



Navigating LA Class B Airspace Using ForeFlight



December 2, 2017

“Luck is what happens when preparation meets opportunity.”

— Lucius Annaeus Seneca

www.captainschiff.com

Capt. Brian Schiff



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— Lucius Annaeus Seneca

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Today's Objectives



- ☀️ Safety Warnings
- ☀️ Coming Soon
- ☀️ Find & Save LA TAC Supplement
- ☀️ Class B Regs (sorry)
- ☀️ Plot Class B Routes



First – iPad Warning!



First – iPad Warning!



- Be careful of being “Heads-down” too much
- January 16, 2004:
 - Cessna 180 & Beech Baron Collide (Near TSP)

(images to follow)

First – iPad Warning!



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First – iPad Warning!



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First – iPad Warning!



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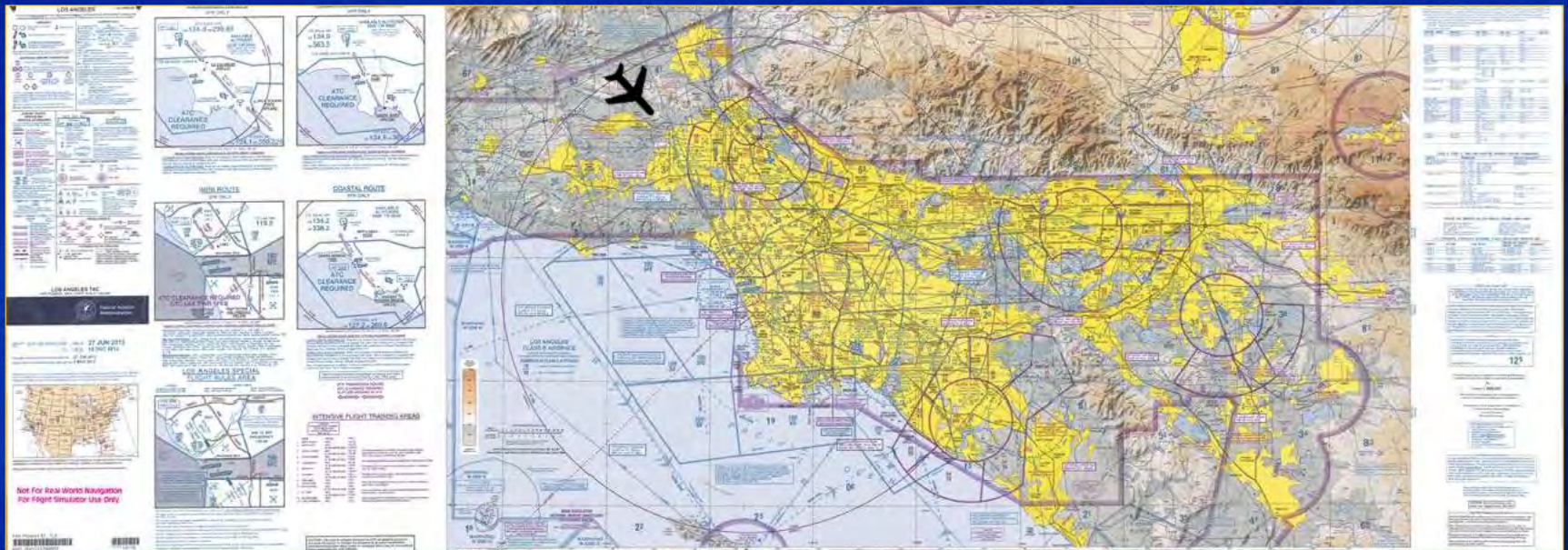
Disclaimer

- Pros and cons of PEDs (AC 120-76C)
 - Handheld PEDs are not reliable for indicating accurate position
 - Handheld PEDs are never allowed as part of any required navigation equipment for IFR operations or ADS-B
 - Can be a distraction

