Review of the Sheriff's Aviation Support Unit



Review of the Sheriff's Aviation Support Unit

SUMMARY

The Orange County Grand Jury has completed a review of the Sheriff's Aviation Support Unit. This review of the unit, never before performed by the Grand Jury, was undertaken because the unit is costly to operate and is a high profile operation. Also, the Sheriff is acquiring responsibility for patrol along with search and rescue operations for a very large, new portion of public land.

It was found that the Sheriff's Aviation Support Unit is well managed, operates in a fiscally prudent manner and provides good service to residents of the County. However, the fleet of only two helicopters is few in number when compared to surrounding counties, and the helicopters themselves have significant limitations when used in search and rescue operations, for which the Sheriff's office is the responsible agency.

The Grand Jury recommends that as the Sheriff's budget improves with a recovering economy, consideration be given to adding to the current fleet, and replacing the two existing helicopters with more capable models. Recommendations are also made to implement long range planning by the Aviation Support Unit, study ways to improve retention of the Sheriff's helicopter pilots and to give consideration to the creation of a regional aerial law enforcement program to cover all of Orange County.

REASON FOR STUDY

When the Grand Jury became aware that the County of Orange was going to be acquiring over 31 square miles of wilderness and parkland with public access as a dedication from the Irvine Company, interest was sparked in the Sheriff's Aviation Support Unit (Aviation Unit). This group would be the first responders if aid should be required in that area. While the Sheriff's Department is the responsible agency for this previously privately held area, the opening up of this new acreage to the public will likely increase demands upon the Sheriff.

Further, since helicopter operation in general is expensive, it is therefore a relatively high cost unit to run and maintain. In recent years the public has become more concerned with efficiency of government operations. The current difficult economic times compound budgetary issues. Finally, there are increasing calls for "regionalization," the concept of creating a single, regional law

enforcement aviation program that would serve multiple cities, as well as, the County.

On this basis the Grand Jury chose to review the Sheriff's Aviation Unit to determine if the unit was operating efficiently and effectively to provide optimum public benefit.

This report covers a considerable number of issues, including:

- Current operating aircraft and their capabilities and limitations.
- A broad comparison with other law enforcement agencies.
- The Unit's current facilities.
- Budgetary issues.
- Retention and staffing.
- The Sheriff's countywide role in search and rescue using these aircraft.
- Impacts of a possible regional helicopter program.
- Long range planning in the Aviation Unit.

METHODOLOGY

The scope of this report is limited to an overview of the operations of the Sheriff's Aviation Unit and those issues directly affecting it. The Grand Jury did not review whether or not the unit's existence in and of itself was justified. That is a very difficult concept to objectively analyze, and studies may be found supporting both sides of the question as to whether helicopter law enforcement programs are effective. The Grand Jury approached the issue by assuming that since the unit has been in existence for over 25 years, it has proven its fundamental worth to the Sheriff, an expert in law enforcement matters. The Grand Jury focused on possible improvements to further increase benefits for those citizens served by the unit.

Members of the Grand Jury met with all agencies within Orange County operating helicopters for law enforcement purposes (Anaheim, Huntington Beach, and Newport Beach/Costa Mesa.) Data also was obtained (primarily from websites) concerning helicopter units for the sheriffs' departments of all counties from San Diego County to Ventura County. And while not a law enforcement agency, the Orange County Fire Authority was interviewed concerning the role its helicopter unit plays in search and rescue operations. Finally, the Grand Jury reviewed a number of local and national studies specifically conducted to examine the efficacy of helicopter law enforcement.

FACTS

Fact: The Orange County Sheriff has operated a two-helicopter unit based at John Wayne Airport since 1985.

Fact: Between the Sheriff's contract cities and the unincorporated area, the helicopter unit serves just over 700,000 citizens.

Fact: The Orange County Sheriff operates the fewest number of helicopters of all counties from Ventura County to San Diego County.

Fact: The Orange County Sheriff provides law enforcement services to 12 contract cities and the unincorporated area of Orange County.

