



U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Air Traffic Organization
Western Service Area

1601 Lind Avenue Southwest
Renton, Washington 98057

APR 15 2011

Mr. Shant Megerdichian
Facility Operations Manager
City of Torrance
3301 Airport Drive
Torrance, California 90505

Dear Mr. Megerdichian,

Thank you for your letter of February 24, 2011 proposing changes to the Torrance Municipal Airport (TOA) helicopter arrival/departure transition routes. We appreciate the hard work of the volunteers who serve on the Helicopter Committee. We wish to acknowledge their efforts to lessen noise in their community while not compromising aviation safety.

You indicated in your letter that the city intends to change the Federal Aviation Administration's (FAAs) Letter of Agreement (LOA) with users. Subsequently, the city intends to make the LOAs airport arrival/departure transition routes permanent "noise abatement procedures" after completion of a six-month test.

Reviewing the LOA, there are five airport arrival/departure transitions routes. Two of these routes, the North and Northeast, remain unchanged in your proposed plan. These unchanged routes can be easily charted on the forthcoming Los Angeles Helicopter Route Chart (Helo Chart).

However, the three proposed route revisions, Southeast, South Crenshaw, and Pacific Coast Highway, may not be easily accomplished. All the revised routes appear to move helicopters into the fixed-wing flows by requiring a higher altitude than is used currently. General Operating and Flight Rules (14 CFR Part 91), Operations in Class D airspace, § 91.129, identifies that helicopter pilots must avoid the flow of fixed-wing traffic. Therefore, an aeronautical analysis will need to be done prior to any test procedure being implemented. We will initiate an aeronautical analysis and expect it to be completed within 120 days.

In addition, one route, the Southeast revision, appears to have a new noise profile. Another route, the South Crenshaw, has an extension outside of Class D Airspace (CDAS). Please note, helicopter airport transition routes are not commonly charted outside of CDAS as they

are primarily intended to segregate traffic flows within the CDAS. This proposed extension also appears to inaugurate another new noise profile.

Modifications to routes that potentially affect the noise profile will require noise screening. While the Integrated Noise Modeling (INM) analysis tool for helicopters can be used, it is typically performed by contractors. The FAA Western Service Center (WSC) does not have the resources or tools to accomplish helicopter noise screening or INM for helicopters. As the WSC does not have the resources to accomplish noise analysis using the INM tool, the noise analysis will be with the proponent.

You have indicated an intention to evaluate the "test procedures" upon completion. Please identify how you will accomplish this evaluation. The evaluation may be critical in the FAA's environmental review of the proposed action. In the meantime, we recommend that you work with your city's webmaster to expand the airport's noise abatement web site by including brochures for both the fixed-wing aircraft and the present LOA helicopter routes. Providing this information for transient pilots will assist in establishing a baseline for future changes.

We look forward to collaborating with you on a successful noise mitigation activity. Should you have any questions regarding this matter, please contact Western Service Center Operations Support Group, Rex MacLean at (425) 203-4564.

Sincerely,



For John Warner

Manager, Operations Support Group

AJV-WZ
RECEIVED MAR 15 2011



CITY OF TORRANCE

ZAMPERINI FIELD

February 24, 2011

FAA Northwest Mountain Regional Office
AJV-W
1601 Lind Ave., SW
Renton, WA 98057
Attn: John Warner/ANM/FAA – Operations Support Group Manager

Dear Mr. Warner:

The City of Torrance is requesting that the Federal Aviation Administration (FAA) review and approve modifications to the Helicopter Letter of Agreement (LOA) at Torrance Municipal Airport – Zamperini Field. The LOA outlines the arrival and departure routes, including altitudes for helicopters operating out of Torrance Airport. The Agreement is voluntary, though the routes included within it are recognized by the FAA. If approved, the City will change the LOA and make it a published noise abatement procedure.

On February 1, 2011, the Torrance City Council approved several modifications to the LOA, including increased altitude recommendations, as well as route modifications. These changes were brought before the Council by a Committee formed to examine the current LOA to try and mitigate noise in the community. It is the Council's understanding that their recommendations will be forwarded to the FAA for review and approval. Changes to the LOA include:

1. Lateral modification to the Southeast route, while increasing altitude from 600' MSL to 1500' MSL
2. Lateral modification to the South Crenshaw route, while increasing altitude from 600' MSL to 2000' MSL
3. Modification to the PCH route increasing altitude only from 600' MSL to 1400' MSL Departure and 1200' MSL Arrival.

