

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet. MSL. Altitudes are minimum altitudes unless otherwise indicated.

Distances are in nautical miles (NM). Graphic depiction attached.

Arrival Name	Number		STAR Computer Code		Superseded Number			Dated	Effective Date
CESAN RNAV	FOUR		CESAN.CESAN4		THREE			11/10/2016	22 JUN 17
Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes

TRANSITION ROUTES:**ARRIVAL ROUTE DESCRIPTION:**

LANDING KHOU:

FROM CESAN ON TRACK 185.33/15.55 NM TO CREPO (MEA 3100/MOCA 1600), THEN ON TRACK 195.66/29.89 NM TO PLEDO (MEA 3100/MOCA 1700).

LANDING KHOU RWY 13R/L: FROM PLEDO ON TRACK 195.71/6.42 NM TO FRITZ (MEA 3100), THEN ON TRACK 195.69/4.00 NM TO SSERA (MEA 3100), THEN ON TRACK 243.50/14.56 NM TO LLEGS (MEA 3100/MOCA 1300), THEN ON TRACK 239.45/7.68 NM TO FRDDY (MEA 3100/MOCA 1300), THEN ON TRACK 289.49/14.90 NM TO FIGGG (MEA 3100/MOCA 1600), THEN ON TRACK 278.49/8.59 NM TO IVEEE (MEA 3100/MOCA 1400), THEN ON TRACK 280.34/4.57 NM TO VILLI (MEA 3100/MOCA 1400), THEN ON TRACK 310.79/2.80 NM TO ALLY (MEA 3100/MOCA 1700), THEN ON TRACK 310.79. EXPECT VECTORS TO FINAL APPROACH COURSE.

LANDING KHOU RWY 04: FROM PLEDO ON TRACK 195.71/6.42 NM TO FRITZ (MEA 3100), THEN ON TRACK 195.69/4.00 NM TO SSERA (MEA 3100), THEN ON TRACK 243.50/14.56 NM TO LLEGS (MEA 3100/MOCA 1300), THEN ON TRACK 239.45/7.68 NM TO FRDDY (MEA 3100/MOCA 1300), THEN ON TRACK 289.49/14.90 NM TO FIGGG (MEA 3100/MOCA 1600), THEN ON TRACK 255.46/5.40 NM TO SHUUG (MEA 3100/MOCA 1300), THEN ON TRACK 222.00/2.00 NM TO EMARR (MEA 3100/MOCA 1400), THEN ON TRACK 222.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KHOU RWY 22: FROM PLEDO ON TRACK 195.71/6.42 NM TO FRITZ (MEA 3100), THEN ON TRACK 195.69/4.00 NM TO SSERA (MEA 3100), THEN ON TRACK 243.50/14.56 NM TO LLEGS (MEA 3100/MOCA 1300), THEN ON TRACK 272.84/5.00 NM TO WWILD (MEA 3100/MOCA 1300), THEN ON TRACK 310.02/13.93 NM TO JCNT0 (MEA 3100/MOCA 1500), THEN ON TRACK 310.02 EXPECT VECTORS TO FINAL APPROACH COURSE.

LANDING KHOU RWY 31R/L: FROM PLEDO ON TRACK 195.71/6.42 NM TO FRITZ (MEA 3100), THEN ON TRACK 195.69/4.00 NM TO SSERA (MEA 3100), THEN ON TRACK 243.50/14.56 NM TO LLEGS (MEA 3100/MOCA 1300), THEN ON TRACK 220.27/9.62 NM TO MMOOW (MEA 3100/MOCA 1300), THEN ON TRACK 273.67 EXPECT VECTORS TO FINAL APPROACH COURSE.

KLVJ/KCXO/KARM/KLBX/KIWS/KEFD/KHPY/KAXH/KSGR/KT00/K54T/KBYI/KGLS/KT41: FROM CESAN ON TRACK 185.33/15.55 NM TO CREPO (MEA 3100), THEN ON TRACK 195.66/29.89 NM TO PLEDO (MEA 3100), THEN ON TRACK 195.71/6.42 NM TO FRITZ (MEA 3100), THEN ON TRACK 195.69/4.00 NM TO SSERA (MEA 3100), THEN ON TRACK 243.50/9.00 NM TO KAANE (MEA 3100/MOCA 1300), THEN ON TRACK 215.00 EXPECT VECTORS TO FINAL APPROACH COURSE.

