



Houston Center Standard Operating Procedures

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Chapter 1: Purpose

This document serves as the standard operating procedures for Houston Center. All home, visiting and returning controllers must be familiar with this handbook. This document is to be used for VATSIM purposes only. In the case of special procedures this document may be overridden by the Air Traffic Manager, Deputy Air Traffic Manager, Training Administrator, Events Coordinator, or CIC with pre coordinated procedures.

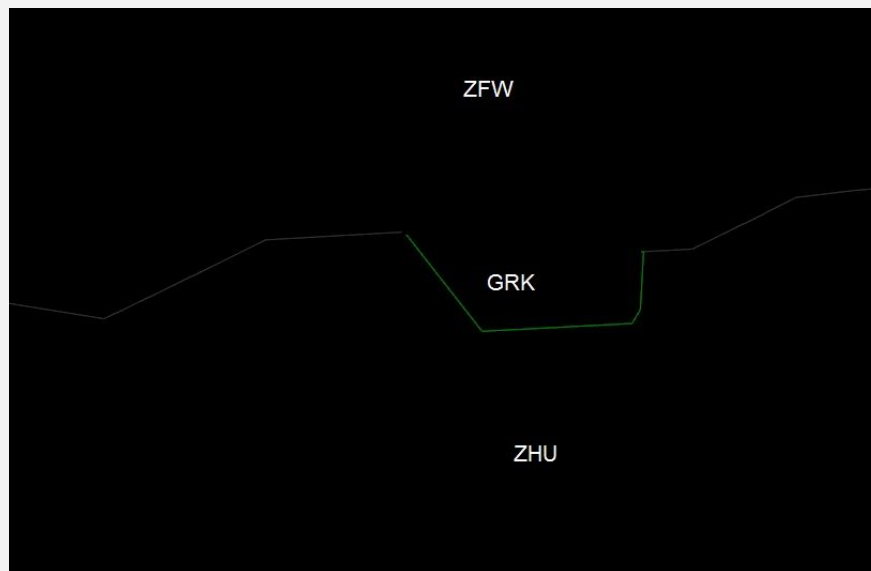
Chapter 2: Sector Layouts

2.1 Combine Sector

- Houston Center controls surface to FL600 within the ARTCC boundaries.
- The following image depicts the main ZHU sector with the boarding ARTCCs. Utilize the Daisetta High freq as the main center sector.
- **The combine Houston Center frequency and sector will be operated under HOU_38_CTR 126.950**



- Note the Gray approach airspace depicted below: Houston Center will have jurisdiction of the Gray approach sector from surface to 12,000 ft. Fort Worth Center will have jurisdiction of the airspace over the Gray RAPCON from 13,000 ft to FL600. Proper handoff procedures must be initiated to ZFW.



2.2 High Sector Splits

- The main Houston Center frequency and sector will be operated under HOU_38_CTR 126.950. The Daisetta and Eagle Lake high must be staffed first unless otherwise stated or planned by the ZHU Events Coordinator or CIC (Controller in Command).
- Both Daisetta and Eagle Lake will control SFC to FL600 until a low sector is staffed. If a low sector is staffed the appropriate high sector will have jurisdiction of airspace from FL250 to FL600
- The following image depicts the Daisetta and Eagle Lake high sectors.



