

THE SHADOW OWNERS CLUB



NEWSLETTER NOVEMBER 1996

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editorial

It is with regret that as this issue was in the final stages of completion that we learn that CFM Metal-Fax Limited, due to cash flow problems, has had no option but to call in the Receiver. Speaking with Pat and Jacob they are devastated to say the least.

As we all know, the Shadow is without doubt the top of the range in terms of microlights, virtually anywhere in the world, and I am sure that it will not be too long before Streak and Shadow kits are being delivered again and Shadows being manufactured. Lets all hope that happens not too far away from Leiston.

In the meantime any owners who require spare parts etc. please call Pat White at his home number on 01728 832353.

As you will see from the front page there has been a small change, in that I have taken over as Editor for the newsletter. This will allow Barry to concentrate on the Secretarial and Treasurers functions. I would like to thank Barry for all the effort he put in to keep the newsletter going following Nigel Ramsey's efforts.

I am only too aware that this will be only the second newsletter this year, however due to the low number of contributions from the membership there was little point in producing a newsletter during the summer, and in any case you were probably too busy flying !

I do have some good news for those members with Personal Computers and connection to the Internet. I have set up a Web Page for the Shadow Owners Club. The page is at :-

<http://dspace.dial.pipex.com/town/terrace/ce50/>

Although the address is long, once it has been selected the location can be stored as a bookmark.

The Web Page will contain much of the material that is contained in the newsletter together with other more general information for the "Surfer"

who happens to drop in. The current plans are to include :-

- An Editorial
- The History of the Shadow
- Reports from Club Members
- A New Members List
- Stories such as "Tales from David Cook".
- Technical Topics
- New Products
- Details of Shadow Owners Club Fly-Ins
- For Sale
- Useful Contacts
- Links to other Flying Organisations on "The Net".

Already on the net is a history of the Shadow, Crosbie's Corner, one "For Sale" item and the first story from David Cook - Powered VJ23. Links are already in place to Laron Aviation's page in the US, the BMAA, and the PFA. A superb photo of a Shadow supplied by Laron forms part of the header. Also included is a link to our "shadow.owners@dial.pipex.com" mailbox.

For those without a personal computer and Internet access I have included some sample pages of our page on the Internet.

Such is the power of the Internet, anyone with access to it from anywhere in the world can view new pages and information within a matter of seconds of them being loaded on to it, and in many cases for the cost of a local phone call. On top of all this, they can send an e-mail, for less than the cost of a postage stamp.

Those of you with Internet access please E-mail me either at :-

j.lord@dial.pipex.com

or

shadow.owners@dial.pipex.com

I would like to hear from you - and also it will save on postage of the newsletter.

There are however some items which I believe cannot be published on the net. Results of modifications etc. which have yet to be approved will not be published, together with any other articles which the author has requested not to be

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published. For these articles I can e-mail them to you.

As the long nights approach, for me, it is a case of hoping that the weather at the weekend will be favourable. Indeed I think some of the best and smoothest flying is to be done in the winter.

Once I have completed this newsletter it will be out with the new Flight Simulator for Windows 95, for a bit of practice. Hopefully someone will one day create a Streak to fly on the PC !

This October saw the release in the UK of the feature film 'DragonHeart' starring Dennis Quaid and Sean Connery. The Shadow and CFM were involved in the making of this film. A Shadow was used for the flying sequences which involve the 'dragon'. With a movie camera fitted to the nose of the aircraft in front of the pilot, all of the 'dragon's eye view' sequences and flying shots were achieved. David and Jacob were involved and went on location to Slovakia in Eastern Europe for several weeks of filming.

The answer to the What is it ? in the last issue was a heater. Air is taken from the cylinder head on a series 'C' Shadow with a 503, and sucked through a pipe with outlets in the rear and front compartments. A motor driving an impeller is enclosed within the can and controlled from a switch in the cockpit. The pilot says it functions well and helps clear the condensation from the inside of the front canopy. Carbon monoxide detectors are fitted in the front and rear cockpit positions as a safety measure should any fumes find their way through. The next question in the competition is; on whose aircraft is it fitted ?

John Lord

reports

Moorsele

Five aircraft from Suffolk made the trip this year, namely, Frank Claydon, Jacob Cook, Danny and Jan Crosbie, Michael Stebbing with Liz, and myself with Angela.

We met up with the sixteen aircraft at Headcorn and after refuelling and the mandatory wait whilst the flight plan was activated we set off. It is amazing that with the precision of the infamous GPS that so many pilots all going to the same place can go in so many different directions ! Crossing the channel was uneventful, except that when the "lead" aircraft called mid-channel I was 3nm from Cap Griz Nez, probably on account that I had chosen to cross at 3,500 ft and not climb to 6,000 ft and beyond.

Due to a British pilot getting caught trying to run drugs out of Moorsele, Moorsele has lost its right to accept international traffic, we therefore had to go to Wevelgem to clear customs. Wevelgem has a 6,000ft hard runway and we had been briefed at Headcorn about nosewheel shimmy - scares the life out of you first time someone said.

