

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: STAR	Estimated Chart Date: 12/26/2024	APWS Task ID: 2E2AEAC29DB54D798C0DF9CD54974BDD	APWS Project ID: 595BE7D948E847508E64323AFC041F90
Procedure: OHSEA THREE (RNAV)		Enroute: YES	Specialist: Garrity, Michael		Agreement Number:
Airport ID: KSNA			Airport City: SANTA ANA		State: CA
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			
<div>Procedure Comments:</div> <div>ACTIVE DATA USED FOR KSNA AIRPORT AND RUNWAYS.</div> <div>CONTACT: ALLAN WILL, TEAM 2 SUBTEAM-C MANAGER, 405.954.6103.</div> <div><div>QUALITY 35 CHECKED</div><div>QUALITY 33 CHECKED</div></div>					

FIPC DME/DME FORM							
PROCEDURE: OHSEA (RNAV) THREE ARRIVAL			AIRPORT NAME: JOHN WAYNE/ORANGE COUNTY		AIRPORT ID: KSNA	SPECIAL CONTROL NO: SG-09-046-24	
FAC ID: OHSEA3		CITY: SANTA ANA			ST: CA	ORIG CHART DATE: 12/26/2024	
DFL TYPE: PROC/D	THIRD PARTY: <input type="checkbox"/> YES	EST. TIME ON SITE: 1.0	REIMB. NUMBER:		PTS TASK ID: 2E2AEAC29DB54D798C0DF9CD54974BDD		
PREFLIGHT NOTES							
REVIEWER:					DATE:		
COMMENTS:					CHECK ONE:		
					<input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT		
							YES
					CPV COMPLETE?		X
PROCEDURE RESULTS							
INSPECTION DATE: 09/27/2024		CREW #: VN235	N #: N79	INSTRUMENT PROCEDURE STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT		ARINC CODING: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT	
FLIGHT INSPECTOR SIGNATURE: thomas e molokie @ 09/27/2024 17:20			PRINTED NAME: MOLOKIE, THOMAS EDWARD				NOTAM INITIATED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
FLIGHT INSPECTOR REMARKS: Procedure Satisfactory for GNSS operations, DME/DME awaiting AFS/WAJR approval. *Note: DME-DME Recordings flown on PCIFC3 Arrival (KLGB)							
DME/DME STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> UNSAT		SPECIALIST SIGNATURE: bob ctr graham @ 10/15/2024 11:02			PRINTED NAME: Bob Graham		
SPECIALIST REMARKS: DMEs received as modeled.							
IN-FLIGHT OBSTACLE REPORT							
OBSTRUCTION ID #:	COORDINATES OR LOCATION:		GNSS ALTITUDE (MSL):		BAROMETRIC ALTITUDE (MSL):		HEIGHT ABOVE GROUND LEVEL:

FIPC DME/DME FORM									
PROCEDURE: OHSEA (RNAV) THREE ARRIVAL				AIRPORT NAME: JOHN WAYNE/ORANGE COUNTY		AIRPORT ID: KSNA		SPECIAL CONTROL NO: SG-09-046-24	
FAC ID: OHSEA3			CITY: SANTA ANA			ST: CA		ORIG CHART DATE: 12/26/2024	
DFL TYPE: PROC/D		THIRD PARTY: <input type="checkbox"/> YES		EST. TIME ON SITE: 1.0		REIMB. NUMBER:		PTS TASK ID: 2E2AEAC29DB54D798C0DF9CD54974BDD	
PREFLIGHT NOTES									
REVIEWER:							DATE:		
COMMENTS:							CHECK ONE:		
							<input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT		
									YES
							CPV COMPLETE?		X
PROCEDURE RESULTS									
INSPECTION DATE: 09/27/2024		CREW #: VN235		N #: N79		INSTRUMENT PROCEDURE STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT		ARINC CODING: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT	
FLIGHT INSPECTOR SIGNATURE: thomas e molokie @ 09/27/2024 17:20				PRINTED NAME: MOLOKIE, THOMAS EDWARD				NOTAM INITIATED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
FLIGHT INSPECTOR REMARKS: Procedure Satisfactory for GNSS operations, DME/DME awaiting AFS/WAJR approval. *Note: DME-DME Recordings flown on PCIFC3 Arrival (KLGB)									
DME/DME STATUS: <input type="checkbox"/> SAT <input type="checkbox"/> UNSAT		SPECIALIST SIGNATURE:				PRINTED NAME:			
SPECIALIST REMARKS:									
IN-FLIGHT OBSTACLE REPORT									
OBSTRUCTION ID #:		COORDINATES OR LOCATION:		GNSS ALTITUDE (MSL):		BAROMETRIC ALTITUDE (MSL):		HEIGHT ABOVE GROUND LEVEL:	

INFO ONLY

1. FLIGHT PROCEDURE IDENTIFICATION:

SANTA ANA, CA
JOHN WAYNE AIRPORT-ORANGE COUNTY
OHSEA ARRIVAL (RNAV)

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Per 8260.3C, para 2-2-1 i., Deceleration. Sufficient distance and a reduced descent gradient are required prior to any fix with a speed restriction. Enroute transition segment from GUDBY to YORBS does not meet minimum deceleration length requirement per 8260.3C, para 2-2-1i(2)(b). Deceleration from assumed 310K to 280K would increase leg length from 8.62 NM to 12.1 NM

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

The descent, airspeed constraint and the placement of fixes are required because of airspace limitations, traffic volume, and the ATC facility procedures for sequencing John Wayne Airport arrivals from the northwest.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

The vertical path descent gradient from GUDBY to YORBS is 348 ft/NM. Deceleration from GOONA to YORBS (19.45 NM) based on a combined segment vertical path calculates to be of sufficient length (18.15 NM). RADAR is required for this procedure and controllers will intervene if aircraft flight path deviates from the published track. Historical operational success and use of controller intervention are strong justifications to support the waiver request.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Redesign of the STAR was considered, however, traffic flow constraints along with the operational requirement for a speed reduction at YORBS are necessary for sequencing, this option was deemed not feasible.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

Southern California Metroplex D & I Team Leads.
Los Angeles ARTCC.
Socal Approach Control.

