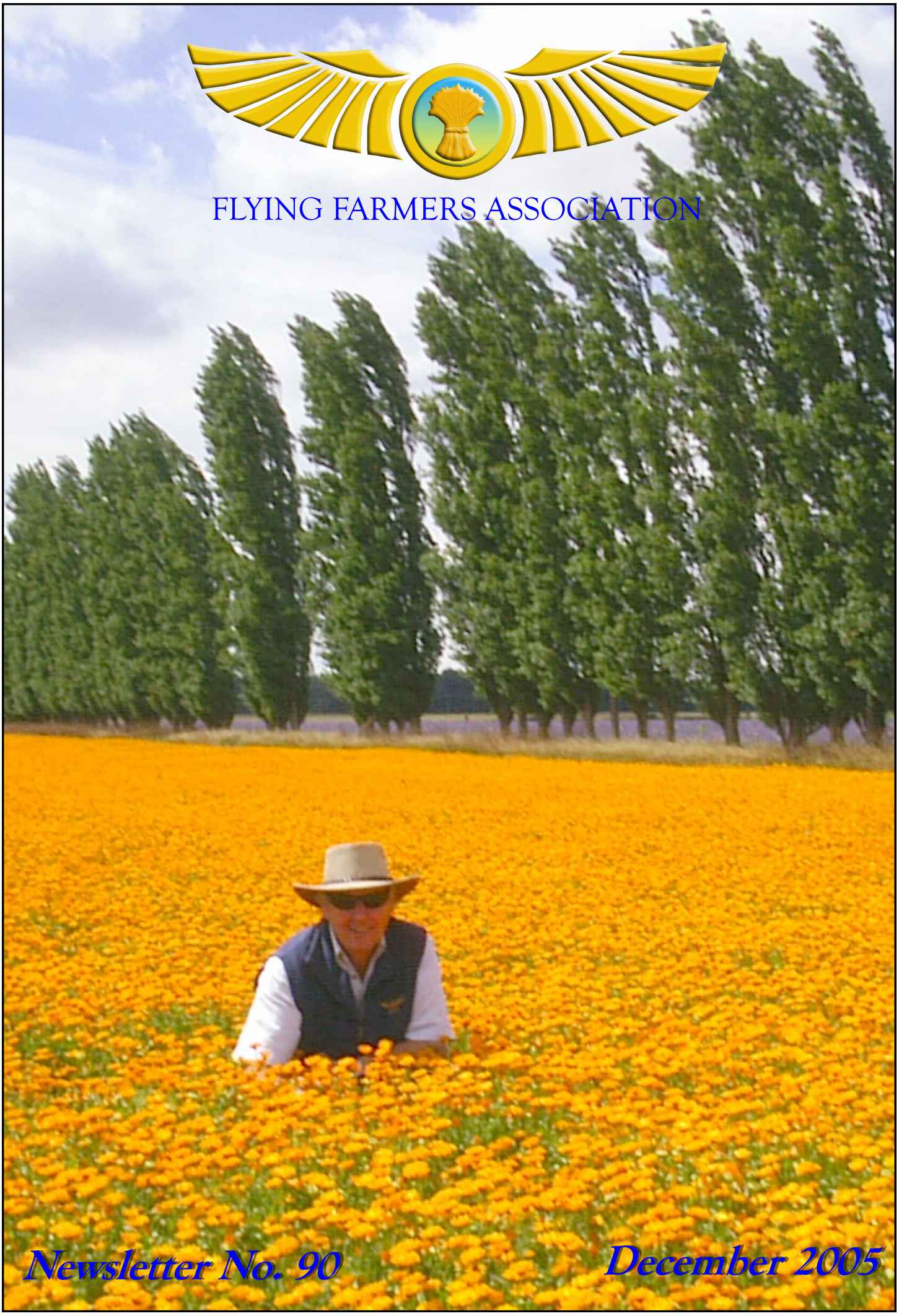


FLYING FARMERS ASSOCIATION

Newsletter No. 90 ***December 2005***

Opening Thoughts

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Editor, Publisher & Printer;

P.A.& R Stephens
Moor Farm
West Heslerton
Malton
North Yorkshire
Tel: 01944 738281
Fax: 01944 738240
Email: chix@farmline.com

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Cover photograph;

Guess who in the Marigolds?
Lees Court - photo by Mike Cuttell

Chairman's Message

Winter seems to be here – it is sleeting as I write. Some have had snow, and on several days we have had thick fog until mid-day – not weather conducive to flying. We must hope that the next three months also bring many of those crisp, cold, fantastic-visibility days so that we may enjoy some good winter flying and stay current.

It was the awful weather that spoilt our last meeting, the AGM held at the Yorkshire Air Museum at Elvington, an excellent venue and a well-organised event. 58 members confirmed that they were coming but only 35 made it. Sad, because we hadn't yet met some of those who planned to come – let's hope we meet you in 2006.

I wonder if those of you who have airstrips have uninvited and unwanted visitors. An article in Pilot magazine entitled 'Fly Like a Pro' ends with a section on grass strips. In it Rod Brown points out that "if a diversion or change of mind leads you to land at a private strip without having first gone by road and examined it on foot, your insurance company might refuse to pay up if there is an accident. You must always get prior permission and contact the owner on the day of your flight, because there might have been very recent changes or work in hand, never mind the odd ditch dug since your previous visit. Sound advice, but I suppose in an emergency and failing all else .....

Gerald Corbin has just told me about a local businessman who has an R44. Travelling north to a meeting, he was faced by the familiar situation of the cloud getting lower and the hills getting higher. Prudence prevailed and he set down in a field. Securing the R44, he became aware that he had chosen an extremely sticky, muddy landing place. By the time he reached the gate, the mud was up to the knees of his Saville Row suit. He was delighted when a Landrover appeared and he was offered a lift, but when he opened the door he saw that the interior was filthy with excrement and rubbish. No sooner had he cleared a space and sat down on the very smelly seat than two wet spaniels leapt over to welcome him. The poor man actually had to burn his lovely suit! Why do we laugh at others' misfortune?

Looking back over 2005, I think that the Association has had a good year. We all hope that 2006 will if possible be even better, despite the many looming farming, aviation and world problems.

I wish you all a very happy Christmas and a prosperous New Year.

John Golden

Editor's Notes

In this issue you will find an appraisal of the new Robin DR400 Tdi ('diesel'). I think I am correct in saying that we have beaten all the periodicals to this test, as Martin Gosling was one of the first to fly it in this country. Also demonstrated to the Flying Farmers was another 'diesel' - the Diamond TwinStar. Both these aeroplanes are capable of running on your common (but not so cheap now) red diesel, so we are really getting agricultural.

I would like to thank all the contributors this month for sending me their stories - they go to make this newsletter interesting and informative. Please keep the articles coming and the photographs for our new picture album website.

At the AGM, David Corbett announced his retirement from the position of FFA Treasurer. I find it very sad when an era like this comes to an end, as David was one of the very Founder members and was partly responsible for the set up of our great Association. Not only has he held the post for over 30 years, but he has represented the FFA on various important aviation councils and gained a massive insight into the politics of general aviation. You can read more about what he is doing in his article in this issue, which might highlight the loss we are going to incur when David bows out in the future.

Paul Stephens

Committee Members

Dick Walgate	President	01472 371203
John Golden	Chairman	01725 552384
Paul Stephens	Secretary	01944 738281
David Corbett	Treasurer	01568 708351
Mike Cuttell	Events Secretary	01242 236770
Martin Gosling	Airstrip Advice	01787 269369
Anthony Kedros	Committee Member	01295 720876
Mike Ashmole	Committee Member	01738 627622

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www.ffa.org.uk

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Wanted - Treasurer

At the recent AGM, David Corbett – a Founder Member and our long standing Treasurer - announced that he would step down once a new number cruncher has been found.

Through the bulk email newsletters, one gallant member has stepped forward, but the opportunity should be offered to the whole membership in order to select the most appropriate volunteer.

Obviously, this is an opener to joining the FFA Committee, which in itself is an interesting position. The Committee meet twice a year as well as the AGM, usually at a central point in the country. The Treasurer is responsible for the book keeping (not a massive job as there aren't that many transactions – the accounts are currently maintained on Sage Instant) and for reconciling the membership with the standing orders on the bank statement once a year, to make sure that everyone is paying their dues.

If you fancy having a go, please send your CV with any accounting experience to the Secretary - Paul Stephens chix@farmline.com or to the address on the facing page.

Two New Services for Members

In order to keep members up to date with things of importance and interest, two new services have been introduced:-

Bulk emails. The Secretary currently has around 130 correct email addresses, to which hot news items are sent around once a week, as and when they happen and when he has time to do it. These have proved very popular and we are now up to around FFA News 24. If you want to be included on this list, please email me at chix@farmline.com

A website for members' photographs. This has been set up as we have many members taking digital photographs at meetings and it is an easy way to share them with others. They might also be of interest to those that couldn't make the meeting and will act as a bit of an archive for the future. Send them to me either by CD or email (reduced in size if there is a lot) and I will place them on this new site. Have a look at http://ffapics.myphotoalbum.com/albums.php there are now nearly 500 photographs to browse through.

Members with Hangarage Available

Peter and Polly Vacher have hangarage available at North Moreton, near Didcot, Oxfordshire, just inside the Benson MATZ. 630 metre smooth grass strip, shortly hopefully to be extended to 775 metres. Good hangar with electric doors. Avgas on the premises. Please contact us at pvacher@aol.com

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I am writing to see if it is possible to for me to advertise hangarage space available here at Kersey, Suffolk.

I have space in the hangar for one, if not two, small aircraft . We have a grass landing strip, the co-ordinates you have available on record. At present we have two Jodels, and have accommodated a Piper cub, Tiger Moth, a large five seater Jodel, a Cap 10 & several microlights amongst many others. We are five minutes flight from Elmsett airstrip where fuel is available, and are just outside the Wattisham matz.

If anyone is interested then they can reach me at my e-mail address (veronica@kersey13.plus.com), or by telephone 01473 823188.

Watch out Skymap owners

How many of you are aware (or remember) as you fly around following your GPS needle that the database you have so carefully built up over the years is supported (in my Skymap III at any rate, and probably many other GPS types) entirely by one AA battery - which has a finite life?

My son discovered this the hard way on Saturday as he flew to Elstree, and a warning message came up that "The database had been corrupted, and the information stored was no longer available" (or words to that effect) This also meant that it was unable to acquire satellites and so the map reverted to it's default position which was rather unhelpfully about 100 miles west of Africa and resulted in a completely blue screen, and the whole unit went into a sulk!!

When I rang Honeywells about it, they were quite matter-of-fact and said the battery has a life of between 3 and 6 years; all I needed was a new one - which had to be lithium - and would need a soldering iron to remove and reassemble it, after you had taken the whole unit apart. They suggested Harry Mendelssohn as a supplier at £15 for the battery, who in turn said they could reinstall a new battery and would charge £40 to do the job - but that Honeywells would charge £200 to do it!! Apparently it would mean the unit would have to be recertified after they had done it. Fortunately Honeywells said that a person competent with a soldering iron would 'probably' be able to do it! I am awaiting a new battery and am yet to find out if I am competent or not!

Today I went flying the old fashioned way - compass and map - to find a strip in the middle of Norfolk, which was grass in the middle of a larger grass field all of which was of the same colour and my only aerial identification was by a printout of the area via Multimap (my waypoint had of course gone down the swanny with the battery failure). The cloudbase hovered around 1000' and I had to avoid an active danger area north of Honington. I reckon the stress levels of that flight were at least 10 times normal!

The more sobering thought for me was that in 5 weeks I am due to have a fortnight flying around Africa and will be taking my GPS with me. I was certainly blithly unaware that the unit was about to fail (no advance warning came up on screen), and the middle of Africa would not have been the place to discover it for the first time!

