



AALOSG Newsletter No. 13 July 09

[AALO Supporters' Group Newsletter](#) [20/7/09](#)

Nic Holman (Pres.)

Phil Kingsbury

Clive Richardson

Charles Scott

Max Waldron (Founder Member)

AALO 10th Anniversary Issue

Greetings to friends and supporters of XS422. It has been a while since the last newsletter and for that I must apologise. As a voluntary project, while ideally the team would like to be making XS422 our number one priority, we all have day jobs ... some more secure than others and real life has, latterly, rather taken over.

While it has not been so easy to find the time to report the progress being made, progress is being made, both in the UK and more importantly in the hangar in Mississippi. But more of that later...

As I write this newsletter it would be fair to say that the restoration of XS422 has reached, somewhat, a financial impasse. Having done outstandingly well this far and achieved completion somewhere in the region of 80% complete, we are now entering the most expensive stage of the return to flight. While the fund raising undertaken by the supporters' group and the small, but generous, donations received from time to time have sufficed until now, we really need a major sponsor or significant donation to complete what we have started.

In the current financial climate the appetite for spending money on anything other than essentials is seriously dented and unfortunately aircraft restorations like ours doesn't fit the 'essentials' category. However, the AALO goal to see XS422 fly is as strong as it always has been and we continue to explore every avenue of possible financial assistance for the project. The engineering team continue to donate their time and skills and we continue to enjoy the support of Andrew Brodie, our project champion, who's consistent donations enable the project to keep ticking over.

AALO exec, Max Waldron, comments, "It has been 10 years next month since a dirty hulk in a rotten container arrived at Stennis. What has been achieved is remarkable. There are plenty of 15-year aircraft restoration projects out there and we are not alone by any means."

There is every continuing confidence that we will reach journey's end but, as always, a good-sized financial donation will seriously accelerate the project.

The executive steering committee are due to meet very soon to thrash out a strategy for the next 12 months and I'll report back to you either through an extra newsletter or through the website.

We have a small electricians trip planned for October and that will most likely go ahead as planned with a loose game-plan to significantly advance the cockpit refurbishment. Following that a change of course is mooted: to address the serious need for major funding.

Instead of rushing into a further, larger team visit to Stennis instead the favoured approach is that any funds are predominantly directed towards marketing the project and PR.

It's hoped this concerted 'push' will flush out some interested parties, either in the UK or the USA.

This strategy is not intended to grind the restoration to a halt; rather background work will continue, such as the sourcing and restoration of parts together with the activity of acquisition and proving of cockpit instruments.

As the situation can change on a weekly basis we may be able to plan an early 2010 trip, or indeed a late 2009 visit to Stennis if funding is found.

The SG will continue to raise funds and hope to continue enjoying your support.

Bruntingthorpe 3rd August 2008

On the 3rd of August the SG was at Bruntingthorpe for the LPG's Jimmy Dell memorial day. The LPG put on a great show with a total of three Lightning runs. Combined with an AALO working weekend to raid a few more essentials from our spare wings it meant we had a great compliment of engineers in attendance in the Gazebo (courtesy of Pat Kingsbury).

With a bumper crowd of Lightning aficionados in attendance and a good selection of merchandise and aero jumble to sell we had a cracking fund-raising day, making just over £500.

Ably assisted by Phil Kingsbury and Nicky Tibbells as well as Mike Crawford, Geoff, Milton & Rob Barker, we were more than able to deal with the volume of visitors and the growing interest in XS422's progress.

Jon Roth made it across from Sweden and Andrew Brodie was also in attendance.

For the first time I was permitted some 'microphone time' and able to share our progress with the crowds, via the PA system.

Dave Hurst Donation

The raffle prize, a wonderful Ronald Wong print of a Lightning passing fast and low over Binbrook runway, was won, rather fittingly, by two of our SG members, Mike and Linda Cartwright.



I'd like to single out Dave Hurst for huge thanks in this newsletter. We had the pleasure of meeting Dave and his son Chris at Waddington back in July and he was generous in promising us some of his surplus Lightning memorabilia to sell and raise funds for XS422. I met up with Dave *en route* to Bruntingthorpe on the 2nd August when he handed over a stunning Ronald Wong print plus a number of other pictures, as well as a couple of die cast Lighting models.

On one of our best air show Sundays ever at Bruntingthorpe, we were able to raise £250 from Dave's donated items, including funds raised from the print raffle.

A great boost to funds and many thanks, Dave, for your generous support.

[If anyone else has any items to donate that we can sell to raise funds then please get in touch.](#)

November 08 Trip to Stennis

Led by Geoff Commins the November trip was the culmination of no less than three trips to Stennis last year and a sure sign, if one were needed, that there is no let up in the efforts to get XS422 airworthy.

Attending, along with Geoff, were Mike Crawford, Dave Dunn, Gary Hurst, Roger Winkworth & Andrew Brodie.

