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

FROM	TO	COURSE AND DISTANCE	ALTITUDE
FOMAH (IAF)	UCENU (FB)	047.97 / 10.00	3000
BOBLE (IAF)	UCENU (FB)	228.11 / 10.00	3000
UCENU (IF)	SWANE (FB)	138.04 / 7.00	1800
SWANE (FAF)	RW14 (MAP) (FO)	138.08 / 5.47	
RW14 (MAP)	1200 MSL	138.08	1200
1200 MSL	DELVE (FO)		3000

MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW14

CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 DIRECT DELVE AND HOLD.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT UCENU
3. FAC: 138.08 FAF: SWANE DIST FAF TO MAP: 5.47 THLD: 5.47
4. MIN. ALT: UCENU 3000, SWANE 1800
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 1800 GS ALT AT: SWANE 1800 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 52.7 34:1 IS CLEAR
8. MSA FROM: RW14 3100

ADDITIONAL FLIGHT DATA:
HOLD E, RT, 270.96 INBOUND.
FAS OBST: 207 AAO 291909N/0945400W
DISTANCE TO THLD FROM 200 HATH: 0.46 NM.
CHART VDP AT 1.26 MILES TO RW14*
*LNAV ONLY.
WAAS CHANNEL # 65606
REFERENCE PATH ID: W14A
LTP HAE: -24.8 M

MAG VAR: 2E EPOCH YEAR: 2015

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
LPV DA	205	1/2	200	205	1/2	200	205	1/2	200	205	1/2	200	205	1/2	200
LNAV/VNAV DA	342	5/8	337	342	5/8	337	342	5/8	337	342	5/8	337	342	5/8	337
LNAV MDA	460	1/2	455	460	1/2	455	460	7/8	455	460	7/8	455	460	7/8	455
CIRCLING	500	1	494	500	1	494	500	1 1/2	494	560	2	554	620	2 1/4	614

NOTES:
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING WILLIAM P HOBBY ALTIMETER SETTING. @ CAT E 800-2 1/4
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 1C (34F) OR ABOVE 54C (130F).
CHART NOTE: CIRCLING NA E OF RWY 18 AND NE OF RWY 32.
CHART NOTE: DME/DME RNP-0.3 NA.
(SEE FORM 8260-10)

QUALITY CHECKED 2

CITY AND STATE	ELEVATION: 6 THRE: 5 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP: RNAV (GPS) RWY 13
GALVESTON, TX	SCHOLES INTL AT GALVESTON	RNAV	RNAV (GPS) RWY 14, AMDT 1	AMDT: ORIG
				DATED 06/08/2006

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		ROUTINE

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[ ]	[ ]	[X]	[ ]	[X]	[X]	[X] ZHU, HOU APP CON, GLS ATCT, AMGR, ST. AV. DIR.

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:

DEVELOPED BY		
NAME: JILL OLSON (BRIAN BERUBEE)	FIFO AJV-353	DATE: 08/20/2012

APPROVED BY		
NAME: LARRY H STROUT MANAGER	FIFO AJV-353	DATE:

CHANGES:

1. CHANGED PROCEDURE NAME FROM RNAV (GPS) RWY 13 TO RNAV (GPS) RWY 14
2. CHANGED MAGVAR FROM 6E TO 2E
3. CHANGED FINAL COURSE FROM 134.08 TO 138.08
4. CHANGED DIST FAF TO MAP FROM 5.38 TO 5.47
5. LOWERED LPV DA FROM 260 TO 205
6. LOWERED LNAV/VNAV DA FROM 480 TO 342, VIS FROM 1 1/4 TO 5/8
7. LOWERED LNAV MDA FROM 480 TO 460, CAT C/D/E VIS FROM 3/4 - 1 - 1 1/4 TO 7/8
8. CHANGED TDZE TO THRE
9. CHANGED MISSED APPROACH FROM "...DIRECT LOPCE AND RIGHT TURN VIA 224.14 TRACO TO RELOY..." TO "...CLIMB TO 1200 THEN CLIMBING RIGHT TURN TO 3000 DIRECT DELVE AND HOLD".
10. CHANGED INTERMEDIATE COURSE/DIST FROM 134.04/6.01 TO 138.04/7.00
11. ADDED INITIALS FROM BOBLE AND FOMAH
12. UPDATED CIRCLING RESTRICTION NOTE
13. UPDATED BARO-VNAV NOTE