COMING SOON: IPHONE & IPAD DESIGN IMPROVEMENTS

Click [here](#) for video

LA TAC Supplemental

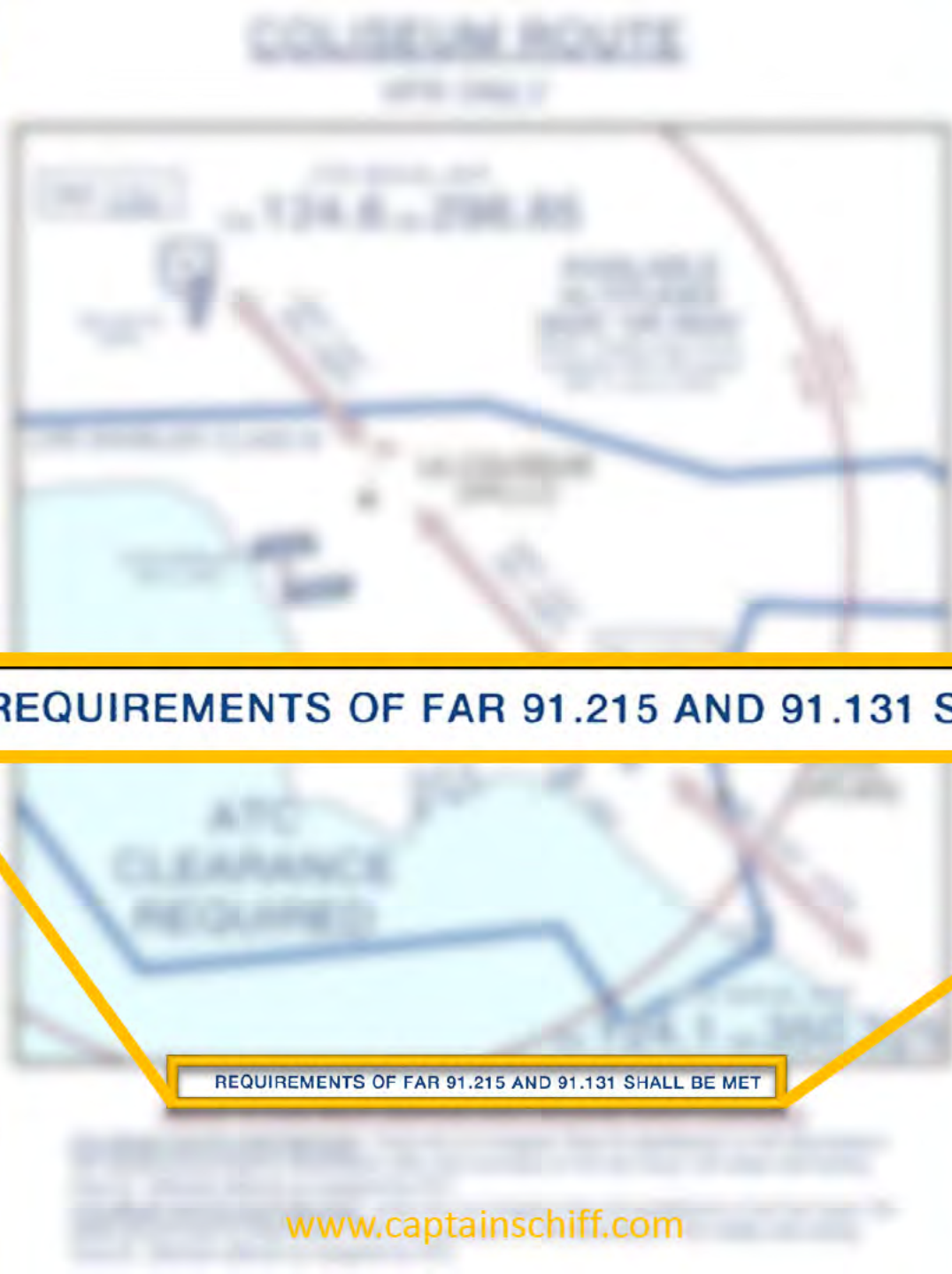


LA TAC Supplemental on iPad (video)

click [here](#) for video showing how to obtain LA TAC Supplemental on your iPad

Or: <https://youtu.be/1jdKVuKQqgM>

LA TAC



REQUIREMENTS OF FAR 91.215 AND 91.131 SHALL BE MET

LA TAC Supplemental

- §91.215 ATC transponder and altitude reporting equipment and use
 - **Mode C veil**
- §91.131 Operations in Class B airspace
 - **ATC Clearance**
 - **Turbine aircraft operate above floor**
 - **Private, Recreational, Light Sport Pilot (no students without endorsement)**
 - **No TO/LDG at primary airport unless at least Private Pilot**
 - **Two-way radio**

Check Notams!

← Back

BRIEFING

KCMA to KSBA



GENERAL FDC NOTAMS

FDC

CHART CORRECT U.S. GOVERNMENT VFR LOS ANGELES TERMINAL AREA CHART (TAC)/FLYWAY, 75TH EDITION, EFFECTIVE 22 JUN 2017... CHANGE ONTARIO CLASS C APP FREQUENCY FOR N-NE FROM 127.25 TO 127.0 AT ONTARIO INTL AIRPORT (ONT), ONTARIO, CALIFORNIA, LOCATED AT 34 03 21N, 117 36 04W. 21 JUN 18:45 2017 UNTIL PERM. CREATED: 21 JUN 18:45 2017

The Secret...



