Washington Times

Newsletter

Issue 15

Spring 2008

Cover Photos

Top WF512 (44 Squadron) at dispersal, RAF Coningsby (***Ernest Howlett***)

Lower Peaceful Pacific. An evocative photo taken through the nose of an unknown 330th BG B-29 on probably its first peace time mission whilst en route to participate in the massed flypast following the surrender ceremony conducted on the USS Missouri in Tokyo Bay, August 14, 1945. (***Steven Smisek – webmaster 330th BG***)

This Page KO-F and KO-A of 115 Squadron empty their bomb bays of a full load of 40 x 500lb bombs over the Heligoland Bombing Range, 12 December 1950 (***PRB 1659***)

Chris Howlett
The Barn
Isle Abbotts
Taunton
Somerset
TA3 6RS e-mail chris_howlett@tiscali.co.uk

Memorial for the crew of WF502

Sheelah Sloane, daughter of Sqdn Ldr Sloane, O/C 90 Squadron who was killed in the crash of WF502 in North Wales in January 1953, has got together with several relations of the airmen who were killed in the same crash and two Welsh aircraft enthusiasts who have been doing research into the crash. They have arranged for a Welsh stonemason to engrave a memorial stone to the memory of those who died in WF502 and have it placed in the village churchyard alongside the war memorial. The 'unveiling' ceremony with a Welsh choir and a standard bearer from the RAFA and the British Legion, will take place in September 2008.

If you are interested in attending the ceremony please make contact with Ross Duffield on 01978 314050 or email: duffield1@btinternet.com Updates will also appear in future issues of Washington Times.

Reunion update

Welcome to issue 15 of Washington Times. Before we get into the main letters and articles I need to inform all readers that the planned reunion for July 2008 has had to be postponed. This is partly due to the Red Lion being fully booked (a party of Germans has block booked it to attend the Flying Legend air show) and partly due to myself becoming unavailable at that time due to a newly planned commitment at work. I will look for an alternative date and maybe location and keep you informed in the next issue. The reunion is however not likely to happen now until the autumn.

Ideas raised so far by readers include RAF Cosford with its Cold War Museum, Shoreham Airfield which hosts a classic aircraft air show, RAF East Kirkby home of the taxiable Avro Lancaster 'Just Jane' and RAF Waddington for their annual air show.

I will look into possible sites over the next few weeks and hopefully we can get together at some suitable location in the early autumn. Sorry for any inconvenience that this change of plans may have caused you.

Letters

John Moore wrote:

Here is the long awaited report of a bomb hangup from a B29, whilst at EGXC. I had only recently in 1953, probably springtime been transferred from the OPS room to the A.T.C. At lunchtime that day we, in the Ops/A.T.C. were left chuckling over the EXTREMELY irate farmer from the North Lincs side of Coningsby, he had fronted up at the Guardroom absolutely out of his mind, the guardroom in their infinite wisdom had promptly ushered him into the OPS room, complete with pitchfork!!.
The reason was that at the start of spring he had done the big cleanup on his farm, there to his then satisfaction stood a beautifully whitewashed farmhouse, and his pride and joy was the pile of manure sitting nicely settled in the farmyard. Needless to say he was not a very happy chappy when a B29 returning from 'Heligoland" or similar chose that day to drop its "hungup" 25lb practice bomb, furthermore unbelievably it fell into the middle of the manure heap. Result was a badly "decorated" farmhouse and a farmer who armed himself with the said pitchfork to launch WW III on Coningsby. Decisions were made in "nano seconds" and the final result was at least 2 x 3 tonners complete with a load of admin wallahs armed with whitewash buckets and spades etc doing a "Fangio" out of the base to reinstate his besmirched home!!

Incidentally he was prepared to take apart the airbase and all the flying crew who were remotely connected with B29s.

Finally I suspect this would have been May/June '53. It may jog the memories of some of the other people stationed at Coningsby at that time.

Keep up the good work, I look forward to each edition as it is received.

Eric Butler wrote:

Thanks for issue 14 of Washington Times. The pictures of the models on page 12 and the RAAF variant remind me of a visit I made a couple of years ago to what I believe was the Chinese National Air Museum. Unfortunately I do not know the name because all signs were printed in Chinese! The actual site was on a currently disused airfield and was very impressive as part of it was a huge tunnel built on a curve through a mountain which stored many of the smaller aircraft. The large ones were on hard standings outside.

The point I am coming to is that there are a few B-29/B-50 variants on show; one had an AWACS dish on it and another appeared to have turbo-prop engines. I do not know if the aircraft were Russian or Chinese copies or anything about them. Have you come across any references in your searches to such variants?

(Eric, following forced landings by three American B-29s in Russia during WWII the Russians used the airframes to reverse engineer an almost exact copy – the Tupolev Tu 4. This plane, later code named Bull by western nations, provided the Russians with a credible strategic bomber during the early cold war years. Rumour has it that Stalin had ordered an exact replica and that the engineers were so afraid of him that they did just this, even copying field repairs made to one of the interred B-29s. Unfortunately, tempting though this story is, it is not true. Although almost identical, the Russians did fit indigenous Shvetsov ASh-73TK engines rather than copy the Wright Cyclones (probably a good thing given the problems the Wright Cyclones had!) and also fitted 23mm cannons to the gun turrets rather than the standard 0.5 inch machine guns. One of the hardest things for the Russians to master was apparently converting the American imperial sized items to the metric system – the metric equivalent thickness for the sheet alloys used to cover the wings and fuselage is thicker. Hence the Tu 4 weighs more than the B-29 with a consequential slight reduction in range and pay load. They also needed to create a new set of flying clothing and parachutes for the Tu-4 crews so they would be compatible with their new mount.

Eventually Tupolev produced a large number of Tu-4s in three factories across Russia. Actual numbers are uncertain with different sources citing different numbers. However, it appears that about 1,200 were made (one source states 847 while two others cite 1,296 and 1,195). Russia also provided several Tu 4s to China where they were used in the conventional and nuclear bomber role. By the 1970s the design was obsolescent although the few remaining examples were re- engined with Shanghai WJ-6 turboprops creating the so called 'Turbo Bull'. These remained operational in China until the 1980s. One of these, the one in the museum, was also used as the prototype for the Chinese AWACS radar but this did not get beyond the prototype stage. ***Chris****)*

Peter Fairbairn wrote:

Here are some of my memories relating to the demise of WF574 ….

One particular day I noticed green streaks behind many of the rivets on the underside of the port wing, obviously fuel leaks (the engines used 130 octane fuel which was coloured green). This I reported to my Crew Chief, Flt Sgt Rule. This situation brought forth the Squadron Engineering Officer, Flt Lt Robinson together with Chiefy Ball and a host of others.

The underside panels were removed and the fuel tanks emptied. Panels were removed from the composite fuel tanks to discover where the problem lay and, if I remember correctly WF574 went into a hanger for new or repaired fuel tanks to be fitted and, I think, we changed an engine at the same time as we had 'genuine fitters' on the job. This kept us very busy for several days. I can remember having my head and shoulders inside the main tank at one time!

I believe the aircraft was put back into the air again and it was said that it swung to the left on take off and landing. It was suggested that there was a possibility of undue strain having been put on the port wing and or undercarriage. I am not too certain exactly what followed but it was thought that at some time the aircraft had suffered a heavy landing, we were after all training new Sgt Pilots, some of whom I know were National Service. The problem persisted and eventually it was decided that the port undercarriage should be removed and inspected. This was to be done out on the dispersal. A caterpillar tracked jack was procured and situated under the port wing behind the undercarriage. Flt Sgt Rule, SAC Charlie Beart, SAC Wally Narborough, LAC Brian Erde (both of the A/C's riggers) and myself were of course surrounded by a bevy of big wigs. The tracked jack was positioned under the main undercarriage leg, which must have weighed half a ton or more and the aircraft was jacked up to give support and clearance for the removal of the undercarriage. I cannot remember if the wheels