The team were on site for around 2 weeks and a great deal was achieved. Their arrival coincided with that of the newly-refurbished instrument panel (to John Watson's credit) and so that was Dave & Gary's main focus as the team electricians.

However, before the arrival of the 'A1 panel' the first job on the cards was an electrical assessment of the Ventral Tank; this included the inspection, as far as possible, of the power cables, the capacitance units and coaxial cabling. Capacitance units are used to indicate the fuel tank's contents. The inspection went well until a fault was found on the high-level float switch circuit, which then required access to the cabling.

Several attempts were made to gain access to it via the Outward Vent Valve (OVV) but the access was very restricted and, after much swearing and sore fingers, trying to get to the float switch's cable via that it was decided that, since the likelihood of getting it back on was virtually zero, the larger access panel section would have to be removed.

With approx 300 nuts and bolts to undo it took the non-electrical team most of a morning to remove the panel but once off the switch was viewable, albeit by using a camera under the lip of the tank! With the offending cable now reasonably accessible and after some further diagnosis it was concluded that the switch was serviceable and it was the cable connecting it that was unserviceable and giving some very strange resistance readings. The cable was replaced, along with the OVV cable which was exhibiting some external damage and their circuits successfully tested.

A further two days of work then saw the tank emptied of residual fuel; the old PRC cleaned off and resealed with new PRC with the large access panel re-seated, along with the incredible number of nuts and bolts.

With the rest of the boys preoccupied with the Ventral Tank, Gary & Dave got back into the cockpit work. The refit of the Instrument (A1) Panel was not all plain sailing; partly, it transpired, due to a slightly poor fit on the IFICS crate that sits at the top and in the middle of the panel. Further investigation showed that the new rail, fitted on the previous trip had not had one edge chamfered as per the opposite rail. This was corrected and the crate was able to be properly located, allowing the proper fitment of the A1 panel.

Once fitted and connected, Dave & Gary began sorting through the mass of plugs and placing them through their correct position on the panel. Dave's tour of duty over it was then left to Gary to start functioning the panel.

This started with some minor lighting systems and progressed on to the flap indicators and combined position indicator, finishing off with the undercarriage position indicator.

The 28V Power Supply, kindly donated by Bill & Wendy Bell, was then connected into the AC/DC supply panel to simulate power conditions to the cockpit.

A number of bulbs were found to be unserviceable, but the majority of the circuits tested were satisfactory. The Flap indicators, Hydraulic Feel Isolate, Port and Starboard Undercarriage indicators and the Control Position Indicator circuits were tested with only minor problems found.

Gary reports: "It was nice to see electrical power coursing through '422 for the first time in several years!"

Over and above the electrical work Geoff was occasionally allowed into 'the office' and more work was carried out on the cockpit sidewalls, which are nearing completion. Phil and the team in March will no doubt continue this work.

Work was also continued around the aircraft to complete various outstanding tasks including work on the Air Turbine Gearbox and the fitting of a total of 4 of the heat shields.

Along with assisting the rest of the team Roger's non-engineering skills were put to good use with some essential 'husbandry'. The rest of his trip was devoted to upgrading the look and usefulness of XS422's corner of the hangar. This entailed work on most of the service bay work benches, as well as cabinets and cupboards. The scaffolds, ground equipment, access ladders, and grind-wheel unit all got a clean, service and paint in 'Lightning Red'.

As a result we not only are a professional operation at Stennis but we look a professional operation.

(My thanks to Gary, Dave & Roger for their contributions to this write up) .

Now, look overleaf for some good pictures from the latest trips!

November 2008 Photo Gallery

A small selection of the vast photo album shot by the team...



L to R
Mike Crawford,
Roger Winkworth,
Dave Dunn,
Gary Hurst,
Geoff Commins &
Andrew Brodie