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED.

NOTE: RNAV 1.

NOTE: DME/DME/IRU OR GPS REQUIRED.

NOTE: DME/DME/IRU OR GPS EQUIPPED TURBOJET AND TURBOPROP AIRCRAFT CAPABLE OF 280 KIAS OR GREATER MUST FILE THE WAAPL (RNAV) STAR.

NOTE: VERTICAL NAVIGATION PLANNING INFORMATION FOR CESAN; EXPECT CLEARANCE TO CROSS AT 11,000.

FIXES AND/OR HOLDING PATTERNS:**COMMUNICATIONS:**

HOUSTON APP CON

ATIS: HOU, EFD

AIRPORTS SERVED:

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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CESAN RNAV	FOUR	CESAN.CESAN4	THREE	11/10/2016	22 JUN 17

WILLIAM P HOBBY, HOUSTON, TX
ELLINGTON, HOUSTON, TX
SCHOLES INTL AT GALVESTON, GALVESTON, TX
BAYTOWN, BAYTOWN, TX
WEST HOUSTON, HOUSTON, TX
TEXAS GULF COAST RGNL, ANGLETON/LAKE JACKSON, TX
PEARLAND RGNL , HOUSTON, TX
SUGAR LAND RGNL, HOUSTON, TX
CONROE-NORTH HOUSTON RGNL, HOUSTON, TX
CHAMBERS COUNTY, ANAHUAC, TX
LA PORTE MUNI, LA PORTE, TX
RWJ AIRPARK, BAYTOWN, TX
WHARTON RGNL, WHARTON, TX
BAY CITY RGNL, BAY CITY, TX
HOUSTON-SOUTHWEST, HOUSTON, TX

LOST COMMUNICATIONS PROCEDURE:**REMARKS: ABBREVIATED AMMENDMENT****ADDITIONAL FLIGHT DATA:**

DME/DME ASSESSMENT: SAT (RNP 2.0).
REFERENCE MAGNETIC VARIATION = KHOU 03E/2015

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
CESAN RNAV	FOUR	CESAN.CESAN4	THREE	11/10/2016	22 JUN 17
FLIGHT INSPECTED BY:			<i>Digitally signed by</i> STEVEN A VARGAS Feb 14, 2017		
Name			Organization	Date	Signature
DEVELOPED BY:			<i>Digitally signed by</i> BRIAN J BICKETT Feb 12, 2017		
Name			Organization	Date	Signature
BRIAN J BICKETT			AJV-5442	02/12/2017	
Name			Organization	Date	Signature
APPROVED BY:			<i>Digitally signed by</i> STEVEN A VARGAS Feb 14, 2017		
Name			Organization	Date	Signature
JULIE MORGAN, MANAGER			AJV-5420		

CHANGES:

1. AIRPORT NAME CHANGED FROM LONE STAR EXECUTIVE TO CONROE-NORTH HOUSTON RGNL.
2. AIRPORT NAME CHANGED FROM BAY CITY MUNI TO BAY CITY RGNL.

REASONS:

- 1, 2. TEXAS DEPARTMENT OF TRANSPORTATION REQUEST.

02/12/17: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 12/07/16.

1. AIRPORT NAME CHANGED FROM BAY CITY MUNI TO BAY CITY RGNL.

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

STAR (DATA RECORD)

Arrival Name CESAN RNAV	Number THREE	STAR Computer Code CESAN.CESAN4	Superseded Number THREE	Dated 11/10/2016	Effective Date 22 JUN 17
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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
Common Route									
CESAN	303219.56N / 0941206.77W	Y		IF					CESAN.CESAN4
CREPO	301654.00N / 0941443.00W	Y	FB	TF	188.33	15.55			
PLEDO	294830.39N / 0942542.46W	Y	FB	TF	198.66	29.89			