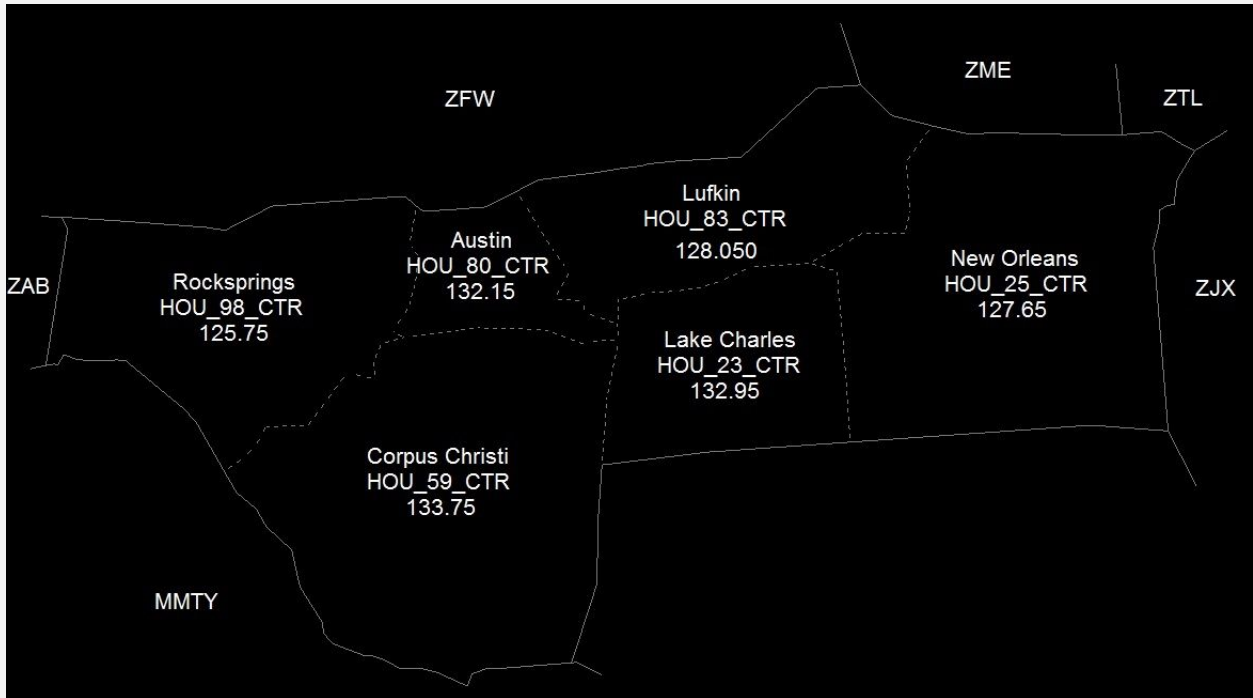
2.3 Low Sector Splits

- The follow list consist of the Houston Center low splits. Each split must be staffed in the follow order:

1 Austin HOU_80_CTR 132.150	4 New Orleans HOU_25_CTR 127.650
2 Lufkin HOU_83_CTR 128.050	5 Rocksprings HOU_98_CTR 125.750
3 Lake Charles HOU_23_CTR 132.950	6 Corpus Christi HOU_59_CTR 133.750

- **The combine low Houston Center frequency and sector will be operated under HOU_80_CTR 132.150**
- Each low split will have jurisdiction of airspace from surface to FL240
- Handoffs must be initiated no less than 5,000 ft below the top of the sector (FL190)
- Each controller must climb each aircraft to the top of the sector (FL240) upon initial contact once traffic permits

- The following image depicts the low split boundaries within ZHU



Chapter 3: Tracon Sectors

The follow chapter will cover each center split with their underlying approach sectors.