SEE 8260-10

REASONS:

1/3/12. MAGVAR
2/9/11/17. FPT REQUEST
4. PFAF LOCATION
5/6/7. OBSTACLE STUDY
8. USING THRE IN LIEU OF TDZE
10. MAGVAR/MINIMUM LEG LENGTH CRITERIA
13. CRITERIA
14. LOWERED MDA
15. CRITERIA
16. NOT APPLICABLE
18. APT ALTIMETER SOURCE NOT REDUNDANT

QUALITY 2 CHECKED

NOTES, (CONT.):
CHART PLANVIEW NOTE: RADAR REQUIRED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLIAM P HOBBY ALTIMETER SETTING AND INCREASE ALL DA 79 FEET AND ALL MDA 80 FEET. INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 7/8 MILE, LNAV CATS C/D/E VISIBILITY TO 1 MILE, AND CIRCLING CAT E VISIBILITY TO 2 1/2 MILE.
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LPV CAT E VISIBILITY TO 3/4, LNAV /VNAV CAT E VISIBILITY TO 1 1/8, AND LNAV CAT E VISIBILITY TO 1 3/8 MILE.
CHART NOTE: FOR INOPERATIVE MALSR, WHEN USING WILLIAM P HOBBY ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 7/8 MILE, AND LNAV CAT E VISIBILITY TO 1 1/2 MILE.

QUALITY 2 CHECKED

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

CHANGES CONT.
14. REPOSITIONED VDP FROM 1.35 MILES TO 1.26 MILES
15. UPDATED INOP MALSR NOTE
16. DELETED "VGSI AND RNAV GLIDEPATH NOT COINCIDENT" NOTE
17. RAISED ALTITUDE AT UCENU FROM 1800 TO 3000
18. ADDED BACK UP ALTIMETER NOTE

REASONS:

QUALITY 2 CHECKED

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FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGLS
RUNWAY	RW14
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W14A
LTP/FTP LATITUDE	291618.1800N
LTP/FTP LONGITUDE	0945203.5315W
LTP/FTP ELLIPSOIDAL HEIGHT	-00248
FPAP LATITUDE	291509.6400N
FPAP LONGITUDE	0945058.2100W
THRESHOLD CROSSING HEIGHT (TCH)	00052.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0920
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	4C96F5CB

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+00016
FPAP ORTHOMETRIC HEIGHT	+00016

QUALITY CHECKED

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC PACKET - 424-18 - RNAV (GPS)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BOBLE K40    W     N29321943W094522577                      E0027     NAR           BOBLE
        SUSAEAENRT   DELVE K40    C   L N29080317W095153036                      E0030     NAR           DELVE
        SUSAEAENRT   FOMAH K40    W     N29192680W095095912                      E0029     NAR           FOMAH
        SUSAEAENRT   SWANE K40    C     N29203057W094560436                      E0028     NAR           SWANE
        SUSAEAENRT   UCENU K40    C     N29255341W095011300                      E0028     NAR           UCENU

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KGLSK4AGLS     0     060YHN29155520W094513750E002000006         1800018000C    MNAR    SCHOLES INTL AT GALVESTON

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KGLSK4FR14   ABOBLE 010BOBLEK4EA0E  A    IF                                                18000                A JS
        SUSAP KGLSK4FR14   ABOBLE 020UCENUK4EA0EE B 010TF                      22810100    + 03000                            A JS
        SUSAP KGLSK4FR14   AFOMAH 010FOMAHK4EA0E  A    IF                                                18000                A JS
        SUSAP KGLSK4FR14   AFOMAH 020UCENUK4EA0EE B 010TF                      04800100    + 03000                            A JS
        SUSAP KGLSK4FR14   R      010UCENUK4EA0E  I    IF                                  + 03000     18000                A JS
        SUSAP KGLSK4FR14   R      020SWANEK4EA1E  F 051TF                      13800070    + 01800                 RW14  K4PGA JS
        SUSAP KGLSK4FR14   R      020SWANEK4EA2WALPV       ALNAV/VNAV ALNAV                                                   JS
        SUSAP KGLSK4FR14   R      030RW14 K4PG0GY M 031TF                      13810055      00058             -300          A JS
        SUSAP KGLSK4FR14   R      040         0  M     CA                      1381        + 01200                            A JS
        SUSAP KGLSK4FR14   R      050DELVEK4EA0EY  R   DF                                  + 03000                            A JS
        SUSAP KGLSK4FR14   R      060DELVEK4EA0EE  R   HM                      27100040    + 03000                            A JS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KGLSK4GRW14    0060001381 N29161818W094520353+0000    -0024800005000053150I