Common Route									
CESAN	303219.56N / 0941206.77W	Y		IF					CESAN.CESAN4
CREPO	301654.00N / 0941443.00W	Y	FB	TF	188.33	15.55			
PLEDO	294830.39N / 0942542.46W	Y	FB	TF	198.66	29.89			
FRITZ	294224.71N / 0942804.29W	Y	FB	TF	198.71	06.42			
SSERA	293836.79N / 0942932.54W	Y	FB	TF	198.69	04.00			
KAANE	293500.61N / 0943900.51W	Y	FO	TF	246.50	09.00			
K54T,KARM,KAXH,KBY,Y, KCXO,KEFD,KGLS,KHPY, KIWS,KLBX,KLVJ,KSGR, KT00,KT41				FM	218.00				RECOMMENDED NAVAID: AEX VORTAC

Runway Transition									
PLEDO	294830.39N / 0942542.46W	Y		IF					
FRITZ	294224.71N / 0942804.29W	Y	FB	TF	198.71	06.42			
SSERA	293836.79N / 0942932.54W	Y	FB	TF	198.69	04.00			
LLEGS	293246.63N / 0944451.30W	Y	FB	TF	246.50	14.56			
FRDDY	292912.75N / 0945239.40W	Y	FB	TF	242.45	07.68			
FIGGG	293454.51N / 0950826.43W	Y	FB	TF	292.49	14.90			
IVEEE	293637.09N / 0951805.85W	Y	FB	TF	281.49	08.59			

QUALITY
4
CHECKED

US DEPARTMENT of TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

STAR (DATA RECORD)

Arrival Name CESAN RNAV	Number FOUR	STAR Computer Code CESAN.CESAN4	Superseded Number THREE	Dated 11/10/2016	Effective Date 22 JUN 17
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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
VILLI	293740.49N / 0952312.28W	Y	FB	TF	283.34	04.57			
ALLLY	293937.02N / 0952531.48W	Y	FO	TF	313.79	02.80			
KHOU:RWY 13B				FM	313.79				RECOMMENDED NAVAID: AEX VORTAC

Runway Transition

PLEDO	294830.39N / 0942542.46W	Y		IF					
FRITZ	294224.71N / 0942804.29W	Y	FB	TF	198.71	06.42			
SSERA	293836.79N / 0942932.54W	Y	FB	TF	198.69	04.00			
LLEGS	293246.63N / 0944451.30W	Y	FB	TF	246.50	14.56			
FRDDY	292912.75N / 0945239.40W	Y	FB	TF	242.45	07.68			
FIGGG	293454.51N / 0950826.43W	Y	FB	TF	292.49	14.90			
SHUUG	293349.40N / 0951430.28W	Y	FB	TF	258.46	05.40			
EMARR	293224.33N / 0951607.56W	Y	FO	TF	225.00	02.00			
KHOU:RWY 04				FM	225.00				RECOMMENDED NAVAID: AEX VORTAC

Runway Transition

PLEDO	294830.39N / 0942542.46W	Y		IF					
FRITZ	294224.71N / 0942804.29W	Y	FB	TF	198.71	06.42			
SSERA	293836.79N / 0942932.54W	Y	FB	TF	198.69	04.00			
LLEGS	293246.63N / 0944451.30W	Y	FB	TF	246.50	14.56			
WWILD	293317.12N / 0945033.68W	Y	FB	TF	275.84	05.00			
JCNT0	294248.36N / 0950215.45W	Y	FO	TF	313.02	13.93			
KHOU:RWY 22				FM	313.02				RECOMMENDED NAVAID: AEX VORTAC

QUALITY
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CESAN RNAV	FOUR	CESAN.CESAN4	THREE	11/10/2016	22 JUN 17

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
Runway Transition									
PLEDO	294830.39N / 0942542.46W	Y		IF					
FRITZ	294224.71N / 0942804.29W	Y	FB	TF	198.71	06.42			
SSERA	293836.79N / 0942932.54W	Y	FB	TF	198.69	04.00			
LLEGS	293246.63N / 0944451.30W	Y	FB	TF	246.50	14.56			
MMOOW	292545.30N / 0945224.19W	Y	FO	TF	223.27	09.62			
KHOU:RWY 31B				FM	276.67				RECOMMENDED NAVAID: AEX VORTAC