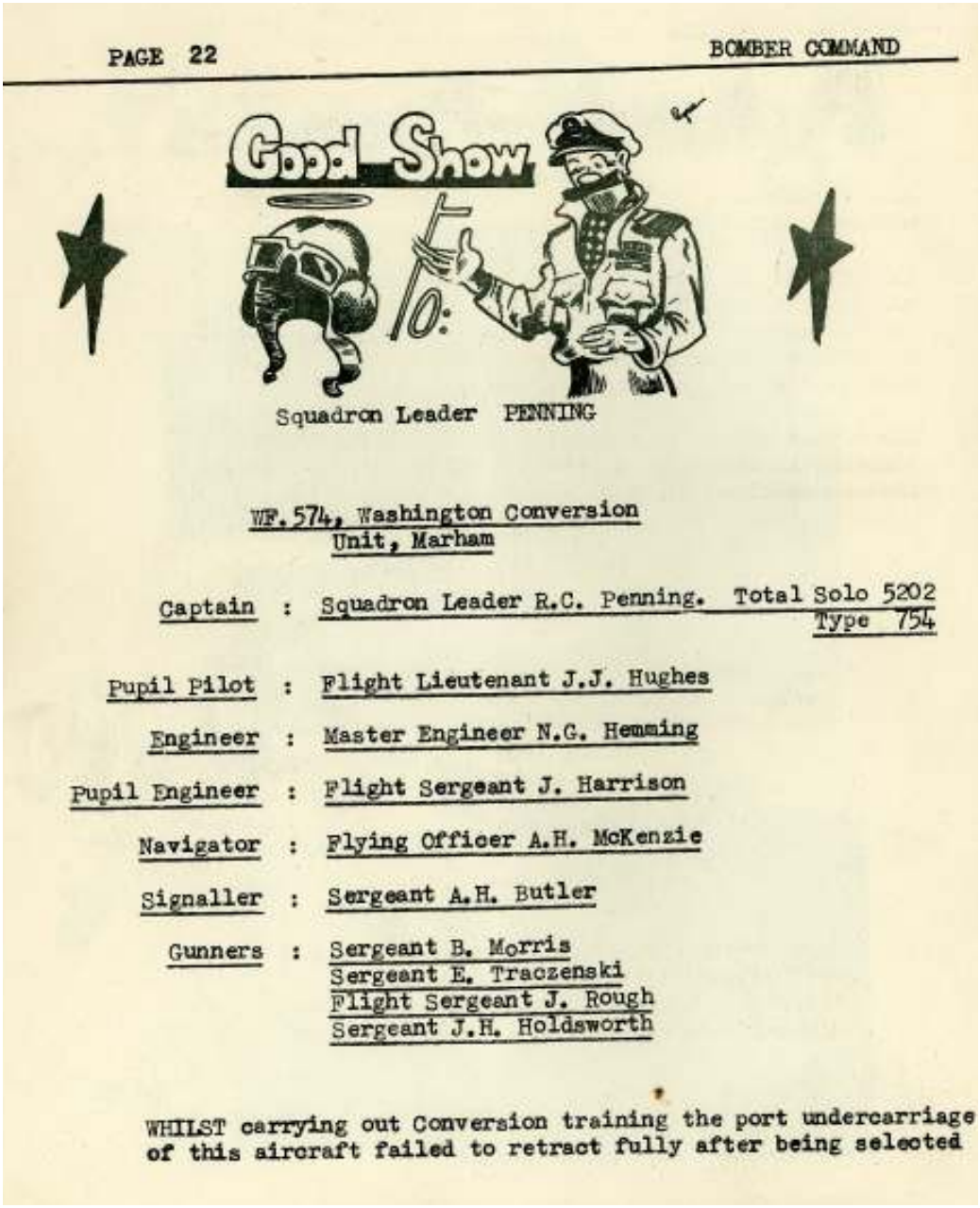
and hubs were removed, I suppose they must have been, yes I can now visualise the shafts of the wheels being bare.

Eight bolts, four either side holding the bearing cages had to be removed and during this exercise all the top brass melted away leaving only the five of us who were the ground crew of WF574. We began to undo the eight bolts with, of course, the support jack in position. Gingerly was the word, this operation not having been done previously, in the RAF at least. When it came to the last bolt it really was a matter of wait and see. The last bolt was extracted and immediately there was an almighty crash and the main leg came down onto the jack support with such force that the fore end of the jack kicked up into the air and Flt Sgt Rule was very lucky not to have been crushed to pulp!! I can remember that it was then lunch time and we pondered upon how lucky he had been. WF574 did not fly with the squadron further. She was repaired and I believe went up to Prestwick and back to the USA.

We had noticed that the undersides of the main planes had begun to powder away. One could rub your hand on the under surfaces and they would be covered with alloy powder. After this all aircraft were sprayed a miserable grey and from then on they appeared decidedly dowdy.

Air Britain's Washington File shows WF574 as joining the WCU on 4.7.51 before transferring to 35 Sqdn on 1.9.51. She moved to the Disposal Flight on 2.9.53 and was returned to the US on 17.11.53.

WF574 had suffered a port undercarriage failure on 3 January 1953 as described in this extract from Bomber Command's Aircraft Accident Review for Jan – Mar 1953. Maybe this was the starting point for the troubles mentioned by Peter above?
(Bomber Command Aircraft Accident Review from ***Mike Davies***)



PAGE 22 BOMBER COMMAND

Good Show

Squadron Leader PENNING

WF.574, Washington Conversion Unit, Marham

Captain : Squadron Leader R.C. Penning. Total Solo 5202
Type 754

Pupil Pilot : Flight Lieutenant J.J. Hughes

Engineer : Master Engineer N.G. Hemming

Pupil Engineer : Flight Sergeant J. Harrison

Navigator : Flying Officer A.H. McKenzie

Signaller : Sergeant A.H. Butler

Gunners : Sergeant B. Morris
Sergeant E. Traczenski
Flight Sergeant J. Rough
Sergeant J.H. Holdsworth

WHILST carrying out Conversion training the port undercarriage of this aircraft failed to retract fully after being selected

ACCIDENT REVIEW PAGE 23

("GOOD SHOW" cont)

up. The captain decided to wind it down by emergency methods and curtail the sortie.

All efforts to lower the port gear failed, so the captain informed the tower of his intention to carry out an emergency landing. A successful landing was carried out using the starboard and nose wheel only, despite the icy state of the runway.

The Captain is to be commended for executing a well judged crash landing, in which the aircraft suffered a minimum amount of damage.

Mike Brown wrote:

Being an airframe mechanic and posted to 115 Squadron from RAF St Athan, I was one of the ground crew on WF446 (B for Baker). Each aircraft had its own ground crew, our crew chief was Sgt Young or Williams (can't remember which), Wally Gault was the other rigger (A/F MECH), Satch Galton, engine mech. The usual pilot was F/Lt Haynes, Flt Engineer F/Sgt Wisbridge (with a handle bar moustache). The crew chief on WF444 was Sgt (Chunky) Chambers with Cpl Curly Powers airframe fitter and Derek Baskerville airframe mech.

One of the many things that I recall is that at ten past nine in the morning most ground crew used to go into their aircraft and listen to 'House Wives Choice' on the radio. In the winter we were issued with American flying suits, a thick capok lined inner and a light brown outer (both one piece). The outer had a detachable fur collar. The F/Sgt in charge of all ground crew was F/Sgt Webb, later (1953) Warrant Officer Webb B.E.M. I think the Squadron Commander was Sqdn Ldr Halford whilst I was on the squadron (Nov 1951 – July 1953) we won the Lawrence Minot bombing trophy.

WF446 formates with two other 115 Squadron B-29s on its way to bomb Heligoland. ***(Prb 1658)***

Following the articles regarding modelling the Washington, **Jeff Brown** sent me some photos of his model making prowess with photos of his Washingtons (1:48, 1:72 and 1:144 scales) as well as his 1:72 B-36 and his favourite topic - inter war RAF bi-planes.

A selection of Jeff Brown's models (***Jeff Brown***)

In the same letter, having seen the items relating to training of aircrews he also sent a copy of a letter he received from Joe Kucera, an F.E. serving with the 330th BG on Guam. Apart from an ability to write expressively of his experiences, Joe also possessed a camera and photographed his crew members while serving on Guam – see below. Any comments about how the USAAF training differed or not from RAF methods would be welcomed! …..

Dear Jeff:

I certainly enjoyed the report and chronology of your wartime RAF training program, makes me ashamed of my failure to keep any sort of journal of my own schooling at the time. Your description of the corkscrew manoeuvres in the Lancasters was especially well received, and I have nothing but sympathy for that guy who broke, but then unfortunately he had a lot of company. I've always felt that such cases often came about through lack of confidence in the rest of the crew, and that such lack of confidence often sprang out of wrong impressions gained on first contact.

