655 Maintenance & Preservation Society

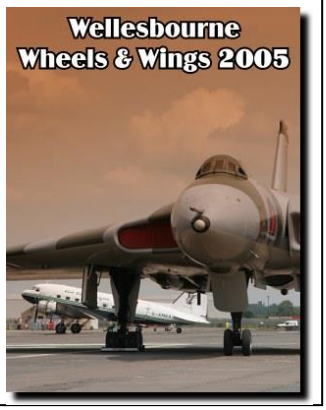
Issue No. 14 Winter 2005

Wellesbourne Wings & Wheels 2005 Review

Army Blue Eagles Display Team Arriving at Wellesbourne Mountford for Wellesbourne Wings and Wheels

IN THIS ISSUE……

Right – XM655 with Air Altanque's DC-3



2006 XM655 TAXI RUN – SUNDAY 18th JUNE

ENGINEERING REPORT
By Derek Powell

From an engineering point of view the run up to our fast taxi day went very smoothly with 655 in the best of humour. The only really unexpected blip was the failure of the co-pilot's Air Speed Indicator. This was detected on a routine test and was fixed by the replacement of the indicator unit. We are fortunate that **C.F.S Engineering** at Baginton maintain and calibrate our indicators and pitot/static test equipment which is something we do not have the facility to do. What was outside our control was the very heavy rain which flooded our entire site to a depth of nearly two feet in places. Fortunately, this occurred on a Saturday when we were present but unfortunately no one had the time to take a picture of the entire engineering team, with trousers rolled up, moving the contents of the workshop above the flood line, knee deep in very cold water.

Before the taxi run, the paint gang had managed to repaint the starboard air intakes right down to the engines which is a considerable achievement in cramped and uncomfortable conditions. They had hoped to do the port side as well but the weather got the better of them.

The taxi run, including the full rehearsal on the Saturday went off as planned with the aircrew expressing themselves satisfied with 655 and reporting only a couple of minor snags. This is a tribute to the enduring quality of the Avro product and especially to the engineering team who do such a superb job.

After the high of the taxi run it's back on the treadmill and on with the more routine, but absolutely essential, maintenance and preservation tasks. In June we did however find time to do a little wheeling and dealing. Barry Parkhouse of **Parkhouse Aviation** had been contacted by one of our members and he agreed to part with three nosewheel jacks for a very nominal sum. While in the buying mood we also purchased a second bomb hoist which the owner had surplus to requirements. This gives us a source of spares for our unique piece of Vulcan ground equipment.

As an incidental to the jacking of the aircraft, earlier in the year, we redefined panic when one of our jacks refused to retract with 655 stuck firmly up in the air and the wind getting stronger by the minute. Only some very hard work by all the crew retrieved the situation and the aircraft was returned safely to earth. A faulty valve inside the jack was the cause of more than a few grey hairs.

Our ground equipment is of the same vintage as the aircraft so it is hardly surprising that it can be a bit troublesome at times and needs constant attention but is always at the back of the queue. Our famed "one man" Vulcan towing arm has always needed at least 5 people to remove and refit with everyone counting their fingers at the end. No More. Eric Ranshaw has replaced all the broken bits using his lathe and the towing arm functions as advertised. On our last run day the visiting crew chiefs only gave us 7 out of 10 for our ground equipment so we are hoping to improve on it this year.

We have still not managed to replace our Houchin GPU which is a bit disappointing but **Steve Moore** has sold us another old unit which we can use for spares at a very good price and delivered it FOC. In an effort to prolong the life of our GPU, Andrew Cardus has spent many hours manufacturing a very impressive RO/RO shelter for it which should protect it from the worst of the elements.

Work has also begun to secure a further supply of fuel for next year and we are hopeful that we will be able to find a supplier who will assist our cause with a generous discount on the price!

Engineering report cont'd

While this work was taking place it was discovered that we were leaking fuel from the region of the starboard No1 tank. Investigation showed that the fuel was coming from the pump assembly. The contents of the tank were pumped into the wing tanks and the complete assembly removed from the bottom of the tank. This is a fairly large unit which holds both fuel pumps, the associated pipe work and the solenoid valves, with all the gubbins being fixed to the baseplate. We quickly found that the culprit was the baseplate itself which had corroded through and was therefore scrap. We were very fortunate in having a spare assembly which came from the Cardiff machine when that was scrapped. Serviced and tested it was fitted to No 1 tank and it worked first time.

