

**DATE ISSUED:** July 9, 2004

REPORT NO. 04-150

**ATTENTION:** Public Safety and Neighborhood Services Committee  
Agenda of July 14, 2004

**SUBJECT:** Police Helicopter Fleet Status and Needs Assessment

### **SUMMARY**

Issue – The purpose of this report is to outline the current status of the Police Department helicopter fleet and discuss alternatives for replacement options.

Manager's Recommendation(s) – Evaluate the information contained in this presentation, and determine a direction for additional planning concerning the future helicopter needs of the Police Department.

Fiscal Impact – None. This is a non-economic item at this time and is being presented for informational and planning purposes.

### **BACKGROUND**

The Police Department Air Support Unit currently operates an aging fleet of police helicopters in constant need of costly maintenance and repair. A police sergeant oversees nine pilots, four tactical flight officers, and two civilian mechanics. On an annual basis, the Air Support Unit averages over 3,000 flight hours, covers 7,600 radio calls, assists in 980 suspect apprehensions, covers 140 pursuits, and are the first police unit on the scene in 42% of the calls they cover.

The current air fleet consists of three Bell 206 Jet Rangers helicopters, one Bell 206L4 Long Ranger helicopter, and two Cessna 182RG airplanes. The major concern is the continued operational integrity of the helicopter fleet. As identified below, the fleet age

and structural integrity of the airframes are safety issues requiring attention. The helicopter fleet consists of:

1 Unit N703SD – B206B	(37-years-old, 22,300+ Flight Hours)
1 Unit N704SD – B206B3	(30-years-old, 19,300+ Flight Hours)
1 Unit N705SD – B206B3	(11-years-old, 7,400+ Flight Hours)
1 Unit N706SD – B206L4	(11-years-old, 9,000+ Flight Hours)

## **DISCUSSION**

The purpose of this presentation is to discuss options concerning the inevitable replacement of Police Department helicopters and to explore the available options for this substantial investment. This presentation will address several issues with the current helicopters that negatively impact police operations. It will also present currently available helicopters, technology and equipment, which would best suit the needs of the Police Department and the community. The presentation includes the concept of a complete helicopter fleet replacement as an alternative to purchasing helicopters on a rotating basis.

The age of the current fleet is of serious concern. As mentioned above, the older two helicopters are 30 and 37 years old. The other two are 11 years old. At these ages, we are incurring substantial costs and down time with unscheduled maintenance issues. Corrosion and metal fatigue are of concern when aircraft reach the ages of these helicopters despite being well maintained. Additionally, these helicopters are flown a great deal. Each helicopter flies between 750 and 1,000 hours per year, which is a substantial flight schedule for aircraft of any age and condition.

Another big issue concerning the current fleet is the type of helicopter we currently fly. Three of the four helicopters are Bell 206 Jet Rangers of different sub-classifications and one is a Bell 206L4 Long Ranger. The Jet Rangers simply do not have adequate performance for the police mission that they are called upon to perform. At the root of this problem is the substantial amount of specialized police equipment installed on each helicopter. Spotlights, Forward Looking Infrared (FLIR) imagers, recording equipment, video downlink systems, public address systems, Lo Jack receivers and antennas, other types of signal locators and antennas, and a number of police and aviation radios are all necessary equipment. The weight of all of this equipment significantly reduces the performance of the helicopters. When these helicopters are fully loaded with their full complement of police equipment and a full load of fuel, they cannot accept two 170-pound crewmembers without exceeding gross weight limits. These helicopters have to fly with partial fuel loads for routine police work. This situation leaves little margin for safety when the helicopters are orbiting at the low altitudes sometimes necessary for successful police support. This weight and performance problem also limits the potential of the helicopters for additional missions in emergencies such as the recent wildfires. The smaller helicopters could not carry additional personnel to help direct ground forces, nor were they equipped to provide communications from additional passengers to their respective agencies. The practical outcome of this for the fires was that we could not

take fire commanders up and have the police aircrew direct police units and the fire personnel direct their units at the same time.

Another substantial problem with the current fleet is that the support equipment mentioned above is substantially different from one aircraft to the next. The location that the equipment is installed on each aircraft varies significantly. This is the result of the helicopters being acquired and outfitted at different times. Much of the support equipment for police aviation has evolved, and as such, the newer helicopters have newer and better equipment than the old ones. The problem is that the equipment functions differently, is not compatible or interchangeable with the other equipment, and is frequently installed in different locations making it difficult for aircrew members to efficiently change from aircraft to aircraft.

### **ALTERNATIVE(S)**

The presentation will show a possible option to the historic method of replacing one or two helicopters at a time and equipping them with the then current support equipment available. The alternative to this method is a complete fleet replacement done on a 10 to 12 year lease plan through a public finance institution. The Los Angeles Sheriff's Department Aero Bureau recently replaced their old fleet with 12 new helicopters completely outfitted with new technology support equipment. The deal was structured so the annual lease payments were due at the end of each year. This allowed the agency to sell their existing equipment as the replacement helicopters arrived and use the proceeds to make the first year's payment. The agency's next payment is not due until the end of the second year of the deal. Additionally, due to warranties and negotiated training incentives, the agency's normal operating expenses will be dramatically reduced during the two-year period as well.

The Police Department's Air Support Unit has conducted substantial work on identifying potential helicopters and equipment that would meet their needs. They have identified two models of helicopters that would meet these needs and both helicopters are currently in use by numerous police agencies throughout the world. One is the Bell 407 and the other is the American Eurocopter A350 B2. Right now, there is vigorous competition between the two vendors and the potential for substantial savings exist in a competitive bidding situation for a full fleet replacement plan for the Police Department.

The potential fleet replacement idea is an alternative to the "phase-in" method previously used. The fleet replacement plan provides substantial economic and operational advantages to the City of San Diego. Volume pricing, minimal parts inventory, simplified training program, improved maintenance efficiency and current low interest tax exempt lease options all create a positive economic perspective for this type of plan. Having all aircraft capable of performing the mission, configured in the same manner with interchangeable support equipment and parts would provide the Police with a dramatic operational improvement over the current situation. If the Police Department commits to a new fleet lease-purchase program, this will be an effective, long-term, cost efficient solution to equipment problems at the Air Support Unit for the next 15 years.

Respectfully submitted,

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Approved: P. Lamont Ewell  
City Manager

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Submitted By: William M. Lansdowne  
Chief of Police

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