                 1         2         3         4         5         6         7         8         9         0         1         2         3
PP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KGLSK4PR14   RW14 001 0000W14A0N2916181800W09452035315-002480300N2915096400W094505821001067509200005 27F4003504C96F5CB
        SUSAP KGLSK4PR14   RW14 002E      +00016+00016LPV       65606

                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KGLSK4SRW14 K4PG                0   18018003125                                                                        M
```

QUALITY CHECKED 4

CITY AND STATE	ELEVATION: 6	THRE: 5	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP: RNAV (GPS) RWY 13
GALVESTON, TX	AIRPORT NAME: SCHOLES INTL AT GALVESTON		RNAV	RNAV (GPS) RWY 14, AMDT 1	AMDT: ORIG
					DATED: 06/08/2006

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BOBLE	BOBLE	010	IAF	IF		FB					
	BOBLE	UCENU	020		TF		FB	1.0	228.1(230.1T)	010.0	AA 03000	
	FOMAH	FOMAH	010	IAF	IF		FB					
	FOMAH	UCENU	020		TF		FB	1.0	048.0(050.0T)	010.0	AA 03000	
		UCENU	010	FACF	IF		FB				AA 03000	
		SWANE	020	FAF	TF		FB	0.5	138.0(140.0T)	007.0	AA 01800	
		RW14	030	MAP	TF		FO	0.3	138.1(140.1T)	005.5	AT 00058	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		138.1(140.1T)		AA 01200	
	DELVE	050		DF	R	FO				AA 03000	
	DELVE	060		HM	R	FO		271.0(273.0T)	004.0	AA 03000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	BOBLE	N293219.43	W0945225.77	N2932.324	W09452.430
	DELVE	N290803.17	W0951530.36	N2908.053	W09515.506
	FOMAH	N291926.80	W0950959.12	N2919.447	W09509.985
	SWANE	N292030.57	W0945604.36	N2920.510	W09456.073
	UCENU	N292553.41	W0950113.00	N2925.890	W09501.217
	RW14	N291618.18	W0945203.53	N2916.303	W09452.059

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW14	00005	53

QUALITY CHECKED

CITY AND STATE	ELEVATION: 6 THRE: 5	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP: RNAV (GPS) RWY 13
GALVESTON, TX	AIRPORT NAME: SCHOLES INTL AT GALVESTON	RNAV	RNAV (GPS) RWY 14, AMDT 1	AMDT: ORIG
				DATED: 06/08/2006

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	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.
INITIAL	FOMAH	UCENU	1. TOWER (48-023422)	291800.65N/0950640.27W	2013 (5D)	1000	SA-980 AT967	3000
			2. TERRAIN	292327.00N/0950806.00W	33 (0)		AS1500	1500
INITIAL	BOBLE	UCENU	3. TOWER (48-004625)	292443.62N/0945708.58W	590 (4D)	1000	AT1410	3000
			4. TERRAIN	293012.00N/0945815.00W	30 (0)		AS1500	1500
INTERMEDIATE	UCENU	SWANE	3. TOWER (48-004625)	292443.62N/0945708.58W	590 (3D)	500	AT710	1800
			5. TERRAIN	292527.00N/0950236.00W	27 (0)		AS1500	1500
FINAL: LPV	SWANE	RW14				ASC		205/200
FINAL: LNAV/VNAV	SWANE	RW14	6. CRANE (48-005394)	291645.00N/0945245.00W	131 (4D)	21.81:1	AC50	342/337
FINAL: LNAV	SWANE	RW14	7. AAO	291909.00N/0945400.00W	207 (2C)	250		460
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	DA / DA / RW14	DELVE				ASC		3000
			8. TOWER (48-014090)	291239.60N/0945618.78W	328 (2C)	1000		1400
ELEV:	38/181/360		9. TERRAIN	290821.00N/0951345.00W	30 (0)		AS1500	1500

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL							
CATEGORY A	1.3 NM	350	494	10. TOWER (48-011943)	291502.00N/0945119.00W	148 (5D)	300	AC50	500
CATEGORY B	1.5 NM	450	494	10. TOWER (48-011943)	291502.00N/0945119.00W	148 (5D)	300	AC50	500
CATEGORY C	1.7 NM	450	494	10. TOWER (48-011943)	291502.00N/0945119.00W	148 (5D)	300	AC50	500
CATEGORY D	2.3 NM	550	554	11. BRIDGE (48-005786)	291750.00N/0945309.00W	169 (5D)	300	HAA	560
CATEGORY E	4.5 NM	550	614	12. TOWER (48-001949)	291405.00N/0945416.00W	255 (5D)	300	AC50	620