PLACE/BEARING/DIST

Example: VNY/180/10

VFR & TFRs



FPL

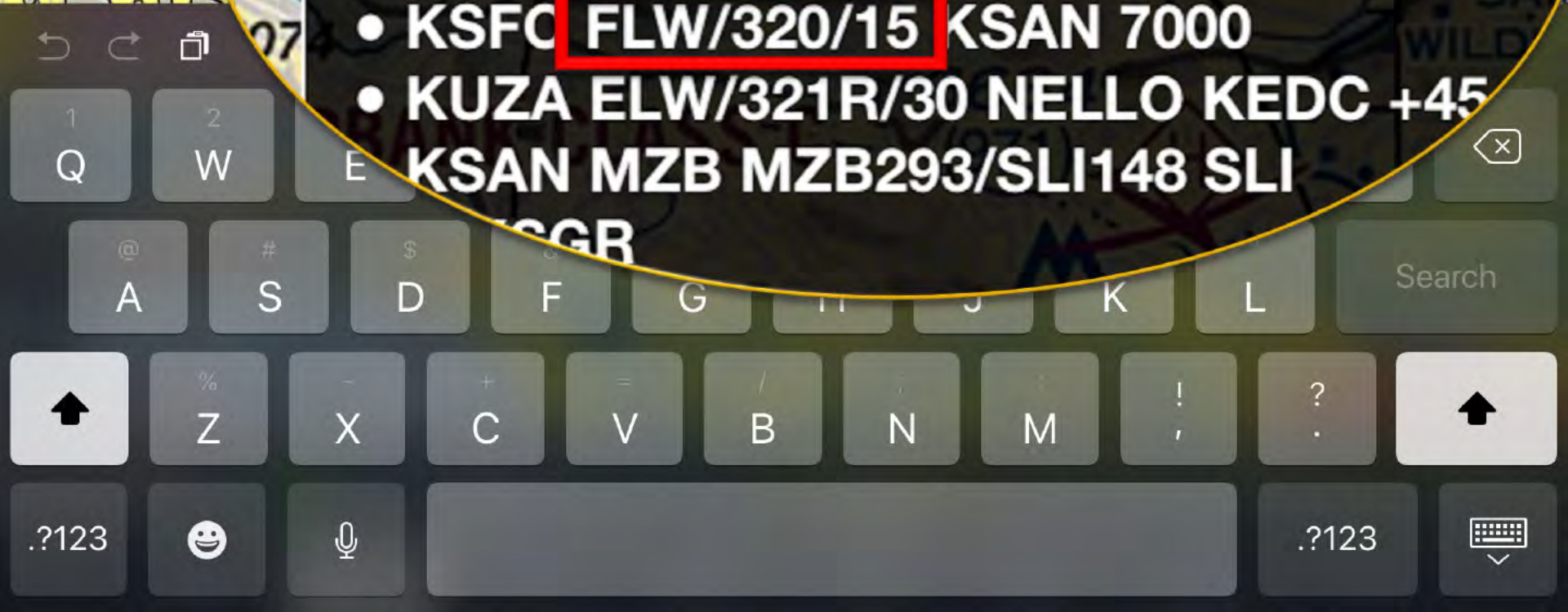


Route, waypoint, or aircraft



Search like:

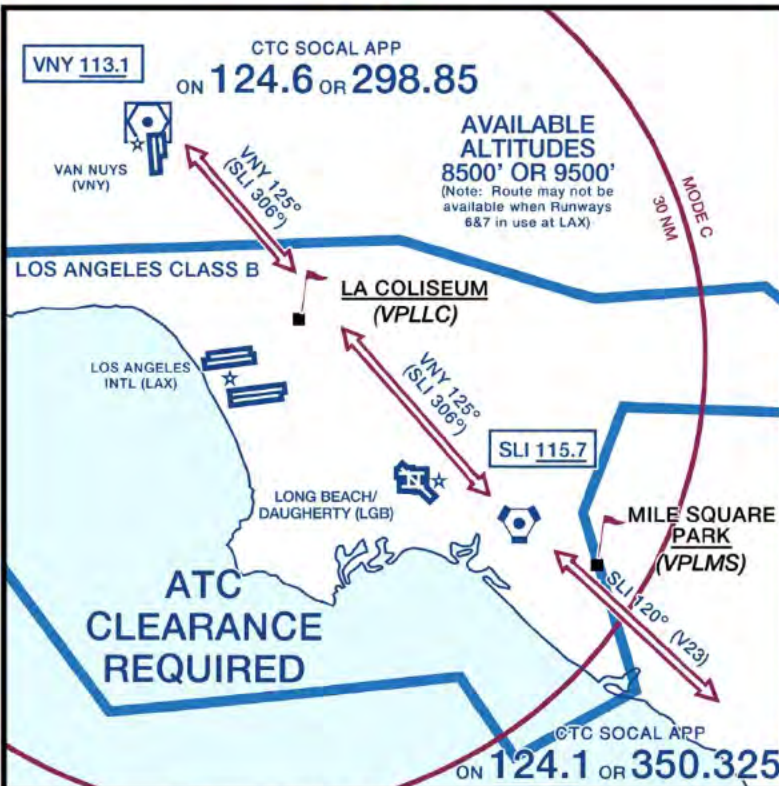
- KSFO FLW KSAN 7000ft
- KSFO KSAN 32.3N/99W N35388 1:45p
- KSFO **FLW/320/15** KSAN 7000
- KUZA ELW/321R/30 NELLO KEDC +45
- KSAN MZB MZB293/SLI148 SLI



Coliseum Route

COLISEUM ROUTE

VFR ONLY



REQUIREMENTS OF FAR 91.215 AND 91.131 SHALL BE MET

REMAIN OUTSIDE BRAVO AIRSPACE UNTIL RECEIVING BRAVO CLEARANCE

COLISEUM ROUTE NORTHBOUND: Enter the Los Angeles Class B established on V23 (Seal Beach 120 radial) and proceed to Seal Beach VOR, then proceed on the Van Nuys 125 radial until exiting Class B. Maintain altitude as assigned by ATC.

COLISEUM ROUTE SOUTHBOUND: Enter the Los Angeles Class B established on the Van Nuys 125 radial and proceed to Seal Beach VOR, then proceed on V23 (Seal Beach 120 radial) until exiting Class B. Maintain altitude as assigned by ATC.

