



Corona Police Department

In April 2006, we sent an email survey to all of the California Police Agencies who are part of the California Police Chiefs' Association. The survey asked whether or not the departments had air units, what aircraft they flew, and what their missions were.

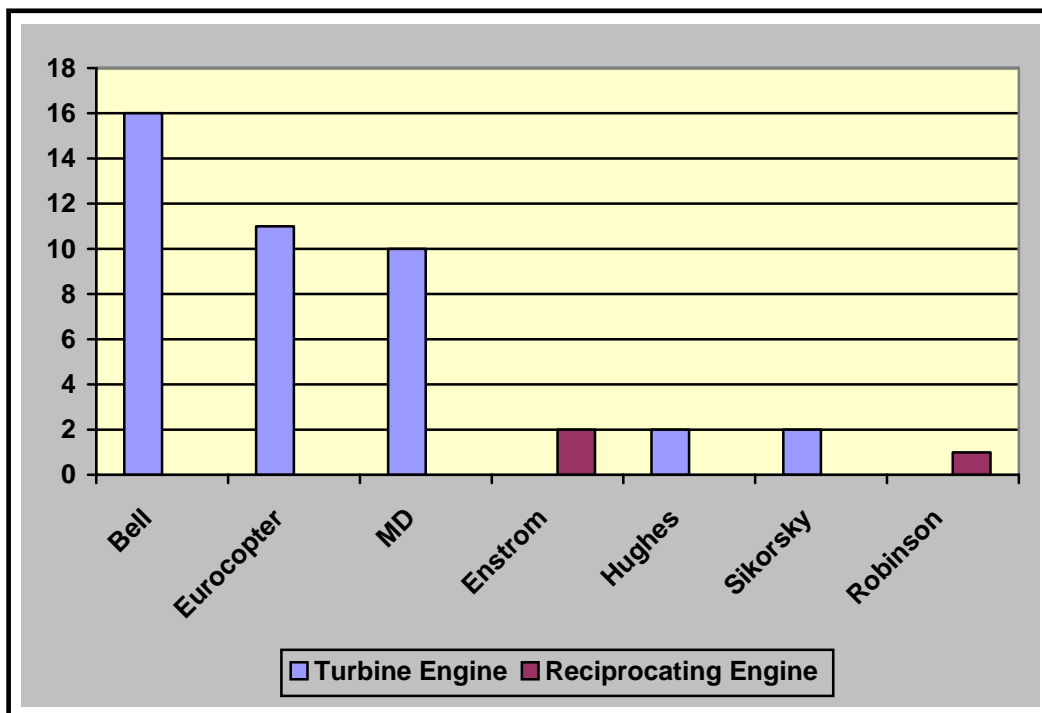
We reviewed The Airborne Law Enforcement Association website and learned that this site contains searchable databases that can be broken down for air units nationwide or by state. The information in these databases described each unit's aircraft, personnel, and mission capabilities.

Police Department staff made personal and phone contact with several other California air units. A total of 35 units out of 39 total Municipal or County units in California were studied using information obtained by email, conversation, or database review.

The majority of the 39 listed units cite their main missions as patrol support, search and rescue, SWAT, surveillance, and external loads. Fewer than half claimed to perform firefighting operations.

The types of aircraft listed covered the spectrum of light and medium turbine helicopters. The helicopters listed were the Bell 206, Bell 407, Bell 206 L4, Bell UH1H, Bell 205, Bell 212, Enstrom F28F, Eurocopter AS350 B2 and B3, Eurocopter EC 120 and 130, MD 500, MD 520N, MD 600, MD530F, OH 6, OH 58, Robinson R44, and the Sikorsky HH3.

NUMBER OF CALIFORNIA AGENCIES FLYING EACH MAKE OF AIRCRAFT
(Information obtained from the Airborne Law Enforcement Association's database of California Air Units)



Of the 35 units studied, 32 (or 91.4%) fly turbine aircraft as their primary helicopters. One department flies an Enstrom F28F (piston engine) as a backup ship to their standard turbine aircraft.

Reviewing the statistics nationwide, out of 185 law enforcement air units listed by the Airborne Law Enforcement Association, 12 of them (or 6.46%) fly piston powered helicopters as their main ships. Of the 185 units listed, 4 fly the Robinson R44 (2.1%).

Through personal and phone contacts with members of air units throughout California (many of them supervisors), we learned that the overwhelming trend in California Airborne Law Enforcement is to be multi-mission capable. Every agency we contacted who fly turbine aircraft said they did so because the turbine aircraft offered them the power, speed, cabin space and reliability they needed to be capable of performing missions other than just police patrol. Many of these experts stated that if the mission includes flying with more than two people in the aircraft in hot weather, in mountainous terrain, then the situation calls for the power and reliability of a turbine engine.

The common theme we received from experts in the field is that areas with the geography, climate, terrain, and traffic congestion similar to that of Corona support the need for a turbine engine aircraft. Another common thought from those with whom we spoke was that the urban/forest interface we have in Corona demands an aircraft with the ability to drop water in the early stages of a fire.

The contacts we made who fly the Robinson R44 believed that the aircraft was suitable for police patrol only, but will not be able to compete with a turbine helicopter when tasked with other missions such as external loads, rescues, or special team deployments. Many of these units restrict the amount of fuel they take onboard just to perform standard patrols safely. Through research, we learned that the Robinson R44 does not have the power, payload capability, or seating capacity to perform many special operations. This is compounded when one adds hot temperatures and elevations such as those we have surrounding our city. The Robinson helicopter is not capable of initial attack on a fire.

Everyone contacted made it clear that a turbine engine aircraft is more expensive to operate than a piston engine aircraft. However, the common thought, especially among those flying turbine aircraft, is that the additional cost is relative to performance. The R44 can operate at a lower rate per hour, but will only be capable of patrol. As capabilities are added, operational costs increase. The increase in operational cost needs to be tempered with the benefit of being able to perform life saving missions, or delivering a direct attack on a fire threatening a neighborhood in the city. No one we contacted could provide a dollar amount that could be attached to these abilities. However, those that have these abilities stated they would not trade them for lower operating costs.

All helicopters make noise. A multi-mission helicopter is larger and more powerful than smaller aircraft. With this size and power comes a larger noise signature. To address

this, the Corona Police Air Support Unit has policy in place to keep normal flight levels above 500 feet above the ground, and encourages patrol levels above 700 feet above the ground. Additionally, the air crew remains aware of the noise they are causing, and departs the area as quickly as possible upon completion of the call. After the fact, every person who calls to complain about the helicopter noise receives a follow-up phone call from the Air Unit Sergeant or Captain to ensure the caller's questions about the complaint have been answered (unless the caller advises they do not wish to be contacted).

To sum up our research, 21 of the 24 units with whom we spoke fly turbine helicopters because they feel the turbine helicopter is more reliable, safer in a police mission, and more powerful than the piston engine. All of the units who told us they had previously flown reciprocating engine helicopters viewed their transition to turbine helicopters as a progression and a step which they would not take back.