

IS THERE A NEED FOR A REGIONAL FIRE AUTHORITY AND RESCUE HELICOPTERS IN SAN DIEGO COUNTY?

In July 2003, the first month in its term, the San Diego County Grand Jury began an investigation into the need for a Regional Fire and Rescue Helicopter Program and a Regional Fire Authority to support it. The Grand Jury was in the final stages of the investigation when Firestorm 2003 occurred. We are fully aware that other organizations have undertaken investigations and are making recommendations relevant to this issue. Nevertheless, the Grand Jury believes that issuing this report now will best serve the citizens of San Diego rather than to wait until all the ongoing investigations are completed.

SUMMARY

Several years ago, the San Diego Fire - Rescue Department recognized the potential value of a large, well-equipped helicopter for public safety. They took the initiative to secure both public and private funding which allowed the leasing of a Bell 212 HP helicopter for trial programs during the 2002 and 2003 fire seasons; the aircraft was designated *County Copter 1*. A 90-day pilot program was run in 2002 and a longer program took place in 2003. The goal of the program was to provide a helicopter with multi-mission capabilities for responses to firefighting and rescue incidents.

Before the programs with *County Copter 1*, the California Department of Forestry (CDF), the Sheriff's ASTREA helicopter (with Bambi Bucket), and the U.S. Forest Service provided air support for fire suppression. Because CDF and U.S. Forest Service air support are not under local control they are subject to being called away to other fires during the fire season. Until recently they were not available at all during the winter. In the past, U.S. military firefighting air support was not authorized to provide help on short notice.

County Copter 1 made its services available throughout all of San Diego County. During the 90-day deployment in 2002, *County Copter 1* responded to 45 emergency incidents. During the total deployment in 2003 the helicopter responded to 185 incidents.

The Grand Jury found San Diego to be the only large county in the state that does not have one or more fire and rescue helicopters. There is no single county coordination / control organization for fire safety; in fact there are 53 independent fire agencies. The San Diego County Fire Chiefs' Association, representing the chiefs of these agencies, has sent letters to the San Diego County Board of Supervisors and SAFE (Service Authority for Freeway Emergencies) stating their unanimous support for the Regional Fire and Rescue Helicopter Program.

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After researching the San Diego Fire - Rescue Department proposal, the Grand Jury concludes that the County of San Diego is in critical need of two or more regional fire / rescue helicopters. The aircraft should be under the supervision of a yet to be defined regional fire authority.

PURPOSE

The San Diego County Grand Jury initiated a study to answer the following questions:

- Is there a need for a regional fire / rescue helicopter program in San Diego County?
- Is there a need for a countywide regional fire authority?

DISCUSSION

At this time, there is no year round helicopter assigned to San Diego County that can provide all the services that *County Copter 1* has been providing on a seasonal basis. Between July 1 and December 31, 2003 *County Copter 1* responded to 185 incidents (see Table 1). Included in these incidents were both wilderness and urban fire fighting. They performed victim extrication from remote areas. They assisted in rescuing victims from traffic accidents. They were able to deliver equipment and personnel to a scene of an accident despite major traffic gridlock. They also transported a critically injured victim to a trauma center significantly increasing the victim's chance of survival.

Table 1 -- Incidents from July 1 through December 31, 2003¹

Description	City	County	Total
Vegetation Fires	28	36	64
Air Rescues (cliff, etc.)	26	7	33
Vehicle Rescues	40	0	40
Medical Aids	16	0	16
Patient Transports	3	1	4
Water Rescues	3	0	3
Structure Fires (2 nd & 3 rd alarms)	7	0	7
High Rise Structure Fire	1	0	1
Vehicle Fires	3	0	3
Search and Rescue	1	2	3
Animal Rescue (Horse)	0	1	1
Vehicle vs. Structure	4	0	4
Downed Aircraft	3	0	3
Miscellaneous Rescues	2	1	3
Total	137	48	185

¹ Supplied by San Diego Fire - Rescue Department

County Copter 1 has a 375-gallon tank to be used for fire fighting. The tank can be filled with either water or fire suppressant. To refill the tank using the built-in siphon and pump, the crew can use any water source at least 18 inches deep and fill the tank in less than two minutes while remaining airborne. By comparison, the Sheriff's helicopter uses a "Bambi Bucket" with a 90-gallon capacity.