7. SUBMITTED BY:

DATE	OFFICE IDENTIFICATION	TITLE	SIGNATURE
08/11/17	AJV-143	Robert E. Henry, Manager, SOCAL Metroplex	

8. AFS ACTIONS:

☒ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

Approved Based on the Equivalent Level of Safety in Block 4.

DATE	ROUTING SYMBOL	SIGNATURE
		Danny E Hamilton Signed By: Danny E Hamilton Mon Sep 24 2018 16:13:48 GMT- 05:00:00 (Central Standard Time)

INFO ONLY

1. FLIGHT PROCEDURE IDENTIFICATION:

SANTA ANA, CA
JOHN WAYNE AIRPORT-ORANGE COUNTY
OHSEA ARRIVAL (RNAV)

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Per 8260.3C, para 2-2-1 i., Deceleration. Sufficient distance and a reduced descent gradient are required prior to any fix with a speed restriction. Enroute transition segment from RCHEL to SHOLN does not meet minimum deceleration length requirement per 8260.3C, para 2-2-1i(2)(b). Deceleration from assumed 310K to 280K would increase leg length from 8.8 NM to 12.1 NM

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

The descent, airspeed constraint and the placement of fixes are required because of airspace limitations, traffic volume, and the ATC facility procedures for sequencing John Wayne Airport arrivals from the northwest.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

The vertical path descent gradient from RCHEL to SHOLN is 340 ft/NM. Deceleration from REESR to SHOLN (19.58 NM) based on a combined segment vertical path calculates to be of sufficient length (18.15 NM). RADAR is required for this procedure and controllers will intervene if aircraft flight path deviates from the published track. Historical operational success and use of controller intervention are strong justifications to support the waiver request.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Redesign of the STAR was considered, however, traffic flow constraints along with the operational requirement for a speed reduction at SHOLN are necessary for sequencing, this option was deemed not feasible.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

Southern California Metroplex D & I Team Leads.
Los Angeles ARTCC.
Socal Approach Control.

7. SUBMITTED BY:

DATE	OFFICE IDENTIFICATION	TITLE	SIGNATURE
08/11/17	AJV-143	Robert E. Henry, Manager, SOCAL Metroplex	

8. AFS ACTIONS:

☒ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

Approved Based on the Equivalent Level of Safety in Block 4.

DATE	ROUTING SYMBOL	SIGNATURE
		Danny E Hamilton Signed By: Danny E Hamilton Mon Sep 24 2018 16:13:49 GMT- 05:00:00 (Central Standard Time)



Federal Aviation Administration

Memorandum

To: Mark Steinbicker, Manager, Flight Technologies and Procedures Division
THRU: Danny E. Hamilton, Manager, Flight Procedure Implementation and Oversight Branch

From: Lonnie Everhart, Manager, Instrument Flight Procedures (IFP) Coordination Team, AJV-5310
Digitally signed by
TRACEY STILES
Feb 08, 2018

Subject: Approval Request: John Wayne Airport-Orange County, Santa Ana, CA (KSNA)

Request is for approval for a descent gradient of 348 ft/Nautical Mile (NM), or 3.28 degrees from GUDBY Waypoint to YORBS Waypoint, a vertical loss of 3000 ft in 8.62 NM.

The requirement in Order 8260.3C, paragraph 2-2-1.g(1)(a) is:

(a) The maximum permissible gradient 10000 MSL and above is 330 ft/NM (approximately 3.11 degrees).

Paragraph 2-2-1.g(2) states:

“(2) When a gradient exceeds the maximum DG allowed in paragraph 2-2-1.g(1), the STAR requires approval from Flight Standards. The approval request should state the operational need for the steeper gradient. It is suggested that a study of historical winds for that location be used for analysis and for simulator runs; if the requested steeper descent gradient historically has a head wind (using average historical wind), that information should be included in the approval request.”

The Descent Gradient (347.750 ft/NM, or 3.28 degrees) from GUDBY to YORBS is calculated from an altitude of FL280 at GUDBY (+FL280) to an altitude of FL250 at YORBS (+FL250), over a distance of 8.62 NM. The course from GUDBY to YORBS is 124.01 magnetic / 136.01 true. Most often, when the STAR is in use a crosswind prevails.

There is an operational need to have the OHSEA STAR operate between the altitudes designed into the procedure because of limited maneuvering room and crossing enroute, arrival, and departure traffic operating near the OHSEA STAR.



FAA

Memorandum

Date:

To: Manager, Instrument Flight Procedures Coordination Team, AJV-5310

From: Manager, Flight Technologies and Procedures Division, AFS-400

Prepared by: Flight Procedure Implementation & Oversight Branch, AFS-460

Subject: Approval Request; AJV-5310 Memorandum Dated 02/08/2018

Danny E Hamilton
Signed By: Danny E Hamilton Mon
Sep 24 2018 16:13:50 GMT-
05:00:00 (Central Standard Time)

Your request to utilize descent gradient of 348 FT/NM from GUDBY to YORBS on the "OHSEA TWO (RNAV) STAR" at John Wayne Airport-Orange County, Santa Ana, CA was discussed at the Flight Standards Procedure Review Board on 11/09/2017 and is approved.