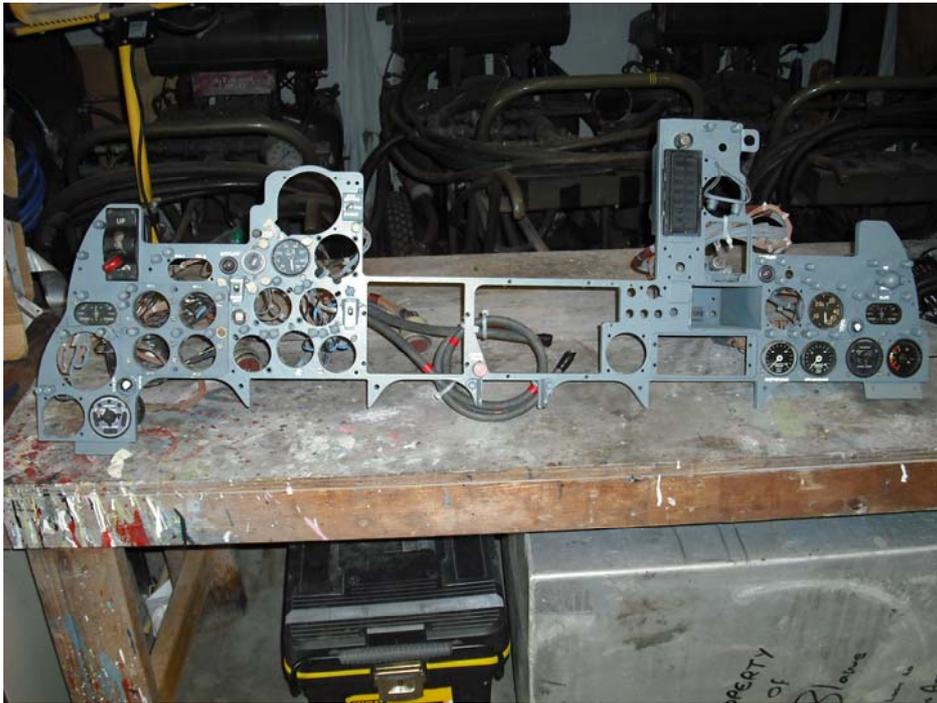
Photo. Andrew Brodie



The ventral tank with the two part top panel removed. Geoff and Gary on the electrical test.

Below shows before and after the deep clean.





The Instrument panel, pre-fit & in the cockpit.

Both photos. Gary Hurst



Another view of the fitted A1 panel.

Photo Mike Crawford



At left - three green lights

Photo. Gary Hurst

March 2009 Trip...

Back in late March a small but perfectly-formed team headed out to Stennis for our first main visit of 2009. Very different timing to the trip meant we were still a little in the rainy season but the weather was generally favourable.

With a good mix of skills to the team a good variety of work was achieved on XS422 and we had the additional bonus of having Simon Johnson on site for a few days from his Chicago home.

Chief Engineer, Phil Wallis had set a number of objectives for the team and many of these were achieved.

Rod worked with Simon to continue the refurbishment of the cockpit wiring and installation work. Their goal was also to benchmark the cockpit electrical work outstanding and produce a report that could be viewed, used and updated by future electricians on site.



As with many aspects of the restoration a great number of people have worked on XS422's cockpit over the year and it is an important part of the work to keep up to date with who's done what and when. This will also be part of the paperwork for future FAA certification. Phil has put great store in the check 4 servicing and the paperwork that it necessitates.

Apart from furthering the great work carried out by previous electricians Rod and Simon were able to give the team a very visual milestone by functioning the navigation and anti-collision lights on the aircraft. This was achieved from an external power source but through the circuits in the aircraft and controlled from the cockpit. Another tick on the restoration sheet (see pictures).



The following tasks were also carried out, by Phil, Geoff and the team:

- Independent Check on ATGB.
- Status check – Starter System.
- No1 Engine Bay – Independent Assy & Locking.
- Complete Propulsion Check 4 Servicing Inspection Cards as far as practicable.
- Hydraulic Systems – Function as far as practicable.
- Cockpit – Synchronise electrical versus mechanical effort on cockpit & with Lower rear bulkhead – examine/scope work outstanding, continue refurbishment.

The other major work that Max and Geoff undertook in particular with assistance from Phil was to work the leaks to the fuel systems, re-establishing actual leak rates and then effecting repairs where necessary.

Lightnings in RAF service often had ongoing leak issues and so to have a few on XS422 is not unusual and not a cause for panic. After some considerable and hard work from 'Mr PRC', Max, the picture at the end of the trip was a very happy one with just one bolt area to address on a future trip.

I was also able to spend some time pursuing some of our local contacts and growing our relationships with local businesses and individuals. The residents of southern Mississippi certainly know we exist and they'd love to see us succeed.

On our next trip we have an invite to be interviewed on the local ABC news station so that should boost public awareness.

Donations ...

Yet again I'm pleased to announce that since the last newsletter we've received a couple of significant donations to the restoration funds. All donations, regardless of amount, are the lifeblood of the project at the moment so we're particularly grateful for the following;

Jon Roth, a charter member of the project and current majority sponsor of our hangar rent, was good enough to make a further gift to the restoration of \$4900 just before Christmas.

Once again, John Horrod has blessed us with his donations, two since the last newsletter, totalling £500. To date, John has donated well over £1000 to the project.

It was with great pleasure that we were able to award him one of our polo shirts after meeting up at Bruntingthorpe - a small token of our appreciation.