Verizon 1:55 PM 74%

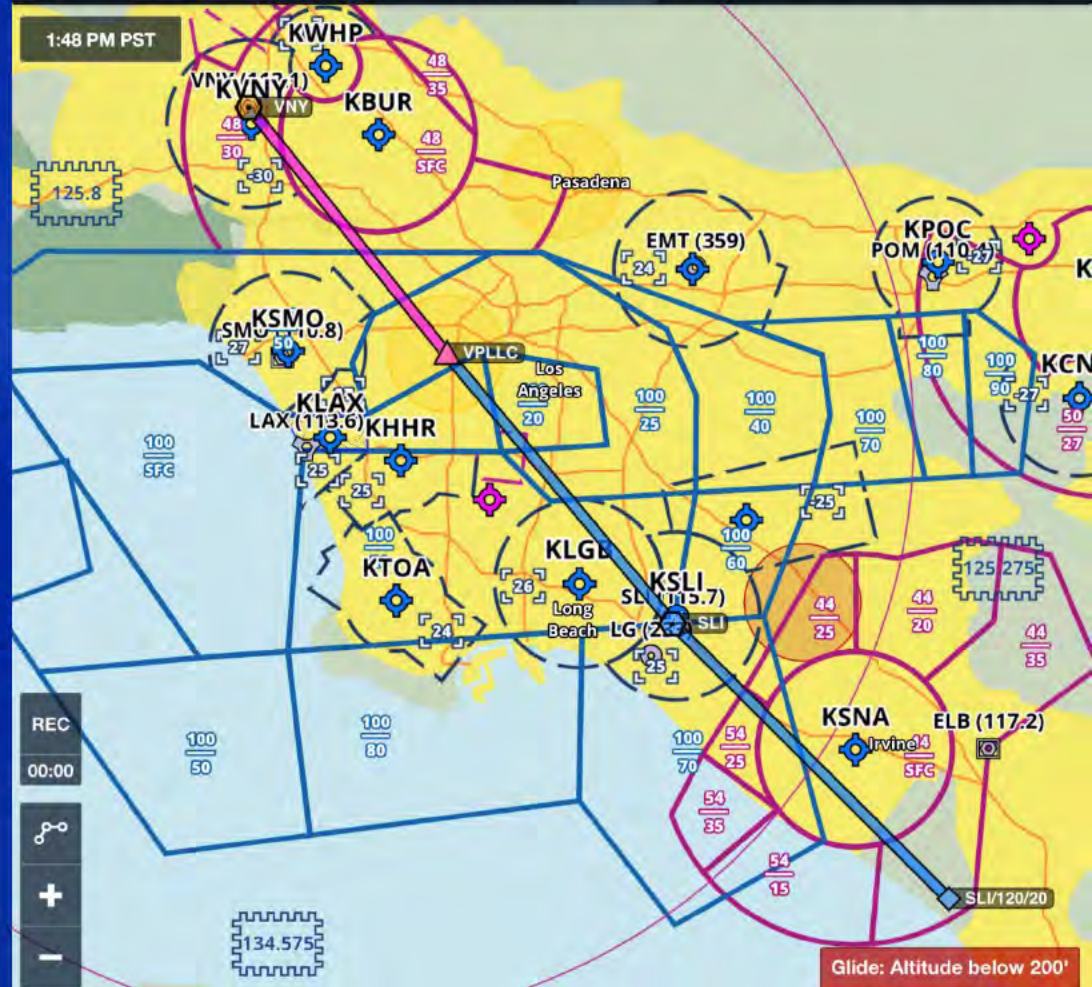
Aero & TFRs FPL

N6543V VNY VPLLC SLI SLI/120/20 Procedure

Aircraft Basic Performance Profile Routes (1)

8,500' Reverse Clear ETD

Dist 54nm ETE 0h24m ETA - Fuel 6.4g Wind 5kts tail Edit NavLog Profile



Airports Maps Plates Documents Imagery Flights ScratchPads More

Hollywood Park

HOLLYWOOD PARK ROUTE

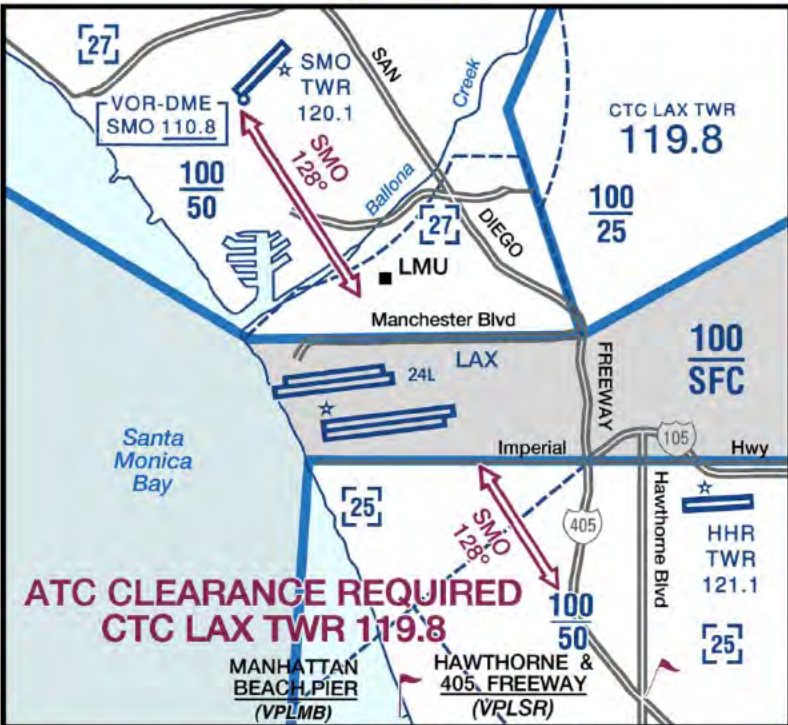
VFR ONLY



REQUIREMENTS OF FAR 91.215 AND 91.131 SHALL BE MET
 REMAIN OUTSIDE BRAVO AIRSPACE UNTIL RECEIVING BRAVO CLEARANCE
HOLLYWOOD PARK ROUTE NORTH/SOUTHBOUND: Enter the Los Angeles Class B north/southbound established on and follow the Van Nuys 140 radial until exiting the Class B. Maintain altitude as assigned by ATC.
 Note: If VNY VOR is out of service navigate visually along a line between the Van Nuys airport, Hollywood Park and Queen Mary, or request radar vectors.

