Nowadays most people are very familiar with helicopters and other aircraft in our skies and, through the medium of television and radio, we can see their use in dramatic events by our emergency services. This notebook traces the beginnings of Police Air Support in the U.K. and its introduction and development within Essex.

The very first recorded police aerial support operation in the U.K. was in 1921 when a tethered balloon was used to observe traffic and crowds at the Epsom Derby. True air support had to wait until 1931 when the Metropolitan Police hired an Autogyro (forerunner of the helicopter) for a two month trial. Not much is known of its outcome so it was not until 1967 that the Home Office first looked at the possibilities of Police Air Support.

The Home Office commissioned a 20 week trial using Army Sioux Helicopters with 10 Police Forces, including Essex. With the help of the Royal Canadian Horse Artillery and a police observer on board, a series of two week trials were carried out with nominated forces.

The scope of these trials was based upon the experiences of law enforcement agencies across the world and, in particular, those of the USA and Canada. The first trial area was Hampshire.

Whilst these trials did confirm the potential of air support there was still a gap of over 5 years before any permanent form of air support was introduced in the U.K. Up until that time, air support had been requested/leased on an “ad hoc” basis. In 1973 the Metropolitan Police were the first to introduce a single engined helicopter for operational use under the rules of the Civil Aviation Authority (C.A.A.).

It is important to note that the C.A.A. imposes severe height and operational restrictions on the use of single engine or high octane petrol engine aircraft over built up areas, sea and for night time flying. Nonetheless, the Metropolitan Police achieved considerable positive results.

The majority of early sorties
were related to Crime Searches. Later the MET used twin engined turbine aircraft to overcome the C.A.A. restrictions.

From 1979 onwards a few U.K. Police Forces were using air support but, again, it was on an "as and when required" basis. During this period Essex occasionally called upon the MET for assistance, but this was only given on an "if available" basis. Devon and Cornwall and Hampshire forces commenced their air support in 1979 and others soon followed.

To minimise costs, three Midland forces created a joint arrangement where one aircraft was used between them. Whilst this was cheaper for each force, there were limitations as all demands could not be achieved simultaneously. Early funding allocation was also relatively low and records show that Hampshire's annual budget for air support in 1979 was just £5,500. Interestingly, Hampshire's analysis supported the operation of a fixed wing aircraft, which they still use to this day.

Hampshire's annual budget for air support in 1979 was just £5,500. Interestingly, Hampshire's analysis supported the operation of a fixed wing aircraft, which they still use to this day.

However, with a very long coastline and difficult access to many areas, Devon and Cornwall opted for a helicopter. These decisions, together with the MET experiences, very much influenced the choice for Essex.

The County of Essex has a substantial mix of requirements: a) a 250 mile long coastline with many inlets which are not easily accessible, b) heavy urbanisation along the southern corridor from Grays to Southend, c) extensive open farmland in the central and northern areas of the county, d) major motorways and trunk routes criss-crossing the county, as well as e) a major airport and ferry port. This scope of requirement identified a need for a very flexible facility and one which can respond quickly and effectively in support of conventional policing methods.

Following the issuance of the Home Office Joint Working Group report in 1988 on "Police Use of Aviation", Essex Chief Officers appointed Supt. Allan Taplin, together with Insp. Florence, to carry out a study. "To examine the need for air support as a means to maximise the effectiveness and efficiency of police operations". This study was very thorough and drew upon the experiences of other police forces and government agencies of the world. What was remarkable was that the survey identified and confirmed a similarity of experiences and operating benefits across a broad spectrum of policing activities.

The study also included a review with each Divisional Command Team in Essex to identify key areas where air support could and did work more efficiently than conventional methods. These were identified as Search, Command and Control, Patrol, Traffic Control, Surveillance, Pursuits, Rapid Transportation, Rescue and Disaster Support and Air Related Crime (Stansted Airport is the UK's hijack location).

The study identified that the topography view provided by air support is vital in the search of open land, in difficult areas and in high speed pursuits. This aspect is frequently demonstrated in the many dramatic actions featured in TV news items. This asset was aptly demonstrated in the year of the review, where an elderly person was reported missing and found 2 days later lying in a growing crop field. It was only when a passing commercial helicopter spotted and reported the sighting, was the person found. The person was not visible to officers at ground level and, had air support been involved when originally reported, that person's life may well have been saved.

The study clearly supported the potential of air support in Essex and the savings that could be made. The time and cost of air support to search one square mile is about 10 minutes and £109. The cost with conventional means is about 450 man hours and £5,500.

In December 1989, recommendations for a six month trial were put before the Chief Officers and to the Police Authority. Approval was given and a budget of £300,000 agreed but with flying time limited to 2 hours and 15 minutes per day. It was agreed the Police team to would be 1 Inspector, 1 Sergeant and 4 Constable observers. By 13th March 1990 Inspector Mike Walker had been appointed Unit Executive Officer (required by the C.A.A.) and Team Leader. Together with Supt. Taplin there followed a very intensive, if not frantic, period of time preparing for the trial.

During March 1990 the contract for Aircraft and Technical Support was advertised, invitations for Sergeant and Constables circulated internally and a search for a suitable operational base conducted. There were also a number of visits to other police forces with air support units to observe their procedures and to obtain specimen documentation.