Fact: The Orange County Sheriff is responsible for search and rescue operations within the entire geographical boundary of Orange County.

ANALYSIS

Current operating aircraft and status

The Sheriff's Aviation Support Unit has a staff of eight, consisting of seven deputies and one sergeant, all pilots or are training to be such. The unit currently operates two Eurocopter AS350-B2 helicopters, commonly known as ASTARs. These are very popular aircraft with law enforcement agencies due to their relatively reasonable operating and maintenance costs, as well as their performance.

One ASTAR was acquired in March of 2005 and the second in March of 2006. Presently one ASTAR has approximately 5,000 operating hours on its airframe and the other has about 6,000 hours. One of these aircraft will require a major engine overhaul within the next six months which will cost between \$300,000 to \$400,000. Without this overhaul the aircraft will no longer be legally flyable.

An AS350-B2 helicopter currently sells for approximately \$1.8 million in a "bare" condition. This is the cost of an unpainted aircraft without avionics and specialized law enforcement equipment. When fully fitted out for law enforcement use, an AS350-B2 becomes a \$2 million operating asset.

The aircraft are equipped with many of the usual enhancements found in aerial law enforcement. These include FLIR (Forward Looking Infrared) units, Nightsun spotlights, specialized radios and a hook for water dropping buckets.

The FLIR units enable the operator to see heat signatures on the ground, in the dark, and are invaluable in tracking subjects and searching for missing persons.

Each Sheriff's helicopter was originally equipped with one unit each. However after time these units failed and became unrepairable. Unable to acquire replacement funds through the normal budget process, the staff of the Aviation Unit was able to borrow a single "loaner" unit from the manufacturer for over a year. This was swapped between the two helicopters as needed, but was subject to recall by the manufacturer for trade shows. While this is an example of resourcefulness on the part of the unit's staff to maintain operations, it is of concern that the staff had to resort to these measures due to lack of resources. Very recently a Federal grant application was approved providing the unit with a new, state of the art FLIR unit, partially resolving the situation. But it is still only a single unit and must be swapped between helicopters as needed.

Aircraft capabilities and limitations

The Sheriff's Aviation Support Unit's two current B2 ASTARs, while desirable from an operations perspective, do suffer the drawback of relatively modest power. Equipping a helicopter for police operation requires the addition of several hundred pounds of specialized equipment (FLIR, police radios, Nightsun spotlight, etc.), thus limiting the aircraft's useful payload.

To give this limitation an Orange County perspective, on a very hot day a police-equipped B2 ASTAR with three people on board, and a heavy fuel load, could land on Santiago Peak, but taking off might not be possible due to an effect known as "density altitude". This means that on hot days or higher altitudes, more power is needed to operate the helicopter, more power than the present B2 helicopters can provide. Thus police-equipped B2 ASTARs are significantly limited in passenger capacity and also cannot effectively perform hoist operations.

Hoist operations or "hoisting", involves the use of an electrical winch to raise or lower personnel or equipment to or from a hovering helicopter, involving several hundred pounds of load. With the type of helicopters generally used for law enforcement operations, the winch is attached to the outside of the helicopter above a side door and equipment or personnel are lowered through that door. Usually the Tactical Flight Officer stands outside the helicopter on the landing skid operating the hoist control, assisting personnel being transported in this manner. Individuals may be raised or lowered while wearing harnesses, or may be placed in a litter and the entire litter lifted. Hoisting is limited by the length of the winch cable, which can be several hundred feet, allowing for extrication of individuals from within forested areas or other tight confines where a helicopter landing is not possible.

The inability of the Sheriff's helicopters to perform hoists is a substantial issue. Hoisting not only comes into play in search and rescue operations, but is often a part of SWAT extractions. In reviewing the helicopter operations of all California counties from Ventura to San Diego, the Grand Jury found the County of Orange

is the only Sheriff's helicopter operation lacking the ability to perform hoists.

