

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION							RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33										Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.						
TERMINAL ROUTES														MISSED APPROACH									
FROM				TO				COURSE AND DISTANCE				ALTITUDE		LP: RW05 LNAV: RW05									
WINUP (IF/IAF)				OSOLA (TF) (FB) (RNP 1.00)				048.82 / 5.97				1700		CLIMB TO 1900 DIRECT COMTO AND HOLD.									
OSOLA (FAF)				CELOM/3.40 NM TO RW05 (TF) (FB) (RNP 0.30)				048.86 / 1.76															
CELOM/3.40 NM TO RW05				RW05 (MAP) (TF) (FO) (RNP 0.30)				048.86 / 3.40															
RW05 (MAP)				340 MSL (CA)				048.86															
340 MSL				COMTO (DF) (FO) (RNP 1.00)								1900		ADDITIONAL FLIGHT DATA: HOLD NE, RT, 228.98 INBOUND. CHART FAS OBST: 87 TREE 300729N/0931402W CHART FAS OBST: 114 TREE 300815N/0931400W CHART: ASR. CHART VDP AT 0.88 NM TO RW05. WAAS CHANNEL # 69440 REFERENCE PATH ID: W05A CHART CIRCLING ICON. OSOLA TO RW05: 3.00/48.8. LTP HAE: -24.1 M									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)														MAG VAR: 3E EPOCH YEAR: 2005									
2. HOLD SW WINUP, RT, 048.82 INBOUND, 1700 FT. IN LIEU OF PT (IAF)																							
3. FAC: 048.86 FAF: OSOLA DIST FAF TO MAP: 5.16 THLD: 5.16																							
4. MIN. ALT: WINUP 1700, OSOLA 1700, CELOM/3.40 NM TO RW05 1140																							
5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____																							
6. MIN GS INCPT: _____ GS ALT AT: _____ OM: _____ MM: _____ IM: _____																							
7. GS ANGLE: _____ TCH: 34:1 IS NOT CLEAR																							
8. MSA FROM: _____																							
MINIMUMS																							
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT							ALTERNATE: N A			STANDARD													
CATEGORY =====>		A			B			C			D			E									
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA								
LP MDA	340	1	326	340	1	326	340	1	326	340	1	326											
LNAV MDA	380	1	366	380	1	366	380	1	366	380	1	366											
CIRCLING	440	1	425	480	1	465	580	1 1/2	565	680	2	665											
NOTES: CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. CHART NOTE: DME/DME RNP-0.3 NA.																							
CITY AND STATE LAKE CHARLES, LA		ELEVATION: 15 TDZE: 14 AIRPORT NAME: LAKE CHARLES RGNL					FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 5, AMDT 1					SUP: AMDT: ORIG DATED 05/15/2003									

