8 Pembroke-Andover Era 1969 - 77

There had been an RAF communications squadron in Germany since 1944. In preparation for the invasion of France a unit had been formed in July 1943 at what is now Blackbushe Airport but was then known as RAF Hartford Bridge. Initially called the 2nd Tactical Air Force Communications Flight, it transferred to RAF Northolt in April 1944, then followed the invading forces, operating in France, Belgium and eventually Germany, establishing itself at RAF Buckeberg in May 1945, where it was to remain for almost ten years. 'Communications', in this context, are nothing to do with radios or telephones. A 'communications squadron' is the RAF's term for a light transport unit, with duties such as VIP air taxi and those passenger and freight tasks which do not justify larger transport aircraft. Typical examples might be medical evacuation and small but urgent packages.

The role and organisation of the RAF in Germany changed as the political and military situation changed. Immediately after the war the British military force in Germany was, inevitably, an army of occupation. German civilian administration had largely either been destroyed or had broken down. Even elementary necessities of life such as housing and electricity had to be organised by the Allied military. As an example, until 1949, it was the British Army which was running the Volkswagen car factory which produced the Beetle at Wolfsburg. For the RAF, this situation was reflected in the change of name from 2 TAF to the British Air Forces of Occupation (BAFO) in July 1945. At this time, the stand-off against the Soviets was still in the future. They had been our allies in the War and, whilst a four-power division of the territory was a practical administrative necessity, occupation was still considered an American, British, French and Soviet joint project. The amalgamation of the first three sectors into West Germany and the latter's transformation to East Germany did not take place until 1949.

As time progressed and Adenauer's post-war Federal Republic of Germany produced a strong credible de-Nazified civilian administration whilst the Soviet threat became more evident, the Western priority changed from civilian administration to developing a suitable response to a potential enemy. The formation of the North Atlantic Treaty Organisation (NATO) in 1949 allowed joint Allied contingency plans to be drawn up. All of this required changes to the RAF's organisation and inventory. Naturally, the RAF unit which eventually became Sixty Squadron was affected. The original 2 TAF Communications Flight changed its title from 'Flight' to 'Squadron' on arrival at Northolt and had become part of a 'Wing' in 1945 at Buckeberg. The BAFO Communications Wing was disbanded in 1947, with part of it becoming the BAFO Communications Squadron again. In 1951 BAFO was re-labelled as 2 ATAF and in 1954 the squadron, having reverted to its old name of 2 TAF Communications Squadron, moved to RAF Wildenrath. A further change of name to 2 ATAF (Allied Tactical Air Force) occurred in 1958. During part of its pre-Sixty history it became very large, at one time operating up to seven different types. 2 ATAF was re-designated Royal Air Force Germany on 1 January 1959 and thereafter, until it became Sixty Squadron in 1969, the unit's title was the RAF Germany Communications Squadron.

RAF Wildenrath, in Nordrhein-Westfalen, very close to the Dutch border, was carved out of a North German forest and opened on 15 Jan 1952 as the first of the 3 'clutch'

airfields, the other two being Brüggen and Laarbruch. It was to become Sixty's home for twenty-two years, the longest time the Squadron has ever spent in a single location. During that period, the station's initial main role was as home to 3, 4 and 20 Squadrons, operating a variety of fighter or fighter/bomber types over the years which in 1969 were Harriers. From October 1976, Phantoms replaced the Harriers, the resident squadrons being 19 and 92. There was also an Army Air Corps Flight and a signals support regiment. For a time, Rapier and Bloodhound missile units were established there. Additionally, Wildenrath was a major transport airfield supporting numerous RAF and charter trooping flights along with a multitude of other NATO flying services, using its 24 hour a day Master Diversion (later re-labelled Military Emergency Diversion) Airfield capability.

A Ceremonial Numbering Review at which the squadron formally took up the title of Sixty Squadron was held in the Squadron's hangar at RAF Wildenrath on 3 February 1969. The weather was kind, for the time of the year. A snowfall three inches deep had stopped and been cleared just in time for the parade. The Reviewing Officer was the C-in-C RAF Germany, Air Marshal Sir Christopher Foxley-Norris, who had been instrumental in securing Sixty's continuing existence, and he gave a welcoming address. The Squadron then hosted some very distinguished guests at the formal lunch which followed. The Rt Hon Lord Balfour of Inchyre PC MC TD who, as Lieutenant Harold Balfour, had been a founder member and pilot on Sixty in May 1916, gave a warm and humorous speech. Air Vice Marshal Stan Vincent CB DFC AFC DL, who had been the first Sixty Squadron pilot to achieve a confirmed combat kill (in 1916) also attended, along with three recent former commanding officers, Group Captain Peter Smith who was conveniently based nearby at the headquarters at Rheindahlen and Wing Commanders Jock Fraser and Mike Miller, the latter the previous Squadron Commander who had presided over the Javelin-equipped Squadron's disbandment parade only some ten months previously.

The squadron was commanded by Squadron Leader Charles Burrows, inevitably known as 'Bunny'. Its aircraft consisted of eight Pembrokes and one Heron, which was used as the C-in-C RAF Germany's personal aircraft. The personnel establishment was eleven pilots, twelve navigators (one of whom was the CO), one Warrant Officer (Eng), 19 SNCOs and sixty airmen. The ages of the aircrew varied from twenty to forty-seven, although the young ones tended to be the exception. This represented a significant change. The Javelin had been a high-performance night/all-weather fighter, the operation of which is normally a younger man's game. Virtually all of the Javelin squadron's aircrew had been in their twenties and thirties. In the years that followed, Pembroke aircrew were generally in their thirties and forties, with some fifty-year olds. This led to some aircrew serving on the squadron, years apart, on very different aircraft and roles. For instance, Mike Mercer had flown the Venom from 1954 to 57 and Fred Butcher had flown the Javelin from 1961 to 64. Both were to fly the Pembroke and, in Fred's case, the Heron as well, years later. Barry Taylor flew the Meteor and Javelin with Sixty in Singapore from 1958 to 1962, then came back later to fly the Pembroke.

Photo: The Hunting Percival Pembroke

The workhorse of the squadron from 1956 had been the Hunting Percival Pembroke. Edgar Percival was an Australian who had actually been a pilot on Sixty in 1917, and had formed the Percival Aircraft Company in Gravesend in 1933. The company was later bought by Hunting and re-named Hunting Percival Aircraft in 1954. The Hunting Percival P 66 Pembroke was a 7-seater, high wing monoplane powered by two 550 BHP 9-cylinder radial Alvis Leonides Mk l27 engines driving three-blade constant-speed, fully feathering propellors. Its maximum all-up weight was 13,500 lb and it had a top speed of 220 knots. Its primary role in the RAF was carrying passengers and freight. However, the RAF still had global commitments when the type entered service in 1953 and so its version could also be used for various other roles: photographic survey and operational photographic reconnaissance support to ground forces, for instance, supporting the Army in Malaya (with provision for two P52 and one P49 cameras on the cabin floor, and two P24 cameras for oblique cover); Air Sea Rescue (with Lindholme gear – an emergency liferaft and survival pack dropped from the air by the search aircraft); bombing(one 250 lb bomb under each mainplane); speech broadcasting (one loudspeaker on each bomb carrier); and aeromedical duties (up to six stretchers). Avionics equipment at various stages included VHF and UHF R/T, Gee Mk 3 or Decca, Rebecca, IFF/SSR, SARAH/SARBE homing (Violet Picture), ILS, ADF/VOR, and radio altimeter.

One of the squadron's most visible roles was VIP air transport. At this time, NATO was organised into two Strategic Commands, Allied Command Atlantic and Allied Command Europe (ACE). ACE itself was subdivided into three regions, Allied Forces North, Central and South (AFNORTH, AFCENT and AFSOUTH). Allied Air Forces Central Europe (AAFCE) was the air element of AFCENT and was commanded by a Royal Air Force Air Chief Marshal based at Brunssum in the Netherlands, who was also, ex-officio, Deputy Commander-in-Chief of AFCENT. Sixty Squadron provided

the DCINCENT's personal aircraft, a Pembroke (WV729, in a VIP fit) and crew. The DCINCENT was given his own constituted crew wherever possible and he tended to task them himself.

In February 1969, at the time of the re-numbering of the Squadron, DCINCENT was Air Chief Marshal Sir Augustus Walker. 'Gus' Walker was a Yorkshireman who had played rugby for the RAF, Yorkshire and England in the 1930s. After his MA at St Catherine's College, Cambridge, he had joined the RAF in 1934 and by 1942 he was a 30-year old Group Captain commanding RAF Syerston, where he was to lose his right arm. Quoting from Guy Gibson's *Enemy Coast Ahead*:

> 'About thirty aircraft were taxiing round the perimeter track waiting for each other to take off. Gus and I were watching from the control tower. Suddenly right on the far side of the aerodrome, we saw that a few incendiaries had dropped out of the gaping bomb-doors of one of the Lancasters. Gus, thinking that this aircraft had a 'cookie' on board, immediately rushed over to warn the crew to get out. Watching him through field-glasses, I saw him get out of his car. I saw him run towards the aircraft, his arms waving against the lurid light cast up by the incendiaries. He was within twenty yards of the cookie when it went off.
>
> There was one of those great slow explosions which shot straight into the air for about 2,000 feet and the great Lancaster just disappeared. We turned away, trying not to think of the horrible sight; we thought that Gus had surely been blown sky high. But he was too tough for that. He had been bowled over backwards for about 200 yards; he had seen a great chunk of metal swipe off his right arm just below the elbow, but he had picked himself up and walked into the ambulance.
>
> Before he was taken off to a base hospital he said two things. He asked me if I would look for his arm, which had a brand-new glove on it, and he told me to ring up the AOC and ask him if he would take a one-armed Station Commander in two months time. And Gus came back in that time to the day.'

Returning to service with an artificial arm he was referred to by all and sundry as the 'one-armed bandit'. Despite his injuries, he continued to fly and later, as Commandant of the RAF Flying College, had been responsible for developing flying techniques for the new post-war jet aircraft. Now, as DCINCENT, he was on his last tour. When being ferried around by Sixty on his official tasks, he often flew the Pembroke himself, accumulating 237 hours on type during this period.

The squadron's other primary VIP passenger, again with his own aircraft and constituted crew, was, of course, the C-in-C RAF Germany, Sir Christopher Foxley-Norris. His aircraft was the Heron, XM 296, formerly of the Queen's Flight. This was a four-engined development of the De Havilland Devon and Dove series of aircraft. One pilot described it as 'rather like flying four Chipmunks strapped together', a reference to its 4 Gypsy Queen Mk 30 engines, similar to the Chipmunk's Gypsy Major engine. The aircraft was designed as a simple and basic type, suitable for operation into remote and ill-equipped airfields. The original civil version carried up to seventeen passengers but, as an ex-Queen's Flight aircraft, XM 296 was in VIP fit.

It had been given the name “Quadriga” (a winged Goddess of Victory with her chariot drawn by four horses in line abreast). However, a former C-in-C had almost named it “Snow White” as he considered that it was only big enough for himself and seven dwarfs!

Photo: DH Heron (see if you a can find a good photo of a Heron in RAF, or better still, Sixty Squadron livery)

Other VIP tasks included providing air communications for HM Ambassador to FRG and the Air Attaché and Headquarters staff at RAF Germany and Northern Army Group. Most crews who were selected for VIP flying enjoyed it. Appointment was by merit, based on annual check flights from an external examining unit and it could be regarded as something of a mark of recognition to be chosen. Moreover, the work presented slightly more of a challenge than normal routine passenger or freight flying because of the requirement for accurate timing. VIP crews worked to a ‘Doors Time’, which was the moment that, after the aircraft had taxied in to its appointed stopping place, the door was opened for the VIP to meet a reception committee, or take his place at saluting base, walk down a red carpet, or whatever else was required by the occasion.

Achieving the ‘Doors Time’ required close co-operation and joint planning between the pilot and navigator. Firstly, a decision had to be made as to which was the most likely runway to be in use at the destination airfield. This depended on the wind and the weather on the day and needed to be checked. The pilot would then look at the ‘taxy plate’, that is, the expanded airfield diagram showing the taxiways in detail. He would then decide on the most probable taxy route in – for instance, were runway intersections available as short cuts and were they likely to be offered by Air Traffic Control? Having measured what he considered to be the most likely distance, he would then calculate how long it would take to taxy in at ‘a fast walking pace’. Working backwards from the ‘Doors Time’ then gave the navigator the required landing ETA. From this, he could work out the required take-off time. But this

depended on the route and the weather and also required a fair number of assumptions. Would the crew be re-routed once airborne? Would they be allocated the requested flight levels? Would the winds be as forecast? Would they get an expeditious arrival from the destination ATC? En route timing could be adjusted either by speed changes or by requesting ATC approval for a more direct route. There were many factors which were not always within the crew's control - the runway in use might not be the one they expected, there was a limit to how much could be achieved by adjusting speed, and requests to ATC were not always granted. The crews therefore had to be adaptable and capable of making rapid decisions on those factors which were within their control. Everyone would notice if they failed, for any reason, to achieve the required time, even if they were not to blame.

A high standard of catering was also required on VIP flights and the squadron was not established for Air Loadmasters or Air Stewards at this time. The crew was therefore supplemented by a SNCO Crew Chief, whose primary task was maintaining the aircraft when away from base but who also had responsibility for the catering. It was also essential that the start-up went without hitches, so the crew would go out to the aircraft early and start both engines and run them up until warm. They would then position the aircraft as required and close the engines down. About ten minutes before the VIP's arrival, the pilot would re-start the starboard engine, leaving the port one still shut down to avoid slipstream by the entrance door on the port side. Once the passengers were on board, they would close the doors and start the port engine.

In addition to the VIP flying, there was also a scheduled service between Wildenrath and Northolt for regular Germany/UK liaison visits which the crews welcomed as a UK night stop in order to top up on items of shopping which were not so readily available in Germany. Oxo cubes and Fishermen's Friends were particularly favoured. Another of the squadron's roles was to provide air support for the RAFG strike and recce force. This would include small detachments and exercises. It was a particularly useful facility for recovery of aircraft which had become unserviceable and had had to divert away from their home airfield. Typically, a Canberra from Laarbruch might have landed unserviceable at the USAF base at Ramstein. The pilot would then phone his home station with a description of the fault. The appropriate spare and a small servicing party would be driven to Wildenrath or, if time was short, the Pembroke would go to the aircraft's operating base to collect them, and they would then proceed to the stranded aircraft and crew. They would normally remain until the aircraft was declared serviceable before recovering the ground party and their tools.

There was a Search and Rescue standby commitment, though this was rarely if ever used. However, an aeromedical evacuation role proved very useful. British forces in Germany had access to good military hospitals, but urgent and complicated cases, particularly of dependants, were often evacuated to the UK The Pembroke's cabin was large enough for patient, stretcher, support equipment and medical staff.

The groundcrew, too, had a support role beyond maintaining the squadron's own aircraft. They were Wildenrath's Visiting Aircraft Support Flight, providing turnround inspection and servicing for all aircraft visiting the station. However, this was merely the peacetime face. In war they would have contributed to Operation 'Ample Gain' and this war commitment partly accounted for the large ground crew component. The role was not only to service and replenish but also to re-arm.

Wildenrath was a node in a NATO-wide network of stations designed to enable continuous friendly operations, including those by other Allied air forces, flying dissimilar types, in the face of successful airfield denial operations by the enemy. It called for extensive practice by the groundcrew, many of whom were cross-trained on several NATO aircraft types. It was the one squadron activity that was declared to NATO and subject to external Tactical Evaluation ('Taceval').

Despite all this, the Squadron's most significant role was an unsung one. It was classified Top Secret and, under normal circumstances, it would not be possible to write about it until October 2020 because this activity was covered by the Official Secrets Acts, on which there is generally a 30-year embargo, and the operation continued until 30 September 1990. Sixty Squadron was carrying out covert photographic espionage of Soviet and East German military forces in and around the Berlin Air Corridors.

It is perhaps slightly ironic that an aircraft which, by the late eighties, looked like a museum piece should have had such a significant role. A crew once turned up at Denham Air Park in May 1987 (they were going to a Reunion at RAF West Drayton, and taking some other squadron members with them). It was a Saturday afternoon and when they arrived, there was a wedding reception going on – presumably the happy couple were members of a flying club or, for other reasons, wanted an aviation theme as the backdrop for their big day. The Sixty Squadron group were, to their surprise, received with a warm welcome, invited to the party, and asked if they were part of some Historic Flight!

Nothing could have been further from the truth in terms of operational effectiveness. In 1987, in a Dining-in Night speech at Wildenrath, the Station Commander, possibly unwisely, noting that he had two Phantom interceptor squadrons on his station, paid tribute to Sixty Squadron by pointing out that it was the only *operational* squadron on his station. The point that he was making was that outstandingly capable though the Phantom was (and far more attractive and desirable to fly as a pure aircraft type), in the absence of a shooting war, his two Phantom Squadrons, 19 and 92, were in a training role. Only Sixty was carrying out operations. Fortunately, his reference was so oblique that most listeners not in the know would have thought that he was referring to Sixty's transport operations and so there was probably no security breach. *(He was not the first to have made a similar remark. It was because of this role, and also the groundcrew cross-servicing role, that the Harrier Force Commander in 1976, in his post-Taceval debriefing referred to Sixty as his only 'permanently operational squadron').*

The reason that it is possible to write about this highly classified operation in such a relatively short period after its cessation is that the geographical, military and political situation of West and East Germany between 1949 and 1990 was unique and is unlikely to be repeated. There are therefore few secrets which might be applicable to Western interests in the foreseeable future to give away.

To understand why this is so, we need to look at a map of the two Germanies during this Cold War Period.

For most of the northern part of Germany the distance from the Dutch Border to the Polish border is about 500 km (300 statute miles). From the former Inner German Border to the Polish border the distance is about 225 km (140 miles). Under the Potsdam agreement of August 1945 the Western allies were guaranteed the right to fly into Berlin over East German territory along the Berlin Air Corridors, which were twenty miles wide, and within the Berlin Air Zone, which comprised a twenty mile radius from a point in central Berlin. The cameras carried by the Pembrokes, with their high magnification, could produce useful information about ten miles beyond the the Corridor and Zone edges, if the visibility on the day permitted it. Thus all of the area bounded by the three corridors, including the no-go areas in between them and also the ten miles to the east of the Zone, was open to reconnaissance photography. This comprised about 120 of the 140 miles of the distance from West Germany to Poland; it meant that about two thirds of the entire area of East Germany was within Sixty Squadron's possible photographic coverage.

East Germany at this time was one of the most highly militarised parts of the world. The Group of Soviet Forces in Germany (GSFG) comprised 21 army divisions and 5 air divisions, whilst the East Germans had the National Volksarmee (NVA), the East German Air Force and the Border Guard. This last formation, which sounds like a harmless home defence unit, had everything that a full army normally has, except tanks. However, for the West, there were problems finding out exactly what was there. Although, in the spirit of initial post-war co-operation, there were agreements allowing Military Liaison Missions on the ground to visit and report on each other's troop deployments, there were also restricted areas to which access was denied. Not surprisingly, the Soviets and East Germans had taken full advantage of these post-war agreements to place most of their most valuable and secret installations within these restricted areas. However, nobody had thought, in this immediate post-war period, to place prohibitions on overflight, and the restrictions on these areas did not extend to the sky above them. Because, as in any potential war situation, it is necessary to have your assets fairly near the front so that they can be mobilised quickly, there was an enormous concentration of Soviet and East German military hardware within Sixty's area of coverage. These days, if we were military, we would describe it as a 'target-rich environment' or, if we were bankers, as 'low-hanging fruit'.

The significance of the Potsdam agreement's flying rights had not been lost upon either the RAF Germany Communication Squadron or the BAFO/2ATAF Intelligence staff, right from the start. Photographic reconnaissance flights had been going on in the corridors from 1945 as and when the opportunity presented itself, but there was no formal plan or organised operation. These had tended to be local initiatives, with little thought of a co-ordinated or centrally controlled intelligence system. From 1956 onwards the Air Ministry and the RAF Intelligence central staff took a more active controlling role. After the 1960 Gary Powers incident of the U2 being shot down over Russia direct overflight of the Soviet Union by the USA became either difficult or impossible, and this was some years before the US had developed the technology to produce satellite imagery more or less on demand, as happens today. This suddenly gave the availability of Sixty's reconnaissance data a much higher priority in London, especially as it might give possible bargaining rights with the USA.

In December 1960 Sir Norman Brook, the Cabinet Secretary, minuted Harold Macmillan requesting that the RAF be authorised to carry out two Pembroke reconnaissance flights along the Berlin corridors to 'take advantage of a unique opportunity to obtain valuable intelligence on Soviet surface-to-air guided weapons'. It is interesting to note that, at this time, each individual flight had to be approved personally by the Prime Minister. Three SAM sites were identified, located and photographed and the data was well received by the US Intelligence services.

Since the Pembrokes had a perfectly legal right to be in the Corridors and genuinely were flying other tasks to Berlin not related to intelligence gathering, such as VIP air taxi and light transport sorties, the risk of detection was low. Nevertheless, there were misgivings, even at Cabinet level. The Minister of Defence at the time, Harold Watkinson, gave his opinion: 'I doubt myself whether the risk is worth taking. Using the corridor for spy flights would be a good card for the Russians'.

He was overruled. The Joint Intelligence Committee, seeing this as a low-risk operation, requested, and were granted, more flights. In August 1961 Ulbricht's East German government divided Berlin by the construction of the 'Anti-Capitalist Wall', which, they told their own people, was in order to keep Westerners out. One effect of the Berlin Wall was to restrict the flow of human intelligence, thereby giving an even higher priority to what was obtainable from the Pembrokes. By 1962 these flights had become regular weekly missions.

Photo: The Berlin Wall

http://upload.wikimedia.org/wikipedia/commons/5/5d/Berlinermauer.jpg

At this point that the whole operation became more formally organised, with an Air Staff Operation Order being promulgated. It was issued by HQ RAFG and called

OPERATION HALLMARK. For those readers who do not have a military background, it is important to point out that it was an Operation, not an Exercise. Operations normally take place in wartime. Exercises usually take place in peacetime.

Once the Op Order was issued and the operation was authoritatively formalised, it became necessary to have a well-equipped fleet of appropriate aircraft. Up till this point it had all been on an *ad hoc* basis but now the required approval was in place. Hunting had offered a general-purpose PR version of the Pembroke in 1953 and the RAF had bought eight of them in the fifties for use in their South-East Asian operational activities, but by this time all but one (XF799) had been disposed of. Work therefore began in 1963 to convert XF799 and two others to a more modern camera fit.

