POLICE AVIATION

A HISTORY

PART TWO

CHAPTER FOUR

War and peace

Not every nation was at war in 1939, many were reluctantly dragged into the fray at later stages. Other than a significant number of volunteers the USA managed to keep their people out of the direct conflict until 1941.

Of the immediate combatants in Europe only the British and Germans had prior police flight knowledge, the Austrian operation having been incorporated into the Reich in 1938. Contrary to Trenchard's intentions earlier in the decade, the British gave up all independent police flying and did not actively seek co-operation with the RAF.

In Germany the situation was somewhat different. After losing a large proportion of its strength to the formation of the Luftwaffe in 1935 and beyond, the police air units remained in being as flying units into the war years. Where, before the dismantling of the original formations, units had enjoyed the use of the most up to date flying machines, the independent force that remained was reliant on caste off second line military equipment. Known wartime equipment included Junkers Ju52/3m transports, and a variety of elderly liaison types from Focke-Wulf, Siebel and Fiesler. Reflecting the earlier front line fighter equipment the police also had at least one Messerschmitt Bf109 on strength. The known example [D-POL-98] was an early model 109B that would be unlikely to have acquitted itself on equal terms if faced with an enemy air force.

Unlike its Allied counterparts, the German police air arm was effectively a military unit which, like the whole of the German nation, became increasingly embroiled in front line war duties as the war progressed. At what stage it ceased to exist as a separate entity is unclear.

The Cierva Autogiro's gathered at Hanworth were soon called up to join twelve similar machines acquired by the military as Avro C-30 Rota's earlier in the decade. Each was called upon to serve in a vital role in defence of the British Isles. The C-30's ability to fly at very slow speed was identified as a significant feature in the calibration of the new British secret weapon Radio Direction Finding [radar]. The years of plodding slowly backwards and forwards in this vital role took their toll on the fleet, both the impressed civil machines and the military originals. By the wars end only a dozen of the mixed fleet survived.

Not all aspects of police flying were stopped by the war. The Joint Home Office and Illuminating Engineering Society Lighting Committee [IESLC] were authorised to undertake some live trials with the severely curtailed street lighting that a wartime *blackout* brought in September 1939.

Having the wholly reasonable assumption that the imposition of total darkness nationally would severely hinder enemy air operations over the British Isles, emergency powers were enacted to force everyone to comply with the edict. For the majority of the war it became a punishable offence to show an unshielded light at night - come rainy or moonlit night, whether the enemy was believed present, or not. A great deal of police effort was directed to ensure this was kept to a minimum. Unfortunately, it did not quite work out in the manner predicted. On the ground a situation was created whereby in spite of some severely shielded street and vehicular lighting, the copious use of white paint to highlight obstructions in meagre illumination, and other aids, pedestrians and vehicles were hitting each other with monotonous regularity. Road fatalities soared.

Traffic in the days before the wartime clamp down was in any case little in volume, slow and poorly lit. The roads were narrow and rarely lit in other than major towns - and most of these only showed illumination during the first part of the night anyway, so a blackout situation was not a totally alien concept. It was the lack of flexibility, the adherence to the stringency of the rules at all times, that became the measure's *Achilles Heel*. As was to be clearly demonstrated, viewed from the air on a clear night there was so much upward light leakage, undetectable from the ground, that it was probably not worth all the effort it took to police it.

De Havilland Dominie/Dragon-Rapide in RAF Communications service.

Initially undertaken at street level in London, *Blackout* monitoring activity progressed to flights involving a number of separate bodies. Included were representatives of the police, the British Standards Institute [BSI], the Illuminating Engineering Society and the Wembley based industrial concern, the General Electric Company [GEC]. The IESLC initially operated alone but required the police to provide a waiver document called the Lighting Restriction Order. This document enabled them to undertake their experiments unhindered, but on the clear understanding that immunity ceased as soon as an air raid was signalled. If they should be a bit slow in returning the area to the requisite *Blackout* condition they quite likely to end up being issued with a summons to attend a court. It did not happen of course, if only because such tardiness noted by the enemy posed a far greater danger to the experimenters than any magistrate.

The actual outcome of the series of experiments that this work embraced between 1939 and 1942 only serves to highlight the woeful inadequacies that the B*lackout* conditions suffered from.

After a number of days experimenting in central and west London, interest shifted to the City of Liverpool in the North-West. In late October 1939 the City Lighting Engineer, Mr. Robinson, had devised a new type of street lamp hood which had been installed experimentally in Castle Street, Liverpool. As this hood device was of an unapproved type, it was agreed that a fuller installation would be set up elsewhere in the area and then viewed from the air in due course. Although it was well out of their own area, Sidney Chamberlain and E R Hooper of B Department maintained an active watch on this and other similar experiments set up across the length and breadth of Britain.

The first aerial observation tests were to be undertaken over London on the evening of November 9, 1939. A range of lighting conditions were set up in selected areas of Westminster and Burnt Oak [near RAF Hendon] but, although

the ground operations went well, the task was not completed by the aircraft that night.

The Liverpool experiment was the first successful observation flight. Mr. Robinson had set up the experiment in record time, the city managing to install all of the new equipment along a one and a quarter mile stretch of Speke Road and Speke Hall Avenue, beside the airport, in time for the viewing on November 17. Two flights were made from the airport. The pilot Captain Neish was accompanied by Hooper from the police in London and representatives from the Ministry of Transport, Westminster Council and Liverpool City Engineers. The Liverpool design of cowls were considered a success, pending the viewing of the official BSI design when the Burnt Oak, London, experiment managed to get itself going.

The London aerial viewing finally got underway two days later, on the evening of Sunday November 19. A civil registered National Air Communications de Havilland Dragon-Rapide flown by Wing Commander J G Hawtrey took Hooper and J Waldram, a representative of GEC, up from Heston to view the street lighting in the Edgware Road. This flight was considered a partial failure due to the moonlight being brighter than the possible benefits expected from the street lighting. In spite of the supposed *Blackout* the observers were amazed to see a myriad of pin prick light sources escaping from the inky blackness below them.

Two aircraft from Heston flew over the experimental street lighting on the evening of November 24. Again moonlight effectively outshone the dim street lights. The task was finally undertaken with a degree of success in a further flight from Heston on the evening of December 2. Hooper, accompanied by GEC's Waldram and Wing Commander Hawtrey were passengers in a Rapide flown by Captain Ashley and his R/T operator during a three hour flight that allowed them their first glimpse of a dimly lit Edgware Road.

The "Home Security" flights continued into 1940 with a variety of crew mixes and target towns. Witney in Oxfordshire attracted Sidney Chamberlain as observer in place of Hooper in March 1940, the former finding time in spite of an increasing workload of arranging wartime road convoys. The pilot was again Captain Ashley. Although the light searching was not of a warlike nature this activity effectively overcame an existing police taboo on "involvement" in war operations, thus embracing some parts of the Trenchard war proposals for police duties in time of war, set in the 1930s.

Early in the war Chamberlain gained an MBE for his war work with road convoys, and underscoring his status as a figure of some importance in civil hierarchy at Scotland Yard. Although observer duties were no longer to be his forte, he was still to re-appear on the police flying scene for another 20 years.

The experimenting with wartime street lighting tailed off as lessons were quickly learned. On October 21, 1941 Scotland Yard managed to arrange for their Mr. Haines to undertake a one and three quarter hour ride with an RAF crew undertaking an aerial survey of the London area from Northolt. Flight Lt. Haney was undertaking a similar task for the Air Ministry; the pilot was Squadron Leader Whitham. It was police co-operation, in arranging the setting out of ground marker lights for the flight, which alerted them to the availability of a spare seat. Being the first time he had witnessed the spectacle from the air, Haines was horrified at the extent of light leakage, particularly from moving motor vehicles. As the enemy was by now a rare visitor to the night skies of Britain it was officially decided by the police side not to make an issue of the situation. Logic suggested that should the raiders actually re-appear in any significant numbers there would be a massive, and voluntary, revision of the

situation by those on the ground. Nonetheless, from somewhere, reports which can be attributed to this flight were leaked to the newspapers less than a week later in an apparent effort to stir the public into being a little more *Blackout* conscious.

Following on from this flight, in April 1942, the RAF teamed up with the Metropolitan Police and the Ministry of Home Security to undertake tests relating to vehicle lighting and aerial observation.

Ten Humber police cars, their lighting illuminated and masked in a variety of ways, were driven around Croydon Airport perimeter track as an RAF observer, Squadron Ldr. F J Haney, looked on from above. The results merely showed that whatever form of mask was employed, those attached to police cars being correctly fitted - were far more efficient than those observed on privately operated traffic passing by Croydon Airport on the public road.

Towards the end of the war, in May 1944, throughout the nation thoughts were straying towards peacetime activities and renewed attempts were made to set up a Metropolitan Police Flying Club. All too well aware that, contrary to earlier appreciation's, police of all ranks were now serving in the military and in the air in large numbers, thought was given to the possibility of channelling these skills in the days of peace to come. As in the case of the late 1930s proposals, this scheme, wholly based upon the use of Slingsby built gliders, was to be investigated for a few months before finally being abandoned in the depression of mid-1946.

Helicopters were new to the world at large. Although the German's had flown a helicopter before the war they had seen relatively little use during the conflict. The US Navy recognised that this unique type would be useful in the anti-submarine role even as Sikorsky was flight testing his first helicopter in 1943. The Coast Guard, a law enforcement organisation in peacetime but under the direct jurisdiction of the US Navy in time of war, was selected to undertake trials with the type. Ironically the first Coast Guard helicopters were two of the first Sikorsky YR-4s destined for Britain which were handed over for testing in the US prior to transporting across the Atlantic as part of the defence of a convoy. The operational delivery voyage, using a merchant ship as a flight deck, commenced in January 1944 with a multi-national crew of seven Americans and four British.

In the training period Coast Guard helicopter activity was centred at Floyd Bennett Field in Brooklyn, New York. In January 1944 a Sikorsky helicopter based in Brooklyn was used by the Coast Guard to fly blood plasma to injured crewmen to the USS Turner after the destroyer suffered an explosion off the coast of New Jersey. Later in the same year another helicopter had rescued a youth marooned on a sand bar off New York and undertaken combat rescue missions in the Far East, in these instances the helicopter had landed to take on the additional passengers.

Presaging one of the primary roles undertaken by the helicopter in the future, in late November 1945 a Sikorsky R-5 used a winch and simple loop harness to undertake the first civilian rescue of two men stranded on an oil barge which had struck a reef in Long Island Sound off Fairfield, Connecticut. The technique was then so new that the machine used was one operating experimentally from the manufacturers' factory nearby. This was its first operational use. Significantly, although they did not take a direct part in it, the operation was undertaken at the bidding of the local police.

Even before the war in Europe had ended, one police force in Australia announced that it was to acquire an aircraft for police use. On April 18, 1945 the New South Wales [NSW] Government announced that it was honouring a 1941

promise made by NSW police Commissioner, William J MacKay, to some of his men as the set off for war service in the RAAF in seeking to buy a war surplus aircraft for transport duties.

The reasoning behind the decision to purchase a police aircraft was not conventional in terms of the modern European concept of law enforcement aviation. The acquisition was not intended to furnish a criminal searching and detecting machine, this was a police transportation system to overcome the vast expanses presented by the 500,000 square miles of the State - then a largely undeveloped land area with poor communications and with only a limited police presence in areas beyond the coastal strip of the continent. The aircraft was primarily seen as a means whereby the police could transport centrally located trained personnel into the interior to back up resources already deployed in the field - detectives, photographers and scenes of crime scientists.

Although the important decision had been made, over a year was to pass before the NSW police took ownership of an Avro 652A Anson I twin engine aircraft registered VH-AQV. Previously W2145 with the military, the police aircraft had to pass over a number of hurdles before a suitable machine had been selected. In February 1946 the Commonwealth Disposals Commission allocated the State of NSW an ex-RAAF Anson AW483 for police use. This decision was quickly reversed in favour of W2145.

The selected Anson was built in the UK and shipped to Australia in 1941. Equipped with a dorsal gun turret, it served throughout the war in the role of crew trainer, being finally taken out of military service immediately prior to passing to the police ownership. Passed to the de Havilland Aircraft Pty Ltd., at Mascot, for conversion to civil standard, the work included the fitting of new airways and police radio equipment, three passenger seats and the removal of the gun turret. The area beneath was converted into a police dog compartment. Dogs, even trained police dogs, could not be allowed the opportunity to roam free as much of the cabin wall was merely a traditional pre-war mix of wooden framework covered in doped canvas.

The aircraft was registered in July 1946, re-emerging for police service as VH-AQV *“Nemesis”,* the goddess of retribution, a name chosen as it was the telegraphic code of the parent police force. On July 19, 1946 the silver and black aircraft was officially presented to the police by de Havilland’s in a ceremony at Kingsford Smith Airport, Mascot. The first flight after conversion, and also the official date of registration, took place two days later. On July 19 the aircraft was officially presented to the press and public alike as the first of an intended fleet of police aircraft in NSW police service. One section of the local news media, *The Argus,* erroneously claimed that the aircraft was the first owned and operated entirely by a police force in the British Empire.

The NSW Police Aviation Section was manned exclusively by police officers, none of whom was excused a turn at normal duties by his attachment to the unit. Five pilots, all ex-RAAF personnel each with at least 1,000 hours flight experience, a Commercial Pilots Licence (CPL) and an R/T operators licence. There were three wireless operators who continued to operate the longer distance W/T facility, and two engineers.

The unit commanding officer was Sergeant F J Hanson, who was to hold the post of Commissioner in the mid-1970s. Prior to taking command of the unit Hanson served in various war theatres, being demobbed from transport duties in the rank of Squadron Leader. Each of the others in the unit held the rank of constable, or senior constable.

Aside from standard weekly flight testing, scheduled flying tours were undertaken by a two man crew on a weekly basis, the crew being recalled from

whichever standard duty they were undertaking at the time the aircraft was required. The minimum reaction time was rarely expected to better thirty minutes, presumably on the basis that flight times and distances were so large that time to take off was hardly critical. *"Nemesis"* was operated in a general purpose role and the general acceptance of lengthy call out periods reduced the opportunities for aerial pursuits.

The Anson's workload included the carriage of urgently needed supplies 180 miles Tibooburra for onward transportation by the Flying Doctor Service (FDS) to the scattered victims of flooding in and around Broken Hill, a mining town 700 miles west of Sydney in March 1949. The FDS had been using its own three engine de Havilland Australia Drover and single engine Noordyn Norseman aircraft on this work. It was found that the availability of the police aircraft to supply Tibooburra released FDS aircraft for the task of air-dropping supplies on the affected area. Beyond this type of emergency operation there were numerous instances where the Anson crews transported officers from remote areas to undertake urgent, and even scheduled, court appearances, as well as the transport of search teams and dogs seeking a variety of missing persons.

During 1949-50 the aircraft market was investigated with a view to replacing the single Anson in police service. The favoured type was the British de Havilland Dove. It was not to be. For a wide range of reasons, the air unit did not grow as envisaged in 1945. The growth of police manpower resulted in changes to police working practices and these, allied to improvement in both wireless and road communications, resulted in a greater number of police personnel being based in the interior, close to potential demand. Each of these changes resulted in the high costs of continuing with aircraft being reconsidered. The demise of the air unit took effect with the sale of the Anson on August 31, 1950. It was not brought about by any shortcomings in the airframe; the Anson passed into private hands and flew for a further ten years.

The four years of fairly continuous operations by the Anson had led the field in Australia. No other police force in that continent was to follow suit and fly aircraft as a matter of course for many years after the demise of the NSW unit, most commenced flying in the 1970s. Regular police aircraft use was not to re-emerge in NSW until the force started using Bell helicopters operated by the NSW Department of Main Roads in the 1960s.

On the other side of the world the last item on the agenda for war weary nations, the victors and the defeated, was the provision of suitable aircraft for police use. Many faced the early war years short of food and short of money.

This depressing state of affairs did not stop the British based Taylor Aircraft Company (the name of the then makers of the wartime Auster light observation aircraft - later to evolve into Auster Aircraft), approaching the police. In October 1945, a matter of weeks after the end of the war, Taylor Aircraft wrote to Scotland Yard offering the Auster aircraft for police work. Unfortunately for any hopes the company may have harboured, the file fell upon the desk of the Assistant Commissioner CID for Crime. This officer could see no need for aircraft in his department. Fortunately the manufacturers of the little Auster aircraft were made of sterner stuff and, aside from any other contracts they might gain, would return to Scotland Yard.

Almost ten years had passed by since high ranking police officers had been involved with aerial devices of any type in a police role. In a period when the standard span of service, from training to retirement, was twenty-five years this was a significant span. Without a cadre of interested and informed senior officers there was little chance of progress in promoting expensive toys like aeroplanes in UK police service.

The fact that little tangible was ever likely to happen in Britain's cash strapped police forces did not deter the occupants of the House of Commons. As early as February 1946 the then Home Secretary, Mr. Chuter Ede, was answering questions on police air support following the arrival of stories from the Dominions suggesting that Canada was investigating the possibility of creating an air unit. Someone in the British Parliament clearly had their wires crossed on this information as, already on its fourth aeroplane; the RCMP was actually considering adding some examples of the Beech 18 aircraft to the depleted post-war fleet.

Not unexpectedly the British Home Secretary dismissed the idea of setting up a similar unit in Britain as "unjustified". Sir Gifford Fox challenged the minister to explain what was to be done with air smugglers and pirates in the absence of a police air arm. Chuter Ede, undoubtedly caught out of his depth, declared that the means whereby the police thwarted such law breakers was secret".

It was somewhat simpler than the lame excuse given by the Home Secretary. In 1946 neither the police nor the government had taken time to bother and formulate an "air police" policy. It is highly unlikely that they would consider the production of any understanding relating to the specifics of smuggling and piracy for the simple reason that the responsibility for these fields of law enforcement lay, and still lies, with Customs and Excise.

In spite of the lack of funds, the Lancashire Constabulary were able to arrange for substantial resources, including an aeroplane, to be allocated to policing of the first post-war Grand National race at Aintree Racecourse on Friday April 5, 1946.

The Aintree horse racing course lies immediately to the north of the City of Liverpool. In the 1940s, the responsibility for policing the race meetings, and the heavy traffic approaching it, fell upon Lancashire Constabulary. This task was undertaken with the assistance of the police of Liverpool City, a force which took the area to the immediate south of the venue.

In early 1946 all police forces were chronically short of men. Most of the war duty reserve staff had returned to their peacetime tasks, but in many cases there were large numbers of police still trapped in military units across the country awaiting demobilisation prior to returning to former police duties. To make up for this lack of policemen, the Lancashire Chief Constable, Captain A F Hordern, sought to tap into the large numbers of men of all callings awaiting demobilisation in military camps across the county.

Hordern was able to muster 1,000 police and 100 wireless cars from his own resources. He approached the military authorities seeking some additional resources and found himself welcomed, for they were in the reverse position of having large numbers of under-occupied men looking for something to do for just a few days.

As well as the vast surplus of men there were supplies in numbers to match, all lying idle and awaiting sale or destruction. The roads approaching the Aintree course were marked and cordoned off by a vast number of military signs, items again so plentiful and familiar that after their sudden reappearance on the street it must have seemed to some that the war had not been over for six months after all! Hordern's subordinates were able to post a military stretcher party and a signals section at each of the jumps and to cover most of the exterior road junctions with an abundance of police or army personnel. There were so many men available that the aircraft brought in to keep an airborne eye on the proceedings was all but superfluous. Like the men and other equipment the aircraft was manned by the military. In spreading the theme of co-operation, the Auster was one of few operated by the Royal Navy and the Aintree machine is

believed to have been LB372, one of only three possible choices. On its first day present, the Thursday, the Auster did not even leave the ground to assist. On the Friday, Grand National Day, it went up to transmit general traffic condition reports and became involved in the only worthwhile traffic jam incident of the whole meeting.

By 1230 on the Friday the pre-war car parking areas were brimming with 15,000 vehicles and all the emergency parking areas were brought into use. The total crowd watching Lovely Cottage winning the 1946 Grand National was estimated to be in excess of 500,000 people. Although, because of the excessive numbers of men on the ground, the Auster was not able to shine on the day, it put on a sufficiently good performance to ensure that its talents were appreciated by those likely to be involved in future events.

That, almost wholly military, occasion was not to be the last of police flying over Aintree. On March 29 the following year an almost identical set of arrangements was put in hand but, on this occasion using only police staff and a hired civil Auster aircraft. The observer on this occasion was Lancashire's Chief Superintendent W H "Bill" Mercer. Chief Constable Hordern later claimed that the presence of the aircraft had resulted in the crowd dispersal time being reduced from around three hours to a mere three quarters of an hour.

Although confirmed facts for each succeeding year are sparse, it would appear that there was air cover over the Grand National Aintree almost continuously from the 1946 event. It is known that in April 1949 a twin engine Miles M65 Gemini, G-AKHB, took Mercer and a Marconi "Walkie Talkie" radio set over the race-course on Grand National Day. Later the same year the same officer was employed in undertaking observation over the heavy traffic attending the switch on of the first post war Blackpool illuminations. The superintendent's final involvement with the Lancashire air observation task

over Aintree took place on March 25, 1950. Coincidentally, with the renewed patronage of the Monarch this was also the first “Royal” race meeting of the post-war era.

On April 17, 1951 an Auster aircraft was again employed on traffic control over Aintree. On this occasion Mercer was replaced in the observer role by Sergeant Gerald Lewis DFC, a wartime night fighter pilot and Pathfinder. This officer was to be the regular observer for the following few years. For the 1952 event the police moved their local command post wireless into the grandstand area for the first time.

Except in the islands of the UK, the regular annual air observation undertaken by the Lancashire Constabulary was not a major event in terms of its importance to the overall development of police aviation. In comparison with activity in other parts of the world it meant very little. Looked at within the insular world of the UK policing it took upon itself an importance far beyond its worth. It was a police force doing something when all around were not.

In some areas of Britain the years immediately after the war were marked by a degree of lawlessness as the population came to terms with the peace. It was not only the indigenous population, there were foreign groups, large and small, many formerly in the military, refugees and displaced persons faced with making important decisions about their future. With Europe ravaged by the effects of the recent conflict housing, any housing was at a premium and many were starving. In addition, many distant states, including Poland, were falling under the iron grip of Stalin’s Communists and large numbers were unsure whether to leave Britain even though the situation, and the amount of financial support, was bleak even there. This situation led to a number of the temporary population resorting to crime merely to survive.

On Monday June 2, 1947 it was announced that three Polish soldiers had escaped from Norwich Prison during the previous Friday night and Saturday morning [May 30-31] and were on the run in East Anglia. The three, were Teodor Kutcz who was awaiting deportation, Wlaydslaw Beijecki and 22 years old Stanislaw Zobrowski a battle hardened young soldier who had recently been sentenced to 9 months imprisonment at Suffolk Assizes for theft of tobacco at Livermore near High Ash, Suffolk.

The following day it was reported that police officers keeping watch on an abandoned stolen car were fired at when they approached it. A Sten gun was thought to have been used. Kutcz was subsequently recaptured and arms were issued to officers engaged on the search. For officers unused to arming themselves for their civil policing duties these weapons were an ad-hoc range of country weapons, mainly shotguns, and war surplus revolvers.

On Wednesday June 11 two Norfolk police officers, including PC Walter Brown of Weeting, were fired at in Mundham. One man, Ronald Spalek, was arrested and taken to Methwold police station. He was remanded at Methwold Court on June 17, charged with shooting PC Brown with intent to murder. It appears that he joined up with the others at some stage after the break-out but this is unclear and there may have been no connection other than an assumption on the part of the newspaper. On the same day as the shooting was taking place in Norfolk arrangements were set in train for the use of a Westland Sikorsky S-51 helicopter by the police. It is possible that this was also to be the first such event in the world.

Every helicopter mission by helicopters in the mid-1940s was producing “firsts”. On the British side of the Atlantic Ocean there were few helicopters. The British police had become familiar with the rotor by way of the autogyro before the war

and the military were using small numbers of early helicopters designed by Sikorsky. Westland's the Yeovil based aircraft manufacturer moved towards building helicopters designed by others and eventually became the sole major helicopter manufacturer in the UK. Westland had a long history of building conventional aircraft but not having its own design capability for the new class of aircraft it sought to enter into an arrangement with Sikorsky in the USA to build their helicopters under licence.

The first Westland licence built example of the S51 was not to be airborne until 1948. Before the UK manufacturer built its own version they bought a total of six from the US production line as pattern aircraft. In June 1947 there were only two of these civil Sikorsky S-51s in the UK; one was G-AJHW and the other, G-AJOO. G-AJHW first flew in the USA on February 18, 1947 and, dismantled and crated, was delivered to England by sea, arriving at Westland's Yeovil factory on April 14th. As a tried and tested type already in the USA although it only first flew in the UK on April 18 it received its UK Certificate of Airworthiness [C of A] on the 24th. From that point on it was used for manufacturer's trials and as a demonstration aircraft. After brief military trials in 1948-49 it returned to civil use with BEA and eventually left the UK for Canada in 1957. The second example was re-flown in Britain on June 6.


THE AEROPLANE 645 JUNE 20, 1947

HELICOPTERS IN ENGLAND

As the police in Norfolk were under fire on that Wednesday June 11, Westland brought both of its new helicopters to land on the tennis courts of the Harrods Sports Club in Barnes, South London, to present them to the press. The first machine was flown by Squadron Leader Alan Bristow and the second by Squadron Leader LP "Pete" Garner, they were there for two days undertaking a number of trips over London for press photographers including those of the London based national the *Daily Express*. During this presentation Superintendent N Garner of the Norfolk Constabulary accompanied his son, Peter Garner, an ex-Mosquito night fighter pilot and assistant experimental test pilot with Westland Aircraft, in being flown over London in the Sikorsky S-51 G-AJHW by Alan Bristow the Chief Pilot for Westland. The air experience flight was to have far reaching effects. In this report the Superintendent was quoted as saying "Helicopters will be of wide value to the police in making arrests or rescues".

