs and test their work thoroughly before putting it back into service.

The next area we visited was the machine shop which when it was completed in 1968 was the largest in Europe. In this dept. engineering drawing is taught on draughtsmans boards to enable the trainee to read and produce drawings, if necessary to enable parts to be made. Later in their training they are given a project which involves design, planning and production of an article on which each step is assessed. The skills delivered in this area include marking out, use of hand tools to cut and file accurately, turning, milling, grinding, drilling and sheet metal work. This gives an appreciation of the necessity to mark out accurately, plan the order of machining work and the importance of organisation and communication with others. Most ships have limited workshop facilities in which the engineer is expected to be able to improvise in order to effect repairs and bring things back into working order. There were an impressive array of test pieces on display, produced by trainees who had previously "gone through the mill."

We then moved on to the welding and copper smithing department the latter skill which now mainly involves pipework but is again important in effecting repairs. The test piece for this discipline required the production of a copper pipe with a reduced diameter at one end both fitted with braised flanges to go into a pipe run while leaving enough space for the gaskets. On the sides of the main pipe were fitted two smaller pipes, one with a saddle joint teed at one side and a scotch joint teed the other. It might not sound much but a considerable amount of time and skill would be involved in producing an accurately fitting leak proof test piece. One repair only was allowed after testing. The welding skills taught included Oxy acetylene brazing (required for refrigeration pipework), fusion welding and cutting, arc, MIG and TIG. Aluminium and stainless steel were included with TIG. Each discipline was assessed with test pieces that would be likely to be required on board ship. The initial duration of training was 6 weeks with a staff student ratio of 1 : 8 on standard courses and 1 : 4 on advanced. They are capable of providing training up to class 1 Nuclear standard.

The next section that we moved on to was the nuclear training department where we were met by their training manager who had recently returned from a tour of duty in a nuclear submarine. Apparently this area of the service does not have many applicants who freely volunteer to spend three months at a time in a steel tube under the sea driven by a nuclear reactor and so a modern form of press ganging is used to assign personnel to crew these vessels! We were however assured that tests had been carried out which showed that people receive a higher radiation dose from the sunshine on shore over a three month period than they do while on board a nuclear sub over the same period. Indeed our speaker did look fit and healthy. He then went on to tell us that the department ran training courses of 8 week duration and that they handle about 100 trainees over a 6 month period. The current range of nuclear submarines are coming towards the end of their 30 year service life and the current nuclear reactors being used are still using their original fuel rods. Back in the early days of this technology the fuel had to be replaced after 3 years and this involved cutting a hole in the hull above the reactor and using a crane to lift out and replace the fuel rods. This was presumably followed by some very careful welding to make the hull secure and watertight to withstand the pressures exerted at operational depth. There are 2 naval dockyards in the UK that are able to carry out this work. The nuclear reactor assembly used in submarines is about 2 metres diameter and 4 metres high and is made by a branch of Rolls Royce. The reactor produces heat which in turn produces steam which is used to drive turbines, driving generators which drive electric motors which drive the propellers. Submarines when underwater are trimmed to have a slight negative buoyancy and rely on forward movement to maintain depth. If that forward movement ceases the sub will start to sink and as the depth increases so does the pressure, which in turn compresses the hull making the craft less buoyant with the eventual inevitable result. Within the department they have a simulator on which they can train the management of a reactor and run a range of safety procedures to control different circumstances.

The 5 nations which have nuclear subs include France, China, Russia and USA who also run a nuclear powered aircraft carrier. We were able to study the coloured diagram of a nuclear powered ship while we listened to the information being imparted from the training manager; but for some reason he seemed reluctant to take us further into his top secret training section and so we moved on to the Gas Turbine training building. .

Here we were introduced to the training dept manager who had been in the service since 1978 and had seen active service on board ship in the Falklands campaign. Now in charge of training on gas turbines he enthusiastically bombarded us with facts and figures about the two Rolls Royce engines which they use on site and on board ship. The engines in question are the Olympus which started life in the Vulcan bomber and was later used in Concorde and which produces 25000hp and costs about £1.5 million. This engine has a marine service life of 5000 hrs and takes approx 50 hrs to change. The other is the Tyne which produces 3500hp and doesn't cost quite so much. Its service life is 6500hrs and takes 3 to 5 days to change On the larger ships there are a pair of each of these engines, the Tyne's used for cruising at up to 18 knots and the Olympus's for full power from 18 to 30 knots. Just out of interest the Tyne engine uses 2.2 tons of fuel/hr while the Olympus uses 6.5t/hr.

The ship is got under way on the Tyne engines and then the Olympus engines are engaged into the drive by some special synchronising self shifting clutches to allow full power to developed and transmitted.

In the department there were one of each of these engines, each bolted very firmly to the floor and coupled to gearboxes and Froude dynamometers. Each engine is connected to the control panel in a separate room from where the engines can be started and run through a series of simulated situations. There is also the facility to start the engines from the engine room when maintenance procedures require. Both engines are fitted with emergency fire extinguishers piped in to critical areas. Towards the end of each training course a simulated "Take the ship to Sea" exercise is run starting at 6.45am. This is a command and control exercise which is assessed with the trainees having to demonstrate skill and judgement.