The *County Copter 1* program has shown it can provide timely medical aid to injured and ill patients when necessary as there are two paramedics on board. If the situation is critical, *County Copter 1* can transport a victim directly to the nearest trauma center. Where appropriate, *County Copter 1* can extricate a victim from the scene of an emergency and transfer the victim to Mercy Air² for transport to the nearest medical facility. Mercy Air's crew includes a registered nurse for every incident and is qualified to perform advanced medical treatment beyond that provided by paramedics.

One of the significant differences between the proposed helicopter(s) and those of the Sheriff and other agencies is its ability to be configured for special purpose missions. With its on-board hoist, it can be used to deliver fire fighters or lifeguards to the scene and lower them to assist victims. Air rescue from high-rise structures, cliffs, floods or swift water are also possible using the helicopter's rescue hoist. The helicopter(s) can also transport Hazmat teams and their equipment. Hydraulic extrication equipment such as the Jaws of Life is carried on the helicopter to assist with victim rescue from automobile accidents.

To accomplish all of these missions, the fire / rescue helicopter(s) needs to have heavy lift capability similar to the Bell 212 HP. Professional fire aircraft consultants should be used to determine the actual aircraft specifications.

Current Program Capabilities and Equipment

- Advanced Life Support (ALS) Rescue Aircraft classification (County EMS)
- Paramedic Equipment (similar to a ground ambulance)
- Type 1 Flycrew (Sycuan Golden Eagles Hotshot Crew)
- Internal Rescue Hoist (600 lb. Capacity w/ 250 foot cable)
- 375-gallon Self-filling Fixed Tank (water or retardant drop)
- Longline (150 foot with remote hook for external cargo transportation)
- NightSun Searchlight (30 million candlepower)
- Rappel and Shorthaul
- Hydraulic Extrication Equipped (Jaws-of-Life)
- Water Rescue (harness, capture ball, cinch collar, personal floatation devices, etc.)
- Cervical Spine Immobilization Board and Pre-rigged Stokes Litter (Bauman Bag)

² Mercy Air is a private service operating under a memorandum of understanding with the County to provide air ambulance services.

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- 1 – 800 MHz Radio
- 2 – VHF-FM Radios
- 3 – VHF-AM Radios
- Global Positioning System
- Handheld Thermal Imager
- On-board Hoist and Camera System (training and incident video documentation)³

Currently there is no countywide fire agency. There are 53 different local fire departments, agencies, and authorities within the County. Additionally, there are state (California Department of Forestry), federal (U.S Forest Service), and military fire fighting organizations also functioning within the County. There are a number of mutual aid agreements between many of the agencies, but the agreements are not countywide.

As a result of the seasonal program with *County Copter 1*, the San Diego Fire - Rescue Department has recommended the formation of a regional county fire authority to run the Regional Fire and Rescue Helicopter Program. The San Diego County Fire Chiefs' Association, representing most of the county agencies, has also recommended the creation of a regional fire authority. A member of the San Diego County Board of Supervisors has recommended that an appointed governing body consisting of area fire and emergency experts be created to oversee the Regional Fire and Rescue Helicopter Program.

The Grand Jury believes that the funding of the Fire and Rescue Helicopter Program is a major consideration. Due to budget constraints at all levels of government, there are no easily identifiable funds available. Additionally, the method of acquisition needs to be determined, either purchased or leased and whether the equipment should be new or used. Each of the acquisition decisions will effect the funding required. One option that could be evaluated is procuring a helicopter from the Federal Excess Property Program. A major consideration when looking at the various methods of acquisition is the cost of refurbishing the aircraft and ongoing maintenance costs.

PROCEDURES EMPLOYED

During the investigation, the Grand Jury obtained information from the following sources:

- Interviewed: a San Diego Fire - Rescue Department Assistant Chief, an Acting Battalion Chief, a City of San Diego Director of Development, an Orange County Fire Chief, the Chief Pilot for L.A. County Fire Department.