The most suitable camera within the RAF inventory of that time was the F96 and a suite of five of them was fitted into the Pembroke. Three of them, equipped with 12 inch lenses, were arranged in a downward-pointing fan (ie, one nearly vertical, but slightly pointing left of centre, one vertical and the third pointing slightly right). The other two were fitted with 48 inch lenses for long distance vision and they pointed out through the left and right side windows of the Pembroke, but with a slight depression angle. These were the ones that could see out to about ten miles sideways, given suitable atmospheric visibility.

Clearly, if the pretence were to be kept up that these were normal VIP and light transport aircraft, some attempt at concealment was necessary. Accordingly, sliding camera doors were fitted to the underside hatches and a procedure was put in place whereby the crews always had to black out the side windows with thick curtains prior to landing. Five heavy cameras added greatly to the Dry Operating Mass of the aircraft. Each one weighed about 60 kg and there was also a substantial frame of what looked like scaffolding to support them, along with heavy-duty electric motors to rapidly adjust the depression angle of the 48-inch oblique variants. No easy figures are available for the additional weight of the camera fit, as the installation was highly classified, but it must have been of the order of half a ton or so, which was a lot for a small and relatively light aircraft. Not surprisingly, this made single-engined operations problematic. Normally, if you lose one engine and the other one keeps going, the aircraft should gracefully descend, eventually arriving at a stabilising altitude which will be dependent on the aircraft weight and the atmospheric temperature at the time. This altitude is usually quoted, in Western aircraft, in feet. With the Pembroke, in camera fit, the aircrew joked privately that it would be quoted in fathoms. This is not as silly as it sounds. Had one of the Pembrokes lost an engine halfway down one of the corridors and not been able to make it, if travelling eastbound, to Berlin, or westbound, to the FRG, it might have had to divert into an East German airfield. The consequences are unimaginable. Fortunately, it never happened during the whole period of the HALLMARK operation.

The RAF, in common with all British Armed Forces and the Civil Service, manages its security on the ‘need to know’ principle. This means that, irrespective of rank or position, if you don’t actually need to know about a classified operation in order to do your job properly, you don’t get told. It was decided that only some of the squadron aircrew would be selected for the HALLMARK operation and the others would continue with their normal transport operations. Accordingly, only those operating on

HALLMARK were briefed about it. Other squadron aircrew clearly worked out that something was going on, but did not ask questions, knowing that they would be inducted into HALLMARK if they were needed. In fact, at station level at RAF Wildenrath, the only people with access to the HALLMARK Operation Order were the Station Commander, OC Operations Wing and the operating crews. Even the engineering staff and the technicians who downloaded the film on the completion of the missions were not told the full story.

The other aspect that the HALLMARK Operation Order had to establish, before operations could commence, was deniability. It was no secret that the Pembroke had a 'photographic survey' capability – note the use of the word 'survey' rather than 'reconnaissance'. Hunting had marketed this option in its advertising blurbs in the fifties. Indeed, the aircraft was genuinely used occasionally for survey work within the FRG for map-making and similar projects and its photographic capability was published in various RAF public relations and recruiting documents, widely available to the general public. Rather than being a disadvantage, this actually provided the basis for a cover story. The crews were briefed, and this was set out in print in the Operation Order, that if they were ever forced to land within the DDR and were interrogated by East German or Soviet questioners, they were to say that they were carrying a light but urgent package up to Berlin. The package was always on board, parcelled up with all the appropriate conveyance documentation, exactly like any real parcel, and it was a spare for the RAF Gatow 3-D radar. Had the Soviets or East Germans opened it up, it would have been found to be the genuine article. As for why the cameras were on board, the story was that the aircraft had been on a previous survey mission when this urgent task had come up and there had not been time to change the aircraft fit before take-off.

It is extremely unlikely that this cover story would have convinced either the East German or Soviet interrogators, who would have been no fools. However, once passed upwards to an appropriate level of command, it is possible that some general or, more likely, politician, might have decided that there was some advantage to going along with it (up to a point) in order to extract negotiating advantages. This might have resulted in the early return of the aircrew and possibly without too much loss of face on either side. It is well known that the Russians are great chess players.

To brief this complex operation in order to ensure that the aircrew knew what to look for, and to manage the information from the photographs that they brought back so that it was exploited and disseminated rapidly, an intelligence briefing and de-briefing service was required. This took the form of BAOR's 6 Intelligence Company and the RAF's Photographic Intelligence/Interpretation Department, both rather conveniently located at HQ RAF Germany at Rheindahlen, only about ten miles from RAF Wildenrath. With most of the bricks in place the operation could now proceed. It would evolve and refine itself over the years to follow, but the basis for regular operations was now established. This history will now pass over the years between 1962 and 1969 as it was in the latter year that the squadron was re-numbered as Sixty.

The new Sixty Squadron did not get off to a good start. Early in June 1969 four of its Pembrokes were grounded because of cracks in the main spars caused by fatigue. It was perhaps not surprising. The aircraft had already been in service since 1953 and had flown many hours. Between February 1970 and September 1971 fourteen

Pembrokes were re-fitted with steel main spars by BAE at Weybridge and reissued to the various communication squadrons (at this time, Sixty was not the only Pembroke operator, although it was the only one with this secret and important HALLMARK role). Additionally, updated navigation kit was fitted during the out-of- service period.

To replace the grounded Pembrokes, De Havilland Devons and Beagle Bassets were lent from other RAF communication squadrons in August 1969, initially with crews for a few weeks, until 75% of Sixty's crews had carried out the necessary training to convert to a new type. Thus Devons VP956 and VP981 were borrowed from 21 Sqn, and Bassets XS766 and 780 were borrowed from 26 and 207 Sqns respectively.

Photo: The De Havilland Devon

The Devon was a military development of the very successful De Havilland 104 Dove 8-seater which had made its first flight from Hatfield on 25 September 1945. A low-wing monoplane with retractable tricycle undercarriage, it was powered by two 340 BHP Gipsy Queen Mk.70 engines, and was the first British transport aircraft to be fitted with reversible pitch propellers. Its maximum all-up weight was 8,500 lb, and the maximum speed 210 mph. The flight deck could be fitted with dual controls in about 15 minutes. Starting in 1948, fifty-six Devons were used by the RAF, and other military versions were bought by Argentina, Ceylon, Congo, Egypt, Eire, Ethiopia, India, Iraq, Jordan, Katanga, Kuwait, Lebanon, Malaysia, New Zealand, Pakistan, Paraguay, South Africa, Sweden, and Venezuela. It was generally quite a useful aircraft.

Photo: The Beagle Basset

The Basset CC Mk.l was built by the Beagle Aircraft Ltd at Rearsby, Leics, as the B206R, developed from the civil 5-seater to incorporate a cargo door and airstairs. It was a low-wing aircraft with retractable tricycle undercarriage, powered by two 310 BHP RR-Continental 10-470 engines. Twenty two were bought by the RAF, basically for transporting V-Force crews to their dispersed locations. It was never a great success in that role for the RAF because it was really designed to carry only four passengers other than its crew of pilot and navigator. A V-force crew was five in number and they often carried heavy personal flying clothing since their role could involve very high-level operations. Additionally, when Beagle Aircraft Ltd went into liquidation in 1969, spares for the Bassets became a problem,

The first recorded official visit to the new Sixty Squadron was on 21 March 1969 by the Chief of the Air Staff, Air Chief Marshal Sir John Grandy. Next came AVM G A H Pidcock, President of Sixty's Officers' Dinner Club, on 13-14 June 1969. He had been a pilot on Sixty in 1916, joining it two days into the Second Battle of the Somme. Wildenrath held an Open Day in June 1969 to celebrate the 20th birthday of NATO, and ground servicing of some seventy visiting aircraft was carried out by Sixty personnel.

In January 1970 Sixty received a silver model of an SE5A, bequeathed by the late Lieutenant Colonel S B Horn, MC, a pilot with Sixty in 1917. In l966 Horn (who had had the nickname of 'Nigger' – times change) had already presented two watercolour paintings of WW1 air combat scenes to the Squadron. All of these are still amongst the Squadron's present historic treasured possessions.

At this time the aircraft strength was one Pembroke, one Basset, one Heron and two Devons (one in VIP fit for AFCENT use). The Heron "Quadriga" continued in service as the CinC's aircraft. On 8 July 1970 it was joined by the 'Red Heron' XR391.

A watercolour of the ‘Red Heron’

Flight Lieutenant Fred Butcher had been a Javelin pilot with Sixty in Singapore from 1961 to 1964, after which he joined 27 Maintenance Unit (MU) at RAF Shawbury as a unit test pilot. Whilst there, his flying duties paved the way for his return to his former Squadron five years later, though in a very different role. He got to fly a wide variety of types - one being an ‘ex-Queen's Flight Heron painted a bright Red’. As he described, ‘I flew it regularly for the next 5 years or so and it became like my own personal aircraft!’ He was, by then, one of only 2 pilots VIP qualified on the Heron in the RAF. He recalls: ‘I got posted back to Sixty Squadron again in June 1969, a few months after the RAF Germany Communications Squadron was renumbered. I was there, in part, to act as the standby Heron pilot to the CinC RAF Germany. At around that time the Pembrokes began to have fatigue problems and were beginning to be ‘re-sparred’ so were in short supply and high demand. One day I was flying the RAFG Senior Air Staff Officer (SASO) and mentioned that the ‘Red Heron’ at RAF Shawbury could be a good stand-in to cover the Pembroke shortage. Next thing, it turned up and we flew it for at least another two years’. These two Herons were the last in the RAF. With the best will in the world, it was, by this time, a dated aircraft.

In November 1970 Air Marshal Sir Christopher Foxley-Norris relinquished command of RAF Germany. The Squadron were sorry to see him go – he had been a good friend of Sixty and had ensured its continued existence. However, the new CinC, Air Marshal Harold Martin, CB, DSO*, DFC**, was also a very distinguished officer. Known universally as ‘Micky’ Martin, he had trained 617 Squadron in low flying in preparation for the dams raid and had been the third pilot to attack the Möhne Dam after Gibson and Hopgood and, along with Gibson, on subsequent runs he had drawn the flak to himself to give the later attacking aircraft a better chance. Some weeks later, when the Commanding Officer was killed in action, Martin, then still a Flight Lieutenant, was given field promotion to Squadron Leader and instantly appointed OC 617, a Wing Commander post. Later, he had, virtually single-handedly, developed the technique of low-level dive-bombing the target with long-burning flare markers in a Lancaster. This was afterwards carried out in a much more manoeuvrable aircraft, the Mosquito, and became the basis of the Pathfinder technique, which transformed Bomber Command’s bombing accuracy in the later stages of WW2. On 1 Jan 1971, shortly after taking up his new post as CinC, he was knighted KCB.

In October 1970 Fred Butcher and Flying Officer Jed Sturman flew General Fusseneggers, Head of the Austrian Army, from Vienna to Hannover. He presented a small mounted sword to Butcher which was then added to the Squadron's already impressive silver collection. The Red Heron carried its fair share of VIPs at this time. Air Vice Marshal J C G Aiken was the Deputy Commander RAFG and Sixty flew him from Gatow to Laarbruch on 10 February 1971. John Aiken (later Sir John) was subsequently in the news in 1974 when he was Commander in Chief of British Forces Near East as Turkish Forces invaded Cyprus, annexing the northern one-third of the island in direct contravention of the 1960 Treaty of Guarantee. It was a situation requiring a great deal of diplomacy and tact on his part at the time, especially as many thought that Wilson's government, which had a responsibility under that Treaty, should have intervened. They did not do so, perhaps wisely. The Turks would have been formidable opponents. James Callaghan, Foreign Secretary at the time, later disclosed that Henry Kissinger had vetoed at least one British military action to pre-empt the Turkish invasion. Nevertheless, most people were not privy to this kind of detail and the whole episode left a sour taste in the mouth, especially for Greek Cypriots, most of whom had expected the British to invoke the Treaty and felt that they had reneged on their obligations. The situation remains unresolved today *(written in Dec 2015).* On 11 May 1971, Field Marshal Sir Gerald Templer (the first Western officer to fight a successful counter-insurgency operation against communism, in Malaya, and the only one who achieved it by actually winning the hearts and minds of the local populace), and his wife Peggie, were flown to Gütersloh in the same aircraft, again by Fred Butcher and Jed Sturman.

By November 1970 the strength was 2 Herons, two Devons and two Pembrokes. As the main spar modifications were completed, the Pembroke strength began to increase again. XF799 was the first re-sparred aircraft to be re-issued to Sixty, arriving on 27 April 1971, to make two on strength. By August 1971, there were seven Pembrokes, two Herons and two Devons on strength, the latter two being flown back to the UK in October. On 17 July 1971 Charles Burrows was posted out to take over as Station Commander at Upavon and Sixty's new CO was Squadron Leader 'Jock' Copland, who had been a member of the RAF's bobsleigh team.

March to November 1971 saw Hardened Aircraft Shelters (HAS) built south of Wildenrath's 09/27 runway, which was re-surfaced. The southern taxiway was used for take-off and landing by the Harriers of 4 and 20 Squadrons, whilst the northerly one served Wessex helicopters of 18 Squadron, Beavers and Scouts of 669 Army Aviation Squadron and Sixty's aircraft, all of which had a complicated taxi-pattern to follow to get there. The Master Diversion Airfield commitment was temporarily passed to RAF Brüggen, ten miles away by road, and half Sixty's ground crew were detached there as a Visiting Aircraft Servicing Flight (VASF). Subsequently, on their return, Sixty's groundcrew's war cross-servicing role would now take place across the airfield in the HASs. The apron in front of Sixty's hangar (Wildenrath's No 8 hangar) was also re-surfaced, so that access was denied for some time and by September, the hangar had been re-painted in tone-down olive-green. It was clear that the Cold War was expected to last for a long time and the necessary infrastructure was being put in place. November 1971 also saw the Under Secretary of State for Defence (RAF), Lord Lambton, father of Lucinda Lambton, the TV journalist and architectural commentator, visiting Sixty. (Lambton later achieved notoriety, becoming involved in a scandal over the use of prostitutes, and resigned from office in May 1973).

An Andover CC Mk2, XS 791 arrived from the Far East to replace Heron XM296 as the CinC's aircraft. The last re-sparred Pembroke arrived in December 1971 and Fred Butcher finally flew the 'Red Heron'(XR391) to 5 MU on 3 December 1971 for disposal. This was the Andover's first appearance on the Squadron, which, in its initial incarnation, lasted from November 1971 to November 1975. It would later reappear from March 1987 until Sixty's disbandment as a communications unit in March 1992.

Photo: Andover CC Mk 2 (look for a better one)

The Andover CC Mk 2 was the RAF variant of the civilian HS 748. It was a passenger and VIP aircraft and markedly different from the C Mk 1 which also served with the RAF but had a 'kneeling' facility and rear opening doors. Both were powered by Dart turboprop engines and both had a water methanol injection facility for enhanced take-off performance. The aircraft had a service ceiling of twenty-fivethousand feet, but most routine passenger flying was done between about five thousand feet for short hops and twenty thousand for long legs. It cruised at around 220 knots TAS and had a range of about a thousand miles. The VIP version had a comfortable and uncrowded passenger area

The Andover was allocated as the CinC RAF Germany's personal aircraft. Its arrival brought a new dimension to the level of VIP service offered on the Squadron, not least in the field of catering. It was equipped with a comprehensive galley and other RAF Andovers, operating in the VIP role on No 32 Squadron, included VIP qualified Air Loadmasters as part of the crew. These personnel were trained in the finer arts of catering and were renowned for producing in-flight meals of the very highest standards. No such creature was established on Sixty and the catering on VIP flights was the responsibility of the Crew Chief, whose primary task had been, and still remained, maintaining the aircraft whilst away from base. These skilled technicians were more used to wielding a greasy spanner in the cold and wet outside than a greasy spatula in an aircraft galley. Nevertheless, the Crew Chiefs appointed to the Andover all accepted the challenge with great enthusiasm. Their *pièce de résistance* was a freshly cooked full English breakfast which was invariably served on early morning flights from Wildenrath to Northolt. Rarely was there a morning departure when the CinC did not request the famous breakfast. On one occasion the CinC (Sir Nigel Maynard) was attending a conference at Oldenburg together with CinC BAOR. In those days CinC BAOR had a private train, operated by Deutschebahn, and he had suggested to CinC RAFG that they travel up to Oldenburg together on the train the evening before the conference whilst enjoying dinner on board. CinC RAFG countered by insisting that they would return on the morning after the conference in his personal aircraft. When the ADC contacted the crew to discuss the idea and to say

that the CinC wanted breakfast served it was gently pointed out that the forty minute flight from Oldenburg to Wildenrath was not really long enough to cook and serve breakfast. Needless to say, this was not considered a good enough reason not to comply with the CinC's wishes and a way must be found. A pre-cooked breakfast was simply not acceptable! The problem was that the Andover's galley ran from AC power and, whilst the aircraft had been designed to accept 28 V DC power from an external ground source before engine start, in order to save battery life and get the engines started, there was no facility for an external input of AC. The only way to power the galley (which took about 20 minutes to heat) was to have the engines running in order to power the AC alternators. The crew were not flying in that morning to pick up their VIPs; they had positioned the aircraft at Oldenburg the night before and it would be cold when they went out to it in the morning. The only answer was to run the engines on the ground for about 45 minutes before the VIP party arrived. The co-pilot, Flight Lieutenant David Adams recalls: 'I remember well trying to explain to the Luftwaffe groundcrew that we would require their services about one and a half hours before departure as we needed to run the engines for "technical reasons". To make matters worse, it was a cold and wet morning and I am sure they thought we were mad. Nevertheless, the freshly cooked breakfast was duly served on the flight back to Wildenrath, hopefully going some way to match the dinner served on CinC BAOR's personal train. The considerable quantity of Avtur (aviation fuel) used to cook it was another matter!'

The Andover had been allocated to the CinC RAFG because he was the most frequent user, so it became his personal aircraft. When he was not using it, it was available for other VIPs, including the British Ambassador and the DCINCENT. However, on those occasions when DCINCENT and CinC RAFG were travelling to the same event in different aircraft, the CinC, a 3-star Air Marshal had a somewhat grander form of transport than DCINCENT, a 4-star Air Chief Marshal, who arrived by Pembroke; this invariably confused the VIP reception committee.

With the arrival of the Andover in November, Sixty had one Andover, one Heron and nine Pembrokes. Thus at the end of 1971 the Squadron was back to full strength and ready to resume its one hour standby for medevac and SAR roles in addition to the normal communications tasks; early in 1972 the Squadron was reunited with its errant ground crew, back from Bruggen, in its re-decorated offices and hangar at Wildenrath. The fitting of Violet Picture UHF Homing equipment, necessary for the Search and Rescue role, took place on some of the Pembrokes at 60 MU, Leconfield, the programme being completed by March 1972. The Andover was flown to 5 MU, Kemble, in March 1972 for a three-months refit.

Whilst all this re-sparring and re-equipping had taken place Pembroke HALLMARK operations had been continuing quietly and secretly. Whatever other tasks might have had to take a back seat occasionally due to aircraft shortages HALLMARK proceeded in its discreet way with a high priority. However, an incident on 17 January 1972 reminded all those who were privy to the operation that it could be far from routine sometimes. No one knew whether the Soviets had worked out that the Pembrokes were being regularly used for espionage, but whether they had or had not, they generally allowed the operation to proceed without harassment. After all, Corridor flying rights were guaranteed by the Potsdam agreement and in interpretation of such treaties, the Soviets tended to be sticklers to the letter of the law, even when it

disadvantaged them. They were far less sympathetic to the spirit of the law, especially when it disadvantaged them. On the occasion of this January incident, the crew included Flying Officers Ian Pride as the pilot and Rob Fallon as one of the navigators. The following extract comes from an article written by the university lecturer and aviation historian Dr Kevin Wright and it appeared in the March 2011 edition of *Aircraft* magazine:

> On 17 January 1972 XL954 was intercepted by three Soviet MiG-17s. Rob Fallon, one of the navigators on board, described how the Pembroke was flying close to the edge of the southern corridor and suddenly started bouncing around as the MiGs thundered by in close proximity and in quick succession. 'Immediately, the radio became very frantic and we were moved onto our discreet frequency. The pilot lowered the undercarriage and flaps, brought XL954 down close to its stall speed, and moved us back south towards the corridor centreline. Meanwhile, the second navigator was bouncing around in the back, re-winding the film to spoil it, expecting that we might have to force-land. Our cover story suddenly looked very thin. I had been reading various books by Aleksandr Solzhenitsyn, and had visions that, even if very lucky, we might end up in Siberia for an extremely long time! The MiG-17s couldn't compete with our slow speed, so carried on circling in order to stay with us. Soon, another aircraft, this time a MiG-21, came up. It flew on a reciprocal heading beneath us and we were close enough to see the pilot looking up and waving. We could easily see the missiles loaded under the wings - he was probably at around 2,000ft. Radar was talking to us continually and monitored the MiGs' approach. In addition, we could hear the crews of both types of aircraft talking in Russian as it was breaking through on the radio. This was another first for the Intelligence people, as they had been told that all the aircraft on combat air patrol (CAP) over the GDR at that time were operated only by East Germans. After the event we received an apology for the incident through the Berlin Air Safety Centre. The Russian excuse was that a trainee radar operator monitoring the corridors had misplotted an aircraft so that it had an apparent ground speed of 600 knots. Checking inbound flight plans to Berlin, the only thing around was a twin-engined RAF aircraft, and the trainee made the assumption that this was one of the then new RAF Phantoms commencing an attack run to Berlin to start World War Three! We were told that we were not shot down or forced to land because the first CAP MiG-17 to buzz us told his control that we were not a Phantom and perhaps they should check again.' The RAF Gatow Operations Record Book notes: 'This incident was reported to the Berlin Air Safety Centre (BASC) and later, the chief American controller, who controls the south corridor, obtained through the chief Russian controller an admission of error and an apology. This reaction was unique in that it was the first on-the-record Russian apology in BASC that anyone here can currently recall.'

Fallon mentions three points worth expanding. The first is that they were on the edge of the southern corridor, eastbound. This would have been the northern edge, either because they wished to overfly a target located in the northern part of the corridor to capture it on their vertical camera fan or because they wanted to get as close as

possible to a target outside the corridor and to the north of it for an oblique depression shot. Once the MiGs appeared, Ian Pride immediately regained the centreline. The HALLMARK crews were always advised that they faced the possibility of being shot down if they wandered outside the corridors and navigation on this point was meticulous, visually map-reading from a very large-scale topographic chart. Most bona fide air traffic in the Berlin air corridors hugged the centre-line, as did Sixty themselves when not on 'Hallmark' missions, because they knew the risks of not doing so. However, the HALLMARK job required them to go to the edges, and it concentrated the mind. Watching the Pembrokes on their radars would occasionally worry new air traffic controllers in the Berlin Air Safety Centre until they got the message that the Pembrokes were best left alone to go about their business.