Please direct all inquiries to Danny E. Hamilton, Manager, Flight Procedures Implementation & Oversight Branch, at (405) 954-9359.

Attachments



Federal Aviation Administration

Memorandum

To: Mark Steinbicker, Manager, Flight Technologies and Procedures Division
THRU: Danny E. Hamilton, Manager, Flight Procedure Implementation and Oversight Branch

From: Lonnie Everhart, Manager, Instrument Flight Procedures (IFP) Coordination Team, AJV-5310
Digitally signed by
TRACEY STILES
Feb 08, 2018

Subject: Approval Request: John Wayne Airport-Orange County, Santa Ana, CA (KSNA)

Request is for approval for a descent gradient of 340 ft/Nautical Mile (NM), or 3.21 degrees from RCHEL Waypoint to SHOLN Waypoint, a vertical loss of 3000 ft in 8.8 NM.

The requirement in Order 8260.3C, paragraph 2-2-1.g(1)(a) is:

(a) The maximum permissible gradient 10000 MSL and above is 330 ft/NM (approximately 3.11 degrees).

Paragraph 2-2-1.g(2) states:

“(2) When a gradient exceeds the maximum DG allowed in paragraph 2-2-1.g(1), the STAR requires approval from Flight Standards. The approval request should state the operational need for the steeper gradient. It is suggested that a study of historical winds for that location be used for analysis and for simulator runs; if the requested steeper descent gradient historically has a head wind (using average historical wind), that information should be included in the approval request.”

The Descent Gradient (340.384 ft/NM, or 3.21 degrees) from RCHEL to SHOLN is calculated from an altitude of FL280 at RCHEL (+FL280) to an altitude of FL250 at SHOLN (+FL250), over a distance of 8.8 NM. The course from RCHEL to SHOLN is 139.8 magnetic / 151.8 true. Most often, when the STAR is in use a crosswind prevails.

There is an operational need to have the OHSEA STAR operate between the altitudes designed into the procedure because of limited maneuvering room and crossing enroute, arrival, and departure traffic operating near the OHSEA STAR.



FAA

Memorandum

Date:

To: Manager, Instrument Flight Procedures Coordination Team, AJV-5310

From: Manager, Flight Technologies and Procedures Division, AFS-400

Prepared by: Flight Procedure Implementation & Oversight Branch, AFS-460

Subject: Approval Request; AJV-5310 Memorandum Dated 02/08/2018

Danny E Hamilton
Signed By: Danny E Hamilton Mon
Sep 24 2018 16:13:49 GMT-
05:00:00 (Central Standard Time)

Your request to utilize descent gradient of 340 FT/NM from RCHEL to SHOLN on the "OHSEA TWO (RNAV) STAR" at John Wayne Airport-Orange County, Santa Ana, CA was discussed at the Flight Standards Procedure Review Board on 11/09/2017 and is approved.

Please direct all inquiries to Danny E. Hamilton, Manager, Flight Procedures Implementation & Oversight Branch, at (405) 954-9359.

Attachments



Federal Aviation Administration

Memorandum

To: Mark Steinbicker, Manager, Flight Technologies and Procedures Division
THRU: Danny E. Hamilton, Manager, Flight Procedure Implementation and Oversight Branch

From: Lonnie Everhart, Manager, Instrument Flight Procedures (IFP) Coordination Team, AJV-5310
Digitally signed by
TRACEY STILES
Feb 08, 2018

Subject: Approval Request: John Wayne Airport-Orange County, Santa Ana, CA (KSNA)

Request is for approval for a descent gradient of 335 ft/Nautical Mile (NM), or 3.16 degrees from SHOLN Waypoint to PCIFC Waypoint, a vertical loss of 5000 ft in 14.93 NM.

The requirement in Order 8260.3C, paragraph 2-2-1.g(1)(a) is:

- (a) The maximum permissible gradient 10000 MSL and above is 330 ft/NM (approximately 3.11 degrees).

Paragraph 2-2-1.g(2) states:

“(2) When a gradient exceeds the maximum DG allowed in paragraph 2-2-1.g(1), the STAR requires approval from Flight Standards. The approval request should state the operational need for the steeper gradient. It is suggested that a study of historical winds for that location be used for analysis and for simulator runs; if the requested steeper descent gradient historically has a head wind (using average historical wind), that information should be included in the approval request.”

The Descent Gradient (334.536 ft/NM, or 3.16 degrees) from SHOLN to PCIFC is calculated from an altitude of FL250 at SHOLN (+FL250) to an altitude of FL200 at PCIFC (+FL200), over a distance of 14.93 NM. The course from SHOLN to PCIFC is 139.14 magnetic / 151.14 true. Most often, when the STAR is in use a crosswind prevails.

There is an operational need to have the OHSEA STAR operate between the altitudes designed into the procedure because of limited maneuvering room and crossing enroute, arrival, and departure traffic operating near the OHSEA STAR.



FAA

Memorandum

Date:

To: Manager, Instrument Flight Procedures Coordination Team, AJV-5310

From: Manager, Flight Technologies and Procedures Division, AFS-400

Prepared by: Flight Procedure Implementation & Oversight Branch, AFS-460

Subject: Approval Request; AJV-5310 Memorandum Dated 02/08/2018

Danny E Hamilton
Signed By: Danny E Hamilton Mon
Sep 24 2018 16:13:50 GMT-
05:00:00 (Central Standard Time)

Your request to utilize descent gradient of 335 FT/NM from SHOLN to PCIFC on the "OHSEA TWO (RNAV) STAR" at John Wayne Airport-Orange County, Santa Ana, CA was discussed at the Flight Standards Procedure Review Board on 11/09/2017 and is approved.