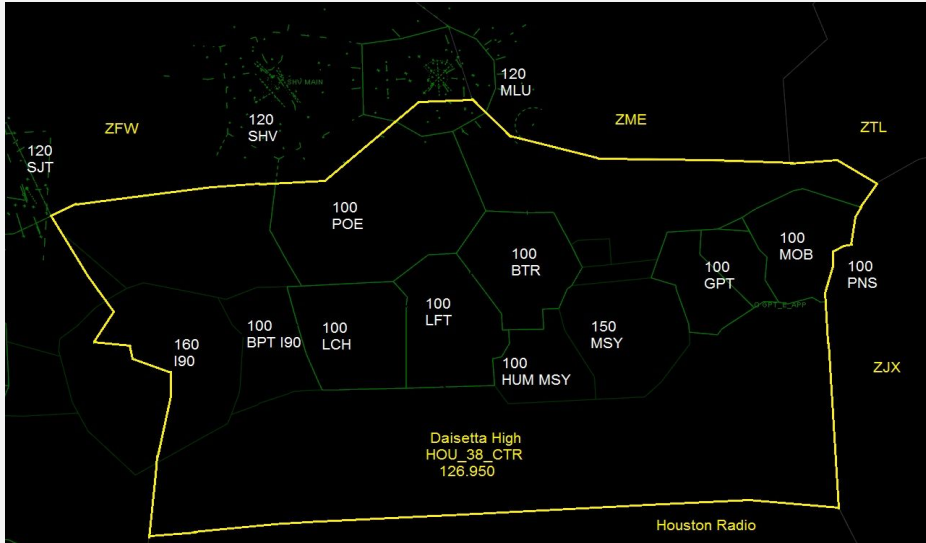
3.2 Combine Sector

- The follow image depicts the tops of each tracon when working the combine Daisetta sector
- Each tracon is responsible for initiating proper handoff procedures to the appropriate center controller
- The ZHU ARTCC does not have jurisdiction over the following tracons: San Angelo, Monroe, Shreveport, Pensacola, Jackson, Meridian, Midland, and Montgomery. The letter of agreement (LOA) will state the proper procedures for arriving and departing traffic, pre coordinated procedures are permitted to override the LOA.



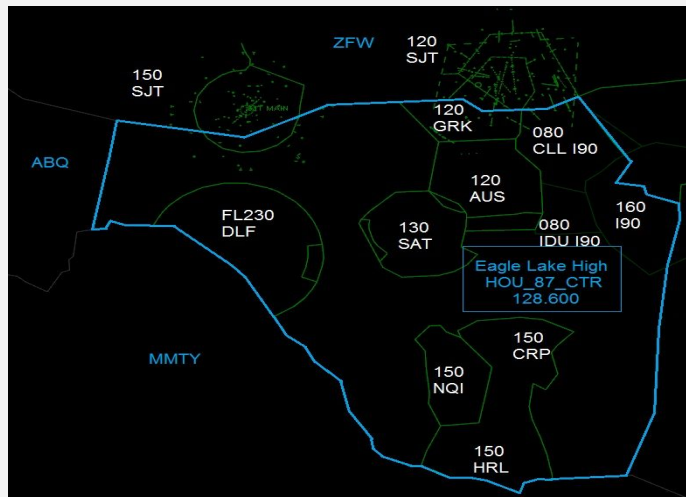
3.3 Daisetta High

- The follow image depicts the tops of each tracon when working the Daisetta High sector. Note that the boundaries depicted applies only when the Eagle Lake sector is staffed. This sector will split through the I90 main approach sector.
- Each tracon is responsible for initiating proper handoff procedures to the appropriate center controller



3.4 Eagle Lake High

- The follow image depicts the tops of each tracon when working the Eagle Lake High sector. Note that the boundaries depicted applies only when the Daisetta High sector is staffed first. This sector will split through the I90 main sector
- Each tracon is responsible for initiating proper handoff procedures to the appropriate center controller

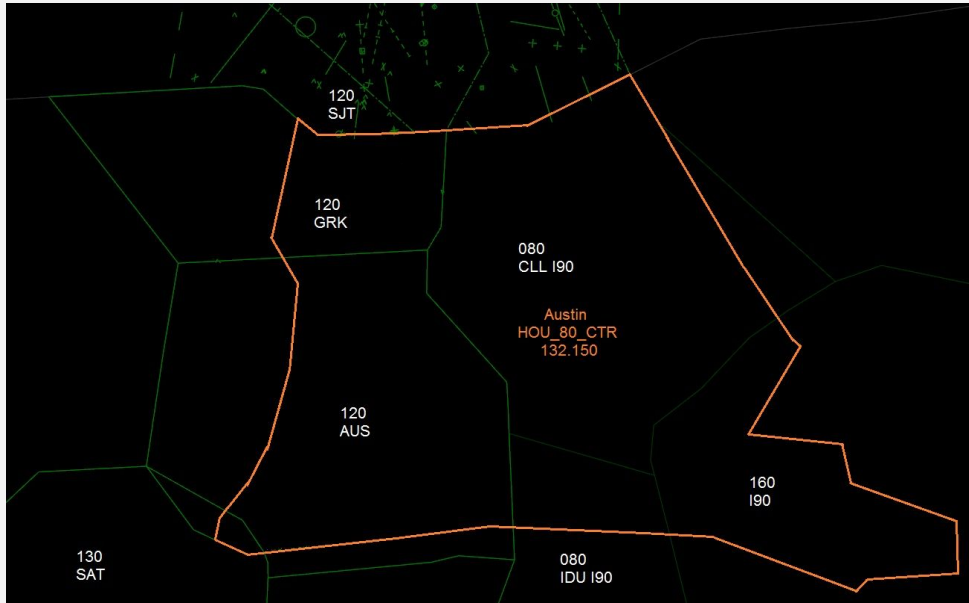


3.5 Low Sectors

- The follow images depict the tops of each tracon when working each low sector. Note that the boundaries depicted applies only when both high sectors are staffed first.
- Each tracon is responsible for initiating proper handoff procedures to the appropriate center controller