Many jurisdictions provide hoisting capabilities through their use of Eurocopter AS350-B3 aircraft. These B3s, as they are called, are virtually identical to the Aviation Unit's B2 helicopters, but enjoy the benefits of a more powerful engine. Despite the larger engine, the hourly operating costs are only fractionally higher. The increased power greatly expands the aircraft capabilities and provides for safer flying in marginal weather conditions. While selection of a helicopter model for a law enforcement role is an involved and complex process, replacement of the existing Sheriff's aircraft with the AS350-B3 model seems reasonable due to similarities in operation and maintenance.

The Grand Jury is cognizant of the current economic constraints and budget limitations affecting everyone in government, including the Sheriff. In light of this, to call for immediate replacement or acquisition of new aircraft would be unrealistic. The present fiscal constraints are not expected to last indefinitely, and plans should be in place to improve the operating fleet as soon as financial conditions allow.

Comparison with other jurisdictions

The Grand Jury reviewed published reports to determine if there are any recommendations or minimum standards as to the number of aircraft an agency should operate for an effective aerial law enforcement program. In short, there are no recognized standards. Each agency operating helicopters uses the number they feel is best for them, or the number they can afford.

To acquire a sense of how the County of Orange compares to other jurisdictions in terms of helicopter assets, the Grand Jury reviewed the number of helicopters operated by county law enforcement agencies (due to their presumed similar responsibilities) between San Diego County and Ventura County, as well as the number of helicopters operated by the three police agencies operating helicopters within Orange County. In the interest of brevity, cities operating helicopters in other counties weren't listed. The number of aircraft was then compared to the population they served. For counties, this encompassed the unincorporated population, as well as those cities which contracted for Sheriff's services.

This resulted in a ratio of "Residents per Helicopter," the tabulation of which is presented in the following table. The lower number of residents per helicopter, the better the theoretical service level. The agencies are ranked from low to high in "Residents per Helicopter." Also displayed is the area in square miles served by each agency to provide a sense of the responsible area, especially for the larger counties.

Comparison of Law Enforcement Helicopter Patrol Service Levels

Law Enforcement Agency	Number of Helicopters	Area Served (square miles)	Population Served	Residents per Helicopter
Newport/Costa Mesa (ABLE)	3	30	182,941	60,980
Huntington Beach Police	3	28	195,864	65,288
Ventura County Sheriff	4	1,647	333,272	83,318
San Bernardino County Sheriff	10	19,730	1,057,039	105,704
Anaheim Police	3	55	348,467	116,156
San Diego County Sheriff	7	3,673	883,939	126,277
Los Angeles County Sheriff	18	3,162	2,945,627	163,646
Riverside County Sheriff	5	6,800	1,216,073	243,215
Orange County Sheriff	2	429	700,589	350,295

Note 1. For county agencies, "Population Served" includes those living in unincorporated areas as well as contract cities

Note 2. For county agencies, "Area Served" includes the area of the unincorporated area and the sum of the contract cities area

Note 3. Population and area data as of 2009, from City-Data.com

This table and its data provide at least a broad basis for comparison. It suggests, that the County of Orange may be, for lack of a better word, "underhelicoptered." For example Ventura County has twice the helicopters for less than half the served population of Orange County, even though by most measures Orange County is substantially more affluent.

It should be noted that although there are a total of 11 law enforcement helicopters operating within the geographic boundaries of Orange County, most are restricted to their specific jurisdictions, and thus aerial coverage is not uniform. Except in extraordinary circumstances, the helicopters operated by ABLE (Airborne Law Enforcement Agency, a joint powers agreement helicopter program for the Cities of Costa Mesa, Newport Beach and Santa Ana), Anaheim and Huntington Beach stay over those cities, with the Sheriff's Aviation Unit left to provide service to the rest of the county.

The idea that the County of Orange may have fewer helicopters than needed was reinforced by interviews made in the course of this study. All law enforcement helicopter units interviewed stated they felt three was the minimum number of helicopters required for any sizeable law enforcement agency. The reason for this position was that helicopters require considerable maintenance time, during which they must be removed from service. Helicopters are also very delicate, and even minor damage can take extensive time to repair.