Soon made aware of dire twists involving the search taking place in his own police area and now aware of the potential capabilities of the helicopter, on June 14, Superintendent Garner broached the question of a possible loan of a helicopter by the Norfolk Police with Peter. The request was passed on to the aircraft company and Westland promptly agreed to the free loan of their new machine as a public service and as a marketing exercise. Underlining the urgency of the situation, there were further news reports on June 14 and 16 which related to break-ins at Methwold and Thetford. At the latter incident shots were fired when a man was disturbed attempting to steal a car.

As Westland's senior pilot, Alan Bristow was sent to Feltwell in S-51 G-AJHW on June 15 1947. Following three years as a Fleet Air Arm pilot and nearly two years in the Westland test piloting post, in a period when rotary wing pilots were rare Bristow was an experienced helicopter pilot. He qualified on the novel type at the US Coastguard base at Floyd Bennett Field in June/July 1944 on the Sikorsky YR4. At the time Idlewild Airport [later JFK] was being built on a site immediately adjacent.

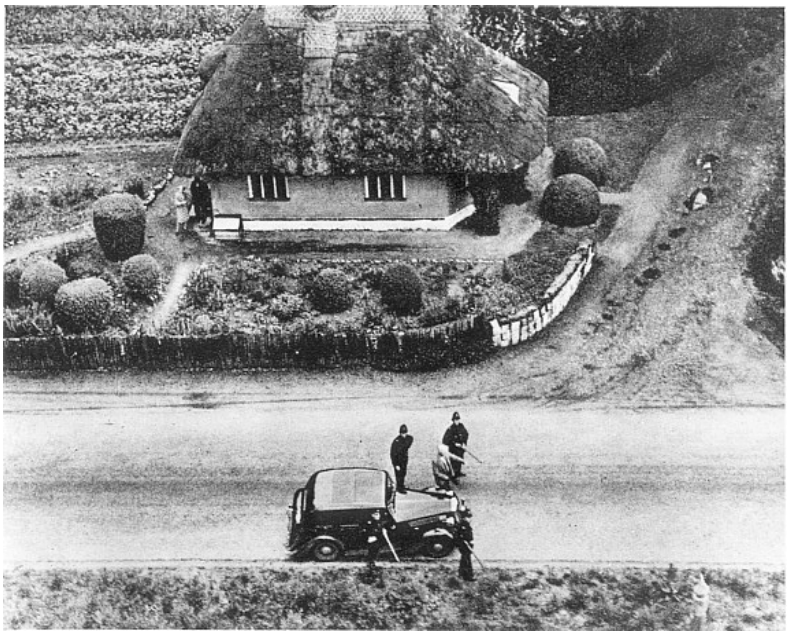
The novel police operation attracted the attention of *Daily Express* photographer Walter Bellamy and he accompanied Alan Bristow and Methwold based Inspector Brunson in the S-51 to search an area of East Anglia where the Poles were last reported. Brunson was armed with a .38 Webley revolver.

Inspector Brunson of Norfolk Constabulary.

The search area decided, the trio flew a "creeping line ahead" flight pattern over the area. Alan Bristow saw smoke rising from a shack in a heavily wooded

area. As it was unusual to see smoke coming from what appeared to be a gamekeepers shed in summer, the helicopter circled the site reducing altitude to about 150 feet above the shed until a suspect on the ground opened up with a 12 bore shotgun, fortunately without damaging the helicopter. The inspector called in ground support forces and the armed suspect, probably Beijecki, was captured shortly afterwards. The helicopter search lasted two and a half days; no further members of the band of renegade Poles were captured using it. Certainly the first use of a helicopter for criminal police work, this operation would also seem to be a likely candidate for the first of its kind in the world.

On Wednesday June 18 local and military police raided a Polish re-settlement camp at High Ash and arrested 53 people. Twelve pistols were seized. The following day, June 19 it was reported that a dishevelled man, identified as Zabrowski, was seen with Polish soldiers at North Bodney Polish Camp. A green Polish Military motor-cycle and several army pay books were stolen from the camp. Armed police searched the military battle training area and a warning was put out that he was believed to be armed with a razor. The following day many of the newspapers carried a picture of the young fugitive.



That weekend, Saturday June 21 the newspaper carried a first report on the resettlement camp raid and reported that the search area was being widened with officers now working from their own beats rather than assembling at Thetford daily as had been the case previously. At this stage the newspapers stated that army had not been called in although there had been reports of military personnel volunteering their services. One such was that an RAF Warrant officer and a corporal from the 14/20th Hussars had started searching in their own time using an ex-US Army command vehicle.

Stanislaw Zabrowski had remained on the run for a total of 23 days, when he was finally recaptured in Essex on June 22. Zobrowski was captured in Rochford, Southend-on-Sea, following a thwarted attempt at breaking into a car. He had fired shots when disturbed attempting to steal a car at Southchurch and was later spotted by the local vicar in Rochford. The capture was affected by DI Hempson assisted by around a dozen other officers. The detective jumped out of a car whilst passing him on the road. He offered no resistance, but when taken into custody he still possessed a German Luger pistol and six rounds of ammunition.

DAILY EXPRESS

MONDAY JUNE 23 1947

HOME NEWS • FUGITIVE Pole caught after 23 days • PRISON to change its master-keys • OVERSEAS • BRITISH police chief beats kidnap • CLAYTON flies off 'in secret'

HUNTED POLE CAPTURED NEAR SOUTHEND

'A MAN FIRED TWICE . . .'

Trailed by woman: 1 a.m. gun charge

From ARTHUR COOK: Southend, Monday morning

STANISLAW ZBOROWSKI, the 24-year-old hunted Pole, was cornered outside The Shoulder Stick off-licence at Barling, seven miles from Southend, at nine o'clock last night—and was recaptured without a fight after 23 days freedom.

DAILY EXPRESS POLL REVEALS...

The following day he was in front of the Magistrates at Southend and remanded into the custody of DI Kybird and DC West from Norfolk. The next day he was remanded at Methwold Magistrates on the next stage of his return to prison.

Peter Garner, the pilot who appears to have facilitated this, the first recorded use of a helicopter in police work, was still acting as Test Pilot to the Westland Company when he was killed on October 15, 1947. During an air-to air photographic sortie, Peter was piloting Westland Wyvern fighter prototype TS375 when the propeller failed. Alan Bristow was flying nearby in G-AJHW when Pete called him up and reported the failure and seizure of the translational bearing between the contra rotating propellers. Faced with the enormous drag presented by the six stationery propeller blades, Pete elected to stay with the aircraft and managed to bring the large aircraft into a perfect wheels up approach to a long narrow field near Yetminster as Alan headed towards his position. As the helicopter approached all appeared to be going well as the stricken Wyvern approached what was probably the best field in the area to put down in. The fighter rushed along the ground on its belly rapidly losing speed, crashed through a dividing hedge into an adjacent field. Unfortunately, one of the propeller blades came off and smashed through the windscreen and killed Pete. Alan landed nearby, but it was too late.

A few days after the Norfolk search, on June 19, Alan Bristow again accompanied the press photographer on a *Daily Express* chartered flight to a crime scene. On this occasion the pair set off from Croydon in G-AJHW in search of a man and a woman who were reported lying naked amongst the bracken and bushes somewhere unspecified on Epsom Downs. After two runs over the area they found the couple and directed members of the Metropolitan Police to the exact location. This incident featured searching police officers on the front page of the following days *Daily Express*. The incident was quickly resolved as a suicide pact. The photographs taken on this sortie were sped to London, delivered by air, when the pair landed on Horse Guards Parade immediately afterwards.

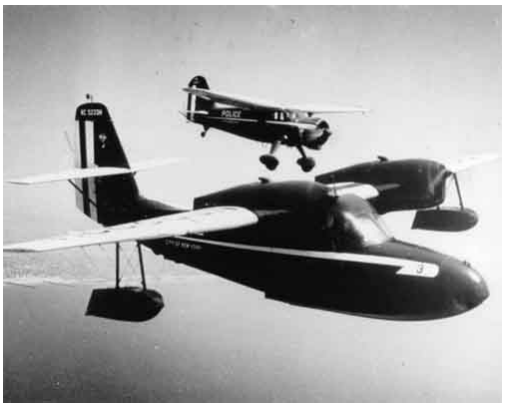
On August 12 1947 Bristow was again the pilot when G-AJHW was used in an abortive search for a prisoner reported to have escaped from Princetown Prison, Dartmoor. Accompanied by locally based Inspector Turner, Alan flew search patterns in a 20 mile radius around the prison before abandoning the task.

Continuing the police theme he also took the S51 to Number 4 Police Training centre Ryton-on-Dunsmore, Warwickshire, for demonstration on September 25, 1947. Alan gave the police officers at the training school a short talk on how he believed the helicopter could be an advantage to police in their work. Chief Constables Bond, Jackson and Young each took a demonstration flight in the helicopter. This recently re-established training school was situated in a former displaced person's camp and was tasked with the training of recruits and other ranks. Later there were to be other aerial visits.

The United States, with large sections of its economy enhanced giving succour to the war, was able to continue with police flying virtually unimpeded. The volunteer pilot scheme, set up in the Los Angeles County Sheriff's [LACS] area of California in the same period as New York set up their full time operation, continued successfully, and remained virtually unchanged until 1962. Additional resources were donated to the LACS by leading Hollywood figures shortly after the end of the conflict. The first aircraft owned was a war surplus Fairchild 24 aircraft donated by the famous actor Robert Taylor. The Fairchild was a four seat high wing utility aircraft in the mould of the New York Stinson's but equipped with a fixed land undercarriage. A short time later, Clarence Brown, a movie director working at the MGM Studios also donated a Stinson L5 aircraft to the Sheriff's fleet. The Stinson L5 was a compact army spotter aircraft, considerably smaller than the New York aircraft and equivalent to the Auster used by the British. It remained in service into the 1960s. Helicopters', in the form of the ubiquitous Bell 47G, were not to enter service with the LACS's fleet until 1955.

War surplus types became a feature of many US police forces in the early post-war years. Many instances of citizens acquiring and painting up private aircraft in police related markings have led to subsequent confusion. It is clear that most of these did not relate to an officially established police formation. One instance is presented by the situation in Oakland, California, in the summer of 1946. A number of privately owned types, including a Vultee BT-13B NC66707, were noted at Hayward bearing official looking marks clearly showing them to be the Oakland Police Air Patrol. Whilst these aircraft may well have undertaken a number of police support flights in the manner of the contemporary LACS operations, Oakland Police themselves do not acknowledge any operations prior to 1969.

New York used its pair of Stinson Reliant aircraft throughout the war, but following the declaration of peace these gave way to two modern amphibians from Grumman Aircraft - the successor company to the pre-war Loening. The first acquired, in November 1946, was a G44 Widgeon and the second, taken over in April 1947, was a war surplus G21A Goose. This Goose aircraft had previously served on war duties with the Royal Navy. Both aircraft were a notable departure for the NYPD aircraft fleet in that they were twin engine flying boat designs of substantial proportions when compared with earlier equipment. Destined to be the last fixed wing equipment operated by the NYPD; the twin engine specification was also to be a rare feature over the Big Apple.



Nearly twenty years after it was formed to rid the City of New York of rogue fliers that its part time predecessor had failed to address successfully, the NYPD air unit was still tackling the problem. Although greatly reduced the problem persisted. There were enough calls to law breaking pilots, stunt flying, force landings and crashes for the authorities to pass a new local ordinance interpreting violations of the Civil Air Regulations as misdemeanours attracting more stringent fines and the threat of licence revocation.

In 1947 the NYPD became the first recognised US police air unit to seek to operate helicopters. A single Bell 47D, NC201B, equipped with large pontoon floats was delivered for trial operations from the NYPD facility on the edge of the US Navy Floyd Bennett air base, commencing in September 1948. The specifying of the pontoons on the new helicopter reflected both a long tradition of amphibian aircraft and an acknowledgment of a degree of unsureness surrounding the reliability of the single piston engine powering the machine. The last thing anyone wanted was to lose the pioneering craft in New York harbour through engine failure.

In the period when helicopters were being introduced the unit had strength of seventeen, seven pilots and ten mechanics. Credit to being the first recognised civilian police helicopter pilot is given to Gustav “Gus” Crawford of the NYPD. Gus was born in New Brunswick, New York State, before the Great War but started his flying career in Kansas in 1929. Thwarted in his attempts to become an airline pilot by the stock market crash he returned to New York and, with many others, applied for a job with the newly formed NYPD aviation unit. He failed, but finally secured a position as a foot patrol cop in 1932. When the air unit was re-activated in 1939 Gus was taken on as one of the six pilots, by 1945 he was the commanding officer of the Air Bureau.

In 1946 Gus Crawford was selected to go to Bell Aircraft Corporation in Niagara, New York State to learn about the helicopters they too were now building. The primary purpose was to advise the city officials about their possible uses for a variety of tasks - including mail transportation. He was already aware of the few examples operated in the New York area by the Coast Guard.

After a month he was back in the city, not only with a helicopter licence, but with an instructor’s certificate also. He was so convinced of their worth that it was not long before he set about convincing Mayor O’Dwyer that the police should have them on trial as a rescue craft. His recommendation was accepted.

Initially three pilots were trained to fly the helicopter with others being added to the total. In 1949 the unit undertook 300 individual missions, including 63 responses to distress calls from boats.

Shortly after the introduction of this Bell helicopter, on March 30, 1949, four prisoners' escaped from the Riker's Island Penitentiary in the East River. Called in, the helicopter flew low over the island searching roofs, docks and exposed shores where the prisoners might have secreted themselves. A task that ordinarily took a large squad of men a whole day to accomplish, it took only fifteen minutes to search the whole of the island. A number of further irregular air searches were operated throughout the day. The following day the escapees surrendered to the authorities on the island. Although safely concealed from the prying eyes of the helicopter crew beneath a dock, they had been constantly aware of its presence and had been unable to make a run for it without being spotted.

Although this incident did not in itself promote the observation capabilities of the helicopter above that already proven by fixed wing aircraft for over twenty years, it was a good start. Even intermittent search patterns had an effect upon the target way in excess of the actual capabilities of the aircraft and crew. An ability to hover above a potential hiding place further heightened this fear by the hunted.

In June 1950 the first helicopter was withdrawn from service and replaced by three newer Bell 47s offering a slightly enhanced specification. The three helicopters continued to operate alongside the fixed wing Grumman machines

until November 1955, at which time the helicopter fleet had grown to a total of six, and the fixed wing element was finally withdrawn.

The introduction of the helicopter into NYPD service is accepted as the first law enforcement helicopter operation, and there is no dispute that it was the first successful long term use of the new type of aircraft. In fact there was another slightly earlier introduction of the helicopter into law enforcement service in Eastern Europe.

Czechoslovakia was a country born out of political expediency. In 1993 the former nation split into two and became the Czech and Slovakian Republic's. Police aviation in the formerly united countries has been traced back to the use of a SPAD bi-plane fighter under unknown circumstances in 1920. Before the Second World War the nation had undertaken extensive law enforcement flying from the 1930s until the nation was engulfed by the Nazi war machine during March 1939. The aircraft employed by the military structured Czechoslovak Gendarmerie [Cetnicke Letecke hlfdky] included a number of aircraft types which clearly indicate a military background. The Skoda D-1, Aero AP-32, Avia B-534 and Letov S-328 were all types appropriate to military service as spotter planes and fighters.

After the cessation of hostilities the nation acquired a number of war surplus aircraft from the British, Russians and the Germans on which to build up a new defence and air police structure. In the immediate post war years Czechoslovakia allocated a number, at least five, Supermarine Spitfire LFIXe fighters for duties with the Bezpecnostni lectectvo [Frontier Patrol], operated as the type S-89. Flying alongside these were other war surplus types including the Avia S-99, S-199 and the S-97. The S-99 and the S-199 were better known as late production examples of the Messerschmitt Bf109 and the S-97 was actually the Russian Lavockin La-7.

Most of the aircraft used had been manufactured in Czechoslovakia in support of the war effort of the invaders. Where the S-89 was a complete and standard Spitfire imported from Britain the S-199 was a hybrid of the locally built Bf109 featuring a Junkers Jumo 211F engine in place of the original Daimler-Benz DB605 which was no longer available. Unfortunately the less powerful Jumo was more at home on a bomber, it was considerably heavier and the larger three blade propeller produced such increased torque that the original vertical stabiliser and rudder could barely cope, especially on take-off and landing. The S-199 was known locally as the Mezec - or Mule - a name which aptly described its capabilities. The change in engine reportedly resulted in the former 400mph fighter being restricted to around 200mph. Many of these Avia's, disliked by the Czech military, and clearly of little tactical use were supplied to the police. Other examples were sold to the fledgling Israeli Air Force in total disregard of an existing, UN-imposed, arms embargo. It can be assumed that this move was primarily to get rid of them, the customer in Israel having little choice in the types it acquired with the world against it. The aircraft were not a success there and were later replaced in Israeli service by Spitfires also supplied from Czech stocks.

The employment of these unusually aggressive types for police patrol was apparently out of place in peacetime but, in essence, they were only late 1940s equivalents of the military surplus types operated by the German and Austrian police in the immediate post Great War years and the obsolescent Bf109B fighters operating with the Germans earlier in the decade. The former combatant types remained in service alongside locally produced examples of other German aircraft including the Fiesler Fi-156C Storch spotter [the Mraz K-65 Kap] and the Arado Ar-96B trainer [the Avia C2B] into the early 1950s. Operating alongside these former fighting aircraft on police duties was an Avia

VR-1 helicopter. As with the Avia fighter types the type designation hid the work of a German manufacturer.

The Focke-Wulf Fw 61 flew in 1936. The Germans came to the forefront of rotary wing flight with this machine, the world's first helicopter, which gave a convincing demonstration of practical helicopter flight. The designer, Doctor Focke, had gained rotary wing experience through the German building of Autogiro's under licence to Cierva. The Fw 61 was an ungainly but efficient craft featuring side-by-side fully articulated rotors on outriggers, a feature that removed the need for a tail rotor. Cyclic pitch was used for directional control and collective pitch for lateral control. The Fw 61 was developed into the Focke Achelis Fa 223 during the war years, most of the production examples being destroyed by Allied bombing.

At the end of the war the battered remains of the Nazi war machine was stripped bare and examples of any type displaying a modicum of technological advance were sent to the four corners of the earth. After the Allies had taken their fill of the nine year old Focke-Wulf helicopter production line Czechoslovakia was allowed to pick over the remains of a few examples. After the now dated helicopter design was re-worked by the former Avia aircraft factory technicians, now operating as Ceskoslovenske Zavody Letecke [CZL]. Two examples of the German design re-appeared in the air as the Avia VR-1 and VR-3. Overshadowed by later examples of helicopter technology, it was not a successful metamorphosis.

In the spring of 1948, a single example, the VR-1 OK-BZX, was released to the Ministry of the Interior. From March 12, 1948 [some six months prior to the setting up of the NYPD helicopter operations] the Avia was made available for law enforcement duties with such as the Bezpecnostni lectectvo. It officially entered service in the April and was finally written off in 1949 - just as police helicopter operations were getting into full swing on the east coast of the USA. Another ten years were to pass before helicopters re-entered Czech law enforcement use.

Little tangible progress was being made in Britain, what passed for progress was invariably little more than hot air and theory. In its wide agenda, the 49th meeting of the Central Conference of Chief Constables held on February 26, 1948 heard that the Superintendent's Central Committee had suggested that the use of aircraft in certain branches of police work should be examined and that regulations should be drawn up governing the procedure to be adopted when seeking the assistance of aircraft. The conference resolved that is was not necessary to draw up such regulations, it was deemed that the simple procedures required to call out either civil or military aircraft were well known

but rarely invoked. Unfortunately no one at the conference addressed the major problem holding back the progress of police aeronautics - the lack of cash.

If finance was lacking, the interest in operational police flying was still alive in a number of important areas. Sidney Chamberlain OBE, DFC, was regularly called upon to give talks of his experiences in pre-war police flying to the newly opened Police College at Ryton-on-Dunsmore, Warwickshire, and other bodies. Almost the last of the “old guard” of flying experience at Scotland Yard, his wide knowledge of the subject overcame much of the natural reticence his civil position in the police engendered in police officers of the time.

The Ryton Police College, which Chamberlain first visited shortly after it re-opened in a new guise in September 1948, was the replacement for Trenchard’s Hendon College of the 1930’s. With the bad feeling Hendon had engendered against graduate police in the lower ranks in the 1930s, the College had been “moved sideways” and now, with a different class of pupil from Trenchard’s ideal, was situated in the former displaced person’s camp. Perhaps it was appropriate under the circumstances. Many years later the College overcame its identity problems and moved to somewhat better accommodation at Bramshill, Hampshire. Just like the Hendon College had before it, Ryton then turned into a recruit training school.

As had been proven at the 1948 Chief Officer’s Conference, the acquisition of hardware continued to prove expensive and elusive, but talk was plentiful and cheap. In a country where domestically produced helicopters were still to prove themselves capable in a police environment, the only examples readily available were a few from Sikorsky and Bell. Committees sat to talk about the expected capabilities of, rather than the introduction of helicopters. The situation was to change shortly but the first report of the grandly titled Inter-departmental Helicopter Committee in September 1950 usefully summarised the principal characteristics of the helicopter in a manner that, with the benefit of hindsight, appears naive.

(a) its ability to fly slowly and to hover
(b) its ability to ascend and descend vertically,
(c) its ability to use small and restricted areas for take-off and landing and hence its ability to move from point to point in three dimensions.

There were a few brighter moments in the furtherance of police aviation in Britain, unfortunately the majority of these revolved around trials, trials and yet more trials. In 1949, and again in May 1951, the Auster Company teamed up with the “Tannoy” loudspeaker manufacturing company to present their latest aerial speaker systems. Much later generically known as “Skyshout”, the idea was not entirely new, but carriage on the light Auster was. Typically ugly, as are most prototype installations, for the 1949 display the large speakers were slung below the wings of, G-AJIZ, the aircraft then acting as the company demonstrator for the high wing spotter aircraft The equipment in the repeat display in 1951 was little changed but featured an improved speaker array fitted to another Auster demonstrator. According to the police file on the second event some disquiet was expressed by officers when they were unable to ascertain which of them had attended the 1949 display. Embarrassingly, the hosts at the Auster factory insisted that Scotland Yard representatives had been there but nothing was ever found relating to it in their files. This second trial had little to do with British policing in 1951, any more than the obviously forgotten event two years earlier.

Severe storms lashed the seas around the United Kingdom at the end of January 1953. Many ships and smaller fishing craft got into difficulties, culminating in the sinking of an Irish ferry off Scotland with heavy loss of life. Late on the night of Saturday January 31, a combination of adverse winds and high tides resulted in large areas of the North Sea coasts of Britain and Holland

being inundated by freezing flood waters which caused many deaths. In Britain the east coast areas of Lincolnshire and East Anglia and Kent were waterlogged, but the worst effected area was Essex.

By the Sunday afternoon, February 1, the flood waters were receding back into the North Sea leaving many areas still cut off. Some Essex districts had no contact with the rest of the county for many hours. One such was Foulness Island, a largely military occupied desolate mud bank of an area primarily used for weapons trials. A number of agencies, wishing to find out what the situation of the 290 people living on the island was explored all possible avenues in pursuit of concrete news.

The same afternoon, one of those having a professional interest in the situation on Foulness, the police inspector stationed in the mainland town of Rochford, made enquiries at the local Southend Municipal Airport. He found that the airport had already sent up a Miles Gemini light aircraft, G-AIRS, belonging to the local Municipal Flying Club on disaster observation duties over the whole of the Thames Estuary area. Unfortunately it was learned that the aircraft had not overflown Foulness and was unable to report on the situation there. As a result of the police inspector's request the Gemini was sent up again to undertake a specific reconnaissance of the area. the pilot was back shortly after six, by which time darkness had returned, with reports that he had seen a number of families at the upstairs windows of flooded houses - most had waved to him, which was a promising sign. Other sightings had included a lone man in a boat and a military policeman on a rooftop. It was to be the only flight undertaken at the direct request of the police throughout the emergency.

In the meantime the Essex County Constabulary headquarters had also been exploring avenues of obtaining information on Foulness and had also investigated a separately contrived solution. At 1645hrs contact was made with the RAF at Kenley, Surrey. It was hoped that this air station could be asked to widen the scope of operating rescue plans primarily evolved long before for rescue operations at the military establishments. The police found that they were having their own problems in attempting to rescue as much as they could from the various military sites under their charge, including Felixstowe, Suffolk, in a situation that was far worse than expected.

Rather than send the requested helicopter, with night fast approaching the RAF Duty Officer suggested the use of a civil lifeboat to undertake a search of the area in the dark. The RAF officer offered to call out the lifeboat and in the meantime arrange for the sending of an unspecified reconnaissance helicopter from the fleet of the Aeroplane and Armaments Experimental Establishment [A&AEE] RAF Boscombe Down, Wiltshire, early the next morning. In addition an aerial survey of the flooded area around Foulness was to be undertaken by a photographic reconnaissance aircraft the next day.

The flood, and the level of resultant fatalities, was worse in Holland. A result of this was that most available helicopters had been drawn across to the other side of the North Sea. In the region of 2,000 rescues were undertaken by a mixed bag of 38 helicopters drawn from many nations, including the civil fleet of British European Airways Helicopters [BEAH].