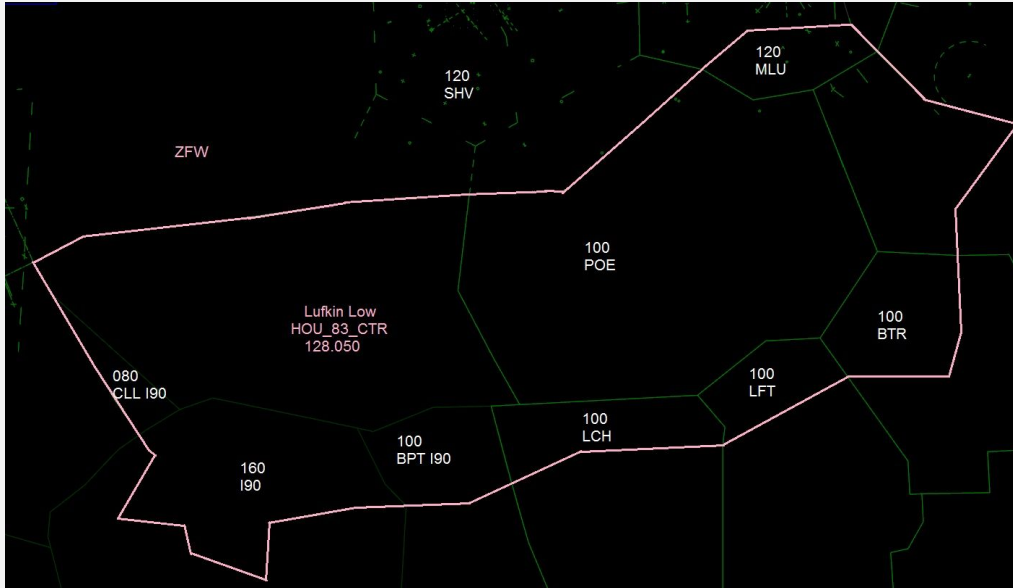
3.5.1 Austin Low

- Note that the Austin low sector boundary splits through the Austin, Gray and the I90 tracon; along with the College and Industry I90 sector.