This episode showed the value of the electrical test bench which we have built over the months. Previously the only way to test a piece of electrical equipment was to fit it to the aircraft and try it, not a very satisfactory solution particularly with things as large and difficult to swap such as the PFCU's. We are now able to bench test motors, pumps, relays and indeed anything using 28 volt DC or 200 volt 3 phase AC supplies.

In August we received another visit from the local vandals, those mindless morons who have turned damaging property into a national sport. Again the UHF aerial on the top of the aircraft (which was replaced not long ago) was damaged in the attack. I would like to grease the area in the hope that they would slide off onto the concrete but I can't afford the compensation which would be undoubtedly given to the "victim".

While all this has been going on, the paint gang has repainted the port side engine air intakes, a job which was held up by the weather earlier in the year.

Over the past few weeks we have been looking into the fuel gauge system which has been throwing up some wrong or intermittent readings. These seem to have been largely caused by poor connections particularly around the small junction boxes which carry the tank contents signals via small coaxial cables. The big problem has been finding the boxes which are described in the AP as being "located near the tanks". This of course narrows it down to about 75% of the airframe.

The replacement of the jet pipe end caps is our priority job for the foreseeable future with refurbishment of the separator units on the main undercarriage going on in the background.

Talking of the main undercarriage, we are able to report that progress is being made on the overhaul of our failed liquid spring by **Messier-Dowty Services.** The hold-up was caused by the lack of suitable spare seals as they simply did not exist and the material which they were made of was no longer in production. To cut a very long story short we have received the most fantastic support from **Messier-Dowty Services, Messier Military Spares and Messier-Dowty.** Their patience with my continual pestering and their perseverance with our problem has been little short of miraculous. On top of this, they have very generously agreed to sponsor us to 75% of the £1000 which it is costing to have the 5 seals made. It will still, however, be March 2006 before the seals are manufactured which gives an insight into the logistical and procurement problems which are being faced by the VOC.

****STOP PRESS**** We've got a new tug! As we go to print, a Douglas Tugmaster is on its way up from the Britannia Aircraft Preservation Trust at Kemble from whom we've acquired it. It no doubt needs a little TLC but it's known to be a good runner and fits in well with the era of our other equipment and 655 herself.

655 MaPS News

Away from the technical stuff, the aircraft has been attracting attention from a variety of groups and we have been pleased to receive visits from a wide range of people wishing to see XM655.
At the beginning of July we were host to a group of clients of **Baker-Tilley** which is a firm of business consultants. Although small in number there was considerable interest in the aircraft and we were in receipt of a generous donation from **Baker-Tilley** themselves.
Also in July we had a visit from a group of motorcyclists. No ordinary bikers these. They are a group of volunteers who provide an emergency delivery service for the rapid (very rapid) carriage of medical supplies between hospitals and doctors. (The leader of the group worked with me on Victors at Gaydon so we go back a bit…….)
August was a busy month for visits with three groups coming to see us.
The Wolseley Car Club were first and they came en masse to have the cars lined up and photographed in front of 655. We were rewarded with a very nice front page photo in their house magazine.
Next we had an evening visit from the Shottery Village Association. It is good to see local people taking an interest in what we are doing and helps to spread the word in the neighbourhood. When you make as much noise as we sometimes do you need all the friends you can get!
For the last visit we were able to welcome a whole coach load of people from the Bruntingthorpe area. Now where have I heard that name? There was some serious discussion here about relative merits but I think we won the day.

In September, we treated ourselves to a barbeque down at Wellesbourne for all the workers and their families as a thank you for the many, many hours of toil and for the patience of the Vulcan Widows.
Naturally it persisted down for the whole day but that did not dampen the spirits or drown the conversation, nor did anyone seem to lose their appetites.
Many thanks to the ladies who prepared the food and to our volunteer cooks who kept up an endless supply of goodies. Thanks to everyone for turning up in spite of the conditions.

