Hollywood Sign

The Hollywood Sign is located at an elevation of 1,595 feet MSL. The terrain surrounding the sign within a 1 mile radius is steeply sloped from 800’ up to the 1,775’, with the highest point being ½ mile northwest of the landmark. The tallest obstacle in the immediate vicinity of the sign reaches to an elevation of 2,035’.

The Hollywood Sign is a VFR reporting point located within Burbank (BUR) ATCTs delegated surface area (below 2,000 feet). VFR aircraft are commonly observed navigating around the area near the sign with fixed-winged aircraft at approximately 1,800’ and helicopters at approximately 1,200’. The minimum vectoring/IFR altitude over the Hollywood Sign is 3,000’.

Hollywood Bowl

The amphitheater is situated below the top of a mountain ridgeline which has a peak elevation of 1,690 feet MSL. Within ½ mile of the bowl, the terrain slopes downward from north (1,100’) to south (450’) into a residential area. Highway 101, a prominent visual reference point for VFR pilots, runs from southeast to north just east of the Hollywood Bowl.

The Hollywood Bowl lies beneath the BUR Class C airspace, which extends from 3,000-4,800 feet directly above it. The Bowl also lies just outside the area where the BUR Class C airspace extends down to the surface. VFR aircraft routinely uses the amphitheater as a visual reporting point for BUR ATCT, and fixed-wing aircraft flying via Highway 101 will cross this area at approximately 1,800’, while helicopters will cross at 1,200’. There is a published helicopter route which follows Highway 101, and the Bowl itself is denoted on the Los Angeles Helicopter Chart with a comment asking aircraft to avoid flying over this landmark during concert season (“Avoid when white strobe lights are on June-October”).

Griffith Park

The Griffith Park Observatory is located approximately one mile south of the Hollywood Sign and at an elevation of 1,150 feet MSL. There is higher terrain north of the structure, and the highest nearby obstruction is a 317’ tall tower on top of 1,708’ high Cahuenga Peak. A residential neighborhood is located immediately south of Griffith Park Observatory where the terrain slopes gradually to 200’.

Like the Hollywood Bowl, the Griffith Observatory and Park are located within the lateral confines of the BUR Class C airspace. The observatory lies beneath the portion of the Class C which extends from 3,000-4,800’, while the park extends into the area in which the Class C airspace reaches to the surface. Just south of the observatory and park is the boundary of the LAX Class B airspace, which extends from 5,000-10,000’ at the closest point, and from 2,500-10,000’ within
There are two published helicopter routes which run north and south on each side of the park over Interstate 5 and Highway 101.

Carmageddon I and II

The freeway closures took place along a 10-mile section of I-405 in Los Angeles. The airspace over this area is extremely complex, with various classes of controlled airspace above and around the nearby airports. There is also Class G, or uncontrolled airspace in the area, where ATC cannot observe aircraft on radar and does not have authority to control aircraft. Overlying the freeway is the published San Diego Helicopter Route which begins at the intersection of I-405 and I-5 and continues south past the West Los Angeles Veteran Affairs Medical Center. The following image depicts where Carmageddon took place and the published helicopter route following the 405.

Van Nuys Airport (VNY)

Van Nuys Airport (VNY) is a public use airport located in the Los Angeles Basin (Latitude 34°12.59’N/Longitude 118°29.40’W). The airspace surrounding VNY airport is designated as Class D airspace from 1400-0645 Zulu and Class E during all other hours. Van Nuys airport is 4.8 miles from Whiteman Airport (WHP) and 6.6 miles from Bob Hope Airport (BUR). Van Nuys airport is closed to air carrier operations. The airport facility directive (AFD) states that Van Nuys is an extremely noise sensitive area and outlines the noise curfew. The noise ordinance curfew states there will be no take offs for aircraft exceeding 74 DBA (PER AC36-3) between 2200-0700, except military, mercy flights, or law enforcement aircraft.

Van Nuys Airport fixed-wing traffic pattern on the west side of the field is 2,000 MSL (1200 AGL) and on the east side of the field the fixed-wing traffic pattern altitude is 1,800 MSL (1,000 AGL). The helicopter traffic pattern altitude is 1,300 MSL (500 AGL) throughout the VNY airspace which is 500 feet below the lowest fixed-wing pattern. The fixed-wing traffic pattern altitude was established to protect air carrier operations descending directly over Van Nuys Airport that are landing at Burbank Airport. Due to the fact that Burbank Airport is in close proximity to Van Nuys Airport, the air carriers will descend to cross the BUR final approach fix (BUDDE) at an altitude of 2,750 MSL which is located in Van Nuys Airport airspace.

Helicopter pilots should transition over the airport while climbing to or descending from 1,300 MSL to avoid noise sensitive areas and should remain on one of the established routes which were designed to overfly industrial areas or freeways unless they are on an emergency response or surveillance mission; i.e., Police or Fire Department.

Zamperini Field (formerly Torrance Municipal Airport) (TOA)

Zamperini Field (TOA) is a public-use airport located in the Los Angeles Basin (Latitude 33°48.20’N/Longitude 118°20.38’W). The airspace surrounding TOA airport is designated as
Class D airspace (surface to 2,400 feet MSL) from 1500-0400 Zulu and Class G airspace (uncontrolled) during all other hours. TOA is closed to departures from 2200-0700 on weekdays and 2200-0800 on weekends and holidays. The airport facility directive (AFD) states TOA has noise-sensitive areas surrounding it. There are 5 voluntary helicopter routes to and from TOA airport along with noise abatement procedures. Touch-and-go, low approach, and stop-and-go landings are permitted Monday through Friday, are restricted on Saturdays and prohibited on Sundays and holidays. Simulated multi-engine out procedures are not authorized in the traffic pattern. City Noise Abatement restricts training operations in the south traffic pattern unless directed by Air Traffic.

