

ATTACHMENT A

COUNTY OF SANTA BARBARA

BOARD OF SUPERVISOR'S
AD HOC SUBCOMMITTEE
ON PUBLIC SAFETY
AVIATION

FINAL REPORT



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AD HOC SUBCOMMITTEE ON PUBLIC SAFETY AVIATION

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BACKGROUND

Modern firefighting and law enforcement are greatly enhanced by ready access to air support. Initial attacks on wildland fires, pursuit of fleeing suspects, surveillance on crime scenes, searching for lost hikers, rescue of stranded boaters and the ability to place disaster response personnel on scene in remote or dangerous situations are all facilitated through the skilled use of helicopters or fixed wing aircraft. It is difficult to imagine providing public safety without these vital aviation resources and the skilled personnel that operate them.

Santa Barbara County is over 2,700 square miles in area. Many parts of the county are inaccessible and remote such as the Gaviota coast or large parts of the Los Padres National Forest. The population centers are geographically dispersed making for long travel times between them by ground vehicles. In emergency response, time is essential. Helicopters and fixed wing aircraft dramatically reduce the time needed for public safety personnel to arrive on the scene and begin the efforts to preserve life and property.

The use of these aircraft is expensive. Fuel costs, maintenance, pilot training and staffing all add up. Last year, the Sheriff and Fire Departments combined spent over \$2,200,000 on their aviation programs. Combined, the departments allocate a total of twelve positions to their aviation programs. These highly-skilled individuals perform unique tasks that are essential to maintaining, preparing, executing and evaluating valuable public safety services. Currently the County maintains a fleet of six helicopters and one fixed-wing plane. While each aircraft in the County's fleet has its own unique capabilities, together the fleet does have some duplication of capacity that may be considered excess.

In the highly challenging budget environment currently facing the County of Santa Barbara, the Board of Supervisors (hereafter, Board) created the Ad Hoc Subcommittee on Aviation (Subcommittee) and appointed Supervisor Janet Wolf (District 2) and Supervisor Steve Lavagnino (District Five). This report is the result of careful consideration of the public's need for an effective and efficient public safety aviation program. Santa Barbara County will continue to receive excellent firefighting and law enforcement through the availability of air resources, highly skilled pilots, flight crews and maintenance staff and most importantly through committed leadership by all involved.

The policy consideration before the Subcommittee and the Board is to identify and prioritize the aircraft and personnel capabilities required to provide the necessary level of service to the public. The Subcommittee used subject matter experts from across California to assist in understanding the key components of an effective public safety aviation program for Santa Barbara County.

Finding 1:

The availability of aviation assets is an indispensable component of modern firefighting and law enforcement. Effective aviation programs should preserve and maintain appropriate aircraft and personnel assets to provide public safety.

A BRIEF HISTORY OF PUBLIC SAFETY AVIATION IN SANTA BARBARA COUNTY

In June and September, 1995, the County appropriated two used military (OH -58) helicopters (commonly referred to as Copter 1 and Copter 2) for law enforcement missions and the Board authorized the Sheriff's Department expenditures to refurbish the helicopters in June 1996. In 1997, the Fire Department was authorized by the Board to acquire two used military (UH-1) helicopters (commonly referred to as C-308 and C-309) for Fire missions and established the Fire Department's aviation program in 1999. In 2001, a fixed wing aircraft was acquired as a result of drug asset forfeiture. This also began a period of joint operations for both law enforcement and fire suppression at the Santa Ynez Airport. In 2006, an additional military surplus UH-1H helicopter (commonly referred to as Copter 3) was accepted, as well as a fixed wing aircraft which was acquired to replace the damaged plane received in 2001. Donations to begin refurbishing Copter 3 were accepted by the Board in January of 2007. In February 2009, the joint operations of the Sheriff and Fire Aviation units ended. In October 2009, the Board accepted one UH-1N twin engine helicopter (commonly referred to as Copter 4) for the Sheriff's Department. Copter 4 provided an extra level of because it has an extra engine. This is particularly valuable when flying missions over the ocean. In June 2011, the Board was asked to accept the donation of over \$1 million in equipment incorporated into the renovation of Copter 3. The Board has not decided whether to accept the offer until considering the recommendations of the Ad Hoc Subcommittee. The following charts identify each of the aircraft, capabilities, usage and resource utilization history in the Fire and Sheriff Departments.