Secondly, he mentions rewinding the film in order to destroy the evidence and maintain the cover story. The F96 cameras had been specially modified with a rapid reverse motor and a selectable bright light within the camera. The quickest way to spoil already exposed film would have been to have 'fogged' it by re-winding it back through the cameras and exposing it with the light on, which would have taken mere minutes to render useless hundreds of feet of film. There was no need to manually tear it out of the camera – if it worked. That was one reversionary option. Another would have been to set fire to the aircraft. Again, fortunately, it never came to that.

The third point that Fallon makes is hearing Russian spoken. The Pembroke aircrew were not trained in languages, though most of them had heard plenty of German even if they did not speak it themselves. They would have been on a completely different VHF frequency from the MiGs, so it suggests that the bandwidth of the Soviet radios was a great deal coarser and broader than comparable NATO equipment for it to have been able to break through – or that they got very close! It also showed that the pilots were Russian. This is an unusual piece of intelligence in that it came in one discrete chunk – a genuine new discovery. Most intelligence is not like that – it normally gets gathered by continuous repeated runs over the same targets and noting small changes over time – the *Gestalt* effect, whereby the whole becomes greater than the sum of its parts.

Flight Lieutenant Jeremy Collins was a navigator on Sixty with a talent for art. (After leaving the RAF he became an auctioneer for Phillips, was later poached by Christie's, and went on to retire as one of their Directors). It had been noted that Sixty Squadron was unique in RAF Germany in that it was the only one which did not have its Squadron Badge on its aircraft and so in August 1971 he had created some suitable designs, which were passed up through Jock Copland to HQ RAFG for approval. In March 1972 he painted the selected design, a head of Kabul Markhor , on the fins of the Pembrokes and the Andover, each badge taking two hours of artistic effort. This maintained a tradition that went back to 1924 and had been seen on the Squadron's previous aircraft from the Javelin back to the DH9A.

In April 1972 one of Sixty's Pembrokes flew an aeromedical task to evacuate a mother and a baby (in an incubator) back to the UK. Shortly after take-off for the return flight to Wildenrath with some CCF cadets aboard a violent yaw to port occurred with a loud unpleasant noise as the rear half of the freight doors swung open. Fortunately the door remained on and disaster was avoided, with only minor to moderate damage resulting. It was deduced that a member of the Duty Crash Crew under training at the departure UK station had depressed the emergency door button and the top door handle was free to move, with airborne vibration and slipstream doing the rest.

In May the CO, Squadron Leader 'Jock' Copland, navigated 'Maverick', the British team yacht in ocean races off Rhode Island. On 16 July 1972, Flight Lieutenants Fred Butcher and Bob Leyland ferried the last RAF Heron XM296 to Northolt, and then on to Lee-on-Solent the next day, when it was transferred to the Fleet Air Arm. 'Jock' Copland was succeeded as OC Sixty by a Welshman, Squadron Leader Ron Thomas on 5 December 1972. Ron had been a flight commander on 24 Squadron, a C-130 Hercules unit; he was to prove a most personable and popular OC Sixty.

Many sorties were routine and repetitive, but not all. There were occasionally semi-official tasks or genuinely official sorties which, whilst justifying the use of a small aircraft, would have caused pursed lips at the Treasury had, say, a C-130 Hercules been employed. Some of these took the Squadron away from their usual destinations of Northolt or Berlin. For instance, a Berlin Sub-Aqua Club expedition had recovered

the remains of some Gladiator fighters from Lake Lesjaskog in Norway. These had been abandoned there by 263 Squadron during the brief defence of Norway against the German invasion in April 1940. The expedition leader had requested help in assessing whether what had been found was worth saving and would be air transportable. A Pembroke crewed by Flight Lieutenant Taff George, Jock Copland and Jeremy Collins flew to Trondheim, where they were driven the 150 miles through magnificent Norwegian scenery to the lakeside recovery site. It was decided that the aircraft, or remains of them, were well worth recovering, especially as a considerable quantity belonged to an incomplete aircraft already in the RAF Museum at Hendon. George and Copland flew back, leaving Collins, who was knowledgeable on both history and engineering, to supervise the recovery of, effectively, 3 Gladiators, which, once at Trondheim, were later picked up by a Hercules and returned to the UK, all going to the RAF Museum. One was subsequently passed to Wildenrath for off-duty time restoration by Squadron personnel.

The Andover was much in use during the 1972 Munich Olympics, not only with the CinC but also with the British Ambassador. These trips to Munich invariably involved a night stop or two, so there was potential for visiting the games. Unfortunately spare tickets for any of the events were impossible to obtain through normal channels. On one occasion between Köln/Bonn and Munich, Flight Lieutenant David Adams popped down the back to say good morning to the Ambassador, Sir Nicholas Henderson. He was sound asleep, but the pilot spoke briefly with Lady Henderson, who asked which events the crew would be attending. He confessed that they would not as they had no tickets. “Leave it to me”, she said. “I will have a word when he wakes up.” On arrival at Munich Sir Nicholas came up to the flight deck to say thank you, adding that he understood that they were short of tickets; he threw a sheaf of them onto the navigator’s table saying, “I hope these might be of some use”. There were more than enough for all to attend several events. David Adams will always remember sitting in the VIP stand for the athletics finals and being asked if he was representing the British Ambassador!

On a more sombre note, the 1972 Olympics were marred by Black September terrorists taking Israeli athletes as hostages and then murdering them during a botched rescue attempt. The Sixty Andover crew flew into Furstenfeldbruck the next day, seeing bullet-ridden helicopters and the bullet-scarred control tower and travelling in a crew bus full of bullet holes.

Wildenrath's Station Commander, Group Captain George Black, was really a Harrier pilot, but he enjoyed flying the Pembroke. Christmas was approaching and the Officers' Mess required turkeys. However, fresh turkeys are difficult to find in Germany, as the national preference is for roast goose, and all were agreed that frozen ones do not taste the same. An order was therefore placed for fresh turkeys from Norfolk to be delivered by an Air Anglia flight to Twenthe Airport, which conveniently happened to be a civil/ military joint airport shared with the Royal Netherlands Air Force. Arrangements now needed to be made to receive them. Black therefore decided that he required a Pembroke landaway training flight on the 22 December under the instruction of Sixty's local examiner, Flight Lieutenant Jim Willis. Air Anglia were quick to see the public relations potential and provided an attractive blonde air hostess to hand the turkeys over and pose for photographs with the crew.

RAF Wildenrath's nearest town was Wassenberg, about five miles away, with a population of around 10-15,000. In matters of relationships with the civilian community the scars of the Second World War had taken time to heal, but now a new German generation was emerging. *Karneval* is Germany's equivalent of *Mardi Gras*, or the Venice *Carnevale*, a general excuse for licentiousness before the start of Lent, a popular holiday, and a time for processions through the town with floats. In 1974 RAF Wildenrath was invited to participate in Wassenberg's *Karneval* for the first time. The Station accepted willingly and, inevitably, it was Sixty who were 'asked' to take it on. It was decided that it had to be an aviation theme, but nothing too warlike. Flight Lieutenant Mike Iles was the project manager and he designed a 1910-style monoplane at about 1/5 scale, but big enough for a 'pilot' to sit in. Jeremy Collins, with his artistic flair, was roped in for the construction, along with SAC Al Bromley. The float was called 'Der Stille Flug', which loosely translates as 'the flight that's going nowhere'. The whole construction was mounted on an RAF 4-ton lorry and even had a propeller that turned by bicycle-pedal power. Station and squadron personnel, with wives and families, turned up in Edwardian costume to support the procession. With the somewhat heavy-handed facetiousness typical of most RAF Squadron and Station magazines, '*Zulu*', RAF Wildenrath's journal, reported: "….the machine needed airtesting and so the services of Flt Lt Jim Willis, the Training Officer, were called in. He decided that, as its airworthiness was in doubt, a pilot should not be risked. Thus a navigator, Flying Officer Bob Bolton, had his chance at 'piloting' the 'aircraft' in the parade". Actually, Bob Bolton was a good choice, as he looked the part. He had an enormous traditional RAF handlebar moustache, and with a leather helmet and goggles, the picture was complete. Again, quoting *Zulu*: "Sitting on high, with moustache generating more lift than the aircraft wings, was the intrepid Navigator-Pilot, Bob Bolton, turning the propeller". This sort of thing was very useful

for RAF public relations and thereafter became an annual commitment by Sixty, helping to foster a good rapport with the local community.

'Der Stille Flug'

Suitable period costumes

Bob Bolton

Later that year the Paris Air Show was memorable for one crew at least: On 25 May 1973 Flight Lieutenants Owen Beverley and Jeremy Collins flew SASO RAFG to the show, where they saw the TU-144 'Concordski' give an impressive display. They took off the next morning to fly their VIP back, to learn later that it had crashed in front of 25,000 people, killing all six crew and eight people on the ground and destroying fifteen houses when it had broken up trying to pull out from a steep dive, possibly trying to recover from a stall.

This period was only thirty years or so after the Second World War and, being based in Germany, Squadron crews would, in the course of their work, often meet Germans who had fought in that conflict. Sixty provided air taxi services to other NATO forces, as well as to senior British officers. One such passenger was Major General Walter Krupinski, whom the Squadron ferried on his farewell tour of the Luftwaffe visiting the German Air Force bases at Hopstein, Kaufbeuren and Oldenburg, amongst others. He was always very affable and easy to get on with, but he would never talk about his WW2 career, during which he had scored 197 victories whilst flying the Me 109, the FW 190 and the Me 262 jet. On another occasion, Flight Lieutenant Ken Munn had gone into Munster/Osnabruck in a Pembroke when a Grumman Ag-Cat biplane landed. As the 2 aircraft were of approximately similar vintage, the Sixty crew went over to meet the pilot and exchange notes on their respective aircraft. When they introduced themselves, they found that they were talking to Erich Hartmann, the top-scoring Luftwaffe WW2 fighter ace, with 352 victories.

During 1974, notwithstanding the continued OPEC fuel price crisis, flying was gradually increased, with Sixty's aircraft operating throughout Europe and the Mediterranean, again providing the first and last RAFG aircraft to fly in the year. Two or three out-of-duty hours call-outs for aeromedical flights were averaged per month through 1974, saving the lives of 12 people, including two one-day old hole-in-the-heart babies, evacuated to the UK. An aircraft and crew were kept at standby 24 hours a day to carry out this task, whilst another aircraft fitted with Violet Picture (an equipment for homing on to SARBE personal locator beacon transmissions from a LSJ or dinghy) was on standby for Hannover ACC Search and Rescue call-out. An interesting personnel posting was that of Flight Lieutenant Barry Taylor, who rejoined the Squadron on 20 May 1974, for his second tour with Sixty, his first having been on Meteors and Javelins 1959-62.

Two notable items of memorabilia were added to the Squadron's already extensive collection during 1974. On 1 April 1918 the Royal Air Force had been born and, on that day, Sixty had made its own contribution to the achievements of the new Service. A Canadian pilot, Captain 'Art' Duncan in his SE5 had engaged a German Albatros and pursued it so that it flew over Allied territory, until the enemy pilot voluntarily landed it in a field. A photo of Duncan sitting in the cockpit of the captured Albatros was presented to the Squadron. The other item was a Japanese flag. In April 1944 the Squadron, then equipped with Hurricanes, had provided close air support to British ground forces as the enemy had retreated from Kohima across the border to Burma. After one of these operations, the Army had presented the flag to Sixty as a mark of gratitude for their help.

Another reminder that HALLMARK sorties could be far from routine sometimes came on 6/7 May 1975. On the 6th one of Sixty's Pembrokes en route from Gatow to Wildenrath strayed outside the northern edge of the Central Corridor, most likely unintentionally. It left the Corridor about fifty-five nautical miles west of Tempelhof, flying an arc outwards and then back in again, rejoining the corridor some fifteen miles later. Its maximum excursion was about 3½ miles from the edge. It was almost certainly a HALLMARK aircraft trying to overfly a target on the northern edge or possibly trying to get an oblique shot of a distant target to the north, and they just got it wrong. HALLMARK crews were never briefed to intentionally leave the Corridors. The excursion was observed by the Berlin Air Route Control Centre radars, who immediately informed the British Berlin Air Safety Centre controllers, who chose not to inform the Soviets, presumably hoping that they would not notice.

Bob Bolton was the rear-seat navigator on this sortie and so not really responsible for route navigation but he recalls that on landing he was required to report to the RAF Gatow Station Commander. He was surprised when the CO motioned him silently to follow him out of his office and led him onto the edge of the airfield. There he explained that he thought that his office might be bugged and he had to be very careful what he talked about in there, before questioning him about what had occurred on the sortie. It was a sensible precaution. After German reunification it was established that one of the local civilian barmen in the Officers' Mess had been an East German agent. Planting a bug in the Station Commander's office would have been a difficult task for the East Germans but it might not have been impossible.

The next day another Sixty Pembroke was outbound from Gutersloh to Gatow. This was a passenger sortie in a non-HALLMARK aircraft and the operating crew may well have been a dedicated transport crew, not even privy to the operation. They were intercepted by a 'twin-jet swept-wing aircraft with a red star on the fuselage'. If they were not HALLMARK-qualified, they would probably not have taken the same interest in recognition of Soviet fighter types, and were thus unable to identify it more fully. The interceptor approached them from the right at ninety degrees angle off and passed approximately fifty metres in front of the Pembroke. It seems probable that the Soviets had noticed the excursion on the previous day but were unable to scramble to respond in time. Perhaps this made them more alert and aggressive the next day, still smarting from not being sharp enough the day before. It was a salutary reminder to everyone that standards of navigation needed to be high.

On 23 July 1975 Ron Thomas handed over as CO to Squadron Leader Mike Jackson, an ex-Cranwell flight cadet navigator who had had a background on Beverleys and VC10s and then to gone to Staff College at Bracknell. He was an interesting choice. In its earlier incarnations as a fighter and bomber squadron Sixty had produced, from its junior officers, many who would go on to the highest ranks. These had included Marshal of the Royal Air Force Lord Portal, Air Chief Marshal Sir David Lee, Air Chief Marshal Sir John Stacey and others. However, the qualities valued in transport flying, and particularly in VIP flying, tend to be those of maturity, experience, judgement and a steady temperament, and therefore most junior officers on Sixty during its Pembroke era were older than previously, and were generally regarded as having had a good career behind them rather than in front of them. Accordingly, during this time, Sixty was something of a promotion backwater, with few of its members progressing much beyond one further rank subsequently. This even extended to the COs. Of the nine navigator Squadron Leaders who commanded Sixty between 1969 and 1992, only three were promoted. Two of them, John Maddocks and Peter York, became Wing Commanders.

The exception was Mike Jackson. On leaving Sixty he was promoted to Wing Commander, first to the Directing Staff at the Army Staff College Camberley and later as OC Ops Wing at Brize Norton. He then spent two years in Warsaw as British Defence and Air Attaché. Later, as a Group Captain he was appointed OC the Joint Air Reconnaissance Intelligence Centre (JARIC) at Brampton from July 1987. Much of his subsequent career was in the Defence Intelligence Staff as Director of Analysis and later Director General Intelligence Collection, and he retired as Air Vice-Marshal. At the time of writing *(December 2015)*, he is President of the Sixty Squadron Association.

In 1975 Harold Wilson's government produced a swingeing Defence Review aimed at cutting £4700 million at 1974 prices between the years 1976 and 1984 - an intended average saving of £800 million a year for 8 years. The fixed-wing element of the RAF Transport fleet was reduced by 50% from 115 to 57. The Comet and Britannia Squadrons and the Andover tactical transport force were all disbanded - a total of 39 aircraft; and the number of VC10 and Hercules aircraft was reduced from 66 to 47. A large-scale RAF-wide redundancy scheme was introduced, not all of it voluntary. For Sixty Squadron, when Andover Mk l aircraft on other units were withdrawn from service, their Andover Mk 2 XS791 was passed to 32 Squadron at Northolt in November 75, marking the departure of that type from the Squadron’s inventory until 1987, when it would make its return. 207 Squadron, the only other RAF unit operating the Pembroke, passed its final remaining Pembroke to Sixty in November 1975. This became the CinC's own aircraft, WV746. Another Pembroke, XK884, joined Sixty in February 1976, and eventually became the D/CINCENT’s aircraft, though his former aircraft, WV729, remained on strength for another five months thereafter. Later, as the cuts bit harder, no dedicated aircraft was allotted to D/CINCENT when Air Chief Marshal Sir Peter le Cheminant took over, but the Squadron continued to provide him with VIP transport when required.

These Defence Cuts of 1975-76 cost the Squadron some 35% of its manpower and hardware. The Squadron establishment was cut to 8 pilots and 9 navigators in January 1976 and to six Pembrokes in April. Sixty, now the only Squadron operating the type,

had to run its own Pembroke Operational Conversion Unit (OCU), with the first Conversion Course starting in April 1977.

One navigator who experienced the in-house OCU later wrote a not-too-serious (but completely accurate) account of the experience. He had operated mainstream aircraft equipping major fleets (Vulcan, Canberra, Nimrod, etc) and consequently had previously attended well-established large OCUs for those aircraft.

> 'So I thought I knew how it was done,' he recalled. 'You arrive on a highly structured course which contributes to a major part of the UK's defence policy. The lecture notes are in place, the slide shows are in place, the Intelligence Library is in place, the simulator is in place and each flying exercise is phased and paced.
>
> And then I was posted to the Pembroke. 'Turn up in the crew room with your pilot on Monday morning,' I was told. So we did, and there was a whole stack of photocopied notes for us to read. We looked through them. 'Excuse me,' I said, after a while. 'Please don't think that I speak in a spirit of carping criticism, but I can't help noticing that these aren't about the Pembroke at all. These are Pilot's Notes for the Devon.'
>
> 'Ah, good point, good point. Wondered if you'd notice. Well, the thing is, when we had a general communications squadron we had a mixed fleet and there were always Devons, and de Havilland produced some quite good notes. But we never found anything quite as good for the Pembroke. This is all you're going to get. It doesn't matter, though. All the systems are the same.'
>
> They were, too - well, nearly. I did the whole Pembroke conversion course whilst reading about the Devon electrical system, the Devon pneumatics system, the Devon instruments and the Devon navigation equipment. I did notice some differences between the Gypsy Major and the Alvis Leonides engines, but that was the pilot's problem and, as a nav, I thought it would be a bit rude to nit-pick on points of detail if my man seemed happy.
>
> The Pembroke had its own peculiarities. All the systems which one had become accustomed to being operated by hydraulics on other aircraft were operated by pneumatics in this beast. Every time the flaps, brakes or undercarriage were used, it was accompanied by great hissing sounds of compressed air, which could be clearly heard in the cockpit, even in flight with the engines running and wearing a headset. In fact, if you wanted to frighten Air Traffic Control you could call up and say you'd had a total hydraulics failure. It meant you'd lost the windscreen wiper - and that was all. Everything else was pneumatic.
>
> My previous operational background had been all jet or turbo-prop. To someone unused to piston engines, the sight of thick swathes of black oil dribbling down the outside of the engine nacelles was also a novelty. 'Is that all right?' I asked during an early trip. 'Don't worry about it,' I was told. 'The engines leak oil like sieves in flight all the time. The time to worry is if you don't see it. That means you're out of oil, and in that case, the engine could seize at any time.'

The flying phase of our course started on 4 December. Well, what do you know, that was just about the time when the Christmas market season starts in all the major cities in Germany. By the time we started the nav phase, the only possible thing to do, the conversion instructors assured us, with serious nods of the head, was to plan navigation exercises with nightstops in Hamburg, Braunschweig, Stuttgart, Nurnburg, Saarbrucken and Munich. (They were coming with us). Well, I'm a good boy, of course, and I always do what I'm told. Each city and Christmas market was duly ticked off during the flying phase, which finished off with our return from a night stop at Munich, which had landed there at about 4 pm the previous night, followed, as with them all, by a trip to the market, complete with Christmas stalls, bratwurst and glühwein, then a few beers and a meal downtown. The hand-crafted straw angel still sits at the top of our Christmas tree every year. I can't really believe that we got paid for doing it. I'm sure that the fun police wouldn't let it happen today.'

Despite the informal atmosphere, professional standards were high on the conversion course, and also on subsequent routine periodic crew checks. They had to be. These mature students usually brought a lot of experience and background with them, of course, and would not have been selected for this particular squadron, with its unusual roles, unless they had a proven track record of ability, but the aircraft was old, even by mid-seventies standards. It had been quite a traditional and simple design already when brought into service in the fifties. There was, for instance, no oxygen, and this imposed a service ceiling of ten thousand feet. The cockpit and window seals were worn and let in rain. Squadron Leader Peter Miles, then a Flight Lieutenant pilot on Sixty, who would later become one of the Flight Commanders, recalls:

'It was a Friday lunchtime and we were sitting around in the Sixty crewroom at Wildenrath and the weather outside was pretty foul - a fairly standard Germany winter day. Then we received a phone call from the Squadron Commander of one of the (in early 1976) resident Harrier squadrons. One of their jets had gone unserviceable in southern Germany and, knowing that HQ RAFG would not approve a recovery tasking, he was asking whether we could organise a 'trainer' to take the groundcrew down and recover the pilot.

As I was always ready to go flying, I grabbed the nearest navigator, the long-suffering Pete Swatton, and we trundled down through Germany with the Harrier groundcrew. We dropped them off, picked up the young-looking Harrier JP (junior pilot) and launched back to Wildenrath and an inviting Happy Hour (it <u>was</u> Friday). The JP was briefed to come forward after take-off and stand between us two to see what was happening. The ulterior motive was to get him to hand up the coffee and sandwiches so that we didn't have to get out of our seats!

In standard Pembroke fashion I was flying the aircraft (no sensible autopilot), eating my sandwich, drinking my coffee and talking to Air Traffic Control. Pete was quietly navigating under a sheet of polythene because it was snowing and was coming in on his side of the cockpit and, generally, the weather outside was dire. So far, so good - and then the hailstones started pounding down on the Pemmie and the JP suddenly disappeared down the back and hastily strapped in. We saw nothing of him again on the flight and, as soon as the engines stopped on arrival at Wildenrath, we heard him open the door and run off!

> As soon as we had finished the paperwork, we went to the Mess for Happy Hour and who should we see hunched in the corner of the bar and clutching a beer but our young Harrier pilot? 'Whatever happened to you?' we asked. His answer was that he had never been so frightened in his life - he always avoided bad weather. We explained that we had no choice, as we could not fly above the weather or route round it, so we simply flew through it and, as fully operational aircrew, we always got the job done. For some reason, he was not impressed! Sixty rules again!'