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: RW14

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (48-005320)	271/ 19.1	2017 (3C)	3100					

QUALITY CHECKED 2

CITY AND STATE	ELEVATION: 6 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
GALVESTON, TX	SCHOLES INTL AT GALVESTON	RNAV	RNAV (GPS) RWY 14, AMDT 1	ASW

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
HOUSTON APP CON GLS TOWER ZHU ARTCC		N W S	OTHER: ASOS	SOURCE: KGLS / KHOU
		F A A		DISTANCE: 0 / 31.59
		A / C		HOURS REMOTE OPERATION: 24 / 24
SATISFACTORY ON: X VHF X UHF H F	LOCATION: KGLS			ADJUSTMENT: 0 / 79

4. MONITOR STATUS	PRIMARY NAVAID:		
	MONITOR POINT:		
	HRS OPTN:	CAT 1	
		CAT 3	
5. APPROACH & RUNWAY LIGHTING		ALS	
		(S) SALS	
	X	MALSR 14 (PCL)	
	X	HIRL 14, 32	
	X	MIRL 18 (PCL), 36	
	X	REIL 18, 36, 32	
		TDZ	
		C/LINE	
	X	OTHER (SPECIFY) PAPI-4L 18, 36, 14, 32	
6. RUNWAY MARKINGS	BASIC		
	ALL WEATHER	PIR-G 14, 32	
	INSTRUMENT	NPI-G 18, 36	
7. RUNWAY VISUAL RANGE	APPROACH		
	MIDFIELD		
	ROLL OUT		
8. GLIDE PATH	GP ANGLE: 3.00		ELEV RWY THRESHOLD: 5.4
	DISTANCE FROM RWY:		ELEV GP ANTENNA:
			THRESHOLD CROSSING HEIGHT: 52.7
9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	X	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: JILL OLSON (BRIAN BERUBEE)	DATE: 08/20/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

RASS PRESSURE PATTERNS SAME
KGLS 6, KHOU 46
RA = 78.36.
SEE ATTACHED AIRSPACE LETTER.

40' VEGETATION APPLIED PER FPT

30' BOAT HEIGHT USED IN BAY, 50' BOAT HEIGHT USED IN GULF PER PREVIOUS AMDT

KGLS ASOS ON SVC A
KHOU ASOS ON SVC A

RASS ADJUSTMENT ROUNDED UP TO 80 FEET AND PUBLISHED BY NOTE

VGSI DATA: 52.2/3.00

AVERAGE COLD TEMPERATURE (1C) BASED ON FIVE-YEAR HISTORY (2006-2011)

BARO-VNAV HIGH TEMPERATURE (54C) DERIVED FROM AFS-400 CALCULATOR

LPV SLOPE: 34:1
VNAV SLOPE: 21.81:1

MISSED APPROACH SEGMENT DEVELOPED USING IPDS. A 23 DEGREE BA WAS USED IN THE DEVELOPMENT OF THE MISSED APPROACH SEGMENT.
IPDS DERIVED VNAV DA CONFLICTS WITH THE VNAV DA DERIVED FROM IAPA. BOTH THE IPDS SPECIFIED DA AND THE IAPA SPECIFIED DA WERE EVALUATED WITH RESPECT TO THE MISSED APPROACH SEGMENT.

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: BOBLE **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 293219.43N/0945225.77W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 14			KGLS	GALVESTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** 08/02/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON, GLS ATCT
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DELVE **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 290803.17N/0951530.36W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SCHOLES	VUH	VORTAC	H	242.58	248.58	22.05	22.05		2600	17500
2	HOBBY	HUB	VOR/DME	H	173.25	178.25		31.22		2000	17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	W		WP	283.37	103.37	R		4	2000	6000	4	6
2	SW	VUH	VORTAC	242.58	062.58	R	1		2600	6000	6	8
3	E		WP	090.96	270.96	R		4	2000	10000	4	12

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (48-012449)	290730.00N/0952125.00W	485	4D
1	200	TOWER (48-004472)	290401.56N/0951911.64W	580	2C
2	200	TOWER (48-004472)	290401.56N/0951911.64W	580	2C
3	200	TOWER (48-002869)	291130.00N/0951734.00W	335	5D
3	265	TOWER (48-012449)	290730.00N/0952125.00W	485	4D

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3100

REMARKS:
SCHOLES (FAC 1) AND HOBBY (FAC 2) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V70	1, 2				(US)
IAP	RNAV (GPS) RWY 35		1	KLBX	ANGLETON/LAKE JACKSON	TX (US)
IAP	ILS OR LOC RWY 14	1, 2	2	KGLS	GALVESTON	TX (US)
IAP	RNAV (GPS) RWY 14		3	KGLS	GALVESTON	TX (US)