I early November, 655 MaPS went ‘on the road’ to The Boulton Paul Association open day in Wolverhampton. Armed with a table and numerous photographs plus a few choice pieces of merchandise, Derek, Ruth, Mark, Jan and Gary were able to pass information regarding 655 MaPS and work being carried out on the aircraft to visitors on the day.

Next year if all goes well with XH558 we will be tasked with providing a serviceable aircraft not only for our own taxi event, but for the training of the aircrew who will be responsible for putting the aircraft back into the air. We know that this will stretch our resources to the limit but we are determined to do our very best to make it happen.

******The Committee of 655 MaPS wish all our members a very Happy Christmas and a Prosperous New Year******

Wellesbourne Wings and Wheels 2005

After six months of planning, 655 MaPS were delighted to welcome nearly 2000 enthusiasts to Wellesbourne Wings and Wheels 2005 on Sunday 19th June in (pre-booked) glorious hot weather.

Final preparations for the big day actually start on Saturday with a small scale practice and taxi to confirm aircraft serviceability and to begin to set up the airfield. From 7am on Sunday members of MaPS and the exhibitors start arriving, ready for the first members of the public at 10am. Those who were able to get in early were treated to a low speed taxi by 655 just before 11am which enabled her to be repositioned on the cross runway prior to the main event. At just after 1pm the crew - Squadron Leader (RAF Retired) David Thomas, Wing Commander Mike Pollitt, AEO Barry Masefield plus 'guest' pilot Al MacDicken and our own stowaway James Partridge - began the start up procedures in preparation for the high sped run. At 2pm the display started with a gentle zig-zag run up the main runway (great for the photographers) before turning at the far end. After holding the aircraft for a few seconds, the throttles were opened and with a roar of the engines and a cloud of exhaust gasses 655 leapt down the runway and, delight of delights, the nosewheel was lifted briefly in the near perfect conditions. With cheers and applause from the crowd, the crew taxied the aircraft back in to the disused runway for shutdown, allowing the crowd to visit the aircraft for a closer inspection. Our thanks go to the crew for putting on such a great show and to Paul Hartley for providing an excellent commentary throughout.

An integral part of the day are the 'Wheels' – this year we had in excess of 200 classic cars and motorcycles with us and they made a fantastic spectacle in the sunshine. We must thank Gary Lewis who worked tirelessly before and during the event to bring these magnificent machines to Wellesbourne and to act as a focal point during the day. Amongst the gleaming vehicles were a group of Lotuses (or should that be Lotii?) and representatives from the Rootes Group. Also with us was the largest UK gathering of 6 wheel Range Rovers, mostly converted to fire fighting vehicles. The winners of a Best in Show competition, voted for by the car enthusiasts themselves, were presented with their prizes at the end of the day.

We were delighted to host a visit (kindly arranged by Richard Dick) of the Army Air Corps' Helicopter Display Team, the Blue Eagles. They arrived overhead in formation between the Vulcan's two taxi runs and following a pass down the main runway, peeled off to land (see front cover). The lead helicopter, a Lynx, set down directly in front of the crowd causing a huge dust storm to blow over the airfield. The 4 Gazelles decided to set down further away so as not to cause any further dust storms! After an all too brief stay, the team departed, the leader this time making a very impressive high power take off.

Earlier in the day, the DC-3 operated by Air Atlantique (based at nearby Coventry Airport) arrived and featured in the static park for the remainder of the day. Also from Air Atlantique came the Dragon Rapide which was scheduled to offer pleasure flights. However, the aircraft developed a minor problem so could not perform this duty, but the beautiful Twin Pioneer arrived to take over in the afternoon.

The crowd were further entertained on the ground by a variety of stalls and displays, ranging from the Enigma Group from Bletchley Park to owls and birds of prey. Our thanks once again must go to the officers and cadets of 163 and 1289 (ATC) Squadrons who provided excellent support (and burgers!) on the day.

Run day Photographers: Charles Toop, Gavin Kemp, Richard Clarke, Michael Baldock and Malcolm Campbell-Ritchie

FANCY THAT……Part 3!

Sale of Blackpool Vulcan continues……

Becoming a bit of an epic this story.