Inventory of County of Santa Barbara Public Safety Aircraft

Name	Model	Department	Year Built/ Acquired	Acquisition Program ¹	Flight Hours	Value
Copter 1	OH-58A+	Sheriff	1969/1995	1033	10,000	\$0
Copter 2	OH-58A+	Sheriff	1971/1995	1033	6,000	\$0
Copter 3	UH-1H	Sheriff	1965/2007	1033	10,000 ²	\$0
Copter 4	UH-1N	Sheriff	1971/2009	1033	10,000	\$0
C-308	UH-1H	Fire	1967/1999	FEPP	13,657	\$0
C-309	UH-1H	Fire	1966/1999	FEPP	14,500	\$0
Air 50	Cessna	Sheriff	2001	Asset Forfeiture	1,371	\$175,000

¹ See the following paragraph for a description of the federal programs for acquiring military surplus aircraft

² Complete rebuild being completed Spring of 2012

All of the helicopters used by the Sheriff and Fire Department were procured through federal programs designed to provide state and local first-responders with surplus aircraft mostly former military. The 1033 Program (formerly the 1208 Program) permits the Secretary of Defense to

transfer, without charge, excess U.S. Department of Defense (DoD) equipment to state and local law enforcement agencies. The law enforcement agency must be a government agency with officers who are compensated and have powers of arrest and apprehension. The receiving agency is responsible for all costs associated with the property after it is transferred, as well as for all shipping or federal repossession costs. Equipment may not be sold, leased, rented, exchanged, bartered, used to secure a loan, used to supplement the agency's budget or stockpiled for possible future use. The Federal Excess Personal Property (FEPP) program refers to Forest Service-owned property that is on loan to states for the purpose of wildland and rural firefighting. The program has existed since 1956. The state may then place equipment with local departments to improve local fire programs. Under the FEPP program requirements, 90% of use must be for fire suppression with remaining 10% available for other incidental uses including medical assistance.

Capability of County of Santa Barbara Public Safety Aircraft

Name	Model	Department	Mission Capabilities			
			Reconnaissance & Search	Water Drops	Rescue	Medical
Copter 1	OH-58A+	Sheriff	Yes		Yes	
Copter 2	OH-58A+	Sheriff	Yes		Yes	
Copter 3	UH-1H	Sheriff	Yes	Yes ¹	Yes	Yes
Copter 4	UH-1N	Sheriff	Yes	Yes ²	Yes	Yes
C-308	UH-1H	Fire	Yes	Yes	Yes	Yes
C-309	UH-1H	Fire	Yes	Yes	Yes	Yes
Air 50	Cessna 206	Sheriff	Yes			

¹ 300 gallon “belly” tanks installed

² 300 gallon “Bambi bucket” used when needed for fire suppression

Each aircraft provides a unique set of capabilities to fulfill necessary mission requirements. The preceding chart identifies the mission capabilities dictated by the onboard equipment or aircraft characteristics. For example, rescues may require the ability to hoist an individual from the ground or water when no landing site is available. Water drops can be made using water tanks attached to the aircraft or using a “Bambi bucket” suspended below the aircraft. Medical rescues and, when necessary, transportation of patients requires trained personnel and at least a basic life support equipment and supplies.

Mission Data of County of Santa Barbara Public Safety Aviation

	2006 Flight Hours		2007 Flight Hours		2008 Flight Hours		2009 Flight Hours		2010 Flight Hours	
	Fire	Sheriff	Fire	Sheriff	Fire	Sheriff	Fire	Sheriff	Fire	Sheriff
Public Safety Missions	138.4	311.8	196.0	340.6	266.0	257.4	204.5	241.0	91.5	275.7
Training & Maintenance	71.4	88.5	112.2	41.2	80.5	62.6	101.2	61.4	60.8	132.8
Mutual Aid & Other	24.8	59.6	35.0	40.3	37.8	80.6	7.3	89.7	9.1	45.6
Department Totals	234.6	459.9	343.2	422.1	384.3	400.6	313.0	392.1	161.4	454.1
Aviation Totals	694.5		765.3		784.9		705.1		615.5	