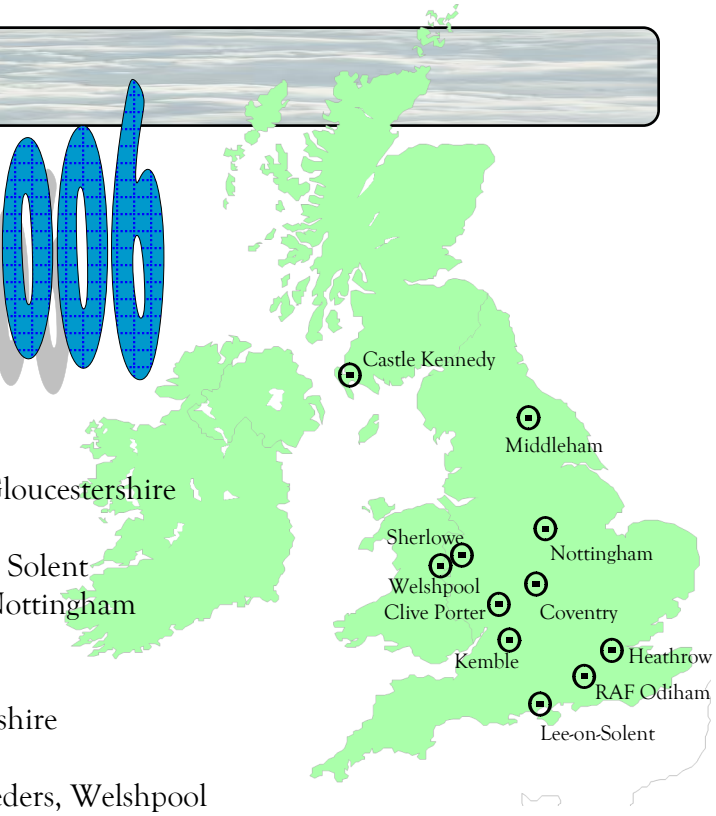
Martin Gosling

Welcome to New Members

Since 1st July 2005, the following have joined

777 John Watts, Haleston, Norfolk
778 David Howard, Denbighshire
779 John Clarke, Andover
780 Trevor Jarvis, Banbury
781 David Watt, Kirby Stephen, Cumbria

Programme 2006



Wednesday 1st February	London & Heathrow
Wednesday 8th February	Alvan Blanch, Kemble, Gloucestershire
March	Air Atlantique, Coventry
April	Sparsholt and /or Lee on Solent
April	Tony Strawson's estate, Nottingham
May	RAF Odiham
Wednesday 10th May	Vale of Evesham
Wednesday 17th to 18th May	Middleham, North Yorkshire
28th May to 6th June	European Tour, Italy
June	Windfarm & broiler breeders, Welshpool
Thursday 8th June	Ironbridge museum / Aviat Husky demo, Sherlowe strip
Wednesday 12th to 13th July	Visit the Earl of Stair's estate, Castle Kennedy

Wednesday 1st February, 2006

How about a day out, involving a visit to the Churchill Museum and the Cabinet War Rooms, a spot of lunch, then a tour around the British Airways maintenance 747, 777 workshops and perhaps more at Heathrow Airport



There are a couple of travel options either drive to Heathrow, tube to Central London, then tube back to Heathrow or perhaps you would rather drive straight to the museum and then to Heathrow, the choice is yours.



The cost for both visits will be £16 excluding travel and lunch. The visit to Heathrow is limited to 11 people **(passports will be required)** The Churchill visit has no limit on numbers. (If you would like to do both visits, the names will have to go into a hat). The Heathrow visit is free but a donation is being made to a local charity.

If you are interested please forward a Cheque & S.A.E. to Neville Stops, who will send you the travel information and itinerary - closing date Monday 9th January2006

Contact: Neville Stops. Donks Acre, Monxton Road, Grateley, Andover, Hants. SPll 8JG. Tel: 07860 937933.

Wednesday 8th February, 2006

Visit to Alvan Blanch, near Kemble in conjunction with agricultural dealers T.H.White, to see the production of biofuel - diesel substitute made from oilseed rape.

Landing at Kemble by 10:00 - 10:15 with lunch at Kemble airfield. The demonstration will be limited to 30 people, but if there is a large response, it may be possible to arrange 2 parties.

No charge for the visit - pilots to buy own lunch and pay landing fees. SAE to Mike Cuttell by 10th January 2006.

March

Visit Air Atlantique at Coventry. Possibility of a flight in a Rapide or Dakota.

No exact date or detail as yet. SAE to Ian Bonham-Smith.

April

Possible visit to Sparsholt Agricultural College and / or police unit at Lee-on-Solent where they operate Islander aircraft.

Negotiations still going on for this one.

Events such as these set above are arranged by FFA members on a voluntary basis. It is accepted by those who participate that nothing undertaken by the FFA collectively or members individually shall be construed as establishing a duty of care nor in any way removing or modifying the duties, responsibilities or obligations of pilots or land owners in relation to any event and attendance thereat. All information provided in these programmes is purely advisory and should ALWAYS be verified from official sources.

April

Diversification projects, Tony Strawson's estate. Fly in to John Hardy's strip, Lambley, Nottingham.

Further details in the March newsletter.

May

RAF Odiham. Chinook training base. Lunch in the officer's mess. Further details to follow.

Wednesday 10th May

Rick and Laura Holt together with Clive Porter welcome us to see tomato and asparagus growing in the Vale of Evesham.

Land at Clive Porter's excellent strip and asparagus lunch at the local pub.

Approximate cost inclusive of coach and lunch will be £20 each.

Further details in the March newsletter.

Wednesday and Thursday 17th & 18th May

Visit to Middleham, North Yorkshire. We start at Mark Johnson's renowned racing yard, landing at his strip. After a guided tour we have lunch at East Witton, then go to Forbidden Corner, a four acre garden in the Yorkshire Dales with hidden surprises. Stay at Swinton Castle, Masham with dinner.



Next day, go to Wensleydale Creamery at Hawes to look round the museum and factory. Lunch at the creamery. Visit Brymor Icecream at East Witton, where Bryan Moore milks Guernsey cows with robotic milkers and uses all the milk to make icecream. Return to the airstrip.

Useful website addresses

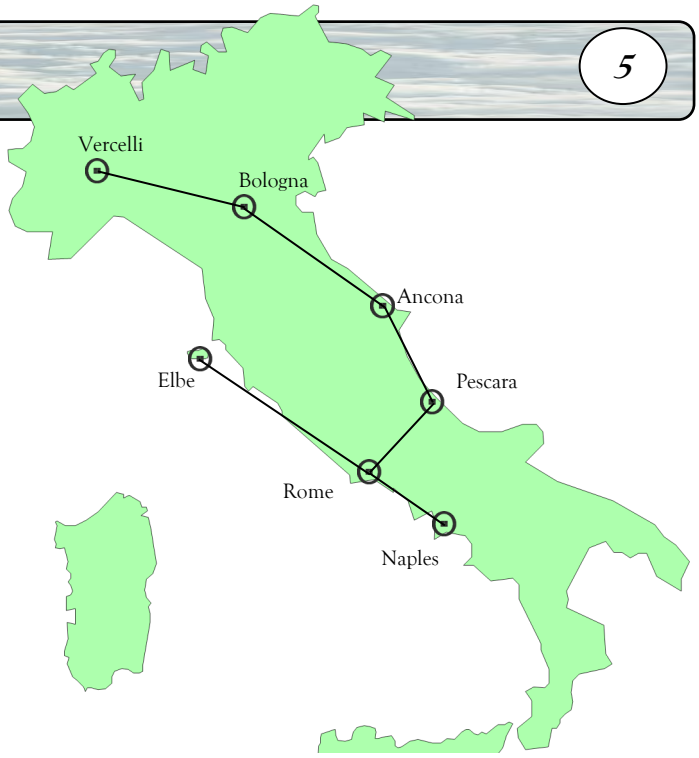
www.markjohnstonracing.com

www.yorkshirenet.co.uk/theforbiddencorner

www.swintonpark.com

www.brymordairy.co.uk

Total cost estimated to be £160 pp. SAE to Gordon Bellerby by 5th April 2006.



Sunday 28th May to Tuesday 6th June

This year's European tour is being arranged by Paul & Roz Stephens with a lot of help from Richard Howard.

Still at the planning stage, but likely to start at Vercelli in north west Italy to see rice and tomato growing. Fly to Bologna for three nights with visits to include the Lambourgini car factory, Imola race circuit (by bus!), a potato farm and a large vegetable farm. On to Ancona on the east coast to visit Case New Holland and see one of Italy's natural wonders in the mountains.

Fly on down the coast with another farm visit between Pescara and Rome, then to Rome for three nights. Pirelli / Trelleborg have been extremely helpful in this area and visits will include the tyre factory, conducted tour of Rome and a Buffalo farm near Naples with some sight seeing round Pompeii.

We finish on the island of Elbe for the final night, where anyone is free to relax at will for a few extra days.

To secure your place, we will need £50 per person deposit to Paul Stephens by 31st January 2006. Final payments will be nearer the departure date, but it is intended to make this an all inclusive trip (as much as possible) as per previous years.

June

Visit to Welshpool to see a broiler breeder farm and a windfarm. Further details in the next newsletter from David Corbett.

Thursday 8th June

Visit to Ironbridge museum. Arrive at Sherlowe airstrip near Shrewsbury and a demonstration of the Aviat Husky aircraft. Cost to be around £30. Details in the March newsletter.

Wednesday and Thursday 12th & 13th July

Visit the Earl of Stair's 2000 acre farm, landing at his Castle Kennedy airfield near Stranraer. Details in the March newsletter.

Lees Court & Leeds Castle

Wednesday 20th July 2005

The previous day dawned with brilliant skies and a strong north westerly wind and so knowing that we had to be at Headcorn by 09.30 the following morning we decided to fly to Shoreham, leaving a short hop the next morning. The Alouette is not renowned for speed ans so we were delighted to see 110 knots on the GPS.

We were pretty surprised to have to pay a landing fee of £30 at Shoreham but worse was to come when we discovered that our fuel top up cost us 70p per litre for Jet A1 (against 46p at Gloucester). An Alouette devours fuel at a rate of one litre per minute.

Similar weather prevailed next morning as we headed for Headcorn. Jamie Freeman had kindly agreed to reduce our landing fees to £5, or free to anyone buying 40 litres of fuel. At least I was going to save a fiver!

After landing we met Marc L' hermette who, through a friend, had organised a 50 seater coach. We were slightly behind schedule as we headed for Lees Court with about 30 members on board.

Lady Sondes (of American origin) took over the running of the 4500 acre estate after her husband, the fifth Earl Sondes died prematurely in 1996. She now has become one of the foremost advocates of non food crops and because of her connections she knows the market potential in the USA.

As we arrived we were greeted by the sight of a brilliant patch of Calendula (marigolds). After coffee and biscuits in the grain drier, during which we were given an introduction by Lady Sondes, we were introduced to Bill, the farm manager and Liz (a very competent and knowledgeable lady) their secretary.

I think that we all formed the impression that Bill was not quite a sold on the idea of these particular crops as his boss would have liked. Bill and Liz took us across their grade1 land on foot to the first of their experimental plots.

Calendula is a dazzling orange crop which is very easy to grow and needs little nitrogen. It is harvested at the end of August after being sprayed with Reglone. It produces oil with healing properties, can be used a food additive and it is added to gloss paint to speed up drying. It has a gross margin of £400+ per acre and this particular crop was being grown under contract for a Yorkshire company.

Echium, better known as Vipers Bugloss, was being grown specially for cosmetics. It has blue trumpet like flowers. It is high in Omega 3 and 6 and contains sereodonic acid, giving it an ability to retain moisture in the skin and to reduce fine line wrinkles. It contains 40% oil and assists in the treatment of burns victims. Apparently it smells awful which is a problem





they are currently working on. The seed costs £3500 per ton and it gives a gross margin of £550+ per acre. If any of our members want to make money out of reducing ladies' wrinkles, now's your chance – at least Lady Sondes believes this.

