

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

245



FROM: Bob Doyle, Sheriff-Coroner-PA

SUBMITTAL DATE:
09/29/05

SUBJECT: Approval of the Sheriff's Desert Aviation Program and the Adoption of Resolution 440-8622

RECOMMENDED MOTION: Move that the Board of Supervisors:

1. Approve the creation of the Sheriff's Desert Aviation Program, proposed for operation at the Jacqueline Cochran Regional Airport.
2. Authorize the Purchasing Agent and the County Executive Officer to propose the financing for the purchase of an AS350-B3 helicopter from American Eurocopter for a cost not to exceed \$3,030,182 without securing competitive bids, in accordance with Ordinance 459.4.
3. Authorize the Purchasing Agent to make equipment purchases for the helicopter without securing competitive bids, from the following vendors: FLIR Systems, Aircomm Systems and Spectrolab.
4. Amend Ordinance No. 440 pursuant to Resolution 440-8622 submitted herewith. Per the Resolution add the following positions:

Ord. 440	Class Code	+/-	Class Title	Salary Plan	Grade	Salary
2500300000	37602	+2	Deputy Sheriff	RSA	163	\$47,480-\$63,716
2500300000	66301	+1	Aircraft Mechanic	UPE	583	\$45,865-\$59,823

5. Approve and direct the Auditor-Controller to make the budget adjustments on the attached Schedule A.

BR 06-036

Janis K Conklyn for
Bob Doyle, Sheriff-Coroner-PA

FINANCIAL DATA

Current F.Y. Total Cost:	\$252,349	In Current Year Budget:	No
Current F.Y. Net County Cost:	\$252,349	Budget Adjustment:	Yes
Annual Net County Cost:	\$925,600	For Fiscal Year:	FY 2005-06

SOURCE OF FUNDS: Contingency Funds for \$252,349. Other funding sources will be explored through local, state, and federal grants.

Positions To Be Deleted Per A-30	<input checked="" type="checkbox"/>
Requires 4/5 Vote	<input checked="" type="checkbox"/>

C.E.O. RECOMMENDATION: APPROVE. Debt Service was calculated based on 4% interest rate and a useful life of 7 years. The annual net county cost will be reduced if grants become available.

County Executive Office Signature

Julie A. Beauvais

Prev. Agn. Ref.: 1/29/02 3.37

District: 4

Agenda Number:

3.57

Approved by Ronald W. Purchasing: Director
 Asst. County Executive Officer/
 Human Resources Director
 Departmental Concurrence
 Deputy
 FISCAL PROCEDURES APPROVED
 ROBERT E. BYRD, Auditor-Controller
 April - 19/19/05
 BY
 DEPT
 Policy
 Consent
 Dept't Recomm.:
 Per Exec. Ofc.:

Eastern County Aviation Operation

The Sheriff's Aviation Program currently operates from Hemet-Ryan Airport. In 1992, the department centralized all of its air operations under one roof in a move to create a cohesive, effective unit. Now, to safely and effectively cover the County, a second base of aviation operations is required. This proposal includes plans for expansion of aviation patrol operations for the eastern county areas with the implementation of a base of operations at the Jacqueline Cochran Regional Airport and the addition of the third Eurocopter AS350-B3.

Cochran Regional is the optimum choice as the base of operations since it gives Sheriff's Aviation the easiest access into and out of any airport in the Coachella Valley. It also allows for rapid response to calls and is in the heart of the fastest growing area of the Valley. Lease cost for hangar and office space at the airport is estimated at \$12,000 per year.

Operational considerations, staffing requirements and the interrelationship of the Desert Program with overall County helicopter deployment are covered in a report attached to this Form 11.

Helicopter Selection

The Sheriff currently operates two Eurocopter AS350-B3 helicopters. These helicopters have proven to be safe, effective and capable of completing the mission of the Sheriff's Aviation Unit. We conducted extensive research and flight-testing when selecting the Eurocopter AS350-B3 helicopter during the 1999 purchase process. Time and experience have proven the AS350-B3 to be the correct helicopter for our mission. Nothing new has emerged in the industry to change the status of the AS350-B3 as the most effective and capable tool for our use.