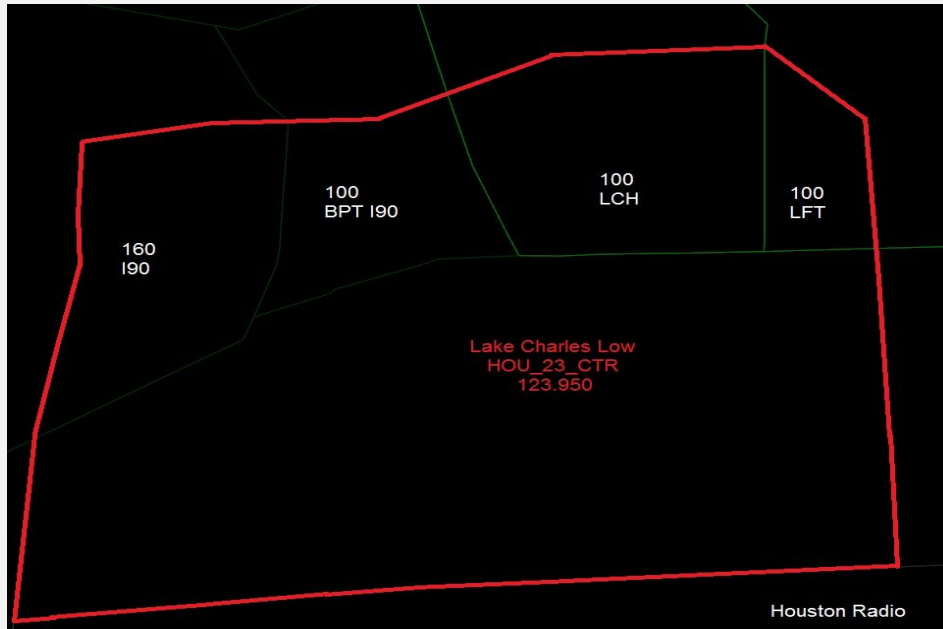
3.5.2 Lufkin low

- Note that the Lufkin low sector boundary splits through the following tracons/trsa Baton Rouge, Lafayette, Lake Charles, and Monroe. It also splits through the main I90 sector along with the Beaumont and College Station sector.



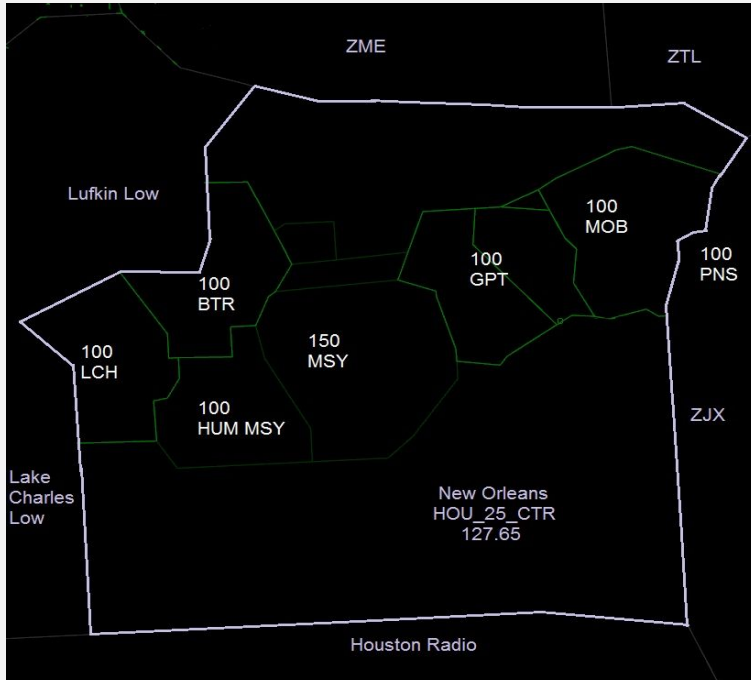
3.5.3 Lake Charles Low

- Note that the Lake Charles low sector boundary splits through the following tracons: I90 main sector, Lake Charles and Lafayette along with the I90 Beaumont sector



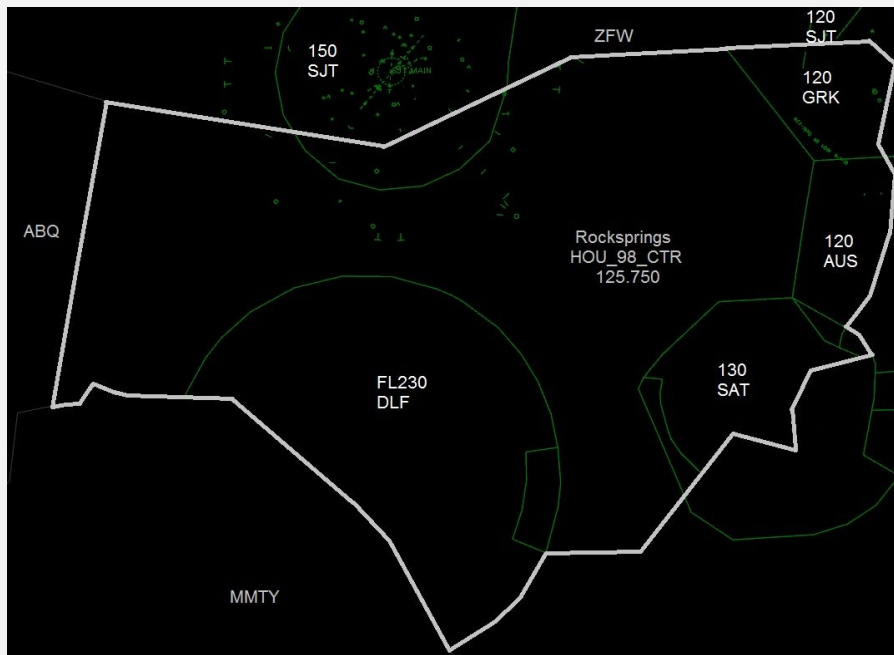
3.5.4 New Orleans Low

- Note that the New Orleans low sector boundary splits through the following tracons: Baton Rouge and Lake Charles