Chris Ollerenshaw, from Dukinfield, Greater Manchester, bid £15,102.03 for the former RAF bomber on the auction site eBay in November 2005. But he discovered it was too expensive to move the fragile plane from Blackpool Airport to his pub garden. He has relinquished ownership, which has reverted to pilot Brian Bateson who sold it to him.

Back in August the Bomber appeared back on the Internet Auction site E Bay. Not surprisingly the aircraft received no bids. In November a Olympus 301 engine appeared on E Bay which was still in situ in XL391, the Blackpool Vulcan. Starting bid was £750 for the engine, though it had to be removed from the aircraft by the buyer, which requires special Vulcan winches and cradle.

The auction ended with no bids. How and when the airframe is scrapped must soon be on the horizon.

XL391's Rolls Royce Olympus Engine on e Bay

I'll have a Sea Harrier instead then…….

Ex Vulcan Owner Chris Ollerenshaw, took delivery to his pub of an ex Fleet Air Arm Sea Harrier. The aircraft has been assembled in the pub garden at The Snipe Inn, Dunkinfield.

Work Starts on XH558…..

Work has indeed started in the Vulcan Hanger at Bruntingthorpe. Various parts from the aircraft are being shipped to there OEM's for overhaul. A non destructive test has been carried out as well as X Raying the airframe to check the integrity of the metals used in the building of the Vulcan some 45 years on since coming off the Avro production line. The proposed aircrews, who are no doubt 'twitching' to get back in XH558 are busy refreshing themselves on the paperwork and meeting the criteria set by the CAA for flying such an airframe under a Civil Licence.
Regular updates are of course to be found at www.vulcantothesky.com

EARLY WARNING DURING THE V-FORCE ERA

Wg Cdr Rod Powell joined the RAF in 1963 as a direct entrant AEO and as such he flew in Vulcans with Nos 83, 9 and 50 Sqns. He is a graduate of the GD Aerosystems Course and has occupied a number of posts associated with EW, including work with the Central Trials and Tactics Organisation (CTTO), OC Ops Wg at the Electronic Warfare Operational Support Establishment (EWOSE) and as OR 53 at MOD. He left the Service in 1994 and, after working as an aerospace systems consultant for seven year's took up his current appointment as Marketing Manager with FR Aviation. In the first part of this two part story, we have an insight to the early warning systems of the Cold War.

Perhaps I could start by endorsing a couple of points that have just been made. First, the lack of investment in EW, which seems to have been a recurrent theme during the post-war years, which has meant that we have sometimes had to spend in a hurry. Secondly, when that has happened, as it did in the Gulf War, the staffs have always been able to provide some sort of solution. I doubt, however, that it will happen like that again in the future because the aircraft that we deal with today are so different. They are integrated weapon systems and we will not be able simply to tack things on at the last moment as we have done in the past.
I can offer an anecdote which perhaps underlines the point about lack of investment, in the context of aircrew training, or perhaps 'education' would be a better term. When I was OC Ops Wg at EWOSE in 1990 we had to train some VC10 crews who were being deployed to the Gulf which had involved fitting their aircraft with ARI 18228, a Radar Warning Receiver (RWR). Their initial lack of awareness of EW was such that one of them actually asked me why they were required to learn about 'Early Warning'. Symptomatic, I suggest, of a lack of investment in training.

But, to return to my brief, which was to talk about the V-Force, I joined it at Scampton in 1966. At that time we had three squadrons of B.2s there, three more at Cottesmore and three of B.I As at Waddington. There were two squadrons of Mk 2 Victor bombers at Wittering, a reconnaissance squadron at Wyton and three squadrons of Mk 1 tankers at Marham. The Valiants had recently been withdrawn from service as a result of a fatigue problem.

I make no claim to presenting a deeply researched historical document. For the purposes of this paper, I shall, in the main, confine myself to my personal recollections of operating in the BLUE STEEL-armed Vulcan B.2s of No 83 Sqn. I shall address our equipment, tactics, training and the calibration of the EW systems.