The Pembroke had been designed for pilot and co-pilot (there was side-by-side seating and two sticks), but the RAF crewed it with pilot and navigator. There was therefore no inbuilt navigation desk, so the navigator kept his log and chart on an A4-sized clipboard, which he could stow down the side if required. The aircraft was well ventilated (not always intentionally) but, like a car, if the weather got too hot, you could open a window. Once, on a HALLMARK sortie, about 15 miles out from RAF Gatow in Berlin, Flight Lieutenant Mike Eacopo decided that he needed some fresh air. It was a mistake. He had his clipboard at chest level and a sudden blast whipped the top sheet out of the bulldog clip, out of the open window, and away into the slipstream. His combined flight plan and navigation log fluttered gracefully down into the East German countryside below. Eacopo probably had to buy the first couple of rounds of beer that evening but, overall, the crew would not have been too concerned; there was nothing secret in a legitimate navigation log and, as for the navigation, they had flown the corridor routes so often that they felt that their ancient Pembrokes could practically find their own way into Gatow.

Another example of the effect of the altitude limitation, even when the weather was not a particular issue, was that it put the aircraft in the lower parts of the airway structure when flying in controlled airspace. Flight Lieutenant Dave Downey was a navigator (who had previously flown Javelins).

> 'I was due to fly to Berlin for a 2 day stint,' he wrote later. (This was obviously a HALLMARK sortie, though he could not say so in his article at the time). 'It was a dull and heavily overcast day at Wildenrath, but the Met Office assured us that conditions would improve as we headed north and by the time we reached Düsseldorf we would see only scattered 'fair weather' cumulus and good visibility. We believed them, checked the NOTAMS, found nothing of note and took off.
>
> Established on the airway to the north of Düsseldorf, we were in and out of cloud at 9,000 feet. On breaking free of one such cloud, we were amazed to find ourselves within a mile of a hot air balloon at our level *(this was in controlled airspace!)* Looking further afield, we could clearly see many more balloons along our flight path. We reported them to Air Traffic, who responded that they had just received a NOTAM that the German Hot Air Balloon Championships were due to take place that day! The controller went on to say that it did not matter because they were all below controlled airspace (!!) so there was no problem, and anyway, he could not see them on his radar!'

The first of May 1976 saw the 60th Anniversary of the formation of Sixty which, conveniently, fell on a Saturday, and was celebrated at RAF Wildenrath. The cover of Zulu that month was of a Pembroke in flight with the caption ‘DIAMONDS ARE

FOREVER'. The organisation of the event was in the competent hands of Mike Jackson and Peter Miles in Wildenrath, and of Gordon Sykes, the Sixty Squadron Dinner Club Secretary, back in the UK. Gordon had received severe life-changing injuries in a Javelin accident several years earlier, but continued to administer the Sixty Squadron Dinner Club with gusto from his wheelchair. The Harrier force was deployed away from Wildenrath at the time and the opportunity had been taken to refurbish the Officers' Mess kitchens, so routine catering was handled by the Airmens' Mess ('The Bristol'). The visitors started arriving on Friday 30th April and there was an All Ranks Dinner Dance held in the Dutch Rooms on base. Lunch on Saturday was at one local German restaurant, the Luttleforster Muhle, and the evening dinner was provided by another, the Tuschenbroicher Muhle. Dancing in the Officers' Mess that evening was to the Erkelenzer Big Band. On Sunday 2 May a Church Service was held in St.Thomas's Church on base. The VIPs were Air Chief Marshals Sir John Baker and Sir Christopher Foxley-Norris, the CinC RAFG, Air Marshal Michael Beetham, later to become Chief of the Air Staff, and Air Vice-Marshals N C S Rutter and L W Cannon. AVM 'Bull' Cannon, who had been a young pilot on Wapitis in India, was one of the last to leave, having danced with most if not all of the officers' wives, and encouraged the current Sixty to keep pace with him at the bar too. He was staying with Mike and Kay Jackson, who were bleary eyed in church the next morning.

To mark this Diamond Jubilee, the members of the Officers' Dinner Club presented a silver model of the Wapiti to the Squadron. Photographs and scale drawings of the aircraft were collated by the Dinner Club Historian, Squadron Leader Joe Warne and forwarded to the Dinner Club President, Air Commodore Mike Miller. An ex-RAF airman and ROC member, Reg Palmer, a jeweller in Melton Mowbray, undertook to have this model made for cost of materials only. Mike Miller presented it to the Squadron at the subsequent Dinner Club Reunion in March 1977. Valued at £1,800 at the time, the 8" model was also unique in that it had the Queen's Silver Jubilee hallmark on it. Also, on the same occasion, Squadron Leader Arthur Young, MBE, (l936-38) donated a framed colour photo of a private painting of a Wapiti flying over Kohat, which was presented to the current Sixty Squadron. Another addition to the Squadron's now-impressive silver collection around this time was donated by the widow of Air Commodore C W Busk, CB, MC, AFC, (1924-28). It was the silver cigarette box presented by the Squadron officers of his time to the then Flight Lieutenant and Mrs Busk on the occasion of their marriage.

During 1976 and 77 Wildenrath's fast-jet force changed from Harriers to Phantoms. 19 Squadron re-formed there in October 1976, and 92 in April 1977, both units flying the F-4 Phantom FGR 2 to provide air defence for RAF Germany and its NATO allies, which continued until the reunification of Germany and the collapse of the Soviet Union. Of the three Harrier squadrons, Nos 3 and 4, moved to RAF Gütersloh in 1977, and 20 Squadron was disbanded, later to re-form with Jaguars at Brüggen. This meant that Wildenrath Station Commanders would now be Phantom rather than Harrier pilots. However, it made no difference to their enthusiasm for converting to the Pembroke and subsequently flying it whenever the opportunity presented itself. The new CinC RAF Germany from July 1977 was Air Marshal John Stacey who, as Flying Officer Stacey, had flown Thunderbolts when serving on Sixty in Indonesia in 1946.

Assisting the RAF Museum Charity, Dave Downey, a keen stamp collector, was involved in producing first day flown covers to commemorate the award of the VC to Captain 'Billy' Bishop whilst he was serving on Sixty. Flight Lieutenants Colin Ruston and Dave Downey flew some of the covers from Northolt to Wildenrath in XL954 on 2 June 1977 (the 60th Anniversary of the 'raid'), and others which had been conveyed by a courier from Estourmel to Wildenrath were later flown by Flight Lieutenants Dave Clark and Downey to Northolt in WV701.

The Strategic Arms Limitation Talks (SALT) which had commenced in 1969 had resulted in the May 1972 signing of the Anti-Ballistic Missile Treaty and the Interim Agreement on the limitation of Strategic Offensive Arms. This event should have marked the beginning Soviet-American détente, but Brezhnev, conservative by nature and background, was the wrong man for such a process, and the Soviet Union began deploying SS-20 intermediate-range nuclear ballistic missiles along its western and southeastern borders in 1977. Fifteen years earlier, in 1962, the UK inner cabinet had approved the rate of HALLMARK flights to be set at one a week, with provision for extra weekly flights at the discretion of local senior commanders (the CinC RAFG and his Deputy Commander). However, by the late seventies, the number had risen to 65 a year, again with provision for local discretion should particular targets justify it, possibly in response to these 1977 Soviet deployments. It then remained at this figure until the arrival of the Andover in 1989 as the Soviet Union's political system was collapsing. Perhaps this is a good time to look at the history of HALLMARK in more detail.

Hallmark

Operation HALLMARK, along with its sister Operation NYLON (the use of RAF Gatow's resident Chipmunks) together constituted one of the most successful intelligence gathering operations of the Cold War and provided the only regular surveillance of Soviet and East German forces until the advent of reliably available satellite imagery in the mid-sixties. Together, they made a major contribution to the West's intelligence community's knowledge of Soviet and East German forces. The story of the NYLON Berlin Chipmunk operations could probably make a book in itself so this chapter will limit itself to covering the history of HALLMARK and the Corridor operations preceding the formal adoption of the HALLMARK Operation Order.

Immediately after the Second World War, the inner German border could be crossed by road at almost any point along its length; the limitation to specific crossing points was not imposed until 1952. However, the air corridors were agreed at the Potsdam conference of 1945. There was a benefit to both sides. For the Allies, it was perceived as guaranteeing access to Berlin. For the Soviets, it was welcome because otherwise there would have been a free-for-all over the Soviet Zone and the establishment of the Corridors placed constraints on Allied flights over their territory.

Initially there was no upper vertical limit to the Corridors; The maximum operating altitude was constrained only by the service ceiling of the aircraft type which in those days would have been, at most, between forty and fifty thousand feet. There was also no restriction on aircraft type, which meant that warplanes could be deployed to Gatow if required. Indeed, at this time RAF fighters were regularly detached there on rotation.

In 1945 and 1946 forward-facing oblique (ie, angled partially downwards) cameras were fitted to Mosquitos using the Corridors. The British Air Forces of Occupation (BAFO), the precursor to 2nd Allied Tactical Air Force, later Royal Air Force Germany, did not operate any Mosquito PR variants at this time so the aircraft used were the bomber version. These early attempts with the Mosquito were not pursued further.

Photo: The de Havilland Mosquito http://jetphotos.net/viewphoto.php?id=7510745

The next initiative was the approval of trials using the CinC's personal VIP transport aircraft, an RAF Douglas DC-3 Dakota, in 1946 and 1947. The camera was a hand-held F24, already in the RAF's inventory, and was operated from the co-pilot's seat. These came to an end when the CinC, Air Marshal Sir Philip Wigglesworth, changed his mind, probably because had the operation been compromised he would have lost his personal transport. However, it was next year that the true precursor of HALLMARK emerged. The BAFO Communications Squadron operated the Avro Anson, the immediate predecessor to the Pembroke, and the aircraft was used for photo reconnaissance missions from 1948 onwards.

Photo: The Avro Anson
http://feastbowl.files.wordpress.com/2012/07/paver-classic-trust-june-2012-f-500px.jpg

1948 was the year of the Soviet closure of all roads, railways and canals from the West to Berlin in an attempt to impose a total blockade in order to make a continued Western presence there untenable. The Allies countered with the historic Berlin Air Lift, a feat of aerial logistics which up that point in history had been regarded as impossible. It turned out to be not only a triumph of Western resources and capability but also a clear demonstration of the Allied will. The Air Lift made it clear to the Soviets that the only way that they could get Berlin would be to fight a war for it. At this time they did not have the atomic bomb and the Wast did. After ten months they lifted the blockade, realising that it was pointless as by May 1949 the Air Lift was bringing more goods and freight into Berlin than had been delivered by rail the previous year.

The success of the airlift embarrassed the Soviet government. Had their blockade succeeded, they would have acquired Berlin and, in their eyes at least, the end would have justified the means. As it was, not only were they defeated but they had broken international agreements without any gain and now the whole world could see what Soviet intentions in Europe really were. The pragmatic *entente* which had existed from 1945 to early 1948 was shattered by the events of these ten months. In 1949, in response, the North Atlantic Treaty Organisation (NATO) was created ; the three Allied Sectors were amalgamated into the new Federal Republic of Germany (West Germany) and the German Democratic Republic (Communist East Germany) came into being. The FRG joined NATO.

In response to the Berlin blockade the RAF mounted its only Corridor espionage operations by dedicated high-performance photo reconnaissance aircraft. Between 1949 and 1953 Spitfire FR Mk 14 and PR Mk 19 aircraft of II (AC) Squadron were used at high level along the Corridors with the aim of assessing Soviet fighter strength and capability, with particular

emphasis on their likely contribution if the Soviets were to mount a further blockade. II Sqn was initially based at RAF Buckeberg, but moved to RAF Wahn, near Cologne in 1953.

http://www.davidtomlinsonphotos.co.uk/duxford/spitfire_mk19.jpg

Photo:
Spitfire PR Mk19

Following the Berlin Air Lift the Soviets unilaterally imposed an amendment to the Corridor rules demanding altitude limits of 2,500 feet to 10,000 feet and restricting the aircraft types to unarmed transport and training types only. The initial Allied response was to ignore it as they had not agreed to it and the Corridor procedures were already the subject of an agreement which was binding on both sides. However it soon became clear that the Soviets were serious. On 29 April 1952 an Air France Skymaster operating an internal German scheduled service into Berlin Tempelhof Airport came under sustained attack from two MiG 15s whilst in the Corridors. Two of the engines were put out of action but the aircraft survived despite sustaining 89 hits and, amazingly, no-one was killed. The Soviets defended this attack on an unarmed civilian aircraft by claiming that it was outside the air corridor at the time of attack. On 12 March 1953 two routine NATO liaison sorties were scheduled for RAF Lincolns of the Central Gunnery School at Leconfield, Yorkshire. As the first aircraft neared Kassel, still well inside the British Zone, two MiG 15s suddenly appeared from underneath the aircraft on the port beam. After an initial fly-by the two MiGs peeled away and commenced a series of mock attacks without actually opening fire. All of this was recorded on the cine-cameras attached to the Lincoln's guns. Prudently, the crew of this first Lincoln turned away from its track towards the Corridors and returned safely to Leconfield. Some two hours later, as the second aircraft was entering the Hamburg-Berlin Corridor it was attacked by two MiG 15s which opened fire without warning. The Lincoln went down in a steep dive followed by the MiGs still firing on it. The aircraft's starboard wing caught fire and it began to break up in mid-air. All personnel on board were killed. A number of German eyewitnesses confirmed that the MiGs had fired, unprovoked, on the Lincoln. Whilst this aircraft had undoubtedly strayed close to and possibly even slightly over the border its track was clearly intended to take it into the Corridor, a fact that must have been quite obvious to the Russians. The Prime Minister, Winston Churchill, described the incident in the House of Commons as a 'wanton attack' and a strong note of protest was delivered to the Soviets, who replied by claiming that the Lincoln crew had fired first. However it was soon pointed out that on these training sorties the belt mechanisms were removed from the cannons in the mid-upper turret and the rear turret carried no ammunition. The Soviets eventually expressed regret over the death of the seven crew members and returned their bodies and the wreckage to RAF Celle shortly after the incident.

The Soviets were particularly aggressive during this period. A week earlier a USAF F-84 Thunderjet had been shot down by MiGs; luckily the pilot managed to eject safely. A week later a BEA Viking was attacked by MiGs whilst on a scheduled flight in the Corridors. Two weeks later an American B-50 allegedly on a routine meteorological flight was also attacked by MiGs but drove them off with cannon fire. For several weeks all NATO aircraft flying near the East German border operated on a fully-armed 'fire back' basis until the crisis had

gradually died down. However by 1953 the Soviets had their own atomic bomb and, for the RAF at least, the Anson operation was now sufficiently mature to be producing good reliable imagery whilst still conforming to these new unlawful Soviet conditions for the Corridors. As on a previous occasion, it was not an issue worth going to war for so whilst the Allies never agreed to or accepted the new Corridor restrictions *de jure*, in practice they conformed with them from then onwards.

With this clear evidence of the collapse of the initial post-war warmer relationships, intelligence gathering assumed a higher priority. Until the arrival of space technology there were four main sources of intelligence: visual inspection, signals information, human intelligence (ie, spies) and aerial photography. In Germany, the first two were carried out by the (legal) military missions. In 1946, before the stand-off against the Soviets had become evident, all four powers had agreed the establishment of these missions to liaise with each other in order to increase co-operation. The full title of the British mission established in the Soviet Zone was the 'British Commander-in-Chief's Military Liaison Mission to the Commander-in-Chief of the Group of Soviet Forces in Germany'. Thankfully, it was universally known as BRIXMIS. Their home base occasionally caused comment - it was in Hitler's Olympic stadium in Berlin. The Soviet mission to the British Zone was similarly shortened to SOXMIS. These various missions had some freedom of access in each others' zones but as they had to wear uniform and travel in clearly marked military vehicles it was easy for the host zone to keep tabs on their activities.

BRIXMIS car

http://www.bunkertours.co.uk/senator-7-front.jpg

BRIXMIS team crossing the Glienecke Bridge circa 1978-80

http://www.whatliesbeneath.org.uk/upload/img_400/00171683.jpg

They had two aims: their primary role was to liaise between the respective Commanders-in-Chief. Equally, fairly obviously, their secondary role was to gather intelligence. They could achieve this by visual inspection and hand-held photography. However all sides imposed certain restricted areas and not surprisingly the most sensitive military material was in those zones. Separately from BRIXMIS, there was signals intelligence - monitoring the opposition's radio traffic; this can be useful, but covers a limited frequency range and the transmitting source cannot be seen.

Human intelligence can provide physical data: what equipment, what types of troops, how many of each, where they are located, and so on. It can also give intangible information, for instance: states of readiness, states of morale and levels of training. However, the James Bonds of this world are useful only up to a point; their information can be out-of-date or may give only an incomplete picture and, most importantly, the motivation of the source must

always be examined. It could even be a plant - a double agent. Really, the only verifiable source with rights of access to the restricted areas was aerial photographic reconnaissance. The importance of the Ansons of the Communications Squadron was never in doubt. They appear to have been continuously tasked on Corridor photo missions between 1953 and 1958 at the rate of about once a fortnight.

Authorisation of these sorties was at a very high level for most of the life of the operation. Initially the British Zone of Germany was governed by the British Military Government (BMG). At this stage the Corridor photographic activity was largely at the trials and experimentation phase. Probably little actual operational photography took place and control was at BAFO/BMG level. In 1949 the Western Zones merged into the Federal Republic of Germany, which joined NATO, but the FRG was not admitted to the United Nations until 1955 and then only with observer status. In May 1949 the military governors were replaced by civilian high commissioners. The high commissioners were part-governor and part-ambassador. The occupation officially continued until 1955, when the Federal Republic became a fully sovereign state, the western occupation zones ceased to exist, the high commissioners were replaced by normal ambassadors and the FRG joined the UN. At this point responsibility for relationships with the FRG passed to the Foreign and Commonwealth Office and responsibility for the authorisation of the secret photography missions went to a highly select cell of the inner Cabinet, comprising only the Prime Minister, Foreign Secretary, Secretary of State for Defence and Secretary of State for Air. The rest of the Cabinet were probably not even aware of the existence of the missions.

If this seems like an excessively cautious approach, there were good reasons for it. Stalin had ruled the Soviet Union with a vice-like grip and in an utterly autocratic manner. His death in 1953 had left a power vacuum in the USSR with no clear successor and no procedure for establishing one. A power struggle therefore took place between Malenkov, Beria, Molotov, Khrushchev, Bulganin and Mikoyan, amongst others. It was ruthless and resulted in Beria's execution. By 1956 Bulganin was Chairman of the Council of Ministers (effectively Premier) whilst Khrushchev was Chairman of the Central Committee of the Communist Party. This struggle was still going on when Bulganin and Khrushchev visited the UK in 1956. Relationships with the UK were not helped in that, having been adulated in recent visits to India and Burma, the pair were received very coolly by the British public. Worse, the CIA, MI6 and RN Intelligence were all involved in a mission to put divers under the Soviet warship which had brought them to Portsmouth. A British Second World War hero, the frogman Lieutenant-Commander Lionel 'Buster' Crabb, disappeared mysteriously, his body being found over a year later. Added to this, the US was also running aerial PR espionage missions in the Corridors completely independently of and uncoordinated with the British effort, so it is easy to see why at this sensitive time, control of the mission was maintained at such a high level. The UK continued to have good reason to regard the USSR as a volatile powder keg, as the power struggle lasted until 1958 when eventually Khrushchev won, having defeated all his potential rivals in the Praesidium.

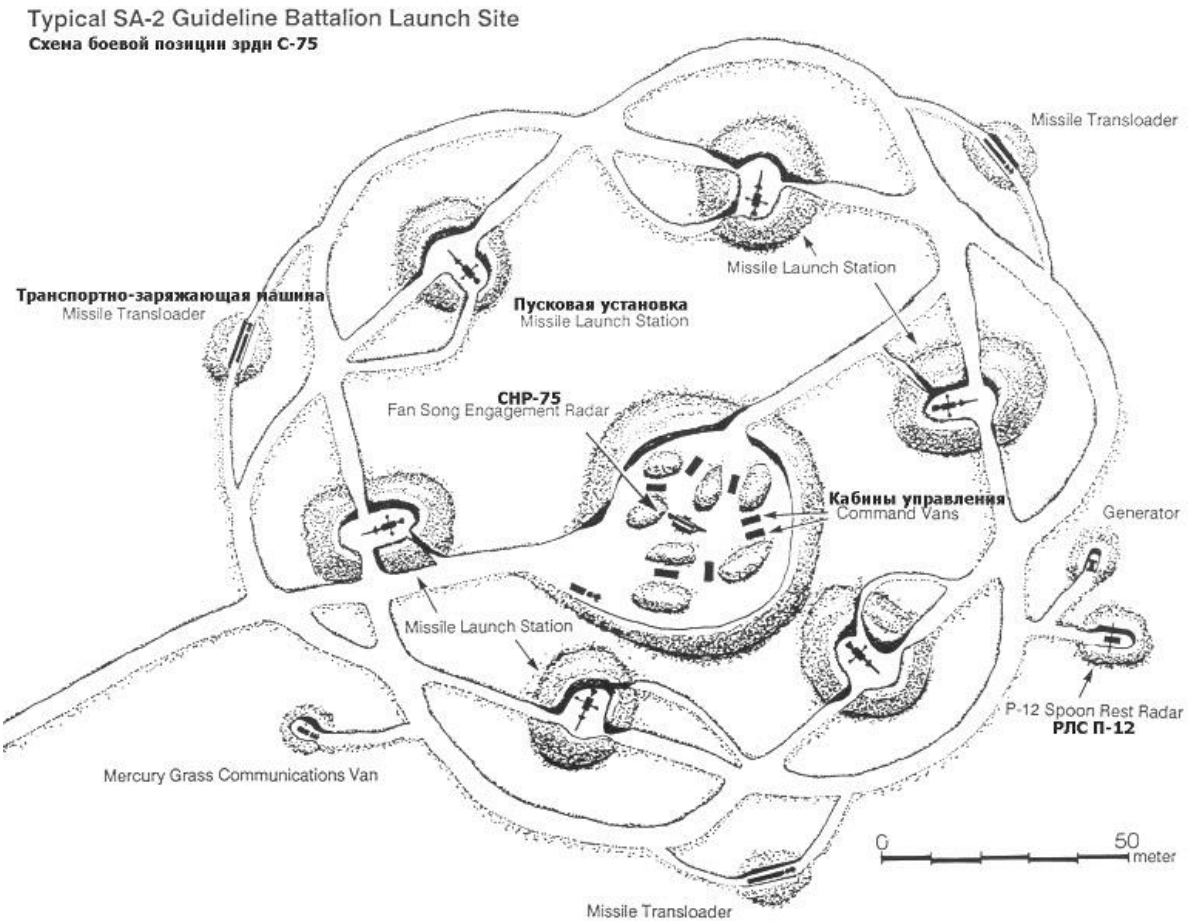
The actual level of control of this top-level inner cell of the Cabinet was probably confined to setting the number of flights allowable in a six-month period or closing them down immediately if required. The detailed control of each individual mission was exercised personally by the CinC RAF Germany. Once the target list for that mission had been drawn up by the intelligence staff the selected targets and routes were submitted to the CinC (or only the Deputy CinC and then only in the CinC's absence). He then consulted the embassy in Bonn for any local political updates and sensitivities and to let them know that the flight

would be taking place and only then signed the personal written authorisation, valid for just forty-eight hours. The FCO's briefing to the CinCs must have been very explicit on the need for tight control because on one occasion, the Deputy CinC was on leave and the CinC himself was away visiting an out-station. When the intelligence staff rang him by secure phone to request an immediate authorisation for a flight he refused, saying it could wait till he got back and that he would not authorise until he had seen the details and could do so in writing.