In addition to these modifications, the City Council requested that these changes be implemented for a six month trial period, after which it will be evaluated whether the modifications have been effective in reducing noise within the community, as well as proving safe for the aircraft operators.

The Helicopter Committee, which made the recommendations to the City Council consisted of members of the professional aviation community, helicopter operators at Torrance Airport including Robinson Helicopters, the Torrance ATCT



CITY OF TORRANCE

ZAMPERINI FIELD

Manager, and concerned citizens. The Committee's priority was to recommend changes within the existing LOA to help mitigate noise in the community, while not compromising safety for the helicopter or fixed wing operators.

It was also the Committee's directive not to move noise from one area to another. Modifications to the Southeast and Crenshaw routes were specifically designed to adjust helicopter traffic away from residential areas to those areas that are vacant or are occupied by an existing non residential structure, such as a reservoir or rock quarry. The Committee also received concurrence from the Cities of Rolling Hills Estates and Rancho Palos Verdes for modifications to the Southeast and Crenshaw routes, respectively.

If approved, the City of Torrance will produce noise abatement brochures specific to helicopter operations. These brochures will outline the modified arrival and departure routes, as well as altitude recommendations for operators at Torrance Airport as well as transient aircraft. Information on the City of Torrance website, as well as other aviation websites will also include the updated helicopter information. Since this will initially be a six month trial period, all published material will have an effective date, a proposed end date, and a proposed revision date.

It is anticipated that once the six month period is over, the changes will be re-evaluated by the Committee by receiving input from all involved. If no further change is recommended, the City of Torrance will work with the FAA to implement permanent modifications to the LOA, and publish new material reflecting the changes.

Respectfully submitted,

Shant Megerdichian
Facilities Operations Manager
City of Torrance

Attachments:

- A – Current Helicopter Letter of Agreement
- B – Map of proposed routes
- C – Proposed changes to Letter of Agreement

cc: FAA Western-Pacific Regional Office
AWP-001
P.O. Box 92007
Los Angeles, CA 90009
Attn: Bill Withycombe/AWP/FAA – Regional Administrator

LETTER OF AGREEMENT

Federal Aviation Administration, Torrance Airport Traffic Control Tower
Torrance Municipal Airport Helicopter Operators

EFFECTIVE: November 1, 2009

SUBJECT: HELICOPTER OPERATIONS

1. **PURPOSE.** This agreement establishes procedures for helicopters operating within the Torrance Class D Airspace.
2. **CANCELLATION.** This letter cancels the Letter of Agreement Subject: Helicopter Operations within Torrance Airport Class D Surface Area, dated April 16, 2006.
3. **SCOPE.** This agreement is for the sole use between Torrance Airport Traffic Control Tower (TOA ATCT) and the signatories while operating in the Torrance Class D Airspace.
4. **RESPONSIBILITIES.** All signatories shall ensure that all their personnel (i.e., students, pilots, consumers, etc) are familiar with and adhere to the procedures contained in this agreement. Nothing in this agreement shall be construed as approval to violate any Federal Aviation Regulations (FARs) or other regulations. Each pilot shall be responsible for advising TOA ATCT, if a deviation from this agreement is necessary to comply with the FARs or other regulations.
5. **PROCEDURES.** All operations shall be conducted using the traffic patterns, areas, altitudes, routes, and procedures specified in this agreement.

a. GENERAL.

(1) All helicopters shall contact the tower on the appropriate frequency, prior to entering TOA ATCT Class D Surface Area, any taxiways, runways, or helipads.

(2) Take off and land in the same direction as the fixed-wing traffic flow during East or West Traffic unless instructed otherwise by ATC.

(3) Helicopters operating in the airspace north of Runway 29R/11L shall use frequency 135.6.

(4) Helicopters operating in the airspace south of Runway 29L/11R shall use frequency 124.0.

(5) Helicopters operating on the ramp or in the grass areas are responsible for ensuring separation from ground traffic and personnel.

b. PADS AND TRAFFIC PATTERN.

(1) The north pad is designated as a movement area and tower clearance is required prior to use.

(2) Use of the north pad shall be on a "first come, first served basis" and limited to one helicopter at a time.

(3) The north pad shall only be used during the hours of sunrise and sunset.