Helicopters still being a relatively rare commodity, the few helicopters remaining available in Britain and involved in the domestic emergency were apparently not called upon to attempt a great deal of rescue work. Incapable of heavy lifts at this stage of their development, and not really suitably equipped for extensive flight in inclement conditions, they were restricted to undertaking a series of fact finding flights in daylight. Part of the problem was the unfortunate timing of the disaster. As peacetime armies the world over still do, the military throughout Europe had run down its strength for the weekend and the floods broke through

on the Sunday morning, all of which required the recall of staff from all parts of the country whilst the emergency cover teams on duty at the weekend found themselves inundated by the scale of the disaster.

Most British operations undertaken at this period were in variants of the Westland WS51 Dragonfly. The Sikorsky derived type was good for its time but, with a small crew and cabin area, it was unable to undertake large scale rescues. The Royal Navy, 705 Squadron, sent one of their Dragonfly's, identified only as "Playmate 61", from West Malling, Kent, on the Monday. The Fleet Air Arm crew reported that no-one was in dire need of rescue at that stage and those other agencies were managing using more conventional transport by this time.

They were difficult times for what were to prove the last days of many of the European nations colonies scattered across the world. Most affected were the possessions of the former British Empire, in the wake of the war it was slowly breaking apart as the subjects in the former Colonies were attacking the whites in the hope of finally driving them from their lands. The cold forces of nature were raging against the east coast of Britain, but in the warmth of Kenya the danger lay in the bloody attacks by native elements - the much feared Mau Mau.

The Kenya Police Reserve Air Wing [KPRAW] was created in 1948. Although classified as a Reserve unit in name, this was no weekend escape from the wife and family, for the members were tasked with a dangerous and deadly duty. The KPRAW was set up in 1948 under the direction of the provincial commandant at Nairobi West, Wing Cdr. A N Francombe, DSO, MBE. Originally equipped with only one Auster, the Air Wing chartered other aircraft when required and operated into a few airstrips up-country, principally in the Abadare Mountain range to the north of the Capital, Nairobi. Expansion was thrust upon the KPRAW by the declaration of a state of emergency in October 1952. Through bloody intimidation the Mau Mau had established a strong hold on the Kikuyu tribe, this leading to the massacre of 84 natives near Nairobi in March 1953. Murderous attacks on Europeans, police and security forces followed. It was the classic scenario of countries seeking freedom from Colonialisation, the widely feared Mau Mau were freedom fighters to at least some of the native blacks, terrorists to the whites and others.

The KPRAW was unconventional and ad hoc. A motley collection of light civil aircraft and pilots in which almost anyone who had the use of a light aircraft could give his services and earn enough to pay for it. The pilots included one "Punch" Bearcroft who only had a single arm but was reputedly capable of flying in a manner better than anyone with two.

Following a review of the available light aircraft, bearing in mind the high altitude requirements, load carrying ability and rough landing characteristics

necessary for operations in Kenya, in April 1953 the KPRAW was set for expansion with the purchase of ten Piper Tri-Pacer 135s. In addition to the mounts of the private flyers, other types in police operation by 1955 were two Cessna 180s and a Chipmunk used for communications and mail delivery. All were civil aircraft on the VP register.

The Piper's lived up to expectations, proving very versatile and capable. They were used for a range of duties, supply dropping, target marking, bombing and close support of army patrols in the forests. Even though the aircraft were built as compact trainers, with the rear seats removed the Tri-Pacer's were capable of carrying 300lbs of freight when flown solo, or a dispatcher was able to oversee the dropping of ten supply packages from the cramped cabin at altitudes up to around 10,000 feet. Powered by a 225 hp Lycoming engine, almost twice that of the Piper, the pair of newer Cessna 180s were capable of air-dropping 600lbs at an altitude of around 12,000 feet.

The main operational base of the KPRAW was at Mweiga, a 1,200 yard grass airstrip at an altitude of 6,200 feet in the Abadare Mountains. This was an open fort protected by the King's African Rifles and surrounded by a protective stretch of barbed wire

The primary operational use was co-operation with the patrols engaging the Mau Mau, this sometime resulting in the police aircraft being called in on bombing runs. The Tri-Pacer's were equipped with four light series bomb racks fitted below the belly slightly to the rear of the main wheels , these usually being loaded with 19 lb. fragmentation bombs, smoke bombs, or phosphorous grenades. The latter were to mark targets for the real big bombers involved in the bush war against the Mau Mau.

The police aircraft were the lower strata of the air war against the renegade natives. The RAF deployed heavy weapons against ground targets from the airfield at Eastleigh, Nairobi. The main strike force was provided by a detachment of half a dozen Bomber Command Avro Lincoln from No.49 Squadron, in addition fire-power was provided by a dozen armed North American Harvard trainers of No.1340 Flight. Neither type was efficient at killing the Mau Mau, the best estimates suggested that it took at least 1,000 lbs. of bombs and thousands of rounds of ammunition to kill each one claimed. Supporting the sharp end aircraft were a pair of photographic Gloster Meteor jets and a number of transports, including examples of the Vickers Valetta, Hunting Pembroke and Avro Anson and a single Sycamore HR14 helicopter. For "sky-shouting" the RAF deployed a pair of Auster AOP6 spotter aircraft fitted with the very type of Tannoy speakers that Auster had been vainly demonstrating to British police a few years earlier. Operationally the pilot of the Auster overflew the intended target area at 1,500 to 2,500 feet altitude and broadcast pre-recorded tapes of warnings in a variety of native languages, Masai, Kikuyu, Swahili etc., both before and after bombing attacks. Warning the intended targets of what was to come, exacerbated the poor kill ratio. The primary purpose of the attack aircraft was to encourage the Mau Mau to surrender with bombs and leaflets - the obsolescent piston engine Lincoln bombers in particular were there to provide a noisy demonstration of what might be expected if they did not surrender.

Following on from the Auster's, the police Tri-Pacer aircraft nipped in ahead of the RAF aircraft and marked the target, before clearing the area. It was dangerous work and by 1955 three of the KPRAW aircraft had been lost to ground fire. Police also flew with the RAF aircraft as observers on operations, at least one policeman, officer McNully detached from the Uganda Police, died as a result of a non-operational Harvard crash.

It was a long and bloody ten year campaign. From taking the oath to expel the whites in 1951 the Mau Mau campaign by 40,000 natives reputedly left around 13,000 dead by the time the British declared the State of Emergency to be at an end in November 1959.

The leading political figure in the break away from Britain emerged as Jomo Kenyatta. Sentenced to seven years imprisonment for membership of the Mau Mau in 1953, Kenyatta was released from custody in the summer of 1961 and elected Premier less than two years later. It was to be a pattern followed in the shift of power in many former African Colonies.

The world being the way it is, it goes without saying that Kenya was not the only country with British connections facing internal policing problems so quickly after the world war. In the Far East Malaya had faced problems in the wake of the Japanese invasion in the war. After the invaders were expelled there were factions in the country, identified as communists, who were hell bent on overthrowing the peacetime government. Operation Firedog, the British military operation in support of police operations officially opened in 1948. The answer evolved to counter the problem was to bring the populace together in protected colonies watched over by the police and British troops.

The RAF operated a range of aircraft in this internal security campaign, including the full range of available helicopters and light aircraft, all with extensive fighter and bomber support. ‘Firedog lasted for twelve years and therefore the range of types operated covered a large proportion of the RAF fleet of the time. Unlike the operations in Kenya, primarily operated with piston engine aircraft, Malaya had almost fully entered the jet age by its end.

The Malay police did not have their own aircraft, instead relying directly upon front line RAF support types which included the Scottish Aviation Pioneer CC1, an ultra short take-off transport that resembled a greatly enlarged version of the Auster. The Pioneer used its near helicopter flying profile to fly in and out of tiny landing strips carved out of the dense forests and perched on sheer valley sides. These locations were manned by the police and RAF ground support crews, and often situated close to the local population site. Each of these was supported almost wholly by airlift. Large items such as tractors were brought in over several lifts as a kit of parts and assembled on site.

As helicopter technology improved the Pioneer and its larger twin engine brother, the Twin Pioneer, was superseded but the general style and aims of the campaign continued. Operation Firedog was declared to have successfully run its course by 1960. Before the operation could be fully run down and British troops withdrawn from a newly formed nation of Malaysia, the whole scenario was restarted to cater for an attempt at destabilising Malaysia by President Sukarno of Indonesia. British military operations in support of the Malayan Police and troops facing up to the “Indonesian Confrontation” commenced in December 1962 and continued until 1966. After the Indonesians gave up the British were finally able to pull out and before long, in 1978, the new nation was able to form a dedicated air unit for its own Polis Diraja Malaysia

CHAPTER FIVE

Civil Defence

Faced with an uncertain post-war civil market, helicopter and aircraft manufacturers and their agents arranged exposure for their products at every opportunity. In spite of positive developments in other parts of the world, British industry remained uncertain of how they could tap an as yet non-existent police market at home. Overall the Home Office and individual police forces exuded negative attitudes toward aircraft usage, leaving the manufacturers to resort to regular displays, seemingly with little return. The favourite venues for displays were at the annual conferences attended by most senior officers and at the Ryton Police College.

Following on from the display of the Westland owned Sikorsky S-51 in 1947, the British aircraft manufacturers regularly showed off their helicopters to the floating population of students at Ryton-on-Dunsmore. The majority of these displays were private affairs which did not attract the attention of the media. The low profile maintained by these visits to Ryton suited the police but naturally did little tangible to promote the wider use of helicopters.

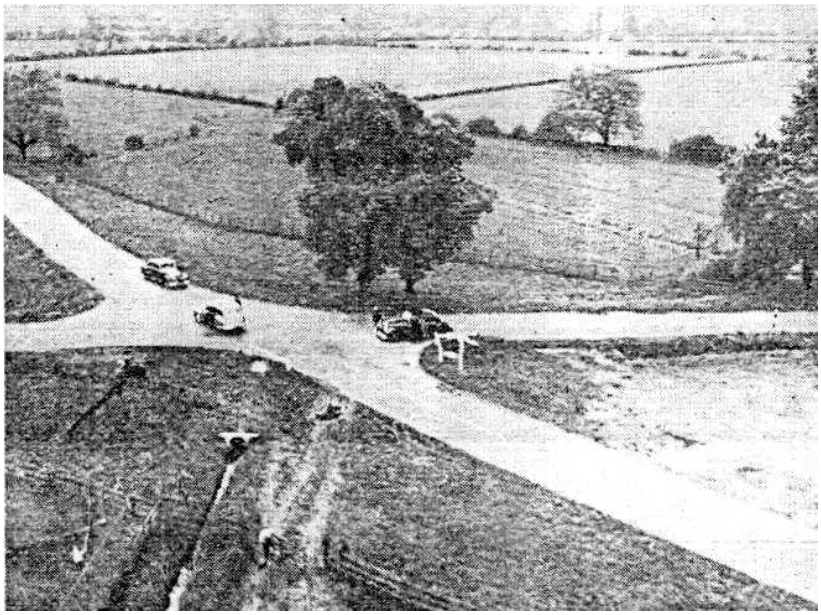
The types available were civil adaptations of military machines and as such they were not perhaps the most suitable for police work. Westland displayed its Sikorsky derived types and the Bristol Aircraft Co. took its Type 171 Sycamore. In time it became clear that the 171 layout was to offer the better solution for police work. In a rare display of co-operation with the aircraft industry, in 1946 the Home Office had circularised a request for a police officer of sergeant or inspector rank to volunteer to work with Bristol in displaying their evolving range of helicopters to police.

On May 15, 1953 the instructional staff at Ryton co-operated with Bristol Aircraft to undertake something special in order that the media might take greater interest. The event was, like many of its forebears, the playing out of a fictional scenario designed to portray the helicopter in a favourable light.

For the background story, a police officer on traffic control duty at a fictional meeting being held at the Silverstone, Northamptonshire, motor racing circuit was provided with a radio [personal radios were still over twenty years away]. While he was there, at 1300hrs an "armed robbery" took place at the Silverstone village sub-Post Office, the three criminals making their escape in a Standard Vanguard Estate motor car, "stolen" from a nearby car park. The alarm was to be raised at a convenient juncture by the Northamptonshire Police telling Warwickshire that the Vanguard was last seen travelling their way and towards Banbury.

In this entire make believe, only the car and its occupants existed, although it was a police vehicle containing police officers acting the part. Exactly one hour after the "post office raid", at 1400hrs police resources in Warwickshire were unleashed upon the suspect

Standard car and the Bristol 171 took off in pursuit. After 20 minutes the helicopter found the beige estate car in a country road. Constant reporting of its position brought about a successful, but quite predictable, interception by two ground units 15 minutes later. Needless to say the final act occurred at scenic country cross-roads which so happened to have a convenient photographer installed.



In retrospect the chase plot lacked any real sense of authenticity, with the bandit vehicle exhibiting the classic distortions in not only remaining unchanged throughout, but hindered in the range of antics it was permitted to perform in efforts designed to throw off the helicopter. On top of this of course, the scenario was clearly planned to culminate at the country cross-roads in front of the official photographer. It is tempting to wonder what exactly the escaping Vanguard was supposed to be doing for a whole hour, waiting for the helicopter after it suffered a technical hitch perhaps.

This fault highlighting is of course wholly negative, and the fact remains that as a public relations exercise this demonstration was a

long lasting unqualified success. Bristol received their hoped for advertising break, the overdue payback for many hours of apparently fruitless demonstrations to a cash starved police service. For years afterwards, whether it deserved it or not, that one demonstration was held up as the prime example of the direction in which police helicopter operations should proceed.

After the war the overall command of what had been Air Raid Precautions, the National Fire Service and many other groups survived as Civil Defence [CD]. The police were involved in perpetuating CD in a variety of ways, some of which bore a direct relationship to the onward development of police aviation. The public face of the police involvement in CD was the Police Mobile Column [PMC]. This was another instance where viewing in retrospect tends to leave the onlooker aghast.

The PMC was a group of about a dozen light and medium panel bodied lorries, two jeeps, the Austin Gipsy or Land-Rover SWB and a handful of motor cycles for dispatch riders. As the overall agency for both the police and CD, the Home Office operated a number of training columns upon which each of the police forces could train. The theory behind the PMC was that in time of war or civil disaster the police would put together a convoy of specially equipped vehicles to be operated by trained police officers. As in war there would be a greater number of columns than the training units would support, the vehicles were to be drawn from commerce and quickly converted for use on a PMC. When war broke out it was intended that the police with these units were to travel the country organising and giving assistance to the unfortunate survivors of the enemy attacks using the most rudimentary of equipment. It was field kitchens, tents and field toilets all round. The flaw lay in the government instructional rhetoric which stated categorically that anyone caught outside [in tents and lorries] during a nuclear explosion, or subsequent fall-out, died quickly and horribly. No one suggested that any future war would involve anything but a nuclear element. Even if the intention was to put these units together some time after the major conflagration and most of the fall-out had passed, it would be problematical to find sufficient suitable vehicles in working condition.

That was the debunk of the theory, whatever might happen in time of war, the police sent for training on these PMC's in time of peace

invariably found them to be an absolute hoot. If nothing else it was a well paid holiday away from the wife and kids. Each column differed from the next, along with the level of discipline, but the Metropolitan Police examples hit the newspapers time and time again as residents local to whichever temporary camp was being occupied by a band of raucous individuals, gave vent to numerous complaints. The neighbours were placated by soothing words, but it was all really to no avail. This was important work in hand, the Defence of the Realm no less! When it was finally done away with it was always remembered an official licence to run amok in a police uniform. Never publicly denounced as an idea born out of distorted tactical thinking, the PMC's were finally withdrawn by a Labour administration as a cost-cutting exercise at the end of the 1960s.

Following similar lines as the Ryton display, Bristol's also involved the 171 helicopter in CD exercises. As an additional survival from the war years, it was still common for the larger commercial organisations to run their own section of CD within the work force. On October 10, 1953 an in-house CD exercise was held on a Bristol factory site in conjunction with the local police force undertaking training with a PMC. The Home Office took note of this and other co-operative CD ventures involving helicopters and entered into negotiations with a view to hiring them for further trials. These talks finally bore fruit in 1955.

A Bristol 171 helicopter also appeared at the 1954 Grand National at Aintree. Lancashire had continued to provide some form of regular aerial cover at the prestigious sporting event, although this had been restricted to light aircraft. For the 1954 Grand National the Chief Constable of Lancashire County Constabulary, Colonel T E St. Johnston, had arranged the use of a Bristol 171 through the manufacturers at their Filton, Bristol, factory. The original arrangement came to naught at the last minute when the machine suffered an accident.

A week prior to the Grand National the army had arranged for one of their three 1906 Flight Bristol 171 Sycamore HC11 helicopter's to undertake a display before a military audience at North-Western Command HQ by the River Dee at Chester. The original appointment had to be cancelled at the last moment due to each of the three aircraft becoming unserviceable.

It was fortunate that an element of the lax pre-war attitudes towards aircraft loans still remained in 1954. Captain [later Major] John Spittal MBE was in charge of 1906 Flight, an RAF unit tasked with the development of the helicopter for army co-operation. It took no more than a telephone call to Bristol from Spittal at Middle Wallop to arrange for the manufacturer to send a stand in machine to Chester in order to reinstate the intended display. Unfortunately, the civil helicopter sent up to Chester by Bristol's as stand-in for the Middle Wallop machine suffered engine failure at a critical moment on arrival and was damaged in the resultant heavy landing on the parade ground. The Bristol, having suffered damage to the rotor and tail boom, was ignominiously transported back to the Filton factory by road.

Another telephone call from Bristol to Captain Spittal was again all that was required to arrange for 1906 Flight to dispatch one of their Sycamore's to fill in the promised slot at Aintree. Spittal did have to clear the unexpected venue with the Chief of the Imperial General Staff [CIGS] Sir John Harding, who was in the Liverpool area at the time - and likely to need the services of 1906 Flight for himself. Sir John agreed that his "personal" Sycamore, WT924, could be flown up north to help out. Each of the three 1706 Flight Sycamore's was technically assigned to the transportation of the CIGS and other senior army officer's in addition to the primary development task. The suggestion that any of these machines was a true "personal" assignment was loose news media terminology.

The Lancashire police observer at this time remained the familiar Gerald Lewis, DFC, but by now, in his third year of observing, he was elevated to the rank of Inspector. With only a matter of days available to arrange the not inconsiderable technical problems associated with the radio fitting and flight timings, Gerry Lewis set off south on a return journey to Middle Wallop, Hampshire, to briefly meet up with Captain Spittal and the Sycamore.

Flown by Captain's Spittal and Graham-Bell [who was in a period of conversion training to the Sycamore] the camouflaged Bristol WT924 arrived at Liverpool Airport from Middle Wallop on Friday March 26, where it was equipped with a police radio prior to test flying at the racecourse. The helicopter and crew stayed overnight on a military field at Samlesbury, east of Preston. Following a comfortable night being entertained by the police, the helicopter and crew flew to the police headquarters at Hutton to pick up Inspector Lewis at 10.15hrs before flying on to the Aintree racecourse.

The weather was a bit rough, but the only effect of this was that the intended "jolly's" for senior police officers were cancelled. An hour and a half was spent prior to the first race reporting on traffic approaching Aintree, after which the Sycamore alighted and the crew were entertained in the grandstand, taking a box next to the

legendary racecourse owner Mrs. Topham. To round off a brilliant day, the ten shillings [50p] each the crew had started the day with was converted to hundreds of pounds thanks to a spell of luck with the unfortunate bookies on the course. The Lancashire Constabulary continued to use, primarily fixed wing, aircraft over Aintree for a few more years prior to taking a short break in 1957. This break was precipitated by a marked fall off in public attending the Grand National.

In Parliament the Home Secretary was questioned by a member [Mr. Langford-Holt] as to the possibility of helicopters being used for traffic observation over London in the near future. The reply was that such a development was "unlikely". Almost as the Home Secretary was answering one line of questioning in the negative, over two hundred miles to the north the Chief Constable of the force adjoining Lancashire, Cumberland and Westmorland, J S H Gaskain, had arranged for the short term use of a Westland WS-51 Dragonfly from the Station Flight of the Royal Navy [RN] Air Station at Anthorn. Operating from the police HQ at Penrith the silver Dragonfly undertook a number of exercises, including vehicle searches which tended to re-enforce the lessons learned at the Ryton demonstration of the previous year. For Cumberland and Westmorland [now Cumbria] the arrangement with the RN was short term, the air station at Anthorn closing to operational flying shortly afterwards.

The Automobile Association [AA], the larger but younger upstart of the big two of the United Kingdom motoring rescue organisations had a fairly extensive pre-war aeronautical past. For both the AA and the Royal Automobile Club [RAC] this activity had included information services on roads and airfields and traffic spotting from a range of aircraft from two seat Moth's to the multi-seat de Havilland Dragon's of airlines like Essex based Hillman Airways. In the mid-1950s the AA decided to re-enter the world of flying with the commercial hiring of aircraft for traffic spotting duties. The first noted use was the hire of a helicopter to cover the June 1964 Lawn Tennis Championships at Wimbledon, South London. The AA invited members of the local Metropolitan Police to send observers on these flights but, unfortunately, details of this noteworthy operation have not survived in official records or in the media.

It was a period of helicopter mania in Fleet Street, almost every other newspaper in London was hiring a Westland WS-51 for a month as a publicity exercise. In flying the helicopter from venue to venue emblazoned with the sponsoring newspapers name on its sides they clearly failed to notice the AA operation.

Shortly after the AA operation at Wimbledon, in February 1955, a long time proponent of police rotary wing flight, Inspector Bruce Dix of Gerald Row police station, Metropolitan Police, submitted a lengthy paper on the possible use of helicopters by his force to Scotland Yard. Dix had been a wartime RAF pilot, his primary rotary wing experience being born out of a private visit to see the NYPD and its helicopter fleet. The reaction of senior officers to his report was dramatic. As if no-one had considered the employment of helicopters prior to the appearance of his report, manufacturers and their agents

were immediately contacted and asked about their products. Many of these contacts led to trial flights and detailed reports of the impressions gained by those taken up. In an ongoing trials process, the range of helicopter types sampled included all of the types offered by British manufacturers and a number from the foreign market, including the new French Sud Alouette and Djinn models. The inspector played no part in all this feverish activity, his first reward came the following year with a Commissioners Commendation. He was not to be forgotten, and was to have a part in a number of future police operations.

Bruce Dix was not alone in his proposals relating to helicopter born police. In May 1955 the Police College Magazine [a vehicle first used by Dix in 1954 to expound his views] carried an article on the same subject. The students at the Police College produced individual thesis which were generally destroyed and lost quite quickly. However some appeared in the form of magazine articles which, although they were severely restricted in circulation, provided a channel whereby "radical" suggestions could be aired. The articles were the visible early entrants in a volume of views putting in print an idea some way from reality in the UK. Each of the writers was expounding upon a subject which remained hampered in the range of reliable information sources. Dix had managed to get to the NYPD, but very few of the others were afforded such luxuries. It was to be the blind leading the blind.

As a result of the lack of background information, some of the comments were to prove a little naive. In 1954, referring to air observation over large gatherings, Dix had stated that *"... the appearance of a helicopter, clearly marked POLICE would, in all probability have a steadying effect on those present... "*Written in times where the presence of a single unarmed police constable could have a similar, sobering, effect this might be true. Unfortunately, by the time large scale employment of helicopters became a reality, the world had changed and the actual appearance of police helicopters usually had a far less dramatic effect.

In spite of many difficulties created by the wartime German occupation, France was to be the leader in the re-creation of European air police. Modern France has three separate elements involved in law enforcement; two of these have direct access to the use of aircraft. The body that does not have immediate access to aircraft is the CRS [Les Compagnies Republicaines de Securite], the security arm tasked with airport security, motorway police assistance and life-saving in addition to its high profile tasks as an anti-riot and anti-terrorist organisation. The Police Nationale [PN], a body originally known as the Surete Nationale, is civilian police under the direction of the Ministere de L'Interieur. With this government ministry they now have the use some of the aircraft operated by the Securite Civile, a fleet also tasked with roles as diverse as transportation, fire fighting and Customs Patrol.

It was the third element that led the way. Although essentially a military arm under the control of the Ministry of Defence the Gendarmerie is an efficient paramilitary force which acts as the

civilian police force in peacetime and is incorporated into the military police in time of war. In their civil role they man around 10,000 posts throughout rural France. Made up of various groups, each of which fills a task within the whole, the air section is known as the Gendarmerie des Transports Aeriens, which translates as Civil Air Police.

In 1953 the Gendarmerie trialled a pair of American Hiller UH-12C helicopters. Early in February the following year a Bell 47G was acquired and after initial training was officially brought into service at a ceremony at Satory [Department des Yvelines 78] near Versailles and Paris. This single machine was initially used for traffic control and flood rescue with such success that within three years the GN unit was to grow to include a total of a dozen similar, Italian assembled, Agusta-Bell 47s, these in turn being joined, from 1957, by the French built turbine engine Sud Alouette. The initial Bell machine remained in service until September 1963.

The GN air unit served in Algeria during the violent troubles surrounding another African colonies struggle for independence from France. The height of the troubles was in the period 1955-1962, this being the period in which the fleet of Bell 47s proved themselves and expanded accordingly. As in France itself, GN duties included the keeping of civil law and order and rescue missions. Additional duties in Algeria included the evacuation of wounded personnel from the combat zone - a duty that belied the true military background of the GN. All in all the Algerian fight for independence from France was a far bloodier episode than that suffered in securing the independence of Kenya from Britain.