Adding a third helicopter to the Sheriff's fleet would not result in a 50% increase in the cost of operation. In general, when dealing with helicopters, costs are primarily tied to the number of operating hours put upon an engine. Having three helicopters instead of two spreads the annual operating hours over three aircraft, making the fleet last longer, increasing the time between costly overhauls and providing an important redundancy in the number of aircraft.

Addition of a third helicopter to the unit would result in a significant capital cost of up to \$2.5 million if purchased outright. However there are "lease to own" programs that essentially spread the capital cost over several years, making aircraft acquisition more affordable.

Aviation Support Unit facilities

The Aviation Unit's aircraft are based on the west side of John Wayne Airport. The unit subleases and shares hangar space with ABLE. The current monthly lease, paid to ABLE, is approximately \$6,600, and represents half the overall lease amount ABLE is responsible for. The present hangar space is not sufficiently large enough to completely house the three ABLE and two County aircraft. Thus at any given time several aircraft are required to remain parked outside in the elements. This has resulted in incidents whereby some of the aircraft were put in jeopardy when severe weather occurred, such as hail or Santa Ana winds.

The hangar lease ABLE holds from Signature Flight Support is a long term arrangement and contains annual inflation escalators resulting in ABLE currently paying a lease rate for this hangar facility that is approximately double that of a comparable facility. Since the County is bound only by a short term agreement with ABLE for half the total rental, this has created a situation whereby, in essence, the County has been subsidizing ABLE's facility rent. Given ABLE's pending dissolution (to be discussed later in this report) and the expiration of the lease with Signature Flight Support in April of 2012, new opportunities for lease negotiations will be opening up for the Aviation Unit.

Despite the existing tight quarters and relatively high rent, the partnership with ABLE has been very beneficial. Fuel and mechanic's services are shared between the two agencies, and have saved the County hundreds of thousands of dollars annually. Further, certain equipment (such as FLIR units) can be and have been shared between the aircraft in critical situations.

Over the past decade some other possibilities for alternate, permanent locations have presented themselves. Fullerton Airport, the James Musik facility in Irvine and the decommissioned Tustin Marine Corps Air Station to name a few, but no action was taken to relocate the unit. Of those, the Tustin facility had potential, as there is a large, fairly new surplus hangar adjacent to and immediately west of the existing Sheriff's Training Facility. It would have been sufficient to house both the Sheriff's unit and ABLE in a structure built to support helicopters. Definitive reasons why this did not come about are unclear at this time.

The Anaheim Police Helicopter unit and the Orange County Fire Authority's helicopter division are based at Fullerton Airport. Both units have very long term leases and private hangar facilities. The Sheriff's Aviation Support Unit management has expressed a desire to be housed in a central county location, so should they wish to stay based at John Wayne Airport, efforts should begin now to develop more appropriate and permanent facilities.

Budget/Operating Expenses

The unit's total expenditures for the prior two years and operating budget for the current fiscal year are shown below:

Fiscal Year	Budget/Operating Expenses
2010 - 2011	\$2,314,902
2009 - 2010	\$2,403,611
2008 - 2009	\$3,077,820

As can be seen, there is a distinct drop in expenditures after the 2008/09 fiscal year. This 20% reduction was in response to the current economic condition and was accomplished by cutting flight hours in half. The flight time reduction continues to be in effect as an ongoing cost savings measure.

A more detailed review of the unit's current fiscal year budget found that personnel costs, consisting of staff salary and benefits, run approximately \$1.5 million annually. This constitutes about two thirds of the unit's total annual expense. The balance of the unit's budget, about \$800,000, is the cost of fuel, operation and maintenance of the two helicopters.

The staff consists of sworn officers, and with the minor exception of the pilot premium (to be discussed next), would cost the Sheriff the same amount of money annually whether they are in the air or in vehicles patrolling on the ground. Thus the cost differential between having these officers on the ground or in the air is currently about \$800,000 annually. This amount represents the annual, additional cost for providing helicopter coverage for residents of the County and its contract cities.