Sweet Quinona comes from Peru. It is very easy to grow and is from the same family as Fat Hen. It is combined in October by which time it is bright red. I produces a useful gluten free food addative.

Fenola I recognised this with some surprise having spent 20 years as a magistrate. Its common name is Cannabis and has to be grown under Licence. The seed costs £306 per ton and it produces a very high grade oil (Body Shop – Vit E) and large seed in September. The fibrous straw it produces is worth £70 per ton and is used by Mercedes for the production of door panels. Because it has fire retardant properties, it has aviation uses as well. After dark it attracts rabbits and other low life. The only difference is that the rabbits don't smoke it!

Camelina (False Flax). A small area was being grown commercially for oil.

Finally we learned that Lees Court grows 900+ acres of peas for Batchelors and wheat and barley.

With just a few minutes left we dashed back to the grain drier where a selected range of beauty products were available. Money changed hands rapidly as bags were filled. Without a doubt some of the ladies who joined us are now looking 20 years younger!

After a fairly time consuming drive we arrived 30/40 minutes late for lunch at Leeds Castle. A splendid meal had been laid on in the gatehouse with waitress service (Lady Sondes is a trustee).

Leeds Castle was built as a Norman stronghold in the 11th Century. It is often described as "The loveliest castle in the whole world" and indeed it is. The interior, although not original, has been appropriately restored and was a joy to see.

Our tour ended with a magnificent evening flight back to Cheltenham and due to the 20 knot headwind – you've guessed it, back into Shoreham for more fuel and another £30 landing fee.

Sadly, some didn't make it on this event for one reason or another but we must thank Marc L'hermette for organising such a good day.

Mike Cuttell

The AGM 2005, Elvington

Wednesday 19th October 2005

Yet again, the weather played its part in making life difficult for our Annual General Meeting. This year, Mike Ashmole had made arrangements for it to be held at Elvington - a super location with a very interesting museum and a 1.92 mile long runway!

As I only live about 25 miles from Elvington, I was almost certain that come what may, I would be flying. Come what may was cloud at 200 feet and about 1km visibility. Martin Gosling wisely flew up to stay with us the night before, due to a poor forecast. So we all set off in the car. Having gone about 2 miles, there was a definite brightening through the gloom, so it was back to the aeroplanes and we arrived in style on the massive runway, almost landing side by side.

Members make a massive effort to attend all the meetings and despite many apologies, around 36 arrived, mostly by car but with a few later arrivals by air including, thank goodness, the Chairman.

After a bacon roll, the AGM was carried out with a bit of discussion afterwards. One change that has been made is that new members will now be presented with an FFA tie on joining (for a slightly increased joining fee). One of our original Flying Farmers, David Corbett, announced that he will be standing down as Treasurer when a replacement is found. David has held the post of Secretary / Treasurer since the FFA was founded in 1974.

A spread for about twice as many was put on for lunch - paid for by the Association - followed by time to look round the museum or view and even fly the Diamond Twin Star DA42 that Henrik Burkal had flown up from Gamston (Diamond UK). A report can be read elsewhere in this issue.

Details of the museum and history of the airfield can be found at www.yorkshireairmuseum.co.uk

Paul Stephens

Recommendations

I strongly recommend anyone with some time to spare in the Sutton Bank area near Thirsk in North Yorkshire, to contact the Yorkshire Gliding Club and have a go in a modern glider.

They are an extremely well run organisation and a very friendly atmosphere surrounds their whole operation. They run a modern fleet of gliders in what must be one of the most idyllic parts of the country. My pilot on this occasion was Robert Bottomly who also runs Soaring-Safaris.com for anyone visiting South Africa.

For those who have not had the experience of a trip in a latest state of the art glider it is well worth their time to contact him on 07799 696748.

Dick Walgate



I don't know how other members get on with their biennial flight reviews, but for some reason I never look forward to having a flying instructor, who is probably far less experienced than most of us and who hardly leaves his little circuit in a benign aeroplane, sitting alongside me in order to certify that I can handle my own aeroplane.

However this year I found a very pleasant self employed CFI who not only volunteered to come to my strip, but was extremely courteous and was a pleasure to deal with. He lives to the west of Hull and could be worth a phone call if you're in that area. His name is Castle Smith and you'll get him on 07711 258080.

Another volunteer for the job is Rob Giles (FFA No. 257) who when he isn't flying his B737, said he could see to members in the Stansted area. Thanks Rob.

Just out of interest, for anyone visiting Salzburg for the Christmas Markets, have a look at Hangar 7 on the airfield. This has been constructed recently by Red Bull who sponsor Formula One cars, the Red Bull Air Race and many other extreme sports. You will be gobsmacked at the construction of the hangar and the owners personal collection of aircraft that are in regular use. They include the proprietor's Falcon jet, a Corsair, a Mitchell, Alpha Jets, etc etc. If you're not in Salzburg, have a virtual tour by going to http://www.hangar-7.com click on Architecture then Virtual Tour. This might take a little time to download as it installs a 3D programme on your computer. You can then 'steer' a young lady round the hangar with your arrow keys while you watch her hips sway. Bit of fun, but very clever graphics.

The Red Bull website is at http://www.redbull.com and also makes fascinating reading.

Mr Red Bull, who is Austrian, has made an amazing success of his product in a very short time and appears to be a master at promotion.

Amazingly – entry to Hangar 7 is completely free of charge!

One of my next door neighbours (3.3 miles away) is FFA member Ed Peacock. He established Eddsfield, which is a fabulous strip about 6 or 7 miles north of Driffield, East Yorkshire. You couldn't find a more pleasant place to go on a day out – no landing fees and fuel the last time I filled up was 103p including the VAT. The strip is around 700 metres and kept in perfect condition. There is a friendly atmosphere and credit must go to Ed and his volunteers. See the comprehensive website, complete with cameras and weather station.

http://www.eastyorkshire.co.uk/eddsfield

Paul Stephens

(With apologies to the Royal Aeronautical Society)

Some months ago I promised Paul – our Editor – that I would write a short article for this newsletter reporting on the various organisations that I attend as the representative of this Association. Little did I realise, when I made that promise at our June committee meeting, how much would change in the world of General Aviation by the time that I come to write this.

Unashamedly, I have "borrowed" as the heading of this article the title of an excellent conference that was organised by the Royal Aeronautical Society, and held at the RAF Museum, Cosford, on 29 November; this conference was so good, and so pertinent to all that is going on around us as GA aviators at present, that I thought that by using the RAeS title, I would give credit to that learned organisation for the initiative that they took in putting on such a wide-ranging and thoughtful day. I will come back to the proceedings of their conference later in this article.

Let me start by setting out, particularly for the benefit of newer members, the background as to how, where and why the Flying Farmers Association are represented on various GA bodies. About 25 years ago the late John Ward, then Chairman of the General Aviation Safety Council (GASCo), suggested to me at an aviation event that we were both attending that FFA should contribute to and have a representative on GASCo. I discussed this proposal with the then committee, and was nominated to be our representative; I have been attending GASCo as FFA representative ever since.

The General Aviation Safety Council

GASCo was originally a charity – it is now a limited liability company registered with the Charity Commission – with objectives relating to the promotion of safety in General Aviation. GASCo achieves its objective in a number of ways; we publish a quarterly magazine "GASCo Flight Safety", which is distributed free to owners of UK registered aircraft, to flying instructors, and to the organisations which support it, including FFA. We run safety seminars - the most recent of which was on aviation weather in October this year – and we have made one video, "Fit to Fly", which highlights human factors affecting decisions before and during GA flights (copies of that video are still available from the GASCo office).

GASCo is funded by voluntary contributions from all the GA representative organisations, which in return are expected to nominate a person to attend the quarterly Council meetings. GASCo also receives annual funding from the Safety Regulation Group of the CAA – which body is also represented on the Council – and to a limited extent by subscriptions to "GASCo Flight Safety" from those who are not eligible to receive a free copy. GASCo has a website – see www.gasco.org.uk - this site is updated weekly from the GASCo Rochester office.

Information from the latest GASCo Council (November 17) meeting appears below. In addition to GASCo, FFA is also represented on the following bodies.

The General Aviation Awareness Council

GAAC has the following objectives – to EXPLAIN the nature of the GA industry; to PROMOTE its purpose and value; to PROTECT its facilities (eg aerodromes and airstrips); and to ENSURE its future. FFA has contributed to GAAC since the early 1990's, because your committee is fully aware that our members need input to and knowledge of the planning system. The GAAC website is www.gaac.co.uk and I have been representing your interests on GAAC for the last 5 years.

The General Aviation Consultative Council

GACC is a forum set up by the CAA and which has been running since 1997. Initially biannual, but now three times per year, all GA representative organisations are invited to meet with the General Aviation Department of the CAA at their Gatwick office. A wide range of subjects are covered at each meeting, and there are always one or two detailed updates on topical matters. Some notes from the latest meeting (November 23) appear below. I have attended most GACC meetings on FFA's behalf.

FFA Representation – a summary

From the above, you can see that FFA members' interest are (I hope!) well covered. Attending the Council meetings – and the associated GASCo and GAAC board meetings – takes up a fair amount of time, and I could not do it in such depth if I was still running our family farming business; luckily, my involvement in that is now only part time. However, the years move on and, having asked the committee to find someone to take over as Hon Treasurer, I have also said that I can see the time coming when a younger member of FFA should take on our Association's representation at the above Councils. I have said that, as long as I remain an Executive Council member of the PFA (this has very little if anything to do with my FFA interests), I will continue to represent FFA at the other Councils; however, the committee does wish to hear from anyone who has the time and the interest to take over from me.

So – what is going on in the GA world that affects members at the present time?

The Single European Skies proposal

The Single European Skies Air Traffic Management for Europe (SESAME) proposals, when published earlier this year for initial consultation, created enormous concern for GA, with the perception by some – principally the Instrument Rated fraternity – that GA would be saddled with enormous extra costs. This concern has now largely gone away – as I will explain.

Firstly, let me set out the background. At present, there are 45 Air Traffic Control Centres in Europe (for comparison USA has less than 15); the intention is to reduce ATCC's to 5/6 with the expectation that, as traffic doubles by 2020, much greater efficiency will be required. There is an Industry Consultation Body taking part in the development of the SES proposals, and Martin Robinson, CEO of AOPA (UK), is on that body representing Europe AOPA. SESAME has now moved on to SES ATM Research (SESAR), where ATM is Air Traffic Management; this is an incredibly long project – the development phase will last from 2008 to 2013, and the implementation phase from 2014 to 2020.

SES is purely for Controlled Airspace, and will only affect levels above FL 195 for the foreseeable future – certainly until 2020; there is no intention to increase the volume of Con-

trolled Airspace below FL 195. I mentioned above that the concerns for GA have largely gone away – this is because the current version of the draft charging proposals exempts from ATM charges all aircraft < 2000 kgs; SES charges for GA will only be incurred by > 2000 kg aircraft, and then only when using ATM services for flights above FL 195. Having said that, a new version of the draft Charging Regulations are due to be published imminently, but the GA aspects in the new draft are expected to remain as described here.

CAA JRT and the latest CAA Scheme of Charges

During 2004 the CAA set up a Joint Review Team to prepare a report on the CAA's external charges, particularly in respect of the "cross subsidy" whereby some of the charges paid by the "heavy" part of the industry – the airlines, etc – are alleged to be used to subsidise charges to general Aviation. The JRT had numerous representatives from the heavy end, but Mark Wilson of BBGA was the only representative of GA invited to take part – and he was only representing his own organisation, rather than the whole of the GA sector. (BBGA is an amalgamation of GAMTA and BAUA). When the JRT report was published there was outrage at the fact that no GA body other than BBGA had been involved, and at the substantial above-inflation increases in charges proposed by the report for most GA sectors. BBGA published a minority report opposing most of the substantial charge increases proposed, and that minority report received substantial backing from other GA organisations. Subsequently, following over 200 written representations protesting against the findings of the report, a very small number of the extensive range of charge increases were scaled down – but the report remains valid and, subject to the further reviews mentioned below, we can expect significant charge increases in some GA sectors in years to come. In order to see the charges proposed for the various GA activities, go to www.caa.co.uk/publications and then type CAA Scheme of Charges into the search box; even then, not every Scheme appears to come up – I have a paper version of one on my desk, dated 2 November 2005, which was not listed until I typed its reference number in.