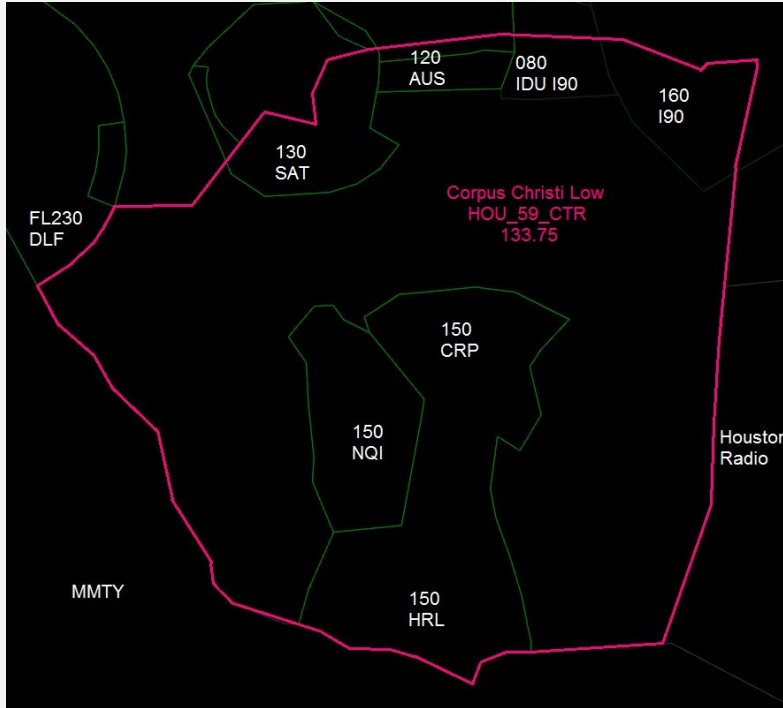
3.5.4 Rocksprings Low

- Note that the Rocksprings low sector boundary splits through the following tracons: San Antonio, Austin, Gray, San Angelo



3.5.5 Corpus Christi Low

- Note that the Corpus Christi low sector boundary splits through the following tracons: San Antonio, Austin, Gray, San Angelo



Chapter 4: Frequency and VOR list

4.1 Frequencies

- The frequency that are bold and highlighted in yellow must be staffed first if ZHU is running top down; Daisetta being high Austin being low

Position Call Sign	Name	Description	Frequency
HOU_38_CTR	Daisetta High	High 1st Combine	126.950
HOU_87_CTR	Eagle Lake High	High 2nd "West Side"	128.600
HOU_80_CTR	Austin Low	Low 1st Combine	132.150
HOU_83_CTR	Lufkin Low	Low 2nd Split	128.050
HOU_23_CTR	Lake Charles Low	Low 3rd Split	132.950
HOU_25_CTR	New Orleans Low	Low 4th Split	127.650
HOU_98_CTR	Rocksprings Low	Low 5th Split	125.750
HOU_59_CTR	Corpus Christi Low	Low 6th Split	133.750