Further information about the engines included :

- Low pressure compressor spool speed 7000 rpm
- High pressure compressor spool speed 9000 rpm
- 71 Blade Power turbine made from nimonic steel and run on white metal bearings at 5660 rpm, with a diameter of approximately 1.6 metres.
- The operating temperature in this area of the engine is about 600C and the turbine has a 25 year design life, albeit with regular inspections.

A story was related at this point where the ship was underway in some sunny part of the world and some of the crew were enjoying some relaxation by sunbathing on deck in their off duty time. In the engine room things were going smoothly when a tinkling noise was heard, nothing loud so it was not an immediate cause for concern. However on deck it had suddenly started to rain down hot metal from the funnel. A little while later a rating appeared down in the engine room with a bucket containing the bits of turbine blades and where he remarked "I think these belong to you!"

Another engine used by the navy is the Spey producing 1900 hp and fitted to frigates.

Marinised engines have a modified air intake system which removes salt and dries the air. The engines are fitted on cantilever mounts. Unrestricted exhaust is important as restrictions reduce engine power.

The current engines run on aviation fuel but a new engine has been developed which uses orimulsion, a mixture of Venezuelan tar oil and hot water.

Another development is the complus cycle gas turbine WR21 based on the R.R. RB211 which intercools the air between the compressors and then reheats the air after the high pressure stage to boost the flow into the combustion chambers and improve combustion. This has increased the thermal efficiency to near 50 % making it close to that of a diesel.

Our final section to visit was the Watt section where they deal with diesel engines, air compressors and pumps. This was the area in which our guide specialised and so he explained that training was given on both large and small diesels, some of which were partially dismantled and so we were able to look in detail. Engine makes included Paxman, Ventura, Wartsala, Dorman, Deltic, Perkins and Yanmar. There was also an extensive fuel injection training section within this area with lines of Hartridge equipment available for use.

Water Pumps were mounted on vibration damped mounts to cut down noise on board. Part of the service of this type of equipment includes measuring and monitoring the vibration frequency produced and retaining records with which future readings can be compared. This system is used to prevent breakdowns by repair or replacement before the unit fails. Alignment of pump drives are checked and adjusted using feeler gauges or lasers.

Two types of desalination plant are used on board ship and these are also dealt with in this training section. The flash evaporator system produces steam which is then condensed to produce drinking water. The reverse osmosis pump is the other system which forces a small proportion water through a tightly rolled membrane at 55 bar pressure producing clean water at the output at 0.2bar. The much larger volume of water is used to keep the membrane clear by its flushing action. This system works well as long as the flow of water is continuous. That concluded our tour of the training facilities so we walked back to the minibus where it just remained for Emlyn Thomas to propose a vote of thanks to Chief Petty Officer Morris for organising this fascinating insight into specialist engineering training for the Navy. He was presented with an owl and we all went away much wiser people! J.Gough. 21.7.06

John Gough

July 2006

ALAM ANNUAL TECHNICAL CONFERENCE 2006

Middle Wallop Army Air Training School

18th July 2006

After a quick dash back from Honda we arrived at Middle Wallop to be introduced to Lt Col Peter Adams who delivered a lively and (occasionally refreshingly un-PC) interesting overview of the training school.

The site was constructed in 1938 as part of our build of arms leading to WW2. During the war many of the Hamilcar gliders were launched. In 1947 it became a general air training school and in 1950 became the Army Air Training School as it is to this day.

As the army operated at low level or of course at ground level, their need for helicopters is obvious and why they run their own fleet as opposed to the RAF who concentrate on fixed wing craft. They have 12 Fireflys, 12 Squirrels, 6 Gazelles 6 Lynx, 1 Bell Hooey 212 (Vietnam type) and 12 Apache attack helicopters. The whole army fleet at 265 is bigger than all but Air France and BA.

Also on site is the Flying Club and the Museum of Army Flying.

In a year they will train around 65 student pilots over 6350 hours and use 12 million gallons of kerosene. They train 48 students on Apaches, 4 test pilots and 6 “competence to instruct” pilots over 3200 hours per annum. They train some foreign national pilots but only in small numbers.

Chris Creasy then thanked Lt Col Adams and we were then escorted by Nigel’s old school friend Neville Stops who although a civilian had a tremendously wide experience of all aircraft on the site.

Neville introduced Phil Parker who outlined the maintenance requirements of the various helicopters particularly the Apache.