Pilot compensation and retention

Most of the general public have little idea of the compensation paid to law enforcement helicopter pilots. The assumption is likely that since they are trained much beyond a street patrol officer, mandating special FAA licenses, and must operate a several million dollar aircraft over populated areas in sometimes adverse weather conditions, that they are paid very highly. That's not exactly the case.

Most law enforcement agencies, including Orange County, pay their pilots a "premium" on top of their base compensation. That is, if a patrol officer chooses to become a pilot, the officer will receive additional pay, equal to some percent of the officer's base salary. In the case of the Orange County Sheriff's department, the flight premium is 7.9%.

The following table shows the premium paid to law enforcement pilots for the Southern California coastal counties and all agencies within Orange County that operate law enforcement helicopters. There is quite a range in the premium, from zero for the City of Santa Ana to over 31% for Ventura County. The premium of zero for Santa Ana is a low amount, which means their pilot flying for ABLE and the considerable responsibility that entails, makes the same salary as a patrol officer on the street.

Comparison of Law Enforcement Pilot Salary Premiums

Law Enforcement Agency	Pilot Pay Premium	
Ventura County Sheriff	31.7%	
City of Anaheim	23.7%	
City of Costa Mesa (ABLE)	17.5%	
San Bernardino County Sheriff	15%	
City of Huntington Beach	8% to 13%	
Los Angeles County Sheriff	11%	
Orange County Sheriff	7.9%	
Riverside County Sheriff	7.5%	
City of Newport Beach (ABLE)	6.9%	
San Diego County Sheriff	5.8%	
City of Santa Ana (ABLE)	0%	

Putting a new Sheriff's pilot in place is a long and extensive process. The Orange County Sheriff's Office does not have the ability to hire experienced pilots directly from the military and put them at the controls of the Sheriff's aircraft. A prospective pilot must first go though the Sheriff's Academy and serve several years assigned to the jails and preferably several more years on street patrol. Only after a prospective pilot is fully versed in law enforcement protocol and procedures may the individual be considered for membership in the Aviation Unit. Once finally assigned to the Aviation Unit, it can take an additional eight to twelve months of flight training before a new recruit is a fully functional pilot for the Sheriff.

Because of the lead time to acquire new pilots, it becomes vital to make all possible efforts to retain existing pilots. Their training represents a substantial investment on the part of the Sheriff's department, much more so than regular patrol officers. This statement is not intended to devalue the considerable training required of regular patrol officers, but to recognize the even more extensive training Sheriff's pilots must undergo.

Some agencies have realized this and have adjusted pilot compensation accordingly. Since pilots represent such a small component of overall law enforcement personnel, they have little weight when it comes to negotiation of salary benefits for law enforcement agencies as a whole. Thus in some cases they receive compensation that fails to match their considerable responsibilities.

In comparison with the premiums paid by surrounding agencies, the Orange County Sheriff is in the mid-range of the field with a 7.9% premium. While that might suggest all is well, several staffers are planning to leave or have left the unit due to the need for additional compensation or advancement provided by transfer or promotion to other positions within the Sheriff's department. With the present organizational structure of the unit, it is not possible for trained pilots to significantly advance within the Sheriff's organization without leaving the Aviation Support Unit. Once in the unit, there is little room for career growth or to earn additional compensation. This is a disincentive to the retention of highly trained individuals.

Significant time and money is invested in training individuals for the unit. A review of the unit's current career paths and flight premium by an appropriate independent body to improve staff retention is reasonable.

Search and rescue operations

In addition to the usual law enforcement duties of the Sheriff, there is another important responsibility that city law enforcement agencies do not have. In the State of California, the statutory authority and responsibility for Search and Rescue (SAR) operations is assigned to County Sheriffs per California Government Code Section 26614. This means for anyone lost in Orange County, the Sheriff has ultimate responsibility to locate and retrieve them, utilizing the same two aircraft already serving a law enforcement function. The Aviation Support Unit currently averages about 30 to 40 search and rescue calls per year.