Development of the County of Santa Barbara Public Safety Aviation Resources

		FY 2005-06	FY2007-08	FY 2009-10
Equipment	Fire	2 – UH-1	2 - UH-1	2 - UH-1
	Sheriff	2 – OH-58 1- UH-1 1-Cessna 206	2 - OH-58 1- UH-1 1-Cessna 206	2- OH-58 1- UH-1 1- UH-1N 1-Cessna 206
Personnel	Fire	2- Pilots 2- Captains 1.5- Mechanic	2- Pilots 2- Captains 1- Mechanic	2- Pilots 2- Captains 1- Mechanic
	Sheriff	1- Sergeant 2-Deputy Pilots 2-Deputy Observers 1- Mechanic	1- Sergeant 2-Deputy Pilots 2-Deputy Observers 1- Mechanic	1- Sergeant 2-Deputy Pilots 2-Deputy Observers 1- Mechanic
Actual \$	Fire	\$ 899,837	\$ 1,362,824 ¹	\$ 1,390,884
	Sheriff	\$ 1,227,026	\$ 1,823,045 ²	\$ 1,275,487
	Total	\$ 2,126,863	\$ 3,185,869	\$ 2,666,371

¹ Higher due to extra help and operations for Zaca fire

² Higher due to extraordinary expenses of \$150,000 in overtime and \$269,351 in equipment

THE WORK OF THE SUBCOMMITTEE

The Ad Hoc Subcommittee on Public Safety Aviation was established by the Board in June 2011. The purpose of the Subcommittee has been to assess the current public safety aviation program including its operations and assets, to find effective methods of enhancing public safety while improving cross departmental communication and functionality and reducing total program costs.

The Subcommittee had one organizational meeting to identify the tasks required to achieve the results desired by the entire Board. The organizational meeting included guidance from County Counsel on the responsibilities of Board Subcommittee. The Subcommittee then met with the Fire Chief and the Sheriff separately to receive a briefing on their respective aviation programs and to identify the issues that limit cooperation and sharing of staff and equipment.

Ventura County has a combined Fire-Sheriff aviation program. The Subcommittee met with Captain David Kenney of the Ventura County Sheriff's Department. Captain Kenney leads the Sheriff-Fire aviation partnership. According to Captain Kenney, the Ventura County aviation team provides a multi-functional service including law enforcement, search and rescue, fire suppression and emergency medical services. In 2010, they flew slightly more hours (+16%) than did combination of Santa Barbara County's Fire and Sheriff. During his presentation, Captain Kenney identified two elements critical to the success of Ventura County's Aviation Unit: a clear MOU that identifies the mission-based roles and responsibilities of each team member, as well as, clear expectations for team members that create a common culture of excellence. Ventura County Aviation Unit does have some challenges. Ventura County Fire Chief Bob Roper commented that, at times, the Fire District could have been better informed and consulted about equipment readiness, budget and personnel decisions. As with any partnership, the Ventura County Aviation Unit appears to function best when consistent and open communication occurs between all parties about planning, executing and evaluating the Aviation Units mission. It should be noted that all parties are highly committed to the

success of Ventura County's Aviation Unit. Currently, Ventura County does provide most of the search and rescue coverage for the Channel Islands, including Santa Cruz, San Miguel and Santa Rosa Islands which are a part of Santa Barbara County, because of the availability of their twin-engine helicopter.

The Subcommittee met with Unit Chief Robert Lewin and Aviation Chief John Winder of CAL FIRE to discuss fire aviation, personnel standards, best practices and available CAL FIRE aviation resources. The Subcommittee learned a great deal about the importance of aviation assets in the initial attack phase of a wildland fire for water drops and transporting fire fighters into remote and often rugged areas. Additionally, the Subcommittee understood the unique skill set associated with

Finding 2:

Other counties have found high quality public safety services delivered through a joint firefighting and law enforcement aviation program that is built upon an Operational Agreement that emphasizes cooperation and coordination to successfully accomplish very different missions. The cooperative relationship in other counties does require the firefighting and law enforcement departments to establish an integrated team under a single chain of command that is built upon regular open dialogue to achieve the service results expected by the public.

fire aviation pilots to safely and effectively carry out these initial attack fire operations. It became apparent to the Subcommittee that State of California and Federal fire aviation assets will be unavailable for at least the initial one or two hour period of a wildland fire. This critical resource gap at the onset of a wildland fire can best be filled through the County's aviation assets guided by pilots with unique skills and experience.

The Subcommittee held a conference call with Kern County Fire and Sheriff Department leaders about their decision to maintain separate fire and law enforcement aviation operations. The Kern County public safety officials have taken a careful look at some challenges with who to dispatch on search and rescue missions. The Subcommittee has identified that dispatching the correct personnel on search and/or rescue missions is often a challenge given the dynamic nature of those operations. Kern County developed a comprehensive agreement identifying the roles, responsibilities and dispatch protocols for search and rescue missions. Santa Barbara County has used a similar matrix of aviation dispatch protocols for several years and is constantly being evaluated and updated when necessary.