It was at this point that I realised that our branch of engineering and this branch were diametrically opposed. Here we are dealing with machines that are so light they are working much closer to their design limits than we do in agriculture where weight is often an advantage. These machine’s reliability is even more crucial than a fixed wing (which can glide) and as life and limb is constantly at risk if anything fails, the standard of checks, maintenance and overhaul must be at a level that we have never encountered in our field. The equivalent of our pre start checks take one and a half hours for an Apache. Every 25 hours requires 4 hours servicing and from then on it gets worse! A 300 hour service can take 4 weeks and so on. In the final analysis it takes 17 – 21 man hours for every hour of flying. An Apache costs around £30 million and £30000 per hour to run so I cancelled my order forthwith!

Phil had an Apache “powered up” - that is by a generator so that the instruments could be seen. Panels etc were removed for inspection. The electronics for the night vision and radar were ”hung“ on the side under a faring and duplicated, the quality of the installation was exquisite. The engineering of the gearbox and drive to the tail prop were surprisingly small and complicated. Practically every nut and bolt was wired. Caps for hydraulic connections were finely finished and wired to prevent loss. Pipes and wiring were secured with painstaking detail and quality. The hydraulic rams, operating links with spherical ball ends and any mechanical link were finished to a standard unseen elsewhere.

The Apache is an attack helicopter and is armed to the teeth! Rocket launchers and a 30mm cannon mounted under the cockpit are the main armaments. The pilot sits in the higher rear position while the co pilot sits lower and at the front controlling the armaments. Controls are doubled up and can become electronic in the event of damage enemy fire. This is cheaper than armour, which has only limited effectiveness and is heavy.

We then went on to look at the Squirrels which are the backbone of helicopter training, civilian versions are widely available if you have £1m to spend1 They were undergoing maintenance at

various levels. The first was a 600 hour strip down and check over which occurs around every 10 – 11 months taking about 4 weeks. The engine, (which was about the size of a big cylinder vacuum cleaner) normally does 1000 hours before removal and strip down. The gearbox was bigger but still very light. In technician Dave Hills' view Squirrels are French and therefore metric and simple. American designs are overly complicated and English stuff is American with some improvements.

Tools are tightly controlled with a tally system to ensure nothing is left in an aircraft.

We then saw some museum exhibits of early helicopters, mainly of fifties technology which by and large hasn't changed that much. Flat six Lycoming engines are still used today in much the same guise.

Finally we had a quick look at the museum, which was unfortunately closed and in darkness. However we saw a section of WW2 glider with pictures showing its post war role as a hen hut! Surprisingly well built for its short working life, but that's aviation for you, no hard shoulders behind clouds for en-route repairs!

We then partook of a handsome barbecue put on by the museum staff.

Chris then thanked and presented an owl to Neville for organising and conducting an excellent visit.

I think I will stick to engineering that allows a factor of safety of at least 10 and servicing intervals of at least 250 hours!

Jonty Rostron

July 2006

ALAM Accounts 2005-06

These accounts are as presented at the AGM at Sparsholt, July 2006.

At the end of the last ALAM year we had 117 members

The one-day courses shown here do not reflect the full picture for each event, as income and payments span accounting years, or payments are still outstanding. The 2004 Claas day currently stands at a £360 surplus, which should rise to £500 when all payments are received. Likewise the October 2005 CNH day currently stands at a £370 surplus, which should rise to £470 when all payments are received.

The AGM at Same Deutz Fahr in 2005 is all represented in these accounts. The Italian trip is now all accounted for, and the overall income for the trip was £7975, expenditure £10,342, meaning ALAM subsidised the trip to the tune of £2,367, as expected for our overseas tours.

THE ASSOCIATION OF LECTURERS IN AGRICULTURAL MACHINERY

Income and Expenditure - Year Ending 31st March 2006

		2004-2005 Income	2004-2005 Expenditure		2005-2006 Income	2005-2006 Expenditure
Subscriptions		1077.00			1017.00	
Committee Expenses			577.80			389.75
Newsletter			139.17			102.26
Courses	Claas	205.00	49.95	Claas 04	205.00	0.00
				CNH 05	370.00	0.00
				0	0.00	0.00
Conference	Warwick	2400.00	1998.34	Italy	553.00	4479.78
	Italy	7430.00	5862.09	SDF	635.00	730.80
Interest		15.68			19.10	
Miscellaneous		55.00	325.70		250.00	342.30
Surplus/Deficit			2229.63		2995.79	
TOTAL		**11182.68**	**11182.68**		**6044.89**	**6044.89**

Statement of Affairs as of 31st March 2006

Bank Account as on 1 April 2005		6935.99	Bank Account as on 31 March 2006		4080.04
Building Society as on 1 April 2005		1330.94	Building Society as on 31 March 2006		1350.04
Plus uncleared incoming cheques	1/4/05		Plus uncleared incoming cheques	29/3/06	0.00
Less uncashed outgoing cheques	1/4/05	10.00	Less uncashed outgoing cheques	29/3/06	168.94
Less Deficit		-2995.79			
		5261.14			**5261.14**

In my opinion the above is a true and fair view of the financial state of the Association of Lecturers in Agricultural Machinery for the year ending 31st March 2006

Signed Treasurer ------------------------ Signed ------------------------ Signed ------------------------