Now then, because you've asked for it, I'm going to dig back through the most vivid recollections of my F.E. training program, although, as I've already explained above, thirty-plus years after it all began I can give you no accurate pin-pointing on the calendar.

I might as well begin with a statement concerning the instructors, quite a few of whom were women, and civilians at that. Very few of whom had any intention of going out, and doing what they were grooming us to do. I'm not knocking these wonderful people. They were all high-calibre salesmen who had the marvelous knack of conning anyone into believing he could be a flight engineer, and I guess that was the point of the whole thing.

My overall impression of the whole program was that it was too damn long, and that the Army spent too much time cramming us full of superfluous crap, like weeks spent in learning how to pre-compute and maintain the "Howgozit" cruise-control chart, only to discover when we got overseas that nobody over there ever used it and never intended to. All we ever did over there was subtract fuel burned from fuel put aboard and, unless I'm mistaken, nobody needs much, if any, training to do that. But then, like your own experience in the Lancs, what I now consider to have been a waste of time might actually have been the key to my own survival, as a Johnny-come-lately.

Also, I must chuckle when I recall those splendid gigantic blueprints of the B-29's electrical system (almost as long as the airplane itself, I believe) which we studied ad infinitum and to almost nobody's edification, and which, unless I'm mistaken, were always carried aboard all folded up in unmanageable bundles in case of emergency. Good God. But out of stuff like that came a healthy sense of humor, which I believe all aircrews should be armed with if they are to exterminate the worms of fear which would otherwise distract them from the job at hand. I have a theory that the finest crews on both sides were made up of 'kooks'.

My F.E. training began at Lowry Field, outside Denver, and that initial three months or so were all filled with the irresponsibility that goes with dumbness. Things like "Now this here thing here is a Dzus fastener." and "We shall study the nomenclature of the generator and the inverter now. And of course the aforementioned "Howgozit", which I still think was more the province of the navigator than the flight engineer. Nonetheless we all learned how to plot that predicted fuel-consumption curve in green ink against which to plot the actual fuel-consumption curve in red (or was it just the other way around) when we got in the air. This we did in war-weary B-24s converted to rearward-riding passenger configuration, with seats and B-29 F.E. panels for ten or a dozen student F.E.s. This was a hell of lot of fun, cruising around in the blue over the Rocky Mountains and then heading off to play-bomb cities like Omaha and Chicago and Kansas City and St. Louis. All of these teaching-aid F.E. panels were identical and the real McCoy, not toys at all, as certain dummies would learn now and then when during their fiddling-around to relieve their boredom they would occasionally flip their ignition switch-bars to "off" and short out all four magnetos and turn the Lib into a great big glider. Fortunately, this always happened at around 15,000 feet, if it indeed did happen at all, but we would hear about such occurrences now and again.

Then off to Maxwell Field, Alabama, for practice in the real thing. These B-29s were real pigs, because they flew around the clock. Maxwell didn't mean getting airborne right away. There was a lot of time spent on the engine-blocks, where one would sit at another F.E. panel and learn how to start an engine. One. Don't look at the goddamn engine, goddamn it, look at your ammeter! Okay, if you'll just look at that goddamn ammeter it'll tell you that your inertia wheel is going as fast as it'll go! Engage, goddamn it! No, don't look at the smoke, look at your goddamn instruments! What the hell do you think that goddamn tachometer's for you stupid bastard? These guys at Maxwell brought it all home very well, so well that came the day when I finally sat inside a B-29 and started all four engines without a hitch and nearly dropped dead with astonishment.

I believe I was joined up with my officers somewhere in the middle of the Maxwell tenure. At least with Kreimer the A.C and Stewart the C.P., because I'm quite sure that Maxwell was where the three of us were soloed as a flight crew, an event I'll never forget as long as I live because we did one circuit and a bump and then a second circuit and a landing, all the while I had to pee so bad I couldn't see. It had nothing to do with nerves. It was just something I'd neglected to take care of before the event. I had long before gotten the nerve bit out of my system. The initial working-together as a crew was doubled up, that is, two A.C. students, two C.P. students and two F.E. students crowded the flight deck

along with a pilot instructor who looked about 14, and an F.E. instructor who looked about 80, and each of the student crews would take their turns during a flying session, one flying the beast while the other observed. What I observed most the first time this happen was that my pilot sat in the left seat as if he were born there, and greased the airplane down as if he'd designed it, while the other crew's pilot sweated blood by the gallon and flew the airplane more like he should have been in the tank corps. One certainly takes and cherishes his good luck wherever he finds it.

Speaking of what I said of the necessity for confidence in whoever fate tosses your way, I'll never, never forget what our tail gunner once said when we were swilling beer at Tampa. We were coming near to overseas posting (that's not the term we used, but I believe you guys did, didn't you?) and we were discussing that which we were about to face and how we all felt about it. The tail gunner wasn't worried at all. What he said, and apparently on behalf of everybody who rode the rear end of the airplane, was, "With you guys up there in front everything is going to come out fine." Good God! Kreimer could have corkscrewed the hell out of a B-29 all day, and Ken Lee would probably have asked for more.

Sorry about all this blather, but you asked for it.

Joe

Don Brezneski, another 20th Air Force F.E. sent this when shown Joe's original letter…

The B-24s in use were indeed war weary; the black painted Munda Belle that we flew in was painted to hide the Patches riveted in so many places. Six engineers in the back with two instructors, the mag switches were not hooked up, the pilot would not have it any other way, he did on one occasion over the Grand Canyon cut all four to scare the crap out of us.

I remember only one woman instructor at the time, but she was good!! The howgozit chart made up on Graph paper, I enjoyed making up and the Nav had more important work to do. Keeping it up to date with the PNR and PLR gave a good reference with fuel consumption.

I joined the bomb Group and had 10hrs of dual instruction, then flew solo shooting touch and goes. When the AC became qualified we started Phase training. First flying local bombing mission, then gunnery training flights. Then long range Navigation missions, which were also used for cruise control. Then we took our first long range over water flight to Puerto Rico on Gypsy Tasks force stationed there for a month to also do over water flights in tropical conditions.

Looking back I think I had excellent training, in AM school, Lowery and in the Bomb Group. I was called back for the Korean War and flew in C97s for MATS, stayed with the reserve and Flew C97s to Nam until 1968, also with the training Uncle Sam gave me I took my A and P license exam when I got out, passed the engine section first time dropped one section of the Airframe [welding - Uncle Sam didn't teach me that so I had to study that for a bit]. Over all I know I enjoyed what I did. If I had been a Pilot I would have been looking forward at the flight instruments and not at the engines. Don B

Following pages: A series of photos from Joe Kucera showing himself and his fellow crew members on Guam in 1945. To continue the model making theme also shown is a photo of a model of Joe's plane, K-38, made by Joe after WWII. (***All photos Joe Jucera via Jeff Brown***)


Flight Engineer Joe Kucera.


Airplane Commander Ed Kreimer.


Right Gunner
George Leodakis.

Central Fire Control
Gunner Joe Kaplan.

Tail Gunner
Ken Lee.