In 1956 the first of the Pembrokes arrived to replace the Ansons, a process completed when the last Anson was withdrawn in 1959 but this re-equipment made no difference to the political control of the reconnaissance missions and the sortie rate continued at approximately one a fortnight. The situation changed after the U-2 incident of May 1960 when the CIA pilot Gary Powers was shot down over the USSR. Whilst this was nothing to do with the UK it raised the general political temperature and particularly, it raised sensitivity over aerial espionage, so all the Pembroke photo missions now came under even stricter Whitehall control. After the U-2 incident there were no flights at all from May to September 1960.

However, earlier in 1959 the Squadron had brought back evidence of construction sites at Glau, just to the south of Berlin. BRIXMIS had been alerted so had driven over to take a look and it had become obvious over time that this was to be a missile site, but more detail was needed. By September 1960 it had been identified from a mixture of sources as an SA-2 site, along with others round Berlin. This was the missile than had knocked down the U-2 over Russia and it was thought to be considerably more capable than its predecessor, the SA-1. It now became a matter of urgency to find out more about these deployments. The Joint Intelligence Committee (JIC) therefore recommended that the Cabinet approve no more than ten flights, to be carried out within a specific period of time. If agreed, the CinC could also approve a limited number of missions should an attractive target of opportunity present itself, but his discretion was also to be limited by the same time-period as the larger framework. In essence, this was the same system that had been used up to May 1960, but with a shorter time period than six months, fewer pre-approved flights, and more direct interest and control from Whitehall.

The SA-2 Guideline


Typical SA-2 Guideline Battalion Launch Site
Схема боевой позиции зрдн С-75
Missile Transloader
Missile Launch Station
Транспортно-заряжающая машина
Missile Transloader
Пусковая установка
Missile Launch Station
СНР-75
Fan Song Engagement Radar
Кабины управления
Command Vans
Generator
Missile Launch Station
P-12 Spoon Rest Radar
РЛС П-12
Mercury Grass Communications Van
0
50
meter
Missile Transloader

The following year in August 1961 the East German Government built the Berlin Wall. There can be no more public admission of the failure of a society than when it has to imprison its own people in order to stop them emigrating but East Germany had lost 3.5 million of its population to West Germany by 1961 and these people were the young, the best and the brightest: doctors, lawyers, engineers, skilled workers, mainly aged about thirty or under, all seeking a better life in the West. In a single month (July 1961) 30,000 of these talented young East Germans crossed into West Berlin. On building the Wall the East German government put out propaganda primarily intended for their own people stating that its purpose was to keep Westerners out, but it fooled nobody. However, from the JICs point of view the existence of the Wall severely restricted the flow of human intelligence and this gave a greater importance to the Pembroke missions. Nevertheless, the tightly-controlled authorisation process instigated in September 1960 remained until early 1962. In the whole of 1961, for instance, Whitehall authorised up to 19 Pembroke missions but only 9 were flown.

By early 1962 it was felt that international tension had relaxed sufficiently to increase the flight frequency to one per week; this was before the Cuban missile crisis. Again there was discretion for the CinC or his Deputy to authorise extra trips if required. The discovery of the SA-2 Guideline SAM site at Glau had given fresh impetus to the operation. This was the first such example of this system to be seen deployed in the forward area of Europe and it was known to be an effective weapon. It was because of its introduction within the USSR that the V-force, at that time the UK's primary nuclear deterrent (this was before the introduction of Polaris submarines) changed its planned penetration technique from very high level, where it had previously been invulnerable to low level, below the radar. The SA-2's arrival at Glau presented a serious threat to aircraft in the Berlin Air Corridors and even the eastern edges of Allied airspace; this had grave political and military implications.

Work therefore began at the end of 1963 under a contract issued in support of Modification 614 to convert three Pembrokes to a modern photo fit. Two, XL953 and XL954 had previously been in the passenger/freight role and the third, XF799, had its elderly cameras updated. This was the 5 x F96 fit described in the previous chapter. In the mid-sixties the MoD and the FCO submitted through the JIC a joint paper at two star level. This simply appears to have formalised what was already *de facto* practice. The annual number of flights was to be set by the inner Cabinet. Individual flights were to be authorised personally by the CinC or, only in his absence, by the Deputy Commander after consulting with the Embassy. It was to be subject to six-monthly review or earlier if the political situation demanded it and it could be suspended or curtailed by Whitehall at any time. Over the years the number of flights grew slowly and by the late seventies had risen to 65 per year. This remained in place until early 1990 when the increase in capability and the even lower risk of detection with the more modern Andover aircraft prompted a request for more flights. By then the Wall had been opened and East Germany was unravelling; Honecker was 'released from his post for ‘medical reasons', Krenz had taken over at short notice and was clearly out of his depth, local mayors and Party *apparatchiks* were committing suicide, and so on, so one can see why more flights were thought to be needed. However, this temporary increase was very short-lived, as the entire HALLMARK operation ceased in September 1990 with the impending re-unification of Germany.

In order to plan, brief, de-brief, exploit, assess and disseminate information from these missions an intelligence support organisation was needed. After some initial settling down, this became BAOR's 6 Intelligence Company and the RAF's Photographic Intelligence/Interpretation Department (PID), both at Joint Headquarters (JHQ) Germany at Rheindahlen, only about ten miles from RAF Wildenrath. The RAF PID concentrated mainly on Soviet and East German air assets whilst 6 Int Coy's primary focus was ground forces. The targets and route (ie, would it be the north, central or south Corridor?) were selected by the intelligence staff and photographic intelligence units. The selection would be predicated on either a specific intelligence requirement at the time or the requirement to keep the routine picture constantly updated so that any changes which might occur in future would become apparent. Sometimes BRIXMIS would pick up a hint that required air photography to confirm or amplify it and sometimes it was the aerial photographic data which prompted BRIXMIS to carry out a ground inspection. Large-scale (1:100,000) maps of the corridors, covering their whole width plus about ten miles had been printed and turned into A3-sized laminated strip folder books. Once the targets had been decided, they were plotted in chinagraph pen ('grease pencil' to the Americans), a technology which has now been superseded by semi-permanent felt-tip marker pens. There were usually about twenty targets per leg. There were two reasons for using chinagraph, an erasable medium. The first was that it meant that the maps were re-usable after each mission, which saved money. The second was that they could be rapidly cleaned by the aircrew if any stage there was the possibility of the aircraft falling into Soviet or East German hands; dusters and metal polish were carried in the aircraft.

With the targets selected and the CinC's authorisation obtained, the next thing to do was to brief the crews. Each week a Sixty Squadron crew of one pilot and two navigators would be nominated as the HALLMARK crew. On a Monday morning, they would drive OC Sixty's car over to JHQ to personally meet the intelligence briefing staff. Three routes would be briefed, one for the outbound leg, one for an internal flight round the Berlin Zone landing back at Gatow and one for the return leg. For each of these routes, the intelligence officers would go through each target explaining why it was significant or stating that it was simply part of the regular routine coverage. The crew would then drive back to Sixty Squadron at Wildenrath taking the locked bag containing the marked maps with them.

There was then often quite a lot of sitting around. Successful photography is dependent on an absence of cloud cover and the presence of good daylight conditions. If the weather was not good the crew might wait several days before the opportunity to fly the briefed mission arose. As the CinC's authorisation was only good for forty eight hours, it would mean asking him for a re-authorisation but this became routine and the CinC got used to it. At Pembroke speeds it took approximately two hours to reach the East German border, the start of the target area, so the best take-off time was 10 am, in order to be over the targets when the sun was at its highest and the light could be expected to be at its best. There were occasionally whole weeks when the weather was unsuitable and after their week on standby the crew went off shift without having flown.

However they usually managed to get at least one series of the three sorties in, and sometimes they even departed on the Monday. Two navigators were required, one to sit in the right hand seat and navigate the aircraft and the other in the rear compartment to operate the cameras. Both were qualified in each role and they would take turn and turn about on successive flights. Three legs were planned on each of these HALLMARK missions. The inbound and outbound flight would use different corridors in order to maximise coverage and on arrival at

Gatow the crew would invent some fictitious aircraft technical 'snag' which needed a local 'air test' to check out the 'rectification'. A one-hour route entirely within the 20-mile radius of the Berlin Air Zone, where the concentration of targets, especially round the edges, was even higher than in the Corridors would then be flown. The local trip was code-named a 'Chukka'. The Corridor trips were usually flown at around 3,500 to 5000 feet above ground level to maximise photo resolution and the Chukka was usually lower - typically 2000 feet. The cameras, though old, were good, and if the weather was fine the quality of the imagery was often outstanding.

Of the two navigators, the front-seater was responsible for all of the route navigation, including preparing the navigation flight-plan. The rear-seat navigator could not see forwards and so for vertical shots had to rely entirely on the front-seat navigator (or occasionally the pilot) for information on when to switch the vertical cameras on. However he did have a vertical sight, a drift-sight, rather like a downward-pointing telescope that could act as a track indicator. If the initial line-up was less than ideal the back-seater could ‘talk’ the pilot on to the right line once he saw the target. The pilot would then use coarse (indeed, rather agricultural) applications of rudder whilst trying to keep the wings level because a gentle turn with bank would have displaced the target from the centre. Most important of all, the front-seat navigator had to ensure that the aircraft stayed within the corridors. These extended only ten miles each side of the centreline and some of the vertical targets lay very near indeed to the corridor edge. With the cautionary tale of the 1953 shooting down of the RAF Lincoln in mind the crews were well aware of the dangers of straying outside the corridor but the 1:100,000 scale mapping did allow them to navigate with great accuracy. Many of the targets were ten to fifteen miles outside the corridors and were perfectly open to photography if the visibility was good enough. The F-96 oblique cameras had a sight-line that could be varied by a manual spring balance adjustment from the horizontal to about 15° depression angle. If the rear-seater saw the target out of the side windows in good time he could adjust the camera down to the correct depression angle by visual estimation. Once the camera was in line, he could squint down the barrel (the lens assembly looked like a telescope and filled much of the cabin’s width) and ask the pilot to make any final adjustment required by a combination of bank and rudder which kept the wing down the right amount but did not change heading. If he picked it up late the whole aiming process would have to be done by talking the pilot on to the right angle of bank because the camera angle motors were quite slow.

The aircraft cabin also carried very powerful magnification hand-held cameras. These were heavy, with telephoto lenses and pistol grips and they could be used by the front-seat navigator particularly when the aircraft was descending into Gatow and was therefore much lower. The route passed over a Soviet tank training ground and also an army barracks and there were often armoured vehicles out on exercise. These targets of opportunity were all grist to the mill. Shortly before landing the rear-seater would cover up the cabin windows and the lower belly camera hatch doors were closed. On landing at Gatow the crew would taxi right up to the hangar and park with the aircraft’s door facing it so that the East German border guards in their nearby watchtowers, who also had cameras with telephoto lenses, could not see into the aircraft door. Outside, crews would also have to watch their conversation as directional microphones were used in some of these guard posts. The maps of the completed sorties were cleaned and the locked map-bag was put into a heavy combination-lock safe in a secure room in a guarded hangar. If the weather was still suitable and enough daylight remained the Chukka would be flown later that day. Otherwise, the crew would check their accommodation arrangements and hope that they had been put up in

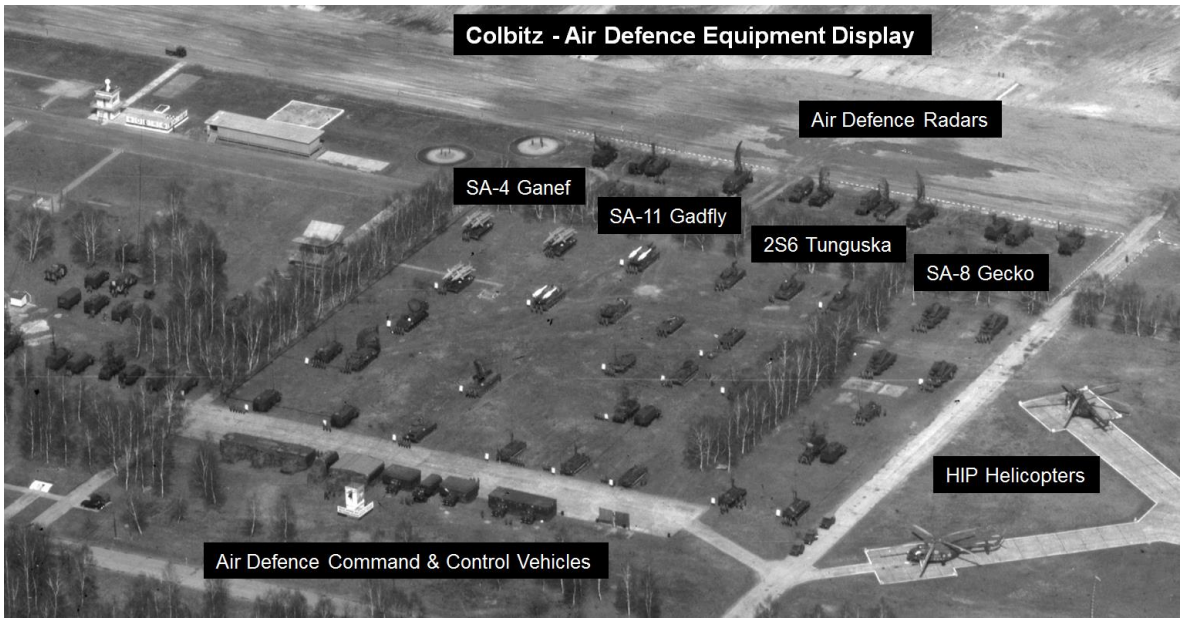
downtown Berlin for the night rather than the Gatow Officers' Mess. They were usually disappointed.

Next day they would check the weather and if possible fly the Chukka, land, refuel and return to Wildenrath. Sometimes they would have to stay in Berlin for several nights waiting on the weather and most of them became very familiar with this wonderful city. The return trip would be flown using a different corridor from the inbound leg. Once back at Wildenrath the Pembroke was again parked close to or moved into the Squadron hangar. The film would be removed quickly by the Squadron photographic technicians and taken over to HQ RAFG, before being processed as a high priority, often within a couple of hours. At the same time usually the whole crew but certainly the navigators, would drive over to JHQ for a de-brief and to take the maps back. If they were back before Wednesday afternoon there was a good chance that they would be told to turn up at JHQ next morning for a fresh briefing for a mission in the second half of the week.

The film was rapidly developed and printed by the RAF Photographic Reproduction Unit at Rheindahlen. This was a combined photographic processing unit and the JHQ Printing Section. The processed film would be passed to the RAF PID for initial appraisal to give a quick report of targets covered, high levels of activity and new equipment. A second, deeper look would then take place to build up the data base and prepare detailed reports.

It is interesting to see what these skilled intelligence officers and photographic interpreters could make of a picture. They knew the sort of thing they were looking for, even if the detail of each new sortie could yield a surprise. It is also interesting to see how good the imagery was and how it could be enlarged without losing much resolution. This, for instance, is a typical single frame from the fan camera. The picture is of an Air Defence Equipment Display at Colbitz, with its vehicles laid out, probably for inspection.

And this is what was produced once the PIs and photographic technicians had worked on it:



In making their reports the priorities were, firstly, indications and warnings of hostile intent. After that came location changes and new technology. However, when satellite imagery became widely available to the Allied intelligence community, it could often provide warnings of hostile intent earlier than terrestrial photography. The priorities then became, in order: analytical reports (unit organisation and equipments, command and control, logistic chains and training patterns); hostile intent indicators; location changes; technical intelligence. On the last, although satellites over the USSR usually gave earlier indications of the appearance of new equipment it was often the HALLMARK sorties that gave the first close-up views.

Perhaps one should attempt some summary of the achievements of HALLMARK and its predecessors. After all, the operation ran, in one form or another from 1948 to 1990, a total of 42 years, 21 of them as the Communications Squadron and 21 more as Sixty Squadron. The MoD, always under budget constraints, would not have kept it going unless they felt that it was well worth the money. As stated earlier, intelligence rarely yields *'Eureka!'* moments. It is more usually a process by which through accumulated repetitive consistent routine operations and cross-correlation the whole becomes more than the sum of its parts.

For instance, 1968 was the year of Czechoslovakia, Dubcek, and the 'Prague Spring' - a kind of dress rehearsal for 1989 and Václav Havel's 'Velvet Revolution'. Tension was high and the West expected the Soviets to invade. A routine HALLMARK flight showed that Soviet reserve transport units - lorries and heavy-haul vehicles - which had never previously been seen to join their parent fighting units had moved out of their barracks and were now deployed out in the field with them. 6 Int Coy passed the information upwards, with warnings. Forty-eight hours later, the Soviets invaded.

A similar situation arose in Poland in 1980 and 1981 with Walensa, Solidarity and massive strike action by the Polish people. Again, it seemed probable that the Soviets would invade. Again, a HALLMARK flight showed the same rare pattern of truck deployments from Soviet

barracks in East Germany to join their operational units and again the JHQ intelligence staff issued a warning. However in this case, the Soviets did not invade. On 13 December 1981 General Jaruzelski declared martial law and the Polish popular movement was instead repressed by the Polish army. Jaruzelski was later castigated for betraying his country but he defended himself, probably truthfully, by saying that he did it to save Poland from invasion and thereby from worse repression by the Soviets.

The SAM site at Glau was another example of this cumulative process. A Pembroke sortie in 1959 had discovered a building site. Something was being constructed, but what? BRIXMIS was alerted and sent a ground inspection team. It was tentatively assessed as being a new heavy AAA (anti-aircraft artillery) site. However with the later appearance of permanent electronic vehicles and drive-through revetments, it was re-assessed as a SAM site - probably a SA-1, a circle of which already ringed Moscow. Eventually further flights identified it as the first SA-2 site.

It was often minor details which gave the first inklings to the photographic interpreters and intelligence officers. For instance, the Soviets numbered all their self-propelled guns within a divisional artillery regiment in simple numerical order (001, 002 .....034, 035...etc). These numbers were painted on the sides of the turret and were big enough to be clearly read by the Pembroke's cameras. This was unintentionally helpful of them because it made accounting for individual guns much easier. One day, the numbers jumped from 026 to 029. Where were 027 and 028? What had changed? By correlation of the photography or from the evidence of further flights the missing guns were located in a different battery. It became possible to deduce that the regiment had not only re-organised but had increased the number of guns.

It was also possible over time to establish the entire composition of a regiment and produce a complete organisation diagram, with numbers of men, guns and vehicles in each company, right down to platoon level. Sometimes they got lucky, as when the Soviets would put out the whole regiment neatly lined up by individual formation for inspection by visiting generals just as the Pembroke flew over. This had to be treated with suspicion, however. It was just too good to be true. The British never knew for certain whether the Soviets had worked out what the Pembrokes were up to but it was considered possible that some equipment was laid out deliberately just to show the Allies what the Soviets possessed.

Another example of this cumulative intelligence process was when in mid-1972 a very poor image of an unknown mounting on top of a known amphibious armoured patrol vehicle was photographed at Kőthen airfield . Some months later a HALLMARK aircraft produced clear imagery of this combination exercising on the Letzlinger Heide tank training area and almost simultaneously, a BRIXMIS ground patrol snapped just the upper part over a hedge at the

SA-9 Gaskin

9K31M / SA-9B Gaskin on display at Kecel in Hungary. (Image © Miroslav Gyűrösi).

The 9K31 Strela 1 / SA-9 was the first Soviet heatseeking point defence SAM system. The fully self-propelled design was hosted on the 7 tonne amphibious BDRM-2/BTR-40 scout vehicle. It was deployed in concert with the ZSU-23-4P Shilka SPAAG, to provide the final layer of air defence capability for combined arms and armoured divisions.

(Source: Air Power Australia - Technical Report APA-TR-2008-0502 by Dr Carlo Kopp, AFAIAA, SMIEEE, PEng)

Perleberg Soviet barracks. After much discussion and analysis it was established as comprising two heat-seeking SAMs (the well-known man-portable SA-7 Grail) mounted on a BRDM-2 armoured vehicle. This system was later NATO code-named the SA-9 Gaskin and was widely deployed by the Soviets and Warsaw Pact.

But of course, there were also some genuine *coups*. These were usually re-equipments. For instance, it was Sixty who provided the first detection of the arrival of the MiG-25 Foxbat at Werneuchen, the arrival of the MiG-29 Fulcrum, and the arrival of Mi-24 Hind attack helicopters in Germany.

One wonders how much the Soviets or East Germans knew about HALLMARK. It is extremely unlikely that they ever had access to any documents relating to it. Although after reunification it was established that they did have an extensive network of agents in Berlin and the FRG and some certainly worked for the British forces, HALLMARK was so sensitive that access was limited to a very small number of personnel, nearly all uniformed. Very few people, even those at the highest levels of seniority, ever saw any documentation relating to it. Agents might have reported on unusual levels of activity but the RAF took great care to make the operations look as routine as possible, even pretending to have an 'airtest' flight for the Chukka. (This was unlike their US counterparts, who seemed quite *blasé* about it all. For instance, the Americans always used the aircraft's airframe number as a callsign, which must have been a bit of a clue that this particular aircraft appeared to be visiting Berlin quite often. As it was a C-130, it had the fuel to go up to Berlin, round the Berlin Control Zone and back to the FRG without landing in Berlin which, again, seemed somewhat unsubtle. The Soviet senior air traffic controller representative in the Berlin Air Safety Cell often referred to the American 'spy plane' to his American counterpart). By contrast, HALLMARK operations always used normal UK military transport callsigns and always landed in Berlin immediately after the inbound Corridor flight. However, the Soviets were not stupid and must have noticed the large number of 'airtests' that the Pembroke seemed to need. They certainly worked out that the Chipmunk was up to something. They may have chosen not to rock the boat because Aeroflot and East German airline flights over the UK were known by the British to divert from track to cover certain target areas and would then 'inexplicably' fail to hear ATC instructions to return to the planned track for a while. The British actually had a counterintelligence cell photographing the Soviets photographing us. Overall, the Soviets probably underestimated the high quality of the imagery and high value of the information that the NYLON and HALLMARK operations were providing for forty-two years.

