



Fire Watch

Los Angeles Fire Department Newsletter

August, 2004
Volume 1, Issue 4

Los Angeles Fire Department
200 North Main Street
Los Angeles, California 90012
(213) 978-3845
Fax (213) 978-3815

Visit Our Website
www.lafd.org

Our Mission

“To Preserve life and property, promote public safety, foster economic growth through leadership, management and actions, as an all-risk fire and life safety response provider.”

The Los Angeles Fire Department Newsletter is published monthly by the Planning Section.

Direct newsletter inquires to:

Planning Section
LAFD
200 North Main Street Rm. 1800
Los Angeles, Calif. 90012

Los Angeles Fire Department Air Operations

Following the Bel-Air fire in 1961, the Los Angeles Fire Department (LAFD) purchased its first helicopter, a Bell 47, as a new weapon in its brush firefighting arsenal. As the needs of the City of Los Angeles grow so do the needs of Air Operations. Millions of dollars have been spent in past years to keep Air Operations fleet current and in up to date condition. This is money well spent given the environment we are currently in.



Fire 2

In subsequent years Air Operations fleet has evolved to a total of six aircraft with a staff of 4 Pilots, 1 Crew Chief, and 2 Paramedics on each of three platoons, all of which are helitac certified and available on a 24-hour basis.

Air Operations is able to launch two fully hoist capable Air Ambulances. In addition, the Bell 412 aircraft are multi mission configured to accommodate Air Ambulance equipment.

LAFD AIR OPERATIONS NEW FACILITY

In order to meet the growing needs of the City of Los Angeles, Air Operations will be moving to a state of the art 56,000 square foot new facility. The expected completion date will be early 2006. This new facility will be built on its existing site with



Medical Transport Configuration



hangars allowing all helicopters to be parked inside. The Air Operations facility will be utilized as a multi-agency central training site, and will be able to meet future needs of the City of Los Angeles.

Over the years Air Operations members have worked to provide and refine operational procedures for the ever-changing needs of our Department. Air Operations is enthusiastically meeting the challenge of providing aviation support for our Department and the City for the next millennium.

Our Department's helicopter fleet has been selected for their multi-mission capabilities. The larger aircraft (Bell 412's) are typically used for firefighting, medical transport, hoist rescue, and swift water rescue. Within minutes the Bell 412 can be converted to transport our USAR Team and equipment. Two of the six helicopters (#4 and #6) are equipped with Forward Looking Infrared (FLIR), daylight video cameras, disaster mapping systems, and GPS flight computers (Aero Computer) used for rapid navigation.

Infrared enhances Air Operations ability to visualize people and /or objects through

The mapping of a disaster has several benefits that can assist with incident mitigation and evacuation. Aerial mapping provides incident perimeter length, acreage, and rate of spread projections. This information can be overlaid onto a topographical or satellite imagery map.



Air Operations New Facility

heat signatures. For example, lost hikers, chemical spills, container vessels, and brush fire hot spots. This information can be down linked real- time to

The Aero Computer is a moving aeronautical and/or Thomas Guide Map that provides the Pilot with real time GPS location information. This information not only reduces response times, it provides the Pilot with an increased safety margin through situational awareness.



FLIR and Daylight Camera

the Command Post without endangering ground personnel.

The daylight video camera provides a clear overhead image that can be relayed to the Command Post. This image can assist with damage assessment, command decision making, and historical reference for LAFD.

Air Operations assets have proven to be a formidable tool for use in all types of emergency incidents. During major disasters such as earthquakes, a helicopter can transport rescue personnel and equipment to inaccessible areas. They also provide a rapid response to brush fires and have saved many homes each year in the hillside and remote areas of the City.

Los Angeles County has over 2000 miles of concrete flood



control channels that flow through multiple densely populated urban and commercial districts. Water in these channels at times can reach speeds upward of 20 mph and temperatures below 40 degrees fahrenheit. A victim can become hypothermic within minutes, leaving airborne swift water rescue as one of the most viable solutions.

Air Operations also has the capability to support the Coast Guard in over water victim search and rescue.

Los Angeles International Airport handles over 500,000 passengers daily. On a moment's notice Air Operations can assist in rapid transport of multiple victims from an airport disaster to outlying hospitals.

There are multiple high-rise districts within the boundaries of Los Angeles City. A large majority of these buildings are from 20 to 50 stories and at any given time can have thousands of occupants. Air Operations can efficiently deploy Airborne Engine Companies to rooftops and simultaneously provide rapid evacuation of victims to

predetermined safe areas. Our command and control helicopters (#4 and #6) are capable of assisting interior companies with detailed

personnel. This capability allows us to mobilize and relocate City leaders and dignitaries in times of emergency.



Moving Map Navigational Screen

locations of possible hazards via a down-link feed of forward infrared or video camera images to the Incident Command Post.



LAFD Air Support (Temporary Landing Site)

On many occasions Air Operations has been called upon for VIP transports. Each one of our Bell 412 Helicopters are capable of transporting up to 12

operations, confined space landing, and emergency procedures. During the initial training phase, the Pilots are continually tested through "check rides" which measure their skill and proficiency in all phases of helicopter operations. Once the initial training is completed, trainees must fly additional hours to build their skills and proficiency. The Pilots will eventually transition into the Bell 412 as their skill, experience, and proficiency increase. All Air Operations Pilots are commercially rated helicopter Pilots and maintain their status as Certified Flight Instructors. Our Department helicopters are staffed 24 hours a day and stand ready to respond to any emergency throughout the City and County of Los Angeles.

Pilot Training

Air Operations Pilots undergo a rigorous screening and training regimen before they are certified to fly for the Fire Department. The initial training program consists of 200 hours of instruction in basic operations, mountain terrain, heavy load



Next Generation Helicopter

Bell/Agusta AB 139

Max cruise speed	157 kts
Max range std fuel tanks	430 nm
Max weight	14000 lbs.
Twin engine take-off power	2 x 1800 HP
Main Rotor	5 Bladed
Tail Rotor	4 Bladed

- ◆ Increased safety and performance due to single engine fly away capability from a hover.
- ◆ Water carrying payload up to 700 plus gallons.
- ◆ Twice the horsepower of our Department's current Bell 412.



Fire 6 B206 L3

Allison 650 SHP
 Turboshaft Engine
 Gross weight 4,150
 Max speed 130 kts
 7 Passenger seating

Optional Equipment:

Nightsun Searchlight
 FLIR
 Day-light video came
 Mapping computer
 GPS



Fire 4 Bell 412

Twin Pratt & Whitney 900 SHP
 Turboshaft Engine
 Gross Weight 11,900 lbs.
 Max Speed 140 knots
 15 Passenger seating

Optional Equipment:

375 gallon water tank
 Nightsun Searchlight
 FLIR (#4 & #6)
 GPS
 Mapping Computer (#4 & #6)
 Rescue Hoist (#1, #2 & #4)



******Contributions for this months "Fire Watch" was made by Battalion Chief John Buck who is a 31 year veteran of the Fire Department. Chief Buck is currently assigned to Air Operations, located at the Van Nuys Airport.**