Left Gunner
Dwight Long

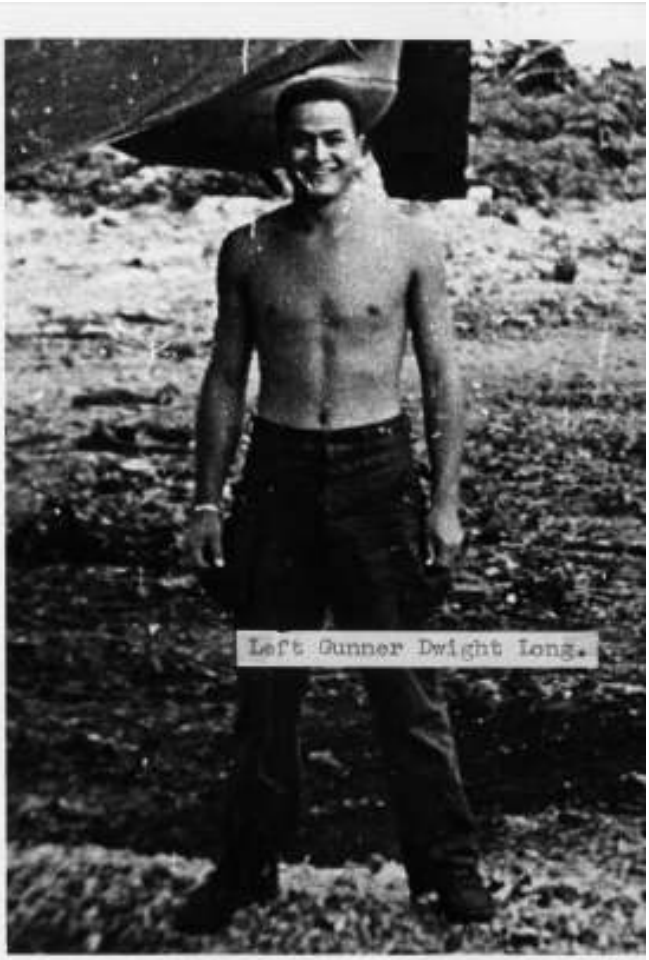
Bombardier Lee Crowder.

Crowder's Incendiary Clusters.

Navigator Herb Gall.

Co-Pilot Jim Stewart.

Radio Operator Casimir (Casey) Dykier.



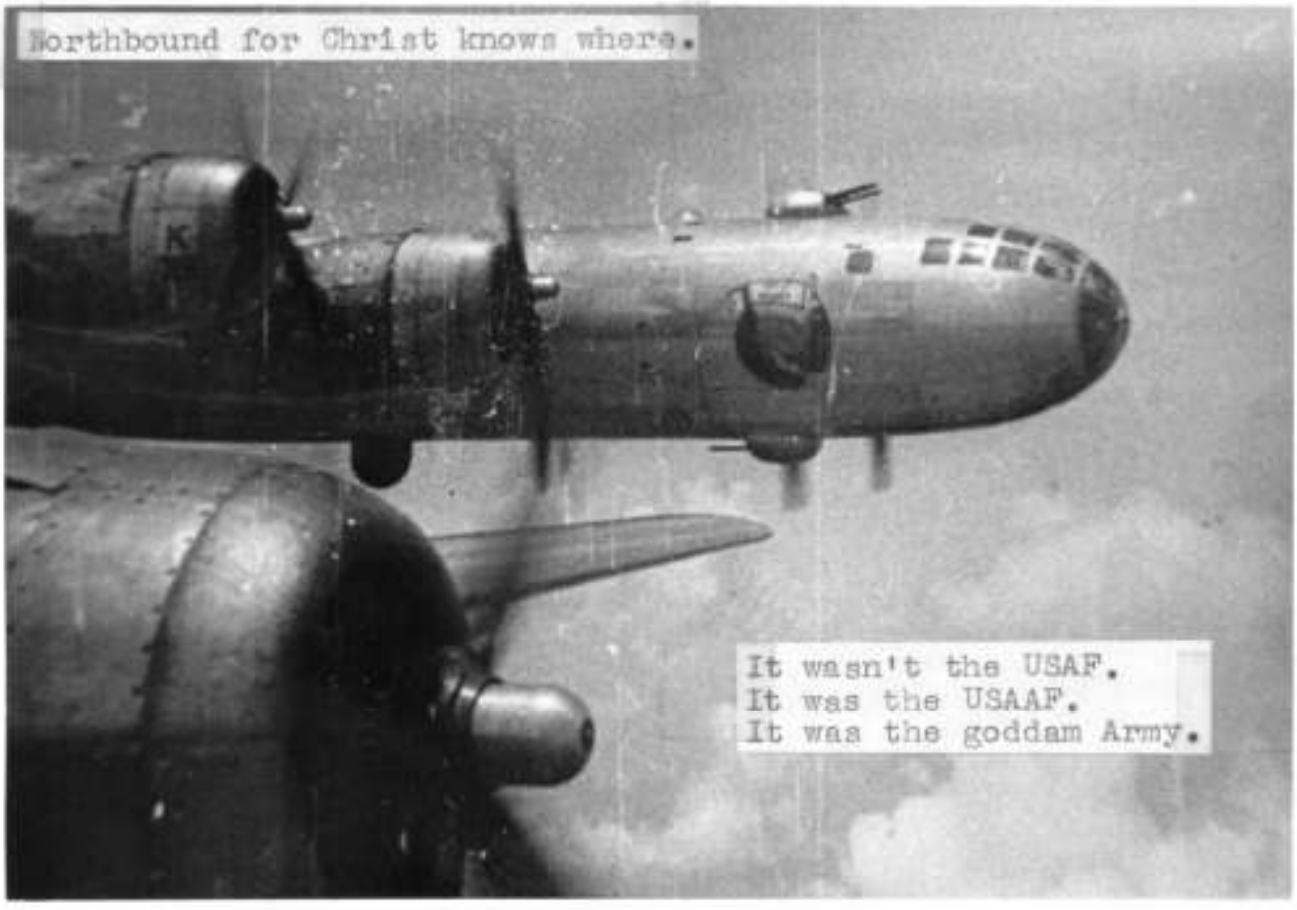
Left Gunner Dwight Long.


"Anybody for a cuppa?"
Radar Officer Mel Koenig.
God only knows what he was actually doing. We were all a little mixed up.


Right Gunner George Leodakis.

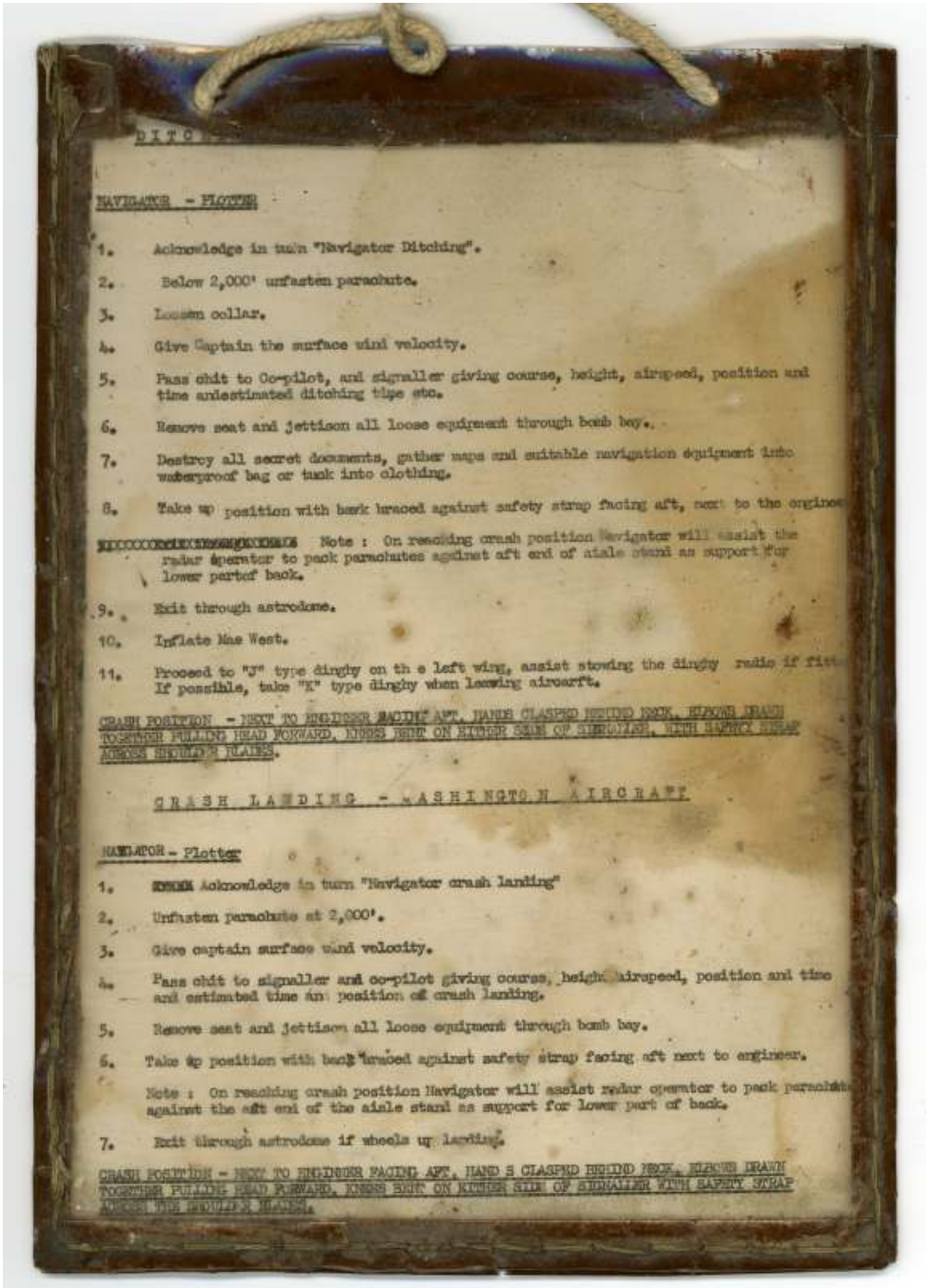

K

Hernia Parade.