The purchase of an additional AS350-B3 for the expansion of our operations into the eastern county areas allows an easy and cost effective integration of an additional helicopter into our fleet. We already have the tooling, inventory and training of both flight crews and maintenance staff to assure the safe operation and continued airworthiness of the new aircraft.

We also operate two Bell OH58A+ ex-military helicopters. These crafts have a limited function and are programmed to be phased out in the near future, due to their age and lack of available parts. This would further streamline our maintenance, inventory and tooling costs, as well as our training costs for maintenance and flight crews.

Funding Considerations

The Sheriff's Aviation Unit has used its helicopters primarily for the drug interdiction efforts of the Department. Thus, the Department has been able to use asset forfeiture monies as the primary source of funding for this program. This drug interdiction focus has continued until the last few years. However, the changing demographics of our county have dictated that the Aviation Unit prioritizes patrol support as its most important mission in its scope of service. Therefore, the use of asset forfeiture dollars as the primary funding source is coming to an end.

The Sheriff's Department and the County Executive Office will be exploring the possibility of securing Capital funding through State and Federal grants, and will look to local revenue assistance for on-going operating costs.

Price Reasonableness

The AS350-B3 price has increased about \$375,000 from the price the County paid in 2000. However, in 2000, the Sheriff's Department, to keep costs down, salvaged most of the navigation and communication equipment from its old helicopters to install in the new aircraft. Also in 2000, the Department evaluated the purchase of a Bell 407, an aircraft with a higher price. After a recent cost comparison, staff found this price differential had not changed significantly.

As another indicator of price reasonableness, Riverside is paying the same price for its airframe as San Bernardino County paid when it placed its order earlier in the year. Eurocopter will increase prices by 4% in 2006.

To keep the helicopter price lower, Aviation staff is proposing to purchase a number of expensive pieces of equipment independently and supplying them to Eurocopter for installation, specifically, an airborne thermal imaging system, the navigation and communication system and a searchlight. This purchasing strategy will eliminate the mark-up that Eurocopter would place on the equipment, saving the County over \$144,000.

The helicopter equipment that the Sheriff's Department recommends purchasing separately are: an airborne thermal imaging system, navigation and communication equipment and a searchlight. These will all be sole or single source purchases.

FLIR Systems is the sole source manufacturer of the airborne thermal imaging system that the Department requires. It is the only system that incorporates a 450 mm lens and continuous TV zoom with a 17% higher pixel array count. In addition, the system is designed to operate on the helicopter's existing cables, allowing system movement from ship to ship. This company is providing a \$15,000 laser pointer free of charge, which is a 4.9% discount on the System package.

Only two area dealers carry the Sheriff's Department specified navigation and communications equipment: Aircomm and Jet Source. The Jet Source price quote on the equipment exceeded the Aircomm quote by about \$12,000. The Sheriff's Department has specified the purchase of the Wulfsberg radio. This radio provides for full interoperability with the other County public agency communication systems. The Department recommends the purchase of three of these radios, so that the units can also be installed in the other two AS350-B3 copters.

Spectrolab is the manufacturer and sole source distributor for all Searchlight Systems (brand name). Spectrolab is offering the County a 5% discount on the model Nightsun searchlight that the Department is currently using on its AS350B3 helicopters. Searchlight Systems' lights can also be directly connected to the thermal imaging system.

AS350B3 HELICOPTER AND SELECTED MISSION EQUIPMENT PRICE LIST

	PRICE
AS350-B3	\$2,343,194
FLIR	309,104
Navigation & Comm. Equipment	131,801
Searchlight w/camera linking system	<u>28,135</u>
Subtotal	\$2,812,234
7.75% Sales Tax	<u>\$217,948</u>
Total	\$3,030,182
Two additional Wulfsberg radios w/tax	<u>127,939</u>
	\$3,158,121

DESERT AVIATION PROGRAM OPERATING COSTS

	FY 2005-06	FY 2006-07
	As of 1-1-2006	
Personnel	\$106,649	\$286,600
Airport Space	2,000	12,000
Aircraft Fuel	13,500	81,000
Helicopter Damage and Liability Insurance Premium	<u>12,700</u>	<u>76,000</u>
Total	\$134,849	\$455,600
 Estimated Debt Service with April 2006 delivery date	 <u>\$117,500</u>	 <u>\$470,000</u>
 Total	 \$252,349	 \$925,600