Mini Route

MINI ROUTE VFR ONLY



REQUIREMENTS OF FAR 91.215 AND 91.131 SHALL BE MET
REMAIN OUTSIDE CLASS BRAVO AIRSPACE UNTIL RECEIVING CLEARANCE FROM LAX TOWER

Restrictions: Fixed-wing, non-turbo jet aircraft only. LAX must be in a west traffic or over-ocean configuration (generally midnight to 0630 LCL) and reporting a ceiling of at least 3500' and visibility of at least three miles. Northrop/Hawthorne and Santa Monica airports must be VFR.

Mini Route Northbound: (GPS routing: VPLSR direct SMO) During normal tower operating hours, 0600-2000 LCL, Northrop/Hawthorne Tower 121.1 will coordinate transitions through the Mini Route. After normal tower operating hours, contact LAX Tower 119.8. Proceed to Hawthorne and 405 Freeway (VPLSR) at 2500'. When cleared by LAX Tower, enter the Los Angeles Class B, established on the SMO 128° radial level at 2500', cross over the LAX Runway 24L numbers or as directed by ATC.

Mini Route Southbound: (GPS routing: SMO direct VPLSR) During normal tower operating hours, 0700-2100 LCL, Santa Monica Tower 120.1 will coordinate transitions through the Mini Route. After normal tower operating hours, contact LAX Tower 119.8. Proceed to Loyola Marymount University (LMU) at 2500'. When cleared by LAX Tower, enter the Los Angeles Class B, established on the SMO 128° radial level at 2500', cross over the LAX Runway 24L numbers or as directed by ATC.

N6543V SMO VPLSR SMO SMO/128/44 Procedure

Aircraft Basic Performance Profile

2,500'

Reverse Clear ETD

Dist 62nm ETE 0h28m ETA - Fuel 7.1g Wind 4kts tail Edit NavLog Profile

9:48 PM PST

KSMO (110.8) SMO

LAX (111.6) KHHR

VPLSR

KTOA

KLGB

KSLI (115.7) LG (233)

KSNA

ELB (115.7)

REC 00:00

134.575

25

HP 22 (Pvt) PEBBLY BEACH

Gulf of

SXC (111.4) camps

SMO/128/44

Glide: 70KIAS, 9:1 (N6543V)

Airports Maps Plates Documents Imagery Flights ScratchPads More

Coastal Route

COASTAL ROUTE

VFR ONLY



REQUIREMENTS OF FAR 91.215 AND 91.131 SHALL BE MET

REMAIN OUTSIDE BRAVO AIRSPACE UNTIL RECEIVING BRAVO CLEARANCE

COASTAL ROUTE NORTHBOUND: Enter the Los Angeles Class B northbound abeam the Vincent Thomas Bridge established on the Los Angeles 123 radial. After crossing the Los Angeles VOR, proceed outbound on the Los Angeles 323 radial until exiting the Los Angeles Class B near the Sepulveda Pass. Maintain altitude as assigned by ATC.

COASTAL ROUTE SOUTHBOUND: Enter the Los Angeles Class B southbound abeam the Sepulveda Pass established on the Los Angeles 323 radial. After crossing the Los Angeles VOR, proceed outbound on the Los Angeles 123 radial until exiting the Los Angeles Class B near the Vincent Thomas Bridge. Maintain altitude as assigned by ATC.

Note: Aircraft departing Long Beach, Torrance, Hawthorne, or Santa Monica airport, please contact So Cal Traccon 134.9 or 363.2 for clearance.

Verizon 2:13 PM 70%

Aero & TFRs FPL LAX/323/20 LAX LAX/123/13 VPLVT Procedure

N6543V LAX/323/20 LAX LAX/123/13 VPLVT Routes (1)

Aircraft Basic Performance Profile 5,500' Reverse Clear ETD

Dist 34nm ETE 0h15m ETA - Fuel 4.8g Wind 5kts tail Edit NavLog Profile

2:10 PM PST

REC 00:00

Glide: Altitude below 200'

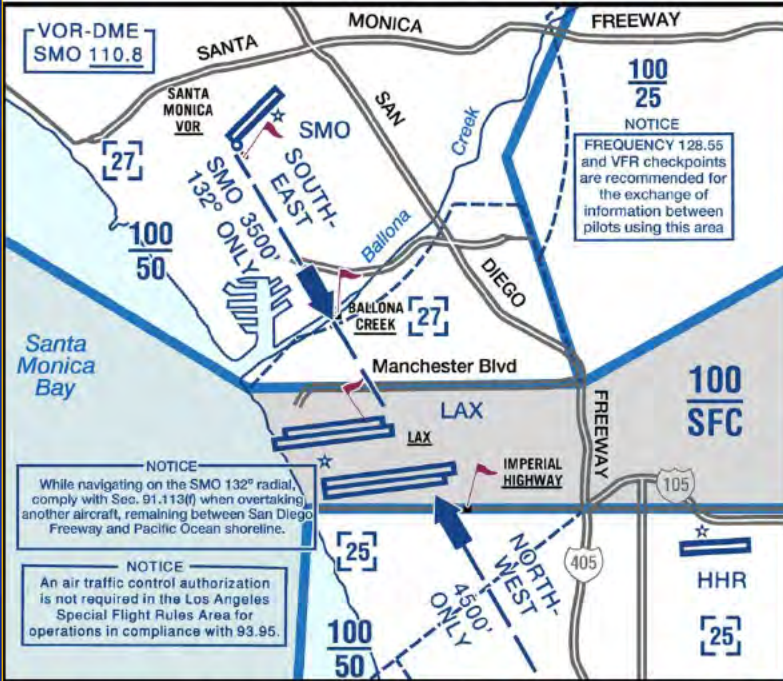
Airports Maps Plates Documents Imagery Flights ScratchPads More

Special Flight Rules

LOS ANGELES SPECIAL FLIGHT RULES AREA

ALTITUDE
Southeasterly 3500 feet MSL
Northwesterly 4500 feet MSL

LATERAL LIMITS
North - Manchester Boulevard
East - San Diego Freeway
South - Imperial Highway
West - Pacific Ocean Shoreline



The following rules shall be adhered to when utilizing the **LOS ANGELES SPECIAL FLIGHT RULES AREA**:

The flight must be conducted under VFR and only when operation may be conducted in compliance with Sec. 91.155.