Northbound for Christ knows where.

It wasn't the USAF.
It was the USAAF.
It was the goddam Army.



DITC

NAVIGATOR - PLOTTER

1. Acknowledge in turn "Navigator Ditching".
2. Below 2,000' unfasten parachute.
3. Loosen collar.
4. Give Captain the surface wind velocity.
5. Pass chit to Co-pilot, and signaller giving course, height, airspeed, position and time andestimated ditching time etc.
6. Remove seat and jettison all loose equipment through bomb bay.
7. Destroy all secret documents, gather maps and suitable navigation equipment into waterproof bag or tuck into clothing.
8. Take up position with back braced against safety strap facing aft, next to the engineer.

Note : On reaching crash position Navigator will assist the radar operator to pack parachutes against aft end of aisle stand as support for lower partof back.

9. Exit through astrodome.
10. Inflate Mae West.
11. Proceed to "J" type dinghy on th e left wing, assist stowing the dinghy radio if fitted. If possible, take "K" type dinghy when leaving aircarft.

CRASH POSITION - NEXT TO ENGINEER FACING AFT, HANDS CLASPED BEHIND NECK, ELBOWS DRAWN TOGETHER PULLING HEAD FORWARD, KNEES BENT ON EITHER SIDE OF SIGNALLER, WITH SAFETY STRAP ACROSS SHOULDER BLADES.

CRASH LANDING - WASHINGTON AIRCRAFT

NAVIGATOR - Plotter

1. Acknowledge in turn "Navigator crash landing"
2. Unfasten parachute at 2,000'.
3. Give captain surface wind velocity.
4. Pass chit to signaller and co-pilot giving course, height airspeed, position and time and estimated time and position of crash landing.
5. Remove seat and jettison all loose equipment through bomb bay.
6. Take up position with back braced against safety strap facing aft next to engineer.

Note : On reaching crash position Navigator will assist radar operator to pack parachutes against the aft end of the aisle stand as support for lower part of back.

7. Exit through astrodome if wheels up landing.

CRASH POSITION - NEXT TO ENGINEER FACING AFT, HANDS CLASPED BEHIND NECK, ELBOWS DRAWN TOGETHER PULLING HEAD FORWARD, KNEES BENT ON EITHER SIDE OF SIGNALLER WITH SAFETY STRAP ACROSS THE SHOULDER BLADES.

An interesting relic sent to me by Tony Hill, archivist P&EEE Shoeburyness. It shows the procedures to be followed by the Navigator – Plotter for evacuating the aircraft should it ditch or crash land. Given the size of writing it would be a hard check list to follow when panicking during a crash. On the back it has a pencil inscription 'Watton 4-2-55' so, presumably, this used to grace the inside of a 192 Squadron B-29. (***Tony Hill via Chris Howlett***)

Conversion Time – By John King

The time has come to rummage through the closets and bring out those old, ill-fitting, uniforms that have been awaiting a suitable opportunity to be worn again. Polish up the buttons; see that there is a neat crease ironed into the trousers and be ready to go on parade again. This time we are off to join the next course about to start at the Washington Operational Conversion Unit (WCU), RAF Marham, in Norfolk. We shall need a whole crew which will include pilots (two of 'em), navigators (another two), an engineer, a signaller (WOP) and three, yes, three gunners. So there is plenty to keep everyone busy - let's all come along.

It is November, 1950, and the weather at this time of the year is, not to put too fine a point on it, **bloody** cold, and dampness penetrates bones to the very marrow. The airfield is crowded to overflowing with personnel and accommodation is at a premium; wooden huts are the best that can be found for the NCO's amongst the crews. The route between each hut, and to wherever it is that you want to go, is marked by a sea of mud - black, clinging, oozing Norfolk mud.

The rain drizzles endlessly and leaves a depressing atmosphere over everyone and everything. But despite it all, there is an air of expectancy and even subdued excitement as the aircrew gather and prepare to master this monstrous collection of aluminum and wires which the USAF refers to as the B-29 Superfortress.

International pressures have created a tense atmosphere and it will be some time before the RAF will welcome the first of its four-jet 'V' bombers. The need for an interim aircraft capable of penetrating Soviet airspace, with greater survivability than the Lincoln, is paramount. The USA has come to the rescue with a timely offer of 70 (later increased to 87) of these aircraft on an extended lease-lend basis.

The B-29 is a large and complex aircraft, larger than any other that the crews have encountered before. It is operated by systems which were, at the time of its inception, representative of state-of-the-art technology. Consequently, the first two months of the course will be devoted to ground school. Each crew member will be confronted with entirely new equipment and techniques which must be mastered before the start of flying training.

But, like everyone else who goes through the WCU, I know that you are anxious to get out to the aircraft and have a first look around. So we'll skip today's lectures and sneak out for a wander around the hangars.

WF443 (KO D of 115 Squadron, RAF Marham, circa November 1950) sitting deserted at dispersal awaiting the impromptu tour! (***Mo Mowbrey***)

Well now, here's an aircraft that isn't being worked on (or else everyone is on a NAAFI break!), so let's climb aboard. There are two ways of entering this aircraft; which one you will use depends upon where

your station is. The aircraft is divided into two (and in some circumstances, three) parts; the front portion houses the pilots, navigator/bomb aimer, engineer and signaller. The rear section contains the positions for the three gunners (we have got to get used to calling them 'scanners') and the radar nav. These compartments are separated by the two massive bomb bays, but connected by a narrow tube which provides a crawl-way between the front and rear.

Let's enter through the forward entrance this time. We'll find a ladder positioned inside the nose-wheel well which will bring us up through a hatch in the floor to the front cockpit. This is an easy exercise today, but wait until you have to clamber up carrying all your kit and paraphernalia for a long twelve hour flight! The first impression is that there is a vast amount of space here, especially when compared to the 'Lanc' or the 'Halibag'. No more squeezing between crew members to get to your station; you can even stand upright. Dominant features include the spacious and almost comfortable pilots' seats, the huge glazed area of the nose, the complex engineer's panel and, aft of him, the massive tub which contains the ammo for the upper forward four-gun turret.

Left: Clambering on board through the forward hatch complete with all the kit and paraphernalia for a long flight! (***PRB1701***)
Right: A well dressed Airplane Commander in his spacious and almost comfortable pilot's seat. Note also the padding covering the wall and roof. (***PRB1690***)

Everywhere the walls are covered with a green padding which will provide some much-needed insulation. It will get cold at 30,000 feet. The nav/bomb aimer has a reasonable amount of space in which to spread out his charts but he will have to watch out that he doesn't bang his head on the repeater scope for the AN/APQ-13 radar. With this he can plot his own radar fixes without having to get the radar nav to pass them forward.

The flight engineer sits behind the co-pilot, facing aft, and opposite the navigator. He manipulates the panel which is commonly referred to as 'The Mighty Wurlitzer', with connotations of the cinema organs that once entertained patrons between films. This crew member plays a crucial part in the operation of the Washington. From this panel he controls every system that is required to bring life to the aircraft and to sustain it, and the crew, for the duration of the flight. This is where the pulse rate

and health of the aircraft is monitored. He is also the butt of complaints when the cabin temperature begins to fall after prolonged duration at high altitude. No one seems to be concerned that he has the coldest seat in the aircraft. See how it's down in a well, below the level of the cabin deck? Those un-insulated sides and floor are up against the nose-wheel well which can get as cold as a certain part of the anatomy of the proverbial lady dressed in black who rides a broom! Don't expect any sympathy from him!