The police helicopter of Essex Police, 1990.
The bid to supply the Aircraft and Technical Support was won by Aeromega Helicopters, who are based at Stapleford Abbots airfield. Their package offered a AS355 Twin Squirrel aircraft and, following confirmation of the contract in early May 1990, the aircraft registered "G-Plax" was assigned for Essex Police use. This aircraft was then re-livered in Essex Police colours/signage and allocated the call sign "QH 99" for police communications purposes.

To meet the operational objectives, the aircraft was fitted with a 700 Watts amplification system for sound communication with officers and public on the ground, a 30 million candle power "Nightsun" searchlight, a gyro-stabilised telescope, powered by the aircraft, to assist in searches as well as aerial photography equipment.

In April 1990 agreement was reached with Ford Motorsport to lease the old Control Tower and adjacent land at Boreham Airfield near Chelmsford. (This airfield was originally used during WW2 by 399 Squadron of USAF with Marauder bombers). Ford Motorsport were extremely supportive and sponsored much of the initial work to use the control tower and proposed landing area.

The advantage of this location is that it is very central, close to Headquarters and achieves the optimum flying response time (15mins) throughout the county. A fuel bowser was also installed to achieve savings of bulk fuel purchases and to optimise operational flying time.

The police team were identified by May 1990 and training immediately undertaken. There were also seminars and introductory talks with Divisional Teams to advise of the availability and scope of air support being offered once the unit was operational.

Finally, with a great deal of effort, lots of sweat and not without a little humour and strong words along the way, the team, aircraft and base were ready.

On 2nd July 1990 the Air Support Unit went operational amidst a fanfare of local media attention.

During the 6 month trial the aircraft was deployed on 598 occasions and, apart from Essex related tasks, it was also used to assist Kent, Cambridge and Suffolk Constabularies.

In the latter stages of the trial, Essex Ambulance Service was invited to provide a paramedic to attend incidents involving serious injury. The aircraft attended 27 such incidents and this may well have influenced the introduction of the Essex Air Ambulance Service as we now know it.

On one occasion there were serious heath and woodland fires near Colchester and it was difficult for Fire Officers to identify the seat of the fires. This resulted in the Fire Service requesting the assistance of Essex Police Air Support. From the air the fire officers quickly identified the problem and contained the outbreak.

The analysis of the trial showed that a substantial number of tasks (50%) were for searches. A majority of which were crime related and resulted in 22 arrests. There were 39 searches for missing persons. The remainder of the tasks were related to Rapid Transport (32%) which involved firearms teams, surveillance, route security, public order, night operations, photo reconnaissance, vehicle pursuit and pre-planned patrol and 18% to traffic related accidents and medical evacuation.
The trial proved a success and identified that the operating costs were substantially lower than conventional methods. This saving was calculated to be £19 million. Following on from the trial, an in depth report and analysis was prepared by Insp. Walker and presented to the Chief Officers and Police Authority. From this report approval was given for an ongoing air support unit.

The trial did identify some limitations with the most important being the lack of hanger facilities for the aircraft. When not in operation, the helicopter was positioned in the secure Ford Motorsport compound which was under 24 hour surveillance. However, being in the open and subject to the elements and bad weather, the aircraft was affected by icing etc., which did affect its 24 hour availability. There were also non-operational costs / flying hours in the daily transfer between the base/compound.

In 1993 approval was given for the building of a prefabricated hanger to be built alongside the Control Tower. This provided secure and weather proof conditions which allows operations around the clock, except only in the most extreme flying conditions.

In July 1994 there was the single most important operational development with the installation of Thermal Imaging Equipment (sometimes known as FLIR - Forward Looking Infra Red). This equipment allows officers to search at night by "seeing" heat reflections recorded on their monitoring equipment. This equipment is also down linked to the Command and Control centre (FIR) at Headquarters so commanders can use the information to direct ground officers to specific locations at night.

Using this equipment the Essex Police helicopter achieved national fame when it was used to assist Cambridgeshire Police in the night search for IRA prisoners who had escaped from Whitemoor Prison on 9th September, 1994. The officers on board were able to direct ground forces to the two men who were hiding in a field. This operation is regularly shown on T.V. as a positive aspect of air support.

Insp. Paul Marrion and Sgt Russ Woolford who head the current team advise that the original operational projections and forecasts remain very accurate. The annual level of activities is about 1500 tasks per year. The only significant changes in activities has been: a) an increase in searches for missing or vulnerable persons (about 40% of all searches) and is as a result in change in Government direction and the Social Services decision not to retain such persons in secure accommodation and, b) overt and covert photo reconnaissance.

The type of aircraft used has also moved on with the purchase of a helicopter as opposed to a leased aircraft. This has resulted in significant savings in expenditure. On 9th July, 2003 Essex Police commenced operations with its own EC135 T2 Eurocopter. This aircraft is of a joint French/German manufacture and has the permanent registration of "G-ESEX" and call sign "QH999".

As well as all the listed equipment, this aircraft is also fitted with GPS Navigation as well as "TRACKER" to identify vehicles fitted with anti-theft equipment. Pilots and maintenance are still provided on a commercial contractual basis.

Whilst this helicopter is exclusively for Essex use, there is a joint support arrangement with Cambridgeshire and Suffolk Constabularies. This means that each county assists the others by providing cover whilst aircraft are being maintained and/or to take turns with cover over weekends etc.

The air support unit is now fully integrated into all operational activities and remains a very important tool in the daily support and security of lives in Essex.

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