The pre-war leading exponents of police aviation with their hidden cache of warplanes - and of course a hidden agenda in the creation of the Luftwaffe - the Germans set about re-creating their lost police air fleet when they acquired a first helicopter for the Grenzschutzfliegergruppe, air support for the Bundesgrenzschutz [BGS], the West German Border Guard. The BGS is an organisation which, like the US Coast Guard it is virtually impossible to separate from civil law enforcement in spite of its military sounding title. The formation's reliance upon civil registered but camouflaged aircraft further confuses the distinctions.

The first helicopter, acquired in 1955, was similar to those that the French had trialled two years earlier, a Hiller UH-12B registered D-HABA. Unfortunately this remained in service only a few months before suffering terminal damage in April 1956. Full expansion of BGS air power was to await the arrival of a fleet of Sud Alouette II's a few years later.

Other West German police forces were also starting to use, and purchase, aircraft in 1955, but each of them chose the fixed wing solution for the time being. The most intensive users were the police of Niedersachsen, Hannover, they made use of a mixture of Piper, Cessna and Mooney fixed wing light aircraft, but also used some helicopters.

The Dutch State Police, then also a formation with a similar background to the French GN, also tentatively entered the field of police flying in 1955. In April 1955 an ex-military British military Auster III observation aircraft was acquired from the Dutch military and appropriately registered PH-POL. Inexplicably this Auster was only used for ten days. Less than two months later a second military Auster was also registered PH-POL and placed in police service. This example of PH-POL was to remain in service for eight years. The police in Holland have remained an aircraft owning fixed wing operator since 1955, helicopters were added to the fleet in 1976.

Clearly the equipment to send police flying, some of it British in origin, was readily available to those who possessed the vision and the financial will to proceed. In Britain progress was held back by the will to allocate money

In spite of the limited capabilities of the available machines, the same performance problems as faced by Bristol's and manufacturers across the world, the Westland Aircraft Co. was promoting both its WS-51 and WS-55 helicopters for a wide range of duties beyond their immediate capabilities. In March 1955 Westland's were pushing the technology forward and demonstrating the WS-51 at the Surrey Fire Brigade headquarters, Reigate, before an audience that included the Home Office and a number of chief fire officers in the south eastern region. Fire Brigade use of helicopters in Britain was to lag far behind both the police and ambulance services. In other parts of the world the environment was harsher and natural fires more prevalent. Where the need was far greater, progress was spurred on. With a low level of need identified in the UK, forest fires being rare, even manufacturers saw little call for such machines and it was not until the late 1990s that a suitable type was finally offered for service.

Repeating the earlier notice of 1946, in 1955, the Home Office circularised all the forces calling for a volunteer to take up the post of Instructional Observer with the Bristol Aircraft Company. This second circular was wider ranging in that is was not to be confined to Bristol types and it also related to the introduction of the C.D. War Duties Air Observer into police duties. The position was to travel around the UK in a helicopter promoting the type and instructing senior officers in its capabilities. The task was a plum opportunity for hundreds of men recently returned to the police from the RAF with observer skills. Of the many volunteers, Chief Inspector Norman Watson DFC, of the Nottingham City Police, was chosen. Watson joined the police in 1935 and, still a constable, he volunteered for flying duties with the RAF in 1941. Commissioned in 1942 he served as a wartime member of RAF Bomber Command for two tours over Europe. Giving up his rank of Squadron Leader, after the war he returned to Nottingham quickly receiving promotion to the rank of sergeant. Trained at the C.D. Staff College at Sunningdale, Surrey, and the Technical Training School at Easingwold, Yorkshire, by 1951 he had reached the rank of inspector and was appointed Training and C.D. Staff Officer. Further promoted to the rank of chief inspector in September 1954 he had been in charge of the Traffic Department prior to his new appointment. In keeping with his Home Office position, he received promotion to the rank of superintendent.

In September 1955 the Home Office set up a contract with BEAH, an operation managed on its formation in 1947 by Reginald Brie, for the supply of helicopters in support of Civil Defence operations. This may have been the result of the earlier Bristol Aircraft CD demonstration. If it was Bristol may have been somewhat disappointed as BEAH chose to employ the rival Westland-Sikorsky WS-55 G-AOCF as the primary aircraft allocated to the scheme. Short term technical problems with the WS-55 conspired to result in the examples of the Bristol helicopter in the BEAH fleet, intended to act as an engineering back up, taking a more prominent role.

Each of the helicopters retained its standard BEA colour scheme for these CD operations. The specialised role of the WS-55 became apparent with the addition of a large CIVIL DEFENCE logo, painted in red on each of the slab sides. The different, more rounded proportions of their airframes meant that while some of the Bristol's also carried similar examples of this titling; the result was smaller and less prominent. The relative unreliability of helicopters at this time resulted in numerous occasions where the machine in use often bore no CD markings at all. As the initial use of the hired BEA helicopters was directly linked to CD police involvement with them was rare, and then only on strictly defence related exercises. The Home Office later relented on its decision to restrict police use of the BEAH fleet to military, CD, manoeuvres.

It was initially intended that police use of CD helicopters for the broadened format trials would be restricted to the WS-55 G-AOCF. Again, events conspired to alter that. In addition to poor aircraft reliability, the main difficulty each of the police forces encountered in these trials related to poor communications. At the time there was no standard in police communications. As a rule officers on flying duties brought with them a state of the art mobile radio system, in those days a bulky "walkie-talkie" set, an item similar to those used by the army. These were often referred to as "personal radios" in reports but the description was not referring to anything of the dimensions current from the mid-1960s.

A further feature driven home to some forces during the course of this often far too brief trials, was that there were major differences between the accommodation offered to observers in the Westland and the Bristol. Clearly a number of forces familiar with the Bristol found it disconcerting to find themselves confined within the box like main cabin of the WS-55 and provided only with a small square window for observation. A number of them made their feelings known.

The Bristol was developed in Britain and the Westland was developed from a licence built Sikorsky design. In military service both types were used for similar duties, such as Air Sea Rescue [ASR] and transport at various times, but they were quite different. The Bristol was powered by a 550hp Alvis Leonides piston engine, this engine being mounted to the rear of the cabin and driving the main rotor via a short shaft which did not intrude into the passenger space. Both crew and passengers were grouped together in the same cabin forward of the engine. The total accommodation amounted to a maximum of

five, although the BEAH machines are thought to have had only four. By virtue of the layout of the accommodations all the crew were able to converse with each other, albeit by shouting, if the intercom system failed. In contrast the BEAH Westland fleet were virtually unchanged copies of the Sikorsky original. Powered by a more powerful 600 hp Pratt & Witney piston engine fitted in the front of the helicopter, below the cockpit and in front of the main passenger cabin, driving the main rotor by a shaft passing between the two and creating a substantial wall between the cabins. Many commented that the Westland engine, or at least its location, was noisier than hat of the Bristol. The main cabin was far larger than that of the Bristol and resulted in seating for up to eight passengers or ten troops in addition to the two occupying the cockpit. This was primarily a passenger carrying helicopter with little of its specification inclined towards full crew observation tasks. As a military ASR type it far outlasted the Bristol because of its ability to rescue more people. As was to be shown time and again, the design may not have suited police work, but it was in no way deficient in its primary military role.

The Westland was first scheduled to operate with the Worcestershire Constabulary from May 2 - 4. The helicopter duly arrived at the Worcester Police HQ for the intended trials programme, only to find that due to a crash involving a similar type; it was grounded from midday on the first day. A military WS-55 flying from the Boscombe Down testing station had inexplicably crashed from 9,000 feet at Bartley, Hampshire on April 30. Four, the military pilot and three civilian technicians, died in the tragedy. The grounding was a short term voluntary precaution on the part of BEAH and other operators pending investigation of the circumstances.

A replacement Bristol 171, G-AMWH, was quickly obtained. Between them, the standard presentation crew of Captain Pritchard, pilot, Mr Newey, engineer, and Superintendent Watson, the HO/CD liaison officer, managed to ensure the intended programme was carried out in spite of the time lost. This combination of crew attended each of the destinations in the short police demonstration programme. A total of 66 Worcestershire police officers mainly very senior ranks, were given air experience flights, although exercises were not attempted. From Worcester the helicopter was ferried east to the BEAH engineering base at London [Heathrow] Airport to be prepared for its next task.

The traffic approaching Wembley Stadium, London for the F.A. Cup final, between Manchester City and Birmingham, on May 5 1956 was observed by Metropolitan Police officers in the BEAH Bristol helicopter. In all, five flights were used to cover the event, four each of some 20 to 40 minutes length during the drawn out build up of arriving crowds and one, lasting 85 minutes, as the crush of people left. Each of these separate flights was undertaken from the BEA base at Heathrow. The use of the helicopter at Wembley was an operation and therefore the demonstration crew were not directly involved, although Watson did fly twice. The pilot was again Captain Pritchard, his passengers, although always three in number, varied in rank, experience and purpose. The common factor among those carried was Chief Inspector Jeffers, the designated observer. Jeffers

acted as R/T operator and [self appointed] photographer for the day. The other passengers included a number of interested senior officers, the most senior of whom was Assistant Commissioner Joseph Simpson OBE, later to serve as the Commissioner.

The weather on the day was kind, visibility being 3-4 miles from a height of 1,000 feet. The conditions allowed easy observation and the taking of some good quality photographs. The photographs were primarily intended to confirm the extent of the view from the helicopter to those officers unable to fly. The crew found no difficulty in picking out the small convoy of cars carrying the Royal Party to Wembley as it made steady progress along Wembley High Road 15 minutes before the kick-off.

The ease with which the helicopter was able to keep the slow moving Royal Party in view and the seemingly lethargic manner in which the tiny motor traffic and ant sized pedestrians arrived and departed from Wembley Stadium was something of an anti-climax for those in the helicopter.

At first R/T transmissions to the ground station, designated "Andrew", were not great in number. This gave the crew some time to come to grips with a complex code adopted for the identification of the traffic junctions and the congestion found there. One of the mistakes identified was that this attempted secrecy in the transmissions caused the message to become unclear to the recipient. As the crowd

of 97,916 left the stadium in a rush the helicopter crew were swamped with sightings of traffic chaos, then being faced with the difficulty of converting the information into the code prior to transmission. The code used was designed specifically for that day's operation and, although quite simple, was wholly unfamiliar. In the Metropolitan Police, the use of R/T message coding was not in itself a everyday requirement, and the widely used American system of incident codes was, indeed remains, outside normal operational experience.

Two days passed before a BEAH helicopter, probably the Westland arrived to undertake helicopter initiation for the senior officers of the County Borough of Southampton Police. With less than 390 officers serving a population of 197,000 the days of this police force as a separate entity were numbered. The Chief Constable, Charles Box OBE, had secured the use of the helicopter for two days, but having gained this facility he appears to have failed to make the fullest use of it. Box and 15 senior officers restricted their employment of the helicopter to providing themselves with air experience flights. Clearly there were to be a number of police forces in the scheme which, in retrospect, could be judged as failing to make the greatest possible use of the facility.

Assisted by knowledge gained during an earlier CD helicopter use, Glamorgan Constabulary plans for the use of the trial period were planned in some detail. Unfortunately the plans were to go awry.

Two days, May 10-11, were set aside for the south Wales force. The first day was almost a non-event as the wrong grade of fuel had been delivered for the Westland, delaying take-off until 1130hrs. Even with a late take-off it was still possible to undertake a limited period of liaison with locally manned PMC’s before they were scheduled to return to their depots. The situation was not improved by both of the police observers being violently air sick in the windy conditions, closely followed by the flight being curtailed by worsening weather conditions. On the second day, due to continuing bad weather conditions, no flying was undertaken at all.

Far from treating the whole affair as the unmitigated disaster it clearly was, Glamorgan were able to draw some solace from analysing the little they had achieved, even though most of it was clearly based upon the one day introductory trial earlier in the year. One thing was made quite clear; they did not like the layout of the passenger accommodation in the Westland for air observation purposes!

Failure to make the best use of the helicopter in the limited time available was not an accusation to be levelled at the next police force to play host to the CD aircraft - Nottingham City. It was home ground for Watson and undoubtedly he had more than a little input into the programme scheduled for May 14.

The first operation was in the morning at 1030hrs. Four flights, each from the grandly titled "Corporation Helicopter Landing Ground" on a site in Trent Lane, were undertaken in the Westland to report on traffic problems at various points in the city and plot them on the

control room maps. In the afternoon - from 1430hrs - a pure CD scenario was enacted. The helicopter was to meet up with a PMC at Ollerton, 19 miles north of Nottingham City, between Mansfield and Retford. The task of the PMC was to aid a supposedly atom bomb stricken built up area, where traffic chaos was encountered. The column was then to be directed into "Ground Zero" [the supposed centre of the bomb explosion] by the helicopter. An hour after this duty [of sending colleagues to a nasty death?] the helicopter was employed on a hunt for "enemy parachutists" on the Race Course at Colwick Park to the east of the City. It was intended that the WS55 would ferry ground search parties and dogs to the race course. The programme went ahead as planned with each of the modest goals being met.

The cautionary note in the subsequent six page Nottingham report to the Home Office, based upon locally gleaned information, was that the operating costs of the helicopter were prohibitive. It was considered that a purchase price in the region of £90,000 and £90 ph to operate would ensure that few, if any, forces could afford one.

Cheshire, the next user on Tuesday May 15, made no obvious attempts to undertake exercises with the helicopter. The helicopter was used only to convey two superintendents over the county on "air experience" flights, thereby effectively leaving a number of seats vacant. With so little apparent effort, it is no surprise that Cheshire, alone, failed to see any point in the employment of air observation for police purposes.

On the same day the Westland flew the short distance to Liverpool, to await use by the Liverpool City Police the following day. Although inexperienced first hand, Liverpool City was of course familiar with co-operation with the Lancashire Constabulary operations at Aintree for the Grand National. Operating from the playing fields of the police training school at Mather Avenue, all of the senior officers of the force were given air experience flights. In addition, two exercises were undertaken, one in the morning and one in the afternoon. Both of these bore a direct relation to CD activity although both also retained a peripheral application to normal duty in the communications field. Little difficulty arose with the R/T fit which, in any case, was operated at short ranges in both of the chosen city centre locations.

After a short break, when it is assumed that the helicopter returned south to Heathrow for maintenance, Captain Pritchard flew north and took one of the BEAH helicopters on to fly a total of 7½ hours with the most experienced post war UK user of aircraft in support of policing, Lancashire County Constabulary, on May 19-20. On the first of the two days, Saturday, Lancashire chose to employ the helicopter at on traffic duties covering the heavy flow of traffic towards the Lake District. Shortly after lift off there was a classic opportunity to display the ability of any aircraft in flight to report accurately the extent and cause of a traffic problem which was not apparent to ground based officers. On the A6 Preston - Lancaster road the helicopter crew were able to find at the head of a massive traffic queue a very slow moving large motor vehicle restricted to 5mph. This giant mobile road block was intercepted and put off the road by a police motor cycle patrol,

thereby solving the congestion at a stroke. Quite whether the driver of the problem vehicle held a similar view at his own consequent delay was not recorded!

There was one section of the 1956 Lancashire trial that clearly displayed that its originators were unaware of a technique already used with success in the past. The helicopter was employed in searching out and identifying a particular vehicle in the traffic flow. To assist the crew the vehicle *was especially marked with a small white cross on the roof*! It serves to underline that without the comprehensive recording of earlier experimentation, numerous experiments - in this case one undertaken by the Metropolitan Police using autogyro's in the mid-1930's - were being needlessly repeated. Again, as that earlier trial had shown, Lancashire Constabulary found that cross, or no cross, it was very easy to find the quarry in daylight.

The Saturday afternoon was spent operating the helicopter in support of the horse racing at Haydock Park, south of Wigan, taking the days flying total to five hours. Flying operations on the Sunday, resulting in the adding of a few more flight hours, were unremarkable. Throughout, the Lancashire Constabulary experienced no problems with wireless transmissions. Not many of the forces were able to make that claim.

After further one day maintenance respite the series of trials continued with the flying of a helicopter to operate with the West Riding County Police at Doncaster on Tuesday 22. From 1030hrs, the morning was taken up with a number of 15 minute air experience flights for a total of eighteen police officers, a tiny percentage of the 2,300 then on strength. The flying was undertaken from the grounds of Rossington Hall Special School, the local additions to the crew consisting of two chief inspectors and a constable wireless operator. The dedicated police communications van, manned by another chief inspector with a further constable wireless operator, being initially situated at Doncaster Divisional Headquarters, but later they moved to a position near Doncaster Racecourse. A number of duty car patrols were involved with the exercise as needs arose, and then only if not employed upon "real" police duties.

The primary purpose for the exercise section of the trials in the afternoon flying session revolved around the use of air observation assisting traffic control of congestion in time of war. The scenario was that a nuclear attack had occurred upon Leeds at noon, and fall-out had contaminated the area to the east around Tadcaster, this in turn causing the residents around Goole, even further east on the Humber to flee to the south and west, creating traffic jams around Doncaster. Other than the communications being found wanting, as usual, the trial went well, good quality photographs were taken and the officers of West Riding thought that the concept was proven.

The next day, Bristol 171 G-AMWG, was with the 1,280 officer Staffordshire County Police, having arrived the previous evening. Ensuring that the single day of helicopter use was adequately utilised, required a great deal of pre-planning work by officers of the host police force. Surviving records on the trials suggest that far more

detailed planning had been undertaken in the Chief Constables Office at Stafford than in any of the other forces affected by the 1956 trials.

The Stafford based trial, "Exercise Cop" - a code name showing a over simple brilliance that only a policeman could dream up - was operated from the grounds of the Force Training Centre, Baswich House, Stafford. As a helicopter landing pad, the choice of location was quickly found to be an error. The base station wireless equipment for "Cop" was at a site five miles away in a mobile police station at Pye Green. The Pye Green site was around 750 feet above sea level and the Baswich House helipad was at about 350 feet - with high ground in between - the result was that the two could not communicate until the helicopter was airborne.

In spite of all the forward planning difficulties abounded. In addition to the poor communications between base station and helicopter landing pad, most of the "walkie talkie" sets in use suffered problems throughout the day. Whenever the helicopter flew more than a dozen miles from base, because the mobile sets were using a similar wavelength, its signals were blotted out by those of the small Wolverhampton Borough police, a few miles to the south of Stafford.

Briefing at the Training Centre was scheduled for 0930hrs on the Wednesday morning. The first of six, originally eight, flights undertaken was lined up for 1100 and the last at 1500. Of the thirty passengers, almost exclusively drawn from the training branch, only one was a constable. In keeping with the thinking of the time, the involvement of constables in flying was rare, only a handful being directly involved in the whole 1956 series. It was to be many years before the economics of relying upon the lowest of police ranks to undertake the duty of observer was fully appreciated. Until economics intervened the authority of the rank of inspector, chief inspector or even superintendent, although it was a status unseen by those being directed, was deemed to be a necessary aspect of the post.

In the tight schedule of Civil Defence orientated trials, involving co-operation with local patrol cars from Cannock, Headquarters, Stone, Stafford and Lichfield, the Chief Constable, Colonel G W R Hearn, went aloft in the first flight to observe the area of Churchbridge.

The following flights were of the now familiar pattern relating to sending the helicopter into the supposed area of devastation to pave the way for the PMC vehicles its motor cycles and brave - or foolhardy - crews. In spite of the obvious limitations posed by the weak signals of the "walkie-talkie" radio sets in the area of Wolverhampton, the experience was judged to be a successful introduction to the world of helicopters in support of police operations.

There was another week long break for the BEAH demonstration crew, before they again returned to fly with the Metropolitan Police, this time it was duty over the Summer Race Meeting, the Derby meeting, at Epsom. The helicopter operation was scheduled for Tuesday and Wednesday, June 5 and 6.

Captain Reid of BEAH took WS-55 G-ANUK and a variety of police observers aloft over the Epsom area on the Tuesday in a rehearsal for the following, Derby, day. Great difficulty was experienced with the inter-communication between the pilot and police observer, usually Inspector Trendall, on the flight deck and the lesser observers in the main cabin. Those in the main cabin reported that they had great difficulty in shouting messages to each other - let alone gaining contact with the pilot and front observer. In the absence of an intercom or physical contact between the cockpit and cabin, the "walkie-talkie" radio sets used for air to ground communication were also intended for use in passing messages internally. Neither the air-to-ground nor the internal communication role was well served. Where the front observer was afforded an excellent view from his lofty position, the police staff in the rear was provided with five seats and could only look to the side of the flight path through relatively small windows.

The major differences in layout were underscored the following day when the Bristol 171 G-AMWH was used. Subsequent reports heaped praise upon the layout of the Bristol which, although there was no intercom, was found quieter and easier to observe from.

Both helicopters operated from the well kept grass of the golf links of the Royal Automobile Club [RAC] at Woodcote Park. The position of this club fortunately coincided with the usual position of the main police control area in the north-east of the race course. The police control point in 1956 was at Tattenham Corner, the 1921 control point lay immediately to the west and Buckles Gap, the mooring point of the 1924 balloon, was also close by the golf course. Later, in the 1970s, police helicopters alighted in the car parks in the same area. Much of this section has now been re-developed.

Flying commenced at 1140hrs on the Tuesday and 1028 hrs on the Wednesday. The first day was marred by wind, the second by almost non-stop rain. Because of the accommodation in the WS-55 only front observer was able to undertake operational duties. The four additional passengers carried in the main cabin were senior ranks and were quickly rotated as each of five 30 minute flights, ended. Most passengers were of superintendent rank upwards. One additional face from the past was Sidney Chamberlain. He flew for 15 minutes in the evening. As befits its limited seating, on the second day only three police flew in each of the six flights undertaken by the Bristol. The flying was restricted to times when no racing was being undertaken, one flight each day being allotted to Sergeant Carter of the photographic branch to record the events.

So ended the 1956 Home Office Civil Defence trials. The majority of the forces involved had made the best of the experience, most had also managed some flight time outside the CD spectrum. As has already been recorded, almost all forces declared a preference for the layout of the Bristol in the police role.

On July 26, 1956 another country showed that it was growing weary with the presence of European nations on is territory. The Egyptian President, Nasser, nationalised the Suez Canal. Although in distance

the man made strip of navigable water was far removed from Europe, both Britain and France possessed deep rooted financial interests in it. These interests were such that in the October both nations acted in concert and sent troops to secure the canal for their interests. "Operation Musketeer" was a startling success for both nations and the Canal Zone of Egypt was quickly captured by land, sea and air. Unfortunately, the world at large, particularly the Americans, was horrified and Britain and France were castigated and quickly brought to heel, resulting in an ignominious retreat.

Back in Britain, a major result of this military action against Egypt, in a period when neither attacking nation had its own oil fields, was that oil supplies to both were severely reduced. The effect on the CD helicopter operation was that the flying was cut back through the introduction of stringent fuel saving measures. Within weeks of the successful flying operations, no further police flying was deemed possible.

The halting of the BEAH CD operations was not the end of CD flying. In the same period as the helicopters were hired a parallel flying scheme was set up, primarily involving the employment of RAF fixed wing trainers.

Police force and fire brigade CD flying commenced in the summer of 1954. Employing a mixture of fixed wing and helicopter flights, military and civil aircraft, the primary task related to the employment of the light trainer aircraft in service with University Air Squadrons of the RAF. The scheme was to last just under forty years.

Following the thinking behind the creation of the PMC system, it was assumed that in war there would be a requirement for members of the civil emergency services to fly as War Duty Observer’s [WDO] with the Regional Air Squadron’s [RAS] of the Air Commander Home Defence Forces [ACHDF]. The UAS, which formed part of the RAS organisation, were to provide training in peacetime to familiarise those nominated as observers with their nominated war role,

There were two types of course evolved, neither of which involved a large number of hours flying for the individual observer. The Ab Initio Course allocated four hours flying, and the Refresher Course three hours fifteen minutes. With an annual maximum of forty hours allocated to each UAS for WDO training, little could be expected, but much was achieved. Most of the week each course lasted was taken up with classroom subjects.

The allocation of which UAS was to serve which police force was not as simple as it might have been. The Cambridge UAS logically served the Cambridge Constabulary and those in the nearby counties of Essex and Suffolk from their Teversham base and the London UAS was that linked with the Metropolitan Police, even though they were based in Oxfordshire. Some officers in Hampshire were also obliged to travel to Oxford rather than train with the local Southampton UAS at Hurn.

Formed as a means of attracting suitable young men to a flying career, the UAS system was created on Trenchard's command in 1919. Few formed before the war, but a significant number were located close to a variety of universities in the 1950s. Over the years, as the post-war RAF shrank, the number of individual UAS units was reduced by amalgamations. Immediately post-war the UAS units operated wartime equipment, but by the time the police started flying with them the Tiger Moth and Harvard trainers had given way to the de Havilland Canada DHC-1 Chipmunk. The fleet of Chipmunk's remained in RAF service well into the 1990s, for the UAS and the police however they were to remain only into the 1970s. From 1973 they were progressively replaced by the modern Scottish Aviation Bulldog.

Beyond the basic arrangements for WDO training, in the early years of CD training there was further activity involving the air arms of all three military services. The Army supplied CD training to a number of forces. Hampshire Police, known to be users of a BEAH CD Bristol 171 in 1957, also made extensive use of Army facilities at Middle Wallop in the period 1955 to 1961. Army aircraft types involved included the Auster spotter and the Skeeter helicopter. It is believed that Essex Police, and probably a number of others in their own regions, were given similar facilities by the Army at Colchester Barracks.