The CAA's Strategic and Regulatory Reviews

Perhaps spurred on by the furious reaction to the JRT report, the Chairman of the CAA has set in motion two further reviews – the CAA Strategic Review and the CAA Regulatory Review. Both of these reviews have excellent GA representation on the review teams, but the reviews have only got under way in the last couple of months, with reporting dates in the second half of 2006. It is too early to make serious comment about the progress of these reviews, or about the areas that they are to cover, in this newsletter – I will write more in the March 2006 edition – but I can say that we are receiving good feedback from our contacts on the review teams.

Department of Transport (DfT) proposals for Foreign Registered Aircraft – and Instrument Rating review

Some FFA members took more than a passing interest in the proposal made earlier this year by the Department of Transport that all foreign registered aircraft based in the UK should be required to transfer to the British register if they wished to remain in the UK for more than 90 days in any year – thanks particularly to Boyd Munro and Gerald Hackemer for their inputs to the DfT, and to other members if they responded without copying the committee. Although DfT now appear to have put this proposal "onto the back burner", one interesting matter that may or may not be directly related is the fact that the JAA Licensing Sectorial Team are now reviewing the requirements for qualification for the JAR Instrument Rating. The UK/JAR IR requirements are substantially higher than FAA equivalents, which is just one reason why a significant number of N registered aircraft are operating in UK. I see from the latest AOPA magazine that AOPA has been able to identify about 830 N registered aircraft in UK. AOPA are optimistic that this review of the JAR/UK IR standards will be helpful – but this optimism was not reflected at the GACC last month; watch this space...

Parliamentary Transport Select Committee – Investigation into the CAA

The Parliamentary Transport Select Committee (TSC) – chaired, I believe by Mrs Gwynneth Dunwoody – decided in October, at fairly short notice, to conduct an investigation into the "remit and operation" of the CAA. Submissions (to remain confidential until publication of the TSC findings) were requested by 14 November, and we now await the outcome of this investigation. Some very strong views were sent in by organisations that we support.

Whilst on the subject of parliament, 3 PPL Parliamentarians - Gerald Howarth MP, Lembit Opik MP, and Lord (Robin) Rotherwick – the latter himself a member of this Association – have formed the Parliamentary Aviation Group, and recently met with the Aviation Minister, Ms Karen Buck MP; this, the first such meeting, failed to make progress on the subject of CAA charges, but in other respects was successful, and will be followed by more meetings. There was a short debate on the Civil Aviation Authority in the House of Commons on 11 October, initiated by Gerald Howarth MP, and it is well worth reading the Hansard report of that debate. Here is the link – I am sorry that it is such a long web address! www.publications.parliament.uk/pa/cm200506/cmhansard/cm051011/debtext/51011-39.htm#51011-39_head1

Light Aviation Airport Study Group

This CAA Study Group – on which I represented GASCo – has completed its work and its final report is now beginning its progress through the CAA legislative hoop. There are recommendations about Flying Training and Commercial Air Transport; LAASG recommended that CAA should "...develop a detailed proposal to remove the requirement for flying training to be carried out at a licensed airfield..." I am aware that this proposal, if followed through to a successful conclusion, would introduce an interesting situation for some FFA members. The final report has not yet been published on the CAA website, but if anyone is interested in following this up, contact me direct.

And now for some news that is not related to on-going CAA reviews!

Mode S – proposed requirements

The position at present is that CAT (Commercial Air Transport) should already be fully fitted with Mode S transponders, and Mode S is already in use within the London TMA. For aircraft that are expected to be required to fit Mode S by 2008, a Regulatory Impact Assessment (RIA) is currently under way. Informal consultation is taking place currently, and the proposal will be put out to formal (*continued back cover*) consultation during the spring of 2006; the formal Assessment

To the North Cape in a Robin

A week after the end of this year's study tour to Germany, Annette and I were off again with another flying group to Denmark and Norway. It was nice not to have to be responsible for other people and we could enjoy just 'being a participant'.

When the maps of Norway arrived from Pilot Warehouse, I was somewhat alarmed to realise what a very long country it is – and the plan was to fly to the very top of the country and land at the North Cape. With the maps laid out to cover the whole journey, Stones Farm started in the kitchen and the journey





continued with Denmark, our first stop, in the hall, and then Norway progressed through the dining room and finally arriving at the North Cape in the middle of the sitting room – something approaching 1000 miles – one way!

However, the organisers had been as thorough in their planning of this adventure as our own study tours are planned, and so it was a question of following the itinerary and keeping our fingers crossed for some fair weather for the next week.

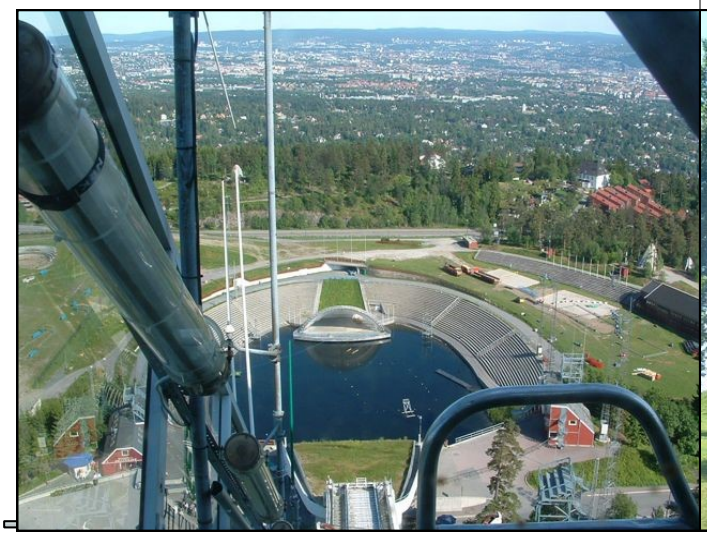
The first day, Friday, saw us heading for Odense, a large island off the southeastern mainland of Denmark, having stopped off at Lelystad for both man and machine to refuel. Everyone arrived in very good time and we were all taken to our hotel for a relaxed first night.

Saturday dawned warm and pleasant for a cultural day, starting with a visit to Egeskov Castle, a most impressive home owned, and still lived in, by Count Michael Ahlefeldt-Laurbig-Bille, and an even more impressive museum attached to it with a vast range of items, mostly covering transport. There were bicycles, motorbikes, cars and planes, all covering an era from almost their respective inception to around the end of the war. There were also some rooms set up with an equally vast range of household memorabilia dating back to the turn of the century. This was a museum that was entirely privately owned.

Our next cultural experience was the much-trumpeted Hans Christian Andersen museum, which portrayed this well-known man's life in the house in which he was born.

Dinner that evening was in a former monastery owned by our organiser's brother – a building being lovingly and continuously restored at vast expense with the help of the Ministry of Culture. We were welcomed by a group of traditional Danish musicians, treated to a magnificent banquet by the owner and his family, and had the evening rounded off by a less-than-harmonious rendition of Hans Christian Andersen's "The Ugly Duckling" by 6 of our members!

Sunday saw the group set off for Oslo – our next stopping point. The more cautious of us opted for the short(er) sea crossing by flying up the east coast of Denmark, and then crossing the Kattegat to coast in north of Goteborg on the Swedish coast, and then following this coast all the way to Oslo. The braver ones took the straight-line approach from the tip of Denmark direct across about 100 miles of Skagerrak sea.









When I shut down in Oslo we were told that one of these 'direct line' pilots had had an engine failure about 30 miles short of the Norwegian coast. There had been an almighty bang followed by a large reduction in power, although they were fortunate to be cruising at FL75 and that the three occupants were wearing survival suits. A distress call to Oslo resulted in the launching of a lifeboat and a helicopter, which came out to meet them. There was sufficient power remaining to allow a controlled descent and with great good fortune they coasted in at less that 1000' to be escorted to land without further drama (except possibly a change of underwear) at a military base on the coast.

The problem was caused by a sticking valve, which remained contained within the engine until a change of power setting when overhead the airfield allowed the valve guide to punch through the guide tube, thus allowing all of the oil out of the engine. They were on the ground before the engine seized up, and so the only damage that had to be repaired was to the valve and it's guide – and they collected the repaired aircraft at the end of the trip and flew it home. A happy ending to what could have been a very unpleasant situation.

When the distressed crew caught up with everyone else at our hotel that night, of course the subject revolved around the incident and gave many of the rest of us time to reflect on our forthcoming days over inhospitable terrain and ever colder waters. A very well appointed hotel sitting high on the hills overlooking the city and very close to the Olympic Ski jump was our base for the next couple of nights before we were to set off to the northwest. Our arrival in Oslo was the only near-perfect day of the trip weather-wise – very warm with blue skies. At dinner that evening we were introduced to Andre, the operations manager of the Norwegian airline, Wideroe Airlines. He was to accompany us to for the week, smoothing out any aviation queries that anyone had, most particularly weather.

His worth was to be proved the next day when we were to try to leave Oslo in very marginal weather – weather which was restricted to the low-lying area around the city and airport, and was forecast to be very slow to clear. Although many participants had instrument ratings and could leave anyway, there were several of us who did not, and were quite unable to get air traffic clearance to leave. After a couple of hours of hanging about it was obvious he had swung the lead with air traffic and we were given permission to leave the zone in less than ideal conditions and sure enough within 10 miles or so the weather became VFR again.

Sogndal was our destination, 1600' up on the edge of a fjord, and when we had all gathered together, we bussed down to a small harbour in a very small village and put everyone, bus included, on a ferry which took us all across to an island where there was the most beautifully preserved world heritage Church, called a Stave Church because it was built with large circular upright posts around it's perimeter, but which did not extend into the ground but rather built onto a foundation of rocks so that the wood did not touch the ground. It was built in the 12th century and is the best-preserved Church of it's kind in the world.

Alesund, further west on the coast was our next stopping point where a family of locals in traditional Norwegian dress gave us a traditional welcome. Dinner in a local fish restaurant preceded an early night before departing on the Wednesday for









Bronnoysund to meet a family who had diversified out of cattle farming into organic herb farming coupled with bed & breakfast tourism and a small restaurant. The Norwegian farming scene is no rosier than our own. The afternoon saw us moving further North to Bodo where the evening was spent as guests of the city council and the Norwegian Air Force looking around, and having dinner in, their impressive aviation museum.

Thursday June 21st was the longest day. And as such I was looking forward to seeing the midnight sun. We would be staying in Tromso and arrived there after an attractive flight taking in the Lofoten Islands, a little way off the west coast, on the way up. I was under the greatly mistaken belief that the midnight sun only happens at the tip of Norway and only on that one day of the year. I couldn't be more wrong. It happens to varying degrees in the upper part of Norway – culminating in the North when the sun doesn't drop below the horizon between early May and late July. That in itself is quite daunting – but imagine the converse in the winter months.....! The suicide rate is said to be quite high in the North, and I can understand why – it must be most depressing in winter. It was difficult enough to get to sleep at midnight in summer with it still being daylight outside. There is a high hill outside Tromso with a cable car running to the top of it, and a group of us took this to the top of the hill so that we could stand on the cairn at midnight looking down over the city. A most unusual experience.