RESOLUTION NO. 440-8622

BE IT RESOLVED by the Board of Supervisors of the County of Riverside, State of California, in regular session assembled on October 25, 2005, that pursuant to Section 5.A. of Ordinance No. 440, the Sheriff/Coroner/Public Administrator of Ordinance No. 440, is authorized to make the following listed change(s), operative on the date of approval, as follows:

<u>Job Code</u>	<u>+/-</u>	<u>Department ID</u>	<u>Class Title</u>
66301	+ 1	2500300000	Aircraft Mechanic
37602	+ 2	2500300000	Deputy Sheriff



Riverside County Sheriff's Department Special Investigations Bureau - Aviation Memorandum

TO: Larry Parrish, County Executive Officer

DATE: October 17, 2005

FM: Sheriff Doyle

RE: Executive Report on the Sheriff's Aviation Unit

In November 1999, the Sheriff's Department submitted a report to the Executive Office on the mission of the Sheriff's Aviation Unit. The report discussed, in detail, the new requirements in helicopter performance as the Aviation Unit transitioned from a primary mission of drug interdiction to one of Patrol support. The report concluded with a recommendation to purchase an American Eurocopter AS350-B3, the only aircraft that met all the new requirements in an evaluation of five helicopter models.

As agreed to in the FY 2005-06 Final Budget Overview, the Sheriff is now submitting an updated Helicopter Operations Report, which will cover why the Department continues to find the AS350-B3, the only aircraft that can meet its mission needs; how the purchase of a third AS350-B3 will fit into the overall County helicopter program; the need for a East County base of operations at the Jacqueline Cochran Airport in Thermal, and the resulting operational efficiencies achieved by the expansion.

History:

In 1990 the Riverside County Sheriff's Department entered into helicopter air support operations. The department began these operations with two McDonnell Douglas MD 500E model helicopters. These operations were primarily intended to support the drug interdiction efforts of the department. While not engaged in drug interdiction operations, the helicopters were utilized for patrol operations. The helicopters were equipped for both day and night operations. The MD 500E was chosen because of its suitability for these operations. Crashworthiness, speed, agility, proven reliability, and a Standard Airworthiness Certificate were all factors in the decision. While range, loiter time, altitude capabilities, small size were less than desirable, the MD 500E was comparable, if not superior to other light single engine helicopters available at that time. Commonality of parts, tooling, training, and operation were prime factors in the decision to operate a

single brand of helicopters. This has led to increased efficiencies and safety in our operations.

In the middle to late nineties, the department acquired eight military surplus helicopters. These aircraft were utilized in limited roles, leaving the MD 500E to fly most of the missions. However, the MD 500E had its limitations, the ability to fly and maneuver at high altitudes, being its chief liability. In January 1999, after the loss of an MD 500E in a hard landing, the Department began the search for an aircraft that exceeded the performance of the MD500E.

The Department chose the Eurocopter AS350-B3 over four other aircraft for its superiority in the following factors:

- . ability to exceed 130 mph;
- . operation in high altitudes in extreme temperatures over rugged terrain;
- . ability to accommodate a rescue hoist and the capability to hoist more than one person and bring them into the cabin;
- . ease of maintenance and no mid-time engine overhaul;
- . on-board diagnostic computer;
- . open cabin design, equipped with rear sliding doors on both sides for access by search and rescue personnel.

Fleet Deployment and Operational Plan:

Since taking delivery of the Eurocopter AS350-B3 helicopters (Astar) in January 2000, we have accumulated 5,000+ hours of operational experience with these aircraft. During this time, nothing has emerged to change our opinion regarding our decision to acquire and operate the Astar. They have proven to be reliable, effective and efficient aircraft. Given the rise in costs, the current hourly cost of operation for these aircraft is \$462 per flight hour as compared to the Bell 407 (a helicopter tested in 1999), which is currently \$522 per flight hour. This cost reflects the direct variable cost of operation of the aircraft and does not include fixed overhead costs.

The Aviation Unit still owns two of the military surplus Bell OH58's, which were overhauled, but these are used almost exclusively for training, and will be retired in the near future.