(4) The north pad traffic pattern shall be kept south of Lomita Blvd. and remain within the displaced thresholds for Runway 29R/11L. (Attachment 1)

(5) Any maneuver that will require an operation of more than 50 feet from the north pad (i.e., 180-degree auto rotations, takeoff, landing, hovering, etc.) requires prior ATC approval. These maneuvers shall remain clear of the runway.

(6) Due to safety, helicopters shall be instructed to vacate the north pad during banner tow pick up or drop operations.

(7) Pattern altitude is 600' MSL.

(8) Helicopter training is not authorized in the south pattern. However, during extreme circumstances due to safety or congestion in the north pattern, ATC may direct use of the south pattern. In this case, helicopters shall climb to 1100' MSL, as soon as possible, and fly over Airport Dr. and for noise abatement.

(9) Only designated medical, law enforcement, fire, Coast Guard, or rescue helicopters shall be authorized to use the hospital helicopter pad.

c. ARRIVAL ROUTES. (Attachment 2) For noise abatement, pilots are requested to remain at or above 600' MSL when flying outside the airport boundary.

(1) West Pacific Coast Highway (PCH) Arrival (Frequency 124.0) – Follow shoreline to Avenue "I," then via Avenue "I" to PCH. Proceed inbound over PCH from the west, avoiding Runway 29L/11R fixed wing arrival/departure course. Report at South High. At airport boundary, follow or remain north of Airport Dr.

(2) South Crenshaw Arrival (Frequency 124.0) – Proceed inbound over Crenshaw Blvd. from the south. Report at South Coast Botanic Garden. Align with and follow airport drive after crossing PCH. Avoid taking shortcut over residential area.

(3) Southeast Arrival (Frequency 124.0) – Proceed from the southeast remaining south of the fixed wing arrival/departure course of runway 29L/11R. Report over the gravel pit.

(4) North and Northeast Arrival (Frequency 135.6) – North and northeast arrivals shall be handled on an individual basis subject to fixed wing traffic volume in the north traffic pattern.

d. DEPARTURE ROUTES. (Attachment 2) For noise abatement, pilots are requested to climb expeditiously and remain at or above 600' MSL after leaving the airport boundary.

(1) West PCH Departure (Frequency 124.0) – Follow or remain north of Airport Dr., then direct to the intersection of Hawthorne Blvd. and PCH, then follow PCH westbound to Avenue "I", then to the shoreline. For noise abatement, pilots should not begin north or southbound turns until reaching the shoreline. At the shoreline, pilots are to fly beyond the breaking surf-line, and maintain at least 600' MSL until reaching Manhattan Beach Pier to the north.

Note – Avenue "I" begins at corner of Palos Verdes Blvd. & PCH. Pilots should avoid turning and over-flying El Retiro Park, or following and over flying Calle Mayer.

Torrance Airport Traffic Control Tower and Torrance Municipal Airport Helicopter Operators
Letter of Agreement
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(2) South Crenshaw Departure (Frequency 124.0) – Fly over Airport Dr., intercepting Crenshaw Blvd. at PCH and proceed southbound along Crenshaw Blvd. Avoid taking a shortcut over residential area.

(3) Southeast Departure (Frequency 124.0) – Follow or remain north of Airport Dr., intercepting PCH at Crenshaw. Remain south of Runway 29L/11R fixed wing arrival/departure course to the gravel pit, then toward San Pedro.

(4) North and Northeast Departures (Frequency 135.6) – North and northeast departures shall be handled on an individual basis subject to fixed wing traffic volume in the north traffic pattern.

e. SPECIAL VFR (SVFR) PROCEDURES.

(1) SVFR helicopters shall maintain visual reference to the surface at all times.

(2) Departing helicopters shall report reaching VFR conditions or exiting the Torrance Class D Surface Area, whichever occurs first.

(3) TOA ATCT shall use the following SVFR separation minima:

(a) Between SVFR helicopters and an arriving or departing IFR aircraft:

- 1 Separate by ½ mile, if the IFR aircraft is less than 1 mile from the airport.
- 2 Separate by 1 mile, if the IFR aircraft is 1 mile or more from the airport.