³ San Diego Regional Fire and Rescue Helicopter Program Update, Sept. 2003

- Multiple question and answer sessions during helicopter “ride-alongs”, San Diego Fire - Rescue Department demonstrations and observations.
- Media reports including newspaper articles and television reports.
- Other reports:
 - Helicopter Budget Owned & Operated Helicopter Program Estimated Annual Cost (March 2003)
 - San Diego Regional Fire and Rescue Helicopter Dispatch Policies and Procedures 2003
 - PowerPoint presentation about San Diego Regional Fire & Rescue Helicopter Program
 - Update of San Diego Regional Fire & Rescue Helicopter Program Sept. 15, 2003
 - San Diego Regional Fire & Rescue Helicopter Accident/Incident Procedures (7-29-02)
 - San Diego Regional Fire & Rescue Helicopter Program Aviation Mishap Response Plan (2003 Draft)
 - Contract Program Estimated Annual Cost (March 2003)
 - Mission Statement San Diego County Sheriff’s Department Aerial Support Detail
 - “Law Enforcement Helicopter Goals/Missions”–Sheriff’s Department
 - “Use of San Diego Sheriffs Helicopters”- Draft, SDSO ASTREA
 - “Interagency Carded Aircraft & Pilots” Air Resources Meeting Minutes, Sept. 18,2002
 - NTSB accident report LAX97GA105 February 16, 1997
 - Master List-Helicopter Operations- June 2003, San Diego County and Environs - Fire Service
 - Policy and Procedure Manual-July 1, 2003, County of San Diego, Health and Human Services Agency, division of Emergency Services

FACTS AND FINDINGS

The first time a helicopter was used for assistance during a forest fire was in California in 1947. Since that time, helicopter use for fire and rescue work has expanded and become a vital tool in most large communities nationwide. For the past two years, the San Diego Fire - Rescue Department has run a fire and rescue helicopter trial program during the local fire season. This year, at the end of the contract fire season, the helicopter left San Diego only to be called back days later to help fight the firestorm that hit San Diego County on October 25, 2003. *County Copter 1* is continuing to service the county through emergency funding from the City of San Diego.

The *County Copter 1* program was available to provide services for all 53 county fire agencies throughout San Diego County. There is no other program in San Diego County that could perform the same year round comprehensive services *County Copter 1* provided during its service. Services included: wild land firefighting, vehicle rescue, air rescue, emergency medical services and hazardous materials response, aide to search and rescue, cliff rescues, ocean and rough water rescues, as well as large animal rescues. Based on fire – rescue helicopter programs in counties of similar size, there should be two or more helicopters in the program.

The helicopter has transported the Sycuan Golden Eagle Hotshot Crew for insertion at fire scenes throughout the county. They are a “first strike” ground team used to fight wildfires by clearing brush and creating firebreaks.

The helicopter can deliver a 375-gallon water / retardant drop and quickly refill from a nearby water source. The Sheriff’s ASTREA helicopter has only the 90-gallon “Bambi Bucket” for fire suppression. ASTREA does not carry the bucket on board and must land to hook it up for a water drop. *County Copter 1* can carry additional tools or replacement equipment to be brought into remote areas as needed.

Due to the maximum height that a ladder can reach from any fire truck, (100 feet) normal fire equipment often cannot reach upper stories of high-rise buildings. The fire rescue helicopter hoist could be used for extraction of people from tall buildings during a structure fire or life-threatening emergency.

The proposed helicopter(s) should be classified as an Advanced Life Support Rescue Aircraft. With this classification, there would be a minimum of two trained and qualified aircrew members and one flight paramedic responding with the helicopter(s) to all air supported emergency incidents.

Mercy Air, the only privately operated air ambulance service in San Diego County, has a memorandum of understanding (MOU) with the Fire and Rescue Helicopter Program regarding protocols for transporting medical victims to the hospital. This agreement

provides for a review process after each incident assuring all parties involved that the appropriate functions were carried out.

The need for the Regional Fire and Rescue Helicopter Program is supported by:

- County of San Diego Board of Supervisors
- San Diego City Council
- San Diego Fire - Rescue Department
- Task Force on Fire Protection and Emergency Medical Services
- San Diego County Fire Chiefs' Association
- Service Authority for Freeway Emergencies (SAFE)
- Sycuan Band of the Kumeyaay Nation.