4.2 VOR List

ACT - WACO	ELA - EAGLE LAKE	JEN - GLEN ROSE
AEX - ALEXANDRIA	EMG - ELM GROVE	KSY - KELLY
AGJ - GOOCH SPRINGS	FST - FORT STOCKTON	LCH - LAKE CHARLES
ALI - ALICE	FXU POLK	LEV - LEEVILLE
BFM - BROOKLEY	FZT FRANKSTON	LFK - LUFKIN
BGS - BIG SPRINGS	GCV - GREENE COUNTY	LFT - LAFAYETTE
BIX - KEESLER	GGG - GREGG COUNTY	LLA - WHITE LAKE
BPT - BEAUMONT	GPT - GULFPORT	LLO - LLANO
BRO - BROWNSVILLE	GRK - GRAY	LOA - LEONA
BWD - BROWNWOOD	GNL - GROSEBECK	LRD - LAREDO
CEW - CRESTVIEW	HDO - HONDO	LSU - FIGHTING TIGER
CLL - COLLEGE STATION	HEZ - NATCHEZ	MAF - MIDLAND
COT - COTULLA	HMU - HAMMOND	MAM - MATAMOROS
CQY - CEDAR CREEK	HRL - HARLINGEN	MCB - MC COMB
CRP - CORPUS CHRISTI	HRT - HURLBURT	MEI - MERIDIAN
CSI - CENTER POINT	HRV - HARVEY	MFE - MC ALLEN
CWK - CENTEX	HUB - HOBBY	MHF - TRINITY
DAS - DAISSETTA	IAH - HUMBLE	MHZ - MAGNOLIA
DLF - LAUGHLIN	IDU - INDUSTRY	MVC - MONROEVILLE
EFD - ELLINGTON	JCT - JUNCTION	NGP - TRUAX
NGS - SANTA ROSA		
NLD - NEWLA		
NOG - ORANGE GROVE		
NPA - PENSACOLA		
NQI - KINGSVILLE		
NSE - WHITING		
NUN - SAUFLEY		
PCU - PICAYUNE		
PNG - PIEDRAS		
PSX - PALACIOS		
REX - REYNOSA	SWB - SAWMILL	
RND - RANDOLPH	TBD - TIBBY	

RQR - RESERVE	THX - THREE RIVERS
RSG - ROCKSPRINGS	TNV - NAVASOTA
SAT - SAN ANTONIO	TPL - TEMPLE
SBI - SABINE PASS	TQA - TUSCOLA
SJI - SEMMES	TYR - TYLER
SJT - SAN ANGELO	VCT - VICTORIA
SSF - STINSON	VUH - SCHOLLES
STV - STONEWALL	

Chapter 5: Standard Terminal Arrival Procedures (STAR)

Chapter 5 will outline each STAR for KIAH and KHOU. Use the following outlines as quick guide. Reviewing each chart before hand is strongly recommended.

5.1 Scratch pad & temporary altitudes

- Ensure that all aircraft that are being tracked has a clear scratch pad before initiating the handoff to another radar controller unless the scratch pad entry is applicable for the receiving controller
- For aircraft issued “descend via” instructions enter “DV” in upper case letters in the scratch pad before initiating the handoff to approach
- For aircraft issued a speed instruction follow the following format: “290” or “M80”
- For aircraft issued a heading instruction follow the following format: “H270”
- For aircraft issued a specific altitude whether pre coordinated or depicted on a STAR set the appropriate temporary altitude in the data block before initiating the handoff to approach

5.2 STARS

5.2.1 I90 STARS

- Note that the HUDZY arrival depicted crossing restriction is HUDZY at 14,000. This arrival serves several airfields within the I90 including the Houston Intercontinental Airport. Due to the location of the 26L/R & 27 localizers this arrival is not applicable to the standard operations of the I90. Aircraft that have filed the HUDZY arrival amend the crossing instruction over HUDZY to 5000 if traffic permits. This applies to KIAH arrivals only.