My approach to Wevelgem was good and the real decision was which part of the 1 mile plus runway to land on. Being some 5 miles ahead of the pack I touched down not far from the numbers only to be greeted by the nosewheel shimmy as I thought, but wait a minute, the nosewheel isn't down yet and if it was why does the aircraft have a tendency to swing to the right. "Wevelgem, Golf Oscar Romeo, I think I have a puncture", I called. "What is this puncture ?", was the reply "Continue to taxiway two" he said. I managed to keep it fairly straight before vacating to the right on the grass, not managing to make taxiway two some half mile further on. On exiting the aircraft my suspicions were confirmed. The others were now close and after landing all decided that where I had vacated on the grass must be taxiway two.



On the apron at Wevelgem

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After clearing customs the Crosbie/Claydon team went into action to help me replace the inner tube which was inflated with the aid of Tyreweld carried by a fellow Shadow pilot. Inspection of the old inner tube indicated that it had been nipped between the two halves of the wheel. On the basis that I have always flown on grass, the wheel was able to skid up to speed, whereas touching down on the hard runway the wheel had to go from zero to 60mph in a few milliseconds causing the inner tube to rupture. With two good tyres now we completed the short flight to Moorseele.

The hospitality as ever was second to none with drink and food, in that order, throughout our stay. The highlight was an excellent barbecue on the Saturday evening.

Camping is the order of the day for the majority although I note that the organisers namely Fiona & Raymond preferred not to. I can't say that I will ever get used to camping though.

Entertainment was provided on Friday by the Crosbie team who waited until near midnight before erecting their tent.



Danny demonstrating he can erect a tent after a few litres of Belgium White Beer

Sunday morning came only too quickly and preparations were made for the trip home via Wevelgem where I am please to say I landed without problems. The flight through Belgium and France did not present a problem although as we approached Cap Griz Nez, the cloudbase got lower and lower.

With a mile to go before the coast we were down to 500 ft, at which point I decided the best option was to go back inland and climb through the holes in the cloud and get above it. After doing a 180 to head back we saw Jacob going in the opposite direction obviously going to cross the

channel at low level. I turned back towards the coast and promptly lost sight of Jacob. The forward visibility at 500ft didn't seem too bad so we headed out across the channel.

Flying at this height gets your attention and I was continuously scanning the height and the heading on the GPS, occasionally looking at the compass just in case the GPS should become affected by some deliberate jamming by the MOD, or Murphy's law should come into play. My main consideration was running into a fog bank which went all the way down to the sea, in which case it would probably be a 180 back to the French coast. I guess at between 300 - 500ft there would be little time for a Mayday call in the event of any problem, and in any case you probably would not be heard due to the limited range of the radio at that height.

Mid-channel we saw a container ship which looked huge and shortly after flew over the top of a sailing vessel, the type of which circumnavigate the world. The crew must have wondered what was happening, no doubt hearing us approach and seeing us at the last minute passing over their mast. Within 3 miles of the coast the low cloud cleared and we climbed to a more respectable 1,500ft for our approach at Headcorn.

The Shadow "Down Wind Club" would have been at home landing at Headcorn as despite numerous pilots commenting on the radio about the tail wind, nothing was done to change the runway direction and we had to endure a tail wind on both landing and on our take-off back to Sudbury.

On unloading at Sudbury, Frank and I took off for our short flight back to Wickhambrook. Angela drove the car with all the gear etc. back to Wickhambrook. Relieved of all the weight, I easily achieved 1,500fpm climb out of Sudbury on our short flight back to Wickhambrook. Some two miles before Wickhambrook we flew into the weather front which had been promised and we encountered rain - the first we had seen all weekend. My thoughts were on those Shadow Owners flying back to Yorkshire and Scotland, clearly it was unlikely that they would be making it on this day.

The verdict on the trip - excellent, but with some lessons to be learned !

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John Lord

stateside news

SHADOW OVER THE ROCKIES

11th - 25th May 1996

BACKGROUND AND PREPARATION FOR THE EXPEDITION

1. Early in 1996 LARON AVIATION contacted me concerning a charitable cross country expedition to publicise the Green Hawk Trust using a Streak Shadow. The flight was nicknamed CITYRAID USA. Laron Aviation were interested in utilizing my previous experience flying coast to coast during SHADOW ACROSS AMERICA. Early indications from the UK side of the Green Hawk Trust showed a very inflated schedule that was unrealistic and despite the advice from myself and Laron Aviation the CITYRAID USA flight did not get off the ground. During my discussions with Laron we came up with the idea of flying a Shadow microlight to the Rockies for some mountain flying and high altitude work. The original idea was to use a Star Streak which is a Streak Shadow fitted with a 4 stroke engine. The new engine was late in delivery and was not available for the expedition; the expedition was flown using a Streak Shadow with a 2 stroke engine.