Another aviation 'drama' happened on this day. There was with us on the trip, a brand new (30 hours on the clock) Challenger jet (many millions I believe!!) flown by a husband and wife team. They decided to make a day out to go to Spitzbergen instead of the Lofoten Islands, and invited half a dozen of the group to join them. A relaxed journey north at 41,000ft(!!) was suddenly interrupted by the husband, who was flying this leg, accusing his wife of messing with the instruments. The entire displays on the navigation glass screens went blank – leaving then only with an ADF to navigate by – which was out of range of Spitzbergen anyway. As they were above cloud with lots of sharp pointy bits below them and the Spitzbergen controller could not identify them, things looked a bit tricky, but a strategic hole in the cloud followed by good old-fashioned visual navigation resolved the problem. Frantic phone calls to their engineering base back in Germany resulted in the question of "where were they?" Stating Spitzbergen, the engineers said 'no wonder – the navigation equipment is not programmed beyond 78 deg North – but don't worry(!) it will come back on stream again when you fly south past 78 deg '! (I think for my millions I would want it programmed for everywhere.) The return flight was started with just an old-fashioned – but highly valuable – magnetic compass, and the passengers in the back watching the GPS world map (as per the airliners) and giving cryptic advice as to where to steer until the display did indeed reappear at 78 deg N

The final day was scheduled to go to the North Cape, but by then the party had rather disintegrated with lots of people doing their own thing and some of the more intrepid ones setting out single engined to Spitzbergen. I had elected not to do that, as it was the best part of 500 miles from the nearest available avgas facility, and, with my range of maximum 600 miles to dry tanks, it left very little margin for error. So it was only 4 people in two aeroplanes that set off for the North Cape – and then only after hanging around for about 3 hours in Tromso for the









persistent drizzle and low cloud to clear. Finally, we took off into pretty marginal weather threading our way down the fjords, with a forecast of good weather only a little way further north, and then all the way to the Cape. This indeed turned out to be the case and 1½ hours later we arrived in glorious sunshine, spending a couple of hours there enjoying a small museum of the area and a video presentation. With our log-book duly stamped by air traffic to authenticate our visit, we had achieved what we had intended.

We returned to Tromso to meet up with four other couples who had decided not to do the Cape, to hear later from the second aircraft (which had gone on to Spitzbergen) that within 15 minutes of us leaving in brilliant sunshine, the sea fog had rolled in quicker than you could run and had obliterated the airfield!

It was now Saturday and the start of a long journey home. The remaining 4 aircraft at Tromso departed after an early breakfast, planning a non-stop flight to Alesund, where we had been on the previous Tuesday. 4 hours 35 minutes later we touched down there with about 20 minutes fuel remaining – although we had been closely monitoring the fuel/distance remaining scenario with the wonders of that facility on our Skymap GPS. There were several boltholes to go to for fuel if we felt we were unhappy – but a diversion would have delayed us by quite a while, and we were keen to depart on the next leg to Sumburgh as quickly as possible.

Alesund was the nearest direct line starting point for Sumburgh, which we had all decided to make for, and so after a quick sandwich, weather briefing and flight planning we set off on the 280 mile over-water leg. All the other crews had survival suits and were somewhat aghast that we did not (when we left home we had not planned to return via Scotland), but a climb to FL85 took us above a solid blanket of cloud for the entire crossing which did wonders for our confidence as we couldn't see the nasty cold sea! This was a beautiful flight in dead calm air, and just over 2½ hours later we touched down back in the UK.

But we were still 4½ hours flying time from home, and although we did consider carrying on, we had already flown for over 7 hours and so the consensus was that we would all have one more evening together before going our own separate ways. Sunday morning saw us leave soon after breakfast and after a quick stop for a sandwich with Paul and Roz in Yorkshire on the way, we arrived home with 29 flying hours under our belt and a very enjoyable experience behind us.

For those interested our route was:

Stones Farm – Lelystad – Odense – Oslo – Sogndal – Alesund – Bronnoysund – Bodo – Svolvaer (Lofoten Islands) – Tromso – Honningsvag (the North Cape) – Tromso – Alesund – Sumburgh – Moor Farm – Stones Farm.

Norway is a very friendly country to fly in, with excellent ATC in perfect English. It is a very long country and also very narrow – being only 50 miles wide near the top. There is some stunning scenery with lots of snow-capped mountains, although the weather was not at it's best for our trip. But it is also pretty inhospitable away from the coastal areas if there should be a problem – so go prepared, and give it a try. (Oh, I almost forgot – it's also a tad expensive!)

Martin & Annette Gosling





Flight Tests - Diamond DA42 TwinStar

The following are three impressions of brief demonstration flights carried out after the AGM.

Impression 1 - Martin Gosling

I was one of the lucky three couples who were quick enough to put their names down for a demonstration flight in a brand new diesel engined light twin – the Diamond DA42 – at the AGM at Elvinton in October.

I had read reports on the aircraft, but, to be honest, had very few memories as to the facts and figures of those test flight reports. Therefore I had no preconceptions of what I was about to try out.

On the ground it looks rather unorthodox with a sharply tapering fuselage, long wings with largish winglets on the end and entry effected by a large forward-hinged canopy for the driver and co-driver, and a large upward-hinged door for the back-seaters – both supported by powerful gas struts.

The rudder pedals and not the seat, were adjustable, and this has the advantage of not having the rear seat legroom reduced by a long-legged pilot. Annette sat in the back and reported that it was very comfortable, with good legroom.

I initially thought the front seats to be rather hard and not overly padded, but that feeling soon dispersed as I settled in – and as soon as I had done so I was totally absorbed by the two enormous glass displays in front of me – the left one for the flight displays and the other for the navigation. Engine parameters were on digital strip readouts on the left of the navigation screen, and were rather small. Since it takes a two-day course just to get to grips with these glass displays, I might be forgiven for being necessarily sketchy (and possibly inaccurate) in their description – but all I know is that I would dearly love to have them on my aircraft. It seems to me that these glass displays are to instrumentation what GPS is to navigation – simply fantastic.

Henrik, the demo pilot ran through all the pre-start up checks and fired up both engines, called for clearance and invited me to taxi. At this stage I have to admit that I have never even sat in the P1 position in a twin, let alone flown one, so it was a completely new scenario for me. The simplicity of the fully FADEC-controlled engines made it all so simple, and with a brief pause while I pressed two buttons for 8 seconds which automatically tested all the engine parameters – I pushed both stubby little power levers fully forward and we were off with





quite brisk acceleration and airborne at 90 knots (I think!)

Henrik kept feeding me headings and heights, which I followed with varying degrees of accuracy, but was made easier by his continually resetting the DI bug for me to follow. 75% power gave a 140-knot cruise at (I think) 4.5 gallons/engine/hour. I wanted to absorb as much of what there was to see about the plane – but there was just so much with so many buttons, I just kept glancing all over trying to take in as much as I could. The one lasting impression of the navigation screen was of it being panned out in map mode until two circles appeared centred around the present position. The inner dotted one was the range (in a 360° circle) with 45-minute reserves, and the outer solid one was range to dry tanks. All so simple and see-at-a-glance.

I asked Henrik what it's single engine performance was like and literally before I had time to blink he had pulled the starboard power lever right back to the stops – just like that. Apart from a pronounced yaw contained with a hefty bootful of rudder, which was quite heavy until I caught up with the rudder trim, it all seemed rather a non-event. Single-engine climb rate was, I think around 600ft/min, and the noise level didn't seem to change at all, which apart from the yaw and scanning of the rather small strip engine readouts, would leave one unaware of what had happened.

All too soon we were returning to land and I was glad of about two miles of runway in front of me because it all seemed rather fast with rather a lot of power on and rather a nose down attitude, and with round-out being lower than I expected. That was undoubtedly because I am used to a single engine aircraft with 60 knots over the hedge. I certainly would not like to try it on my 700-metre grass strip without many hours of landings under my belt, but the performance figures show it to be capable of operating from such a length.

Shutting both engines down resulted in both props stopping almost instantly – the result apparently of being geared – but gave me exactly the same impression as a Rotax engine stopping. It made it seem rather unimportant.

In a nutshell, what were my impressions? A comfortable plane with great economy on cheap fuel but only a 'lightweight' twin with speed and passenger capacity not much greater than my single-engined Robin. The ailerons and rudder were quite heavy, and visibility was nowhere as good as in my aircraft. Its style is rather too modern for my liking and the wings very long, needing careful parking and hangarage. But a delight to fly, and with a panel to die for! Probably THE training twin of the future.

Impression 2 - Paul Stephens

In comparison to the single engined DA40, this DA42 Tdi Twin Star looks a lot more grown up, standing quite high off the ground with an enormous wing (44 feet), which probably won't fit into your average hangar. With Diamond's origins in the glider world, this to me looked like a twin engined glider on high heels.

Henrik offered me the left hand seat, although I'm not twin rated. After climbing aboard I realised that this was in a different league to the DA40. Although the fuselage is about the same as the DA40, it felt a lot more spacious mainly because the glass cockpit instruments are set further away from you. You sit on a hard but comfortable leather seat with the joystick poking through the squab, which must be quite unusual for an aircraft of this type. Henrik powered up the two large Garmin screens and you can't help but be extremely impressed with the clarity, brightness and the information that they displayed. This is entering another phase in light aircraft development; but you would certainly need the two day training course to operate them and then they would need regular use to stay familiar with them.

An article or even a book could be written on the Garmins alone, but this impression is on the aircraft as a whole. Starting the two diesels is so simple and checks are carried out by the computer. Rolling down the runway, I assumed that it wouldn't be the liveliest acceleration as we are talking of a biggish aircraft (1.7 tonne) with a total of only 270 hp. I wasn't wrong, and I did wonder how it would cope out of a wet grass strip when things get a bit soggy in winter. I think in those circumstances, it wouldn't be a Flying Farmers aeroplane. Once airborne, it climbed away reasonably but I thought the diesels were a little bit raucous. As soon as I started turning, I knew that I would enjoy flying the aeroplane as I found the stick makes it an aviator's type aircraft and the instrumentation was giving fantastically clear and easily read information of what was happening outside. In fact, I think the danger would be that I would spend far too much time playing with the gizmos than looking out of the window.

Levelling out at 1500 feet and reducing power to 75% gave around 138 kts cruise. The next thing that strikes you is that the aircraft controls are so simple. No props to play with, no mixture and no carburettor heat - just put 75% on the digitised power display with the power lever, trim and that's it. More time to play with the Garmins! The noise levels were now very acceptable and everything was comfortable. Roz said that she was comfortable in the back but couldn't see where to put all the suitcases!

We only did a quick sortie, so we soon turned back to Elvington skirting a restricted area shown very clearly on the large Garmin map, reduced power to 50%, dropped the gear, dropped the flaps, 90 kts on the read out and point at the threshold, round out, reduce the power and we greased onto the runway. Just so simple.

After flying the Diamond singles, I must say that I was seduced by the toys on this aeroplane and the simplicity of the controls. What I wasn't impressed with, for the £320,000.00 plus the £56,000.00 VAT (unless you buy through a Danish company), is that for a twin you have only got the performance of most decent singles. In fact a lot are considerably quicker and cost a lot less. It will come into its own a bit more at serious altitude, if you spend a lot of time up there, but it only has 5 hours endurance, which means 4 hours of travelling before you're looking for airfields that have Avtur, as they're not as frequent as the Avgas ones. I also think that when you buy a twin, it would be nice to be able to carry six people, or at least four with plenty of baggage.

The downsides; for the DA42's initial cost, I could buy a Robin President, an Aston Martin, a combine and a 180hp tractor; all brand new. Compared to the Robin, it doesn't go any faster, it doesn't go as far and it has the same total fuel burn on more uncommon fuel. With only 440 kgs of payload, if you want to fill the tanks it will only carry 3 people and no baggage; in fact it's a two seater if you opt for the extra fuel tank. It will cost more to maintain with the two engines and retractable gear and I just wonder about the Garmins and all their ancillaries; if things start going wrong, how far do you have to go to get them fixed?