(b) One (1) mile between SVFR helicopters. This separation may be reduced to 200 feet if both helicopters are departing simultaneously on courses that diverge by at least 30 degrees and:

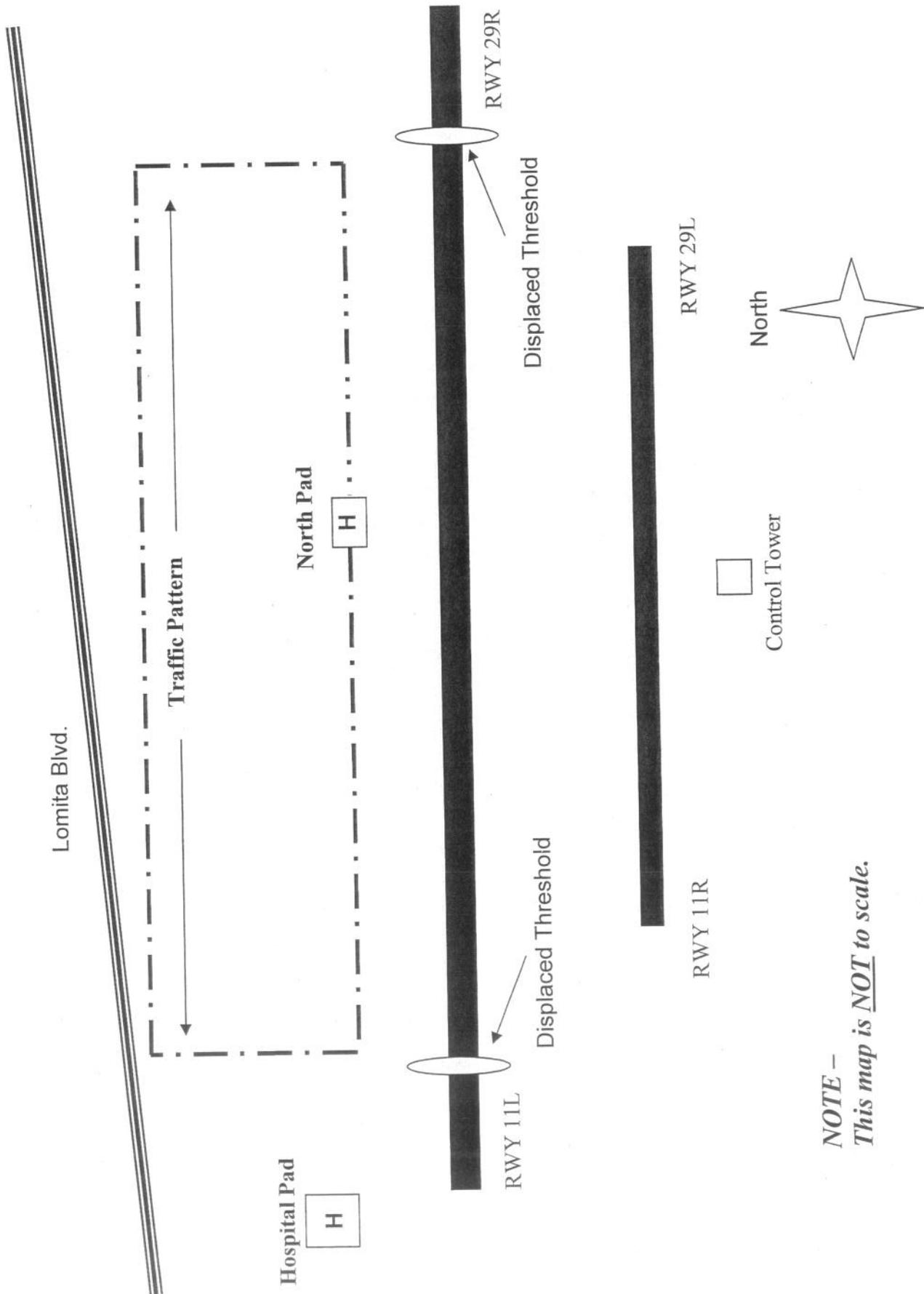
- 1 TOA ATCT can determine this separation by reference to surface markings
- or
- 2 One of the departing helicopters is instructed to remain at least 200 feet from the other.