The RAF provided the major effort in WDO training, and not just through the UAS element. The RAF station at Thorney Island, Hampshire, on the south coast of England, was a base for a number of units. At various times it was the home of an Air Navigation School for air observers and navigators, SAR helicopters and military transport. Police from a number of forces were sent to the base to receive elements of their training alongside their military counterparts. A range of larger aircraft was added to the syllabus. The additional types included the Vickers Valletta and Varsity, as well as military helicopters. Eventually Thorney Island changed it role and closed and WDO training was restricted to the UAS. Whilst operational, the week long course at Thorney Island included a minimum of five hours flight time, whereas all refresher training was undertaken with the UAS on their Chipmunk trainers.

Like the CD helicopter operations before it, the UAS scheme was nominally restricted to the military activities of CD. In a number of instances this did not prove to be the case.

Metropolitan Police files show that the variety of aircraft types used by the police in the pursuance of CD operations was far more extensive that at first appreciated. Early in 1974 the RAF, in the guise of Air Commander Home Defence Forces, Training Command, formed "No.5 Region Air Squadron" [5 RAS] as the London area squadron in aid to CD flying. This was to be the War Duties operational formation, as opposed to a purely training arrangement. It was envisaged that in time of war the RAF would call in its aircraft from their parent formations, the police and fire observers and also take control of whatever air operations the police were then undertaking. By 1974 the Metropolitan Police were flying light helicopters owned by

commercial operators, and it is assumed that these would be, like all civil aircraft in time of war, requisitioned and assigned to the 5 RAS.

Squadron headquarters were at RAF Benson, Oxfordshire. Three flights were initiated, No.1 at Benson with six Bulldog trainers and a twin engine BEAGLE Bassett, No.2 at Abingdon with a further six Bulldog's and No. 3, also at Benson, equipped with helicopters. 1 & 2 Flights were to have two police and one fire officer attached, whereas 3 Flight were to be assigned three police and a single fire officer. The helicopters assigned to the latter varied, reflecting the types in service with the RAF at the time. In 1974 they were stated to be five Whirlwind, one Wessex and one Sioux based at Northolt. In 1974 a number of other aircraft were mentioned in connection with this proposal, the types included the Westland Sea King, Puma and Scout helicopters and fixed wing types such as the de Havilland Devon transport. With the passing of some of these types from service the duty would fall upon later types including the Westland Gazelle and the Boeing Chinook. The second line aircraft of the experimental stations at Farnborough and Boscombe Down were to be assigned in this role.

Actual contact with the police and fire officers intended to man this scheme was rare. In most cases co-operation was restricted to no more than engineering contacts to ensure that current police radio equipment would be compatible with that in the aircraft.

In spite of a comprehensive review of the training schedules a year earlier, in1977 it was seriously considered that the practical benefits to be derived from WDO training had run their course and that the scheme should be disbanded. This proposal was disregarded and the scheme continued for another fourteen years, until outside forces brought about its demise. The final courses were taken in the early 1990s, final closure of the scheme being brought about by the assumption that it, and CD in general, would not be needed in the wake of the collapse of Communism in Eastern Europe.

Following the initial mention of the scheme in June 1954, for most nothing further was heard until a Home Office Memorandum was issued late in 1956. This later document called for the submission of names of police and fire officers who could be trained up as CD Air Observer's for "Bomb Reconnaissance" - the original term for the WDO. The memorandum went on to suggest that anyone selected would be considered by his chief officer as suitable for further promotion. A very juicy carrot for some.

How the CD scheme affected each individual police force is not known, but one man in Hampshire Sergeant Jack Hamblin, left some notes on his own pioneering experiences. In Hampshire training commenced on November 12-13, 1956 with a Radio Telephony Procedure Course undertaken at Hulse Hill, Southampton. Four men attended in addition to Jack, George Mansell a senior officer with the Southampton Borough Police, Mr. Ticknor, a senior Hampshire Fire Officer and two unidentified CD officers. The course was taken by an instructor from the Home Office.

A ground navigation course followed on November 21-22, this in turn being followed by an air observers flying course held from November 27-30. The course was flown from Southampton [Eastleigh] Airport in one of the BEAH Bristol 171s piloted by Captain Dibb. As can be deduced from the shortness of the course, the standard was very elementary. Fortunately a number of the trainees were able to claim some prior RAF flying experience.

Jack Hamblin

A revision flying course was held from June 3-7 1957 after which the five were considered to be competent to fly over an area devastated by an atomic bomb explosion, impassable to ground observers, and assess the extent of the devastation, entry and exit routes, depth of rubble and so on. Hamblin, ex-RAF aircrew with a DFC to his credit, was later a participant in several CD exercises of which two in particular were memorable.

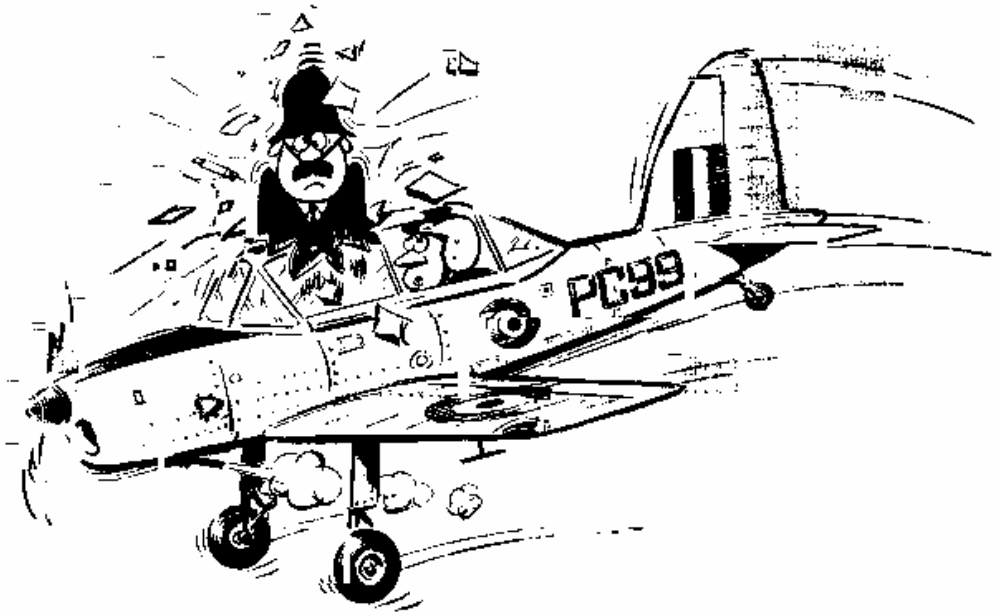
On one of those rare warm and sunny mornings, he took to the air from the grass field at Middle Wallop in a military Auster AOP with flown by a young army officer pilot. Their destination was supposed to be somewhere in the north of Hampshire and they had ample time to spare. The pilot, knowing that his passenger was ex-RAF aircrew, allowed him to take the controls as they set off south, towards the seas around the Isle of Wight some 20 miles away.

They became so engrossed in the pleasures of flying low over the calm sparkling sea in the Solent that they only realised far too late that they no longer had time to make the scheduled rendezvous north of Middle Wallop. Undeterred, their observation report was read from a prepared script some miles from the actual site. Fortunately, the subterfuge passed completely unnoticed.

On another exercise Hamblin was again the observer on a flight out of Middle Wallop. In a Saunders Roe Skeeter, a small two seat helicopter with a background in the old Cierva Company, his pilot was to take him to undertake an exercise in the east of Hampshire during the late afternoon. On this occasion the exercise was completed

satisfactorily, and the pair was returning to the base airfield, when they encountered deteriorating weather conditions. The situation resulted in the pilot electing to fly at low level in order to identify features as an aid his map reading. Seeking assistance to aid his own disorientation, the army pilot asked the local Air Traffic Controller [ATC] where they believed he was. He was told that they were slightly off track and must look out for the approaching high ground east of Winchester. Wholly unexpectedly, a well known landmark - a tree topped hill known as St. Catherine's Hill - loomed ahead, above the Skeeter! Fortunately, the pilot's reactions were instantaneous, the Skeeter avoiding a collision with the trees by inches, with the down-draught flattening the tree tops and scattering leaves as they passed.

Jack Hamblin's next CD involvement was his attendance at Bicester to fly in Chipmunk aircraft with the Oxford UAS from September 26-30, 1960. The same group of five, all comfortably accommodated in the Officers Mess, complete with personal batman, were still together for this week long course.



Air Clues

It promised to be a congenial week's holiday for the group without too much stress. Unfortunately, during an unofficial aerobatic session Hamblin suffered the recurrence of eardrum trouble which had bothered him during his RAF service. It led to his final withdrawal from CD flying duties after a run of four years.

On the opposite side of the world, in Australia, since the demise of the New South Wales Anson progress in police aviation had been at a virtual halt. In October 1955 Australian National Airways Pty Ltd [ANA] announced that they were expecting to receive their first helicopter, a Bristol 171, the following month. The delivery did not take place on schedule due to customs problems. In February 1956 rival Trans Australian Airlines [TAA] announced their own plans to import their first helicopter, a Hiller 12C. This announcement was

followed by the government finally confirming that both of these helicopters could be imported. At the end of April the Hiller, VH-THA, was assembled and test flown at Essendon, Victoria. The ANA Bristol, VH-INO, did not arrive in Melbourne until early May.

The demonstration of the first of this helicopter duo to police took place on May 7, 1956. The TAA Hiller, the first of a fleet of six, was put through its paces in front of the police and journalists in the State of Victoria. It is uncertain whether this demonstration machine was fitted with the large pontoons typical of the TAA fleet.

Not wishing to be further overshadowed in the field of demonstrations and publicity by the Hiller of its rival, ANA's Bristol 171 was test flown at Hobart, Tasmania, four days later and quickly put to work. On May 23 the helicopter was taken to Sydney by road in order that it could be demonstrated to the police there - the primary use being seen as traffic control. In spite of its earlier history in aviation, the NSW police could not justify the capital cost of the helicopter for that type of operation.

In the mid-1950s, Bristol Aircraft had teamed up with Pye of Cambridge Ltd., television equipment manufacturers, to investigate the range of possibilities in broadcasting television pictures from a Bristol 171 helicopter to a ground station.

Twenty years after the BBC had opened up the first television station, the principal of broadcasting television pictures from the air to a ground station was by no means new. Closed down for the war, public service transmissions had resumed in the summer of 1946 and conventional outside broadcasting in October 1948. In 1950 a signal were transmitted across from France, 95 miles to London, and in September 1950 the first air to ground transmission was undertaken from a fixed wing aircraft operating out of the RAF Station at North Weald, Essex. The platform for that occasion was a large twin engine freighter, the Bristol 170, and the occasion was tied in with conventional transmissions covering an air display at North Weald.

The trials at that time were held back by a lack of standardisation. Television programmes could not be exchanged with Britain's neighbours – France used 819 lines, Germany and The Netherlands used and the BBC used 405 lines – but that disadvantage was overcome by 1953 when a converter was devised. Even then recording programmes for other more distant audiences relied upon taking films of a TV monitor screen.

BBC activities progressed slowly and encompassed a number of different aircraft as the camera carriers in transmitting public interest storylines at peak periods. The cameras used on these flights were large and heavy, but the introduction of some ingenuity managed to ensure that overall weight was held down and the picture kept up to an acceptable level. The Pye/Bristol development programme was primarily designed to miniaturise the equipment and, in the face of helicopters with limited lifting power, reduce the weight that they might have to lift. In 1956 technology continued to use the bulky glass radio valve. Fairly fragile and even at its most minimal state, inferior,

far larger and heavier than the transistor that eventually superseded it.

Compared with modern miniaturised television, some elements of the 1956 system were heavy. However taken overall, at 400 lbs., the black and white transmission system displayed a weight not unlike a 1980s colour successor, the Marconi Heli-Tele. As might be expected, by the 1990s weights for vastly more capable multi-sensor turrets had plummeted to under 100 lbs.

These trials were a curtain raiser for modern airborne installations, a number of likely groups being invited to a display of the equipment early in January 1956. The Bristol chairman stated at the time that the two companies were offering the heli-tele system on free loan to police for use at the River Thames Boat Race and the football Cup Final if required. In the latter instance this offer had been invalidated by the subsequent offer of CD helicopters, albeit without the tv system, from the Home Office.

It was a high profile demonstration. A variety of officers from county and city police forces, a brigadier and two colonels from the War Office, and a party of five senior officers from Scotland Yard attended the first demonstration of the Pye system at Filton on January 11.

The weight of the Pye system and the limited performance of the Bristol 171 resulted in a situation similar to that experienced by the 1932 Derby Day autogyro. Little spare lift was available and the Bristol was obliged to fly with only the pilot and a single camera operator. The picture was captured upon an movable "Industrial Television Camera", weighing only 8½ lbs., transmitting in black and white to an airborne 4½ inch by 3 inch monitor. The ground based monitor was a more substantial 14 inch domestic model.

The equipment was very much a temporary fitting in the company Bristol 171 demonstrator G-AMWI. It was bolted in the rear of the cabin area utilising the existing traverse mounted stretcher points, the minimal rear seats being folded up out of the way on the rear bulkhead. The aerial for the equipment was literally lashed to the skid protecting the extremities of the rear boom thus it was claimed, circumventing the requirement for a "proper" and costly modification programme. The television camera operator for the January demonstration, and occupying the reversed co-pilots bucket seat on the port side, was Mr. John Downes of Pye. He had been responsible for the development of the technique used whilst flying. As the only person on board beside the pilot, Downes not only had the selection of picture to decide upon, he was also responsible for the quality of the signal transmitted to the viewing room situated in a part of the airfield flying school. Anyone aware of the unpleasant idiosyncrasies of 1950s television technology will not envy him his position.

It is hardly surprising that the quality of the air to ground transmissions varied considerably as Downes alone undertook the work of cameraman and technical back up team without the assistance of modern automatic test and balancing equipment to assist him. Once clear of the ground, with transmissions settling down from a height of between 500 and 1,000 feet, good quality pictures were seen from distances of about 8 miles. After returning to Filton the tv equipment was removed within ten minutes in order to demonstrate the rapid return to passenger configuration. The tone of the resultant police report on the demonstration could be described as showing a degree of restrained enthusiasm. It was of course a little early to judge with certainty the worth of the equipment. This trial preceded the CD flights mentioned earlier, and until then the Metropolitan Police had not undertaken an official trial in the Bristol 171, leaving some senior officers unaware of the capabilities of the airframe element of the television trial combination. When this fact came to light, a few days later the Home Office ensured that one of the CD Bristol's was briefly made available for this task. The intention to allow the Metropolitan Police to use CD machines for sporting events later in the year was already formed.

After the CD trials, in September 1956, Bristol Aircraft and Pye again held a demonstration of their developing heli-tele system. Set up for September 20, a different venue was used for this further test. Parker's Piece was a large public open space in the town centre of Cambridge close to the Pye test facilities. The Cambridge demonstrations drew attendance of observers from the police, the military [including the USSR], the Home Office and the BBC. A slight improvement in viewing conditions was hoped for by the inclusion of three 21 inch television monitors in place of the single set in a city centre hotel adjoining Parker's Piece and a minor change in the position of the aerial on the Bristol. This aerial was now placed further forward, below the cabin and slightly to the rear of the aft passenger seats. It was still lashed in place to obviate the need for a modification programme. In anything, in spite of reduced transmission distances, the resulting demonstration showed a deterioration in the quality of transmission over the January trials.

The Pye airborne system was quietly dropped around the period the company became part of the Dutch Phillips Group. The Pye trading name was then reduced to little more than "badge engineering". It was a Marconi-Elliott system - "Heli-Tele" - still twenty years in the future, that eventually served the initial UK police market.

CHAPTER SIX

Light aircraft hold sway

The qualities that helicopters could bring to law enforcement aviation were clearly proven. Accepting this fact, many countries across the world sought to acquire rotary wing aircraft to take them forward. Unfortunately, in Britain even if the case were proven, the money was simply not made available and a fifteen year period when all advancement was made on fixed wing aircraft commenced.

Eleven years after the end of the war the AA were still experimenting with the way forward for their own future in aviation. By 1956 they were making use of aircraft hired from Morton Air Services based at Croydon Airport. The primary type used was an Airspeed Consul light twin, G-AIAH.

In a move that was to prove important to the advancement of police aviation, the AA eventually purchased an aircraft of their own, late in 1956. The chosen type was an Auster, in the days before the widespread availability of "personalised" registrations, it was appropriately registered G-APAA. In accordance with the custom of the times, in 1956 the spotter aircraft offered four seats, the pilot, an observer and one space taken up by the wireless equipment. The motoring organisation offered the spare seat to any interested parties, subject to the operational needs of the AA.

The police were within the acceptable range of those offered this generous service. The means by which the spare seat might be obtained for police use was flexible. In a typical instance, the Auster was operating on behalf of the AA over the traffic attending the Epsom Derby of 1957. Its immediate task completed, the aircraft landed close to the race course and the shortly afterwards the crew was approached by a traffic police sergeant enquiring after further information about reported traffic problems in the vicinity. Without further ado the AA crew invited the sergeant into the aircraft and all three took off to seek and observe the problem first hand. Upon his return to earth, the sergeant, Ron Potter, was able to send the necessary messages required to untangle the problem. From such small beginnings as this police use of the spare facilities offered by the AA was to grow immeasurably.

The Buckinghamshire Constabulary hired a number of fixed wing aircraft, mainly for sporting events. It was suggested that this activity was prompted by CD activities, but the reason for this suggestion has not been explained. The first of the Buckinghamshire aircraft hire operations was for traffic control duties at the Silverstone motor racing circuit on July 13, 1956, the British Grand Prix. As mentioned in relation to the 1953 Ryton helicopter trial, Silverstone lies in the County of Northamptonshire and policing of the immediate confines of the location was therefore the responsibility of that Force. Reflecting the similar arrangements between Liverpool City and Lancashire in place for controlling traffic at Aintree, the Buckinghamshire Constabulary took responsibility for approach roads situated to the

south of Silverstone. In order that undue strain was not placed upon the 680 officers in the Force they chose to use an aircraft to assist them. There is no suggestion that Northamptonshire either operated their own aircraft, or gave direct financial assistance to the Buckinghamshire hiring.

The aircraft used by Buckinghamshire were hired from the Herts & Essex Aero Club at Stapleford Tawney, Essex. The type selected for the task, the de Havilland Hornet Moth was, at £4.15s [£4.75p], then the cheapest on offer from Herts & Essex. The small two seat bi-plane, left little room to manoeuvre for the observer and pilot seated side by side in the compact cabin, but afforded a reasonable aerial platform for short duration traffic patrol flying.

On the morning of the race the Hornet Moth, G-ADOT, set off from Stapleford piloted by one of the club instructors, Jim McMahon. Jim landed at the Northampton Airport, Sywell, picked up his police observer, an unidentified Buckinghamshire Police sergeant who had been a former RAF rear gunner and set off for Silverstone. Almost as soon as the pair arrived they were called upon to help deal with a serious road accident near the circuit. With their initial input primarily restricted to identifying and calling in ground units to cope with the smash, they quickly found themselves able to provide those on the ground with a concise overview of the resultant traffic tail backs.

The aircraft returned to Sywell whilst the real business of the day - the motor race - got underway. As Jim and the sergeant rested, Fangio swept to victory and refuelled and refreshed the pair took to the skies again in the Hornet Moth and watched over the further chaos as the crowds made their way homeward. In all, one hour and forty minutes of patrol was undertaken. When Jim flew back to Stapleford the following day, the positioning flight time, spread over two days, matched exactly the total time upon which the police had undertaken their observations.

In June 1956 there were problems with British railway network. After failing to obtain the use of one of the Home Office CD helicopters to undertake the task Scotland Yard approached Hunting Air Surveys Ltd., an associate of "Aerofilms", to arrange for the taking of

photographs of traffic movement. On two occasions Auster aircraft were chartered to undertake the task. There was no direct involvement of police observers with these flights, but they succeeded in providing a link between the police and the company just at a time when they needed to locate a light aircraft for hire.

On Bank holiday Monday August 6, 1956 "Aerofilms" arranged for the supply of an Auster for the use of the Metropolitan Police. For this flight, merely a trial to accommodate a small number senior officers and enable them to gauge the possibilities offered by the use of light aircraft, no police R/T was carried.

One of two passengers carried on the first of two flights was Sidney Chamberlain, undertaking just another of his last few flying appearances prior to his retirement from the police in 1961. Sidney was accompanied on the 1800 hrs take-off flight by a superintendent. The second flight, which lifted off at 1910 hrs, took up an assistant commissioner and a commander. Both flights were restricted to observation of the south western area of the Metropolis, Staines to Epsom.

The experience cost the police a total of £47, which was found to be rather expensive in comparison with prices later quoted by other operators. The main reason for this was that it had attracted a substantial arrangement fee. It was to be money well spent in the light of the fuel crisis created in the wake of the invasion of the Suez Canal Zone.

At subsequent planning meetings, chaired by Chamberlain in his role as Secretary, it was generally agreed that the Auster trial had been successful. It was thought that the best observation height was between 1200 and 1800 feet and that, with the small size of the type, the police crew should be confined to a single observer who would also operate the R/T. The Auster was nominally a 3-4 seat aircraft, but over the years this was whittled down for safety reasons. A problem quickly identified was that with its slow speed and limited fuel, a single Auster would be incapable of ranging far and was to be confined to the outer reaches of about one quarter of the half a million acres of the Metropolis. This problem was exacerbated by existing prohibitions on the single engine type flying over built up areas, the aircraft being obliged to undertake a circuitous route around the urban sprawl. Eventually, the hiring of extra aircraft was to be answering that problem. The deliberations about what to do about hiring traffic spotting aircraft were lengthy. No substantial decisions were reached for over six months.

It was 1957 before the Metropolitan Police finally decided that they would proceed with the Auster operation in preference to using helicopters. As a result applications were sought from officers who might think they were suitable to fill the role of observer in the coming year.

The offer of the flying role was not open to many. Qualifications deemed necessary were that the applicant should have some prior low level flying experience, be skilled in air-to-ground recognition and,

the most stringent requirement, and be one of the relatively few CD Instructors employed by the service. Officers of the rank of superintendent were to be preferred. In spite of the stated preferences, there were forty applications. Among the successful applicants was Chief Inspector Jeffers, observer on the 1956 Epsom helicopter flight, Inspector Arnott from the East End, Station Sergeant Jeffrys from Training School and Sergeant Jack Dennett, a Traffic Patrol officer from Barnes, South London. Those superintendents that were successful in their bid to fly failed to retain their flying post for very long as sense eventually prevailed and the services of the less highly paid ranks were usually preferred.

Over the next few months, even as the observers were being selected, an intensive period of planning was undertaken by the B [Traffic] Department to decide upon the form of future operations. The team was under the command of Chief Superintendent John Bidgood, one of the group of officers involved in the "Pye" tv trials the previous year, and a great athlete and champion walker. His immediate assistants were Superintendent Colin Walton and Sidney Chamberlain.

By the time the newly selected observers had arrived on the scene the general outline for Auster flying had been decided. The majority of the flying would be directed towards the overseeing of Bank Holiday traffic in and around the approaches to the Metropolis, mainly affecting the routes to and from the coastal resorts.

At that time the British people at large had yet to discover the delights of the foreign holiday. The majority of the populace remained content to take unsophisticated annual breaks and public holidays at seaside resorts only an hour or so from the major population centres. Prior to the establishment of the network of motorways, this periodic mass migration of London area residents by motor vehicle caused great traffic jams in the suburbs. Fortunately private car ownership was not then as extensive as it became, the difference was made up by the modest dimensions of the roads. All observations by the air unit were to be transmitted directly to the Information Room at Scotland Yard, and it was their duty to arrange for a ground unit to remedy the problem. On a number of occasions that ground unit was to be a water-borne launch of Thames Division.

It became clear at the initial open conference attended by all concerned that a majority of the more senior officers had not flown, even a passengers. Even those present claiming a limited experience of flight based their experience on a mixture of short manufacturers' demonstration flights and trips across the Ruhr on a bombing mission undertaken in aircraft far larger than the Auster. Sidney Chamberlain was the only person present with extensive knowledge of police flying, but he was the first to point out that his experiences were now twenty years earlier, and probably out of date.

After the open meeting those directly involved in the practicalities of planning operational procedures set to work. The use of flying maps was quickly dismissed from the plans. The pilot would retain his airways maps for navigational purposes, but the observers were to

operate exclusively from road maps. A range of standard folding road maps was obtained straight off the shelf from a retailer, Stanford's in Whitehall. With these the new team set about putting together crude flight plans aimed at taking in known "hot spots" on the road network. Initially it was envisaged that only the western approaches to London were to be covered, a task that would only need the services of a single aircraft.

Vendair [London] Ltd., based at Croydon were accepted as offering a competitive hire charge, at £5 an hour for their Auster 5 G-AKXP. Even allowing for the sub-contract premium it had attracted, this figure from Vendair was a marked improvement upon that the police had agreed with "Aerofilms" a few months earlier.

Vendair managed to reduce its overheads considerably by employing part-time qualified pilots. The part-time pilot involved in the police contract was Trevor Prytherch, a local schoolmaster during the week and often available for the holiday periods that the police chose to operate most flights. Trevor worked in conjunction with Charles Oman, a professional pilot destined to progress into airline piloting after his days with Vendair.

Two light aircraft flights were scheduled for 1957, Wednesday July 17 and Monday August 5. The July flight was for crew training and that in August was to cover traffic attending a late summer meeting of Epsom Races. The performance of the Auster allowed for the carriage of the pilot and two passengers, neither of whom was to be heavier than 14 stone [90kg], plus 45lbs [20kg] in equipment. The equipment quota was largely taken up with the weight of the trusty valve technology "walkie talkie" sets.