2. The idea was to fly from the company factory in Borger, Texas to the Colorado Rockies and then circumnavigate the mountain range and cross from North to South. I would land at Leadville the highest airfield in the North American continent. The expedition was approved as a major RAFAT expedition and a substantial proportion of the expected costs were covered. Direct financial support was

granted from RAFAT Public Funds, RAF Central Non-Public Funds, the Sports Board Lottery, The Trenchard Memorial Awards Fund and the RAF Welfare Fund at the British Embassy. The expedition would require a portable oxygen system and most companies would only sell these units for around \$500; I eventually contacted Aerox who would supply a portable system for rental. Additionally a personal locator beacon and strobe light were received on loan from RLC Thatcham Adventurous Training Stores.

3. Approximately 2 weeks before the expedition the aircraft developed an engine problem. The aircraft was away at the Experimental Aircraft Association's major annual show in Florida. By the time the aircraft was returned to the factory little time was left for diagnosis and repair. Laron worked around all other jobs to ensure the aircraft was ready for the expedition.

THE FLIGHT AROUND THE COLORADO ROCKIES

4. The journey commenced on 11th May 1996 with a commercial flight into Amarillo, Texas and a short journey by car to Borger, home of Laron Aviation. The Shadow's engine required flight testing following the rectification work and ground runs. I undertook the flight test on the Saturday and we found the engine to be running hotter than normal but we were able to make some minor adjustments and keep the engine in limits. Early Sunday morning the Shadow was loaded up with my personal kit, spare tyres, 2 stroke oil, oxygen system, in flight publications bag and extensive survival kit. The aircraft was fitted with its own automatically activated locator beacon in an over wing locker which provided ideal storage for the survival and tool kits. The remaining kit, spare parts and the oxygen system were secured in the rear seat. For navigation and communication the aircraft was equipped with a portable transceiver and a portable GPS. Following some photographs for publicity I was ready to depart but only minutes after leaving Borger the engine water temperature rose rapidly above the maximum and I had to return maintaining the temperature in limits by throttling back close to idle. We spent the remainder of the day stripping and checking the engine. The problem was a loose impeller shaft on the water pump reducing the circulation and hence causing the overtemp. With only a few minutes of

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daylight remaining, I successfully flight tested the aircraft.

5. Monday morning arrived and so did the weather with 1/4 mile in fog, sky obscured. The gloom stayed firmly in place until late afternoon but was clearing slower at my destination. With reported weather in limits, and light winds, I flew one short leg to Dalhart, Texas arriving after only 50 minutes to find the winds all across and moderate. On Tuesday the winds were high and prevented any flying. Wednesday's forecast was for light winds increasing during the morning and becoming gusty. At sunrise I took off to fly to Clayton, New Mexico arriving 45 minutes before the fixed base operator (FBO) opened. By the time I had refuelled the winds were gusting out of limits. The forecast showed no improvement but by late morning the winds had begun to settle down to a gentle breeze. Carefully checking my destinations on each leg I flew on to Trinidad, Colorado and my first high density altitude take off. Trinidad is 5761 ft amsl and with the mid afternoon temperature of 85 degrees F the density altitude was over 9000 ft. The take off was normal with about 300 fpm rate of climb until I encountered some sink half way down the runway. The leg to Walsenburg was short but afternoon thermic activity meant moderate turbulence and gusty winds shortly after my arrival. The airfield was deserted so I had to telephone the local council to dispatch someone to pump the fuel. The winds settled late afternoon and I flew one more leg to Canon City, Colorado at the foot of the Rockies. The Shadow had flown with a fully rich fuel/air ratio as the carburetors were only ground adjustable. Now I was operating from airfields at 6000+ ft I leaned the carburetors out to improve fuel economy and power.

6. The now familiar weather forecast was predicting light winds for the first few hours increasing with gusty conditions by mid morning. Another early take off and I was trying to fly over the Kaufman Ridge into the Arkansas river valley. The winds at 12,000 ft were forecast at about 20 kts but turned out to be about 35 kts. After 30 mins I had to turn back and then spent some time flying in the ridge lift around Canon City and flying to the south of Pikes Peak which stands 14,110 ft above Colorado Springs. I was able to notice the improved performance with the engine operating at a higher temperature; however, the lower outside air temperature at

the increased altitude was causing a low water temperature and with no thermostat a cold seizure was possible. At 15,000 ft the water temperature was reaching the minimum recommended and I had to accept this as my ceiling for the time being. The oxygen system also received its first trial. The oxygen was stored in an aluminium canister supplying a nasal cannular through a variable flow valve. Oxygen flow was adjusted dependent upon the altitude. The flow gauge was a simple ball in a tube that had to be held vertically when making an adjustment; the system was good for altitudes up to 18,000 ft. The rest of Thursday and Friday were un-flyable with the passage of a slow moving cold front which promised cooler temperatures and hence lower density altitudes but little respite from the winds. I taped off part of the radiator in order to reduce the water cooling at altitude.