In Santa Barbara County, law enforcement units are responsible for search and rescue missions and fire units typically respond to rescue calls. Search and rescue missions generally include incidents such as: lost hikers, lost individual suffering with dementia, off-road auto accidents in remote areas, etc. Generally, if someone needs assistance and their location is not known, it is a search and rescue. Rescue calls may involve a traffic accident requiring extricating a motorist

from a wrecked automobile, a hoist rescue of an injured hiker off of an identified mountain or canyon trail or a rescue swimmer deployed to recover an incapacitated person in the water. Often rescued individuals require medical attention provided by certified firefighter-paramedics.

The Subcommittee met with staff from the County's Department of Public Health, the agency responsible for Emergency Medical Service (EMS). The information provided by the Public Health staff was invaluable in understanding the role helicopters play in saving the lives of accident and medical emergency victims. Public Health staff had first-hand knowledge of Ventura County's system of using volunteer medical personnel including physicians. They suggested that it worked well. Public Health staff also recognized the difficulty in recruiting, scheduling and supervising a cadre of volunteer "medical crew chiefs." Another option presented by Public Health staff was to consider placing paramedics from the contract ambulance service on missions requiring medical staffing. Ambulance staff is regularly stationed near the hangar facility at Santa Ynez Airport.

Finding 3:

Professional pilots are needed to skillfully maneuver rotary and fixed wing aircraft to maximize their safety and effectiveness in accomplishing the firefighting or law enforcement mission. Mission specialist crew members with the required training from the Fire Department or Sheriff Department provide technical expertise and operation direction during all public safety missions. Providing systematic cross-training of pilots and all crew chiefs on mission specific strategies and tactics provides increased deployment flexibility, mutual respect and mission effectiveness.

Finding 4:

Santa Barbara County residents and visitors would benefit from the increased accountability, effectiveness and efficiency of a public safety aviation program that is able to perform inherently different missions with a single chain of command.

During medical emergency situations that require more than 15 minutes of ground transportation times AND air travel times will be 10 minutes faster AND the time difference will negatively impact the patient's condition, the EMS can access air ambulance helicopters to provide emergency transportation. Currently, EMS contracts the air ambulance service to CALSTAR which is capable of providing critical care nursing when needed. The Fire Department Air Operations Manual also identifies medical evacuation (medical transport without a need for rescue) as one mission scenario. Medical evacuation by the Fire Department and medical transportation by CALSTAR does appear to be a nearly identical service that should be clarified to effectively render the best aid possible.

Finding 5:

Some mission duplication may exist between medical evacuations conducted by the Fire Department and emergency medical transportation provided by CALSTAR.

On October 28, 2011, the Subcommittee met with the Fire Chief and the Sheriff to discuss the Subcommittee's findings. The Subcommittee requested that the two departments begin working on an Operational Agreement aligned with the recommendations listed below. In early January, a follow-up meeting between the Fire Chief, Sheriff and the Subcommittee was held to learn about the progress made toward an agreement.

SUBCOMMITTEE FINDINGS AND RECOMMENDATIONS

Finding 1:

The availability of aviation assets is an indispensable component of modern firefighting and law enforcement. Effective aviation programs should preserve and maintain appropriate aircraft and personnel assets to provide public safety.

Finding 2:

Other counties have found high quality public safety services delivered through a joint firefighting and law enforcement aviation program that is built upon an Operational Agreement that emphasizes cooperation and coordination to successfully accomplish very different missions. The cooperative relationship in other counties does require the firefighting and law enforcement departments to establish an integrated team under a single chain of command that is built upon regular open dialogue to achieve the service results expected by the public.

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Recommendation 1:

Form a joint fire and law enforcement aviation program within the Sheriff's Department based on an Operational Agreement between the Fire and Sheriff Department that recognizes very different missions requiring a tightly integrated team, under unified command, of pilots, crew chiefs and maintenance personnel willing to communicate and maintain positive working relationships to serve the people of Santa Barbara County.

Recommendation 2:

Include the vital elements of aircraft and equipment availability, operational procedures, financial policies, staffing levels and leadership expectations in the Operational Agreement.

Recommendation 3:

Use professional pilots for public safety flight operations. Crew Chiefs should be made up of appropriate Fire or Sheriff personnel to match the mission.

Recommendation 4:

Clarify the roles and responsibilities for medical evacuation provided by the aviation program and emergency medical transportation provided by CALSTAR to eliminate mission and dispatch confusion.