At the last moment the first flight was in danger of cancellation. On July 11, Vendair realised that they could not fulfil the police contract as the assigned aircraft was going to be delayed on a prior contract. Fortunately another aircraft was found with another operator.

The alternative aircraft was found with the Denham Flying Club. On schedule, the threatened flight went ahead from Denham, on the borders of West London and Buckinghamshire, in another Auster G-AGVJ. The pilot for the flight was Squadron Leader J Hamilton, a club flying instructor. The aircraft was noisier than any of the Auster's previously flown in. Speech was difficult in the cabin, but not serious enough to require the fitting of an intercom system. The high noise level did cause some difficulties with listening to the portable police radio.

As had been the case with previous Auster flights, the police crew on this flight were high in rank. An assistant commissioner and Sidney Chamberlain took the first hour long flight over the West London traffic jams from 1600hrs. a commander and a superintendent followed. Ground based communications were set up at Richmond Park in the south west and Denham in the north west. Transmission and reception of signals were good.

The Denham Auster also flew the August operation. On this occasion the operation was undertaken from Croydon, with flying commencing at 1730hrs. For this flight a number of modifications had been incorporated. The fitting of a rudimentary silencer solved the majority of the outstanding noise problems and the fitting of a modified microphone to the portable radio was also deemed successful. Again the flights were undertaken using the most senior observers. Sidney Chamberlain and Superintendent Fairbank observed on the first 40 minute flight and Superintendent's Bidgood and Gahan undertook an engine running change over to fly in the second. On this occasion the communications were reported as poor, although the aircraft radio operated impeccably, the transmitter at Scotland Yard went out of service and could not be repaired on the night.

A total of 3¾ hours flying, charged by the Denham Flying Club at £5.5.0d [£5.25p] an hour, had attracted a total bill of only £19. In comparison with the earlier experience this was more than reasonable.

It was accepted that the operation would expand, but assumed that the forthcoming bank holiday traffic operations would involve only the

two Auster aircraft from Vendair and Denham. Little thought had been given to providing a similar aircraft to cover the heavy traffic flows to and from the East Coast resorts. The prime reason for this lay mainly with the preponderance of senior officers more familiar with west and south London attached to the unit. One of the new aircraft observers, Inspector Arnott from Ilford police station in the east suggested the use of a third aircraft to cover the bank holiday road traffic to senior officers. As a result of his suggestion, the inspector and Hendon Training School Sergeant Jeffrys were sent off in a police car to observe the continuing flying operations by Buckinghamshire at Silverstone.

The British Grand Prix was not held at Silverstone in 1957. The air operation using the Herts & Essex Hornet Moth continued but was directed towards lesser meetings at Silverstone. It was one of these meetings, on Saturday September 14, that attracted the visit of the Metropolitan Police officers, Arnott and Jeffrys, on their fact finding mission. The pair arrived at the Buckinghamshire Constabulary Control at the Silverstone Circuit after the two hour car journey from London, at 0800hrs.

The police operations room was equipped with two R/T circuits, one for the units serving the event, including the aircraft crew, and the normal force radio traffic, one public telephone and a field telephone system. All very rudimentary, but reasonably efficient.

After being notified that the Hornet Moth and crew had landed the pair of visitors set off to meet up with them at Sywell. The police observer on this flight was Inspector Thomas and the pilot Mr. S Brisk the Senior Assistant Flying Instructor with Herts & Essex. The two inspectors and the sergeant had met each other on a CD course, this giving rise to the mention of the Silverstone operations.

Herts & Essex were then offering four types of aircraft suitable for police use. The single engine Hornet Moth and Auster were available at an hourly charge of £5, the Miles Messenger and the twin engine Miles Gemini [G-AKHB the 1949 Lancashire Police aircraft] were both charged at £8 an hour. As a direct result of the short visit to the Buckinghamshire operation at Silverstone and Sywell, Auster J/1 G-AHHN was hired from Stapleford to undertake the projected East London section of the bank holiday traffic observation.

During the following month the Home Office agreed that the operation could spend up to £200 operating Auster's in the 1958 flying year. This figure was for flight hours and pilotage, the police element not being accounted for. An additional amount was sought to equip the three aircraft with a Pye Ranger PTC FM 8002 R/T system. Putting the use of the portable radio system behind them, an aircraft modification scheme was put in hand to put the standard car radio in the aircraft. The radio was designed to be removed to a local police station after each police flight, but the wiring for the power and the aerial remained for use on the next occasion. In the long term the repeated removal of the radio box and microphone was to have its drawbacks in relation to the reliability of the connections, but it was still a general improvement over the older radio system. The resulting

modifications to the aircraft were long and drawn out, the costs eventually rising to £500 over the three aircraft. Even with the undoubted assistance rendered by Ministry of Civil Aviation exemptions and airworthiness easements, the system involved a great deal of red tape in the approval of the installation. It was just such official difficulties that led to the temporary lashing of the aerial to the Bristol 171 the previous year.

Flight training for the London Auster operation finally started in March 1958. With the decision to reduce the police crew to a single officer, a host of superintendent observers and operators had been considered and finally rejected in favour of the three officers who were, by virtue of their status as qualified radio operators, eventually to sweep most of the opposition away. They were Inspector Arnott, Station Sergeant Jeffrys and Sergeant Dennett. They were each to play a major part in the planning of operations and, more importantly, to fly in the Stapleford, Denham and Croydon aircraft respectively.

The Croydon aircraft, Vendair's G-AKXP flown by Charles Oman, was used on the afternoon of Tuesday March 18 to fly a number of senior police officers around south western areas of the Metropolis prior to actual traffic control operations. Three flights were undertaken, each with a different crewing combination. Sergeant Dennett flew in the first two flights, the first with Supt. Stevenson, and the second with Supt. Darrell. During the third flight Oman took up Supt's Morris and Lyddon.

On each of the flights the intercom system was found to be poor. The R/T call sign assigned to the aircraft was "Whisky one", calling the special base station at Scotland Yard "M2GW", or "GW" for short. The main Information Room at Scotland Yard was "M2MP".

The following afternoon the Denham aircraft, G-AGVJ, flew its trial flights. Between 1500 and 1700hrs the aircraft flew across the NW segment of outer London, again as "Whisky one". As with the Croydon flight, the policemen flying with the pilot, O'Collins, were regularly changed to spread the training load. In the face of small snow storms, the three "Whisky one" flights undertaken from Stapleford [Abridge] took place on the afternoon of Thursday March 20, with Inspector Arnott as radio operator.

Over the Easter bank holiday, Monday April 7, the first in which the modified R/T system was available, all three aircraft were employed in observing the heavy traffic as it made its slow progress homeward through the approaches to London. The aircraft were allocated the call-signs "Whisky one", "Whisky two" and "Whisky three" and in this instance carried two police crewmen in addition to the pilot. Whilst the Abridge aircraft enjoyed excellent communications, the other pair did not fare so well. The pair in the Denham aircraft, Chief Inspector Jeffers and Sergeant Jeffrys, suffered an almost total blackout of signals.

Although the wisdom of the decision was later questioned and changes made it was arranged that the three aircraft would each operate for 90 minutes in the afternoon, the take-off times being

staggered to provide the operation with coverage between 1530 and 1830hrs. It was hoped that the last aircraft would be available to assist with persistent traffic problems after the others alighted at the end of their flight. None of the pilots liked this idea. This should have been no surprise as the need for the three aircraft arose partly because one aircraft could not be expected to cover ore than one section of the Metropolis. Bowing to the wishes of the pilots, the 1959 flying season featured standardised times.

After an operation on May 3, air coverage of the Cup Final at Wembley Stadium by the Denham aircraft, further work on the R/T system was undertaken. The performance of the R/T was noticeably improved. These improvements were reliant upon the aircraft modifications, a fact clearly demonstrated when an unmodified Taylorcraft substituted the damaged Vendair aircraft on August 4, 1958 and displayed unacceptable R/T performance. The police crews were halved due to weight considerations from May.

The availability of spare flying time during the early flights undertaken in 1958 allowed the crews to scout intended locations and routes in the vicinity of scheduled future operations. This did have drawbacks, as the crew of G-AKXP found that spring. Early reconnaissances of the approaches to Epsom Racecourse were highly instructive to the crew in April. Unfortunately, in June when the Derby meeting was being covered by the aircraft, they could not see a great deal of the royal convoy they were escorting as the trees lining the route had inconsiderately grown a mass of leaves in the intervening months! Aside from the problems created by foliage, escort duties highlighted a facet which was not wholly solved for many years, positive identification of the target. In this period the problem was exacerbated by the majority of motor vehicles being black. The application of a range of colours was largely restricted to coach built vehicles, high priced cars and commercial vehicles. Most official vehicles and police cars were black.

Sergeant Dennett submitted a suggestion requesting that at least one vehicle in each convoy be clearly marked with an orange spot on the roof. Years later roof markings were adopted for a range of vehicles and, probably coincidentally, a variation of the Dennett suggestion was eventually adopted as a major part of the roof marking adopted for police vehicles in UK police forces.

All three aircraft were scheduled to fly at the same time only at the time of the heavy bank holiday traffic flows. In 1958 this was Whit Monday, May 26 and August 4. On all other occasions only a single aircraft flew in support of a single special event. Throughout the operation of the Auster scheme these special event flights affected only the Denham aircraft at Wembley and the Croydon aircraft at Epsom. In 1958 the latter task created the greatest effort, the scheduling of six hours flying required the use of two pilots sharing the task. An additional task undertaken on this flight was the taking up of Chief Inspector McGregor of the City of London Police, complete with movie camera, to take footage of traffic jams for inclusion in a training film "Traffic Control".

From late May as the call-sign at Scotland Yard changed to "M2MP", or "MP" for short, new personalised R/T call signs were introduced for the three aircraft. Each of these reflected the Divisional code of the nearest police station area. The aircraft took up "8J" for the Abridge based machine, "8X" for Denham and "8Z" for Croydon. The call signs incorporated the next numeral available after the ground vehicle fleets had been allocated; this factor ensured that they were not destined to be constant. In 1959, when it was discovered that more cars were to be put on the road, the number 8 was changed to 10 to make room and, for instance, "8J" became the call-sign of a Wolseley 6/110 car operating out of Waltham Abbey police station.

Occasionally an unscheduled task was added to the list for the aircraft, one such was the observation of traffic and crowds attending a Rugby match at Twickenham on December 9, 1958. Even with this extra flight by the Vendair aircraft, the year’s operational budget came within target. The whole year of ad-hoc operations finally cost £190.

Early in 1959, Supt. Watson was able to write a glowing report on the operations that year, sure in the knowledge that most of the technical problems that had beset the early days were now overcome. He even allowed himself to insert a request for the force to purchase their own fixed wing aircraft, even if financial constraints meant that it would have to be a used Auster. His proposal further suggested that it would be flown by a police officer pilot and available at a moments notice.

Supt. Walton ventured the opinion that a helicopter would be the better option, bur precluded by high costs. He noted that the RAC had hired helicopter's from Bristol's at a typical rate of £40 an hour, or £100 daily. Even the hire of two "Air Courier" Rapide aircraft to cover the1956 August Bank Holiday traffic had set them back an amount equal to the whole of the annual police budget for 1958. Part of the cost had included painting the two aircraft temporarily in RAC livery, a feature that London police operations never ventured into prior to the 1967 helicopter operations.

The programme of fixed wing flying by the Auster's in 1959 was framed on the success of the previous year. A modest increase in scheduled operations was allowed in the list of pre-planned flying days. Typical of this was the inclusion of three Rugby matches at Twickenham and the Boat Race on the River Thames. The additional flying, added to the re-scheduling of hours over the bank holiday flights, increased costs for the year considerably. The annual budget was £448.

For operational reasons the old airline gateway to London, Croydon Airport, Surrey, was closed during 1959. As a result, the "Vendair" operations moved across to Biggin Hill, Kent. The aircraft call-sign was again changed, the sequence "M2GTG" simplified to "Golf" being allocated to the "Vendair" aircraft.

Only one of the 1959 flights was in any way notable. On March 28, Auster G-AKXP, crewed by Trevor Prytherch, Jack Dennett and Supt. Rosie flew over the University Boat Race on the River Thames. Most of the police officer's observation work was naturally confined to the

areas either side of the river. The pilot's prime responsibility was to obey the bidding of London Air Traffic Control [ATC] whilst at the same time doing his utmost to follow the police mission requirements.

ATC alerted Trevor to an unidentified aircraft heading their way along the line of the river. Interception was relatively easy, and the crew waved off the advertising banner towing Tiger Moth. The matter rested there, for a while at least. Having removed the danger and recorded the basic details of the intruder the matter was all but forgotten. Old habits die hard and no one liked the idea of reporting such an event on the basis of registration mark alone. Based upon previous earthbound experience, displaying such tardiness in not obtaining the name and address of the "driver" would inevitably invoke the wrath of the station officer receiving the report.

The matter of the banner towing Tiger Moth was quickly re-evaluated when the same aircraft landed at Biggin Hill shortly after the police aircraft had returned there. Now able to interview the "driver" [pilot] at length Jack Dennett was able to fill in his report adequately. It was something a little different, but even the completeness of the notes failed to save him from the icy gaze and acid remarks of the station officer when he handed over his book. The case was successfully prosecuted in the courts, in the face of the failure of Sidney Chamberlain's efforts before the war; this was probably the first UK air to air offence to result in a conviction.

A budget of £450 was set aside for the police Auster operations to cover the same venues during 1960. Plans to modernise the type of aircraft came to nought. The arrival of the modern looking American Champion Tri-Traveller two seat light aircraft at Biggin Hill in the May caught the eye of Chief Supt. Thompson of Scotland Yard's Research & Planning Dept. Unfortunately, the technical brief of the Champion proved somewhat misleading. It looked to be a modern type but was in fact little more than a re-worked Piper Cub with a tricycle landing gear. The cabin proved to have only a maximum of two seats set in tandem in a narrow fuselage, whereas the Auster offered the space for four seats. The fact that the Auster tended to be used as for only two occupants resulted in the availability of plenty of room for the radio and equipment As well as being considered totally unsuitable for the London police task, Thompson found that the proposed introduction of the type into the UK market was badly timed for police purposes. In the event "Vendair" operated at least one Tri-Traveller but it was never used on police operations. The layout of this class of aircraft may have been considered unsuitable for the police in London, but the basic Piper Cub saw extensive service with police across the world.

In March 1960 each of the three Auster aircraft from the commercial suppliers was booked for between five and eight dates. In 1960 "Vendair" were charging £5.10s [£5.50p] an hour, the Denham Flying Club £5.5s [£5.25p] and Herts & Essex by far the largest amount at £6.15s [£6.75p]. During the year there were a number of occasions where public service strikes in London created unexpected calls upon the Auster operations. In September 1960 trial flights were scheduled by the Biggin Hill and Denham aircraft to assess their suitability in

covering normal rush hour traffic flows. Due to bad weather flight limitations affecting the Auster's the trials were not a success.

The "Vendair" aircraft was originally scheduled for a flight early in the morning of Monday September 19. Bad weather resulted in the early flight being abandoned and rescheduled for early the following Friday morning. The weather also curtailed flying on the Tuesday afternoon and Friday morning. The Denham aircraft fared little better, going unserviceable most of the week, only to run into bad flying conditions on the Friday afternoon. With the weather comprehensively halting the assessment of the viability of the scheme, no operations were undertaken before the series of strikes ceased.

The end of the Metropolitan Police Auster operations came about in a number of stages, each brought about by re-assessment of operational requirements, more stringent regulations and the withdrawal of existing easements by the Ministry of Civil Aviation. It was decided to cancel Bank Holiday flights from 1961, after it was found that traffic flows, whether good or bad, tended to follow a regular, and predictable, pattern which the air cover had proven unable to influence. Although this did not allow for variables like accidents, it was thought that putting an aircraft in the sky merely in case an accident occurred was not cost effective. This decision resulted in their being no further flying arranged with Herts & Essex from Abridge. It was to be another twenty three years before the Metropolitan Police was again in a position to operate three aircraft on its own behalf.

The fatal blow to continued police operations was the Government decision to ban flights by single engine police aircraft within six miles of Charing Cross from 1961. In addition the aircraft flying minima were reduced to clear conditions at a minimum height of 1,000 feet, the pilot to remain in constant contact with ATC if within 5 miles of London [Heathrow] or Northolt airports. In spite of the stringency of these new conditions, as late as November 1960 it was believed that the following years flying programme would continue to schedule. The Auster programme entered 1961 to be dogged by bad weather conditions and the run of bad luck that had featured in the programme from late the previous summer.

With a background of flying over the traffic attending a rugby football match fixture at Twickenham on December 6, 1960 being cancelled by bad weather, undertaking another such flight over Twickenham with an unserviceable police R/T in the January was galling for the crew. With no means of communication the 1½ hours flying over the approaches to the Mecca of rugby on Saturday January 7, was all but useless.

Records of all the Auster operations are somewhat fragmented and incomplete. According to official papers when, at 1400hrs that January day, Auster G-AKXP came into land at Biggin Hill the three year old police operations were cut with the ignition. Contrary to this officially recorded version of events, it is certain that the final Auster flight actually took place later in the spring. Inspector Arthur Doughty, stationed at West End Central police station and better known for his

later observer duties in police helicopters, undertook a single flight in the Biggin Hill Auster over the 1961 University Boat Race. Sergeant Jack Dennett was absent by this time, predicting the demise of air operations he had tendered his resignation and retired.

As improvements in performance were brought forward, the capabilities of helicopters were expanded to reflect this. By the latter part of the 1950s such craft remained hamstrung by inadequate power, remaining primarily available only for low weight transportation, reconnaissance and rescue. The rescue organisation was primarily established in order to ensure that there were resources available for rescuing downed military personnel on land or in the sea. Fortunately such military emergencies were rare, and the rescue units undertook the rescue of civilians in distress, primarily as a training aid. As time went on this activity grew into a key element of the domestic rescue scene, alongside the boats of the Royal National Lifeboat Institute [RNLI] service. Now taken as an integral part of the rescue services, it was not always so.

On Thursday October 3, 1957, police were called to an isolated location on the moors to the west of Harrogate, in the West Riding of Yorkshire [an area now incorporated within the North Yorkshire Police]. The West Riding Police called in the RAF to assist with the evacuation to hospital of two seriously injured men.

Members of a shooting party, the beaters, enjoying their sport on the bleak section of countryside variously identified as Pockstones Moor or Humberstone Moor, above Nidderdale and 15 miles to the west of the town of Harrogate, came across a familiar item of discarded wartime ordnance as they made their way ahead of the line of shooters. On a previous occasion members of the same party had horsed about with this same item without incident. On this occasion the ordnance exploded killing four of the twelve beaters outright and seriously injuring five.

It was getting late by the time the police were able to set up a control point at Humberstone Bank Farm and dark by the time they were able to obtain the services of the RAF in sending rescue helicopters from the RAF station at Leconfield, near Beverley, to pick up the two most seriously injured beaters. Two No.275 Squadron Bristol Sycamore helicopters, bright yellow and with large "RESCUE" signs flew in to the site and picked up the injured men, before flying them to the makeshift landing spot 15 miles away at Harrogate Hospital. They were being tended by the medical staff by 1830hrs as the less injured victims continued to make their slow way in the back of road ambulances. At this time the helicopter squadron was still "working up" at Leconfield, and was not to be declared as operationally ready until a few days after the mercy mission.

It was later learned that the section of moor where the accident had taken place was a forgotten wartime range that hid a large number of questionable items. In spite of the humanitarian aspects of the operation, and a suggestion that military mismanagement of the site caused the ordnance to still be there a dozen years after the war, the police were subsequently charged a hefty £500 for the use of the two

helicopters required to undertake the rescues. This operation, and numerous others provided by the military ASR services, presaged now regular civil Emergency Medical Service [EMS] air ambulances.

In 1958 the East Riding Police, on the other side of Yorkshire, undertook a further two memorable uses of the military rescue helicopters based at RAF Leconfield. On February 25, Jack Mainprize became seriously ill with appendicitis at his home in Little Weighton, a village situated south-west of Beverley with a population of 555. Under normal circumstances the illness was easily resolved by the use of a standard ground based road ambulance, unfortunately on this occasion the whole area was cut off by a recent heavy snow fall and there was no doctor available. After attempting to get through to the village using a snow plough and even considering resorting to horses, the police were forced to call in the RAF for help. Even as the villagers marked out a suitable landing spot, one of the Sycamore helicopters lifted off and flew the short distance from its base to the village. A landing pad "H" was marked out in a coal yard using empty coal bags pinned to the snow in a 30 foot circle. The patient was transported the short distance to the coal yard by farm tractor, and a short while afterwards he was being set down on another rudimentary landing area beside Beverley Hospital. From somewhat dire beginnings for Jack Mainprize that February day improved immeasurably and he was able to receive first class professional treatment in good time.

The second incident bringing members of the East Riding Police and the Leconfield rescue services together occurred a few months later, late in September 1958. This second incident effectively displayed an entirely different aspect of co-operation.

Stanley Mackins was a wanted man - and he knew it. Wanted by the police in the West Riding for theft, he did his best to keep well away from police in that part of Yorkshire. Unfortunately he chose to sleep overnight in a stolen Wolseley 6/80 car at Yeadon, north of Leeds and Bradford. In the early hours of September 29, he was rudely disturbed by a police patrol; he drove off from the pair at high speed and sparked off a high speed chase. Just for good measure, he loosed off a number of shots at the pursuing police before managing to lose them in the darkness of the night. This incident raised the profile of Stanley Mackins even more in police circles.

At 0915hrs the same day, fifty miles away, a constable in the coastal resort of Bridlington saw a Wolseley 6/80 VRE 529 pass him on the sea front. This was one of two numbers widely known among the police to be used by Mackins to disguise his car thefts. News of the sighting was circulated and the Wolseley again sighted shortly afterwards, ten miles inland, at Driffield. Another chase ensued at 0945hrs. Unfamiliar with his surroundings, Mackins drove the stolen car into a little used country lane which finally petered out into farmland, forcing the suspect to abandon it and set off on foot.

When the officer in the chasing police car arrived at the abandoned Wolseley he was surprised to find that there was a distraught elderly lady sitting in it. It transpired that she had unknowingly accepted a lift

from Mackins in Bridlington - in those days when such actions were held to be relatively safe for women - and had subsequently been treated to witnessing the police chase first hand.

The police car driver, being alone decided to leave the lady in the car and set off in pursuit of Mackins. Hopefully other officers would find her and pick her up for questioning. Unfortunately, although the officer had done his best to transmit a clear and concise location for the position of the two cars to headquarters, even though the area was also unfamiliar to him, the resulting information had been insufficient for them to locate it and there were no back up officers on their way! Neither the control room nor the other police cars could trace him.

Shortly after 1000hrs the police decided to call in a helicopter to help them trace the missing pair. A police wireless was delivered to the control tower at Leconfield so that messages could be relayed between the helicopter crew and the police patrols.

By chance an ex-Hull City police officer came across the abandoned Wolseley and the police car. Told the situation by the woman, he contacted the police control room directly using the police car radio. Having arrived at the spot in a somewhat more sedate manner he was able to provide the control room with the precise location. Ominously, he was able to add the information that according to the involuntary passenger the suspect was armed with a revolver.

Shortly afterwards the police car driver contacted the control room from the village of Skerne, two miles south of Driffield. He had followed Mackins to the village, across rough ground and the waist deep waters of a tributary of the River Hull. Once in the village the fugitive had stolen, and ridden away on, a handy bicycle.

The helicopter was already airborne and in the vicinity. Alerted to the new situation, at 1026hrs the aircrew sighted the wanted man as he abandoned the bicycle in favour of taking another car. The car journey only lasted a mile, before it was abandoned in favour of another escape on foot away from Wansford with the helicopter effortlessly hovering above him and three police running after him on foot quite close behind. Gun shots were being loosed off at the pursuers, the human and the mechanical, and in return the helicopter periodically let off a red flare over the running man to confirm his position to others on the ground still far enough away not to have yet gained visual contact. By 1040 Stan Mackins was again running beside west bank of the waters of the River Hull, this time towards Cleaves Farm. As he approached the farm buildings, he was being watched by a hidden Sergeant T H Huddlestone. At the right moment he walked out from behind the house to meet the exhausted gunman and bravely disarm him before he was able to get his wits about him. The chase had lasted one and a half hours.

There were two sequels to the helicopter chase south of Driffield. The first occurred at Leeds Assizes on December 17, 1958 when Mackins received 9 years imprisonment for shooting at an officer with intent to

resist arrest and a number of other charges. Five officers were commended for their courage and bravery by Mr Justice Hinchcliffe.

Further recognition for the events of that day, recognition which brought home the gravity of the dangers facing all of those involved in the chase, came in June 1959. In the Queen's Birthday Honours, Sergeant Huddlestone was awarded the George Medal, four other police officers and a civilian received the British Empire Medal.

Widespread police helicopter use remained largely confined to these one-off military co-operation exercises, and a handful involving commercial operators, few of which were diligently recorded for posterity. In March 1958 the Hampshire and Isle of Wight Police called in a Royal Navy Sikorsky S55 Whirlwind helicopter from RNAS Lee-on-Solent to assist in a search for a man suspected of shooting a farmer and his wife at Brighstone, IoW, whereas in the July the Surrey Constabulary obtained the use of a civil helicopter from the BEAH base at London [Gatwick] Airport, Crawley, Sussex, to successfully search for two men suspected of house breaking. Such uses could be expensive individually, but were cheaper overall than helicopter ownership.

