

Arming airborne police units



Law enforcement agencies examine possible next step in fighting crime.

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When we see a typical police officer on the beat, most of us see a man or woman wearing a uniform and a badge. We look down at the officer's belt and see the ever-present handgun. And we may reflect that crime and violence are a harsh reality in the United States and that our police officers are equipped to cope with that reality. It's what we're accustomed to in America.

However, when most people think about police helicopters, different thoughts come to mind, like the high-speed chases or dramatic rescues we've all seen on television. Increasingly, however, the law enforcement aviation community is training and equipping itself to engage armed criminals and terrorists from the air. The use of police helicopters as aerial weapons platforms is a growing trend from coast to coast.

In fact, firing weapons at suspects from law enforcement aircraft is nothing new. It's not clear when the first such incident occurred, but there are documented cases dating back to the mid-1960s. In most early cases the situations involved the pur-

suit of heavily-armed suspects in wilderness settings. Firing from the air was an improvised response, either when police spotted the suspects or, as a self-defense measure, when the suspects on the ground fired at the police helicopter.

Perhaps surprisingly, being shot at by armed suspects on the ground is a matter of routine for many law enforcement aviation units. Crews minimize the threat by employing solid tactics and evasive maneuvering. Fortunately, most suspects lack the ability to hit a moving target as difficult as a maneuvering police helicopter. Notwithstanding these facts, ground fire does sometimes hit law enforcement helicopters and their crews.

In May 1994 a Missouri State Highway Patrol Bell 206 JetRanger was hit by ground fire during a vehicle pursuit near the community of Jefferson City. The chase started after 2 heavily-armed suspects robbed a bank in the town of Ashland and murdered a bank employee. The pair of suspects then began shooting at pursuing police cars and the Highway Patrol helicopter. Two officers aboard the helicopter returned fire using a rifle and a handgun.

The fleeing car was finally brought to a halt, but not before the heli-

Snipers with the LA Police SWAT Team practice live fire training aboard one of the department's Eurocopter AS350B2s. The officers always work in pairs—this allows one officer to always be able to engage any hostile target while the second officer reloads his weapon.

copter had been hit by a shotgun blast from one of the suspects. The Highway Patrol pilot was hit 4 times in the leg and the aircraft was damaged. As a result the pilot made an emergency landing next to the highway.

After being surrounded by ground units, the 2 criminals chose to commit suicide rather than surrender to the authorities. The injured pilot returned to duty later following a hospital stay, and the helicopter was repaired and eventually returned to service.

Multiplying the force

A more recent incident occurred in California on Jun 12, 2004. Orange County Sheriff's Dept deputies were dispatched to a recycling plant located in Baker Canyon—a remote area of the county. Two employees at that location had reported that an armed man had shot at them. As the responding officers searched the area, the suspect ambushed one of the deputies, shooting him twice. A massive 4-hour manhunt ensued, involving various local, state and federal authorities.

A patrol helicopter from the Orange County Sheriff's Air Support Detail went to the scene to assist. The area was cordoned off and SWAT officers began searching the area with support from the orbiting helicopter. The suspect repeatedly fired at officers on the ground and at the helicopter. The pilot received a minor gunshot wound to his leg but continued flying for another hour before a SWAT officer colleague riding in the helicopter shot and killed the suspect from the air.

Events such as these and the current threat of terror attacks have been the impetus for law enforcement aviation units across the country to begin formal training, procure specialized equipment, and develop tactics for the use of armed force from the air. One proven armed flight operation often cited by those within law enforcement aviation is the San Bernardino County Sheriff's Aviation Division.

Between 1971 and 1988 this unit was involved in no fewer than 9 shooting incidents in which officers fired from helicopters at suspects on the ground. These incidents



Law enforcement aviation units are increasingly adding an armed response capability. Two armed officers are seen here during a test of the innovative Tyler special operations platform.

motivated the unit to study the subject in depth. Personnel with the San Bernardino Sheriff's Department began to evaluate rifles and submachine guns to determine which types could be employed most safely and effectively from their helicopters.

One type of rifle used in 2 of the earlier shootings was found to be difficult to control while firing in the full automatic mode. It is a characteristic of many semi-automatic and fully automatic weapons that the muzzle climbs upward when the gun is fired rapidly. This happens because burnt gunpowder produces gases that expand rapidly and act like a jet, pushing the barrel upwards. This characteristic caused great concern since it could easily result in the weapon being fired inadvertently into the rotor system.

Another concern was that high-power rifle bullets are more prone to penetrate a target or to ricochet—events in which innocent bystanders would be at risk of being wounded or killed by accident. As a result, the unit decided to evaluate weapons that fired less powerful cartridges of the type more commonly used in handguns. Compact size and ease of handling in the tight confines of an aircraft cabin were also an important consideration with this type of weapon.

Based on its evaluations and safety concerns the San Bernardino Sheriff's Aviation Division chose the model MP5 submachine gun. The MP5 is a compact, accurate and

easily controlled weapon that fires a 9-mm pistol cartridge. In widespread use among the world's elite military and police tactical units, the MP5 can be used in full automatic mode for rapid firing or in semi-automatic mode for firing single shots.