The upside; I would consider this to be a great training aircraft with the lower cost of Avtur. It is a step forward in technology, simplicity and safety.

I don't think many Flying Farmers will be buying one unless they have a large hangar, a solid runway and have already replaced their combines and tractors and still got plenty of the necessary left over.



Impression 3 - Bill Burton

The aircraft has many positive points:- diesel economy 140knots - 10.5 US gals/hr. - very easy engine management - no prop or mixture controls very positive but slightly heavy controls - push rods not cables very well engineered undercarriage and precision composite airframe construction wonderful Garmin 1000 displays - a major advance

But against it are: limited payload - snug cabin - high cost

From the twin handling point of view an engine failure isalways a major event but not dramatic in the Diamond, at least in the cruise which was the only chance I had to sample it in. The yaw was easy to control with reasonably light rudder input and quickly trimmed out, the aircraft losing 20 knots but still maintaining altitude easily with three POB and half fuel. Of course losing an engine just after take off would be more difficult but Henrik assured me (he would of course) that with practice, control can be easily maintained.

Comparing it with the Cessna 303 which I am more familiar with , which has reasonably tame flying qualities compared with some twins, I think on first impressions that the Diamond engine out performance is even more benign.

The airplane's obvious role is training where economy of high utilisation would count big time and the reduced cabin capacity would not detract. The glass cockpit display is very much like the displays students would use in commercial aircraft when they graduate. For the private or company sector its success, apart from novelty value, could be uncertain - especially in the air taxi market because of cabin access and layout.

Robin DR400 TDI – Flight Appraisal

On a frosty Sunday morning at the end of November, I was lucky enough to be the first private pilot to sample the recently certified diesel-engined Robin DR400 to be delivered in the UK

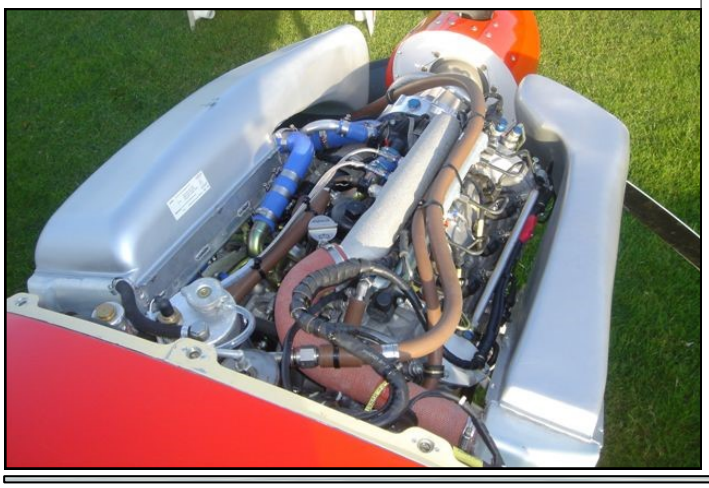
Robert Cole, of Cole Aviation had taken delivery of G-CDAI a few weeks previously but had had a frustrating wait for final certification from the authorities. I had met up with Robert at Aerofair at North Weald in May 2004 when he had told me that he had just ordered the diesel engined version, and I asked if I could test-fly it when it was delivered. He was not expecting the delivery to be so delayed – but that seems to be the way with these things these days.

I was just marking out the runway with 300^{x}, 350^{x} and 400^{x} markers when Alpha India appeared overhead – a familiar silhouette with a slightly different engine noise – quieter and more mellow, and not so barky as my avgas-powered Regent.



Robert had been kind enough to take time out on a Sunday to bring it up to my strip, and he arrived with his wife and 14 month-old son.

After a quick coffee, Robert and I went out to have a fly. Slightly reluctant to let me into the left seat, he relented in the knowledge that I was very current on type, and so he ran through the start-up procedure. With no mags or mixture to worry about, the power lever was set to idle and the key turned. About 3 rotations saw it come to life and settle down to a smooth idle and it was allowed to warm up for a couple of minutes before we made for the threshold. Lined up, we set the power level to idle to check the Fadec. Pressing and holding the 'Fadec Test' button saw the computer run through all





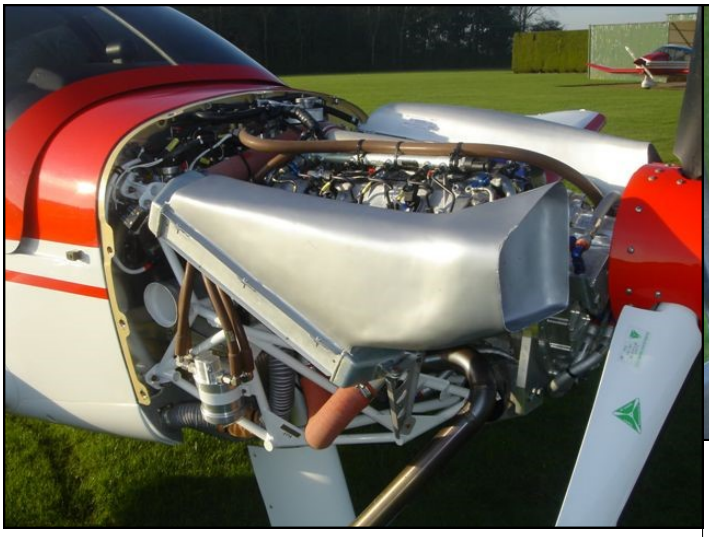
its checks, including cycling the prop, first on Fadec 1, and then on Fadec 2. All being in order, a 'Check OK' light came on and we were ready to go.

Brakes held on and the power lever advanced until 100% power showed on the gauges, I had my eyes set on the three markers I had laid out earlier on to check the take-off run. I estimate we were about 150kgs under gross weight, and the runway conditions were as one would expect in November – quite draggy with wet but shortish grass. To my amazement we got nowhere near the first marker and were airborne comfortably in 220 yards from brake release, acceleration being every bit as sprightly as in my Regent.

Maintaining 100% power we climbed at 850 ft/min at 80 knots, levelled out at 2500 ft and the speed increased to 123 kts straight and level at full power. Bringing the power back to 75%, the standard cruise setting, the speed decayed to 115kts burning 18 litres/hour (red diesel at say 33p/litre gives £6/hour fuel costs. I reckon my Regent works out at around £45/hour for about 5 knots more speed!!) Setting 40% power gave an indicated airspeed of 80 knots in level flight with a fairly pronounced nose up attitude burning goodness knows how little fuel. You could probably stay up for most of the day – or until your bladder burst!

Handling when airborne is entirely conventional Robin and needs no clarification from me. Landing likewise is conventional, save for no carb ice checks, and merely needed a reducing of the power lever as desired. One caveat is that there is a marginal delay in response to an application of power, so that needs to be remembered if it is required on approach. Robert says that the test pilot demonstrated to him that in a full stall and with full power applied, nothing at all happens and it just hangs there. As he had not tried it himself we agreed that we wouldn't try it either!

The power plant is a 135HP Thielert diesel engine based on a Mercedes unit and is installed into the well-known Robin airframe with its cranked wing. The airframe used is the 140B version (which is the same as my previous aircraft G-YOGI), and has a 964 kg all-up weight, with a useful load of 356 kgs (784 lbs). A quick calculation tells me that a full tank of Avtur (110 litres/194 lbs) leaves 590 lbs for passengers and luggage. If Annette and I took two equally weighted friends aboard we would have to sacrifice 20 litres of fuel to remain within limits – and at 18 litres/hour consumption at 75% power, that would be 5 hours flying. Remove a bit more fuel, add a bit of luggage





and you have a serious touring aeroplane (and this example is with 4 people aboard, which I suggest is not too common a scenario).

So what were my impressions? To be honest, I was very pleasantly surprised at its performance. I was extremely impressed by its take off run, and feel that at full gross weight it would have been airborne easily within 400 yards on my strip – on a hard runway, perhaps 325-350 yards.

I stood at the 250-yard mark with a camera when Robert departed with his wife and child, and he was airborne by 4 ft, and climbing, as he passed me. It was quiet too – a definite plus point for the neighbours. When flying, I took off my headset to sense the noise and it was remarkably quiet, and we could comfortably carry out a conversation. As well as being quiet the engine was smooth, without the usual inherent vibration of a conventional 4 cylinder Lycoming.

With the cowlings off – which had about twice the number of fasteners as a Lycoming-engined version, although still relatively easy to remove compared to a Cessna or Piper – it revealed a rather complicated looking power plant as compared to what we are used to with our conventional engines, but most of this complication appears to be electronics and radiators on both sides. Having taken a photo we put the cowlings back on and I asked no more questions.

I was surprised that it didn't have the wing with the two wing tanks – but Robert said 'why – it already carries enough fuel for over 6 hours flying in the main tank alone, so how much do you want?' Fair point. I would have preferred a baggage hatch for access from the outside, and to be fair that is an available option at added expense and weight, but for flying schools where the market is aimed at the moment – Robert decided against it on his demonstrator. The parking brake knob is in the same designed place as on an avgas Robin, but this is hidden by the power lever in the diesel version. There is plenty of space to lower it into view on the console, so what a stupid design slip-up. The ASI is in the same "two-flavoured variety" as G-YOGI had – a scale with kilometres/hour around the outside, and knots on a smaller, inner scale. I really cannot see the point of that as all aviation is traditionally run with knots as the unit of speed. No doubt it is to help our French cousins, but it can only cause confusion to the inexperienced pilot snatching a quick glance at his speed at a critical moment. My present Regent has the ASI only in knots so obviously some of their aircraft are instrumented properly. Finally the colour scheme is ghastly and is typical Robin. The only good-looking Robins are those with personalised paint schemes.



And the price? Delivered to your door with a full tank of fuel, standard instruments plus a chronometer, digital transponder, combined Nav/Comm with glideslope, a Bendix/King 155 colour skymap, 2 Bose noise-cancelling headsets and VAT paid, you would have to find £135,000.

But consider this – the aircraft is delivered with a guaranteed engine life of 2400 hours, however the engine itself is only certified at the moment for 1000 hours. So how do they reconcile those two facts? Well, after 1000 hours a brand new engine is supplied and fitted at no cost at all, which takes you up to 2000 hours – at which point a third engine (maybe new, maybe reconditioned) is supplied and fitted, still at no cost, to take you up to and beyond the guaranteed 2400 hours. If this seems too good to believe it probably is, considering it has taken me 27 years to accumulate 2600 hours, and in the field of private piloting that is probably fairly high hours/year. There is however one caveat, and that is that this engine replacement is calendar limited to either 10 or 12 years (can't remember which), so the manufacturers don't find the guarantee extending to 30 or 40 years!

Would I have one? If I was younger, and richer and farming was buoyant, I think I would. But if they could introduce a 180 hp version of the engine – now that really would be something! My thanks must go to Robert for taking precious time out on a Sunday to give me the opportunity to try it out for me to report in the newsletter. If anyone is inspired by this report Robert would be pleased to hear from you. He trades as Cole Aviation with tel: 01424 870899, or mobile: 07730 202627. His email is coleaviation@dial.pipex.com. Robert has his own maintenance facility and airstrip at Spilstead Farm, near Hastings, and does everything in-house. He is one of the two Robin distributors in the UK at the moment, Mistral Aviation is the other, but his in-house facilities and friendly personality must give him the advantage.

Martin Gosling

Foxbat to Lundy

Lundy, for those of you that don't know, is a small island about twelve miles from the North Devon coast. If you miss it, the next stop is America. What could be more tempting for a Somerset based microlight pilot whose experience over water (so far) has been the Solent. I would add that my microlight, an A22 Foxbat doesn't look like or behave much like a powered hang-glider - with its side-by-side seating, 100mph cruise, 400 mile range and 1200 ft pm climb all in a cosy Perspex bubble that makes a helicopter feel restricted in its view: not much danger of swapping it for a spam-in-a-can Cessna. It also glories in the registration of CCCE.

