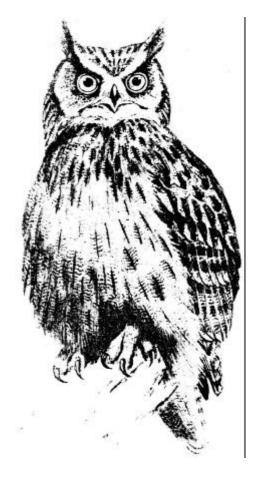


Spring 2003



The Association of Lecturers in Agricultural Machinery



## The Association of Lecturers in Agricultural Machinery

Warwickshire College Moreton Morrell Warwick CV35 9BL Dear Member

Good news at last. The 2003 conference will be running this year at Walford and North Shropshire College. Graham Higginson has put together an excellent programme at an exceptional price. Have a look on the next page for the details and we hope to see you there in July.

Extensive planning is going on for the 2004 conference, with the location at Warwickshire College. We hope to have an interim program for you at this year's conference with more detail to follow in the next newsletter.

A one-day welding seminar has been arranged for the autumn half term. We are open to any ideas for one-day seminars. If you have training needs, or know of places that would interest members, then please bring them to the committees attention and we will try to arrange them.

Looking forward to the future, the committee wondered if any members would like to volunteer their college as a possible future venue for the 2005 conference. Think of the kudos, plus expanding the knowledge of members, and the fact that we like to visit areas in the country we have not seen before!

Can I also put out a plea for potential committee members? Our committee has shrunk recently due to members leaving the profession and we need an influx of ideas. So if you are interested or would like to nominate someone then please contact me

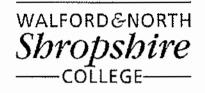
Looking forward to seeing you at conference this year

Peter Walley Honorary Secretary

Email: pwalley@warkscol.ac.uk



The Association of Lecturers in Agricultural Machinery



### ALAM ANNUAL TECHNICAL CONFERENCE 3003

Walford Campus, Baschurch, Shrewsbury, SY4 2HL

### PROGRAMME

Monday 14 July 2003

Lunch @ Walford pm. Latest developments in rubber traction.

Michelin Tyres: Eve AGM & Dinner

Tuesday 15 July 2003

am.	Oil and friction materials		
pm	Modern cultivation equipment		
-	Enrope and gross conditioning		

eve Forage and grass conditioning

JCB Transmissions Kverneland group Kuhn

Wednesday 16 July 2003

am	Robotics, plastic, rubber and
	silicone injection
pm	Our industrial heritage.

Fullwood Milking machines Ironbridge Gorge Museum (1 of the 11)

eve Appreciation of Honda single cylinder engines

Thursday 17 July 2003

am Finnish Agricultural Machine technologies Valtra

### 2003 ALAM Conference

### Walford & North Shropshire College

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The total conference fee will be £150 for members and £170 for non-members including accommodation. If anyone wishes to attend for certain days or will not require certain meals or accommodation, will they please contact me and I will work out separate price for you

Cheque enclosed payable to ALAM for £				
or Please invoice me at the address below: $\checkmark$				
Name:	Address:			
Telephone:(Home)				
(Work)				
Signature:	Date:			
Please return to: Graham Higginson Walford & North Shropshire College Walford Campus Baschurch				
Shrewsbury SY4 2HL				



The Association of Lecturers in Agricultural Machinery

# ALAM

### ONE DAY SEMINAR

# MODERN WELDING TECHNIQUES AND EQUIPMENT

A one-day seminar has been organised and will be run by a leading European welding manufacturer at their Midlands outlet and training school. This one day updating course will include both theoretical and practical sessions on MMA MIG and TIG equipment and include an insight into modern manufacturing techniques with a range of different materials.

Wednesday 29th. October 2003

At

TPS – Fronius Ltd. 108 Highfields Road, Bilston, West Midlands, WV14 0LD

Tel 01902 495686

Start Time 9. 30 am. Finish Time 3. 30 pm.

Cost. Members £40.00 Non Members £50.00

Please contact John Gough to reserve a place on this course. Rodbaston College, Penkridge, Stafford, ST19 5PH Tel. 01785 712209 Fax 01785 715701 Email john\_gough60@hotmail.com

#### VISIT TO EWS INTERNATIONAL TRAINING CENTRE, CREW

EWS stands for English, Welsh and Scottish Railway Ltd.

David Brough, the Chief Training Officer, greeted us cheerily with "are you a bunch of lecturers?". Being used to the language of NVQ Level 11 thought it was quite a compliment.

We were reminded that there where 25,000 volt power lines overhead. On departure I noticed John Gough lowering the radio aerial on the Rodbaston minibus 'just in case'.

EWS services about 90% of goods locomotives in the UK. The Class 92 locomotive weighs 146 tonnes, hauling 16,000 tonnes. It has a total of 5,700 HP costing £4M. In engine spotting terms it would be a 0-6-0, 3 axles at the front and 3 at the rear. It looked like two 0-3-0s joined at the middle. Everything was duplicated to meet Channel Tunnel regulations. The normal procedure for reversing a 3 phase AC motor is adopted, ie changing over any 2 of the phase wires.

David explained the various safety systems:

AWS Acknowledge Warning System This seemed a bit dodgy as the driver could override it with his sandwich box.

**TPWS Train Protection Warning Signal** 

TMS Seemed to be the ultimate meaning Train Management System.

David admitted that things were getting complicated and that the laptop was becoming part of the mechanics toolbox.