Normally, with a typical sortie being flown at altitudes of between 18,000 and 25,000 feet, the cabin conditions can be nicely controlled such that not much additional clothing is required. It is not unusual to see the odd chap in shirtsleeve order.

Left: A navigator working at a fix somewhere over the Irish Sea. The AN/APQ-13 repeater scope is just above his head. (***PRB1693***)
Right: A Flight Engineer tending his 'Mighty Wurlitzer'. (***PRB1692***)

Aft of the engineer and immediately behind the turret ammo tub is where the signaller (the RAF resisted changing this crew member's title to 'radioman') plays with a selection of communication systems; he has both Command and Liaison sets with which to keep in contact with the outside world. The good news as far as he is concerned is that there is no more winding out/in the trailing aerial; this aircraft has a tunable fixed system.

Whilst we are back beside the signaller's seat we can open a door in the pressure bulkhead and look into the front bomb bay. In fact we can climb into the bay and walk along the narrow ledges which run along each side. Bomb hang-ups are no longer a problem; all it takes is a brave soul to climb into the bay and kick it off! By the way, these doors are pneumatically operated and make a snapping turtle turn green with envy when they are selected 'closed'. Make certain that you never enter the bay from below without checking that the safety locks are in position. We have already had at least one armourer wasp-waisted this way. The two halves of the bomb bay are separated by the centre section

fuel tank which is situated between the front and rear wing spars. This tank can carry a total of 1000 gallons of fuel, but we will only use it for long range sorties. The other four tanks containing a total of 4000 gallons will suffice us for normal trips. That sort of fuel load will be good for about 10 hours, at normal cruise.

Ready to go aft? Then climb up the fixed ladder to the small hole above the bomb bay hatch and off you go. No time to discover that you are a sufferer of claustrophobia; there is 36 feet of padded rabbit's hole before you see the other end! Crews use this tunnel in flight in order to get aft to the toilet (still the basic Elsan, I'm afraid) and to heat tinned food. Later in the service life of the aircraft this manoeuvre will only be permitted with the cabin depressurized. The reason being that if someone was in the tunnel at the time of a total loss of pressurization at high altitude, he would appear at one end or the other at a very high rate of knots. His exit would challenge the muzzle velocity of the 0.50 in. guns in the turrets. Unfortunately, his progress beyond that point is not free and clear from obstacles and the resulting impact does not bear thinking about.

Emerging at the rear end of the tunnel will put you face-to-face with the 'barber's chair'. This is the pedestal seat which the central fire controller occupies. With his head poking out of an astro-dome-like transparency his task is to monitor the approach of any unwelcome fighters and allocate the remotely operated defensive armament to those scanners (left, right or, if carried, rear) best placed to deal with the threat. At such times another crew member would nip into the bomb aimer's seat and be prepared to handle either the front upper or lower turrets, as appropriate.

Left: Photographed from the rear bomb bay through the hatch in the bulkhead a CFC gunner occupies the Barber's Chair. (***PRB1698***)

Although this compartment is rather confining you will notice that on either side there are seats for the two scanners who will spend the flight peering out of their own blisters. Even in peace-time they do

not constitute ballast - they keep an eagle eye on the health of the Wright Cyclone R-3350 engines. These have been known to discharge vast quantities of oil at the drop of a hat and need to be watched constantly. Similar to the forward bomb bay bulkhead with its hatch, the rear bomb bay can be accessed from this compartment. Should it be necessary to effect an emergency lowering of the main undercarriage the two scanners would enter the aft bomb bay and, depending on the nature of the failure, either use the standby electric motor or, Heaven forbid there should be a total electrical failure, the hand-crank. If the latter has to be used it will take almost 800 rotations to fully lower each gear! Aircraft Commanders wishing to exercise the crew drills for this eventuality are not overly popular.

Above: Right scanner Ernie Lamb of 207 Squadron at work. (***Geoff Fielding***)

Right: Left scanner Harry Palmer of 44 Squadron relaxing at his station. (***Harry Palmer***)

Behind the scanners is the last section of the pressurized compartment. Poke your head around the bulkhead and there is the radar/nav's position in splendid isolation from everyone else. To go any further aft will take you outside the pressure bulkhead and into the region where the aft entrance ladder offers access for the rear crew members. In this area we can see the Auxiliary Power Unit (APU)

which provides electrical power during ground operations and acts as an emergency power source in the air. Just above the APU is a hatch which gives access to the upper fuselage. You can clamber out onto the top surface to carry out a pre-flight inspection of the panels and lights by walking precariously along the side of the leading edge of the fin, over the turrets and out to each wing tip. This can be a somewhat hazardous task on a frosty morning and calls for a good head for heights. For some reason, and a good one as far as the flight engineers are concerned, this task falls to the scanners. Beyond this aft area is another pressurized compartment of very small dimensions which houses the tail turret. However, since this turret can, like the other four, be remotely operated it is seldom occupied. The one exception is during major exercises when an additional gunner is carried; once enclosed in his turret he can only exit it in flight when the aircraft is depressurized.

Now that we have had a good look through the aircraft, let's return to the forward section and have a closer look at the 'front office'. For those who would rather not return through the tunnel, you can take the rear ladder and climb back up through the nose-wheel well again.

Make yourself comfortable in one of the pilot's seats and we'll have a look at what this has to offer. The large control wheel dominates everything, of course. In the centre of the wheel there should be a Boeing ‘hub cap’ - I say “should be” because they are very much of a collectable item and many have been known to disappear overnight from an unlocked aircraft.

Above: Fully kitted up and entering via the rear ladder. (***PRB1699***)

Above Right: One of the comfortable pilot’s seats occupied by a sergeant co-pilot. (***PRB1691***)

Right: A typical Washington control wheel minus the Boeing ‘Hub Cap’. (***John Forster***)

The size of the wheel gives a clue to the fact that the controls are all conventional - no power operated systems as yet. Mind you, after a long session of formation flying you will feel as if you have been carrying the aircraft rather than flying it. Alongside the outboard side of each seat are the long handles of the throttles. If you are looking for the RPM controls then glance across to the central console; the four spring-loaded electrical switches aft of the feathering buttons are all that you will get. But don't worry too much about that, the engineer will take care of any RPM changes from his own set at his console. Like so many other systems in this aircraft, the propellers are electrically controlled. In fact the only hydraulic system is the wheel brakes. These are operated via toe brakes (another new item for pilots to get used to) and the two large red emergency brake handles at the front of the central console.

The instrument panel is nothing special other than the fact that, in typical American fashion, one has to look all over the place to find the instrument you need most. No attempt to have a standard six instrument 'T' layout. In fact, a couple of them didn't even make it on the main panel and have been added as an afterthought -Turn and Bank and Rate of Climb are tacked on to the top of the panel. The only new instrument is the Localizer and Glide Path deviation meter (Blind-landing indicator in diagram below) for the Instrument Landing System. This would provide us with an excellent precision approach aid if only there were some ground installations! The RAF still prefers the Rebecca/BABS combination or, as at a few Master Diversion airfields, GCA. If we want to practice using the ILS we will pop down to the Bristol Aeroplane Company airfield at Filton, Bristol, and shoot a few approaches there. They are more cooperative than London's Heathrow airport who have the other one in the country. Besides, there is always a chance the latest prototype to emerge from Bristol's hangars, the huge Brabazon airliner, will be in the air. It is really quite a sight to see this vast array of metal lumbering through the sky.

Left: Freddie Tate of 90 Squadron occupying the co-pilot's seat. (***John Williams***)

Below: Flt/Lt Thomas occupying the captain's seat of P Peter, 90 Squadron. (***Don Crossley***)

Another interesting piece of equipment on the central console is the Honeywell-Minneapolis autopilot. There are a bunch of ‘dash pots’ and adjusting knobs that go with this very reliable gadget. Serviceability is its second name and it seldom packs up, unlike the dreadful abominations that appeared in the Lanc and Lincoln. Tie it into the bomb sight during a bomb run and it's money for old rope.

I can tell that there are a few of you who are straining to look over some shoulders to have a ‘dekko’ at that famous Norden bomb sight mounted in the nose.