My strip is now 550 yards (which about 250 yards too long but it is nice to welcome friends that need the room) just inside the Stub of the Yeovilton MATZ. My co-pilot and navigator was my nine year old son Louis and the day was a beautiful one in July with puff-ball clouds at 3000 ft and a 20 knot headwind. The first bit of the flight was over the not-madly-interesting countryside of the Somerset Levels that drain into the Bristol Channel around Bridgewater. The planned route was then to be along the Somerset coast leaving the blue stuff to the right and Exmoor to the left. Actually, the blue stuff is initially rather brown due to one of the highest tidal ranges in the country but about halfway along this stark and beautiful coast it metamorphoses into the deep blue/green of the Atlantic. What becomes very apparent is how last summer's devastating flooding in Boscastle could happen as the mass of Exmoor drains straight and precipitously down what could be described as storm drains with little harbours and villages at their mouths.

I had a Flight Information Service from Cardiff which felt good as the land ran out by Barnstable and the Atlantic opened up with only the odd container ship heading up to Portishead. There were few yachts, despite the beautiful day, as this is an iron coast of lee shores and black cliffs that is a long way from the soft harbours and rivers of the south coast of Devon and Cornwall. 5000ft also felt good, as that would have got me to some firm stuff if the Rotax decided to down tools. The navigator had finished a packet of Malteesers and was absorbed in his Gameboy.

Lundy is a wonderful sight; it must have been somewhere in Enid Blyton's thoughts as the Island of Adventure, about 3 miles long and half a mile wide, completely girded by cliffs, stark and solitary from a distance. I had spoken with a friendly member of the Devon Strut who had warned me that the airstrip is not that obvious but perfectly apparent if you pick out the lighthouse and head straight at it on a South-West course. He also warned me that the other users of the strip are busy rabbits who haven't been told that aeroplane wheels and holes don't do well together. Luckily Charlie Echo has a secret weapon to deal with this: full flap gives a stall speed of 26 knots and with the 15 knot breeze coming at me I felt confident that a 10 knot or so groundspeed at the *moment critique* should make things OK. Rough it certainly is but no worse than many of the stubble fields and paddocks that I like to land in. If you overshoot, it is either great or disastrous, depending on whether you have enough speed on - as the end of the runway simply disappears over a 300 ft cliff.

The first impressions are that of an island in Scotland but – big difference here – dry. A heady smell of the sea, dry grass and wild flowers; bright sunshine and wind clipping across a



plateau of tussocky grass to the north and stone walls and hay meadows to the south with the village out of sight but the granite tower of the church just visible. The island is run by the National Trust with many of the buildings operated by the Landmark Trust who let them on a weekly basis. These vary from fort cottages to the grandly named Government House. The village has the slightly sterile feel of a National Trust operation with its imported population - one of whom was an Italian girl who had been there for 18 months. This is a small place. Normal transport to and from the island is a two hour once-a-day visit from a steamer in the summer and by helicopter in the winter. The pub is the centre of social life and provided plenty of chips to sit happily on top of the Malteesers for the navigator.

It was a truly beautiful day and after a sleep in the sun we walked the cliffs, climbed the tower of the church where a bell ringing practice was in session, searched for puffin burrows and explored the (disused) lighthouse – a wonderful example of engineering built to last only five years after Waterloo. The abiding memory is of warm fresh wind, the smell of hay and the cliff-dwelling seabirds riding the updraft on the windward side.

As I prepared to take off the radio decided to go blank on me. Not a nice feeling as you are about to hurl yourself over a cliff with the rather disturbing memory of a photograph of a Cessna upended at the end of the runway earlier that summer in a nearly fatal accident. As it was, the stiff breeze and updraft from the cliff meant that I went from rabbit holes to 200 ft in a few seconds and enjoyed an exhilarating sweep down the windward coast in the clean air of the updraft before climbing within gliding reach of the strip to 5000 ft before heading towards Hartland Point, the start of an almost uninterrupted cliff that stretches south to the surfing beach of Bude about 20 miles away.

The flight back was uneventful with the navigator sleeping all the way only waking up to witness the worst approach to the home strip at North Cadbury that he (or I) had ever seen: big bounce and a go-round also witnessed by my friend on his tractor who happens to fly balloons and who has never let me forget it.

It was one of those lovely days that I will pull out of the mental DVD selection when I am dribbling in my bath-chair. The navigator? He liked the chips and the ice-cream.

Charlie Ellingworth (FFA No. 742)

FLYING FARMERS ASSOCIATION

Minutes of the 31st AGM

Elvington
Wednesday 19th October 2005

Present: J.R Walgate (President) J. Golden (Hon. Chairman), P. Stephens (Hon Secretary), D.Corbett (Hon. Treasurer) M. Cuttell (Hon Events Secretary), A. Kedros, M.Ashmole, M.Gosling (Committee Members) and 28 members. P.Stephens took the minutes

	Description	Action
	The meeting was opened by the Chairman at 12:30 hrs (local)	
1	**Apologies for absence** Apologies received from Vernon Nott, David Keene, John Milne, Roger Bell, Roger Dadd, Bob Crowe, Paul Platt, Paul Burtwistle, Michael Pudney, John Graves, Mike Rowland, Stuart Mole, Richard Blant & John Hardy.	
2	**Signing of the Minutes of the 30th AGM held at Middle Wallop on 8th October 2004** The minutes were signed as a true and correct record. There were no matters arising.	
3	**Chairman's Report** The Chairman gave his report thanking the Committee for their work.	
4	**Treasurer's Report** The Treasurer gave his report and pointed out that a profit was made and surplus funds have been invested with the Alliance & Leicester building society.	
5	**Election of members of the Company** The members were elected members of the Company	
6	**Election of Committee Members** The Committee were re-elected en bloc although the Treasurer declared that he will stand down when a replacement can be found for his position.	
7	**Membership Report** The Secretary announced 15 new members and 8 not renewing their membership leaving a total of 374 members. The average age is now 57.8 of those that declare their age.	
8	**Event Secretary's Report** The Event's Secretary gave his report outlining a program for 2005.	
9	**AOB** There was a lively discussion on current issues.	
	The Chairman closed the meeting AGM at 13:20 hrs (local)	
	Minutes approved at a subsequent AGM……	

Personal Reflections on Flying the Monowheel Shaw Europa Aircraft, by Hugh Thompson.

After becoming a PFA Coach Pilot in 1996, I had the opportunity to get checked out on the Shaw Europa (Monowheel) version and after an interesting hour with John Brownlow in August 1998, soloed on type. Being a tailwheel trained Auster pilot in my early days, I did not find it difficult but must state right away that as this type of Europa is unique to itself it should not be a problem if you have never flown any tailwheel types before. It is similar in its undercarriage design to many gliders, like the Motor Falke, and Fornier RF4/5 aircraft. One comment about the airfield used was that it was one of the roughest grass strips I had ever experienced up to that time. Sadly I have to report that it was at Cambridge but I am told that previous dry summer's had caused the ground to dip in places. Similar problems also occur at Barton (Manchester) which is why it is an on going problem to try and level the grass runways there. Repair one bump and another appears!

Since then, I have carried out a number of type conversions on to this aircraft, one of which resulted in an accident due to a lack of experience and complacency; using both grass and hard runway surfaces. To date, I have flown just over 160 hours during 260 logged flights with up to 1000 Landings and Take Offs. Personally, I have found grass much more forgiving and helpful if it is smooth enough, but if you can master the art of keeping it straight on a hard runway after you have landed the aircraft, so much the better. More on take offs and landings later.

The Europa is an excellent aircraft to fly when airborne and if equipped with a variable pitch and/or constant speed propeller flies like a small fighter aircraft. Lookout is perfect, handling is crisp and lively with a good roll rate and it can be safely flown clean or with the gear and flaps down, but at a much reduced speed. It does take some time to get used to flying it especially if you have a variable pitch propeller, and a lot of practise is needed at raising and lowering the gear/flap combination without violently pitching about as you move the lever! You have to get used to holding an attitude in pitch visually while you raise and lower the gear/flap.

If you have not flown a variable pitch propeller aircraft before, it is important to have a good understanding of the principles before trying it. Basically the power output is indicated with a Manifold Pressure Gauge and the RPM is dependent on the Pitch setting. Some aircraft will have a pitch setting indication only, others only a manifold pressure gauge, and some, both; depending on the individual builders choice. When increasing the engine power output advance Pitch or RPM before the throttle or manifold pressure and when reducing power, reduce the manifold pressure first. It is worthy to mention, that if you do have a vp/constant speed prop, any carburettor icing will be indicated by a gradual drop in manifold pressure rather than engine rpm. One student of mine who had some difficulty understanding both the aircraft and propeller at the same time suggested that early on you simply set the propeller in fine or nearly fine pitch, and simply leave it alone, treating the aircraft as if it had a fixed pitch propeller; which is the case on some Europa's anyway.



Flying the Europa in the air is hard work initially due to its increased speed in the cruise; you need to think ahead and give yourself plenty of room to slow down before lowering the undercarriage and flaps at 83 Knots or less. If you have a vp prop reducing the blade angle, ie making it finer, helps to slow you down as the prop acts as an airbrake. Also, remember that power plus attitude gives you performance so it is important to hold the pitch attitude constant when lowering or raising the gear. As every homebuilt Europa is different, I cannot give specific details on speeds, power settings etc., but a typical cruise speed with a vp prop is about 120 Knots, best climb and descent speed is 75 Knots (if gliding with the flap/gear up) and around 60 Knots with the gear/flaps down; such as during a forced landing. However in reality you would normally, once at a safe height, establish both a cruise climb and descent when flying a cross country to give yourself maximum endurance and range.

As for taking off and landing, both a difficult task initially for a newcomer, especially if they have had no previous tailwheel experience, on balance I think the Take Off is more challenging as you have full power applied I It does not matter if you do not have any previous tailwheel experience although any flying experience helps, as the aircraft in unique in its handling characteristics. Keeping it straight is the difficulty so you must have foot pressure applied to both rudder pedals, look ahead and outside the cockpit while you apply power and initially keep the stick fully back to ensure you have directional control. Early in the take off role you will have no aerodynamic effect on the control surfaces unless there is a very strong headwind. Only when you reach 30-35 Knots on the ASl can you relax on the stick and it is then kept almost neutral, the aircraft will leave the ground on its own depending on the position set on the trimmer. This depends on the amount of fuel and baggage carried but I tend to trim it slightly nose down to ensure the aircraft does not pitch up sharply as it gets airborne. Do not physically put the stick forward to raise the tail like you would do on normal tailwheel aircraft; this will almost certainly lead to a loss of control especially at the lower speed early in the take off role. It is also important to get full power applied smoothly and quickly. Trying to take off with less than full power will only prolong the agony of trying to keep it straight. Finally, as you get airborne ensure you have a safe airspeed before allowing the aircraft to climb away. One final note about taking off. When you have plenty of experience and know your own aircraft, it is

possible to concentrate on keeping it straight only and holding the ailerons neutral, simply allow the all moving tailplane to move itself providing the trim is correctly set. If you look at your aircraft you will see that it is already sitting in the required take off attitude so there is no need to try and raise the tail at all!



Raising the gear/flap combination after getting airborne can cause problems until you get familiar with it. Spectators often wonder when monowheel Europa pilots appear to lose control at about 2-300 feet. This is when you pitch violently up and down when trying to raise the gear and push the level into its recessed up position. You must concentrate on keeping a constant attitude by looking outside at the natural horizon while moving the undercarriage lever. This is easier said than done when you first try it but practise will soon make the manoeuvre easy to accomplish.

Landing the aircraft is potentially more difficult as it is very possible to ground loop it after touching down and you think the landing has been successful! In any tailwheel type aircraft no landing is ever complete until it has come to a complete stop. You must not relax your concentration or stop looking ahead until you have virtually stopped moving. It is no good making a smooth landing and then looking at your passenger with a smile or trying to find the brake lever only to subsequently ground loop it, yanking on the brake and either tipping it on its nose or scraping the wingtips!