7. With the long term weather forecast predicting windy conditions and another frontal system later in the second week I amended the overall plan and I would remain in the eastern Rockies and fly to Leadville the highest airfield in the North American continent. Saturday morning was calm and a forecast of 20 kts headwind into the Arkansas river valley. The forecast was accurate and I flew into the valley at an altitude of 12,000 ft over ridges up to 11,000 ft. On reaching the valley I had enough fuel to continue up the valley to Leadville. The upwind valley side had been fairly calm with up-slope lift but at Leadville the circuit direction put traffic in the lee side of the mountains which was moderately turbulent with some sink. Delaying my approach for other traffic the calm winds suddenly gusted to 28 kts across causing the small Cessna to go around. Following shortly behind the Cessna, I lost several feet on final but with a close eye fixed on the wind sock I landed in a relatively calm moment. The aircraft was taxied in and tied down and the predictable high winds soon followed. The steady winds were 25 kts with peak gusts of 35 kts. Leadville is 9927 ft amsl and sits in the shadow of Mount Elbert the highest peak in the Colorado Rockies at 14,433 ft. I received a certificate for visiting the highest airfield in the North American continent and wondered if the Shadow would manage to break out of ground effect even in the early morning calm and cool temperatures! I had taken off from Canon City at 5439 ft amsl landing at almost twice that elevation. Some of the climb had been

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in gentle lift and the Shadow had been at full power for the entire journey.

8. Sunday morning and with a temperature of 60 degrees F the density altitude at Leadville was over 12,000 ft. In order to gain the maximum advantage I left the majority of equipment at the motel and only had half fuel. I would fly to Buena Vista which was 30 miles to the south, elevation 8000 ft, and then use the FBO's courtesy car to return to Leadville and retrieve my kit. I left Leadville at 0615, the Shadow climbing with ease at a speed of 200/300 fpm. I was back at my motel to retrieve my kit by 0900 after waiting one hour at Buena Vista for the FBO to arrive and open up. Back in Buena Vista, by 1000, the winds were again gusting out of flying limits.

9. Monday morning arrived and I had planned to fly one leg further west to Gunnison in the heart of the Colorado Rockies before starting the journey home. I departed Buena Vista at first light and found the winds at altitude to be about 35 kts thus preventing my movement west. I elected to return to Buena Vista and attempt to climb to altitude. The up-slope lift carried me to 15,000 ft and was moderately turbulent. As soon as I climbed above the cloud base the air became smooth and I was in lee wave lift. With the throttle back I was achieving a climb rate of 500 fpm and with 58 kts indicated I had a ground speed of 3 kts. By slowing to 55 kts I actually achieved vertical flight and climbed easily to 18,000 ft. I was prevented from climbing further by the oxygen system and Class A airspace. The return to Buena Vista was fortunate as I had left my Visa card after paying for the hangar and rushing out to fly!

10. The weather forecast for the rest of the week showed a frontal system moving in from the west with rain and higher winds. On Tuesday I started my journey home by flying down the San Louis valley and over the Sangre De Cristo mountain range. With a tail wind I flew all the way to Dalhart, Texas in only 4 flights. For the next 2 days I managed only a short local sortie around Dalhart early each morning before high winds picked up with gusts of 45 kts. The winds at Borger, home of Laron Aviation and only 60 miles away were high each day with no early morning lull. On Friday morning, the last day of the expedition, the winds stayed calm at Dalhart and Borger allowing the flight home and thus preventing Laron from dispatching a trailer to recover the aircraft from Dalhart.

11. I had flown only 19 hours with 2 full days flying. The weather had been uncharacteristically windy preventing the circumnavigation of the Rockies. However, I had flown on the lee side of some of the highest peaks in the USA, flown the Shadow at high density altitude airfields and flown up to 18,000 ft amsl. I had flown in thermal, ridge lift and lee wave and visited the highest airfield in the North American continent. Although very frustrating to sit around and wait when winds were blowing only just above limits, mountain flying can be very unforgiving to small craft and caution is advised. The Shadow demonstrated its usual reliability and outstanding performance for a microlight and the trip was completed with a strategic change in the goal based on the prevailing and forecast weather. Many individuals had a helping hand in the success of this expedition from the sponsors to many people along the route including many FBO's who got up early to allow me to take off at first light.

Andy Nightingale

letters

letter from John Wakeford,

Dear Barry,

As you may remember I have a model BD Shadow modified up to CD standard fitted with a Slipper Tank. When I presented G-MNZP for its Permit Renewal recently I was told she was within weight but that I had to incorporate MAAN 1193, Issue No. 5 modifications to the fuel outlet from the slipper tank.

When I asked Billy Brooks (C.T.O-B.M.A.A) who had any drawings he told me "I don't know"! Nobody else seemed to know either. So I drew some up myself.

I submitted a drawing to Mr Brooks and he accepted it as showing a satisfactory solution to the above in regards to paragraphs 4 and 9. I have carried out the work and obtained approval from a B.M.A.A inspector.

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I am now a legal Shadow BD with slipper tank and all mod-cons !

If you hear of any Shadow owner who needs advice on this M.A.A.N problem perhaps I can help.