As previously noted, last year the County of Orange acquired approximately 31 square miles (20,000 acres) from the Irvine Company to be used for public park and open space purposes. This represents an area in size considerably larger than the City of Santa Ana. Much of this land is very rugged and remote, located north and south of Irvine Lake. Although public access currently is limited, OC Parks is planning on furthering visitation in the next few years, resulting in

increased public activity in these new areas. Unfortunately, some individuals will end up needing professional assistance to leave the area. This may lead to a problem due to the aforementioned lack of hoist capability of the Sheriff's current helicopters, limiting their SAR capabilities.

This SAR shortcoming is somewhat addressed by the adoption in 2000 of a memorandum of understanding (MOU) between the Sheriff and the Orange County Fire Authority (OCFA). OCFA has four helicopters with hoist capability stationed at the Fullerton Airport. The MOU recognizes the Sheriff as having "...functional responsibility to provide search for missing and lost persons...," and the OCFA is charged with, "...functional responsibility to provide Fire/Rescue and EMS..." Practically speaking, due to aircraft limitations, while search functions can be provided by the Sheriff, if a person needs extraction it must be performed by OCFA, regardless of whether medical attention is required.

This arrangement has resulted in some difficulties. There have been instances where a Sheriff's helicopter located a missing individual yet had to summon an OCFA helicopter to extract that person. This not only increases delay in the rescue, it increases cost. The Sheriff's hourly operating cost is approximately \$700 while the OCFA's hourly operating cost for their new helicopters is \$3,400. So rescue work using only the Sheriff's helicopters is a significant savings to taxpayers.

There are substantial differences in aircraft availability between the two agencies. The Sheriff's unit has aircraft in the air or available for immediate response until at least 3:00 AM. Unless there is an active fire situation, OCFA pilots go off duty much earlier than that. Also, since fire suppression is the primary duty of OCFA, a conflict may arise if OCFA helicopters are involved with fighting fires in the north county, and the need for a rescue extraction arises in south county. While several law enforcement helicopter agencies in the county have the ability to drop water in assist to OCFA (and the Sheriff's unit has assisted on several fires) only OCFA has the ability to perform hoists.

In this situation Orange County is unique among surrounding counties. Of the counties reviewed, all sheriff's aviation units utilize their own helicopters with hoists to extract missing individuals, even if the party is injured. In Orange County's arrangement, it's possible to have two helicopters under different commands (OCFA and Sheriff) working an incident simultaneously. At the very least, pilot workload is increased, as is the potential for problems. Some conflicts have occurred in the past, but were resolved without significant incident. There remains some operational friction between the two agencies and the potential exists for further incidents due to the seemingly overlapping functions.

Regionalization

Regionalization is the concept of establishing a countywide helicopter law enforcement program, shared among all the cities and County. This could be accomplished using a joint powers agreement/authority (such as was done with the Orange County Fire Authority), or some other structured program operated primarily under the Sheriff's oversight. It is this latter possibility that will be discussed in this report, as it could greatly affect the Sheriff's current helicopter operations.

On February 15, 2011, the Costa Mesa City Council voted to dissolve the ABLE program and directed staff to explore creation of a regional air support program. Council members questioned why the city should be paying what they perceived to be a substantial sum, when they could be getting limited air support from the Sheriff's fleet at no charge. This is a common belief held by many cities and stands as an impediment to a regional helicopter program.

As law enforcement is presently structured in Orange County, all police agencies have mutual aid agreements with each other. This means if a city with a helicopter is asked to respond to another city without a helicopter, they may do so at the first city's discretion, and there will be no charge to the city being provided with the helicopter. A notable exception to this has been ABLE, which charges cities approximately \$1,800 per hour if an ABLE helicopter responds to an out-of-city call. This ABLE charge is not levied against the three other agencies operating helicopters in county (Anaheim, Huntington Beach and the County). This charge by ABLE has had a chilling effect, with instances of other cities rescinding their request for air support when informed ABLE was the only aircraft flying and a charge would result.

The fundamental problem with regionalization comes down to, why would a city pay for a service when it is available to them for free? If the Sheriff, Anaheim and Huntington Beach continue to provide free helicopter mutual aid, there will be no incentive for the other cities to join a regional program.