The aircraft must be equipped as specified in Sec. 91.215 replying on code 1201 prior to entering and while operating in this area.

The pilot shall have a current Los Angeles Terminal Area Chart in the aircraft.

The pilot shall operate on the Santa Monica very high frequency omni-directional radio range (VOR) 132° radial.

Aircraft navigating in a southeasterly direction shall be in level flight at 3500 feet MSL.

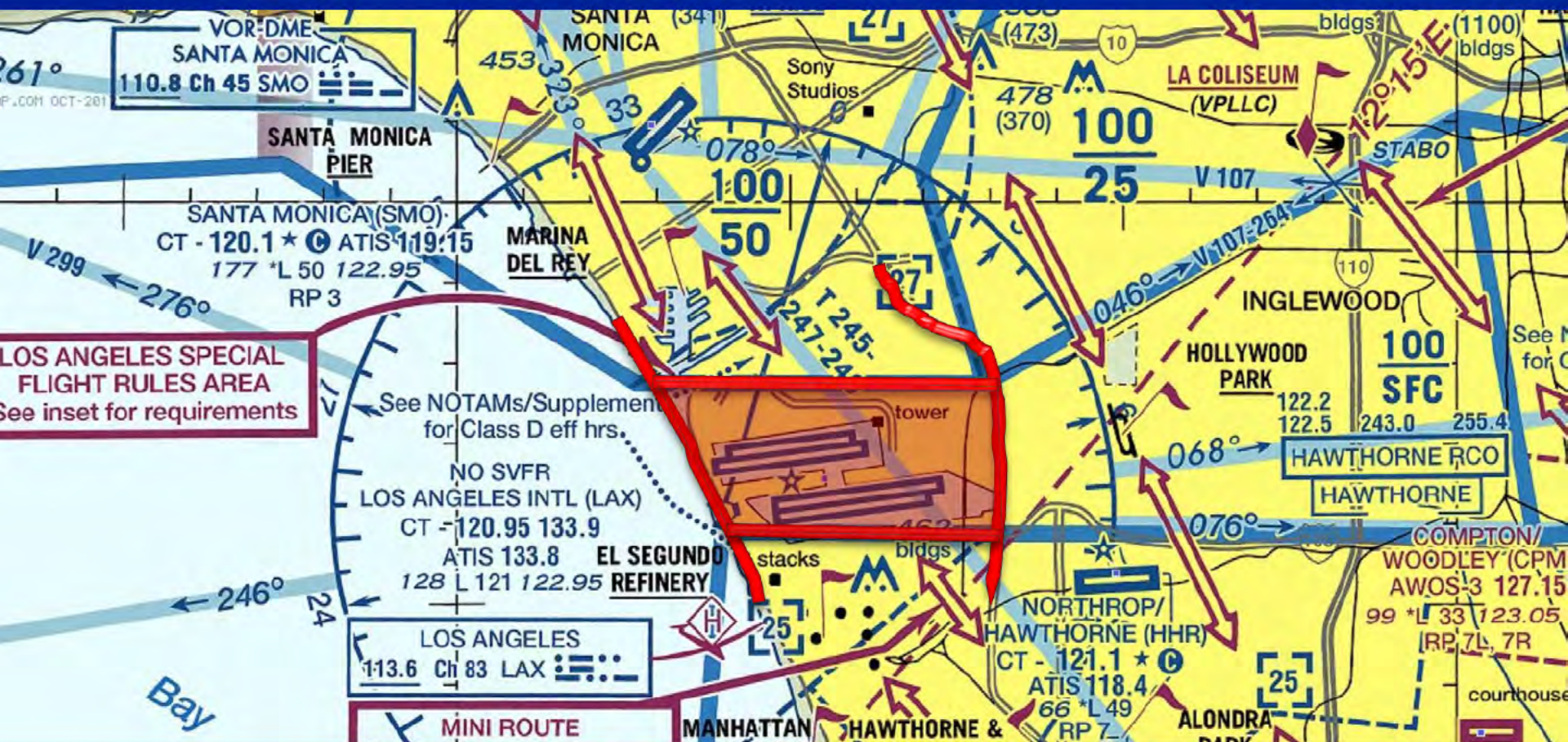
Aircraft navigating in a northwesterly direction shall be in level flight at 4500 feet MSL.

Indicated airspeed shall not exceed 140 knots.

Anti-collision lights and aircraft position/navigation lights shall be on. Use of landing lights is recommended.

TURBOJET AIRCRAFT ARE PROHIBITED FROM 5 of 6 DIRECTIONS IN THIS AREA.

SFRA Lateral Boundaries



LATERAL LIMITS

North - Manchester Boulevard
East - San Diego Freeway

South - Imperial Highway
West - Pacific Ocean Shoreline

Intensive Flight Training Areas

Flight Following Services are available on request and highly recommended in and around Class B, C, and TRSA areas.