Hope to see you soon on the circuit!

Yours sincerely,

John Wakeford

letter from Tony Ashmead,

Dear John,

Thank you so much for remembering to send me a copy of the Shadow Owner's Club Newsletter and I am happy to return the membership application.

My Shadow experiences are rather coloured by the fact that I have an impressive little airframe powered by a b... awful engine (*Hirth ed.*). It has managed to fly 100 hours with only one forced landing, and a complete strip and rebuild this winter seems to have worked wonders.

A few of my little variations may be of general interest. The flap lever spring is much best replaced by a leaf spring fitted between the lever and its pivot; I don't approve of bits of elastic at all! I like my canopy very much because I can lean forward without banging my nose and I think I was probably one of the first to fit a conventional instrument panel so that I could have gyro instruments within range of my half-glasses. A sheet of sound deadening material fastened to the rear bulkhead is magic for the passenger too.

My home made propeller using four precision blades improves performance all round, with a useful reduction in noise but I find the aeroplane is still too noisy and I am exploring the design of

after mufflers. My cowlings you saw at Popham; I like them and they reduce the drag 11%. Both these initiatives await the Master's approval at Shoreham. One day soon I might even achieve a permit!

Yours sincerely,

Tony Ashmead.

letter from George Webb

Dear Barry,

Lots to read in March Newsletter, notice article on "Elevator Authority". As I have always been around the max weight person some 3yrs ago I modified/installed a velcro strip arrangement which I saw on a Shadow at Bassingbourn Fly-In. Pilot B.J. seemed happy with it so I gave it a go. I can confirm that it is no ideal solution to the problem. I did have one side come off, it is not really weather proof, bombproof but it is effective. There is a down side and that is there is a tendency to float more and it does not have that steady Shadow feel in level flight. I have removed the mod and enlarged the trim plate which seemed better. I think David got it right first time. Hope this is of interest, incidentally my Sherwood Airframe is coming on very well and will power it with new Jabiru 4 stroke.

Best wishes.

George

new members

We welcome the following new members to the Club :-

Tony Ellis, Birmingham
Shadow CD G-MYIF

Graham Martin, Cambridge
Streak Shadow G-BTKP

Johan Fouche, Croydon

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Mark Cottam, Lincoln
Shadow CD G-MNVK

Tony Ashmead, Lymington
Streak Shadow G-BUTB

Frank Claydon, Newmarket
Shadow CD G-MNER

Edward Wallington, Canterbury
Building a Shadow at home.

Ian Bloys, Cambridge
Shadow BD

Stephen Wilson, Kings Lynn
Shadow G-MNZR

John Wakeford, Bexhill on Sea
Shadow

Colin Purvis, Hemel Hempstead
Shadow CD G-MTSG

John Smith, Co Meath, Rep. of Ireland
Shadow CD EI-CHR

Dave Good, Shepperton
Shadow CD G-MYPT

Roger Kelly, Golders Green, London
Shadow CD G-MTWM

Jeff Hosier, Andover

Ian Cross, Minster Lovell

Jim McMinn, Craigavon, Co. Armagh

Barry Birchall

personal profile

Danny Crosbie



Born - 11 January 1944
Educated - Headingham Secondary Modern

Married Jan in 1970 and has two sons, Danny Jnr. currently touring Australia and John living at home.

Left school at 15 taking an apprenticeship with a local builder during which he worked on the construction of the Severn Road Bridge. Says the bump experienced when crossing the bridge is the bit he did. Started his own building company in 1970 at the same time as renovating their new home. Employed around 20 people spending a lot of time travelling around the country constructing Piggeries, Poultry Houses and the like. Jan was left at home to run a local clothes shop 'Top Gear'.

A bit of a lad even in his younger days as the local constabulary could probably confirm. (*some things never change ed.*) As with a lot of young tearaways he got into cars - circuit racing with a Mini 7. Hence the necessity for panel beating ! Achieved 4th place in National Championship in 1973.

Started D & J Crosbie Engineering in 1976

A bit of an inventor is Danny with such things as 'The Goodies' Triandem Bike (TV fame as well), Welding Clamp, Orthopaedic Bed, Gates for Disabled, Mobile Phone Brackets and Flood Lighting systems including turning mechanism (to be seen at a number of football grounds). Football is another of his keen interests. As a Director of Sudbury Town Football Club finds a

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conflict of interests when colleagues are flying on a perfect weekend and he is supervising the local match, especially when certain people remind him by circling the pitch.

With so many other activities, not to forget supporting the brewery trade, it took him 18 months to build his Shadow which was completed in 1991. Completed maybe, but work is always ongoing to improve it. Some of the ideas, like the attempt at a heater system to keep the poor old boy warm when flying, keep returning to the drawing board. Others have become very popular with other owners.

Likes - Drinking, Football, Flying, Inventing and Improving Design Deficiencies.

Worst time of life when smashed a leg in a motorcycle accident having to spend 18 months in hospital and a rehabilitation centre.

Most amusing event - being chased by Sudbury Police after a skinny dipping session in the local council pool.