We were shown various pantographs in various states. The pantograph sits on top of the locomotive and picks up the power from the overhead line. At night contact of the wire and the carbon brushes produce an array of sparks. Unfortunately things are not all that simple and there is BRAC (British Railways AC). BRDC (British Railways DC) and so on. Drivers do not lower their pantographs in time when there are changes from AC to DC. This results in damage to the £15,000 piece of machinery. EWS usually manage to repair them for about  $\pounds1,500$ . Small aerofoils are fitted to ensure that the correct contact pressure between the device and the overhead cable is maintained in both forward and reverse.

An axle set for a Class 92 costs £42,000 (£7,000 x 6) with a life of about 3 years. The hammering action of the wheels against the track causes migration of metal similar to mushrooming on top of a chisel - hence the profiling lathe. The wheel flanges have different profiles from P1 to P10 depending on usage, eg speed, weight and length of train.

The wheel lathe we were assured was fully computerised. However swarf removal was not and we could see the operator's head threatened by sizzling coils of blue swarf. We were allowed to look all over the cabs (ie footplate) of a Class 92. Some started at the front and others at the back but we soon realised that no-one could pass in the middle. It also became obvious that to jump from the cab without a platform would be risking injury.

David, our guide, was humorous, entertaining and enthusiastic and was more than a match for a bunch of lecturers. The visit was chaired by William Helen and the vote of thanks was given by Jonty Rostron.

**Report by Gwynfor Williams** 

Fast Lane Karting Ltd Stoke on Trent Wednesday 18<sup>th</sup> July 2001 A.L.A.M Conference Technical Visit

There was a buzz of excitement as the ALAM delegates arrived at the Fast Lane Karting center in Stoke On Trent. It had been a a busy day with visits to E.R.F assembly plant and EWS repair center at Crewe therefore if there were any pent up frustrations this was the place to release them.

Kitting up the members in helmets and overalls, as you can imagine was an interesting spectacle. With resulting legs extending out of short overalls, tight areas restricting movements of bodily parts. All drivers registered and were briefed on the pros and cons pertaining to Karting, specifically to the use of the range of control flags. The colours of these flags were incidentally difficult to distinguish as I was about to find out to my cost. A quick wash in Daz or Persil would have indicated their significance and improved my final placing.

With 26 contestants we could participate in a Grand Prix with 4 practice laps, 5 heats of 5 laps a Semi Final of 8 laps, and a final with the 8 best drivers over 10 laps. The 4 practice laps gave each driver time to get accustomed to there machines, for those not experienced in the art of driving Karts it is quite a hair raising experience, with high G Forces on the corners and speeds of up to 30 mph on a small Oval Circuit, with your backside bearley 25mm from the track. In this situation friends became enemies, all thoughts of politeness disappeared, there is no: After you: on a bend, its every man for himself. With Karts bouncing off Barriers Karts pirouetting in the middle of the track and certain individuals who shall not be named stuffing the opposition into the barrier at every opportune moment.

Remembering that you have signed a disclaimer for any liability you find yourself in the line up, for the first of your heats. After 20 laps of heats you realize how unfit you really are, your arms ache your legs and backside is and you sweat profusely and if your lucky your Kart is still in one piece.

The winners and fastest losers were invited to take part in the Semi Final, which was held over 8 laps. This resulted in the Grand Final with the 8 best drivers taking part

Peter Walley with two 1st and two 3rd

John Gough also with two firsts a  $6^{th}$  place and a  $2^{nd}$ 

John Hesketh with a 1st a 2nd a 3rd and a 4th

Johnathan Yates with two  $1^{st}$  a  $2^{nd}$  and a  $3^{rd}$  and youth on his side. Brian Kessel with a  $1^{st}$  a  $2^{nd}$  and two  $4^{th}$  places. Willam Helen with two  $3^{rd}$  a  $7^{th}$  and a  $4^{th}$  place

Charles Szabo with two 5<sup>th</sup> one 8<sup>th</sup> and one 3<sup>rd</sup> place .

I achieved one 1<sup>st</sup> two 4<sup>th</sup> and a 6<sup>th</sup> place.

The line up for the Final placed me in third place .Positioning my Kart in a David Coultard line at an angle across the track waiting for the off, which seemed to be an eternity., the tactics paid off I was in second place. But on the third lap exiting the hairpin I found myself being propelled into the barrier by outside forces. Disengaging myself cost several places but with a determined effort .I tried to make up the places lost . I was at this time confronted by a Marshall waving a flag, what Flag I thought, it was dark, the flags were blackened with oil any to top it all I am colour confused. If it was a Blue Flag then for what reason so I decided to pull into the pits. On my arrival in the pits I was asked what are you doing here get back out which I promptly did and enjoyed the remainder of the race as Tail End Charlie finishing in 8<sup>th</sup> place.



Final Results	Fastest Lap	Points
1 <sup>st</sup> Johnathan Yates	0.26.98sec	9
2 <sup>nd</sup> Peter Walley	0.27.00	7
3 <sup>rd</sup> John Gough	0.26.90	6
4 <sup>th</sup> Brian Kessel	0.27.37	5
5 <sup>th</sup> William Helen	0.27.59	4
6 <sup>th</sup> John Hesketh	0.27.75	3
7th Charles Szabo	0.27.90	2
8 <sup>th</sup> Ian Whitehead	0.28.49	1

Presentations were made to the the top three contestants. Well done ! it was an enjoyable evening.

Ian Whitehead