STAR	Type	Cross Altitude / Speed	End Location / Rwy / Hdg	Direction / Specific Rwy
DOOBI	RNAV	"DV"	BOZZZ	LNDG WEST (26L)
DRLLR	RNAV	"DV"	SKLER - 26R - 6000 FT ZOEER - 26L - 7000 FT PRAYY - 27 - 6000 FT	LNDG WEST ONLY
DUUUK	ANY	GMANN WEST - 14000 FT - 250KTS EAST - 13000 FT - 280KTS	BIIGG - 26L/R, 27 HDG 085	LNDG EAST & WEST
GESNR	RNAV	"DV"	CASST - 8L - 6000 FT HOWLN - 9/8R - 6000 FT	LNDG EAST ONLY
GILCO	ANY	WOLDE WEST - 12000 FT - 250KTS EAST - 17000 FT - 280KTS	GILCO - 8L/R, 9 HDG 265 VECTOR TO FINAL ALL OTHER RWYS	LNDG EAST & WEST
GUSHR	RNAV	"DV"	GUSHR - 8L - 6000 FT	LNDG EAST (8L) ONLY
HTOWN	RNAV	"DV"	WDLNS - 8R - 7000FT	LNDG EAST (8R) ONLY
HUDZY	ANY	HUDZY - 5000 FT	LUDVG	LNDG EAST AND WEST
LINKK	RNAV	"DV"	GARRR - 26L/R - 7000 FT RDFSH - 27 - 6000 FT	LNDG WEST ONLY
MSCOT	RNAV	"DV"	SKLER - 26R - 6000 FT ZOEER - 26L - 7000 FT PRAYY - 27 - 6000 FT	LNDG WEST ONLY
NNCEE	RNAV	"DV"	CASST - 8L - 6000 FT HOWLN - 9/8R - 7000 FT	LNDG EAST ONLY
OHIIO	ANY	ZEEKK WEST - 12000 - 250KTS EAST - 17000 - 280KTS	PNUUT	LNDG EAST AND WEST
RIICE	ANY	RIICE WEST - 16000 - 280KTS EAST - 9000	LYYTE - 26L/R, 27 HDG 085 VECTORS TO FINAL ALL OTHER RWYS	LNDG EAST AND WEST
SKNRD	RNAV	"DV"	CASST - 8L - 6000 FT HOWLN - 9/8R - 6000 FT	LNDG EAST ONLY
SOULL	RNAV	"DV"	GARRR - 26L/R RDFSH - 27 HOWLN - 8R/9 DOMNO - 8L	LNDG EAST AND WEST
TEJAS	RNAV	"DV"	SKLER - 26R - 6000 FT	LNDG WEST

			PRAYY - 27 - 6000 FT	
TTORO	ANY	"DV"	TTORO - 8000 FT	LNDG EAST (8R) ONLY
ZEEKK	RNAV	"DV"	HOOTI - 26R - 6000 FT BOZZZ - 26L - 8000 FT CLSIK - 27 - 4000 FT	LNDG WEST ONLY

5.2.3 Hobby STARS

- STARS that are highlighted in yellow serves all rwys at William P Hobby

STAR	Type	Cross Altitude / Speed	End Location / Rwy / Hdg	Direction / Specific Rwy
BAYYY	RNAV	"DV"	EMARR - 4 ALLLY - 13L/R, 17	LNDG SOUTH AND EAST
BELLR	RNAV	"DV"	GEEEO - 4 - 6000 FT SUESS - 13L/R, 17 MAAHH - 22 RJAAY - 31L/R, 35	LNDG NORTH, SOUTH EAST, & WEST
BLUBELL	ANY	BLUBL - 9000	CHEWI	LNDG ALL RWYS
CESAN	RNAV	"DV"	ALLLY - 13L/R EMARR - 4 JCNT0 - 22 MMOOW - 31L/R KAANE - OTHER ARPTS	LNDG NORTH, SOUTH EAST, & WEST
HUDZY	ANY	HUDZY - 14000	LUDVG	
KIDDZ	RNAV	"DV"	SUESS - 13L/R, 17 MAAHH - 22 RJAAY - 31L/R, 35	LNDG NORTH, SOUTH EAST, & WEST
OHIIO	ANY	ZEEKK IAH WEST - 12000 - 250KTS IAH EAST - 17000 - 280KTS	PNUUT - OTHER ARPTS	LNDG ALL RWYS
PUCKS	RNAV	"DV"	JCNT0 - 22 MMOOW - 31L/R, 35	LNDG NORTH, EAST, & WEST
QTRBK	ANY	KIDDZ - 12000 - 280KTS	KIDDZ	LNDG ALL RWYS
TCHDN	ANY	BELLR - 12000 - 250KTS	BELLR	LNDG ALL RWYS

TKNIQ	RNAV	"DV"	ALLLY - 13L/R EMARR - 4 KEMAH - 22 MMOOW - 31L/R MMOOW - OTHER ARPTS	LNDG NORTH, SOUTH EAST, & WEST
WAPPL	RNAV	"DV"	ALLLY - 13L/R EMARR - 4 MAAHH - 22 UBETR - 31L/R PLKTN - 8000 FT - OTHER ARPTS	LNDG NORTH, SOUTH EAST, & WEST