6. ATTACHMENTS.

- a Attachment 1 – North Pad and Traffic Pattern
- b Attachment 2 – Arrival and Departure Routes
- c Attachment 3 – Signatory Page

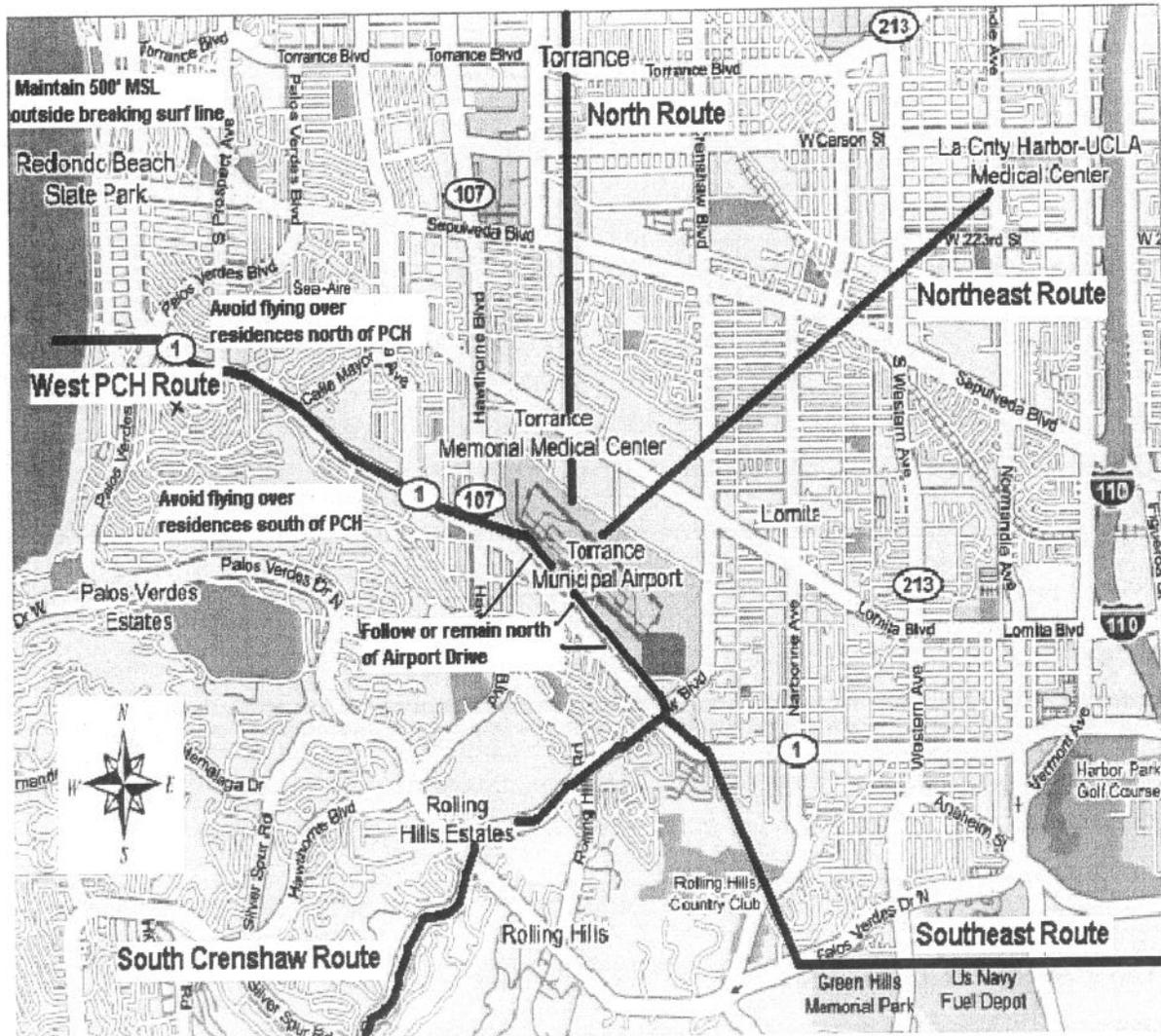
Robin Rush
Air Traffic Manager
Torrance ATCT

NORTH PAD AND TRAFFIC PATTERN



NOTE -
This map is NOT to scale.

