

Exceeding Expectations Drives Strength Of Calgary's Air Support

By Constable/TFO James Partridge, Calgary Police Service Air Services Unit

In 1992, the Calgary Police Service began researching a patrol helicopter for police applications. Numerous successful test projects were conducted using a traffic helicopter through a working agreement with a local radio station. Inspector Kevin Brookwell (who has since retired) headed the study.

On Oct. 8, 1993, Constable Rick Sonnenberg was killed while trying to stop a stolen vehicle fleeing from police. Shortly after the incident, Sonnenberg's family, headed by his sister, Lisa Stinson, established the Constable Rick Sonnenberg Memorial Society and Project Helicopter Air Watch for Community Safety (HAWCS).

In the year and a half that followed, HAWCS raised over \$1.5 million, and the HAWC 1 helicopter, an MD 520N, was purchased. On June 30, 1995, HAWC 1 was presented to the Calgary Police Service. Its acquisition would not have been possible without the dedication of Stinson and the other Albertans who contributed to the project.

On July 18, 1995, the Calgary Police Service became the first municipal police agency to establish an air service unit and full-time patrol helicopter. At the outset of the program, it was expected that the helicopter would:

- be effective for criminal apprehension because of its rapid response and surveillance capabilities;
- enhance officer safety during emergency responses to crimes in progress, police pursuits and area searches;
- be an effective crime deterrence tool because of its patrol capabilities and its omnipresence.

In a study carried out by the University of Southern California for medium to large cities, the researchers concluded that:

- one two-officer helicopter is operationally equivalent to 15 two-officer ground units on patrol;
- helicopter flight crews have 30 times the visibility of a patrol unit and cover the same area 15 times faster;
- helicopter flight crews can keep mobile or stationary objects in view 10-15 times longer;

- by reducing response times from four to two minutes, the apprehension rate can increase by almost 100 percent;

In a study of the Sky Night Program in Lakewood, CA, the authorities concluded that the crimes against persons and property were reduced 8.8 percent during the first year of operation.

In a study carried out by the Jet Propulsion Laboratory and the National Aeronautics and Space Administration, the authors concluded that the overall probability of arrest when a flight crew teamed up with ground units was 40 percent. This compared to only 18 percent arrest probability in divisions not involved in the air support test study.

With the above stated expectations being achieved over a decade of helicopter operations and supported by extensive research, HAWCS was able to raise funds to purchase a second helicopter in 2004. HAWC 2, a Eurocopter 120b Colibri, was put into service in June 2006. The original HAWC 1 MD 520N was sold in late 2006 and replaced with a second Eurocopter 120b.

The Calgary Police Service Air Services Unit now operates two Eurocopter 120bs, equipped with FLIR 7500 thermal imagers, a computerized moving map and address system (GPS linked), a Spectrolab SX-16 Nightsun and downlinking capabilities. Helicopter operations are conducted from the Calgary Police Service's hangar located at the Calgary International Airport.

The unit's primary function is to act in a support role to frontline law enforcement operations. Officer safety and police pursuits are two areas in which the unit enhances law enforcement operations.

The first unit to arrive at the scene of a complaint is usually at greatest risk, because the officer is facing largely unknown factors. HAWC 1 has improved officer safety because of its ability to arrive at an event quickly, identify potential suspects or dangers and direct the activities of units en route. The helicopter is first-on-scene in 55 percent of calls for assistance. When the helicopter is not first-on-scene, it enhances officer safety by delivering valuable information about the scene that is not available from the ground.

To date, there have been situations in which suspects gave themselves up to Calgary Police Service ground units or did not attempt to flee the scene because of fear of being spotted from the air. The average response time for the helicopter is less than three minutes, while the average response time for a ground unit on a priority call is over six minutes. With Calgary covering approximately 300 square miles (768 square kilometers) and a population of over one million, that response time is impressive.

Immediately after helicopter operations were initiated, the Calgary Police Service saw a decrease in the total number of pursuits by 61 percent by year-end 2000. Helicopter operations are credited as a contributing factor to this favorable trend, as is the continuing education of police members in pursuit policy tactics and prohibitions while maintaining and respecting the safety of the citizens of Calgary. During pursuit situations, once the fleeing vehicle has been spotted, ground units can be moved back while flight crewmembers follow the suspect. The risk of injury to everyone on the ground is reduced, including citizen bystanders, police personnel and the suspects themselves.

In addition to its regular nightly patrols, the Calgary Air Services Unit supports the Calgary Fire Department with its Bambi Bucket, which is capable of delivering 100

gallons of water and flame retardant per dispensation. Also, the unit's two thermal imaging FLIR 7500s can be used to assist firefighters to suppress a fire more quickly by detecting the main heat source.

The helicopter is capable of providing real-time video/infrared downlink to mobile or static command posts for scene commanders. The unit also assists the STARS Air Ambulance by illuminating landing zones, locating victims and sharing resources.

The Tactical Unit and K9 Unit can also utilize the helicopter for insertions, victim extractions and other specialized duties. Further, the Air Services Unit provides air support to other law enforcement agencies in the Calgary region.

Over 13 years of helicopter operations, the Calgary Air Services Unit has grown to include three full-time tactical flight officers, four full-time pilots, two full-time aircraft maintenance engineers, a chief pilot and a sergeant. An active fly-along program for both sworn and civilian members of the Calgary Police Service, as well as members of the public at large, allows the unit to maintain strong ties to all stakeholders. Strong support from both the community at large and the Calgary Police Service has greatly contributed to the unit's success.