VFR TRANSITION ROUTE
(ATC CLEARANCE REQUIRED)
ALTITUDE ASSIGNED BY ATC



INTENSIVE FLIGHT TRAINING AREAS

CAUTION
INTENSIVE FLIGHT TRAINING
122.775 BELOW 4500'
123.025 AT OR BELOW 2000'
SIMI VALLEY

	NAME	CEILING	FREQ
1	SANTA PAULA	5500	122.775
2	SIMI VALLEY	4500	122.775
		AT OR BELOW 2000	123.025
3	SANTA CLARITA	4500	122.775
		AT OR BELOW 2000	123.025
4	PALOS VERDES	4500	121.95
		AT OR BELOW 2000	122.85
5	LONG BEACH	4500	121.95
		AT OR BELOW 2000	122.85
6	SANTA FE	4500	123.3
		AT OR BELOW 2000	123.025
7	LA HABRA	4000	123.3
		AT OR BELOW 2000	123.025
8	REDLANDS	7500	123.3
9	CAJON PASS	4500	123.3
10	JOHN WAYNE	4500	123.5
		AT OR BELOW 2000	122.85
11	EL TORO	4500	123.5
		AT OR BELOW 2000	122.85
12	BLOCKHOUSE	6000	123.5
13	LAKE MATHEWS	4500	123.5

To enhance safety in the vicinity of intensive flight training, frequencies are listed for air-to-air communications with other pilots using or transitioning the area.

The following guidelines are encouraged when utilizing these areas.

The flight does not require communications with or a clearance from Air Traffic Control.

All flights are to be conducted under visual flight rules and in compliance with FAR 91.155.

Pilots are encouraged to have a current Los Angeles Terminal Area Chart in the aircraft.

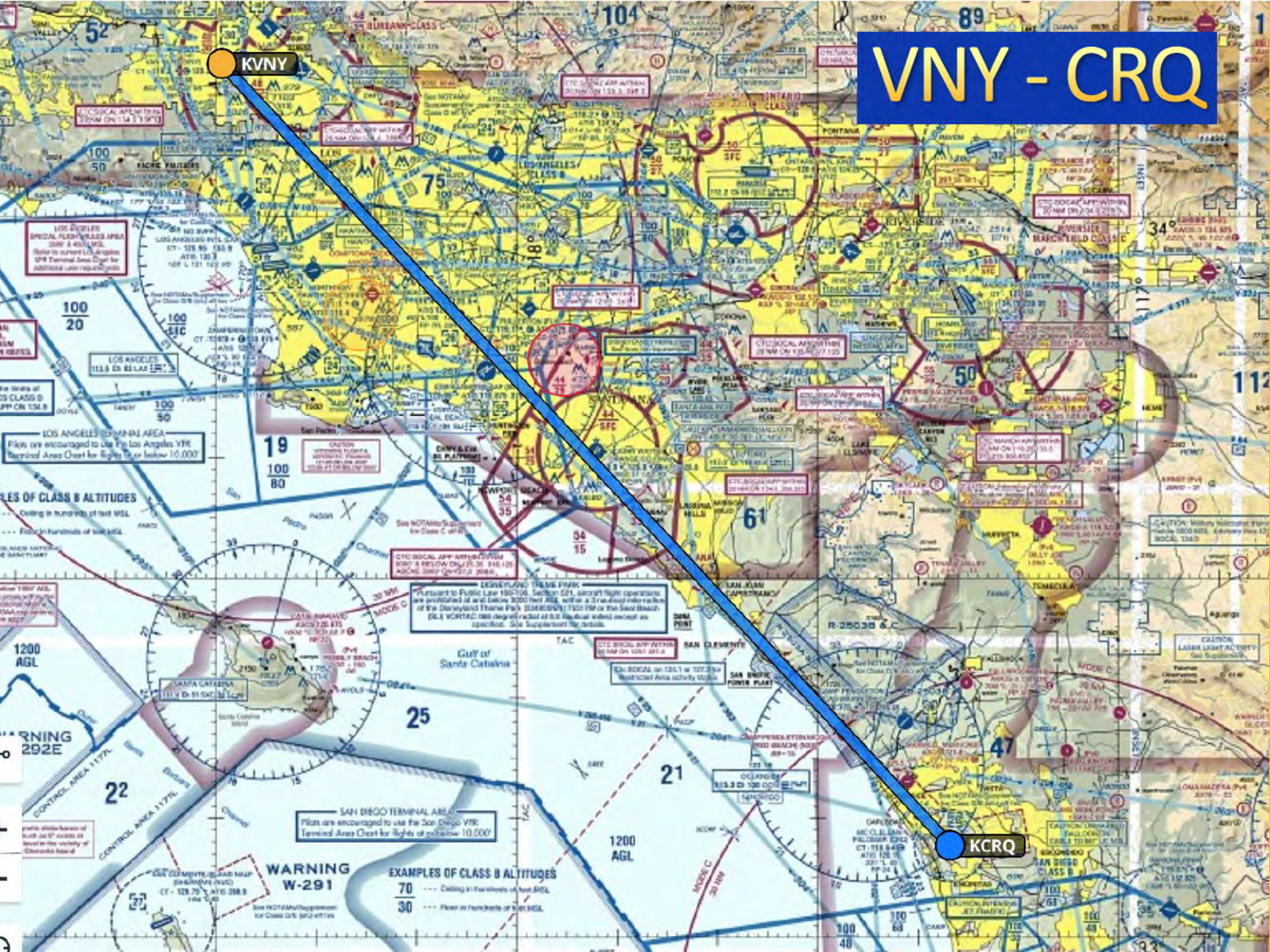
Use of anticollision lights, aircraft position/navigation lights and landing lights is recommended.

Use of indicated VFR checkpoints is helpful to provide location information between pilots using these areas.