Please direct all inquiries to Danny E. Hamilton, Manager, Flight Procedures Implementation & Oversight Branch, at (405) 954-9359.

Attachments



Federal Aviation Administration

Memorandum

To: Mark Steinbicker, Manager, Flight Technologies and Procedures Division
THRU: Danny E. Hamilton, Manager, Flight Procedure Implementation and Oversight Branch

From: Lonnie Everhart, Manager, Instrument Flight Procedures (IFP) Coordination Team, AJV-5310
Digitally signed by
TRACEY STILES
Feb 08, 2018

Subject: Approval Request: John Wayne Airport-Orange County, Santa Ana, CA (KSNA)

Request is for approval for a descent gradient of 350 ft/Nautical Mile (NM), or 3.3 degrees from YORBS Waypoint to PCIFC Waypoint, a vertical loss of 5000 ft in 14.26 NM.

The requirement in Order 8260.3C, paragraph 2-2-1.g(1)(a) is:

- (a) The maximum permissible gradient 10000 MSL and above is 330 ft/NM (approximately 3.11 degrees).

Paragraph 2-2-1.g(2) states:

“(2) When a gradient exceeds the maximum DG allowed in paragraph 2-2-1.g(1), the STAR requires approval from Flight Standards. The approval request should state the operational need for the steeper gradient. It is suggested that a study of historical winds for that location be used for analysis and for simulator runs; if the requested steeper descent gradient historically has a head wind (using average historical wind), that information should be included in the approval request.”

The Descent Gradient (350.227 ft/NM, or 3.3 degrees) from YORBS to PCIFC is calculated from an altitude of FL250 at YORBS (+FL250) to an altitude of FL200 at PCIFC (+FL200), over a distance of 14.26 NM. The course from YORBS to PCIFC is 124.52 magnetic / 136.52 true. Most often, when the STAR is in use a crosswind prevails.

There is an operational need to have the OHSEA STAR operate between the altitudes designed into the procedure because of limited maneuvering room and crossing enroute, arrival, and departure traffic operating near the OHSEA STAR.



FAA

Memorandum

Date:

To: Manager, Instrument Flight Procedures Coordination Team, AJV-5310

From: Manager, Flight Technologies and Procedures Division, AFS-400

Prepared by: Flight Procedure Implementation & Oversight Branch, AFS-460

Subject: Approval Request; AJV-5310 Memorandum Dated 02/08/2018

Danny E Hamilton
Signed By: Danny E Hamilton Mon
Sep 24 2018 16:13:50 GMT-
05:00:00 (Central Standard Time)

Your request to utilize descent gradient of 350 FT/NM from YORBS to PCIFC on the "OHSEA TWO (RNAV) STAR" at John Wayne Airport-Orange County, Santa Ana, CA was discussed at the Flight Standards Procedure Review Board on 11/09/2017 and is approved.

Please direct all inquiries to Danny E. Hamilton, Manager, Flight Procedures Implementation & Oversight Branch, at (405) 954-9359.