With a somewhat different framework of policing requirements, the terrorist beset police in Northern Ireland were afforded close co-operation with military aviation. In the hostile environment it was prudent not to attempt to employ civil aircraft, even if such a course was politically preferable. In the late 1950s regular exercises and operations were undertaken with the Bristol Sycamore helicopters operated by No. 118 Squadron RAF at Aldergrove. As the situation in Ulster worsened in the 1960s there were to be fewer and fewer opportunities to break free of the air services provided by the military.

Industry continued to press its wares upon the Home Office and police regardless of a marked lack of success hitherto. As part of its European sales tour, in mid-May 1958 five different demonstrations of the American Hiller XROE-1 Rotorcycle were arranged by Watford based Helicopter Sales Ltd. The machine was a one man collapsible helicopter, designed and built with the US Marines in mind. Weighing 300 lbs. empty and 556 lbs. fully laden, the 55 mph cruise Rotorcycle was a minimal helicopter with 45 hp Nelson 2-stroke engine driving a two bladed main rotor. The major part of the structure was the engine and its protective casing, attached to which were a tail-boom tube with tail rotor, three landing legs and the pilot's seat and simple controls. All of the craft could be folded down small enough to fit into

the rear of a light van and erected ready for flight in a matter of minutes. It was intended that the Rotorcycle would be built under licence in the UK by Saunders-Roe.

On Wednesday May 21 a guest list of around 100 naval, military, private viewers and police attended a site at Elstree to observe the American product. Elements of the police audience, which including representatives from Cheshire, Lincolnshire, The City of London and the Metropolitan forces, were sceptical from the start. Few could see how a potential police officer pilot could act as observer as well as fly the craft safely.

It was not all of the police audience that were against the project, some praised the potential economies it appeared to offer. In comparison with two other light helicopters then on offer to the police - the British Skeeter and the French Djinn - the XROE-1 appeared to offer vertical lift at a bargain price. If it had met its claimed potential, for under £6,000 the police could have a single seat helicopter that, financially at least, compared well against the £15,000 two seat Skeeter and Djinn. In spite of the few hopeful comments, the majority of the subsequent reports to chief officers were not in the vein hoped for by the sponsors and police interest in the Hiller quickly waned. Just ten examples of the mini-copter were eventually built by Saunders-Roe for testing from 1960. Ultimately, the concept behind the Hiller was not found to be successful, it failed to gain significant military orders, fading from public interest in the US and UK.

In November 1958 the AA upgraded their flying capabilities with the purchase of a twin engine de Havilland Dragon Rapide, G-AHKV. This eight seat war surplus passenger bi-plane had previously been owned by the Inde Coope Brewery concern, which parted with it for £5,000. Like the Auster before it, the Rapide was finished in a bright yellow and black scheme which was far removed from its wartime camouflage and also brighter than its post war BEA airline scheme. For a few short weeks, until the Auster was sold off the Rapide was operated alongside its forebear.

For the AA ownership of the Rapide had is advantages. Flying 250 to 300 hours annually the hourly cost was brought down to about £4.10.0 [£4.50p], plus landing fees. Without taking into consideration the convenience of owning, and having on call, the aircraft, the hourly cost equalled that required by Herts & Essex for its single engine, two seat, Hornet Moth. There were two pilots on the AA strength, Bill Lewis, a tall slim figure sporting a handlebar moustache belying his military background and Don Whitehead, considerably shorter and also sporting a less flamboyant tuft of hair on his upper lip.

Modest costs aside, the large bi-plane greatly increased the facilities available to their own staff, the police and other bodies throughout the UK. With the new aircraft the long standing offer of spare seats could be honoured in a greater number of instances. It would be present wherever the organisation felt that its member’s interests were being served by the presence of the aircraft. Any local bodies were welcome to accompany the AA crew without charge. During the next thirty years the AA operation was a boon to police. In retrospect it can

be seen that its ready availability at major sporting events resulted in the hindrance of the forward progress of wider aircraft use. With an aircraft offering free spare seats at the most important motor racing event of the year it created conditions in which such as the embryo Buckinghamshire operations died away.

Conversely, the availability of the AA aircraft effectively restarted operations over Aintree for the Grand National meeting. After the 1957 Grand National, aircraft use over Aintree ceased. In March 1961 the AA aircraft carried the Lancashire Police observer, Supt. A Humble, over Aintree. The availability of the facility maintained air cover at the race course for many years afterwards. The facility was to provide a continuation of the link police had forged with air cover of major events including The Derby Day racing at Epsom. There were to be few forces that did not make use of the AA aircraft.

Further from the realms of policing in Britain, although a number of British officers served there on attachment, the police in the Crown Colony of Hong Kong were extremely interested in the potential offered by helicopters and the "Tannoy" loudspeaker system.

Hong Kong, returned to mainland Chinese control in 1997, was a British Colony with a history of auxiliary aviation dating back to the 1930s. A volunteer flying force based upon the Hong Kong Flying Club supported a regular military garrison and aircraft presence until it surrendered to the Japanese in 1942. After the war, in 1949, a Hong Kong Defence Force was reconstituted with similar aims. This military arm was variously equipped with Auster's, Supermarine Spitfire's and North American Harvard's until it was decided to acquire the first helicopters in 1958. Two civil registered Westland Widgeon helicopters were ordered from Britain for delivery to the colony specifically for use with the Hong Kong Police. As soon as they arrived the identity of the recipient was changed to that of the local government and although they operated in support of the police the pair never actually operated specifically within a police air support unit as originally envisaged.

While the Metropolitan Police busied themselves with their limited programme of fixed wing flying the police in Sussex undertook trials with a variety of helicopters. In June 1960, the Chief Constable of East Sussex Constabulary wrote to the Home Office and Scotland Yard requesting information about helicopter use and air to ground R/T. East Sussex had undertaken trials on its own behalf using an unspecified helicopter equipped with a walkie-talkie type set. The equipment had impaired reception and transmissions. In his letter the Chief Constable expressed a clear preference for helicopters over fixed wing in the ability of the type to land in open country. Relatively low hire costs associated with a new breed of small helicopter appearing commercially were now attracting renewed police interest in some areas of the country. Few details of these have survived.

The Home Office reply was fairly unhelpful; it referred the Chief Constable to the successful use of helicopters by the adjoining West Sussex force, and the continued availability of the BEAH fleet at Gatwick. The reply from Scotland Yard, constrained by all recent

experience being related to the Auster flights, was confined to operational methods and some of their own communications problems and remedies arising out of experiences with their fixed wing traffic control experiences.

In the spring and early summer of 1960 moves were set in train to hire a Tiger Moth aircraft for Hampshire Police to use over the traffic flows approaching the annual Society of British Aircraft Constructors [SBAC] showcase at Farnborough in September. A Lasham based Tiger Moth was selected for the task. Considerable police time was put into the project, only to have its use rejected by the SBAC on the grounds that the chosen type was too slow and only fitted with simple airways R/T unsuitable for the event. It may be that, like the autogyro's of thirty years earlier, it was incapable of carrying an upgraded R/T, or there again it may be that the sight of the police using a 1930s Tiger Moth at the showcase of the British aircraft industry was just too much to bear. In later years the SBAC ensured that a modern, civil or military, aircraft was made available to the police for this purpose.

With air units springing up across the world, the continued lack of progress within the police to bring about long term air support in Britain was thrown into stark relief. This was a distorted image. Whilst it was true that the British police were not operating aircraft on a long term basis by 1960, only in the USA were civil police in a better situation. The majority of the other European police air units in Austria, Germany and Holland could invariably be linked to paramilitary activities, as could those in Africa, South America .and most of the Pacific Rim.

The California Highway Patrol [CHP], their helicopters later immortalised via prime time television as an element of the programme "CHiPS", first investigated the use of aviation in 1960

The CHP allocated $3,060 of its 1959-60 budget, $28,500 in each of its 1961-62 and 1962-63 budgets to conduct experiments with fixed wing aircraft in the role of traffic law-enforcement. As might be expected of a unit primarily tasked with patrol of the highway, there was little thought directed toward either crime prevention or detection or casualty evacuation in its early stages. The primary objectives sought to reduce hazardous behaviour and direct ground units to that end. Reflecting the normal field of operations of the CHP, the trials were undertaken at various locations along the length of California.

The first trial was operated over two US highways in the Barstow area, east of Los Angeles in the south of the State, between May 1 and June 30. The aircraft chosen, a Cessna 172, was dry leased from Ernest Gentry of Dagget at a cost of $8.50 an hour. Although it was to be used again the following year, this type was found to suffer from poor performance in high ambient temperatures. In this and each of the subsequent test operations the aircraft received extra markings over the existing colour scheme. Under the wings the words HIGHWAY PATROL were painted in letters 30 inches high. The intention was that this marking would be visible to observers on the ground when flying at a mean altitude of 1,000 feet.

The second trial, centred in the northern section of California, commenced in mid-December 1961 and ran until June 30 1962. Using two different aircraft acquired from Aero Activities Inc., of Sacramento, the area in which the majority of the trial took place. The first was another Cessna 172 and the second a Piper Super Cub. Both were dry leased at an hourly cost of $6.50 - well below that of the previous trial. Although the example used was let down by noise and the layout of the cockpit, the tandem seating attracting criticism as it had done in the UK, the Super Cub was found to be the most stable of the types inspected in the early 1960s. The still unsophisticated nature of the available R/T equipment presented greater problems to the CHP than those causing concern in Europe. The potentially large expanse covered by the aircraft necessitated the carriage of two radio sets to improve flexibility of operation. The R/T was tuned to different wavelengths using individual crystals and re-tuning was achieved by the pilot switching between the two sets. A further addition was the installation of a public address system [PA].

This second phase of the trials was marred by a fatal crash on January 18, 1962. As the aircraft was landing at Madera it collided with another aircraft. The CHP officer and the two occupants of the second aircraft died.

The third, 1962-63, trial was centred in the north of the state and involved the dry lease of two Cessna 182s from Santa Rosa Aviation at an hourly charge of $7.40. The higher charge attracted by this Cessna type reflected the higher power offered by the type compared with the similar, bur under-powered, Model 172. This trial was divided into three phases operating from August 18, 1962 into 1963.

In each trial the primary purpose of the aircraft was the tailing of road traffic, mainly to detect and issue citations for road speed violations. If no ground unit was available to stop the erring motorist there were recorded instances of warnings being issued in-flight by means of the PA system. In one instance the PA system was used to call the speeding vehicle to a halt, the pilot landed nearby and issued the citation for speeding himself. There was no form of electronic speed detection; the vehicles were paced by the aircraft. It was fortunate that by their very nature the range of the speed violations were necessarily in excess of the aircraft stalling speed. Initially the method used was tested in the courts, but once accepted future cases were rarely challenged.

Although these flights were primarily directed toward traffic control and speed checks, from time to time the aircraft became involved in crime incidents and car chases and followed the suspects with mixed success.

CHAPTER SEVEN

Success dampened

In 1960 the 82nd meeting of the Central Conference of Chief Constables was held on November 23. The meeting was notified of a commercial offer to supply the Bell 47J Ranger at £18,000, plus £16 each flight hour. It was suggested that three well placed machines would be able to cover the whole of England and Wales. This further presentation of the Bell was not a new concept, not being too far removed from some of the thoughts of Lynch-Blosse in the mid-1930s. The proposal was referred to committee, often the death of many a good idea. A year later a report to the next conference admitted that no significant progress had been made on this proposal. However, the committee did review and revise the existing proposals for calling out military helicopters from their bases. The Air Ministry were still not prepared to officially make helicopters available for any routine police work, traffic and crowd control, searches for vehicles or the transportation of police and their equipment. With notable exceptions, little was to change in following years. Then, as now, they were quite prepared to assist police to meet emergencies, particularly the needs of ships, aircraft and climbers in distress, at a moments notice.

The Metropolitan Police, requiring new observers to replace retiring members of the Auster team, invited invitations from inspectors on January 24, 1961. The volunteers were to ensure that their invitations were submitted by February 1, giving at best four weeks for sorting out the lucky ones prior to the start of the first of two training courses. Through bad timing, on his return from a break the superintendent of D6 Branch deputed to weed the applications was greeted by dozens of written applications, and somewhat less than the four weeks left. Fair selection was cast to the wind. The first and most drastic selection process involved the pulling out of those applications favouring brevity in favour of the long winded. The latter were instantly consigned to the waste basket. By such technological means is an air observer selected!

The 1962 Chief Constables Conference was held in the seaside resort of Torquay, Devon in the June. One of the organised events was a helicopter demonstration that was to lead to far reaching developments in the UK police use of aviation.

In the early 1960s British Executive Aircraft Services, BEAS, or "Bees" to their associates, based at Oxford Airport, Kidlington handled the UK franchise for the diminutive American Brantly B2 series of light helicopters. The Brantly B2 represented about the minimum that could be expected of a two seat helicopter. Ignoring such as the one man Hiller design, the type was smaller than any of the existing competition. Smaller machines have been built since, but to the 1962 audience it represented the cutting edge in miniaturisation. The single 180 hp Lycoming piston engine was capable of taking it to 100mph; the normal fast cruise was 90 mph allowing a useful range of 260 miles.

The Brantly entered production in the USA in 1960 and had arrived in the UK only in January 1962. For the type to be considered for a Home office sponsored trial before the end of the year reflected its above average potential. The decision on which force was to be selected to undertake the trial lay with the Home Office Research and Planning Branch. As this was only a recently formed branch and still finding its feet it displayed an understandable tendency to be easily swayed.

The Chief Constable of the 1,574 strong Durham Constabulary was Alec A Muir, the Chairman of the ACPO Research Committee that year. His own outstanding enthusiasm for the Brantly helicopter ensured that the force selected to operate the UK type trial was his own. Following already established selection criteria Muir chose one of his CD WDO's to undertake the task of lead observer in the helicopter experiment. Sergeant John ["Jack"] Blair, 37 years, was a veteran of the RAF with 33 bombing missions in Avro Lancaster aircraft to his credit.

With an RAF, CD and AA aircraft observer background Blair was clearly not simply plucked from oblivion, and exhibited each of the skills found preferable for observers in London, Buckinghamshire and Lancashire. The thought processes behind observer selection in the UK during the 1960s were clear cut. Unlike many other countries where conscription into military service remained, the selection processes in the UK were to be forced to change. As the years advanced, there were to be fewer war veterans to call upon and, with the removal of conscripted service, the number of police with a prior military background also plummeted. Faced with these factors the selection process was eventually obliged to ignore the military grounding which played a large part in earlier selection processes.

With all the technical arrangements completed, the yellow Brantly, registered G-ARZI, was handed over to the intended operators in a ceremony at BEAS Kidlington a few days prior to delivery to the police. In a further ceremony it was delivered to the police headquarters, situated in old wartime buildings at Aycliffe on November 6, 1962. It was a proud moment for the Durham Constabulary. Although no-one fully appreciated it at the time, and despite the fact that the unit was to be small and only available for a part of each week, they had the honour of launching the first helicopter air support unit in Britain.

The Durham helicopter unit was launched before invited guests including the chief constables of nine local police forces. In his project launching speech Durham's Chief said "I look forward to the day when the police will own several [helicopters to be] based around the country". It was a long wait.

On its ceremonial delivery flight the Brantly was flow by Dick Dorman, a Canadian pilot employed by the Darlington based "Heliconair Ltd.," run by Alistair Craig, brother of the British comedy actress Wendy Craig. As far as can be ascertained through the muddy waters of ownership and sub-leasing, at this time the helicopter remained the property of BEAS but operated by "Heliconair". In the early summer of

1963 "Heliconair" replaced it with another, later, example of the Brantly, G-ASEI which was registered in their name.

With the spiralling costs of owning and operating all types of aircraft, particularly helicopters, the presence of an operators name on any machine was to have less and less meaning. Owners, battling with the costly business of maintaining an aircraft found themselves leasing the aircraft to agents in an effort to recoup some of the high cost of ownership. A result of this practice was that the owner might not see the object of his investment for long periods, as it was progressively sub-let through an industry searching for a diminishing market.

On the first, 33 minute, operational trip undertaken by Jack Blair and Dick Dorman in front of the national press and visiting dignitaries, the only matter of note reported was a minor traffic obstruction. In spite of somewhat murky weather, some two dozen photographs were taken on the trip, primarily of notable road junctions on the A1, Great North Road. The Brantly was able to contact the control room and all cars directly rather than having to rely upon re-transmission by the HQ operators.

Whilst the flying of the Brantly was primarily a Durham operation, it was usual for extensive coverage to be given to the neighbouring North Riding of Yorkshire during the period it operated. Close co-operation was maintained with the staff of Durham Prison, Sergeant Blair being tasked with drawing up the first anti-helicopter prison break plan for that establishment. On another occasion, much later in the decade, Jack was to be called in from his annual holidays to man an RAF helicopter searching for John McVicar, a notorious escapee, who had escaped [using conventional means] from Durham.

After the first day of demonstration flights, operations were generally confined to Thursday's and Friday's each week. The prime reason for this choice of days lay in the wish to spend at least part of the time escorting cash transit vehicles to and from the banks on pay days. In the 1960s the majority of the working population were still to be won over to payment by cheque or bank transfer, vast sums of money continued to be shipped by road in highly vulnerable "armoured" cash vans to enable to workers to be paid in note and coin on Thursday or Friday.

Although it was impossible to escort each of the numerous money vehicles from bank to factory, it was assumed that the random nature of the police activity would put any potential robbers off. Obligingly, no cash vehicle robbery took place in the period of the trial.

Jack Blair's entry into the limelight, and his own self esteem, was given a further boost early in 1963. It was obviously considered in some quarters that in being selected as observer to the unique Durham air support unit, he was considered to be a sergeant officer of the highest calibre. He was selected to travel down to Bramshill College in Hampshire to assist with the demonstration of both helicopters and light aircraft to the top brass from all over the country. It proved to be somewhat of a let down for him. It turned out that the high powered "lecture" position he had been led to believe he was to perform was little more than ensuring that the various chief constables were securely strapped in to the aircraft prior to flight.

Another user of the early model Brantly helicopter was the Oxford City. Between March and September 1963 this small force under Chief Constable C G Burrows were involved with flight trials involving the carriage of police dogs in helicopters. The BEAS Brantly, G-ARYX, was equipped with a light framed box hung on its port side slightly to the rear of the passenger seat. A single Alsatian police dog was carried in the kennel, a closed box with a forward facing mesh doorway easily accessible to the police dog handler in the cabin. At the appropriate time the handler would release the door and allow the dog to leap forward whilst the Brantly was still airborne in a low hover. To facilitate this, the door was removed from the passenger side of the cabin.

The City of Oxford Police had an establishment of just four dogs at this time, the first being taken on strength in 1959. After a week employed in subjecting the dogs to the noise of the helicopter, the first live flight with the kennel was flown by Peter Peckowski the Chief Flying Instructor for BEAS at Kidlington, Sunday March 3, 1963. A number of dog releases from a height of six feet were demonstrated to members of the press using two dogs, "Danko" a five year old handled by PC Peter Cottrell, and the least used "Rex" with PC Blunt. To bring the trials to the notice of a wider police audience, two days later, on Tuesday March 5, the helicopter and

dogs were presented to senior police officers at Bramshill College. Little was heard about the scheme after this presentation, the Oxford news media being suddenly pre-occupied in the local aspects of the internationally famous Great Train Robbery for some weeks.

Even the £2.6M robbery of the contents of a firmly terrestrial travelling post office carriage at Cheddington, Buckinghamshire, on August 8, 1963, managed to involve itself in police aviation in a minor way. After the gang hideout was traced to the isolated Letherslade Farm on August 13, the military were contacted and it was arranged that aerial photographs of the crime scene and the hideout were taken by a police photographer.

With so few staff to call upon, in the 1960s the Buckinghamshire Constabulary combined the roles of police photographer and scenes of crime investigator within the force photography department at headquarters in Aylesbury. John Bailey, a constable in this unit, was sent to the scene and undertook to make an extensive record from ground level. The same officer was taken aloft in an Army Air Corps de Havilland DHC-2 Beaver to take aerial views. The resultant images played a major role in the subsequent trials of a few of those involved who were caught.

Interest in the Brantly dog kennel was briefly revived later in the year. The head of the police dog section, Chief Inspector George Miller and Michael Higginson, the sales manager of BEAS jointly arranged for a further dog flight on Tuesday September 17. Due to the ever present financial constraints, the concept failed to find favour, except it appears with "Danko" who showed every sign of thoroughly enjoying the experience. No further flights took place.

Serving a population estimated at 104,000 persons Oxford City was a force consisting of 185 men in 1963 and clearly helicopter operations were heavily subsidised from one quarter or another. It is quite likely that costs associated with the flights were met by BEAS.

The Durham helicopter trial last far longer than originally envisaged. It continued throughout 1963 into the early part of 1964. The flight

hours were jointly financed by the Durham Constabulary and the Home Office at a rate of £17.10s.0d [£17.50p], an amount which appears quite low in today's financial climate. This amount equalled the current weekly pay rate of the average police constable, or the cost of running two patrol cars.

Such was the success of the Durham operation that in April 1964 Alistair Craig of "Heliconair" proposed a national police helicopter scheme to the Home Office. Presumably based upon the costs associated with the Brantly B2, it was designed that each interested force would be charged between £2,000 and £3,000 per annum. Ten helicopters were to be strategically based at Caernarfon, Durham, Exeter, Lincoln, Maidstone, Northampton, Norwich, Preston, Shrewsbury and Winchester, thus ensuring that no police force was to be more than 40 miles from a helicopter base. One flaw in the scheme was its intended reliance upon police officer pilots.

The Durham helicopter was the gem on the UK police aviation scene, the majority of other police forces were restricted to the use of the AA aircraft and ad-hoc hire. In mid-1963 the AA Rapide was now some two decades old, with 2,000 flights and 1,750 hours to its credit in service with the AA alone. The Rapide was put up for disposal after a decision was taken to replace it with a modern Piper PA-23 Apache 160 registered G-APZE. Sporting a similar black and yellow colour scheme to its forebears, the Apache was first used by the Berkshire Constabulary to cover the Ascot Races in June that year. The exchange of aircraft had reduced the available number of seats from eight to six. Another loss was that the newer aircraft was less nimble.

There were attempts to break the restrictive mould that UK police aviation had created for itself. Warwickshire Constabulary came close to helicopter purchase in 1963. The county Standing Joint Committee were enthusiastic about the proposal, that they might operate a helicopter jointly with a neighbouring force, but finally deferred consideration of the purchase in June 1963. The reason for the deferment was that the group had been presented with figures suggesting that it would cost £10,000 to purchase the machine and a further £5,000 each year if it was to be operated for up to 600 hours. The quoted prices were not particularly high for aviation, it was primarily an instance where the audience was wholly unfamiliar with the costs associated with the industry.

During the period of intensive activity surrounding the establishment of a light aircraft scheme using Auster's over London, helicopters and other means of flight were not forgotten. On June 15, 1957 a party from the Metropolitan Police, the military and Captain Cameron from BEAH accepted the invitation of Agusta the Italian helicopter manufacturers and Hordern & Richmond their UK sales representatives, to view the new Italian registered demonstrator of the new four seat development of the type that had been the first true police helicopter. A single example of the Agusta-Bell 47J Ranger helicopter was displayed at the BEAH base at Gatwick Airport. An Italian, licence built, version of the Bell development of the Bell 47 already in service world-wide, the 47J offered a larger cabin capable of carrying up to five, rather than the customary two or three. Capable

of a similar cruising speed and range, the Bell was far larger than the Brantly and earlier Model 47s. The 240hp Lycoming piston engine powered development was not to catch the market like its smaller forebears. The Bell version had entered service with the NYPD in February 1957, as Agusta production commenced.

The non-technical police officers attending the demonstration reported upon their findings in general, but left the technical description and mechanical appraisal to a report provided by the more knowledgeable Captain Cameron. Suffice to say that the police party came away from Gatwick much impressed by their own, layman's, view of the superiority of the Ranger over the Westland and Bristol helicopter's they had hitherto been used to. Cameron was also impressed by the Ranger and BEAH ordered one, with four seats, which was delivered two years later.

Any Home Office intention of undertaking a trial with the BEAH Ranger was thwarted until 1964 by it being used in Africa until December 1963. The delayed decision of the newly formed Home Office Research and Planning Branch to hire the sole BEAH Agusta-Bell Ranger, G-APTH, for trials in March 1964 was to have unfortunate repercussions for the long standing Durham operation. As the year old helicopter experiment quietly and efficiently continued to operate from Aycliffe with little outward drama it was decided to assess the Ranger in a different style of trial.

In other countries high speed dual carriageway arterial roads, such as that represented by the pre-war German Autobahn system, were becoming increasingly common. In the UK however the concept of what were to be called motorways was new, one of the first, the Preston By-pass section of the M6 opened in 1958, the M1 in 1959.

As soon as the first major length of the M6, Birmingham to Scotland, motorway had been created from a number of small sections joined together, in the late summer of 1963, the Chief Constable of Lancashire, Colonel T E St. Johnston CBE advocated the use of a helicopter in an article carried by the *Manchester Guardian* newspaper. When the decision was taken to employ just such a trial with the red BEAH Ranger on motorway traffic patrol work, the road was a bare 86 miles in length. It then extended between Gayley in Staffordshire in the south and passed through the territory policed by three different police forces to Broughton, near Preston in the north. The three forces were Staffordshire, Cheshire and Lancashire. The helicopter operation was but a small part of a tri-force Motorway Traffic Patrol experiment. The trial was to be led by Chief Superintendent John Wren MBE, of the Lancashire Constabulary.