Says that winning the lottery wouldn't change anything. Is content with things as they are. A happy man with a big heart - a bundle of laughs but no fool.

Angela

tales from captain cook

No.5 - Down Under in Australia

"So you're the great Captain Cook, the flying ace." I winced inside at the coming implications of such a statement. "Just a regular fella that's passed his sell-by-date", I added, hastening to lower the obvious expectation. "Well David, we've got all the bush pilots from all around coming to see you perform tomorrow." Bush pilots. I don't think I slept too well that night in Australia. You don't last too long in that Country, especially if you fall into the 'Whinging Pom' category and then can't cut-the-mustard.

I'd done OK the day before, in a sawdust-floored pub in Melbourne, when a fella said "You're a

flamin' POM (Prisoner of Her Majesty), aren't you?". "Yes" I said, sounding like a posh Aussie. "What do you think of the beer?" "Tastes like piss", I told him. "Good on yer mate" and he bought me another... Hard men to a man. I'm sure if I had pronounced that it tasted 'awfully nice', he'd have stuffed a beer glass down my throat.

The day of my aerial acceptance started with aircraft appearing at our field at Dookie, below tree level. "There's another coming" someone said - all of 60' above the deck and yet another inverted. Hell, how their pilots can fly. Whatever are they going to think of me? How can one be accepted? The level seemed hard to contemplate. Bush pilots can do anything any other pilot can, with a smile and still look laid-back.

Fortunately for me, the wind gusted up to 25 - 30 MPH at the time of my Shadow display, with lots of dust. I accepted the challenge and ripped around the strip. Flying backwards at low altitude past the small crowd of aviators seemed to gain acceptance because 'Bill' offered me a trip in his 'Bill's Beauty' Chipmunk for a thankyou. I insisted that the rear cockpit had its control stick re-attached. "Scared of dying?" he said. "Yep." We took off too early now the dust storm had gone and climbed at what seemed like below stalling speed and traversed all aerial manoeuvres. Whilst pointing vertically downwards, Bill was turned around talking to me and I hurriedly asked, "Who is flying this aircraft?" "You are." This was news to me at the time, but I pulled 4G, pulling out and just missing the ground. "Don't pull the wings off." he grunted and, upon landing, a cheer went up because I'd survived Bill's display by still being able to walk from the 'Beauty' unaided. Then you're 'in'.

A sadness followed six months later, when I heard that the 60+ year-old Bill had been killed whilst slow-rolling after take-off. All that experience gone...

David

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technical

Prop Check

For sometime I have been aware that I am not able to achieve 6,200 rpm on the ground on my Streak. Partly as a result of an article in Microlight I thought it was time to check the prop.

I have also been troubled by a droning noise in the cruise at 5,000rpm especially when I have a passenger. I say a drone as opposed to a vibration caused by prop imbalance. It strangely only occurs when flying with a passenger and one theory is that it is caused by the angle of attack coupled with some differences in the prop blades.

Using a purpose designed protractor designed by Frank Claydon it is possible to accurately check the angle of the rear of the blades. One blade was 20deg, two at 19.5deg and the other at 19deg. These have all been adjusted to 18 deg in an attempt to achieve 6,200rpm.

Initial tests reveal that it is now possible to achieve 6,200 rpm on the ground and the performance in the climb has been transformed. But what about the fuel economy I hear you say ! Well my fuel flow meter confirms that I appear to be using less fuel for the same revs.

As for the drone, it is now less but still evident.

Stephen Hicks & Tim Nicholas have also experienced a drone in G-MEOW which they have cured by attaching a 6" square of neoprene on the fabric covering the box section above the prop. The cause of the drone appears to be the fabric resonating in the turbulence of the four bladed prop.

John Lord

Detached Fuel Filter

Due to a leak in the rear fuel tank at the top above the filler I had cause to remove the tank.

On inspection of the inside I found that the fuel filter, which should be bonded to the floor

covering the outlet, had become detached and was floating around in the tank. More serious was the fact that the epoxy used to fix it had broken away and it had the consistency of rubber, probably being affected by the fuel. These parts could easily get into the outlet causing a full or partial blockage.

The aircraft is two and a half years old and has flown 105hrs. The engine has oil injection and the fuel used has been Shell Unleaded.

I have checked with Ciba Geigy who confirm that the Araldite 2005 used will be affected by fuel. There are however newer types of epoxy which are not affected. I would suggest that this is used in future for bonding the filter to the floor of the tank.

Whilst the inside of the tank is resined to prevent the fuel affecting the bonding on the tank, it is not possible to effectively resin over all of the epoxy holding the filter. The fuel can get around the back where it is not possible to resin.

I would recommend that the filter is checked on both the rear and slipper tanks. The simplest method is to drain the tanks and gently push a thin rod in the fuel outlet. If it meets with resistance then it is reasonable to assume the filter is still in place. Take care not to push too hard for fear of piercing the gauze on the filter. If there is no resistance then unfortunately it has become detached and will need to be removed. The rear tank can also be visually inspected through the filler whilst the only option on the slipper is to remove the fuel gauge sender.