Attachments

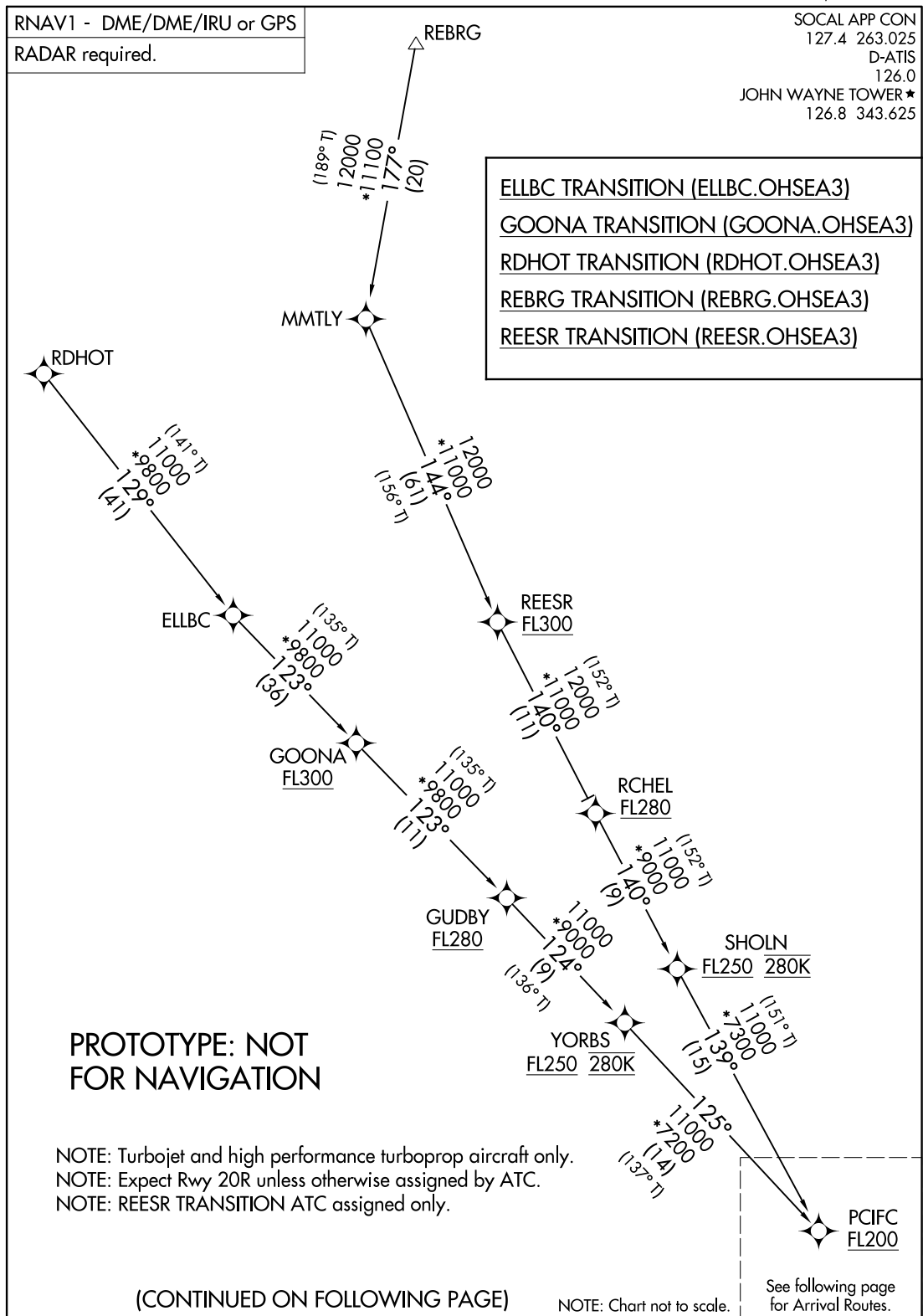
(PCIFC.OHSEA3) FIG

AL-377 (FAA)

JOHN WAYNE/ORANGE COUNTY (SNA)

OHSEA THREE ARRIVAL (RNAV) Arrival Routes

SANTA ANA, CALIFORNIA



AUTOMATED AL-377 OHSEA ARRIVAL

SW-3
26 AUG 2024
COMPILER: CG
REVIEWER:
DBL CHKR:
EFF: FIG

OHSEA THREE ARRIVAL

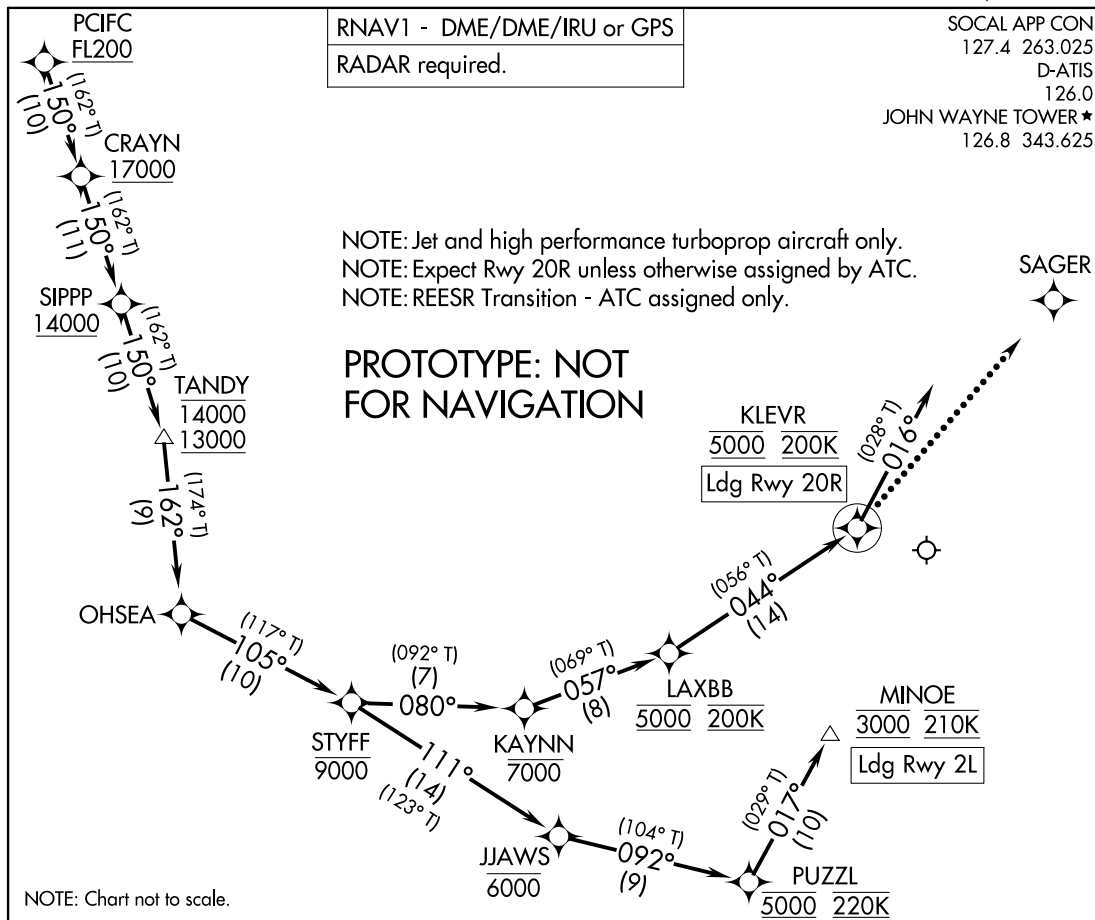
(PCIFC.OHSEA3) FIG

SANTA ANA, CALIFORNIA

JOHN WAYNE/ORANGE COUNTY (SNA)

OHSEA THREE ARRIVAL (RNAV) Arrival Routes

SANTA ANA, CALIFORNIA



NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

From PCIFC on track 150° to cross CRAYN at or above 17000, then on track 150° to cross SIPPP at or above 14000, then on track 150° to cross TANDY between 13000 and 14000, then on track 162° to OHSEA.

LANDING RUNWAY 2L: From OHSEA on track 105° to cross STYFF at or below 9000, then on track 111° to cross JJAWS at or below 6000, then on track 092° to cross PUZZL at 5000 and at 220K, then on track 016° to cross MINOE at 3000 and at 210K. Expect RNAV (RNP) Z RWY 2L or RADAR vectors to final approach course.