We are currently in the process of our first Astar engine overhaul. This is being accomplished by Turbomeca USA, of Grand Prairie, TX, the engine manufacturer. Turbomeca USA is supplying a rental engine so that we can continue to operate this aircraft.

Overall, demand for our services continues to rise. Demand for search and rescue (SAR) operations has increased as well as calls for assistance from field

operations. Demand for narcotic interdiction has fallen over previous years, with the exception of marijuana eradication. With the drain on resources of the military and National Guard due to the war in Iraq, many missions previously fulfilled by those agencies and other state resources, are now being handled by the Sheriff's Aviation Unit.

The explosive growth experienced throughout Riverside County has placed additional demands on our calls for service. This is particularly true in the eastern desert region of the Coachella Valley. In the period from 2000 to 2005, the service area population of the Sheriff's stations in Palm Desert and Indio has increased by over 19%. Over the past several years, we have been scheduling more of our daily patrol time specifically in the Coachella Valley. Currently, twenty-five percent of our patrol time is scheduled in the eastern desert areas. With the increasing demands, it is the intent of the Sheriff to place an aircraft in the desert to cover requests for service in those areas.

Specifically, the Sheriff intends to setup an aircraft base of operations at the Jacqueline Cochran Regional Airport in Thermal. This airport provides for the easiest and quickest approach/departure for the shortest response times of any other airport in the Coachella Valley. This also places the aircraft in the midst of the fastest growing area of the valley. The placement of an aircraft in the desert will also bring with it an assigned crew. This crew is in addition to the current staffing of the Aviation Unit. Training in anticipation of this additional deployment has been ongoing with existing unit staff. Our intent is to bring the newly approved personnel into the unit in January 2006, so that a trained crew will be available by the time the new aircraft is delivered.

Currently, the Aviation Unit staffs three flight crews. Due to military activations and training, we are currently able to field only two flight crews. These training and military issues will be resolved by January 2006. Generally, there is a flight crew on duty Wednesday thru Saturday 0900 hours to 0200 hours. Tuesday coverage alternates between either a day shift or night shift. One out of each four scheduled shifts is dedicated to the desert areas. However, this does not prohibit a flight crew on any other day from responding to the desert to answer calls for assistance. In fact, we regularly respond to the desert in the normal course of a shift. The dedicated desert patrol shift is on a rotating basis with each subsequent shift assignment.

The addition of a third Astar and flight crew will allow us to, at a minimum, double the amount of air support in the Coachella Valley. A full-time assigned helicopter would mean forty hours of scheduled time per week instead of the current eighteen hours scheduled per week. Additionally, the "Desert Ship" would be in a better position to respond to calls for service in the Cabazon Station area, the Colorado River Station area, as well as search and rescue missions, in the event of fog or other inclement weather on the west side of the mountains. While Hemet Airport has the best weather of any west county airport, generally

speaking, the eastern county area enjoys better weather than the western county area.

With the acquisition of the new helicopter and an additional flight crew, the plan would be amended to schedule a full-time crew in the desert. This crew would work the opposite end of the week from the west end crews. Either aircraft would be allowed to respond to any area of the county. However, their primary assignment area would be east or west end depending on their base location. Saving travel time between the two County areas will save us about \$300 per call, and will enable the west end crews to focus solely on that area. This new deployment will enable us to provide an on-duty crew seven days per week. A standby crew could be utilized to cover the off hours. Currently, the Aviation Unit budgets for 1,000 hours of flight time per crew per year. With implementation of the East County operation and all four crews working, the Sheriff will be able provide 4,000 helicopter flight hours annually.

Included in the acquisition of the new helicopter is an upgraded avionics and communication package. The law enforcement radios in our current ships were salvaged from the wreckage of our previous MD 500E helicopters. They are out of date and do not conform to the current communications requirements mandated by the federal government for communications interoperability. The new tactical radios will allow for real-time direct communications with every law enforcement and public safety agency in Riverside County and most local, state and federal agencies. It is also upgradeable for future expansion. This has been confirmed and approved by Riverside County Information Technology. We have included additional equipment in our request to retrofit our existing Astars with the same law enforcement communication radio.