ARRIVAL AND DEPARTURE ROUTES



SIGNATORY PAGE

Name (Print or Type)

Signature

Company Name and Title

Address

City, State and Zip Code

Telephone Number

Letter of Agreement: Helicopter Operations
Effective: April 16, 2006

SIGNATORY INDEX

(Original signature pages located in ATM LOA Binder)

PCH Helicopters and Leasing
3481 Airport Dr., Suite 400
Torrance, CA 90505
(310) 375-3394
(310) 375-6093 Fax
President: Erik A. Shanur

Robinson Helicopter Company
2901 Airport Dr.
Torrance, CA 90505
(310) 539-0508, ext. 171
(310) 539-5198 Fax
Chief Pilot: Doug Tompkins

JJ Helicopters, Inc.
3405 Airport Dr.
Torrance, CA 90505
(310) 257-8622
(310) 257-8057 Fax
President: Toshio Shinohara

Torrance Airport Traffic Control Tower and Torrance Municipal Airport Helicopter Operators
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(5) Any maneuver that will require an operation of more than 50 feet from the north pad (i.e., 180-degree auto rotations, takeoff, landing, hovering, etc.) requires prior ATC approval. These maneuvers shall remain clear of the runway.

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c. ARRIVAL ROUTES. (Attachment 2) For noise abatement, pilots are requested to remain at or above 600' MSL when flying outside the airport boundary.

(1) West Pacific Coast Highway (PCH) Arrival (Frequency 124.0) – Follow shoreline to Avenue "I," then via Avenue "I" to PCH. Proceed inbound over PCH from the west, avoiding Runway 29L/11R fixed wing arrival/departure course. Report at South High. At airport boundary, follow or remain north of Airport Dr. **From the shoreline at or above 1,200 ft, join Ave I to PCH to Hawthorne Blvd to the southeast corner of the main ramp. Do not begin a descent until past South High School, cross Hawthorne Blvd at or above 600ft.**

(2) South Crenshaw Arrival (Frequency 124.0) – Proceed inbound over Crenshaw Blvd. from the south. Report at South Coast Botanic Garden. Align with and follow airport drive after crossing PCH. Avoid taking shortcut over residential area. **From ½ mile east of the horseshoe, proceed northbound to Del Cerro park, then join Crenshaw Blvd. Avoid overflying homes to the extent possible. Follow Crenshaw Blvd to Pacific Coast Hwy, then north of Airport Dr. Cross Del Cerro Park at or above 2,000 msl.**

(3) Southeast Arrival (Frequency 124.0) – Proceed from the southeast remaining south of the fixed wing arrival/departure course of runway 29L/11R. Report over the gravel pit. **From over the World Cruise Center (Berth 93) at 1500msl, proceed to the reservoir, then turn north to the gravel pit. From the eastern edge of the pit, proceed to the South East corner of the airport. From the reservoir, remain over the major roads as much as possible.**

(4) North and Northeast Arrival (Frequency 135.6) – North and northeast arrivals shall be handled on an individual basis subject to fixed wing traffic volume in the north traffic pattern.

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Note – Avenue “I” begins at corner of Palos Verdes Blvd. & PCH. Pilots should avoid turning and over-flying El Retiro Park, or following and over flying Calle Mayer.

(2) South Crenshaw Departure (Frequency 124.0) – Fly over Airport Dr., intercepting Crenshaw Blvd. at PCH and proceed southbound along Crenshaw Blvd. Avoid taking a shortcut over residential area. **From a point north of Airport Dr, proceed to Crenshaw and PCH. Follow Crenshaw southbound to Del Cerro Park and then southbound to a point 1/2 mile east of the horseshoe. Cross Crenshaw & PCH at or above 600msl, continue climb to at or above 2,000msl.**

(3) Southeast Departure (Frequency 124.0) – Follow or remain north of Airport Dr., intercepting PCH at Crenshaw. Remain south of Runway 29L/11R fixed wing arrival/departure course to the gravel pit, then toward San Pedro. **From the SE corner of the airport, proceed to the gravel pit, then southbound to the reservoir, then to the World Cruise Center (Berth 93) Cross Crenshaw Blvd at 600msl, climb to 1500msl in VFR conditions.**

(4) North and Northeast Departures (Frequency 135.6) – North and northeast departures shall be handled on an individual basis subject to fixed wing traffic volume in the north traffic pattern.

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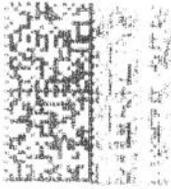
FIRST CLASS



Zamperini Field
3301 Airport Drive
Torrance CA 90505

First Class Mail

Attn: John Warner/ANM/FAA- Operations Support
Group Manager
FAA Northwest Mountain Regional Office
AJV-W
1601 Lind Ave., SW
Renton, WA 98057



FIRST CLASS

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10/10/05