The point of having BLUE STEEL was that it meant that the launch aircraft did not have to penetrate target defences. The missiles could be launched some 25 miles from the target from a height of 250 ft, which was a considerable bonus to the crews, given the heavy defences around many Soviet cities. The B.2, as you will know, was a highly maneuverable aircraft, capable of flying well above 50 000 ft at Mach .84. At low level our speed was restricted to about 350 kts; not very fast, so you can see that we might well have needed a little help to survive.

On paper the Vulcan had an impressive defensive suite comprising powerful jammers, a radar warning receiver, a tail warning radar, infrared flares and oodles and oodles of chaff. This kit provided a reasonable degree of situational awareness, even by today's standards, and the crew could therefore take the necessary action to avoid or evade the ground or air defences. Or could it? We will never know what the survivability rate of the V-Force would have been, but my guess is that many of the aircraft would have been shot down before they reached their missile release point or, in the case of the free-fallers, the target, because, to be honest, the EW suite that we had at the time was just not good enough. Let us take a look at the EW systems that we had and how we were taught to use them.

Figure 1 shows the locations of the Vulcan's main jammers. In early days there was a VHF communications jammer, ARI18074, known as GREEN PALM; it is not actually shown in the diagram but its antenna was at the top of the fin. ARI 18075, BLUE DIVER, had notched aerials at the wing tips, and the ARI 18076, RED SHRIMP, antennas were normally located on the flat plates between Nos 3 and 4 engines, although most of the BLUE STEEL aircraft had them between Nos 1 and 2 engines as well. The jammer power units and the transmitters were housed in the large cans within the tail bulge. All of this kit had been specifically designed to counter the Soviet high level threats of the 1950s but they were of rather less value once the force had adopted low level tactics.