LANDING RUNWAY 20R: From OHSEA on track 105° to cross STYFF at or below 9000, then on track 080° to cross KAYNN at or below 7000, then on track 057° to cross LAXBB at 5000 and at 250K, then on track 044° to cross KLEVR at 5000 and at 200K, then on track 016°. Expect RNAV (RNP) Z RWY 20R or RADAR vectors to final approach course.

LOST COMMUNICATIONS

LANDING RUNWAY 20R: After KLEVR execute RNAV (RNP) Z RWY 20R approach or proceed to SAGER and execute the ILS or LOC RWY 20R approach.

LANDING RUNWAY 2L: Proceed on LOC BC RWY 2L, RNAV (GPS) Y RWY 2L or RNAV (RNP) Z RWY 2L.

AUTOMATED AL-377 OHSEA ARRIVAL (CONT)

SW-3

26 AUG 2024

COMPILER: CG

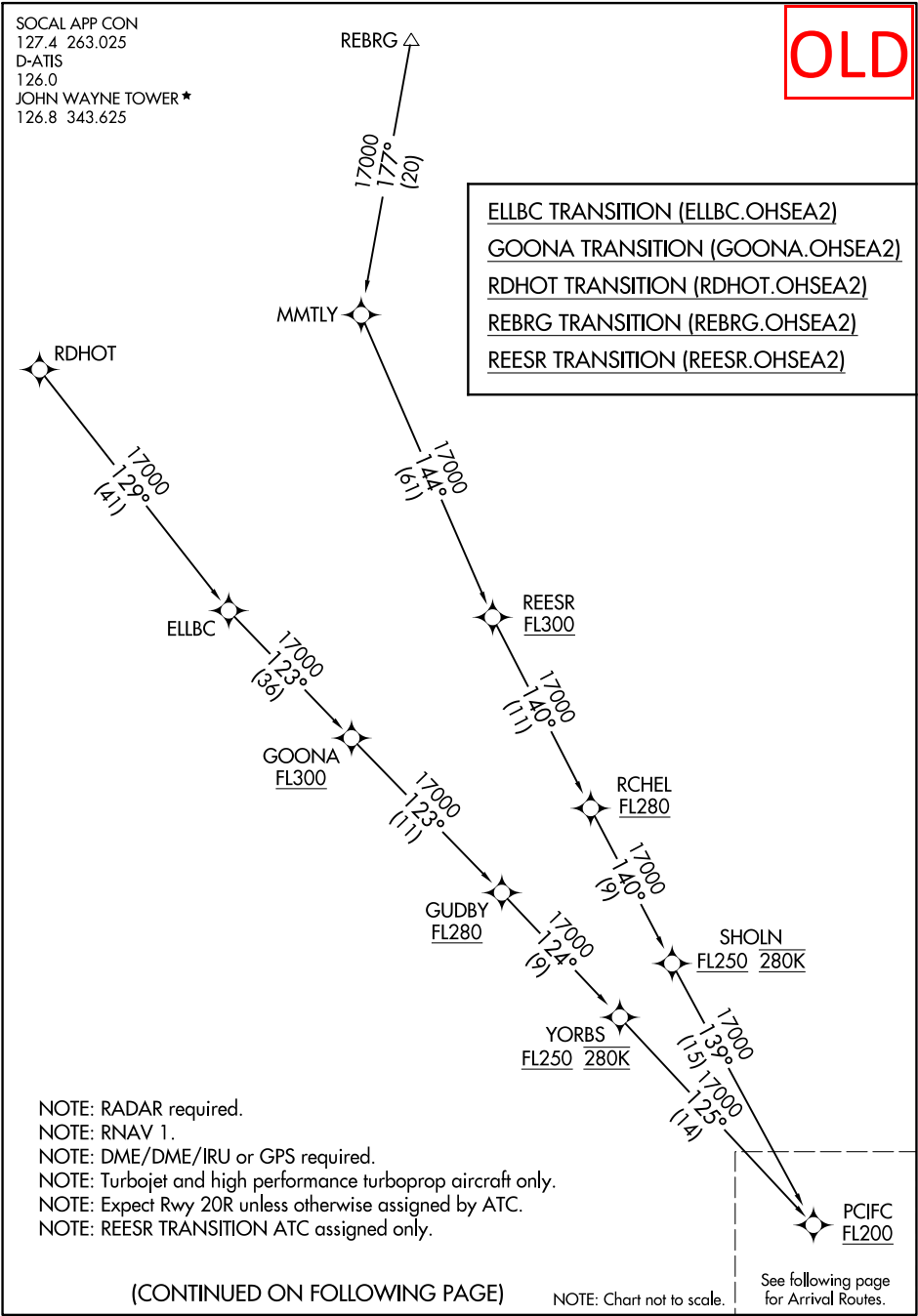
REVIEWER:

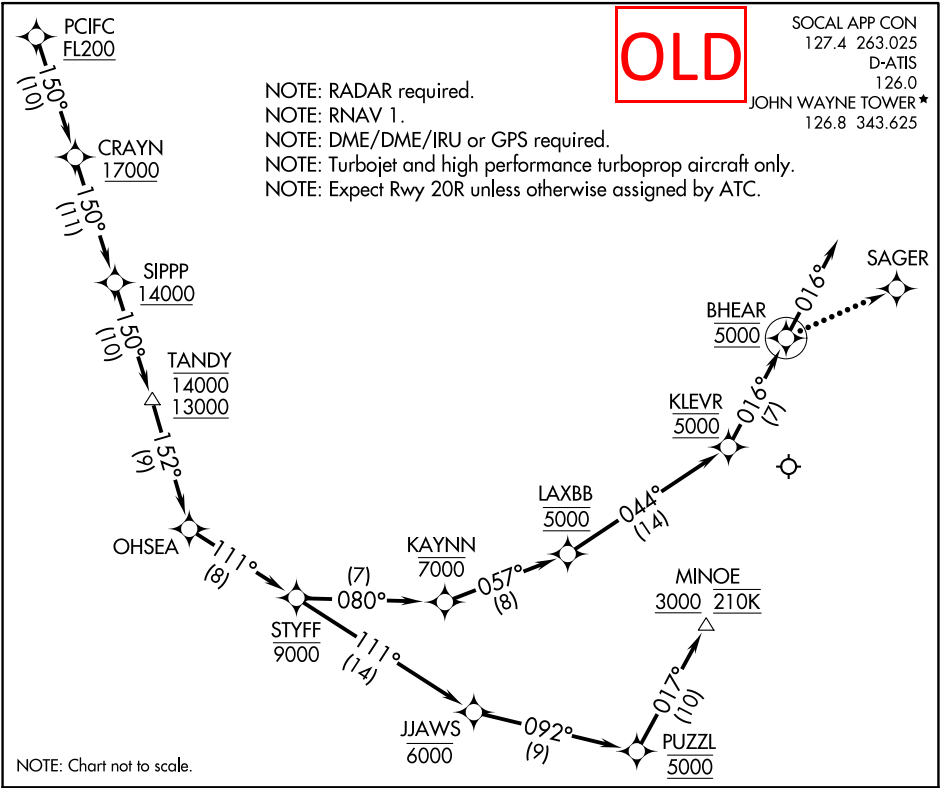
DBL CHKR:

EFF: FIG

OHSEA THREE ARRIVAL (RNAV) Arrival Routes

SANTA ANA, CALIFORNIA





ARRIVAL ROUTE DESCRIPTION

From PCIFC on track 150° to cross CRAYN at or above 17000, then on track 150° to cross SIPPP at or above 14000, then on track 150° to cross TANDY between 13000 and 14000, then on track 152° to OHSEA.

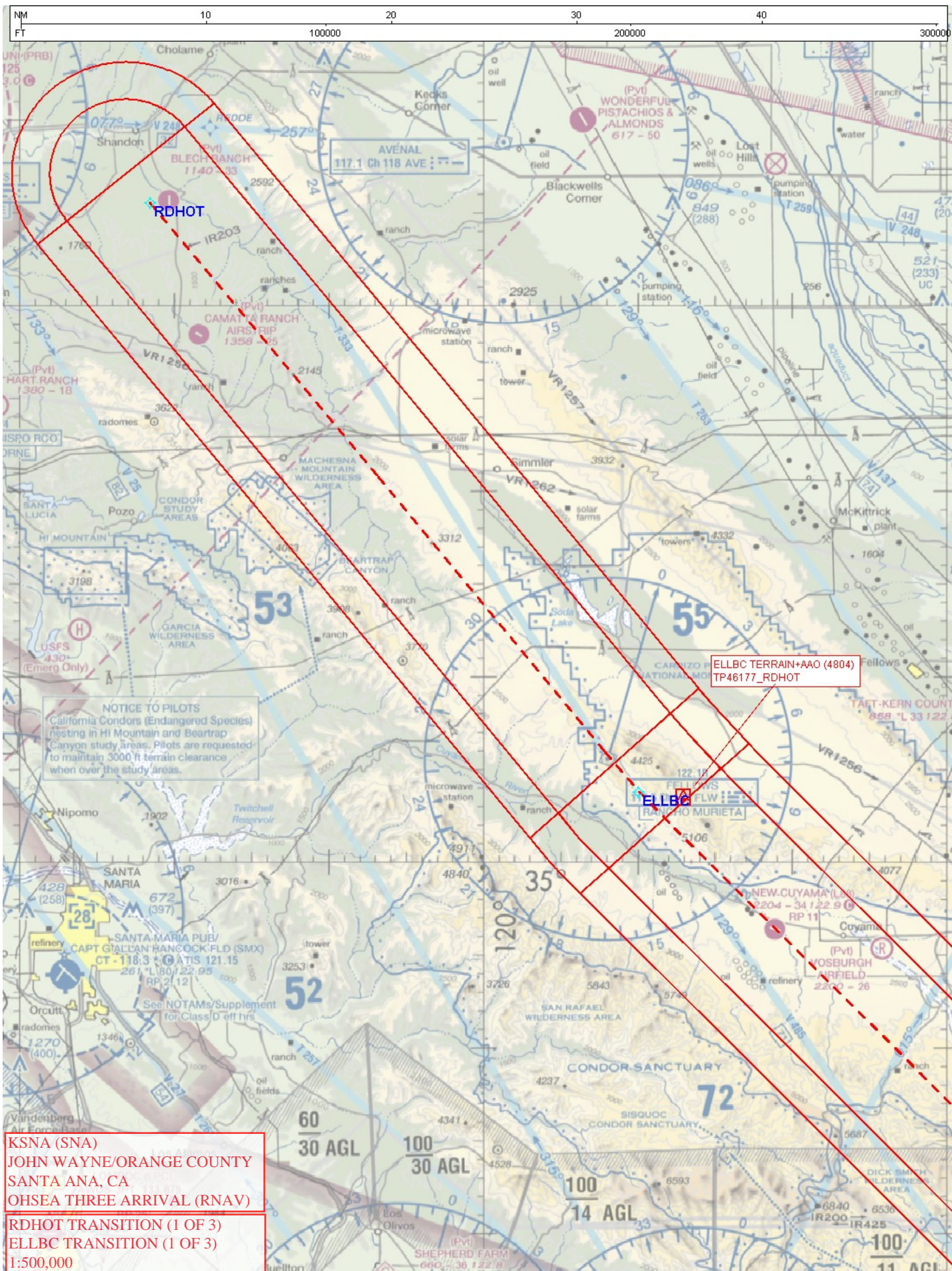
LANDING RUNWAY 2L: From OHSEA on track 111° to cross STYFF at or below 9000, then on track 111° to cross JJAWS at or below 6000, then on track 092° to cross PUZZL at 5000, then on track 017° to cross MINOE at or above 3000 and at 210K. Expect RNAV (RNP) Z RWY 2L or vectors to final approach course.