There are two runways on the field (11R/29L and 11L/29R) that serve both fixed-wing and rotor wing aircraft. There is one helipad on the north side approximately mid field that is available from sunrise to sunset for one helicopter at a time to work the pattern or practice hovering. There is a hospital helipad located in the northwest corner of the field used for Lifeguard and other medical emergency flights. Pattern altitude for both the north and south patterns for single engine aircraft is 1,100 feet MSL and for twin engine aircraft is 1,600 feet MSL. When the north pattern becomes saturated with fixed-wing aircraft, due to the differences in aircraft performance and characteristics, it becomes necessary to move helicopters to the south pattern. This is done specifically for safety, but it is also more advantageous from a noise perspective than moving the fixed-wing aircraft, because helicopters can fly higher and remain closer to the airport as they require shorter climb and descent distance than do fixed-wing aircraft. When operating in the south pattern, helicopters remain inside of Pacific Coast Highway (operating over car dealerships and strip malls).

TOA conducted 151,806 total operations in 2012. Of this number, 69,976 were itinerant operations (arrivals or departures), 69,898 were local operations (aircraft based at TOA) and 11,932 were overflights (transitions). Most operations are conducted by light, civil aircraft both fixed-wing and rotor wing. Currently, there is no way to distinguish which operations are conducted by fixed-wing versus rotor wing aircraft. Jet traffic is limited as there is no jet fuel available at Zamperini Field.

Fixed-wing aircraft inbound to TOA may request to enter the airspace from any geographical area around the field. Generally speaking, however, most report inbound over Alondra Park (northwest), King Harbor (southwest), Vincent Thomas Bridge (east), Palos Verdes, (southeast), Good Year (north) or Signal Hill (northeast). The current helicopter routes keep them away from the fixed-wing entry points and corresponding routes of flight.

Although there is no way to say how many operations are fixed-wing versus rotor wing aircraft, there are a significant number of helicopter operations at TOA. Zamperini Field is the home of the Robinson Helicopter Company (RHC) as well as two independent helicopter flight schools. RHC currently produces 12 aircraft per week, and each one receives 4 to 6 hours of flight testing before delivery. RHC also conducts a 3 ½- day Pilot Safety Course which consists of 2 ½-days of classroom instruction and 1 day of maintenance, pre-flight inspections, and flying with an experienced RHC pilot in the R22, R44 or R66. This safety course is conducted 1 to 2 times...
each month depending on demand (currently scheduled for 17 sessions during calendar year 2013). Helicopter traffic volume is significantly higher during these periods.

Weather conditions also play a critical role in the routes/altitudes used by helicopters. Although TOA is VFR approximately 90% of the time, the coastal marine layer that develops at certain times of the year can leave certain routes unusable or climbing to certain altitudes impossible.

The current voluntary helicopter routes established by a Letter of Agreement (LOA) have been in place for a substantial amount of time (since approximately the early 1990s) and are intended to keep helicopter and fixed-wing aircraft separated, standardize routes for signatories to the LOA, and shorten phraseology between pilots and controllers when requesting/utilizing those routes.

**The Getty Center**

The topography between the Getty Center and the Hollywood attractions varies between 800 and 1,200 feet MSL. Just northwest of the Center is a peak with an elevation of 2,126’. There are many high-rise buildings in the vicinity which reach as high as 824’. The Getty Center is located just outside of the Santa Monica Class D airspace, and the minimum vectoring/IFR altitude above it is 3,300’. The San Diego Helicopter Route follows I-405 just east of the Getty Center.

**Santa Monica Airport**

Santa Monica (SMO) is a public-use airport located in the Los Angeles Basin (Latitude 34°00.95’N/Longitude 118°27.08’W). The airspace surrounding SMO airport is designated as Class D airspace from 1500-0500 Zulu and Class G during all other hours. The airport has instituted a noise policy that does not allow touch-and-go, stop-and-go, or low approaches on Saturdays, Sundays, or holidays. It also restricts those operations during the week and does not allow them between sunset and 0700. There are no departures from SMO between the hours of 11 PM and 7 AM on weekdays, and 8 AM on weekends. SMO has some of the most restrictive noise abatement procedures in the country. SMO is an important reliever for LAX and also provides access for emergency services, general aviation, flight training and medical services such as Angel Flight, a non-profit which transports patients to get medical treatment.

**Hollywood Hills**

Hollywood Hills is just west of the Hollywood Bowl and lies beneath the BUR Class C airspace which extends from 3,000-4,800’ and just north of the boundary of the LAX Class B airspace. Hollywood Hills is used as a VFR reporting point for Burbank ATCT; VFR fixed-wing aircraft navigating over the valley and nearby freeways are typically observed flying at 1,800’ and helicopters at 1200’.
Freeways

The Los Angeles Basin consists of 15 public-use and 11 private-use airports, and 138 heliports. The air traffic over the freeway system will vary depending on the overlying airspace, aircraft operations, and terrain. Many published voluntary helicopter routes overfly freeways since they are easily navigated by VFR pilots. Allowing helicopters to fly the freeways at lower altitudes also allows them to safely pass under the numerous approach and departure paths that exist throughout Southern California.

Freeways are heavily used by the police department during high-speed chases. They are also used by media to provide the public with live traffic coverage.

Plane Spotting Activities at LAX

Helicopters operating in this airspace are required to be in contact with LAX ATCT. Helicopter photography flights (other than those contracted by LAWA) are required to give 24 hour advance notice to orbit over LAX airport. This allows LAX ATCT to ensure they have the staffing to provide additional advisories to helicopters and allows them to prioritize LAWA flights.