Seeing the operation as a short term diversion from important day to day duties, Wren originally resisted his posting from traffic to the helicopter trial. His resistance was overcome by a forceful suggestion that it was intended to be a long term arrangement. Operating with mixed force crews, for a short period the unit investigated methods of policing the new type of road. The vehicle fleet consisted of Ford Zephyr's from Lancashire, Jaguar 3.4s from Staffordshire and Land Rover's and Humber Super Snipe's from Cheshire. In addition to the

cars each force supplied motor-cycles. To assist the helicopter a simple form of roof marking was provided on the mixed array of police cars. There were few enough of them directly involved in the trial to require only the need of large numerals.

The trial did not get off to a promising start. Partly due to work required after its return from the Nigerian contract, the Ranger was not available for the official launch ceremony held at Knutsford, Cheshire, on March 9, 1964. In its stead, BEAH supplied an older two seat Bell 47B3, one of two supplied to the airline in 1947. Although extensively refurbished over the years, this craft was decidedly ancient and was undoubtedly the oldest civil helicopter then flying in the UK. The type was similar in layout to the model supplied to the NYPD post-war. Although unsuitable for the envisaged M6 task it did, as a temporary measure, "fly the flag" and allow a contractual breathing space whilst BEAH engineers set to the final details of equipping the Ranger for police duties.

Launch line-up with the Bell 47B3

Much delayed in its own arrival, the Bell 47B3 did not have a police radio fitted, but for the opening programme Sergeant Jack Smith, the lead observer with the Lancashire Constabulary was sent up on a short familiarisation flight - his first in a helicopter. Jack was familiar with WDO flying in Chipmunk aircraft and flights in AA aircraft over Aintree and Blackpool. As experienced by most first time passengers, the flight in the helicopter was a revelation to Jack and he quickly warmed to the unaccustomed visibility and versatility the goldfish bowl cockpit of the Bell offered. The Ranger arrived, available for police use, the following day.

In order to retain a reasonable operational sortie time of around two hours, the addition of the police role equipment, including standard binoculars, cine camera, maps, first aid kit and traffic cones, had reduced the normal crew of the Ranger to two. All equipment was straight off the store shelf, there being no aeronautical items such as stabilised binoculars or flying suits. Two hour patrols using a single police observer, including offence and incident reporting, were flown at a minimum height of 200 feet every day possible. Flying low, the helicopter tended to be clearly visible to the traffic using the road and resulted in an immaculate behaviour by the majority.

After the arrival of the Bell 47J

The Home Office wireless fitted covered the three channels then used by Cheshire, Lancashire and Staffordshire, but suffered poor reception in the first week. Resiting the aerial and improvements to the head-set and microphone equipment solved many of the problems. Whilst not as sophisticated as modern systems, an attempt was made to provide the crew with reception of a number of transmissions simultaneously. All police transmissions were received in the observers left ear and intercom input from the pilot, ATC and his own throat mike was carried to the right. Far cruder than the modern system which overlays all three sources to both ears, it worked reasonably well. The observers were instructed to log and report upon everything untoward seen on the motorway - the resultant radio traffic often overloading the usually quiet police radio systems of all three counties. Modern police helicopters are allocated special call-signs for ATC purposes, these highlighting potential special needs required by the helicopter. On this occasion, long before such needs were recognised by the air traffic authorities, the police machine was allocated no special call-sign, the standard "Tango Hotel" derived from the Ranger's registration being retained.

Aside from the initial non-appearance of the Ranger at Knutsford, from the outset of the experiment difficulties were experienced in a range of operating areas. Difficulties were experienced in obtaining a landing area in the vicinity of the selected Command Post. One close by had to be given up after it was found to suffer from adverse winds and had a talent for upsetting the neighbours with its excessive noise. A new site was found 12 miles away in a Cheshire County Council Garage in Sandbach. A by product of this enforced move was that the helicopter lost contact with the Command Post when it was on the ground.

Sergeant Smith aboard the Bell 47J

Some landings were undertaken close to incidents on the roads but no opportunity arose to undertake casualty evacuation. In addition to a number of traffic related incidents taking place in areas adjoining the M6, searches for missing persons, motor racing at Aintree, horse racing at Uttoxeter, and an agricultural show in Staffordshire, were covered by the helicopter. On the first day, and upon numerous further occasions, rather than call up extra ground assistance the helicopter landed beside the motorway to enable the crewman to get out and assist ground police units, often providing sheer physical exertion in the clearing of the roadway. With the benefit of hindsight it appears a strange and unorthodox activity for the sole police observer in a very expensive resource to undertake in the circumstances. They were breaking new ground, and for the time being anything was acceptable behaviour.

The site move failed to ensure that complaints about the helicopter ceased. Vociferous members of the farming community claimed that the low flying helicopter was upsetting livestock. In contradiction of those assertions, the crews reported that they saw few instances of animals taking the slightest bit of notice of the helicopter. Only when the machine sought to land in fields already occupied by cattle and horses did any sign of disturbance make itself apparent. On these occasions the odd animal, almost always a horse, might be observed to break away from the group and gallop around the field.

Aside from giving due consideration to livestock care was also taken when landing in most rural locations. When setting down, growing crops were usually avoided, even though this occasionally resulted in the observer hover de-planing on to often sticky ploughed fields. Not all farmers were against the police flying activities, indeed on one occasion a farmer was particularly thankful that the crew found a heifer stranded in deep mud by a pond and were able to land in his farmyard to tell him personally about the plight of the beast.

Unfortunately, and very much confirming suspicions concerning its behaviour on the first day of the trial, the BEAH Ranger was not reliable as might have been expected. Frequent mechanical failures, including the replacement of its engine on one occasion, resulted in numerous operations being curtailed. Disconcerting to police staff, the problems were assumed to be endemic to helicopters in general. The primary problem was logistics. This was only a short term arrangement and therefore the single mechanic assigned to the Bell had to call upon back up staff from the BEAH base at Gatwick. The rarity of the type resulted in occasions whereby spares had to be obtained directly from the manufacturers in Italy and a substitute helicopter brought in. During the engine change, in April, the replacement helicopter was one of the large 7 seat WS-55s still operated by BEAH.

As the police crews flew around in the opulent splendour of the carpet lined executive WS-55 the dormant Ranger was also being fitted with public address -"sky shout" - equipment. Upon its return to service the use of this additional facility in assisting the moving of obstructive vehicles by the voice from the sky was found to be impressive.

In Parliament on April 17, 1964 the cost of the M6 operation, hiring of the BEAH Bell and its pilots, Captain's Graham, Perkis and Cameron, was given as £2,457, an astronomical, and uncomfortable, annual rate of £34,000. Fortunately this rate of spending was moderated before the end of the trial and resulted in a £6,100 bill being presented to the Home Office for the three months use.

The M6 operation was a wide ranging trial and there were a variety of changes affecting the mixed crew style of operation of the ground based vehicles. Contrary to the assertions that the air element of the M6 operation was to be long term, on June 26, after the completion of some 300 hours flying, the Ranger was withdrawn from police patrol use. The remainder of the combined force ground operation continued until July 16, at which date it dismantled and continued in a different manner. In the new arrangement sections of the road,

between entry and exit junctions, were allotted to specific police forces almost regardless of county boundaries. As the police forces allocated to undertake motorway patrol work were acting on the behalf of the Home Office, boundary overlapping was allowed. A similar system operates on motorways today.

In retrospect the whole concept could be held as a defective from the start, but this would be an unfair criticism of those officers groping in the dark attempting to find a niche for promoting police use of helicopters.

Unlike the USA, protracted traffic patrol trials in the UK have only tended to confirm that the use of aircraft, particularly helicopters, with a primary aim of traffic patrol is uneconomic. Twenty five years after the M6 trial many newly forming air units in the UK continued to experiment with undertaking speed check prosecutions by helicopter. It was quickly found that the level of court fines levied in response to these operations failed to make economic sense of tying up a helicopter in these specific duties. Even in the USA this opinion is largely endorsed by the use of economical light aircraft in such duties. Naturally, this does not stop the diversion of police resources into specific areas of traffic control on demand.

The exact cause for the sudden demise of the M6 helicopter operation remains unclear and, understandably, whilst never hidden was not deliberately made public. The high cost of the M6 Motorway operation resulted in the annual budget retaining sufficient funds for other Home Office projects in 1964. Among those affected was the continuing Durham helicopter trial.

Throughout the police hierarchy there have long been those that urged a move towards ever larger police forces. The multi-force M6 trial was an element of this effort. Although the single force Durham experiment was covering sections of surrounding police forces on a day to day basis, economically flying a range of law enforcement operations, from traffic to crime patrols, it was not enough. In the eyes of those constantly seeking their own betterment, the operation had become the epitome of the British policeman, slow steady and plodding, even if displaying annoying signs of relative efficiency. Although it was quietly proving the case for the use of police helicopters, there was no longer any personal kudos to be gained from such an operation, something more startling was to be tried and that had been the M6.

The Home Office sent the message to Muir that due to a shortfall in their funds all future flying operations were to be undertaken at full cost to the ratepayers of Durham. Faced with this unexpected withdrawal of central funding at short notice, and insufficient time to raise further funding from his local Watch Committee, Muir was forced to cancel further operations with the Brantly. The amount required for each hour of flight, £17.50, appears negligible today after many years of inflation, but that is only a part of the story, with a fair number of hours being funded weekly. It is sufficient to state that such funds as had been spent supporting the Ranger for three months might have

easily have ensured the further operation of the Brantly for a further year or more.

Jack Blair was given the bad news personally in the corridor at Aycliffe by Alec Muir. Jack recalls that his Chief Constable was deeply upset as he broke the news to him. With the demise of the Durham helicopter trial, Jack and his colleagues returned to flying as WDO’s in the separately funded CD Chipmunk's of the Newcastle UAS from Ouston and the occasional use of the AA aircraft.

The demise if the Durham helicopter trial did not go un-noticed in Fleet Street and industry. Some sections of the aeronautical and security press protested vehemently about the demise of the scheme, but it was all to no avail. The decision had been taken

There were to be some further police helicopter flights in the county of Durham shortly after this period - including one specifically designed to impress the Home Secretary, Roy Jenkins, when he laid the stone for the new Durham Constabulary HQ on January 16, 1967. Roy Jenkins arrived to perform the task on a short flight from Teesside Airport in a four seat Brantly 305, G-ASXF, accompanied by a smaller B2. Prior to landing he was given an airborne viewpoint of an "cops and robbers" set piece involving two security vehicles bearing appropriate roof markings. The helicopters landed in the County Hall complex and the Home Secretary was taken by motorcade to perform the ceremony at the new police site a short distance away. This demonstration was part of Chief Constable Muir's effort to promote a form of "airborne bank guard patrol" which had featured heavily in the earlier trial. The move failed to win government sponsorship.

In later years many whispers of misinformation grew up about the cancelled Durham trial, a number appeared in print. Much of this information implied that that it was Muir himself that had decided that helicopters were of no use to him. None ever explained why a man holding such a high post in the police should have taken sixteen months to have made that momentous decision, and then having chosen to cancel it at just the time the Home Office ran out of money. This added to his subsequent attempts to start up another similar operation less than three years later, cannot by reconciled with the substance of the rumours. The whole of the Durham episode represented success and the M6 trial, reported upon in a document quietly published two years later, a deep embarrassment to some in the Home Office at the time.

As the Durham trial was done to death the seeds of another police aviation scheme in the UK were already being sown. This was to be something entirely different.

The decade of the "Swinging Sixties" in Britain is remembered for a variety of reasons. As most prefer to remember the better aspects, to the forefront of memories are the fashionable aspects, Carnaby Street, Mary Quant and the like. Less well recalled are the public disturbances that grew out of the changes in attitude that some of these fashions provoked. The major public holiday weekends in early 1964 were marked by frightening gang warfare between youthful

factions styling themselves as the "Mods" and the "Rockers". The groups were respectively those who preferred the new fashions and rode around on imported Italian scooter bikes and the "traditionalist" group generally clad in leathers and preferring to transport themselves astride large motor cycles.

Fights were likely to break out anywhere and anytime. In the event most occurred on the sea fronts and beaches of popular resorts on the south and east coasts. Quickly the government of the day was promising swift and steely action to put down the frightening scenes that were all too often filling television news screens. Having made the promise the politicians then passed the problem straight over to the police to provide the solution. Before long the police had devised a means whereby the political rhetoric could be matched by action.

As the largest available pool of manpower, it was envisaged that the Metropolitan Police would undertake to assist the police at the coastal resorts in their time of need. For the August Bank Holiday 1964, the last opportunity of the summer season, the Metropolitan Police placed a large number of officers on stand-by at RAF Northolt, north-east of London. Drawn from most of the London divisions, there were hundreds of officers of all ranks squeezed together in far from comfortable conditions. One of the organisers of this arrangement was Bruce Dix, now holding the rank of Superintendent and serving with A2 (2) Department at Scotland Yard - the "Special Events" organisers.

For most of the officers on duty at Northolt the time was wasted. The depths of boredom were staved off by a constant diet of card playing, smoking hand rolled cigarettes and downing an endless succession of cups of tea and coffee. On the morning of Sunday August 2 trouble broke out in the coastal resort of Hastings and quickly indicated that the small 133 officer Hastings Borough Police was going to be overwhelmed. As the force received immediate help from the neighbouring East Sussex force 69 officers from the group at Northolt set off to assist. Led by Chief Inspector David "Crazy Horse" Powiss the group embarked in a waiting Armstrong-Whitworth Argosy C1 military transport, took off and headed south the 80 miles to the south coast. The Argosy landed at Lydd Airport, Kent, and the police re-enforcement's were bussed the dozen miles to the sea-front at Hastings.

It was an unfortunate glitch in the plans that resulted in the flight taking only 40 minutes to arrive in Lydd but the ensuing short coach journey taking two hours. The local police were doing their best to keep the trouble-makers out of the town, but this unfortunately created traffic jams which slowed the arrival of the reinforcements. Highly amused the Metropolitan reinforcements paraded at the large WVS building in Hastings to be informed by a heavily moustached chief inspector of the Hastings Borough force that there were no facilities for such a number of men to be fed and watered. He suggested that they descend upon the local restaurants in the town, a novel suggestion that proved extremely popular with the visitors and the beleaguered locals.

In the mid-sixties there was little widespread tactical training in the police, equally the “Mods” and “Rockers” were very unsophisticated groups of troublemakers. The visiting police were sent to patrol the beach in groups of three and left to devise their own solutions to the problem. The arrival of this relatively small group of officers tipped the balance in favour of the police and the resultant street battles were short and crushing, with not a few scooters and motor bikes suffering as a result. Among the inevitable crop of reported injuries there was just one of the London policemen. By the end of the afternoon it was all over and the troublemakers left the town. A further flight of policemen to Hastings had been intended after the single Argosy returned to Northolt, that second flight was called off at the last moment when trouble in the town was seen to evaporate. The original officers returned to Northolt by Argosy, their return being so early that they were able to take in a slight diversion to undertake a sight seeing tour of parts of London prior to landing.

A further flight took place on the Bank Holiday Monday. The period in Hastings was somewhat longer and it was dark by the time the police officers were released. Apparently influenced by the darkness the return flight in the Argosy aircraft was not available and on this occasion the officers, a different group, were forced to return to London in roofless double deck buses normally used for sight seeing trips. The return trip took five hours, an indication of the time it might have taken for any road bound assistance if the RAF had not made an aircraft available. Although all of them had been on duty for over

20 hours by the time they returned to their homes in the early hours of the Tuesday, there were few complaints from the police. It was after all a Bank Holiday, double pay prevailed !!

The following year a similar effort was mounted for the summer of 1965. After the undoubted success of the Hastings operation the idea was renewed under the cover name "Operation Bradshaw" It is presumed that the name was chosen as an topical allusion to the intention of cleansing the seaside beaches of the seasonal problems, Mrs. Bradshaw was a secretive figure featuring in "Surf" brand washing powder adverts appearing on British television at that time. Unfortunately it is so long ago that no-one directly involved can really recall either the code name or the reason behind its choice. The connection is therefore informed conjecture.

Bruce Dix again approached the RAF intent upon repeating the travel arrangements of 1964. On this occasion the air officer commanding [AOC] declined to make a Transport Command aircraft available, indicating that he thought the carriage of police reserves to riot situations was no longer considered a suitable task for the RAF. In addition he declared that his aircrew wished to enjoy the chance of a bank holiday leave themselves! Having faced this unexpected blank wall, the police approached BEAH and hired a helicopter instead. The use of the helicopter had been his natural inclination in 1964, but an attitude of ready assistance by the RAF at that time had deflected him from that intention. The type selected for the purpose was one of the Sikorsky S61N recently delivered to BEAH, effectively the police were having access to a 24 seat rotary wing airliner that could overcome the Argosy’s inability to deliver the officers right to the scene of the problem.

A great deal of planning went into the 1965 measures against potential seaside trouble. Each of the coastal trouble spots in the south-east, stretching from Sherringham in Norfolk to Bournemouth, Hampshire, was noted and flight times calculated to each of them. Some 35 suitable landing sites were identified and surveyed. These locations were invariably flat clear tennis courts and playing fields, but each had to be assessed for flying hazards nearby long before the exercise was set up. Representative flight times quoted for the S61N were:

Imber Court to Brighton	18 minutes
Imber Court to Worthing	20 minutes
Imber Court to Southend	21 minutes
Imber Court to Hastings	25 minutes
Imber Court to Margate	34 minutes
Imber Court to Felixstowe	37 minutes

A liaison link up was forged between the police and the Ministry of Aviation and the two major London airports, Heathrow and Gatwick

for air traffic clearances. To fully assess the suitability of the chosen helicopter type Superintendent Dix took a trial flight in one of the S61Ns in May 1965.

When finalised it was agreed that a single helicopter would remain at its BEAH base at a standing charge cost of £190 per day, for each of the three days the first operation was intended to encompass. Alternatively the police would be charged £200 for each flight hour, with a minimum of two hours should flying take place. The use of two helicopters would have been preferable (BEAH had four in service by that time) but on this occasion the cost cutting measure did not lead to any problems.

Set for the weekend of June 5, 6 and 7, 150 Metropolitan Police officers were held for nine hours a day at the No.1 District Police Sports and Social Club, Imber Court, Thames Ditton, Surrey. The Sikorsky was held in readiness at the nearby BEAH base at Gatwick Airport. With police better prepared in the areas likely to be affected, no incidents serious enough to require the calling in of the reserves took place at any of the coastal resorts during the holiday period. Eventually the need for setting up such a reserve force waned as the "fad" for beach battles lost its glamour for that particular generation. As far as can be ascertained, such air reserves were not contemplated again. With the advent of improved high speed roads, dual-carriageways and motorway's, less and less need arose for swift air travel over such relatively short distances.

The major proportion of the cost of this operation fell upon the Home Office police budget, now revitalised in a new financial year after the embarrassment surrounding the events of 1964. Later in June 1965 a report considering the case for the creation of an experimental police helicopter unit was circulated within Scotland Yard. The outline of this short document displayed a strong inclination towards commercial proposals put forward for the Bell 47J Ranger in 1960. Although apparently a plagiarism, with some expansion in aims, it is worth noting the contents of the document for the roles that were then envisaged for helicopter use.

On a national basis, three, or even four, helicopters were visualised as serving a single police district, or region, up to the size of the Home Counties. Effectively this was the first recorded instance proposing a notion of a regional air support facility. These unspecified machines would be available for a wide range of duties including traffic control and overseeing special events, crime prevention and detection, search, rescue and transportation. It was stated categorically that "... the formation of a helicopter flight by the Metropolitan Police would not be justified..." Further to this it was considered that there would be no call for the same force to use helicopters for either crime prevention and detection, or for search and rescue. Much of the report was based on the premise that the only helicopters available were single engine, and that general over-flights of Central London by single engine types were banned. The main exception was the helicopter route to the east and west along the line of the River Thames. The report concluded that as they stood these air traffic safety restrictions effectively ensured that police

aviation over London could not proceed. The writer of the report took only a narrow view of air support for the central areas of London. As was to be displayed in a matter of months, there were vast areas of the Metropolis that were not subject to flight restrictions. With a few exceptions, the officers of ACPO were doing little to promote the ideas behind the report in their own rural areas. Most remained wedded to the agreeable concept of ad-hoc hire and free aircraft loans by a range of tame operators - from the AA to the Lord of the Manor.

A glimpse of the future was laid on in London for a number of police forces in October 1965. Trans World Helicopters, an agent based at Shannon Airport, Ireland, teamed up with the US manufacturer the Hughes Tool Company, [Hughes Helicopters], to demonstrate two new helicopters. Hughes, a manufacturer evolved from the designs of millionaire Howard Hughes, was not a new "overnight success" manufacturer of rotary wing craft; they had experimented with helicopters for some years before evolving the two models brought across the Atlantic for a European audience. Both aircraft were civil machines based upon types evolved for US military requirements. Across the world, they were to rank among the most successful police helicopters ever produced.

The 2/3 seat Hughes Model 269, also marketed as the 200 and 300, the military TH-55 Osage and, later still, the Schweizer S300, was a smaller mid-1950s equivalent of the ubiquitous Bell Model 47 in that it too was a compact bubble cockpit attached to a minimal airframe. Fitted with a similar Lycoming piston engine to that powering the similar sized Brantly, in some respects it initially offered an inferior performance, a situation that was not to greatly inhibit its ultimate success in the world market. In its basic form it was to remain in production for well over forty years, manufacture now ceded to Schweizer at Elmira. It is too early yet to make a judgement on whether the type will outrun the fifty years of law enforcement service reached by the Model 47.

Longevity was also to be the hallmark of the other display aircraft. The larger 4 seat Hughes Model 369, the 500 or military OH-6 Cayuse. The type originated from a US Department of Defense issued Technical Specification for an aircraft that was nominally a Light Observation Helicopter [LOH]. Twelve US manufacturers submitted over a score of proposals and from these were selected one each from Bell, Hiller and Hughes. Five prototypes of each design were ordered in 1961 for comparative tests; the Hughes HO-6 won. On production for the military the designation was changed. The civil derivative of the military observation type, the 500 of 1963, was powered by a single 250hp Allison turbine engine which gave it an outstanding performance - a maximum speed of 150mph allied to a range of over 480 miles. The type was to quickly become a favourite with those police forces across the world able to afford it, or indeed any new aircraft. In Britain it was to be widely used, but use was held back by those same financial considerations. Continuous development over the following 30 years saw the 369/500 evolve into the similar 520 and 600 Notar helicopters which at the turn of the

millennium continue to represent the ultimate in single engine law enforcement tools.

Under the directions of the Boundary Commission there had been a number of changes affecting the lines taken by county and political borders. Early in the 1960s plans were set in hand for police forces to alter and reflect those same boundaries. In the resulting re-organisation many of the remaining small forces, particularly the Boroughs, were to combine with larger cousins and disappear. The dates of the changes were staged so different areas faced the inevitable disruption on different dates.

Late in January 1966 it was announced to the press that three north midlands police forces were to operate an air unit together. The Chief Constable of Sheffield, Edward Barker, and Councillor M J Sewell announced on behalf of the police forces in Derbyshire, Nottinghamshire and Sheffield Borough that they were now able to call upon the services of the experienced pilots and aircraft operated by the Sheffield Aero Club in an operation that had already undergone a successful trial in 1965. The facility was provided without cost to the police.

In spite of its name, the Sheffield Aero Club was based a dozen miles away at Netherthorpe Airfield, a grass airfield situated near Worksop, Nottinghamshire. They operated the two seat Cessna 150; four seat Cessna 172, a Piper Tri-Pacer and an Auster. No details of specific police operations have survived the passage of time but it can be surmised that it was a fairly short lived operation, if only because of force amalgamations which saw Sheffield become a part of South Yorkshire.

The flying club facility only provided small light aircraft suitable for certain types of police operation, it did not remove the long standing need for using the AA aircraft. Coincidentally, on January 29, the police in Sheffield were making use of the AA aircraft. The Piper Apache operated out of Scafton for 90 minutes covering the traffic situation around the Sheffield football ground at Hillsborough. Bill Lewis, the AA pilot, took up one of his local managers and two police officers - Inspector A K Beaumont from Hammerton Road police station and PC Joseph Purseglove from Perry Bar. PC Purseglove acted as the radio operator.

The Sheffield operation of the AA Apache was not without its problems. On an earlier first flight the force had used a personal radio system [then a very new form of communications in many forces] with very pleasing results. Unfortunately the Home Office got to hear of this unauthorised use of the system and objected on the grounds that it may have interfered with civil aircraft radio traffic. Although there were no adverse reports to back up this assertion, the subsequent flight over Hillsborough, in support of one of the World Cup games, made use of a more acceptable type of portable radio system. No further flights in AA aircraft occurred during the life of the Sheffield Borough police force.

The late 1960s were the time of flower power and the coming to terms with living with the nuclear age. Continued large scale public demonstrations against the dangers of nuclear holocaust, many leading to significant street disturbances, took place across the Western World. In Britain the prime leader of these marches and demonstrations was the Campaign for Nuclear Disarmament [CND]. Although the marches were every bit as large and violent as those in the 1930s, the police in London did not generally seek to cover them with aircraft observation. This was reinforced by the continued ban on single engine types over the areas generally favoured by CND marchers.

The decision to undertake policing of these events without the benefits of air observation was not universal. The Manchester City Police, faced with a large scale anti-nuclear weapon demonstration and march organised by CND, and the expectation of large scale traffic disruption between the start point in the city centre and the dispersal point at Belle View, hired a helicopter to assist on September 21, 1962. Manchester was not suffering from the severe city centre flying restrictions affecting London. As far as is known this was the first and last post war flying operation undertaken by this force before it was amalgamated with neighbouring Salford in 1968 - later still it became a part of Greater Manchester Police.