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
ROUTINE					
COORDINATED WITH:					
ATA <div><input checked="" type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>		ALPA <div><input checked="" type="checkbox"/></div>	
APA <div><input checked="" type="checkbox"/></div>		AOPA <div><input checked="" type="checkbox"/></div>		NBAA <div><input checked="" type="checkbox"/></div>	
OTHER (specify)		<div><input checked="" type="checkbox"/> ZHU, LCH ATCT, AIRPORT MANAGER, ST. AV. DIR</div>			
FLIGHT CHECKED BY					
NAME: <div>JAMES KRENEK</div>		Digitally signed by JACOB POWERS Oct 06, 2017		FIFO FICO DATE: 10/03/2017	
DEVELOPED BY					
NAME: Digitally signed by JACOB POWERS Oct 06, 2017		JACOB A. POWERS (IVAN BLANCO)		FIFO AJV-5432 DATE: 07/11/2017	
APPROVED BY					
NAME: Digitally signed by JACOB POWERS Oct 06, 2017		PATRICK MULQUEEN MANAGER		FIFO AJV-5430 DATE:	
CHANGES:					
<div>1. REMOVED IAF FASUL AND CEMSA AND MODIFIED TAA FROM STANDARD "T" TO STRAIGHT-IN "I".</div> <div>2. MOVED FAF OSOLA 935 FT FURTHER OUTBOUND</div> <div>3. MOVED SDF CELOM 2463 FT FURTHER OUTBOUND.</div> <div>4. CHANGED CIRCLING MDA/HAA: CAT C FROM 480/465 TO 580/565, CAT D FROM 580/565 TO 680/665. CHARTED CIRCLING ICON.</div> <div>5. ADDED LP LINE OF MINIMA.</div> <div>6. ESTBLISHED VDP AT .88 NM TO MAP.</div> <div>7. ADDED NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NA.</div> <div>8. REMOVED NOTE: GPS OR RNP-0.3 REQUIRED.</div> <div>9. CHANGED TERMINAL ROUTE WINUP TO OSOLA FROM RNP .50 TO RNP 1.0.</div> <div>10. CHANGED VDA FROM 3.00/55 TO 3.00/49.</div> <div>11. ADDED ALTERNATE WEATHER MINIMUMS.</div> <div>12. LOWERED LNAV CAT D VISIBILITY FROM 1 1/4 TO 1 SM.</div> <div>13. MOVED IF WINUP 23 FT EASTBOUND.</div>					
REASONS:					
<div>1. PER ATC OPERATIONAL REQUEST.</div> <div>2-3. FOR OPTIMUM DG AND TO MATCH VGSI ANGLE.</div> <div>4. APPLIED EXPANDED CIRCLING AREA EVALUATION.</div> <div>5. IAW CRITERIA REQUIREMENTS.</div> <div>6. NO 20:1 PENETRATIONS IDENTIFIED.</div> <div>7. 34:1 PENETRATIONS IDENTIFIED.</div> <div>8. NO LONGER REQUIRED.</div> <div>9. IAW CURRENT CRITERIA.</div> <div>10. RESULT OF MOVING FAF, SDF.</div> <div>11. IAW WITH CRITERIA.</div> <div>12. APPLIED UPDATED VISIBILITY TABLE.</div> <div>13. TO COMPENSATE FOR EARTH CURVATURE AND ENABLE STRAIGHT INTERMEDIATE BUILD.</div>					

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION  
RNAV - STANDARD  
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TAA

	FROM	TO	ALT
1.	319/30 CW 089/30 (NOPT)	WINUP (IF/IAF) (FB)	1700
2.	089/30 CW 139/30 (NOPT)	089/16 CW 139/16	2400
	089/16 CW 139/16	WINUP (IF/IAF) (FB)	1700
3.	139/30 CW 319/30	WINUP (IF/IAF) (FO)	2600

QUALITY  
16  
CHECKED

CITY AND STATE

LAKE CHARLES, LA

ELEVATION: 15

TDZE: 14

AIRPORT NAME:

LAKE CHARLES RGNL

FACILITY  
IDENTIFIER:  
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:  
RNAV (GPS) RWY 5, AMDT 1

SUP:

AMDT: ORIG

DATED: 05/15/2003

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE  
FLIGHT STANDARDS SERVICE - FAR PART 97.33**

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

**FAS DATA BLOCK INFORMATION**

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KLCH
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	300742.5985N
LTP/FTP LONGITUDE	0931347.0805W
LTP/FTP ELLIPSOIDAL HEIGHT	-00241
FPAP LATITUDE	300837.6960N
FPAP LONGITUDE	0931226.2100W
THRESHOLD CROSSING HEIGHT (TCH)	00049.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1168
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
 <u>CRC REMAINDER</u>	 0007BCFC

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00030
FPAP ORTHOMETRIC HEIGHT	+00030

QUALITY  
16  
CHECKED

CITY AND STATE  LAKE CHARLES, LA	ELEVATION: 15      TDZE: 14 AIRPORT NAME:  LAKE CHARLES RGNL	FACILITY IDENTIFIER:  RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:  RNAV (GPS) RWY 5, AMDT 1	SUP:
				AMDT:      ORIG
				DATED:      05/15/2003