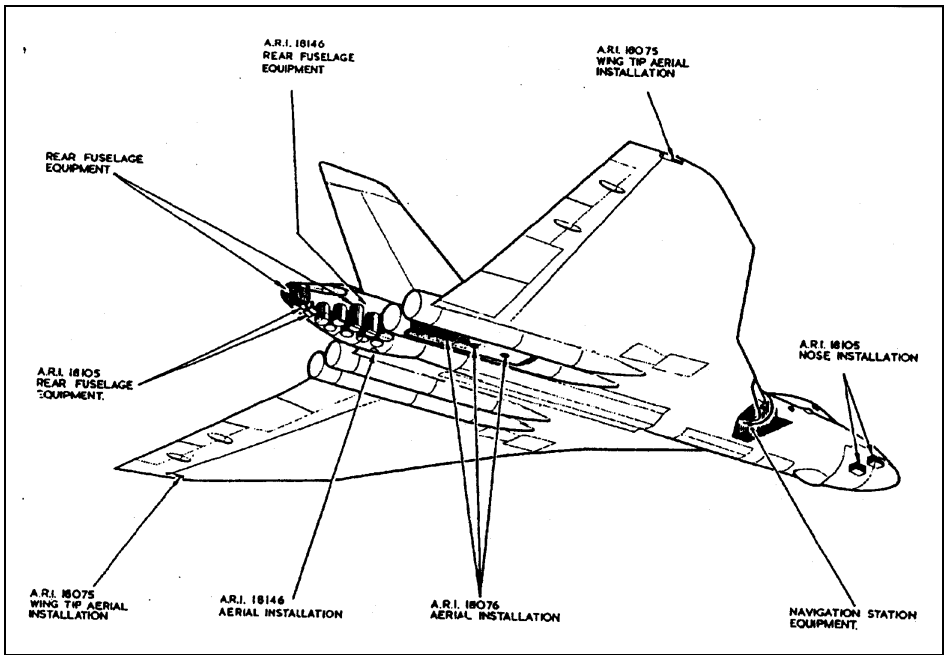


Fig 1. Typical Vulcan B.2 EW installation

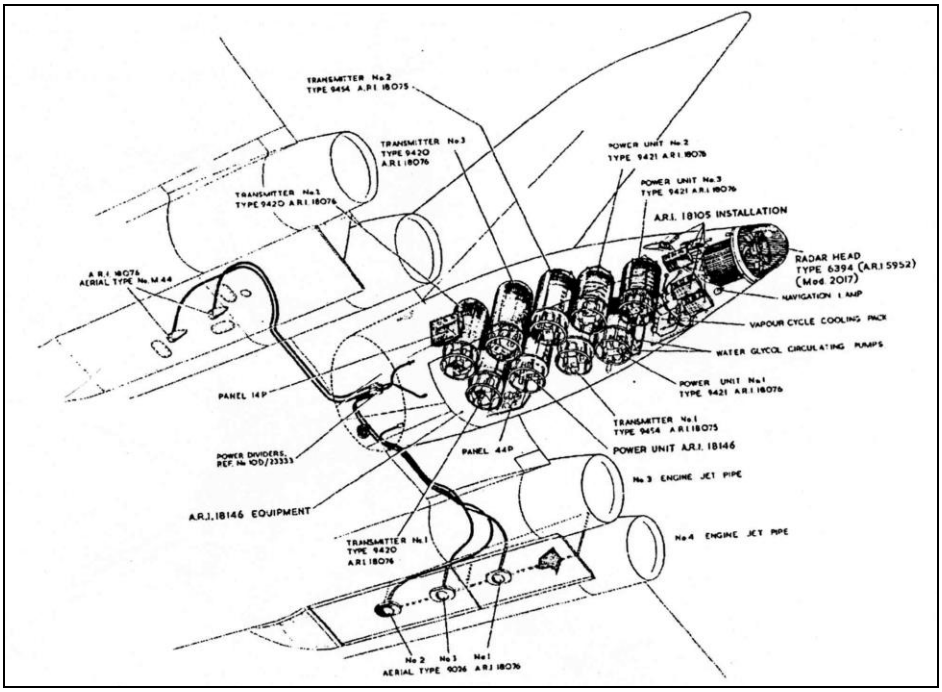


Fig 2. Typical content of the bulged fuselage tail of Vulcan B.2

Fig 2 is a closer view of the tail showing the massive size of the power units and the transmitter cans of the DIVERS and SHRIMPS. I do not recall ever actually knowing what their total weight was, but it must have been several thousand pounds. In fact it was 1978 before I came to appreciate just how big those cans really were. We had lost an aircraft just outside of Chicago and I was involved in the Board of Inquiry. Apart from the engines and the undercarriage units, the most substantial pieces of wreckage were the cans and I was responsible for making sure that they were returned safely to the UK. They each stood about 3]/2 feet high and had a diameter of about 2 feet about the size of a domestic dustbin.

They drew a lot of electrical power in their transmit mode, the total load on the aircraft being about 40 KW, which went some way to explaining why the Vulcan B.2 was blessed with four engine-

driven 40 KvA alternators. The biggest single consumer of power in the Vulcan, however, was the Vapour Cycle Cooling Pack, the VCCP. Located towards the rear of the tail compartment, it circulated a water-glycol mixture around the ECM cans. The VCCP drew about 8-10 KW in normal running, but a massive 40 KW on start-up. You will recall that reference has previously been made to the constraints imposed on the employment of EW equipment by the limited power supplies of earlier aeroplanes. Power was no longer a problem with the V-bombers, but heat dissipation was - hence the VCCP.

In Figure 2 you can also see the cables which channelled the transmitter power to the RED SHRIMP antennas between the jet pipes. I am sure that those cables and connections must all have been very 'lossy', as we say, because they had to take the jamming output power around the engines, around the jet pipe, to what must have been, if you think about it, one of the most electrically inhospitable locations on the entire airframe. We actually had three RED SHRIMPS each of which could operate in two modulation modes in the, then S-, now E-Band, between 2.5 and 3 GHz. They were intended to jam the gun-laying radars controlling 57mm and 76mm AAA and the acquisition element of the SA-3 missile system, the LOW BLOW radar. On some aircraft there was also a lower frequency, L-Band, version, which had its own aerial, a blade antenna on the mounting plate between the jet pipes of Nos 3 and 4 engines.

The two BLUE DIVERS operated in the metric frequency range, B-Band in today's parlance, and were intended to jam early warning radars. The wing tip antennas were more than 50 feet from the transmitters so, once again, there may well have been a loss here too, but it would seem that there was plenty of power left to radiate. It was said that there was an occasion during an air defence exercise in about 1960 when, just as the nation was settling down to watch the soap opera of the day, a bunch of Vulcans switched on their BLUE DIVERS and wiped out all the television signals! That was before my time, so I cannot vouch for the truth of the tale, but whether it happened or not, the story probably does reflect the scale of the jamming that could be achieved.