Intelligence is a serious business and the fate of nations can depend on it but there were lighter moments. Perhaps this chapter should end with one of them. One British intelligence officer noticed that a T-72 tank had been modified by the addition of appliqué armour, which took the form of forward-facing protuberances on the front below the turret. As this was a new sighting there was no established NATO reporting code-name for it so he supplied a provisional name of his own and called it the 'Dolly Parton' variant. He filed his report and sent it up the chain to his UK and USA masters. The British replied with a polite acknowledgement and a short note of thanks. The Americans suffered a total sense of humour failure and their reply was a three-page screed on the undesirability of sexist attitudes in a modern military force! Our hero no doubt filed this response in the nearest suitable receptacle. However, he was amused to note that, until the modification was formally renamed by NATO, in all future intelligence digests, both the British AND Americans referred to this version of the T-72 as the 'Dolly Parton' variant.

The Pembroke/Andover Era 1978 - 92

On the12th September 1977 Mike Jackson handed over to Squadron Leader Colin Campbell, who became the fifth navigator Squadron Leader to command Sixty in Germany. It was a unique post with its elderly aircraft, its Top Secret intelligence mission and, because of its small size, its combination of informality along with high professional standards. For many it was the best flying club in the RAF. One pilot recalled later: 'Not everything was given to you on a plate, you had to work it out for yourself. But it was the most enjoyable time, as you were completely independent - in a way that you could never be on another squadron, because you were a two man crew in a small aeroplane that no one had ever really seen before.'

The aircraft were old; there was no doubt about that. In 1978 MoD Air Staff Requirement 408 considered a replacement for the RAF's ageing Devon and Pembroke aircraft. The likely choice was whittled down to the Beechcraft Super King Air or the Scottish Aviation Jetstream, both powered by Garrett turbo-props. The cost of fourteen of these would have been £11m and £22m respectively. The Squadron awaited the outcome with interest, but in the meantime got on with their HALLMARK and their communications duties in their 25-year old aircraft. Most of the time, this was seen as a challenge rather than a problem. However, on the VIP air taxi task generals and air marshals in other NATO forces had updated their personal transport, some with shiny jets; at international conferences where the various top brass would arrive together, the sight of the Pembroke parked alongside the other more modern types could occasionally look rather quaint. One hoped that it was seen as a sign of British quirkiness rather than straitened financial circumstances.

The gallant ground crew did all that they could to present the VIP aircraft in the best possible condition. The CinC's aircraft, WV746, was known as 'Red Leather' because that was how its interior was fully upholstered, to quite a plush and luxurious standard. A second aircraft was also in VIP fit, though not to quite such a high standard, and was used when 'Red Leather' was undergoing maintenance or was already in use on a higher priority task. This was XK884 - 'Blue Leather'. The aircraft were always highly polished externally and their appearance, if not their design, belied their years. But no amount of polishing could disguise the age of the Alvis Leonides engines.

During 1978 the aircraft started experiencing problems with engine seizures. Flight Lieutenant Dave Clark, a pilot who later became the other Flight Commander along with Peter Miles, suffered three such failures in just five months, the first of which was the most serious. In April he had flown a VIP flight to Northolt and was on the return leg, well over the English Channel.

> 'There was a popping-bang sound,' he recalled, 'and I noticed the cowlings had gone off the port engine, with a loss of power and all the gauges going haywire. I shut the engine down and the navigator - our new CO - issued a PAN call. We were physically closer to the French coast than England but RAF Manston was the closest diversion airfield. Visibility was poor, too. In the radar pattern I was struggling to maintain height at 2000 feet and so was committed to a straight-in landing. When we touched down, the inertia of the aircraft allowed us to get off the runway, but we could not steer because of the now non-functioning differential braking, so we had to switch everything off. When we got

out of the aircraft, I realised it was not just the cowlings that had gone, so too had the engine sump and the bottom 3 cylinders, with the little remaining oil still dripping out.'

Alvis first attempted some simple modifications, including shrinking a sleeve around the base of the cylinder, but these this did not address the problem. Then it was thought that the reduction gearboxes were causing a harmonic vibration which reflected through the engine causing cracking around the base of the lower (5 & 6) cylinders. However, even after a change of specification to the reduction gearboxes, failures continued. Engine problems increased during 1981 and in September, a director of Alvis came to visit Sixty. Later, Squadron engineers later spent a week at the factory, but without finding a solution. Lengthy inspections of components meant loss of aircraft for flying. After more failures in 1982 it eventually transpired that local overheating of one cylinder was leading to piston seizure. Alvis concluded that the cause was that the engine manufacture was now computer-controlled and the tolerances were much finer than with the former manual methods. This sounds as though it should have been an improvement, but it was not; the oil retention properties of the cylinder walls were being degraded. By January 1983 six modified engines had been received, but it was not until April that all engine modifications had been completed.

It had been thought that the Strategic Arms Limitation Talks which resulted in the signing in May 1972 of the Anti-Ballistic Missile Treaty and the Interim Agreement on the limitation of Strategic Offensive Arms had marked the beginning of a Soviet-American *détente*. This idea did not last long. In 1977 the Soviet Union began deploying SS-20 intermediate-range ballistic missiles equipped with nuclear warheads along its western and south-eastern borders The HALLMARK tasking had risen to 65 flights a year over this period, possibly as a response. The United States and its NATO allies regarded the Soviet deployment as destabilizing to the nuclear balance in Europe. In December 1979 NATO decided to counter with the deployment of Pershing II intermediate-range nuclear ballistic missiles and ground-launched cruise missiles. Any thought of *détente* conclusively ended with the Soviet invasion of Afghanistan in December 1979 and the HALLMARK flights continued steadily.

In addition to Sixty's routine flights to Gatow and Northoltthere were trips in 1979 to Oslo, St Mawgan and Sardinia, the latter in support of Phantom air combat detachments to the instrumented range at Decimomannu. There were also, as usual, several medical evacuation flights. Flight Lieutenant Ian Laurie was a very experienced pilot who had flown F-86 Sabre fighters in the RAF in the early fifties; late in 1979 he and Flight Lieutenant Mike Calame were flying a Pembroke to Northolt with an ill day-old baby on board. The aircraft encountered a fifty knot headwind; flying through thunderstorms with hail it was struck by lightning which knocked out the navigation aids. However, they descended below the worst of the weather to 1,000 ft and got through to the destination, and the baby was rushed to hospital for an immediate and successful operation. In the subsequent New Year Honours List Ian Laurie was awarded the Air Force Cross for this difficult medevac flight.

On 8 Oct 1979 Squadron Leader C A Spanner joined for the Pembroke course as OC Sixty Designate. Sixty was extremely disappointed to find that Andy Spanner was a navigator, not an engineering officer; it would have been just too good to be true. He took over from Colin Campbell on 4 January 1980. Shortly afterwards the now elderly cameras for the HALLMARK aircraft received an update. The downward-pointing triple fan of 12-inch focal length F96 cameras fitted in 1963 was by this time seventeen years old and technology had moved on. They were replaced by a single Vinten panoramic scanning camera, similar in principle to those fitted to, for instance, the US RF-5 Vigilante and the U-2.

RF-5 Vigilante

Photo: US Navy

Lockheed U-2

http://wall.alphacoders.com/by_sub_category.php?id=208876

Instead of using a flat plate the panoramic camera curves the film in a concave semi-circular strip above the lens. The lens then rotates from side to side, scanning progressively over the width of the film. This gave the Vinten camera a 160º field of view, from ten degrees below the horizon on the left, sweeping down to the vertical and up again to 10º below the horizon on the right – in fact its coverage actually overlapped with the depression angle available from the two remaining oblique F96s. Another advantage was that it was smaller and lighter than the three F96s that it replaced, which meant that the loss of one engine in the Corridors was now less of a worry. The resolution was much higher. However, a disadvantage was that aircraft vibration proved far more critical. XL954 and XF799 gave no difficulty, but for some reason, XL953 gave fuzzy pictures. Solutions were sought for this particular aircraft, but none was easily forthcoming. However, on a one in a million chance, on 16 May 1980, when 953 was on second line servicing in an Engineering Wing hangar at Wildenrath, static electricity set off a spark, igniting fuel which was being drained off. Half the aircraft was burnt out. The RAF classifies aircraft accidents on a scale from Category 1 (minor damage) to Cat 5 (complete write-off). Andy Spanner was away from the Squadron when the accident happened. On his return, he was greeted with: "Boss, there's both good news and bad news about 953. The good news is that the vibration is no longer a problem. The bad news is that the aircraft is Cat Five'd".

To replace it XL929, the last Pembroke stored at 5 Maintenance Unit, Kemble, was flown to Bruggen on 7 October 1980. There, Sixty's experts helped 431 MU personnel prepare it for handover to the Squadron on 10 December 1980. The discerning might have recognised that if the Pembroke had just had an expensive refit, it could be a clue that no replacement aircraft would be forthcoming in the short term. This turned out to be the case; *Flight International* reported on 4 October 1980 that ASR 408, the Devon/Heron replacement, had been 'temporarily shelved for financial reasons'. In fact, the defence spending moratoria which affected most of the RAF through 1980 were not enforced on Sixty.

John Stacey's career had been progressing very well. As a Flying Officer he had been a Thunderbolt pilot on Sixty in 1946. Appointed CinC RAFG in 1977 and knighted shortly afterwards as Air Chief Marshal Sir John Stacey, KCB, CBE, FRAeS he had taken over as DCINCENT on 1 June 1979. Two years later, to everyone's shock, he died at the age of 56. Lady Stacey requested an Usher attend the Memorial Service held in St Clement Danes; Ian Laurie was chosen. Stacey's successor as CinC RAFG, Air Marshal Sir Peter Terry, flew many sorties at this time and had almost reached examination check standard in the

Pembroke. He stated his intention to continue flying it in his new appointment as DCINCENT.

Following the Soviet invasion of Afghanistan Jimmy Carter's administration instigated a number of sanctions against the Soviet Union, including trade, the cancellation of American participation in the 1980 Summer Olympics in Moscow, and the shelving of the Second SALT agreement. In November 1981, Reagan proposed the 'zero option' - the elimination of SS-20s and other missiles targeted against Western Europe in exchange for removal of Pershing II and cruise missiles. The Soviet Union refused and insisted that French and British nuclear forces be included in the reckoning. Brezhnev's death on 10 November 1982 could have ended the years of stagnation in Soviet policy, especially as at first, his successor, Andropov, seemed like a more progressive man. However, this was an illusion. He reformed the Soviet Union, beyond doubt, but his reforms were to process and administration, not policy. He knew that Soviet ideology was sloppily managed, with sleaze and inefficiency rife. He therefore purged those who were corrupt and incompetent, sometimes by executing them. However, this was only in order to get back to a purer form of Leninism. Ideologically he was reactionary, prepared to test the West even harder; he had no regard for the idea of truth as a desirable concept on moral grounds. Much of his time in office was spent cooking up suitable lies and cover stories. As an example, ten years earlier, during the 'Prague Spring', he had ordered the fabrication of false intelligence, not only for public consumption, but also for deceiving the Politburo itself. During his period as Premier, Cold War tensions were exacerbated by Soviet fighters shooting down a Korean civilian jet liner, killing 269 passengers and crew. Andropov decided to keep secret the fact that the Soviet Union held in its possession the flight data recorder, even publicly announcing that the Soviet Union were also looking for both the airliner and the black box. This ruse continued until Yeltsin disclosed the secret in 1992.

With no suitable response forthcoming from the Soviets, and feeling forced to match the Soviet nuclear threat, NATO announced further deployments to begin in late 1983. As the date neared, the Soviet Union threatened to deploy additional nuclear weapons targeted on Western Europe and weapons that would place the territory of the United States under threat. Soviet negotiators walked out of talks on the reduction of intermediate-range nuclear forces (the INF talks) and strategic forces (the Strategic Arms Reduction Talks, or START). Again, for Sixty, the consequence was that there was no let-up in the frequency of the HALLMARK flights.

Andy Spanner broke a leg whilst on the Winter Survival Course at Bad Kohlgrub in March 1981 and was off flying for six months. However, during this time he did an airtest of a Pembroke with his leg in plaster, as there was no other navigator available! Fuel prices and other economy measures finally caught up with Sixty in May 1981 and a 25% cut in flying hours was imposed, effective retrospectively from March, but the Squadron had already overflown both then and in April, so the new restrictions had an even more drastic effect. The economy trend continued in 1982, beginning with a reduction in the planned flying effort for communications squadrons, as priority was allotted to the frontline, particularly the Tornado. Hence a reduced manning level was imposed. Inevitably, it was at this point that operational demands increased.

In response to the Argentine invasion of the Falklands Islands in the spring of 1982, the UK launched Operation Corporate which resulted in an unprecedented long range war of short duration. Notably, the Black Buck Vulcan sortie against Port Stanley airfield was supported

by eleven Victors. Sixty was called upon to deliver urgently needed Harrier spares to the fleet preparing to sail. The destination was St Mawgan, Cornwall but fog obscured all the airfields in south-western England, so the Pembroke eventually flew in to Brize Norton, Oxfordshire. In August 1982 the general tasking was increased again, almost beyond the capacity of the reduced manning.

In the meantime the engine failure problem had not gone away and on 29 July 1982, the Squadron had a failure whilst in the Berlin Air Corridors. Flight Lieutenants Brian King and Gerry Taylor were returning from Gatow to Wildenrath in XK884, fortunately not on a HALLMARK mission. They were just past half way along the Central Corridor, flying at FL85, when the starboard engine started to bang and shake violently. King diagnosed mechanical failure and shut it down. However, the aircraft started to lose height and they were going to have to pass through flight levels used by traffic inbound to Berlin, so he declared an emergency. They still had forty miles or so to go to get out of the Corridor and into West German airspace. The Pembroke would fly quite well on one engine, albeit at a lower altitude, but the problem, as always, was whether the second one keep going. The Central Corridor controller suggested that Braunschweig was the closest diversion; it was open, and the weather there was excellent. Eventually they cleared the Corridor and lined up to land on the runway at this quite minor airport. There were gliders on finals to the grass strips on either side of them, committed to land, of course, as they were without engines. King and Taylor made a satisfactory landing and stopped quickly, but with the starboard engine failed, they could not taxi without turning right after landing. They stopped on the runway and called for a tractor and towbar, but a provincial airport was not going to have the right equipment for a Pembroke, so the ATC truck brought some wood and nails. Together the pilot, navigator and ATC assistants improvised a 'lash-up' tow bar. They started the tow, but their contrivance fell apart abeam the flying club bar. Happily, the patrons were willing to help them to push XK884 onto the apron. When King phoned back to Sixty, he was surprised to be asked to run the engine to help diagnose the fault. It started and idled more or less normally except for an almighty bang every time the top cylinder fired. An exhaust valve stem had broken and the valve head broke off damaging two pistons. Apparently the broken part had gone via the manifold into the adjacent cylinder. Brian King later recalled:

> 'I don't think the aircraft ever did reach a stabilising altitude, because we didn't level off at all. We drifted-down quite quickly from FL85 and gradually the descent rate reduced. As I became confident of not needing to fly level to reach the airfield, I allowed the speed to increase. Because the scheduled drift-down speed was very slow (95?) and the local wind was westerly, our ground speed would have been painfully slow otherwise. There was no tower controller, so the airway controller just cleared us to leave his frequency for a visual approach. I shut down on the runway and waited for the truck. They were surprised that I asked for a tow and had to go and scrounge materials. The tow bar fell apart several times before the flying club volunteered to help push us the last few yards. It felt like an episode from Monty Python. After parking I thanked them by showing groups around the plane. It took ages to do the ground runs and I was due to report for an early flight next morning. We waited in the bar until the evening, expecting to be told to go to a local hotel, but an RAF Puma landed and whisked me back in time for minimum sleep and my early departure'.

Squadron Leader John Maddocks assumed command of Sixty on 20 November 1982 from Andy Spanner. Maddocks had originally been in the RAF Regiment, the RAF's ground defence force – basically, its infantry: an unusual career change. Group Captain John Allison (later Air Chief Marshal Sir John) took over as Wildenrath's Station Commander in December 1982. He warmed instantly to the Pembroke and later bought two which were being sold off by the RAF, flying them at air displays. He remained a keen pilot, flying his own light aircraft as well as the Shuttleworth Collection of vintage and historic aircraft at Old Warden. He continued to fly the Spitfire and other similar aircraft at air displays. He was also restorer of vintage cars and old airplanes, and president of the Light Aircraft Association. In February 1984 John Allison was made an Honorary Member of Sixty Squadron and still attends Reunions.

In March 1983 Air Staff Requirement 408, the replacement for the aged Devon and Pembroke aircraft, was finally dropped. Instead, four more BAe 125 700s were ordered for the London VIP Squadron, No 32, to add to the six it already had, which were to be re-engined and improved to Series 700 standard. Andovers were then to be drawn out of store and re-tasked and the Devons and Pembrokes phased out. The other UK Communication squadron, No 207, was disbanded on 30 June 1984; the Andovers were to be used by 32 and Sixty in addition to 115 Calibration Squadron at Benson. Giving unjustified hope that the re-equipment would take place soon, one ex-Andover crew was posted in during 1983. It had been decided that, as the Andover would arrive 'before long', those crews already trained on the Pembroke could continue to operate it until the new type arrived. A 'last ever' Pembroke conversion course was run. This turned out to be premature. By early March 1984 the plan to replace the Pembrokes had been delayed and it became obvious that the aircraft would have to soldier on for another three years at least. A second 'last ever' course was put on.

Andropov was a very sick man. Most of his time in office was marked by his incapacity through ill health, and he died of renal failure on 9 Feb 1984. His geriatric successor, Chernenko, appeared to be suffering from senile dementia at the time of his appointment. The Soviet Union finally agreed to resume the INF and START talks around the time of Chernenko's death and Gorbachev's selection as general secretary in March 1985.

January 1985 saw very severe weather, even for Germany, with temperatures down to -22ºC. Whilst travelling to an engagement at the RAF Winter Survival School in Bavaria, the Band of RAF Germany was involved in a road traffic accident at Langenbruck on 11 February 1985; nineteen RAF musicians, the coach driver and an RAF Policeman died. It was an appalling event, even referred to in Parliament. Inevitably, Sixty was involved. They repatriated eighteen of the dead over several sombre sorties during which the bodies were escorted onto the Pembroke with military honours.

In March 1985 the third 'last ever' Pembroke Conversion Course began, as it had been decided that Sixty would receive its Andovers in April 1987 and the remaining Pembroke-trained aircrew should suffice. No 21 Course finished in June 1985. However, a fourth 'last ever' course took place in February 1986. Again, the Pembroke was temporarily defeated by new technology. The entire fleet of seven was grounded in August as fuel seals had perished due to use of a new over-refined AVGAS with a low aromatic content. There was no flying for ten days whilst the groundcrew changed all the seals, and the old-style fuel was provided again. The weather in winter 1985-86 again restricted flying; nevertheless another aeromedical flight for a critically ill baby was carried out by Graham Clifford and Squadron Leader Al Bowen in February, against thirty knots of headwind in extremely low

temperatures which affected the baby's incubator, and they had to descend to a lower level and make some *ad hoc* adjustments to the cabin conditioning for the long flight to Northolt.

Squadron Leader Peter York replaced John Maddocks as OC Sixty on 24 June 1985. Peter's background was as a navigator on Victor tankers, so conversion to the Pembroke was something of a contrast. Preparations for the introduction of the Andover saw aircraft from 32 and 115 Squadrons arrive for towing and jacking trials in the hangar during the year. For the first time, Sixty was to have the C Mk 1 version (their aircraft from 1971 to 1975 had been the VIP CC Mk 2 version). The Mk 1 had rear-loading doors (and taller fins as a result), and a kneeling facility such that the rear end could be lowered in order to take vehicles such as Land Rovers or armoured fighting vehicles on board by simply having them driven or hauled up a ramp. No specialist lifting gear was necessary.

Between November 1982 and March 1985 the Soviet Union had four general secretaries (Brezhnev, Andropov, Chernenko, and Gorbachev) whilst the United States had a single President (Reagan). These changes of leadership in the Soviet Union had produced a stasis in Soviet-American relations. Until Gorbachev eventually assumed power and partially consolidated his rule by 1986, the result was a continuation of policies formulated during the late Brezhnev period. However, a general improvement in Soviet-American relations began soon after Gorbachev was selected general secretary in March 1985. At the Washington summit, the Intermediate-Range Nuclear Forces (INF, ie, SS-20s v Pershings, amongst others) Treaty was signed.

The highlight of 1986 was the seventieth Anniversary of Sixty's formation. The Dinner Club held its annual Reunion in the Officers' Mess on Friday 23 May and on Saturday Sixty's Open Day was followed by an All Ranks Party held in the Dutch Rooms. The senior guest was Christopher Foxley-Norris, accompanied by AVM Derek Bryant, D/CinC RAFG and AOC. The Dinner Club presented the Squadron with a painting by Derek Bartlett of two DH 9As from the 1920s. A flypast of four Pembrokes was carried out by Flight Lieutenants Mike Mercer and Mike Eacopo, Graham Clifford and Fred Stokes, Bryan Taylor and Squadron Leader Al Bowen, and Paul Newton and Mickey Dunn, using XP799, WV746, WV701 and XK884. A name was required for the formation, possibly similar to that used for the Red Arrows. It did not take long to settle on the 'White Knuckles'.

PHOTO

Conversion training on the Andover finally started at Wildenrath in November 1986, using two borrowed C Mk1 aircraft from 32 and 115 Squadrons. However, the first aircraft allotted to Sixty was XS793, a CC Mk 2. After a respray into standard white/light grey finish, it was taken on charge on 2 March 1987 as the CinC's VIP aircraft. The aircraft had previously served on the Queen's Flight and its VIP cabin was truly luxurious. In April 1987 two C Mk 1 Andovers were delivered making the strength three Andovers instead of five Pembrokes. These were XS597 and XS637, both formerly with 32 Squadron.