LANDING RUNWAY 20R: From OHSEA on track 111° to cross STYFF at or below 9000, then on track 080° to cross KAYNN at or below 7000, then on track 057° to cross LAXBB at 5000, then on track 044° to cross KLEVR at 5000, then on track 016° to cross BHEAR at 5000, then on track 016°. Expect RNAV (RNP) Z RWY 20R or vectors to final approach course.

LOST COMMUNICATIONS

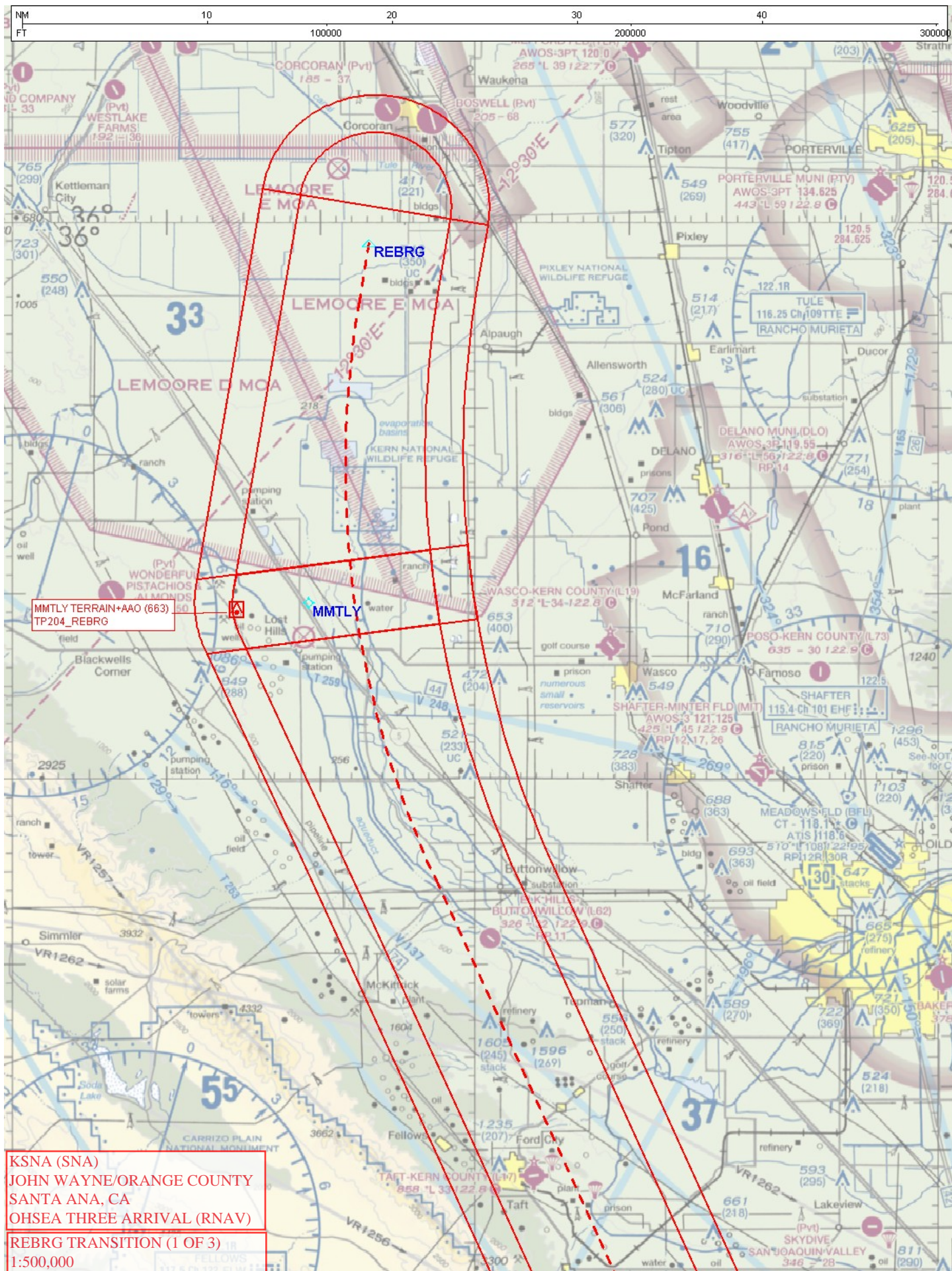
LANDING RUNWAY 20R: After BHEAR turn right direct SAGER and proceed on the ILS or LOC RWY 20R approach.

LANDING RUNWAY 2L: Proceed on LOC BC RWY 2L, RNAV (GPS) Y RWY 2L or RNAV (RNP) Z RWY 2L.











KSNA (SNA)
JOHN WAYNE/ORANGE COUNTY
SANTA ANA, CA
OHSEA THREE ARRIVAL (RNAV)

REBRG TRANSITION (2 OF 3)
REESR TRANSITION (1 OF 2)
1:500,000