I should perhaps point out that, apart from looking after the jammers, the AEO controlled the aircraft's electrical system and handled a great deal of communications, particularly long range HF radio traffic. In the photograph of the AEO's 'office' at Figure 3 the EW controls are in front of him on the bulkhead with a schematic of the electrical system and its various controls to his right, on the port side wall of the cabin.
As I have suggested, the rather impressive jamming capability of the Mk 2 V-bombers had been designed to cater for the high-level case in the late 1950s and early '60s. One can envisage a co-ordinated attack over a relatively broad front with close to a hundred aeroplanes jamming on full power to provide mutual protection, the DIVERS denying the Soviets early warning, the SHRIMPS negating their anti-aircraft missiles and guns and GREEN PALM disrupting the, still VHF-based, Russian air defence network. To some extent, this was an extension of WW II practice. It was barrage jamming, although at much greater intensities than had been possible in 1945. There was little sophistication involved, however; the V-Force's kit did not respond with specific reactions to counter individual threats in the way that modern systems do. The V-bombers relied on brute force, and lots of it; the jammers were simply switched on at a particular point on the outbound track and left to radiate on a pre-set range of frequencies, regardless of whether or not there was an actual threat to be countered.

The change to low-level operations in 1963 should have been accompanied by a change in EW tactics and a reappraisal of the system's capabilities. This simply did not happen, at least, not in any meaningful way. With hindsight, I think that we, the AEOs who were responsible for operating the EW system, should have known a lot more about our EW capabilities than we did and we should have been far more assertive in seeking improvements and changes to enhance our survivability. The fact is that we simply did not do that. Why? I think that it was because of the way we had been trained. We spent an inordinate amount of time learning about the aircraft in minute detail and tracing how each electrical circuit in the aircraft operated.

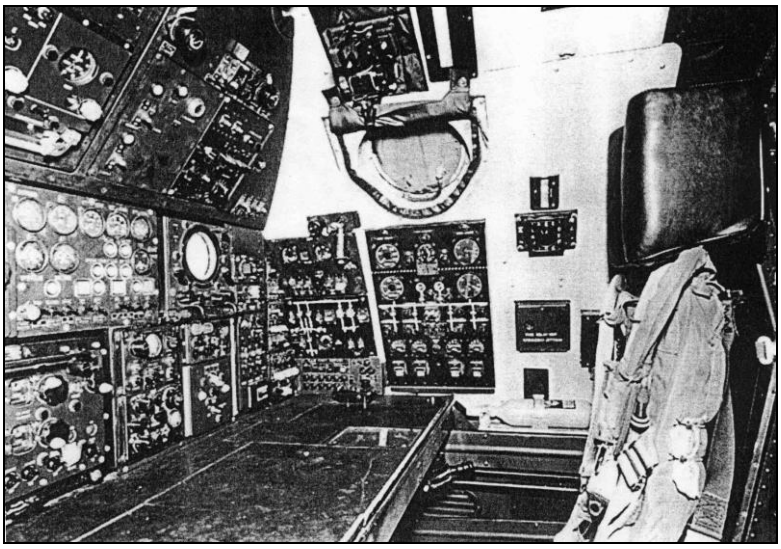


Figure 3: The AEO's Position in the Avro Vulcan

Our knowledge of the sequencing of 'A' breakers and 'S' breakers within the electrical generating system was, it seems, considered to be far more important than learning about EW. If that was what 'the system' wanted, who were we to argue? As a result, very little time was spent studying the EW system or questioning the tactics that we employed.

So what should we have been thinking about? Well, the implications of the operating parameters of our equipment for one thing; and the implications of this in the context of low-level operations for another. As I have explained, BLUE DIVER and RED SHRIMP were barrage jammers. In effect, they transmitted white noise on a wide swathe of frequencies with the intention of swamping the scope of any radar operating within that bandwidth. The problem with this brute force approach was that the power output was spread across the entire transmitted spectrum. That meant that the power density, and thus the jamming effectiveness, on any specific frequency was relatively low. This limitation was offset to some extent in the high-level case by the fact that each aeroplane's jamming reinforced that of the others so the overall effect would still probably have been pretty devastating. At low-level, however, each aeroplane operated in isolation so the mutual support factor simply did not apply.