The crew manning now changed to four members: captain, co-pilot, navigator and air loadmaster instead of the Pembroke's pilot and navigator. This brought a new type of animal to the aircrew strength, the Air Loadmaster. These specialists, usually Flight Sergeants or Warrant Officers, came from a variety of backgrounds which might have previously involved dangling out of the cabin door of a Wessex in Northern Ireland carrying a General Purpose Machine Gun or serving sandwich packs every four hours and paper cups of tea every two

hours to seventy squaddies en route to the Falklands in a C130 Hercules. For the normal transport Andover role, they were usually looking after 20-40 passengers, or were stowing and lashing cargo; they were also responsible for the load sheet and trim weight calculations, which were important because they affected the centre of gravity and therefore the handling and safety of the aircraft. However, for the VIP task, they were required to be extremely high-calibre airborne butlers. Some of them loved this role, some of them hated it.

One of the consequences of re-equipping with the Andover was that Sixty welcomed its first ever female aircrew (and, almost certainly, its first ever women members). This was before the amalgamation of the WRAF and RAF in 1994; ever since, women have served in an integrated Royal Air Force, not the Women's Royal Air Force. Flight Sergeant Gerry Howley, WRAF, joined the Squadron as an Air Loadmaster. A year later, Flight Sergeant Lyn Struthers became the second. (Nowadays, of course, it is taken for granted that women serve in all aircrew roles, including fast-jet pilots and navigators/weapon systems officers. Indeed, the Red Arrows have had their first female team member, a former Tornado pilot).

During 1987 with this increased crew complement the aircrew strength increased from 15 to 24, but the ground strength was cut from 69 to 57, reflecting the reduced number of aircraft. Nevertheless, the senior engineer was upgraded to a Flight Lieutenant, Dave Clark, to replace a Warrant Officer, Mike Brokenshire, in June 1988, as there were now three aircraft different types in use. Some Pembrokes had to be kept going a while longer because the HALLMARK recce version of the Andover had still not appeared. So although conversion courses had officially finished the HQ 1 Group Standards Pilot and Squadron Phil Chaney, a former Flight Lieutenant Pembroke navigator on Sixty, now back as the new CO to take over from Peter York, did a course. Even later, Flight Lieutenant Brian King requalified on the Pembroke and Flight Lieutenant Paul Hickley, an Andover navigator already on the Squadron, converted to the Pembroke by local training. Theirs really was considered to be the 'last last ever' Pembroke conversion course. However, even that was not to be, because the Station Commander, Group Captain Ali McKay, did the very last conversion to Pembroke solo standard in March 1989! Two Pembroke crews had their tours extended to see the aircraft out, along with those Andover aircrew who had completed Pembroke conversion.

Although the work done by Alvis up to 1983 had cured the previous spate of Pembroke engine failures they still occurred occasionally from random causes. On a HALLMARK sortie on 16 February 1988 Flight Lieutenants Paul Newton, Paul Hickley and Fred Stokes were on their way from Wildenrath to Gatow in XF799 and were just about to enter the Centre Corridor when the starboard engine started to play up. There was no obvious mechanical failure and the indications were not all that clear as, when a piston engine windmills, the RPM remains about the same and the boost is maintained. However, the giveaway is the cylinder head temperature along, of course, with the handling qualities. The Corridor flight was immediately aborted and the crew turned for the German Army airbase at Fassberg, about thirty miles to the north. They made a good landing and Newton stopped the aircraft easily, using only about one-third of the 8000-foot runway. The black-out curtains in the side windows had been closed and the belly camera hatches were shut, but the German Air Force had operated the Pembroke in the past and the Fassberg personnel were genuinely interested in this historic aircraft. They were very pleasant and welcoming, and it required quite a lot of tact to make it clear that, with the best will in the world, the aircraft would not be opened and that it would not be possible to show them round it.

Meanwhile real political change was in the air. The first signs of major Soviet Union internal reform came in 1986 when Gorbachev launched a policy of *glasnost* (openness) and emphasised the need for *perestroika* (economic restructuring). By the spring of 1989 the Soviet Union had experienced lively media debate and held its first multi-candidate elections in the newly established Congress of Peoples' Deputies. Though *glasnost* advocated openness and political criticism, at the time, it was only permitted in accordance with the political views of the Communists. The general public in Communist East Germany were still threatened by the Stasi and political repression.

Moscow's largest obstacle to improved East-West political and economic relations with Western powers was its history of repression of the Warsaw Pact countries which it had invaded and used as buffer states between the USSR and NATO. If the West felt that the USSR was likely to do it again, the Soviets would not attract the Western economic support needed to finance the country's restructuring. Gorbachev therefore urged his Central and South-East European satellites to set up their own *perestroika* and *glasnost* programmes. However whilst reformists in Hungary and Poland leapt at the opportunity others feared change. Past experiences had demonstrated that although new ideas in the Soviet Union might be manageable the pressure for change in the Warsaw Pact countries could become uncontrollable. These satellite regimes owed their creation and continued survival to Soviet-style authoritarianism backed by Soviet military power and subsidies and their leaders, hard old Communist men, had too much to lose. Believing Gorbachev's reform initiatives would be short-lived, Honecker's East Germany rejected the idea.

However by 1989 the Soviet Union had repealed the Brezhnev doctrine which had been a policy of active intervention should a Warsaw Pact country show signs of embracing capitalist values (ie, freedom). In its place was a policy of non-intervention, jokingly referred to as the 'Sinatra Doctrine' – they could do it 'their way'. Poland, already straining against communism, was the first to take advantage, closely followed by Hungary.

Lech Walensa with George and Barbara Bush in Warsaw, July 1989.

A wave of strikes hit Poland in April and May 1988, followed by a second wave on 15 August 1988, demanding the re-legalisation of Solidarity. In 1990 Jaruzelski resigned as Poland's president and was succeeded by Wałensa. The Warsaw Pact was dissolved on 1 July 1991. On 27 October 1991 the first entirely free Polish parliamentary elections for over sixty years took place.

Hungary was next. Major reforms followed its Parliament's adoption of a "democracy package", which included real choice in trade union elections, freedom of association, assembly and the press; a new electoral law; and a radical revision of the constitution. On 2 May 1989 the first visible cracks in the Iron Curtain became evident when Hungary began

dismantling its 150-mile border fence with Austria. This increasingly destabilized East Germany and Czechoslovakia over the summer and autumn as thousands of their citizens illegally crossed over to the West through the Hungarian-Austrian border.

Berlin Wall at the Brandenburg Gate, 10 November 1989
Main articles: Die Wende, German reunification and Peaceful Revolution

By the end of September 1989 more than 30,000 East Germans had escaped to the West, before East Germany denied travel to Hungary leaving Czechoslovakia as the only neighbouring state to which East Germans could escape. Thousands of East Germans tried to reach the West by occupying the West German diplomatic facilities in other Central and Eastern European capitals, notably the Prague and Hungarian Embassies where huge numbers camped in the muddy gardens from August to November waiting for German political reform. East Germany closed the border to Czechoslovakia on 3 October, thereby isolating itself from the last of its neighbours. Having been shut off from their last chance for escape an increasing number of East Germans participated in the Monday demonstrations in Leipzig on 4, 11, and 18 September 1989, each attracting 1,200 to 1,500 demonstrators; many were arrested and beaten. However, the people refused to be intimidated. The 25 September demonstration attracted 8,000 demonstrators.

When the fifth successive Monday demonstration in Leipzig on 2 October attracted 10,000 protesters Honecker issued a shoot-to-kill order to the military, but in spite of rumours that the Communists were planning a massacre on 9 October an incredible 70,000 citizens demonstrated in Leipzig that Monday. The police chose not to open fire. This victory of the people facing down the Communists guns encouraged more and more citizens to take to the streets. The following Monday, 16 October 1989, 120,000 people demonstrated on the streets of Leipzig. Faced with this ongoing civil unrest the SED, East Germany's Communist party (and, inevitably, government) deposed Honecker on 18 October and replaced him with Krentz. However, the demonstrations kept growing – on Monday 23 October the Leipzig protesters numbered 300,000 and remained as large the following week. The East German border to Czechoslovakia was opened again on 1 November, but the Czechs decided to lift

their border to the West on 3 November. On 4 November a placatory East German government decided to authorise a demonstration in Berlin and half a million citizens converged on the Alexanderplatz demanding freedom, the biggest protest that East Germany had ever witnessed. Unable to stem the ensuing flow of refugees to the West through Czechoslovakia the East German authorities caved in, largely through accident and incompetence. A botched TV press conference on 9 November 1989 stated that the planned changes were to take effect "immediately, without delay" and hundreds of thousands of East Berliners, amazed and suspicious, thronged to the crossings. Soon new crossing points were forced open in the Wall. The bewildered guards, totally unbriefed but not willing to commit public murder in this changed political climate held their fire and meekly stood by as the East Germans tore down large chunks of the Wall.

I was in Berlin myself on a HALLMARK mission on the evening of 9 November 1989 with Flight Lieutenant Andy Lee as pilot and Squadron Leader Al Boyle as the other navigator. We were accommodated ten miles out of town in the RAF Gatow Officers' Mess. On the English-language television channel for British Forces Germany at that time the ITV news was at 6.40 pm and the BBC news at 10.00 pm. We had had a long and wearing day with an earlier abortive sortie, no one wanted to go into town, and I was tired. Together, we watched the ITV news and then went to dinner. I had a headache, so went to bed for an early night. The others on the crew stayed in the bar for a while. Just before 10 pm they decided that they had seen the early evening news and little was likely to have changed so they would not bother with the BBC, had another beer and went to bed.

I arrived at breakfast the next morning to be told by Andy Lee, who had just heard it on his bedside alarm clock radio, that the Berlin Wall had been opened at 7 pm the previous night. All three of us could have had a ringside seat at one of the most momentous events of our lifetimes and we had spent a quiet night in the Mess! A visiting RAF rugby team, who did not speak German, had gone into Berlin and 'thought that it was a bit busy and wondered if anything special was going on' when they got back. No, the remaining drinkers in the bar told them, there were no planned events. It was just a normal Berlin evening. Unfortunately that morning, we could find no excuse to hang around in Berlin; we were required to fly the local flight and the return corridor leg and get back to Wildenrath as soon as possible. However, on the Chukka, from 2000 feet (I was in the right hand seat) we could clearly see the crowds below still surging through Checkpoint Charlie and filling the Kurfurstendam.

In the weekend that followed the West German Government immediately arranged public meetings in Berlin to celebrate the opening of the Wall and to rally support for full German unity. Helmut Kohl, Willy Brandt and Hans-Dietrich Genscher all attended. The day after the Wall opened a Sixty Squadron Andover captained by Flight Lieutenant Greg Dodson on a routine trip from Wildenrath to Gütersloh was given an airborne re-tasking to divert into Cologne/Bonn airport to collect a VIP (that was all that they were told) and take him to Berlin. It turned out to be Willy Brandt. He had to go by a military flight, firstly for secrecy, but also because Lufthansa flights were not permitted in the Berlin Air Corridors.

A few days later I was in Berlin in a Pembroke again (another HALLMARK mission). This time, I managed to get part of a day off. There was now a new crossing point, in Potsdammerplatz, and many East Germans were coming through, just to take a first look at the West. Ever alert to the possibility of creating a favourable impression the British Army had set up a tea-tent only a few feet from the gap in the Wall; these bemused people's first experience of western culture was to be presented with a paper cup of NAAFI tea made by a

British squaddie! My wife later commented that she was amazed that they did not immediately turn round and flee back to the East.

As if this were not enough, the Squadron had other issues to attend to. The IRA had sent a murder gang onto the Continent to attack British Forces in Germany. On 1 May 1988 a young airman was shot dead in Roermond, actually in the Netherlands, but the nearest town to RAF Brüggen just over the German border. The gunman had fired into a parked car. Two others were killed about half an hour later when a bomb exploded as they got into their car outside a discotheque in the village of Nieuwbergen, also in Holland, about 30 miles from the first attack. On 12 August a British Army Sergeant Major was shot dead whilst sitting in civilian clothes in his car waiting to board a ferry in Ostend. At this time British Forces in Germany were exempt German car tax, so had special BFG number plates which were easily identifiable. It was decided immediately to give them normal UK civilian car number plates. Amazingly, this caused complaint from British civilian tourists planning to travel on the continent, fearing that they might become IRA targets.

However, the gang's ineptitude told against them. They had come, initially, with some propaganda advantages. Most Germans were not well informed about British/Irish history and consequently had no strong reason to take one side or the other, especially as many of them did not realise that the IRA was condemned by the Irish as well as the British Government. Indeed, there were even collecting boxes for IRA funds at some German universities at the time.

This changed when, after one raid, the police commenced a chase and the gang fired rearwards at the pursuing police car. They missed but, instantly, German opinion was transformed. The Germans had had their own experience of terrorism, not least in the form of the Baader-Meinhof gang. The IRA's next mistake was to shoot at a car outside the British Army married quarters at Unna near the Army base at Dortmund. The vehicle was still unfortunately carrying BFG number plates. The occupant, who was reversing the car at the time, was immediately killed. They can have had no idea who they were firing at. She turned out to be Heidi Hazell, a 26-year old German civilian, wife of a British Army Staff Sergeant. Any German sympathy for the IRA was now completely lost. However, worse was to come. On the 26 Oct 1989, they shot at a car in Willy Otten's petrol filling station in Wildenrath village, a quarter of a mile from the RAF Wildenrath main gate. The occupants were a man and his wife, who was cradling their six-month old baby daughter. The man tried to drive away but was pursued by the gunmen, who were firing repeatedly. He was killed instantly, but one of the bullets also tore half of the head off the child, leaving its mother alive. She was in a state of utter shock and later the German emergency services had to gently prise the little corpse out of her disbelieving hands. The adult victim was Maheshkumar Islania, an RAF Corporal and supervisor in the communications and cipher room at Wildenrath. Realising that Indian forenames could be a bit difficult for English speakers, he had chosen to be known as 'Mick' Islania in everyday parlance. He and his daughter were not Catholics or Protestants, but Hindus. The German government was so moved that it gave the widow a German pension in addition to her British one.

At the time of the attack Sixty was initiating an aeromedical flight to deliver a critically ill baby to Heathrow. A week later, the funeral service for the IRA victims took place in Sixty's hangar. It was then the Squadron's doleful duty to fly the two coffins and the grieving family back. The German citizens of Wildenrath village and of Wassenberg, the nearest town, were as appalled as the German government. This is a press report in a pretty literal translation (I

have tried to capture the tone accurately) from the regional German newspaper of the Nordrhein-Westfalen area:

A last salute to the victims of terror

Farewell in Wildenrath: On Wednesday, the coffins of the British soldier and his six-month daughter slain by IRA terrorism were transferred to Britain. The widow was accompanied by comrades to the aircraft.

Silent funeral service at the airfield

Wegberg: *On Wednesday, in an unadorned hangar at RAF Wildenrath, the British Army of the Rhine said goodbye to a comrade and his daughter. A week ago today the 34-year old corporal Maheshkumar Islania and his only child, his six month old daughter Nivruti had been gunned down in a bloody terrorist attack in Wegberg-Wildenrath by two IRA terrorists. Together with his 26-year old wife Smita they were just on their way home after they had purchased some dinner at a fast food stall.*

For the last time, RAF airmen stationed in Wildenrath presented their rifles for their colleague (Kameraden). Only the closest friends and the work colleagues of those shot had been invited to the silent funeral. The parents of the soldier and his wife, both of Indian descent, had come from London and Bombay. Both coffins, a little white one for the child, were covered with the Union Jack. The funeral party bore them up, as the clergy, two Protestant and one Catholic, said the last prayers. The wife was only able to attend the ceremony supported by two RAF Policemen.

The Flight Commander characterised his NCO as a helpful comrade and a man with a sense of fair play. A few months ago the corporal had received an award for 15 years of outstanding duty. For the Flight Commander, the shot man was simply a gentleman.

Little Nivruti had seen the light of day in the nearby Wegberg British military hospital. She had spent her few months of life with her parents in the little service quarter amongst the 6,500 British soldiers and civilians living on the Wildenrath housing of the Army of the Rhine.

Eight comrades carried the two coffins to the sound of Chopin's funeral march to the aircraft and the doors closed. With the family on board, the aircraft set off to Northolt, near London, where the victims would receive a last funeral pyre, according to Hindu belief.

Yesterday evening the Wildenrath population commemorated the terror victims with a silent march.

The last line in the report above refers not to RAF Wildenrath but to the German civilian population of Wildenrath village. Relationships between the RAF and the locals had changed enormously since that first tentative invitation to take part in the *Karneval* of 1974. Many RAF personnel now chose to take rented accommodation in German towns rather than live on base and got on well with their German neighbours. There were Anglo-German friendship groups with sports matches and evening social activities such as *Kegelbahn* – German pub skittles. Germans attended English classes at night schools and RAF personnel and dependents attended German classes on the base. Inevitably, there had been intermarriages. On the 2 November 1989, after a service led by German Catholic and Protestant priests during which a British padre had called for a stand against those who pursued their goals with violence and terror, over a thousand of the local populace from Wildenrath and the surrounding villages expressed their sympathy by a silent march, entirely initiated by Germans, past the murder scene, now adorned with wreaths, and opened a bank donation account to collect money for the young widow.

2 Nov 1989 - Germans from Wildenrath and the surrounding villages expressed their sympathy by a silent march past the murder scene, now covered in wreaths

The wreaths with two woven ribbons of messages. The first says 'Against Violence and Terror', the second 'From Wildenrath (village) and the surrounding villages'.

Yet more was to follow. By now British Forces in Germany had more sense than to sit and socialise in the street in easily identifiable groups. The son of of one of Sixty's pilots, one month short of his third birthday, told his mother that he thought Postman Pat was stupid because he did not check underneath his red van for IRA bombs before driving off. Social functions now took place on the station or in each others' homes. However, the IRA did not know this, so when, on 27 May 1990, they saw two couples in their mid to late twenties returning to their car after a meal in a restaurant in Roermond, speaking English, well dressed and confident in their manner, they immediately assumed that the men must be British

servicemen, probably officers. It was a serious mistake on their part. Nick Spanos (28) and Stephen Melrose (24) were Australian lawyers who lived in London. They were in the Netherlands on a four-day holiday with Spanos's girlfriend and Melrose's wife. As they returned to their car at about 11 pm the Australian men were shot dead in front of their women by machine-gun fire from two terrorists clad in black. The car used by the gunmen was later found burnt out in Belgium. The IRA made its usual 'statement of regret' (they never apologised), but Bob Hawke, Australian Prime Minister at the time, with typical Antipodean forthrightness, described their banal words as 'twisted, too late and meaningless' and the general Australian reaction was naturally one of utter revulsion. They did not forget, either. Six years later, Gerry Adams tried to travel there to promote his autobiography. Phillip Ruddock, the Australian Immigration Minister, refused a visa, stating that Adams had failed a test of good character under Australia's Immigration Act and that he continued to be associated with the Provisional IRA, an organisation that "conducted criminal terrorist acts and bombings". The Immigration Act allowed Australia to refuse visa applications to people who were members of criminal organisations. Ruddock had the full support of John Howard, Australian Prime Minister at the time.

Sixty was involved in all of this. Of course, there had been the repatriations of the bodies, but also, after each of these atrocities, the Squadron's Pembrokes had been tasked to fly over each crime scene to produce our standard black-and-white aerial photographs which might assist the German, Dutch and Belgian police in their forensic investigations. On one occasion, there was something different. Andy Lee and I were summoned to JHQ Rheindahlen discreetly, in a manner that suggested that we were to be tasked on a HALLMARK mission but, unusually, there was no second navigator. We were met by the usual 6 Int Coy briefing team, but it was not the Soviets who were our target this time. Intelligence had been received that it was possible that IRA gang might have buried a cache of weapons for safe keeping in a patch of open ground surrounded by forest. They would have covered the hole up, of course, and made good the topsoil and turf, but it was just possible that, if instead of the normal black and white, the film was infra-red sensitive, it could pick up the small heat differences still remaining from the earth being turned.

Andy and I looked at each other. This was not going to be easy. Firstly, how reliable was the intelligence that the cache was there at all? Secondly, the arms might have been secreted in the surrounding forest, not the open field, in which case the canopy of treetops would render the turned soil invisible to the IR film. Thirdly, how old was the intelligence? Would the heat differences still be detectable? And finally, unlike an East German airfield, a tank or a SAM site, there was no specific target to aim at. We would have to fly an overlapping pattern of parallel strips, progressing laterally, trying to get 100% cover, with no gaps between strips. There was no GPS available to us in those days, and these were fields in open country, with few specific features to line up on. We would have to rely on extremely accurate visual map-reading using 1:50,000 scale maps. We voiced our reservations.

We were not telling the 6 Int Coy briefing staff anything that they had not already worked out for themselves. They knew, but they still thought that it had to be tried. The reason that no second navigator had been summoned was that the back-seater would not be able to make any contribution to the navigation on this trip because there was nothing specific to aim at, so a photo technician could sit there, simply switching the cameras on and off at the navigator's command. We planned the sortie utterly meticulously and took off, loaded with infra-red film and with a corporal from Sixty's own photo section in the back. The planning seemed to work out well in the air; the visual markers were better than we thought that they might have

been from the maps and we were as confident as we could be when we returned that we had not left any gaps. The film went off to JHQ. We were not required for a de-brief this time; there was nothing that we could usefully have added. When the results came back, they were nugatory. No-one was surprised; we had all known all along that it was going to be a long shot.

It was now getting very difficult to keep the Pembrokes going. During 1989's glorious German summer, because of the East German political turmoil, Pembroke flying was almost double the normal, but spares were so critical that on one occasion the resourceful ground crew substituted a modified Harrier GR5 emergency battery in order to fill one gap. Eventually, the two photo Andovers were delivered in 1990: XS596 on 31 January and XS641 on 27 April. These were referred to as the Post MOD 278 aircraft and although there were two of them, there was only one set of reconnaissance equipment, with the other aircraft being designated as an 'in use reserve'.

With the arrival of the first HALLMARK Andover, XS596, it became necessary to familiarise the crews, particularly the navigators, with the new equipment. The sensors represented a huge advance over the Pembroke. In addition to the familiar two F96 oblique sideways-looking cameras and the Vinten scanning panoramic camera, there was also sideway-looking infra-red (SLIR) and low-light television (LLTV), with appropriate recording facilities. The film could be destroyed as previously, by exposing it rapidly, but for the LLTV video-tapes the destruction mechanism in the event of a flight forced to land in hostile territory was to put them in a heavy duty steel container like a safe and fire a Very pistol cartridge into it via an incorporated standard Very mounting. The engineering clearance for this to be used in the air was not available at the time the operation started.