The San Diego County Fire Chiefs' Association recommended to the Board of Supervisors that a professional consultant be utilized to conduct a study to examine the helicopter firefighting requirements in San Diego County. The report should provide recommendations on the level of protection needed, as well as, how to achieve the protection and necessary funding.

COMMENDATION

The 2003/4 San Diego County Grand Jury commends Assistant Fire Chief August F. Ghio and Acting Battalion Chief Brian Fennessy for their efforts in developing the San Diego Fire - Rescue Helicopter program. Beginning in 1999, they led an effort to define what a regional helicopter program should be. Working many long hours on their own time, they were able to secure funding from diverse public and private sources for the seasonal programs in 2002 and 2003. Since Firestorm 2003, there has been a groundswell of support for a regional fire helicopter program. The work of Mssrs. Ghio and Fennessy will be the basis from which the future program will develop.

RECOMMENDATIONS

- 04-01-1** The Grand Jury recommends the San Diego Regional Fire and Rescue Helicopter Program should continue its current operation until a regional fire authority is formed.
- 04-01-2** The Grand Jury recommends that the San Diego County Board of Supervisors work with the City of San Diego to secure cooperative agreements and financial support from the cities and fire districts in the county to fund the interim operation of the San Diego Regional Fire and Rescue Helicopter Program.
- 04-01-3** The Grand Jury recommends that the San Diego County Board of Supervisors in cooperation with the San Diego Local Agency Formation Commission (LAFCO) and other city and governmental fire agencies expedite the creation of a regional fire authority.

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- 04-01-4** The Grand Jury recommends that the San Diego County Board of Supervisors make the first priority of a regional fire authority be the establishment and the operation of a year round Regional Fire and Rescue Helicopter Program with two or more helicopters.
- 04-01-5** The Grand Jury recommends that the San Diego County Board of Supervisors work with all governmental fire agencies to identify and secure the funding necessary for the Regional County Fire Authority to establish, manage, and operate a Regional Fire and Rescue Helicopter Program.
- 04-01-6** The Grand Jury recommends that the San Diego County Board of Supervisors consider the recommendations from the professional consultant contracted by the City of San Diego, in cooperation with the San Diego County Fire Chiefs' Association, to determine the specifications for the fire / rescue helicopter(s).

REQUIREMENTS AND INSTRUCTIONS

The California Penal Code §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 §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 therefor.
- (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 therefor.
- (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 §933.05 are required by the date indicated:

<u>RESPONDING AGENCY</u>	<u>RECOMMENDATIONS</u>	<u>DATE</u>
San Diego County Board of Supervisors	04-01-1, 04-01-2, 04-01-3, 04-01-4, 04-01-5, 04-01-6	06/08/04
Mayor, City Council, Fire-Rescue Dept. City of San Diego	04-01-1, 04-01-2, 04-01-3, 04-01-5, 04-01-6	06/08/04
San Diego Local Agency Formation Commission	04-01-1, 04-01-3	06/08/04
Alpine Fire Department	04-01-2, 04-01-3, 04-01-4, 04-01-5	06/08/04
Bonita Fire Department	04-01-2, 04-01-3, 04-01-4, 04-01-5	06/08/04
Borrego Springs Fire Department	04-01-2, 04-01-3, 04-01-4, 04-01-5	06/08/04
Carlsbad Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04

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Chula Vista Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Coronado Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Deer Springs Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Del Mar Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
East County Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
El Cajon Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Encinitas Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Escondido Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Imperial Beach Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Jacumba / Rural Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Julian Cuyamaca Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
La Mesa Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Lakeside Fire Protection District	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Lemon Grove Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Lower Sweetwater Fire Protection District	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04

National City Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
North County Fire Protection Dist.	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Oceanside Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Pine Valley Fire Protection District	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Poway Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Ramona Fire Protection District	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Rancho Santa Fe Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
San Diego Rural Fire Protection District	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
San Marcos Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
San Miguel Consolidated Protection District	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Santee Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Solana Beach Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Valley Center Fire Protection District	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Vista Fire Department	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04
Yuima Water District	04-01-2 04-01-3, 04-01-4, 04-01-5	06/08/04