Conclusion:

The population growth in the East County and the resulting increase in calls for service require that the Sheriff now devote a helicopter and flight crew to the area. Implementation of the expanded service will result in an overall annual increase in flight time in the County from 3,000 hours to 4,000. Coverage in the West County will improve because the Hemet-Ryan Airport flight crews will rarely be diverted to Desert calls. Flight timesavings between the County areas will result in a \$300 per call savings. Finally, both the Department and County Purchasing continue to recommend the AS350-B3 as the only helicopter on the market that can fully meet the Sheriff's aviation mission and the aircraft that should be purchased for this service expansion.

Schedule A

Increase Appropriations:

10000-2500300000-510040	Regular Salaries	\$71,134
10000-2500300000-518100	Budgeted Benefits	29,415
10000-2500300000-520105	Protective Gear	1,000
10000-2500300000-520115	Uniforms	3,000
10000-2500300000-520900	Insurance-Aircraft	12,700
10000-2500300000-526700	Buildings Rent/Lease	2,000
10000-2500300000-527102	Fuel - Aviation	13,500
10000-2500300000-527460	Firearm Equipment and Supplies	2,000
10000-2500300000-527500	Handcuffs	100
10000-2500300000-532600	Capital Lease/Purchase Equip-Prin	113,000
10000-2500300000-533720	Capital Lease/Purchase Equip-Int	4,500
	Total	\$252,349

Decrease Appropriations:

10000-1109000000-581000	Appropriation for Contingency	\$252,349
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Date: 9/20/2005 .
From: Sgt. Bertling Department/Agency: Sheriff/Aviation .
To: Board of Supervisors
Via: Purchasing Agent
Subject: Sole Source Procurement; Request for

The below information is provided in support of my Department requesting approval for a sole source. Outside of a duly declared emergency, the time to develop a statement of work or specifications is not in itself justification for sole source.

Supply/Service being requested: **A helicopter.**

Supplier being requested: **American Eurocopter, 2701 Forum Drive, Grand Prairie, Texas 75052**

Alternative suppliers that can or might be able to provide supply/service: **None.**

Extent of market search conducted: **The Sheriff currently operates two Eurocopter model AS350B3 helicopters. These helicopters have proven to be safe, effective and capable of completing the mission of the Sheriff's Aviation Unit. We conducted extensive research and flight-testing when selecting the Eurocopter AS350B3 helicopter during the 1999 purchase process. Nothing new has emerged in the industry to change the status of the Eurocopter AS350B3 as the most effective and capable tool for our use.**

Unique features of the supply/service being requested from this supplier, which no alternative supplier can provide: **Time and experience have proven the Eurocopter AS350B3 to be the correct helicopter for our mission. Since we already own two AS350B3's, we have the tooling, parts inventory and training of both flight crews and maintenance staff to assure the safe operation and continued airworthiness of the new aircraft.**

Reasons why my department requires these unique features and what benefit will accrue to the county: **The Sheriff's Department needs to purchase another helicopter for its proposed expansion of operations into the eastern county areas. The purchase of an additional Eurocopter AS350B3 allows the easiest and most cost effective way to provide this new service.**

Price Reasonableness: **American Eurocopter has provided the price quote that it offers to law enforcement agencies. The County is receiving the same price for the helicopter airframe, as paid by San Bernardino County earlier in the year. In addition, it has agreed to install County-furnished equipment, which will result in an additional \$144,000 price reduction. Sheriff's Aviation staff is proposing to independently purchase a thermal imaging system, aircraft radios and navigation equipment and a searchlight for installation.**

Does moving forward on this product or service further obligate the county to future similar contractual arrangements? **No.**

PM Monahan For Bob Doyle 10/6/05
Department Head Signature Date

Purchasing Department Comments:

Approve Approve with Condition/s Disapprove
Billy B Corvett 10/06/05
Purchasing Agent Date

Date: 9/20/2005
From: Sgt. Bertling Department/Agency: Sheriff/Aviation
To: Board of Supervisors
Via: Purchasing Agent
Subject: Sole Source Procurement; Request for

The below information is provided in support of my Department requesting approval for a sole source. Outside of a duly declared emergency, the time to develop a statement of work or specifications is not in itself justification for sole source.