IAP	RNAV (GPS) RWY 18		3	KGLS	GALVESTON	TX (US)
IAP	RNAV (GPS) RWY 32		3	KGLS	GALVESTON	TX (US)
IAP	VOR RWY 14	1, 2	2	KGLS	GALVESTON	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13 **DATE OF REVISION:** 01/10/2013

REASON FOR REVISION:
DELETED FAC 3 (RELOY) AND ASSOCIATED DATA
CHANGED PATTERN 1 MAX TEMPLATE FROM 10 TO 6
CHANGED PATTERN 2 MIN/MAX TEMPLATE FROM 5/11 TO 6/8
CHANGED PATTERN 3 INBOUND COURSE FROM 266.96 TO 270.96
CHANGED PAT 3 HOLDING OBST FROM 2017 TWR TO 485 TWR
CHANGED DME FOR PATTERN 1 & 3 FROM 5 TO 4
UPATED PATTERN 1 & 2 CONTROLLING OBST
ADDED NOTE "PRECIPITOUS TERRAIN EVALUATION COMPLETE"
UPDATED FIX USE

DEVELOPED BY: **DATE:** 08/01/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FOMAH **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 291926.80N/0950959.12W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 14			KGLS	GALVESTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** 08/02/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON, GLS ATCT
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: LOPCE **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 291144.02N/0944742.41W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** CANCEL

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	KGLS R13					140.11	5.94				17500

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	SCHOLES INTL AT GALVESTON - RNAV (GPS) RWY 13			KGLS	GALVESTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** **OFFICE:** **NAME:**

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: FTW
ARTCC: ZHU
ATC FACILITY: IAH
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: RELOY **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 290706.29N/0945401.01W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** CANCEL

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	LOPCE					230.14	7.20				17500

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	SCHOLES INTL AT GALVESTON - RNAV (GPS) RWY 13			KGLS	GALVESTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/10/2013

DEVELOPED BY: **DATE:** **OFFICE:** **NAME:**

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: FTW
ARTCC: ZHU
ATC FACILITY: IAH
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: SWANE **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292030.57N/0945604.36W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	GALVESTON	I-GLS	LOC		318.11	320.11		6.63	40287	1800	4500
2	TRINITY	MHF	VOR/DME	L	211.72	218.72		15.68		1800	17500
3	SCHOLES	VUH	VORTAC	H			5.58	5.58		1800	17500

HOLDING: **HOLDING TYPE OF ACTION:** ESTABLISH

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW	I-GLS	LOC	318.11	138.11	R	1		2400	6000	4	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-004625)	292443.62N/0945708.58W	590	4D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN

REMARKS:
GALVESTON (FAC 1) AND TRINITY (FAC 2) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 14	1, 2, 3		KGLS	GALVESTON	TX (US)
IAP	ILS OR LOC RWY 14 (ALT MISSED)	1, 2	1	KGLS	GALVESTON	TX (US)
IAP	RNAV (GPS) RWY 14			KGLS	GALVESTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6 **DATE OF REVISION:** 01/10/2013

REASON FOR REVISION:
REPOSITIONED FIX 520 FT NORTHWEST
DELETED FAC 4 (RWY13) AND ASSOCIATED DATA
CHANGED FAC 2 BRG FROM 211.71 TO 211.72
CHANGED FAC 3 DME VALUE FROM 5.49 TO 5.58
ADDED HOLDING PATTERN AND ASSOCIATED DATA
UPDATED FIX USE

DEVELOPED BY: **DATE:** 08/01/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON, GLS ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: UCENU **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292553.41N/0950113.00W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	GALVESTON	I-GLS	LOC		318.11	320.11		13.63		1800	4500