In considering the Sheriff's operation, these "out of area" responses by the Aviation Unit currently do not appear to be a major drain on resources. For the calendar year 2009 (the most recent full year for which data were available), the Aviation Unit logged 1,401 calls. Of these, 181 calls for assistance involved areas for which the Sheriff did not have primary responsibility (i.e., cities not under contract, other counties, etc). This amounts to approximately 13% of total calls, not an obviously excessive amount.

To get a gross sense of the feasibility of a regional air support program, it is possible to make some reasonable operational cost estimates and thus assess the broad viability of such a program. While there are many possible organizational

and financial structures, this report will quantify a simple program based upon a "per person" cost.

Review of operations in surrounding counties and assuming an assertive aerial patrol philosophy suggests a county-wide regional helicopter program would require six to eight helicopters. For consistency in piloting and maintenance, they should all be of the same or very similar model. For the purposes of this rough analysis, six helicopters will be assumed as a lower end, conservative number.

For planning purposes, a new helicopter fully equipped with the necessary law enforcement radios and equipment would cost about \$2.5 million each. Thus a fleet of six helicopters would cost about \$15 million. An appropriate base for that size fleet at a local airport or other location would cost about \$6 million. So the initial capital startup cost for a regional program would be roughly \$21 million.

Aerial patrol hours are assumed to be a minimum of 20 hours per day. That is, there would be at least one aircraft in the air for 20 hours every day, 7 days a week. This totals 7,300 hours per year.

The Grand Jury obtained hourly helicopter operating costs from all the law enforcement agencies in the county. Costs ranged from \$700 up to \$1,800 per hour. For planning purposes and assuming a uniform fleet, from these current costs a weighted average of \$1,100 per hour will be used in this analysis. This includes all operating and maintenance costs, as well as the salary and benefits of the assumed two law enforcement occupants.

Thus 7,300 hours per year at \$1,100 per hours yields an annual program operating expense of just over \$8 million.

The next step is to prorate the costs over the county's population. 2009 estimates put the county's total population at just over 3 million. It is assumed the cities of Huntington Beach and Anaheim will not be a part of a regional program, as they have expressed to the Grand Jury a strong disinterest in such participation. They have their own helicopter programs whose cost is acceptable to them, and would not want to relinquish control of aerial operations over their cities. Removing their estimated 2009 populations from the county total leaves a population of approximately 2.5 million to share operating costs of a regional helicopter program. This amounts to \$3.20 per resident for annual operating costs and \$8.40 per resident for initial capital startup costs.

While these costs viewed on a per person basis don't seem especially burdensome, the picture is different when they are applied to the population of entire cities. The following table shows some randomly selected Orange County cities, varying from small to large, their approximate 2009 population (from Citydata.com), and their capital startup and annual operating costs for this hypothetical regional helicopter operation.

City	2009	Capital	Annual
	Population	Startup	Expense
La Palma	15,719	\$132,040	\$50,300
Stanton	37,567	\$315,563	\$120,214
Newport Beach	72,521	\$609,176	\$232,067
Costa Mesa	110,420	\$927,528	\$353,344
Orange	136,990	\$1,150,716	\$438,368
Irvine	209,716	\$1,761,614	\$671,091
Santa Ana	340,340	\$2,858,856	\$1,089,088
Unincorporated area	120,088	\$1,008,740	\$384,282

Clearly, these are significant startup and ongoing costs. It's probable many cities in Orange County would balk at such expenditures in these lean economic times.

The conclusion here is that there remain serious impediments to the establishment of a regional law enforcement helicopter program, as worthy as it might be. Given the low probability for implementation, there shouldn't be an impact to the Sheriff's helicopter operations for the foreseeable future. With the dissolution of ABLE, there may be an opportunity for the Sheriff to step in and provide limited service to one or more of the former ABLE cities, at some reduced cost from what they had previously been paying. However this would almost certainly require some increase in the Sheriff's present fleet.

Although the aviation unit has been in operation for 25 years, it currently lacks strategic direction and vision. No matter the cause, it should be corrected, and a long term plan developed for the unit.