Supply/Service being requested: **An airborne thermal imaging system for installation on the Department's helicopter.**

Supplier being requested: **FLIR Systems, Inc. 25 Esquire Road, N. Bellerica, MA**

Alternative suppliers that can or might be able to provide supply/service: **None.**

Extent of market search conducted: **A market search was conducted.**

Unique features of the supply/service being requested from this supplier, which no alternative supplier can provide: **FLIR provides the only system with a 450 mm lens and continuous TV zoom. It is also the only system that can be easily moved between helicopters, because it can be connected to existing helicopter cables.**

Reasons why my department requires these unique features and what benefit will accrue to the county: **This system is essential to providing search and rescue operations by air. The Department already owns a FLIR System and staff is familiar with its operation.**

Price Reasonableness: **FLIR is providing a \$15,000 laser pointer free of charge, which is a 4.9% discount on the System package price.**

Does moving forward on this product or service further obligate the county to future similar contractual arrangements? **No.**

J. M. Morris For Bob Doyle 10/6/05
Department Head Signature Date

Purchasing Department Comments:

Approve Approve with Condition/s Disapprove
Billy B. Corbett 10/06/05
Purchasing Agent Date

Date: 9/20/2005

From: Sgt. Bertling Department/Agency: Sheriff/Aviation

To: Board of Supervisors

Via: Purchasing Agent

Subject: Sole Source Procurement; Request for

The below information is provided in support of my Department requesting approval for a sole source. Outside of a duly declared emergency, the time to develop a statement of work or specifications is not in itself justification for sole source.

Supply/Service being requested: **Navigation and communications equipment for installation in the Sheriff's Department helicopter.**

Supplier being requested: **Aircomm Systems, Inc. 1409 Washington Street, Colton, CA. 92324**

Alternative suppliers that can or might be able to provide supply/service: **Jet Source.**

Extent of market search conducted: **Aircomm and Jet Source are the only area suppliers of the Wulfsberg radios.**

Unique features of the supply/service being requested from this supplier, which no alternative supplier can provide: **The Wulfsberg radio-the centerpiece of the helicopter communication system- will enable our helicopter pilots to communicate with the radio systems of all other agencies in the County.**

Reasons why my department requires these unique features and what benefit will accrue to the county: **The helicopter pilots must have communication interoperability during rescue missions.**

Price Reasonableness: **Aircomm has quoted a package price, which is \$12,000 less than that quoted by Jet Source.**

Does moving forward on this product or service further obligate the county to future similar contractual arrangements? **No.**

P. M. Monroe For Bob Doyle *10/6/05*
Department Head Signature Date

Purchasing Department Comments:

Billy B. Corbett *10/6/05*
Approve Approve with Condition/s Disapprove
Purchasing Agent Date

Date: 9/20/2005
From: Sgt. Bertling Department/Agency: Sheriff/Aviation
To: Board of Supervisors
Via: Purchasing Agent
Subject: Sole Source Procurement; Request for

The below information is provided in support of my Department requesting approval for a sole source. Outside of a duly declared emergency, the time to develop a statement of work or specifications is not in itself justification for sole source.

Supply/Service being requested: **A searchlight for installation on the Sheriff's Department helicopter.**

Supplier being requested: **Spectrolab, Inc. P.O. Box 9209, Sylmar, CA 91392-9209**

Alternative suppliers that can or might be able to provide supply/service: **None. Spectrolab is the manufacturer and sole source distributor for Searchlight Systems' Nightsun Searchlight.**

Extent of market search conducted: **A Market search was conducted.**

Unique features of the supply/service being requested from this supplier, which no alternative supplier can provide: **This is the same searchlight that is installed on the Department's other AS350B3 copters. This is the only light available that can be connected to the FLIR thermal imaging system that the Department is currently using, and that is specified for installation on a helicopter proposed for purchase.**

Reasons why my department requires these unique features and what benefit will accrue to the county: **This light is essential to providing search and rescue operations by air.**

Price Reasonableness: **Spectrolab is offering a 5% price discount.**

Does moving forward on this product or service further obligate the county to future similar contractual arrangements? **No.**

Bob Doyle For *Bob Doyle* *10/6/05*
Department Head Signature Date

Purchasing Department Comments:

Billy B. Corbett *10/06/05*
 Approve Approve with Condition/s Disapprove
Purchasing Agent Date