For the photo role, the crew complement was captain, co-pilot, and two navigators. The task of map-reading from the large-scale topographic maps passed from one of the navigators to the co-pilot. The camera compartment was immediately behind the flight deck and the two navigators were now about halfway down the aircraft, just forward of the passenger entrance door. One was responsible for route navigation, using VOR, DME, TACAN, ADF and a Doppler-fed Decca/TANS Tactical Air Navigation System. This now gave a constantly-updated present position read-out and a waypoint steering facility. The other was the sensor navigator, controlling a large console so wide that he had to have a seat which slid on railings to move from one side to the other. As before, both navigators were to be qualified in either role, changing on alternate sorties. A series of familiarisation training flights was laid on with mock targets in the Rühr area: bridges near Düsseldorf and factories near Dortmund were chosen, amongst others. The temptation to include the Möhne and Eder dams was resisted, albeit with difficulty.

With the crews worked up on the photo Andovers, the last two Pembrokes were finally flown to Northolt for disposal by sale. XF799 went on 16 May 1990, followed by the last ever Pembroke sortie, XL954 flown by Brian King and Phil Chaney two days later. This was the end of the aircraft which had served with Sixty since February 1969 - much longer than any other type - and with its predecessors in the RAFG Communication Squadron since 1956.

The SLIR and LLTV sensors on the post-MOD 278 Andovers gave good imagery at night as well as day. This now offered the facility of night surveillance of the Berlin Corridors and Zone; it had long been known that the Soviets and East Germans used the cover of darkness for some of their movements. However, there was a navigation problem. Some of the targets were extremely close to the edge of the Corridors and an excursion might still prove fatal,

notwithstanding the changing political situation – no one knew. With the navigation aids on board, even with the new Decca/TANS, the level of accuracy was not good enough without confirmation by visual map-reading. Night Vision Goggles (NVG) for pilots were in common use in the Harrier and C130 Hercules Force at this time, and were known to be good, but all the (still classified) literature gave trials results only for low level sorties (200-500 feet above ground level). The HALLMARK sorties were usually at 3500-5000 feet AGL. Were the NVGs any use at that height? Nobody seemed to know. I was made Project Officer, with the task of trying to find out. We asked RAF Lyneham to allow me to fly on a routine night C130 training trip along the Southern UK Coast and across Wales at low level wearing NVGs, during which I would request the crew to climb up to normal HALLMARK operating altitudes at various points along the route to assess the efficacy of the goggles at that level. Brian King and I tried several times to arrange to fly to Lyneham, but plan after plan fell down because of lack of Pembroke availability at this late stage. Phil Chaney happened to mention the problem to Group Captain Geoff Brindle, Wildenrath's Station Commander at this time and he was immediately interested. He offered to fly me to Lyneham in a Phantom and also to go on the C130 to see for himself.

It was pretty unusual for a Station Commander to give up a day and fly someone not qualified on type for an air taxi trip in a Phantom, so Geoff must have thought (rightly) that it was quite important. The last time that I had operated a Phantom was thirteen years earlier, in July 1976, at Boscombe Down; even then, I hardly ever flew in it, so effectively, I was approaching the aircraft from square one. I was sent over to 19 Squadron where I was fitted with an immersion suit and bone dome (we wore lightweight headsets on Sixty) and given an extremely rapid re-familiarisation with the Phantom back seat, including the AWG-12 interception and ground mapping radar. I wasn't too concerned, because I thought that Geoff, a very experienced and able Lightning and Phantom pilot would do it all, and I could just sit in the back and be chauffeured there.

I couldn't have been more wrong. He had decided that, even though unfamiliar with the Phantom, I was an experienced navigator on a wide variety of types and he was going to take no prisoners. He had let drop casually that it would be helpful if I could prepare a map, so I asked him how he was planning to route. He said that we would go high level airways and mentioned the major turning points. We met at about lunchtime on 12 December 1989, both clobbered up in immersion suits. 'I'm a bit tied up with something that's just come up', he said. (He <u>was</u> Station Commander. It was not that surprising). 'Could you just check the Lyneham, Leuchars and Coningsby forecasts and the rest of the TAFs generally, and select a couple of diversions? Oh, and put the flight plan in? '

As we took off, as always, I couldn't help noticing the Phantom's acceleration as the brakes were released. Everything happened so much faster than I was used to at that time and I think that we were crossing the boundary between the Netherlands and Belgium at over forty thousand feet before I finally got the AWG-12 switched on. En route, Geoff still expected me to perform. Even though I normally flew at less than half the speed (or, in the Pembroke, one third) I was required to pass the required track for each leg and a suggested drift, come up with ETAs and read out the checks. I enjoyed it, of course, and very shortly we arrived at Lyneham.

The experience with the NVGs in the Hercules was fascinating. It is amazing how the very blackest night can be turned into daylight whilst wearing them. It was also brought home to me that, even flying over the darkest parts of mid-Wales, there was more ambient light and

light pollution from little lights in remote villages than when flying over central East Germany. It is not as though central Wales was an exemplar of thriving capitalism at this time. Geoff and I were both passengers (or strictly, supernumerary crew) on the flight deck for the sortie, standing immediately behind the pilots and looking out through the front and side windows. The Hercules has a lot of transparent perspex up front and the view is good. When we landed, we compared our impressions and agreed closely and I wrote it all up in a 10-page Top Secret report, which was later submitted through Phil Chaney and through Geoff to the RAF Germany Air Staff. At the time of writing, that report is still covered by the 30-year rule, so I will say no more.

However, the Andover, with its improved range and speed and high-tech sensors, had really arrived too late. East Germany's political structures were imploding before Sixty's eyes. Once free from fear of persecution, the people showed their enthusiasm for change. The East German flag was the same tricolour of black, red and yellow horizontal stripes used by West Germany but with the addition of a logo of a hammer and mason's compass, similar to the USSR's hammer and sickle, in a circle in the centre. The people took scissors and cut the central emblem out, leaving a gaping hole and displayed these modified flags outside nearly every house in the East in early 1990.

West German Flag

East German Flag

Flag seen almost everywhere in East Germany in 1990

They readily embraced the mixed blessings of capitalist consumerism and the most common new advertising posters on the streets of East Germany at this time were for Tchibo coffee and pornographic films. Initially this political turmoil prompted requests for more HALLMARK sorties and, anyway, we wanted to play with our new toy, but it soon became pointless. It was not details of hardware that the West needed to know, but human intelligence on the political situation and on people's attitudes and this was widely available through newly liberated East German travellers freely crossing to and fro. This changed situation created a sense of unreality over HALLMARK tasking. What was the point of trying to capture the latest technical details of, say, the MiG-29, when several squadrons of them were going to be absorbed, along with all their equipment, into the newly-merged Luftwaffe in October? Quoting again from Kevin Wright's article in *Aircraft* of March 2011:

> Paul Hickley described the final months of flying. 'We had virtually ceased operations by August 1990. It was not, as far as I recall, that the operation was officially cancelled, just that the tasking requests dried up because the operation had become pointless in view of impending German reunification.' Operation 'HALLMARK' was officially wound up on 30 September 1990. However, the last full flight had one final, unexpected twist. As the then CO of No 60 Squadron, Phil Chaney, describes, 'Our final 'HALLMARK' flight was on 6 September 1990. Take-off was delayed because the Wildenrath armoury was on fire (*by way of explanation, the Station Armoury contained not only machine guns, rifles and pistols for ground defence operations, as with the*

Army, but also the guns, ammunition and missiles carried by the Phantom, along with the ejection seats and explosive bolts which formed part of the Phantom's aircrew escape equipment). Eventually we got off and flew to Berlin along the corridor (which by now had become a formal civil airway). On our return we overflew the site of the armoury, which was now a roofless, smouldering shell, using our few remaining feet of film. Those last few feet of the final 'HALLMARK' film were declassified and released to the President of the Board of Inquiry into the fire. He was astounded to find such high-quality imagery was available to aid his investigation.' It seems that HALLMARK had kept some of its secrets, if not from the Russians, right to the very end.

Sixty was also involved in the formal reunification process. Inserting another personal note here, having missed a great street party in Berlin eleven months earlier at the opening of the Wall, I missed a second one when Germany was united at midnight of the 2/3 October 1990. One part of the formalities was the annulment of the 40-year old Four-Power Agreement on the Corridors and the status of Berlin. On 2 October I was the VIP navigator taking the Commander-in-Chief Royal Air Force Germany and the Commander-in-Chief British Army of the Rhine up to sign the rescindment. The French, American and Soviet counterparts would also be there. Outbound, we heard a Lufthansa callsign, the first ever in the Corridors, as up till then, only British, American and French airlines had been allowed to use them. We were due to fly back that evening, but we had the afternoon off and went into town. All over central Berlin, but particularly in the East, in the Unter Den Linden and the Alexanderplatz, waiters were setting up tables and chairs in the street outside. There were food stalls every few metres. Quite clearly there was going to be one hell of a party at midnight. As had been the case eleven months ago, sadly, we could not stay; our CinCs had to be back. I have another, more personal, reason for remembering that flight back; it was my last with Sixty Squadron and also my last as operating crew in the RAF. It was a pretty historic note to go out on.

Wind-down and transition

On 1 December 1990, Squadron Leader Allen Snowball, BSc, took command as the last ever OC Sixty in Germany and the Communications role. Following the collapse of the Warsaw Pact and Germany's Reunification decisions were made at high level that Wildenrath and Gütersloh would be closed down in 1992 and Army and RAF units would disband or be withdrawn to the UK. The final fate of Sixty was left unspecified. However, as had so often been the case in the past, almost immediately, whilst politicians were basking in the kudos from a 'peace dividend' new and unforeseen threats were emerging.

Saddam Hussein's invasion of Kuwait took place on 2 August 1990, whilst the US and the European nations were still trying to come to grips with the changed situation in the Central and Eastern part of their area of interest. Most of the West initially took the view that the Arabs, presumably responsible people, would sort this out for themselves. However, once it became obvious that they would not, the United Nations Operation "Desert Shield" was put into effect not only to rescue Kuwait but, far more broadly, to safeguard other Arab countries from aggression and the rule of the jungle. Eventually twenty diverse nations formed the UN Coalition Forces, which concentrated in the Persian Gulf region and Turkey. UN Resolution 678 demanded that Iraq should withdraw from Kuwait by 15 January 1991. It was ignored by Saddam, who obviously thought that the West was not serious. The next day, Operation 'Desert Storm' began. Western high-tech weapons demonstrated US and British modern air warfare with devastating effect. With most of Iraq's military and industrial might destroyed, another ultimatum demanded that Saddam should withdraw at 1700 hours GMT on 23 February 1991 and that the operation be completed within a week. It was not, and the final act was the land offensive "Desert Sabre" which began on 24 February. The last part of this phase was so sickening that most of the Western pilots, largely on the USAF's A-10 Warthog, an amazingly capable ground attack aircraft, did not have the heart to kill the obviously defenceless retreating Iraqi forces. The words 'Turkey Shoot' were used. The shooting ground war lasted only 100 hours, with the rout of the invaders, but the air transport effort before, during and afterwards was of a hitherto unprecedented scale.

For this operation it was not Sixty's aircrew but its groundcrew that should be lauded. The Squadron had many short-notice flights and visiting aircraft to contend with in support of the RAF and Army units detached from Germany to the Gulf and Cyprus. However, on the aircrew side, no pilots, navigators or Air Loadmasters could have paid as much attention to NBC (nuclear, biological and chemical) countermeasures training as the crew captained by Flight Lieutenant Garth Gray assigned to fly the CinCs BAOR and RAFG around the Gulf areas in order to visit Germany-based personnel during the build-up. There were also other, non-war-related tasks. The CinC BAOR had to be flown to Oslo for the funeral of King Olav of Norway. March also saw the first venture into the former Eastern Bloc, areas that they had previously been photographing as part of HALLMARK with a trip to Dresden carrying the CinC BAOR. Tasking reached a peak in this month with many flights associated with the returning troops and airmen and the repatriation of some of the fatalities sustained in the last days of the Gulf conflict.

The major social function in 1991 was the celebration of the 75th Anniversary of the formation of the Squadron, which had been on 1 May 1916. Prime responsibility for the organisation of events was given to one of Sixty's pilots, Flight Lieutenant Steve Wyatt. Former members of Sixty, dating from 1939 onwards, attended. One of the more entertaining had previously been a Javelin pilot (1966-68), ex-Flight Lieutenant Dave Sumner, now

retired from the RAF but employed by FRADU of Yeovilton, who were a civilian contractor to the MoD. Dave flew in in his Fleet Air Arm Hunter jet.

The Parade was commanded by Allen Snowball, the Standard was paraded by Flying Officer Mark Pearce, escorted by MALM (Warrant Officer) Chas Sweeting and Sergeants Everleigh and Irwin. The Band of Royal Air Force Germany, the same one whose bodies Sixty had repatriated after the awful road accident in 1985, provided the accompaniment. A strong cold wind was distinctly chilling for the seated spectators. Additionally, low cloud prevented the planned three-ship flypast at the General Salute, only one Andover doing so. The Reviewing Officer was Air Marshal 'Sandy' Wilson, CB, AFC. His speech referred to the family nature of Sixty and its part in Operation "Granby" (the British contribution to the American 'Desert Storm'). The Parade was followed by a buffet luncheon with sparkling wine held in Sixty's hangar. Afterwards the Squadron held an Open Day in the afternoon with the aircraft, photo albums and memorabilia on display, along with a Phantom and a Tornado of RAFG still painted in Desert Pink from their recent operations. For this special occasion the Andovers had been painted with the lightning flash patches either side of the fuselage roundels as introduced on Sixty's Vampires in 1951 in addition to the normal painting of the Markhor head on the fin. In the evening a superb Dinner was held in the Officers' Mess, with speeches by Allen Snowball and Air Commodore Mike Miller, former Commander of the 50th Anniversary Parade and now President of the Officers' and Aircrew Dinner Club. Air Vice-Marshal Pete Harding, AFC, the Deputy CinC of RAF Germany, was the senior guest. On Friday 3 May, an All-Ranks Dinner was held in the Dutch Rooms on the Station.

In October, if proof were needed that the Cold War was over, Sixty took the CinCs BAOR and RAFG to Moscow for 3 days. Inevitably, the crew bought matryoshka dolls and fur hats. It was all good fun, unless you tried to pay in roubles – no one was interested. It was Western currency that they wanted. The crew, captained by Flight Lieutenant Paul Bradshaw, had Allen Snowball as navigator, but had brought along Flight Lieutenant Mike Limb, a navigator who spoke Russian at virtually interpreter level; they were fortunate to have him on the Squadron at the time. Although normal airport charges were published at and paid for on an official scale, because of the need to hand out bribes for everything (but on a sliding scale), all the usual airport services had to be negotiated for in order to get off on time. The refuelling bowser was 200 cigarettes and the Met Brief a couple of Mars Bars. November was a quiet month, one highlight being the use of the Squadron hangar for a performance by the Chippendales dance troupe who were, effectively, male strippers. Most of the men folk wisely kept out of the way as a thousand women paid 50 DM each for the evening, raising over 10,000 DM for service charities.

In January XS 596, one of the ex-HALLMARK aircraft, now earmarked for the 'Open Skies' project, was demonstrated to a group of Russian observers as part of the UK's Joint Arms Control Implementation Group (JACIG)'s contribution. It was necessary to remove the IR camera as only normal optical cameras would be used on 'Open Skies' and there was no point in letting the Russians know that other sensors had been fitted. However, the IR camera was big and heavy, mounted on floor rails, and could be swung over to look out of either side of the aircraft and it was difficult to conceal evidence of its installation. The Squadron therefore constructed and mounted a completely fictitious 'Mission Commander's Consol', consisting of a table and every scrap radio that they could find, to put on the floor rails. But

there still remained the problem of the very new side cladding panels that hid the holes where the camera umbilical wires had come through. The ingenious solution was to leave the panels out in the airmen's crew room for 10 days and allow people to walk over them, after which they looked as battered and aged as the rest of the aircraft.

In the same month Geoff Brindle, along with Wing Commander Al Pulfrey, Wildenrath's OC Ops, as navigator, delivered a retired Phantom to the Czech Aerospace Museum and Sixty went out to Kbely, near Prague, to accompany them there and bring them back. Flight Lieutenant Paul Bradshaw and crew flew a party of Wildenrath Station executives and their wives, along with the engineers required to render the Phantom permanently unflyable. The Phantom had also had to have all its navigation equipment and UHF radios removed as part of the terms under which it could be presented, since these were modern NATO avionics. It was therefore necessary for the Andover to rendezvous with them near the Czech border and then guide them to Kbely. In fact the whole thing was touch and go until about 24 hours before and required the personal intervention of the US Ambassador to Czechoslavakia, Shirley Temple-Black to make it happen on the agreed dates thus saving major embarrassments all round. The trip involved a night stop where all were shown tremendous hospitality by the Czech Air Force who were very proud to show off their World War II association with the Royal Air Force. There was a museum tour where the host was Colonel Vladimir Remek, the first (and only) Czech cosmonaut and first man into space other than a US or Soviet citizen who showed the crew the 'Tin Can' he had sat in for a week in space. Another part of the museum was a whole section on the Czech RAF/WW2 story, which the Soviets had allowed them to keep as, at that time, the UK, the Czechs and the USSR had all been on the same side. At the formal dinner in the evening the welcoming speaker had fought with the RAF in the second world war as a pilot and on returning to his homeland, after the imposition of the Iron Curtain, found himself demoted from senior rank (approximately Wing Commander) to Corporal and considered 'unreliable' by virtue of his RAF/UK connections. However, he had risen again and became the number 2 in what was effectively the Czech Fighter Command.

NATO's Deputy SACEUR at this time was General Sir Brian Kenny and between 23 and 26 February 1991 Sixty took him to Estonia, Latvia and Lithuania, in preparation for those countries' absorption into NATO in 2004. Allen Snowball was on the crew and recalls:

> 'The trip was also about what NATO could do to get the Russians to go home (their troops were still in barracks in the Baltic countries as there was nowhere for them to go back in Russia). However, Flight Lieutenant Dave Bull (the captain) and I conferred with General Kenny when the Estonians seemed to be trying to balance their national debt with a previously unannounced fuel surcharge. With very little fuel on board we elected to get airborne and go the 60 miles to Helsinki rather than pay. This had the added advantage of getting our principal passenger some more suitable food as we had been on long-life rations since leaving Wildenrath'.

It had been all very well for Sixty to have their 75th Anniversary celebration but everyone knew that, at least in this incarnation, its days were numbered. After several rumours regarding retention of the Sixty Squadron numberplate it was announced in Parliament on 10 December 1991 that Sixty was to be disbanded, whilst RAF Wildenrath was to be closed down as an RAF airfield. By this time the Phantoms had gone but Sixty continued to be

useful as a Communications Squadron (it had not all been sham). Eventually, as the last fixed-wing flying unit at Wildenrath, the Squadron was disbanded on 31 March 1992, flying thereby ceasing four decades after the station had opened. XS 596, the post MOD 278 photographic aircraft went to the 'Open Skies' project, and XS 793, the VIP Andover CC2 and one crew moved to Brüggen to continue as the CinC's personal transport, but otherwise the aircraft were disposed of and the personnel dispersed to new appointments. It is perhaps worth recording that during all of this final run-down period under Allen Snowball's command, Sixty never flew less than 100% of the allocated flying task and this included the final month, when they had already lost an aircraft and a full crew.

As the facilities at Wildenrath had already been so reduced, little scope was offered for a major wake (for instance, the very next day, the Sergeants' Mess was to move into and share the Officers' Mess). However, past OCs Sixty and members of the Dinner Club Committee attended, most being conveyed in Andover XS637, flown by Flight Lieutenant Paul Bradshaw, Flying Officer Jules Heal, Flight Lieutenant Len Hind and MALM Chas Sweeting, from Finningley and Northolt to Wildenrath on 30 October, the previous afternoon, doing a flypast over the parade ground before landing. John Allison, who still owned his ex-Sixty Pembroke WV740, was to have flown in from Benson with Des Taylor in the right-hand seat, with some passengers formerly of Sixty but the weather was unsuitable. However, those who were there were Mike Miller (last Javelin Squadron Commander and President of the Dinner Club), Group Captain Mike Smart (early resident of Wildenrath with 71 Vampire Squadron and last Sixty day fighter Squadron Commander), Group Captain Peter Smith (first OC Sixty Javelin Squadron and Dinner Club Committee Member), Wing Commander Tim De Salis (who had been on Spitfires on Sixty and also was a Dinner Club Committee Member), Wing Commander Peter York (also Committee Member), along with Squadron Leaders Bunny Burrows, Ron Thomas, Andy Spanner and Phil Chaney, all past OCs Sixty. From Saudi Arabia came ex-Sixty navigator (now BAe contract Mission Controller), retired Squadron Leader Dave Downey, whose RAF son was based at Wildenrath at the time.

Ironically, on the 31st, the very morning of the disbandment, the engineering clearance from Strike Command to use the Very pistol destruction mechanism on the videotapes of the LLTV finally arrived. This was not the squadron's first priority at this time however and, having been found accommodation in the near-empty Officers' Mess, guests and residents assembled at 1045, yet again cold and windy, as the Parade formed up in front of the Squadron hangar with Allen Snowball as Squadron Commander and Geoff Brindle as Station (and Parade) Commander. As the sole Andover flew over from the south Air Marshal Sandy Wilson took the General Salute. His subsequent speech included appropriate salutations to attending German military and civil dignitaries fluently in their own language. Thereafter the Standard was marched off and Sixty marched past prior to other station personnel carrying out the Advance in Review Order and then marching off. The RAFG band was in fine form and military music can be quite emotional, especially in quiet reprises. There were few dry eyes in the house. In the Officers' Mess, sparkling wine drinks and an informal stand-up buffet luncheon gave further opportunities to reminisce and discuss the still unknown future, if any, of the Squadron. On 2 April 1992, the Standard was again (as in 1968) to be placed in

the Rotunda at the RAF College Cranwell pending ‘resurrection’ of the Squadron, whenever that might be. No-one held out much hope that it would be soon. And then, five weeks later, to everyone’s surprise, there was a reprieve.

In February 1992, 72 Squadron, a Wessex helicopter unit at Aldergrove in Northern Ireland, had been split into two smaller squadrons as part of a complete reorganisation of the UK’s Support Helicopter force. One of these elements, now based at RAF Benson in South Oxfordshire, had been known simply as the GB Wessex Squadron, or GBSH, or GB(H), but on 7 May 1992, it was given the name and number of Sixty Squadron. The Standard was recovered from Cranwell and taken to Benson and Allen Snowball had the pleasant duty of delivering the Squadron Silver to its new custodians. Sixty had been a fighter squadron, a bomber squadron, a fighter squadron again, a transport squadron (albeit with some rather interesting other tasks), and now it was to commence a new phase of its career as a Support Helicopter unit. Everyone wondered what the future held.