2	TRINITY	MHF	VOR/DME	L	237.37	244.37		15.85		1800	17500
3	SCHOLES	VUH	VORTAC	H			12.58	12.58		1800	17500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
TRINITY (FAC 2) AND GALVESTON (FAC 1) USED TO ESTABLISH FIX COORDINATES
FIX NAME RETAINED AT ATC REQUEST DUE TO OPERATIONAL NECESSITY

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 14	1, 2, 3		KGLS	GALVESTON	TX (US)
IAP	RNAV (GPS) RWY 14			KGLS	GALVESTON	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 01/10/2013

REASON FOR REVISION:
FIX REPOSITIONED 1.08 NM NORTHWEST
DELETED FAC 4 (RWY13) AND ASSOCIATED DATA
CHANGED FAC 2 BRG FROM 233.52 TO 237.37
CHANGED FAC 3 DME VALUE FROM 11.50 TO 12.58
ADDED DIST FROM ALL FACILITIES
UPDATED FIX USE

DEVELOPED BY: **DATE:** 08/01/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HOU APP CON, GLS ATCT
OTHER:

QUALITY 2 CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **GALVESTON** STATE: **TX**

AIRPORT NAME: **SCHOLES INTL AT GALVESTON** ID: **KGLS**

PROCEDURE: **RNAV (GPS) RWY 14** AMDT: **1**

DOCKET # :
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **2.80**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **140.08**
4. High Terrain in **FINAL** segment containing 1000' point **10**
5. Distance from **THLD** to 1500' point **4.61**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **1.20**
7. True Course of **FINAL** segment containing 1500' point **140.08**
8. High Terrain in **FINAL** segment containing 1500' point **10**
9. Threshold Coordinates (if straight-in) ... **291618.18N** / **0945203.53W**
10. ARP Coordinates ..... **291555.20N** / **0945137.50W**
11. Runway Approach End and distance furthest from ARP.....RWY **14**
    Distance **.54** NM
12. FAF Coordinates ..... **292030.57N** / **0945604.36W**
    (Click to Select)

REMARKS: Approach/Drawing attached.

Federal Aviation Administration

Memorandum

Date:

To: Dick Powell Manager, National Flight Data Center, AJV-21

From: Larry Strout, Manager, Terminal Procedures & Charting Services, Central Team, AJV-353

Subject: **ACTION:** Magnetic Variation Change

The Magnetic Variation (MV) data for the airport(s) and/or facility(s) listed under the 'Airport/Facility" column will be revised effective concurrent with the publication of the procedure(s) listed below.

ILS OR LOC RWY 14, AMDT 12
RNAV (GPS) RWY 14, AMDT 1
RNAV (GPS) RWY 18, AMDT 2
RNAV (GPS) RWY 32, AMDT 1
RNAV (GPS) RWY 36, AMDT 1
VOR RWY 14, AMDT 4

Estimated Chart Date: 01/10/2013

Runway Numbers are affected with the airport rotation; 13/31 change to 14/32 and 17/35 change to 18/36.

Please publish these changes in the National Flight Data Digest.

TEXAS

Location	Name	Airport /Facility	Identifier	Assigned Magnetic Variation Value	Epoch Year
Galveston	Scholes Intl at Galveston	Airport	KGLS / GLS	Old 6 ° East New 2 ° East	2015
Galveston		ILS	GLS	Old 6 ° East New 2 ° East	2015

If you have any questions please notify Larry H. Strout, larry.h.strout@faa.gov (405) 954-5070

Cc:AVJ-3rf
AJV-353; LStrout;sbj;x7537;7/31/12: U:\AVN100\100Public\MAGVAR\MAGVAR Letters 2012\MV Change Request for Galveston, TX (KGLS) 7-31-12
Requestor:BBerubee, AJV-353 Evaluated By:LFortier

CONCURRENCES
ROUTING SYMBOL AJV-34 SBaker
INITIALS/SIG
DATE
ROUTING SYMBOL AJV-353 JOlson
INITIALS/SIG
DATE
ROUTING SYMBOL AJV-353 LStrout
INITIALS/SIG
DATE
ROUTING SYMBOL AJV-341 JAlfonso
INITIALS/SIG
DATE
ROUTING SYMBOL
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