You cannot make a good landing unless you first make a good circuit and a nice trimmed out approach at the correct airspeed. The Europa manual suggests 60 knots but, subject to the weight of your own aircraft, feel that about 55 Knots at the runway or touchdown threshold is about right; as you do not want to prolong the float and when it does land, it is desirable to stay on the ground rather than get airborne again. Believe it or not, some Europa pilots, even experienced ones, have managed to land it with the gear and flaps up, especially when there is a strong headwind and the approach attitude looks normal. The difference approaching to land with the gear up, is the Airspeed indication; it will be about 10-20 knots faster than normal. During training I get all my students to deliberately make an approach with the gear up just to impress on them how easy it is to forget it. So far, I have remembered to "Go Around". You may think this will never happen to me; but it might?



Apart from keeping it straight after landing, and this is the difficult part for most, it is important to attain the correct attitude in pitch when checking the rate of descent and holding off. If this is achieved correctly, it will land when the speed dissipates. If a small bounce occurs which often happens, just hold the attitude. Do not relax the back pressure on the stick or put the nose down. If you achieve a touchdown before you get the stick right back, continue to do so and make sure the throttle is completely closed. As far as the attitude is concerned, keep whatever seating position you are used to so as not to change the apparent attitude for your aircraft. Someone else's Europa may be different so before getting airborne take a moment when you line up to study again what your landing attitude happens to be!



Throughout the landing you must concentrate on looking ahead out of the cockpit and working the rudder to keep it straight. If there is a cross wind you can only keep the wings level and maintain the runway centre line with the rudder, straightening it just as you land. Only then can you use the ailerons to lower the upwind wing. If you try the wing down method then it is possible that the outrigger wheel will make contact with the runway surface first causing a swing. It is perfectly possible to bounce it a little as all the weight is on one main wheel but I find that on grass this rarely happens; unless it is a really bad arrival. If you have a choice, a grass landing is much more forgiving on the aircraft, if it is a smooth airstrip; and it is much easier to keep it straight as you slow down. In my one accident, directional control was lost late in the landing run and the aircraft groundlooped on a hard surface. Unfortu-

nately both the student and myself applied the brake which resulted in it tipping on to its nose. If you are confronted with a ground loop, keep the stick back, switch off the ignition, and do not apply the brake. You may then get away with it, if you are lucky!

During the flying I have obtained on the monowheel version of the Europa. I have gained some valuable tips on various items. One of these is the fuel tank. As it is made of a glass fibre or plastic material and molded together when built, it takes some considerable time to get all of the very fine debris out of the system. On one occasion after we had flown about three hours on a newly built aircraft, I advised the owner to check the fuel filters. He forgot to do so, and on our next flight we lost power during the take off and initial climb. On reducing power the engine ran smoothly again. I immediately asked if the filters had been checked. Being given a negative answer, I knew what the problem was. If rough running does occur, change to the reserve; part of the same tank in practise but with the fuel coming via a feed line which will have had much less use! Also the capacity of around 70 litres can vary from tank to tank especially if venting of the air in the sealed tank is a problem.



The PFA appears to be very concerned about the provision of stall warning devices on the monowheel type of Europa. I personally think this is unnecessary if you have been trained properly and remember what the true symptoms of an approaching stall are. I know of some owners who simply disconnect the warning as it distracts them from concentration during both take off and landing. There is no harm done having some kind of warning but when I learnt to fly they did not exist; on the Auster.

Having said that there was a more pronounced natural buffet then than nowadays.

As there is only one main wheel and no differential braking, the turning circle of the single wheel Europa is a fixed radius. This can cause problems on narrow taxiways and runways. You must think ahead and use any crosswind component to your advantage. Accelerating a little prior to a turn can give you more momentum but do not be surprised if your passenger, if you have one, eventually has to get out and lift the tail round one day. Only by experience can you get an appreciation of the possible difficulties.

One very good tip if parking for long periods on grass. Prior to getting in and starting, always move the aircraft slightly by hand. As all the weight is effectively all on one wheel, it can sink into soft ground making it virtually impossible to move, except with full power; which with a possible cold engine is not a very good idea.

There are two modifications 1 would like to see on the aircraft. Firstly, the one landing accident I had was possibly caused by the port outrigger wheel not locking down correctly. On an earlier flight we had had a groundloop in the same direction as a result of the port wing lowering. On that occasion we got away with it but sadly not the next time. I do remember that on one aircraft you could hear the outrigger wheels clicking into position about 10-15 seconds after the gear and flaps had been lowered. To ensure the outrigger wheels are down, I would like to see a modification done so that when they extend fully a small pinhead painted red (or some other colour) would protrude slightly above the upper wing surface. As you cannot see these small extended wheels in flight, there is currently no way of knowing if they have fully extended! In feedback, prior to publication of this article, the owner has confirmed to me that tests proved that the port outrigger wheel was not locking down correctly! As far as the accident was concerned, the owner decided to convert his aircraft into the Tri-Gear version, so regrettably he never achieved his aim of flying it solo as a monowheel. This was a pity. Unfortunately he subsequently suffered a nosewheel failure as well and ended up selling his aircraft.



The second modification also concerns the undercarriage. On two occasions in turbulence, I have had the gear come down inadvertently at cruising speed; nearly taking the end of my finger off the second time. It would be nice to see a secondary uplock incorporated to prevent the main gear lever coming unlatched unless deliberately intended. This would be similar to the fitted down lock safety catch which all monowheel Europa's are required to have.

Based on all the experience gained to date, I have prepared a basic list of good advice for any monowheel Europa owner. I have found some conversions easy to accomplish, whilst others have been more difficult. As an instructor, I cannot teach anyone to fly the aircraft, they have to do it themselves in the end. What I can do, is demonstrate, advise where they are making errors, and suggest ways of overcoming any difficulties. My list, which applies to the monowheel version only, is given below:-

1. Landings are not finished until it comes to a complete stop. As you slow up, directional control becomes very twitchy as you lose any aerodynamic effect and tailwheel becomes the only way to keep straight.

2. Keep Foot pressure on both rudder pedals to ensure positive control and feel. Anticipate application of right rudder as you get airborne to keep straight; depending of course on the wind and engine fit.



3. Aircraft is more difficult to Take Off and Land in NO wind. Best conditions are a light headwind of say 10 Knots. No wind makes one complacent and ground loops often happen when you least expect them.

4. On Take Off keep stick fully back until you are conscious of a positive forward movement, either by outside reference or airspeed at end of yellow arc at 30-35 Knots on some ASI's. As you become airborne you need to pitch nose down to ensure a safe airspeed then climb away. Look well ahead at all times.

5. On landing speed control is essential. Aim for 50-55 on round out and do not over rotate and get nose too high. There is a tendency is to check a little on the high side. Make sure the stick is moved fully back and throttle is closed. If you make a small bounce do not let the stick go forward, just hold it steady. The Aircraft manual says 60 kts; but my experience suggests that is a little fast!

6. As you slow up on landing do NOT look for the brake lever, you may lose directional control. Apply brake only If need be, gently. Keep looking ahead.

7. On Take Off be positive. Start from a FULL Stop if you can and look and study attitude as a reminder. When applying full power, do so quickly and smoothly. Remember to hold the stick back initially while applying the power.

8. Do not find yourself high and fast on approach. Give yourself plenty of room to slow down. In any light crosswind, keep wings level on approach and use rudder to maintain the centre line.

9. Aircraft prefers grass for both Landings and Take Offs rather than tarmac or concrete, if you have a choice, and it is smooth enough!

10. Since we all fly for pleasure, if the wind is not right, leave it for another day!

11. Always start engine on the "Reserve" tank selection and change to "Main" prior to engine run up. This will ensure both fuel lines are clear and working correctly.

Prior to publication, I sent a draft of this article to all the Europa Owners I have flown with. Very positive feedback was forthcoming and a number of changes have been made as a result, including my spelling mistakes. One comment was that I should consider seeking a commission from the Europa manufacturer for all the Tri-Gear conversions I might induce as a result. There is however a great degree of personal satisfaction to be gained from a successful monowheel conversion which will give any pilot a great degree of confidence when flying any other type of tailwheel aircraft; including a Spitfire if you were so lucky!

I have also learnt as a result of the feedback I received, that the PFA now require a manifold pressure gauge to be fitted to all variable pitch propeller aircraft. This may have been the result of one of my reports when I expressed surprise that there was no indication of the power output on one aircraft during air testing of that particular Europa, I had a nasty scare when 1 was misinformed about the propeller pitch setting; which I was told had been adjusted! I made a take off with the fine pitch setting too fine and was barely able to stay airborne, right on the stall, until I had the presence of mind to increase the blade angle; i.e. make it more course. The engine rpm was also exceeded by a wide margin and my first action was to reduce the power. Another important point is that if you are doing fast taxi runs prior to an intended first flight, always secure your harness fully and close both canopies; just in case you inadvertently get airborne. As I understand it, there was once an unfortunate fatal accident (which was not witnessed) at a private grass strip where the owner probably did not intend to fly, yet got airborne without being strapped in.

Finally, as a summary, can I say that the standard monowheel Europa is an excellent aircraft, but it can be a handful during both take off and landing. Good training is required to ensure a safe operation and you must expect problems at any time; especially when there is no wind, when you may become a little complacent! My aim in writing this article has been to promote increased awareness and flight safety when flying this particular aircraft which has, in the past, gained a bad reputation based on the number of accidents which have occurred.

I would welcome any comments as a result of this article; please send them to my e-mail address at:-

thompsonmilson@talk21.com; alternatively, phone me at home on 01584-711986 or my mobile 07702-077996.

Safe Flying. Hugh Thompson. (ATPL No 2196498) (PFA No 14799) (FFA No 475) November 2005.

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will be put to Government in autumn 2006. At GACC in November, we were given a presentation by Andrew Greenwood, whose company Adept-ADM is undertaking the RIA. Andrew is himself an ex en-route Air Traffic Controller, and his presentation was very impressive and reassuring. He explained an enormous amount of background, for which I do not have space here, and also confirmed that the RIA will consider, against the background that Mode S must be able to "migrate" to ADS-B some time after 2012, whether Mode S should be bypassed for those aircraft not already required to be fitted, and that ADS-B should be brought into use much earlier than planned. Using my layman's language, Mode S requires ground radar to operate and interpret, ADS-B is aircraft operated and interpreted with ground radar receiving the information; the problem from the UK point of view is that the new generation of en-route ATC radars currently being introduced are not equipped for ADS-B. There are two e-mail addresses that may be of interest to members;

mode.s@dap.caa.co.uk is for enquiries to the Dept of Airspace Policy at CAA about the Mode S situation

andrew.greenwood@adept-atm.com will contact the person undertaking the research for the RIA

New GASCo Chairman

Roger Dunn, representing PPL/IR Europe, completed his term of office as chairman in November this year, and Gerald Hackemer, who represents GAPAN at GASCo, has volunteered to take over the chair. Gerald is a FFA member, having worked for many years for ICI, and operating his aircraft from the late Walter Wheatley's airstrip at Frensham. Thank you, and congratulations, Gerald!

NPPL to become RPPL

Some members will now be flying with the benefit of an NPPL, rather than their old PPL. You will be glad to hear that it is expected that EASA will adopt a similar licence, to be called the Recreational PPL, and that when this happens (timescale not clear yet) NPPL holders will be able to use their licence throughout Europe.

GPS approaches

As a result of pressure from AOPA, amongst other organisations, CAA are now undertaking preliminary work towards introducing GPS approaches at a limited number of airfields; hopefully, active trials will commence in mid 2006. Although this will not authorise widespread use of GPS approaches initially, it is at least a step in the right direction; CAA accept that this step is a necessity.

David Corbett

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