This article was first published in the journal of the Royal Air Force Historical Society and we are most grateful for their permission to reproduce it here. The journal carries a series of extremely interesting articles on a wide range of aviation subjects. Chairman of the Society is AVM Nigel Baldwin who is a long standing member of 655 MaPS.
If you are interested in joining the RAFHS you should contact the membership secretary
Dr Jack Dunham
Silverhill House
Wooton-under-Edge
Gloucester GL12 7ND

XM655 MERCHANDISE

Many of you will have seen our fine range of merchandise on sale in support of 655 on our stall at each taxi run event and we are please to offer a selection of items via mail-order as listed here. We can't accept credit or debit cards, so cheques or postal orders only please, payable to 655 MaPS**, to the address below. Don't forget to include your own address!**

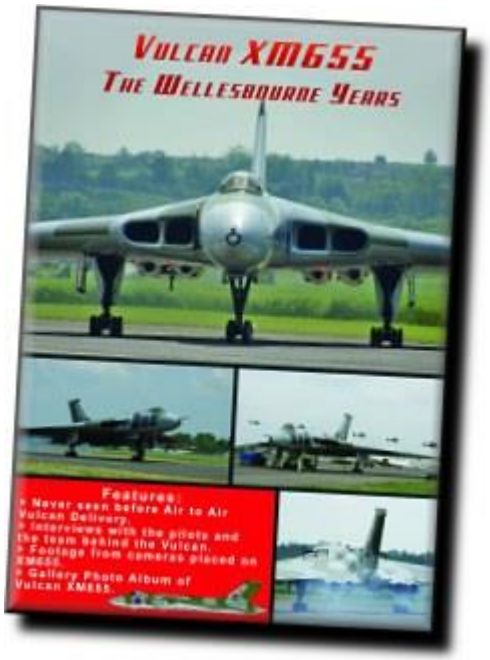
655 MaPS 100% Cotton Polo Shirt - Blue	£16.00 (M/L/XL)	plus £1.95 Post & Packing
655 MaPS 100% Cotton Polo Shirt - White	£16.00 (M/L/XL)	plus £1.95 Post & Packing
655 Bronze Note Pad with XM655 on front cover	£2.50	plus £1.95 Post & Packing
655 Carrier Bag Tidy with views of XM655	£3.75	plus £1.95 Post & Packing
655 Melamine Coasters (4 different views)	£2.00 each	plus £1.95 Post & Packing
655 70mm x 70mm Candle with XM655 on it	£3.50	plus £1.95 Post & Packing
655 Fridge Magnet	£1.20	plus £1.95 Post & Packing
655 Bottle Opener	£1.30	plus £1.95 Post & Packing
655 Baseball Caps – Blue	£7.50	plus £1.95 Post & Packing
655 Key Ring	£1.00	plus £1.95 Post & Packing
655 40th Anniversary Mug	£5.00	plus £1.95 Post & Packing

Please order items by either a) copying the top of this page, marking those you require and sending it to the address below, OR b) simply send a note with your requirements to:

655 MaPS Merchandise
c/o 25 Binley Avenue
COVENTRY
West Midlands CV3 2EE

Although we aim to fulfil all orders within 7 days of receipt, but please allow up to 28 days for delivery.

COMING SOON……



Our new DVD – the current working title of which is "XM655 The Wellesbourne Years", will be out in the new year. We have some excellent footage that was professionally taken at this year's "Wings and Wheels" plus a wealth of old, rare and in some cases unique material. Our intention is to produce a DVD that is truly representative of the history of this special aircraft.

We aim to include the impressive high power runs from the Vulcan from a range of perspectives, along with interviews given by the aircrew who taxi the aircraft.

It is also our intention to incorporate a picture gallery of Vulcan XM655 and maybe even some bonus material of previously unseen footage of XM655's arrival at Wellesbourne in February 1984.