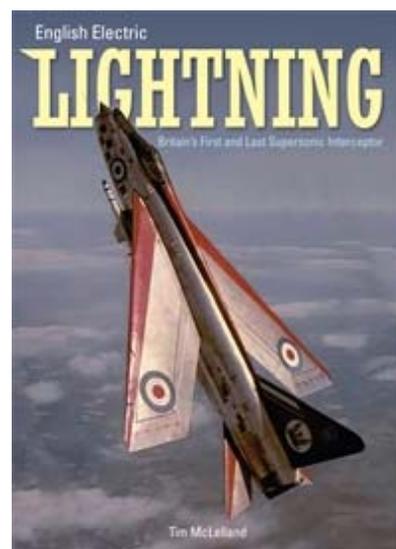
To both Jon & John, thank you for your continued support.

AALO in print ...

Author, Tim McLelland, whose previous subjects have included both Hunter & Vulcan, has more recently been focussing his attentions on the Lightning. The result is the Ian Allan Publication, 'English Electric Lightning – Britain's First & Last Supersonic Interceptor'.

With around 250 colour and mono photographs, of particular note for supporters of XS422 is that Tim has kindly featured the restoration in his book and it gets a good treatment.

This handsome work is due for publication in July and should retail for around £35. We hope to have a couple of copies later in the year to auction for the project.



Waddington 2009 ...

Phil Kingsbury and I made our annual pilgrimage to Waddington a few weeks back for what turned out to be quite a 'Lightning Waddington'. Our friends in the Lightning Association were in attendance as always, but we also had the LPG and Dave Blisset and family in attendance. The Lightning recently secured on loan to 5 squadron was also on site, although regrettably a static display only.

With a bigger tent this year, kindly loaned by Phil's wife Pat, we were able to present our merchandise as well as exhibiting many of our restoration photographs, both of which proved popular. We made a lot of new friends and certainly spread the word. We were also able to raise in the region of £600 so many thanks if you donated or bought from us and helped boost that figure.

We pioneered our new 'Sound for a Pound' campaign with instant success and that raised nearly £200. With the cost of setting it up covered all future donations will be 100% to the restoration.

Interesting we had a lot of folks wishing us well with our endeavours but failing to donate or buy any goodies. We need to find a way to convert the good wishes into funding.

There was a really good turn out again this year so we'll look forward to attending next year.

Bruntingthorpe...

We hope to be joining the LPG for their next Lightning Day on **Sunday 26th July** ... in the sunshine ...

All being well, a pairs run is on the cards and 2 singles.

Come along and donate a pound into our new campaign.

LIGHTNING 21ST ANNIVERSARY DAY Bruntingthorpe Airfield, Leics **Sunday 26th July 2009**

Double Streamed Lightning run plus two single runs. Also Canberra, Hunter, Buccaneer & JP runs



XR728 'JS' arrived at Bruntingthorpe 21 years ago. Come and celebrate with us.

See the new front doors on the Q-Shed.

Lightning Souvenirs, DVD's, Prints & Refreshments.

New DVD's - Lightnings at Binbrook Vol 13 & 14,

Lightnings at Warton Vol 1 & 2 available.

All items subject to availability. Disabled parking available.

Adults £12

Children & OAPs £6

Family £32 (2 adults & 2 children)

www.lightnings.org.uk

Enquiry Hotlines:

01636 700482

01234 378827

Gates Open 10.30

Shoreham...



It's turning out to be a reasonably busy air show year for us and we're delighted to announce that we have been invited by the organisers to attend the Shoreham Air Show on the 22nd and 23rd of August. This is a hugely generous gesture and means that, after insurances, any money raised goes straight to XS422.

Although in past years we've done the aero jumble at Shoreham we've not had the pleasure of attending the air show.

As most of our regular shows are up north in 'Lightning Country' this will be a great opportunity for many of our southern-based supporters to catch up with us.

Maybe the Vulcan will fly also ... who knows?

October 2009 trip to Stennis ...

As mentioned in my introduction, the planned October Electricians Trip to Stennis is still very much on the cards, although it may be the last visit to Stennis for a few months. Rod Barker, together with Geoff Commins, has been doing commendable work collecting additional cockpit instruments from some (sometimes) unlikely sources, and Rod is working to bring all the instruments up to serviceability. These instruments will then be shipped to Stennis for fitting.

It's hoped that 3 or 4 electricians will make the trip.

And finally, the website ...

Job done, work almost complete. If you haven't recently visited our website: www.lightning422supporters.co.uk then please take a look at the new and, hopefully, far more informative site. I'll be constantly adding to and updating the new site and in a short while hope to have a really very representative photo gallery up and running.

New features coming soon will include an online shop.

We've also signed up to Google's 'adsense'. This means we will be allowing some limited advertising on the site, for which the project will be paid for anyone who clicks on one of the ads.

We've assured Google we won't be clicking on the links ourselves, but there's nothing to stop our supporters doing that.

Thanks as always for your support and we'll let you know how the funding quest goes.

(Newsletter written by Nic Holman & edited by Phil Kingsbury)

Nic Holman

SG President

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