FINDINGS

In accordance with California Penal Code Sections 933 and 933.05, the 2010-2011 Grand Jury requires responses from the agency affected by the findings presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based upon its review of the Sheriff's Aviation Support Unit, the 2010-2011 Orange County Grand Jury has arrived at seven principal findings, as follows:

- **F.1:** The Orange County Sheriff operates the smallest fleet of helicopters of any county in the southern part of the State.
- **F.2:** Orange County is the only county in the southern part of the State whose Sheriff's helicopters lack hoisting capability.
- **F.3:** Budgeted amounts to maintain the unit are reasonable and have reflected prudent management in view of the economic downturn.
- **F.4:** The current facilities of the Aviation Support Unit are overcrowded and inadequate to house all aircraft.
- **F.5:** Law enforcement pilot compensation varies considerably between agencies and lacks standardization.
- **F.6:** No reimbursement program exists to compensate the Orange County Sheriff when county helicopters are operated in support of agencies outside the Sheriff's jurisdiction.
- **F.7:** The Sheriff's Aviation Support Unit lacks a long term plan.

RECOMMENDATIONS:

In accordance with California Penal Code Sections 933 and 933.05, the 2010-2011 Grand Jury requires responses from the agency affected by the findings presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based upon its review of the Sheriff's Aviation Support Unit, the 2010-2011 Orange County Grand Jury makes the following six recommendations:

R.1: As budgetary constraints allow, add a third helicopter to the Aviation Support Unit, with hoist capability.

- R.2: As budgetary constraints allow, replace the two existing helicopters with hoist capable models.
- R.3: Conduct a study of Pilot and Tactical Flight Officer career paths to improve retention and staff longevity within the Aviation Support Unit.
- R.4: Develop and implement a plan for reimbursement from non-contract city operations, within the framework of mutual aid agreements.
- R.5: Conduct a study for regionalization of the Sheriff's helicopter program to equitably distribute costs and coverage to all citizens of Orange County.
- R.6: Develop and maintain a long term plan for the Aviation Support Unit for acquisition of significant capital items and improvement or relocation of existing operating facilities.

REQUIREMENTS AND INSTRUCTIONS:

The California Penal Code Section 933(c) requires any public agency which the Grand Jury has reviewed, and about which it has issued a final report, to comment to the Presiding Judge of the Superior Court on the findings and recommendations pertaining to matters under the control of the agency. Such comment shall be made *no later than 90 days* after the Grand Jury publishes its report (filed with the Clerk of the Court); except that in the case of a report containing findings and recommendations pertaining to a department or agency headed by an elected County official (e.g. District Attorney, Sheriff, etc.), such comment shall be made *within 60 days* to the Presiding Judge with an information copy sent to the Board of Supervisors.

Furthermore, California Penal Code Sections 933.05(a), (b), (c), details, as follows, the manner in which such comment(s) are to be made:

- (a) As to each grand jury finding, the responding person or entity shall indicate one of the following:
 - (1) The respondent agrees with the finding
 - (2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefore.
- (b) As to each grand jury recommendation, the responding person or entity shall report one of the following actions:

- (1) The recommendation has been implemented, with a summary regarding the implemented action.
- (2) The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.
- (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of publication of the grand jury report.
- (4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefore.
- (c) If a finding or recommendation of the grand jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the Board of Supervisors shall respond if requested by the grand jury, but the response of the Board of Supervisors shall address only those budgetary or personnel matters over which it has some decision making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.

Comments to the Presiding Judge of the Superior Court in compliance with the Penal Code Section 933.05 are required from the:

Responding Agency	Findings	Recommendations
Orange County Sheriff-Coroner	F.1, F.2, F.3, F.4, F.5, F.6, F.7	R.1, R.2, R.3, R.4, R.5, R.6

COMMENDATION

The Grand Jury would like to commend the staff of the Sheriff's Aviation Support Unit. Their exceptional management and operation of the unit has kept the aircraft flying despite challenging budgetary constraints. The unit's staff has shown resourceful initiative, solving difficult problems in the face of funding cutbacks.