Today the San Bernardino Sheriff's Aviation Division routinely conducts armed patrol missions in its Eurocopter EC120s. Weapons and ammunition are stowed in special racks inside the cockpit and, if the situation warrants an armed response, the weapons can be brought to bear quickly. Additional weapons and equipment are kept at the department's base for use during tactical operations aboard the unit's MD Helicopters MD500 and 600s.

At the time of writing we learned that the San Bernardino Sheriff's Dept is again evaluating new firearms for use in its helicopters. During a telephone interview, Capt Tobey Tyler stated that his agency would be selecting a new weapon for aerial use by the end of 2004. Since the unit chose the MP5 submachine gun there have been many advances in rifle configuration, ammunition and optical sighting systems. It is likely that the unit will choose a higher-powered rifle to deal with today's more heavily armed threats.

Platforms over LA

Pioneering new techniques and equipment has always been a hall-



USCG Petty Officer 2nd Class Chris Karpf maintains a vigilant watch while on security patrol over midtown Manhattan during the Republican National Convention in Aug 2004.

mark of the Los Angeles Police Department (LAPD). This remains true in the field of armed flight operations. In collaboration with Tyler Camera Systems, LAPD Air Support Division has developed an external platform for armed flight and other special applications. This innovative piece of equipment is known as the Tyler special operations platform—TSOP for short.

Tyler had previously developed external platforms for use in the motion picture and powerline maintenance industries. LAPD needed a platform that could be used to carry and deploy SWAT officers from its Eurocopter AS350B2 AStar helicopters. The TSOP grew from that requirement and is also able to serve as a sniper platform for armed operations.

Unlike San Bernardino County, LAPD doesn't routinely operate armed flights. When necessary, the Air Support Division can install the Tyler platforms on any of the unit's fleet of 10 AS350B2s in about 10 minutes, according to LAPD Sgt Bill Shortly. LAPD SWAT officers can then be picked up at landing zones around the city close to any incident requiring an armed response.

Shortly says that only highly-qualified SWAT team snipers are currently allowed to fire weapons from the department's aircraft. Armed missions are carried out using 2 helicopters, each with 2 snipers riding externally on the TSOP on the left side of the aircraft. Using 2 shooters per aircraft allows one officer to engage a hostile suspect continually while the other reloads his weapon.

Safety is a primary concern during armed flight operations. While riding externally, the snipers are strapped to the TSOP and are attached by harnesses to an anchor point inside the cabin. The officers also wear safety helmets and body armor.

The weapons used by the snipers are a compact variant of the military M16 rifle known as the M4 carbine. Because this weapon forcibly ejects spent cartridge cases as each shot is fired, it has been necessary to equip them with special bags to catch the ejected cartridge cases to avoid possible FOD damage to the engine and rotor system.

Other law enforcement aviation units have purchased or expressed interest in the TSOP. Craig Dyer of Tyler Camera Systems reports that the Memphis Police Department in Tennessee and the US Border Patrol have acquired Tyler platforms for their Eurocopter AS350s. Due to high interest from police users of MD500 helicopters, Tyler has developed a platform for that aircraft. FAA certification is pending.

Antiterrorism aspects

Continuing concern over the possibility of terrorist attacks following the events of Sep 11, 2001 has led the New York City Police Dept to conduct armed flight operations. These patrol flights are among the many anti-terrorist measures put into effect as part of the heightened security in and around New York City. Police helicopters are used to make regular checks of government buildings, bridges, tourist land-

marks and other possible terrorist targets.

The New York City Police Aviation Unit has given few details about its armed flight operations. However, the department's Bell 412 and Agusta A119 helicopters are routinely seen carrying officers equipped with assault rifles. Members of the unit's elite Emergency Services Unit provide rescue divers and medics to the aviation unit as a matter of routine. It is likely that the armed officers seen in the air also come from the ranks of this same special unit, although, when contacted regarding this story, officials with the New York City Police Department declined to comment, citing ongoing security concerns.

On at least one occasion armed helicopters from the New York City Police Department have been used to intercept suspicious aircraft.

According to publicly available NTSB documents an intercept of 2 airplanes took place on Jul 4, 2002. The police department and FAA received numerous reports of 2 single-engine airplanes flying at altitudes as low as 25 feet. The two aircraft also flew close to people in the area around Rockaway Beach NY.

Neither aircraft responded to ATC communications. It was later found that both pilots had switched off their radios and transponders in an attempt to escape ATC attention, despite being in close proximity to JFK (John F Kennedy, New York NY). After a tense few minutes following the intercept, the aircraft were escorted toward a nearby airport. An additional New York City Police Department helicopter and a US Air Force McDonnell F15 joined in along the way. Upon landing, both pilots were taken into custody at gunpoint and charged with violating several state and federal laws.

Because of the continued threat of violent crime and terrorism, it is likely that armed police helicopters will become an accepted part of American society. Law enforcement agencies that utilize such tactics face many challenges. Pilots, who in the end bear final responsibility for the safe operation of their aircraft, face the biggest challenge of all. Vital to the success of any armed flight operation will be a determined focus on safety, legal issues, training and tactics. 