Above: Not a clear shot but the best I have of a Norden bomb sight in a Washington. 44 Squadron Nav/Bomb Aimer Gordon Galletly occupying the bomb aimer station. Note the X-1 reflex sight addition to the bomb sight head. Note also the covered forward gun sight and partial views of the Airplane Commander’s and Co-pilot’s instrument panels. (***Gordon Galletly***)

Well, there it is. Now I don't profess to know a darn thing about the workings of this contraption except that it is gyro stabilized and it uses the rate/angle principle for tracking the target. Mils (whatever they are) come into play during a bomb run. Overall, it seems to work just fine and is definitely more serviceable than the British equivalent, the SABS sight. One of the advantages of the pneumatically operated bomb doors is that they can be left shut until the moment of release thereby removing the need to juggle the power so as to maintain the pre-determined TAS for the run. A quick snap open and, once the load has gone, close again saving a lot of messing about.

I suppose a word or two about the engines would not be amiss at this juncture. They are big and powerful; they are also mean b.....s. Temperamental as a bear with a sore head, they need a lot of looking after, both in the air and on the ground. The two row, 18 cylinder, collection of intermittently moving parts will, if all goes well, produce some 2200 galloping horses. Getting them all pulling in the same direction is the real trick. In an attempt to achieve this, the fuel is fed via two injector carbs

which are interconnected and must be synchronized; a delicate and time-consuming job carried out by the engine mechs. Once the fuel is burned it exhausts via a pair of turbines which, in turn, drive the superchargers; hence the term Turbo-Supercharged. These two features can be, and more often than not are, the cause of much gnashing of the flight engineer's teeth and asymmetric approaches. Reliability is not a word recognized by the manufacturers of this engine. Witness the first aircraft delivered to the RAF on 22nd March 1950. WF437 (alias USAF 44-69680) arrived before the ceremonially assembled group of VIPs with No. 3 engine feathered, its cowlings drenched in oil; surely an omen of things to come!

Above: Newly trained Engine Fitters get instruction on the mighty Wright R-3350 Duplex Cyclone. RAF engine fitters were generally trained on the Bristol Hercules sleeve valve engine and some conversion training was necessary before they could be let loose on squadron aircraft. (***PRB1669***)

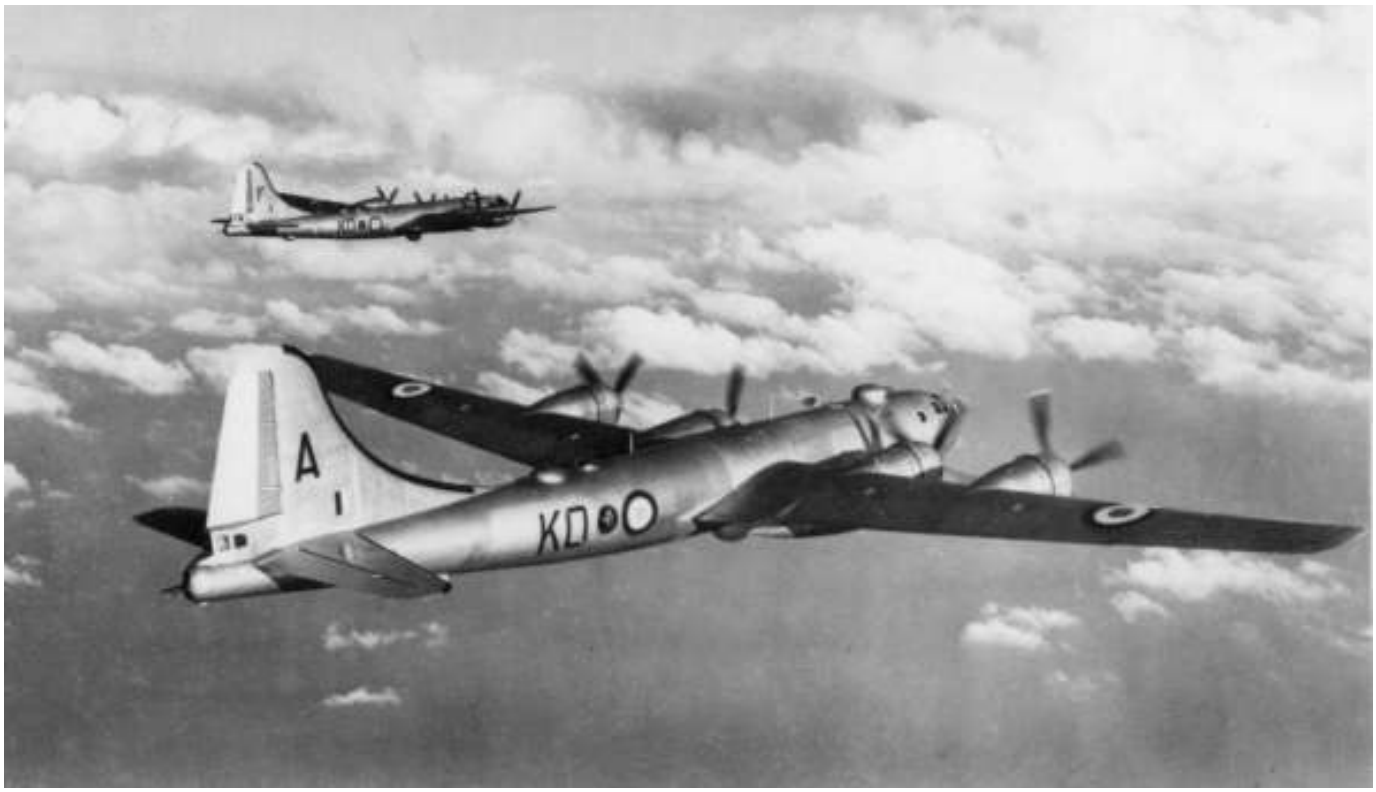
As if this is not enough of a headache for the engineer the variety of fuel systems adds insult to injury. There are two distinctly different fuel systems, dependent on the age of the aircraft. Late build planes had the simpler and, thankfully, the far more common system; this is the Manifold system. All fuel tanks, including the centre-wing tank, feed into a common manifold line running from one wing to the other. From this manifold, fuel can be directed to all engines and/or other tanks. In this manner any tank can be responsible for providing fuel to these thirsty engines.

Earlier planes have a system known as the Transfer system. Each of four wing located tanks feeds its own engine directly; provision is made for fuel to be transferred from either the centre (bomb bay) tank to any other tank or between main tanks. In the event of an engine failure (not unlikely) fuel from that tank would be available to other engines after being transferred to the remaining tanks. Flight engineers quickly get to know which aircraft has which system - it doesn't pay to be caught napping.

There are, however, still one or two other quirks awaiting the unprepared engineer. Take the electronic controls for the turbo-superchargers for instance. These units regulate the position of the waist-gate in the exhaust manifold which, in turn, determines the amount of boost an engine receives. The Aircraft

Commander selects the desired boost setting from a rotary knob on the centre console and the regulators maintain that setting. On take-off the engineer must watch the manifold pressures very closely and make sure that the limit is not exceeded. If a regulator decides to go hay-wire there is going to be a fine collection of cylinder heads along the runway unless the engineer acts quickly. If he sees an errant MP needle then he must isolate the offending regulator and, as time permits, replace it with a spare. The trick is to know where to look for the regulators! It seems that the original Boeing installers enjoyed playing hide-and-seek. These regulators might appear in any odd spot in the forward cabin. Prior knowledge is a good insurance policy. Fortunately, most squadrons follow the policy of allocating one crew to an aircraft. That way you really get to know your own aircraft.