Replacement of the filter is somewhat more difficult and probably requires the fitting of an inspection/access panel. I am also investigating a fuel outlet which incorporates a gauze filter on the inside which would be the best solution. If anyone has had this problem or knows the source of a suitable outlet/filter please give me a call.

John Lord

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crosbie's corner

Wing Lockers

I am pleased to report that the Wing Lockers have been approved for the Shadow series. The approval came just in time to enable me to take Jan, my wife, to Belgium. We were able to take a tent, two sleeping bags, change of clothes, toothbrush etc., and a 15 litre fuel tank, without any problems and without exceeding the 5kg individual locker weight. The fuel tank was a collapsible one used for conveying fuel from the pump to the aircraft, just in case you are wondering!

I can supply the Wing Locker kit with instructions for £400.00 + vat. Delivery is 2-3 weeks from receipt of order.

Folding Wing

All is looking good for the Folding Wing system as featured in the last newsletter along with the Wing Lockers. By the time this goes to print I expect to have approval for the Shadow series.

The kit price for the Folding Wing modification will be £725.00 + vat which includes all the paperwork for the submission to the BMAA. Please note that you will have to apply to the BMAA for approval which will cost £30.00.

Availability of the kit is 2 weeks from receipt of order.

Side Windows

I can also supply a kit for the side windows also featured in the last newsletter. The kit comprises of the pre-cut polycarbonate windows, the rubber seal and the rivets together with a cutting template for the shroud. The cost of the kit is £65.00 + vat. If you want us to supply and fit the windows, the cost is £135.00 + vat. You can fly the aircraft in to my strip but we do need a day to carry out the work.

The Wing Lockers and the Folding Wing have so far only been submitted to the BMAA and

therefore any Streak owners will have to apply to the PFA for the modification.

The Side Windows have been approved for both the Shadow and the Streak.

For further information on the above please call me on 01787 375202.

Danny

fly-in - reports

The principle of having a primary and secondary date for the fly-ins certainly paid off, as this year all of the fly-ins were attended on the first choice date.

Deanland, E.Sussex , 21st April 1996

Member Stanley Freestone kindly arranged for the Shadow Owners Club to visit Deanland to visit Deanland which shows great hospitality in the form of John Wakeford, SOC member with Stanley and their Shadow G-MNZP.

My wife Susan kindly drove to the airfield and provided a buffet on a fine sunny day whilst Roger and I flew SW from Headcorn in G-MVVT to meet Derrick Brunt from Plaistows Farm enjoying himself.

Later after we had left, leaving a donation to the World Wildlife Fund a red Streak appeared (Dave Grint from Shoreham via Brooklands, Surrey).

We thank Mr Brooks for his hospitality to the SOC and hope to return to this attractive airfield in the future.

Barry Birchall

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Sudbury, 2nd June 1996

The weather was kind and some 12 Streaks/Shadows made the trip, plus two weightshifts and a Goldwing flown by fellow Shadow pilot Frank Claydon. There was much hilarity, as with runway running out, the bomb doors opened on the Goldwing and out came Franks feet to assist in the braking process.

All were well tucked into a superb barbecue when the dreaded phone call came. Due to fuel starvation - well that's another way of saying run out of fuel!, a Shadow had made a forced landing in a sugar beet field somewhere near Cambridge. The pilot who does not want to be named for fear of a landing fee being demanded by the farmer, admitted that he had mistaken Haverhill for Hadleigh and had become uncertain of his position. Having only a rear tank and little knowledge of local airstrips, the best was made of a poor situation. There was spare fuel on the rear seat but before filling up the pilot thought it best to phone up Danny and advise the situation.

Not ten minutes after the call from the pilot, who had walked to the nearest house, a phone call was received from Cambridgeshire Police saying that they had found a aircraft and was there a reward ? The pilot had the foresight to leave Danny's phone number on the seat.

Gordon Sargent, who has intimate knowledge of the area, went in search of the downed Shadow and having found it, escorted it to Wickhambrook where further fuel was taken on before the short flight to Sudbury. They arrived just in time for the second round at the barbecue. No damage was done to the aircraft, only a small dent in the pride of the pilot.

The lessons to be learned from this :-

Always plan to make a landing when down to 15 mins fuel.

If you make a forced landing and have to leave the aircraft, leave a phone number where the police or somebody can call.

Always travel with a mobile phone - this reduces the need to leave the aircraft, cows have been known to eat an aircraft which was otherwise undamaged in a forced landing.

Always fly with a GPS - it reduces the chance of becoming uncertain of your position.

Always work on the rule that if you do fly with a GPS and it stops, you will be totally lost !

Old Warden Fly-In, 12 May 1996

The weather was kind for this fly-in and saw the following aircraft make the trip, G-MWTP, G-MJVF, G-BVFR, G-MNER, G-BVOR, G-BUWR, G-MWDB, G-MVRE, G-MYZP, G-MVHD, with Barry in his Ford Galaxy "Maxilight".