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

## STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

## PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.			
STRAIGHT-IN AREA	319/30 CW 089/30	WINUP	1. TOWER (48-004601)	300523.00N/0935714.00W	656 (2C)	1000		1700			
			2. TERRAIN	295042.00N/0935654.00W	37 (0)		AS1500	1500			
STRAIGHT-IN AREA	089/30 CW 139/30	089/16 CW 139/16	3. TOWER (22-001983)	301727.00N/0933436.00W	1349 (5D)	1000		2400			
			4. TERRAIN	302515.00N/0934048.00W	82 (100)		AS1500	1600			
STRAIGHT-IN AREA	089/16 CW 139/16	WINUP	5. TOWER (22-002273)	300556.00N/0932834.00W	520 (5D)	1000	AT100	1700			
			6. TERRAIN	300827.00N/0933609.00W	30 (0)		AS1500	1500			
STRAIGHT-IN AREA	139/30 CW 319/30	WINUP	7. TOWER (22-000809)	302347.00N/0930004.00W	1549 (2D)	1000		2600			
			8. TERRAIN	303212.00N/0932030.00W	119 (100)		AS1500	1600			
INTERMEDIATE	WINUP (IF/IAF)	OSOLA	9. TOWER (22-001698)	300017.00N/0932445.00W	410 (3C)	500	DG790	1700			
			10. TERRAIN	300115.00N/0931942.00W	27 (0)		AS1500	1500			
FINAL: LP	OSOLA	CELOM/3.40 NM TO RW05	11. TOWER (22-000775)	300521.00N/0931739.00W	230 (4D)	250	AC50 DG610	1140			
FINAL: LP STEPDOWN	CELOM/3.40 NM TO RW05	RW05	12. TREE (22-023238)	300729.07N/0931402.26W	87 (1B)	250		340			
2. HOLD-IN-LIEU-OF-PT	WINUP	P-4	9. TOWER (22-001698)	300017.00N/0932445.00W	410 (3C)	1000	AT290	1700			
			10. TERRAIN	300115.00N/0931942.00W	27 (0)		AS1500	1500			
3. MISSED APPROACH	MAP: RW05 / RW05	COMTO				ASC		1900			
	ELEV: 240/280		14. TOWER (22-000732)	301420.80N/0930443.50W	541 (5D)	1000		1600			
			15. TERRAIN	301415.00N/0930054.00W	27 (0)		AS1500	1500			
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.									
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	425	16. BUILDING	300812.00N/0931242.00W	130 (2B)	300		440
CATEGORY B	1.5 NM		450		465	17. TOWER (22-003368)	300837.20N/0931509.84W	180 (2C)	300		480
CATEGORY C	1.7 NM		450		565	18. TOWER (22-003184)	300755.83N/0931556.22W	262 (2C)	300		580
CATEGORY D	2.3 NM		550		665	19. TOWER (22-003052)	300401.00N/0931458.00W	365 (2A)	300		680
CATEGORY E	4.5 NM		550								
5. MINIMUM SAFE ALTITUDES											
PRIMARY NAVAID:											
SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A		
CITY AND STATE		ELEVATION: 15		FACILITY		PROCEDURE AND AMENDMENT NO:			REGION		
LAKE CHARLES, LA		AIRPORT NAME: LAKE CHARLES RGNL		RNAV		RNAV (GPS) RWY 5, AMDT 1			ASW		