VNY - CRQ

KVNY

KCRQ



Battery Saving Techniques



- **Screen brightness and location services (GPS positioning)**
 - These consume the most battery percentages per hour of use. Some techniques help mitigate excessive battery drain. In addition, display of ForeFlight when not actively in use will consume battery unnecessarily.

Battery Saving Techniques



- **Location Services**

- Select “While Using” for each application installed to prevent battery drain while the applications are not in use. Go to iPad Settings > Privacy > Location Services to make these adjustments. If “While Using” is not an option, consider using “Never” instead.

Battery Saving Techniques



● Screen Brightness

- Most apps provide a day/night or light/dark theme option. The darker themes require less battery to display and may be advantageous even in certain daytime lighting conditions. Consider using the invert colors option or Dark Map Theme for Aeronautical Map.

Battery Saving Techniques



- **ForeFlight**

- ForeFlight can be configured with sleep mode set to Off so the iPad doesn't go to sleep unexpectedly while displaying charts during an approach. That means it is up to you to manually sleep the iPad when not needed.

ForeFlight Related Docs

www.captainschiff.com/foreflight-documents

CAPTAIN BRIAN SCHIFF

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ForeFlight Documents



[ForeFlight PowerPoint Slides](#) (Coming Soon)

[ForeFlight Pilot's Guide](#) (version 9.4)

[ForeFlight Layout Map](#) (needs updating)

[iPad Checklist](#)

[EAB 01-21 - Portable Electronic Devices](#)

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Coliseum Route

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Hollywood Park Route

REMAIN OUTSIDE BRAVO AIRSPACE UNTIL RECEIVING BRAVO CLEARANCE

HOLLYWOOD PARK ROUTE NORTH/SOUTHBOUND: Enter the Los Angeles Class B north/southbound established on and follow the Van Nuys 140 radial until exiting the Class B. Maintain altitude as assigned by ATC.

Note: If VNY VOR is out of service navigate visually along a line between the Van Nuys airport, Hollywood Park and Queen Mary, or request radar vectors.



Mini Route

REMAIN OUTSIDE CLASS BRAVO AIRSPACE UNTIL RECEIVING CLEARANCE FROM LAX TOWER

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Note: Aircraft departing Long Beach, Torrance, Hawthorne, or Santa Monica airport, please contact So Cal Tracon 134.9 or 363.2 for clearance.



Los Angeles Special Flight Rules Area

The following rules shall be adhered to when utilizing the LOS ANGELES SPECIAL FLIGHT RULES AREA:

The flight must be conducted under VFR and only when operation may be conducted in compliance with Sec. 91.155.

The aircraft must be equipped as specified in Sec. 91.215 replying on code 1201 prior to entering and while operating in this area.

The pilot shall have a current Los Angeles Terminal Area Chart in the aircraft.

The pilot shall operate on the Santa Monica very high frequency omni-directional radio range (VOR) 132° radia

Aircraft navigating in a southeasterly direction shall be in level flight at 3500 feet MSL.

Aircraft navigating in a northwesterly direction shall be in level flight at 4500 feet MSL.

Indicated airspeed shall not exceed 140 knots.

Anti-collision lights and aircraft position/navigation lights shall be on. Use of landing lights is recommended.

TURBOJET AIRCRAFT ARE PROHIBITED FROM VFR OPERATIONS IN THIS AREA.

LATERAL LIMITS

North - Manchester Boulevard
East - San Diego Freeway

South - Imperial Highway
West - Pacific Ocean Shoreline



Los Angeles Special Flight Rules Area

NOTICE

While navigating on the SMO 132° radial, comply with Sec. 91.113(f) when overtaking another aircraft, remaining between San Diego Freeway and Pacific Ocean shoreline.

SPECIAL FLIGHT RULES AREA:

Conducted in compliance

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LATERAL LIMITS

North - Manchester Boulevard
East - San Diego Freeway

South - Imperial Highway
West - Pacific Ocean Shoreline



Los Angeles Special Flight Rules Area

NOTICE

While navigating on the SMO 132° radial,
compliance with 93.95 is required.
another
Fre

NOTICE

An air traffic control authorization
is not required in the Los Angeles
Special Flight Rules Area for
operations in compliance with 93.95.

SPECIAL FLIGHT RULES AREA:

Operations in compliance
prior to entering
radio range (VOR) 132° radia
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Indicated

Anti-collision lights and aircraft position/navigation lights shall be on. Use of landing lights is recommended.
TURBOJET AIRCRAFT ARE PROHIBITED FROM VFR OPERATIONS IN THIS AREA.

LATERAL LIMITS

North - Manchester Boulevard
East - San Diego Freeway

South - Imperial Highway
West - Pacific Ocean Shoreline



Los Angeles Special Flight Rules Area

NOTICE

While navigating on the SMO 132° radial,

NOTICE

An air traffic control authorization is not required for Special operations

NOTICE

FREQUENCY 128.55 and VFR checkpoints are recommended for the exchange of information between pilots using this area

SPECIAL FLIGHT RULES AREA:

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Anti-collision lights and aircraft
TURBOJET AIRCRAFT ARE PRO

LATERAL LIMITS

North - Manchester Boulevard
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Los Angeles Special Flight Rules Area

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SPECIAL FLIGHT RULES AREA:

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...adio range (VOR) 132° radia
...MSL.
...MSL.
...landing lights is recommended.

ALTITUDE

Southeasterly 3500 feet MSL
Northwesterly 4500 feet MSL

LATERAL LIMITS

North - Manchester Boulevard
East - San Diego Freeway

South - Imperial Highway
West - Pacific Ocean Shoreline





End

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