Time is rushing by and so we'd better get back to the Mess for tea. If you would like a famil ride in one of these splendid examples of modern technology, come back again and we'll lay one on. (*The next installment in John King's tale will appear in the next issue – **Chris***)



When it all worked the Washington was a graceful and powerful plane.
Top: 2 Washingtons of 115 Sqdn formate on the way to the bombing range on Heligoland. (***PRB1653***)
Above: An unidentified Washington lifts off to start another sortie. (***PRB6065***)

Contacts

A list of those people who have made contact with me (**new contacts in bold**) – if you wish to contact any of them, let me know and I will pass on your request:

Michael	Achow	General Interest
Thomas	Adams	Flight Engineer 44-69680 (WF437)
Oliver	Adamson	'Bad Penny' 42-65274 (WF442)
David	Alexander	ASF RAF Marham
Ken	Alderman	Bristol Aeroplane Company, Filton
Derek	Allen	192 Squadron
Neil	Allen	Bombardier 44-69680 (WF437)
Trevor	Allwork	149 Squadron Engine Fitter
Brian	Armstrong	XV Squadron Association
Roy	Arnold	44 Squadron Air Gunner
Vic	Avery	90 / 44 Squadron Navigator
Phil	Batty	44 Squadron Signaller
Gerry	Beauvoisin	57 Squadron Air Gunner
Ray	Belsham	ASF Engine Fitter RAF Marham
Cliff	Bishop	115 / 90 Squadron Engine Fitter
Bunny	Bowers	Crew Chief WF437
Maurice	Brice	General interest
Joe	Bridge	Webmaster, RAF Marham Website
John	Bristow	207 Squadron Airframe Mechanic (WF564)
John	Broughton	207 Squadron Engine Fitter
Jeff	Brown	149 Squadron Air Gunner
Mike	Brown	115 Squadron Airframe Mechanic (WF446)
Eric	Butler	207 Squadron Armourer
Michael	Butler	Son of Harry Butler, 207 / 35 Squadron Signaller
William	Butt	115 Squadron Crew Chief
John	Care	149 Squadron Pilot (*deceased*)
Katie	Chandler	Widow of Vern Chandler, A/C 44-69680 (WF437)
Pat	Chandler	Daughter of Vern Chandler, A/C 44-69680 (WF437)
Brian	Channing	149 Squadron Navigator
Wendy	Chilcott	Sister of Ken Reakes 90 Squadron Air Gunner
Bob	Cole	149 Squadron Electrical Fitter (WF498)
Terry	Collins	XV Squadron Engine Fitter
Doug	Cook OBE	44 Squadron Co-Pilot (WF508)
John	Cornwall	192 Squadron Aircrew
John	Cowie	207 Squadron Air Gunner
John (Buster)	Crabbe	207 Squadron Crew Chief
Don	Crossley	90 Squadron Signaller
Howard	Currie	44 Squadron Pilot (*deceased*)
Bernard	Davenport	90 Squadron Air Gunner
Mike	Davies	90 Squadron Air Gunner
Gordon	Dickie	35 Squadron Airframe Mechanic
Basil	Dilworth	XV / 192 Squadron Navigator
Keith	Dutton	90 Squadron Air Gunner
Ray	Elliott	Pilot 'Bad Penny' 42-65274 (WF442)
Peter	Fahey	35 Squadron Electrician
Peter	Fairbairn	35 Squadron Engine Fitter
Tony	Fairbairn	Lived near 23MU, RAF Aldergrove
Les	Feakes	149 Squadron Air Gunner
Geoff	Fielding	Air Gunner
Ken	Firth	44 Squadron Air Gunner

Charles	Fox	Bombardier 42-94052 (WF444)
Dave	Forster	Researching RAF ELINT Squadrons
John	Forster	207 Squadron / WCU Air Gunner
John	Francis	192 Squadron Engine Fitter
Ray	Francis	57 Squadron Association
Gordon	Galletly	44 Squadron Navigator / Bombardier
Norman	Galvin	XV Squadron Engine Fitter
Alan	Gamble	90 Squadron Radio Operator
Brian	Gennings	Ground Maintenance Hanger
Bob	Goater	XV Squadron Instrument NCO
Tony	Goodsall	90 Squadron Air Gunner
Kevin	Grant	207 Squadron Air Gunner
John	Hanby	207 Squadron Engine Fitter
Ken	Harding	44 Squadron Signaller
Alan	Haslock	ASF Turret Armourer
Charles	Henning	CFC 'Bad Penny' 42-65274 (WF442)
John	Hewitt	Fire Section RAF Coningsby
Peter	Higgins	207 Squadron Air Gunner
Roy	Hild	Pilot 42-94052 (WF444)
Tony	Hill	Archivist P&EEE Shoeburyness
John	Hobbs	149 Squadron Air Gunner
Julian	Horn	RAF Watton Website
Henry	Horscroft	44 Squadron Association
Brian	Howes	115 Squadron
John	Howett	A/C 44-61688 (WF498)
Ernest	Howlett	44 Squadron Engine Fitter (WF512)
Alex	Hughson	Brother of Sgt Hughson 90 Squadron Air Gunner
Tamar	Hughson	Niece of Sgt Hughson 90 Squadron Air Gunner
Ken	Hunter	90 Squadron Navigator
Paul	Hunter	Flight Engineer 'Bad Penny' 42-65274 (WF442)
Jimmy	James	Engine Fitter
Bryan	Jordan	207 Squadron Air Gunner
Ron	Jupp	Vickers Guided Weapons Department, Weybridge (*deceased*)
David	Karr	Nephew of William Karr, XV Squadron Air Gunner
J.	Kendal (Ken)	90 Squadron ??
R (Dick)	Kent	35 Squadron
Andrew	Kerzner	Tail Gunner 44-69680 (WF437)
John	King	44 Squadron Flight Engineer
John	Kingston	CFC RAF Marham
John	Laing	207 Squadron Air Gunner
George	Lane	Navigator 44-69680 (WF437) (*deceased*)
Peter	Large	Brother of Edward Large, 44 Squadron Pilot
Pete	Lewis	149 Squadron Engine Fitter
Brendan	**Maher**	**192 Squadron Electrical Mechanic**
David	Male	Bristol Aeroplane Company, Filton
Gerry	Maloney	44 Squadron Navigator/Bomb Aimer (WF508)
Patrick	McGrath	115 Squadron Pilot
Pete	McLaughlin	Engineering Officer, Pyote Texas
Derek	Mobbs	192 Squadron Electrical Mechanic
John	Moore	Air Traffic Control, RAF Coningsby
Peter	Morrey	57 / 115 Squadron Air Gunner
Mo	Mowbrey	57 Squadron Air Gunner
Don	Neudegg	115 Squadron Air Gunner

Pat	O'Leary	RAF Coningsby Armourer
Brian	O'Riordan	192 Squadron Ground crew
Ralph	Painting	57 / 192 Squadron Flight Engineer
Harry	Palmer	44 / 57 / 115 Squadron Air Gunner
Tom	Pawson	35 Squadron Signaller
Bob	Pleace	XV Squadron Pilot
Chris	Petherington	207 Squadron Pilot
Ian	Qusklay	90 Squadron Air Gunner
Harry	Rickwood	149 Squadron Electrical Fitter
Phil	Rivkin	90 Squadron Signaller
Harold	Roberts	Witness to crash of WF502
Ivor	Samuel	207 Squadron Air Gunner
William	Santavicca	Gunner 'Look Homeward Angel', 6th Bomb Group Association
Sheelah	Sloane	Daughter of Sqdn Ldr Sloane, OC 90 Squadron
Richard	Sloane	Son of Sqdn Ldr Sloane, OC 90 Squadron
Steve	Smisek	Son of A/C of City of San Francisco (K-29, 330th Bomb Group)
Joe	Somerville	RAF Marham Engine Fitter
Paul	Stancliffe	192 Squadron Co-pilot
David	Stanford	192 Squadron Wireless Mechanic
Derek	Stanley	57 Squadron Radio Engineer
Jim	Stanley	
Adrian	Stephens	192 Squadron Air Wireless Fitter
Bill	Stevenson	35 / 635 Squadron Association
Harry	Stoneham	44 Squadron / A.S.F. Engine Fitter
Ron	Street	90 Squadron Pilot (WF503)
Harold	Tadea	'Bad Penny' 42-65274 (WF442)
Tim	Thewlis	General interest in Washingtons
Albert	Urquhart	Left Gunner K-39, 330th Bomb Group
Dave	Villars	44 Squadron Electrical Fitter
Peter	Walder	44 Squadron Radar Fitter
Geoff	Webb	57 Squadron Engine Fitter (WF558)
Geoffrey	Wellum	115 / 192 Squadron Pilot
A	Whatman	
Colin	Williams	XV Squadron Navigator / Bombardier
John	Williams	XV / 207 Squadron Air Gunner
Robert	Willman	A/C 42-93976 (WF440)
Charlie	Woolford	90 Squadron (Stirlings)
Stephen	Wynne	Son of Sgt Jack Wynne 57 Squadron co-pilot