PART B - SUPPLEMENTAL DATA									
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE			3. ALTIMETER SETTING		
LCH TOWER ZHU ARTCC				X	N W S	OTHER: ASOS	SOURCE: KLCH		
							DISTANCE:		
							HOURS REMOTE OPERATION:		
SATISFACTORY ON:									
X	V H F	X	U H F		H F	LOCATION: KLCH/KLCH			ADJUSTMENT: 0
4. MONITOR STATUS		PRIMARY NAVAID:							
		MONITOR POINT:							
		HRS OPTN:	CAT 1						
			CAT 3						
5. APPROACH & RUNWAY LIGHTING		ALS							
		(S) SALS							
		X	MALSF 33 (PCL) MALSR 15 (PCL)						
		X	HIRL 15 (PCL), 33 (PCL)						
		X	MIRL 05, 23						
		X	REIL 05, 23						
			TDZ						
			C/LINE						
		X	OTHER (SPECIFY) VASI-4L 23 PAPI-4R 33 PAPI-4L 05, 15						
6. RUNWAY MARKINGS		BASIC							
		ALL WEATHER     PIR-G 15, 33							
		INSTRUMENT     NPI-G 05, 23							
7. RUNWAY VISUAL RANGE		APPROACH							
		MIDFIELD     15, 33							
		ROLL OUT							
8. GLIDE PATH		GP ANGLE:				ELEV RWY THRESHOLD:			
		DISTANCE FROM RWY:				ELEV GP ANTENNA:			
						THRESHOLD CROSSING HEIGHT:			
9. FINAL APPROACH COURSE AIMING			X	RUNWAY THRESHOLD					FT. FROM THRESHOLD
			X	ON CENTERLINE					FT. FROM CENTERLINE
10. WAIVERS: NONE									
PART D - PREPARED BY: JACOB A. POWERS (IVAN BLANCO)						DATE: 07/11/2017			
TITLE: AERONAUTICAL INFORMATION SPECIALIST						OFFICE: AJV-5432			

PART C - REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
VISUAL PORTION OF FINAL PENETRATIONS: LP, LNAV: 34:1 87 TREE (22-022268) 300729.03N/0931400.93W (29.86) 87 TREE (22-023238) 300729.07N/0931402.26W (27.23) 79 TREE (22-023239) 300727.67N/0931402.35W (16.48) 50 POLE (22-021318) 300734.79N/0931356.13W (13.17) 62 TREE (22-022471) 300730.53N/0931403.07W (3.26)
ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED. CAT A: 1.30NM CAT B: 1.81NM CAT C: 2.84NM CAT D: 3.70NM
NO ADDITIONAL AIRSPACE REQUIRED.
KLCH ASOS ON WMSCR; REDUNDANT WEATHER SOURCES AVAILABLE, BACK-UP ALTIMETER NOT REQUIRED.
LPV, LNAV/VNAV MINIMUMS NOT DEVELOPED DUE TO QGS PENETRATIONS.
VEGETATION HEIGHT OF 100 FT UTILIZED PER FPT.
16. CAT A OBS #22-001668.





STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD		
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## PART - A OBSTRUCTION DATA

[illegible]

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:	
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE			3. ALTIMETER SETTING				
SATISFACTORY ON:					N W S	OTHER:		SOURCE:			
					F A A			DISTANCE:			
					A / C			HOURS REMOTE OPERATION:			
	V H F		U H F		H F	LOCATION:			ADJUSTMENT:		
4. MONITOR STATUS		PRIMARY NAVAID:									
		MONITOR POINT:									
		HRS	CAT 1								
		OPTN:	CAT 3								
5. APPROACH & RUNWAY LIGHTING			ALS								
			(S) SALS								
			MALS								
			HIRL								
			MIRL								
			REIL								
			TDZ								
			C/LINE								
6. RUNWAY MARKINGS		BASIC									
		ALL WEATHER									
		INSTRUMENT									
7. RUNWAY VISUAL RANGE		APPROACH									
		MIDFIELD									
		ROLL OUT									
8. GLIDE PATH		GP ANGLE:				ELEV RWY THRESHOLD:					
		DISTANCE FROM RWY:				ELEV GP ANTENNA:					
						THRESHOLD CROSSING HEIGHT:					
9. FINAL APPROACH COURSE AIMING				RUNWAY THRESHOLD					FT. FROM THRESHOLD		
				ON CENTERLINE					FT. FROM CENTERLINE		
10. WAIVERS:											
PART D - PREPARED BY:										DATE:	
TITLE:										OFFICE:	