Interesting was the fact that the first aircraft from CFM, 002 was flown in by Jacob Cook and the most recent being the Super Shadow D-Series flown by John Pearson. Another "old bird" also made the trip, 008 owned jointly by Frank Claydon and Gordon Sargent and based at Wickhambrook near Bury St Edmunds. 008 has a Rotax 462 water cooled powerplant and achieves superb fuel economy. It was re-built by Frank and Gordon who purchased the wings and tail section from the original owner. The original fuselage was heavily modified for survey equipment and was not usable.

A new club within the Shadow Owners Club was formed at Old Warden, The Downwind Club ! Several members seemed confused by the windsock and landed down wind.

PFA Rally, Cranfield, 5-7th July 1996

A total of 15 Streak and 16 Shadows made the trip to the rally.

G-MMWT	Haydon Block
G-MNER	Frank Claydon
G-MTDU	Mick Jones
G-MTHS	James McMinn
G-MTHV	Paul Walker
G-MVPK	Geoff Dalton
G-MVRE	Dave Chamberlain
G-MWDB	Derrick Brunt
G-MWFB	Dave Cripps
G-MWPP	Bill Yates
G-MWTP	Danny Crosbie
G-MWYD	Martin Copland
G-MYIF	Tony Shellis
G-MYNA	Peter Walker
G-MYZP	John Pearson
G-BRSO	Dave Smith
G-BSRX	Raymond Proost

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G-BTGT Nigel Howard
G-BUTB Tony Ashmead
G-BUWR Tim Harvey
G-BUXC Jeff Hosier
G-BVLF Brian Johnson
G-BWOZ Heinz Witt
G-GORE Dave Gore
G-MEOW Tim Nicholas
G-OPIT Wayne Kilner
G-ORAF Gary Taylor
G-RINT Dave Grint
G-SHIM Graham Shimmin
G-WESX Dari Sagar
G-WHOG Brian Cannell

A fine buffet was prepared by Pauline Batten and a donation of £15.00 was made by the Club to the Macmillan Cancer Relief Nursing fund in lieu of any gift to her good self.

advertisements

For Sale.

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Duxford, 18th August 1996

The following aircraft made the visit to the Imperial War Museum :-

G-MWDB	G-MTSG	G-MZBS
G-MEOW	G-BVOR	
G-BUWR	G-MNZR	G-BVVT
G-BSOR	G-BUXC	
G-TTOY	G-WHOH	G-MTWM

The temperature was 28deg plus which made flying interesting, riding the thermals. It was a day for keeping a close eye on the water temperature for those with Streaks 582's without the radiators being spaced out. Members were treated to several flying displays as various Duxford aircraft departed and arrived from doing air displays in other parts of the country.

Tillingham, 25th August 1996

A regular fly-in for the Shadow Owners Club this event seems always to attract the worst in weather and this year was no exception with a rather strong westerly wind putting off several members. There was however the usual strong support from Plaistows Farm near St Albans namely :-

G-MWDB	Derek Brunt
G-MYZP	John Pearson
G-MTSC	Colin P.
G-MVRE	Dave Chamberlain
G-MVHD	Susan Groves
G-MTWM	Roger Kelly.

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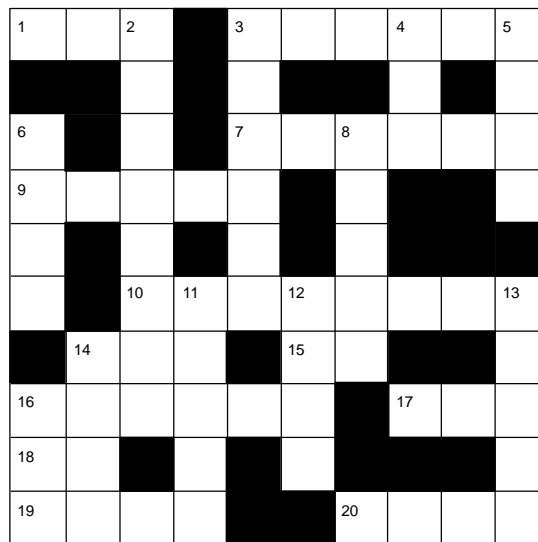
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SHADOW CROSSWORD NO.1



Across

1. Ingredient necessary to fly.
3. Take off and landing.
7. Needed before flying.
9. One who is in control.
10. Lift offered by thermals.
14. Needed to fill in log book.
15. Where you go on take off.
16. Keep the dirt out.
17. Who we are.
18. Where nose should be when landing.
19. Ideally where airstrip should be.
20. You cannot fly without it.

Down

2. These clouds can keep you on the ground.
3. Used to take the strain.
4. Aid to reaching destination.
5. Necessary container.
6. Unwanted rotation.
8. Could be grass or air.
11. Get into cockpit.
12. Take one if you want to go back.
13. Flight to the pub.
14. Boom tube you can smoke.
16. Goes with Florida sun.

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compiled by *Angela*