ORDER

HOU 7110.1Y

HOBBY ATCT
AIR TRAFFIC CONTROL

February 10, 2013

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Distribution: HOU ATCT, Facility Directives Repository

Initiated by: HOU-500

HOBBY ATCT

AIR TRAFFIC CONTROL

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FOREWORD

This order defines the duties and responsibilities of, and depicts allocated airspace for all positions of operations at Hobby ATCT.

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CHAPTER 1: GENERAL

CHAPTER 2: PROCEDURES

SECTION 1 - GENERAL

SECTION 2 - STARS PROCEDURES

CHAPTER 3: COORDINATION

CHAPTER 4: FLIGHT PROGRESS STRIPS

CHAPTER 5: POSITION RELIEF BRIEFING

CHAPTER 6: SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM (SMGCS)

CHAPTER 7: POSITION DUTIES AND RESPONSIBILITIES

APPENDICIES

CHAPTER 1: GENERAL

1-1. PURPOSE.

This order defines duties, responsibilities, and allocated airspace for all positions of operation at Houston (Hobby) Tower.

1-2. DISTRIBUTION.

This order shall receive standard intra-facility distribution and posted to the Facility Directives Repository

1-3. CANCELLATION.

This handbook cancels the HOU 7110.1X dated April 20, 2012.

1-4. EFFECTIVE DATE.

This order is effective February 10, 2013.

1-5. EXPLANATION OF CHANGES.

3-3.c	Added requirement for GC to advise LC of personnel in the RSA. Added requirement to suspend use of a runway when there is a vehicle in the RSA
3-3.d	Added requirement for GC to obtain approval from LC prior to assigning a runway for departure that is not part of the flow
3-3.g	Added "Cross Delta"
Chap. 4	Clarified Flight Progress Strip marking
7-4.b.2	Added pushback requirements

1-6. WORD MEANING.

As used in this handbook:

a. Shall/must, or an action verb in the imperative sense, means a procedure is mandatory.

b. Should, means a procedure is recommended.

c. May, or need not, means a procedure is optional.

d. Will indicates futurity, not a requirement for the application of a procedure.

e. Singular words include the plural, and plural words include the singular.

1-7. ANNOTATIONS.

Revised, new, or reprinted, pages will be marked as follows:

a. The change number and effective date will be printed on each revised or additional page.

b. Bold vertical lines in the margin indicate the location of substantive revision to the order. Bold vertical lines adjacent to the title of a chapter, section, or paragraph indicate that extensive changes have been made to that chapter, section, or paragraph.

c. Statements of fact or of a prefatory or explanatory nature relating to directive material are set forth as notes.

1-8. ABBREVIATIONS.

AFLCS	Airfield Lighting Control System
ALSF	Approach Light System w/ Sequenced Flashing Lights
ARFF	Airport Rescue & Fire Fighting
AIT	Automation Information Transfer
ATM	Air Traffic Manager
CIC	Controller in Charge
CD	Clearance Delivery
ECN	Emergency Communications Network
ESL	Emergency Service Level (STARS)
DEF	Discrete Emergency Frequency
FD	Flight Data
FSL	Full Service Level (STARS)
GC	Ground Control
GC/DEF	Ground Control working the DEF during an emergency
GPM	Geographic Position Markings
GSI	General System Information
HC	Helicopter Control
IDS	Information Dissemination System
JPA	SanJac Satellite
LA	Local Assist
LC	Local Control
LUAW	Line Up and Wait
LYD	Lakeside Satellite
MVA	Minimum Vectoring Altitude
OS	Operational Supervisor
POFZ	Precision Obstacle Free Zone
RVR	Runway Visual Range
SSALR	Simplified Short Approach Light System w/ Runway Alignment Indicator Lights
TCP	Transfer of Control Point

CHAPTER 2: PROCEDURES

Section 1. GENERAL

2-10. RUNWAY SELECTION.

The OS/CIC has primary responsibility for determining the active runway(s) and whether LUAW procedures will be used. This determination requires consideration of factors such as surface wind direction and velocity, wind shear/microburst alerts/reports, adjacent airport traffic flows, severe weather activity, IFR departure restrictions, construction, equipment outages, and environmental factors which may affect the safety of landing and takeoff operations.

a. Normal Flows:

Flow	Landing Runways	Departure Runway(s)	Notes
South	12R, 12L	12R, 12L, 17, 22	RY 17 not advertised on ATIS, may be appreq'd by Hobby final, use is at LC's discretion
North	30L, 30R	30L, 30R, 35	RY 35 not advertised on ATIS, may be appreq'd by Hobby final, use is at LC's discretion. RY 22 may be used with OS/CIC approval and coordination between LC and GC.
East	4, 35	4, 35, 30L, 30R	RY 35: may be appreq'd by Hobby final
West	22, 17	22, 17	Parallels inactive
Church	4, 35	4, 35, 12R, 12L	Sunday 1000-1200 LCL *(see restrictions below)*
SMGCS	4	4	Numerous restrictions – see chapter 7
MID	4	22	Nightly 0000-0600 LCL *(see restrictions below)*

b. Noise Abatement Procedures:

Note: These procedures <u>shall</u> be used unless wind, weather, runway/taxiway closures, runway conditions, NAVAID outages, or traffic, dictate otherwise.

1. Restrict turbojet aircraft to land on Runway 4 and depart on Runway 12R and 12L:

(a) Between the hours of 1000 to 1200 local on Sundays.

(b) Departures shall exit Hobby airspace via Runway 4 departure gates unless otherwise coordinated with Houston Approach Control.

2. Restrict turbojet aircraft to land Runway 4 and depart Runway 22 between midnight and 0600 local, daily. Ensure that the Mid flow light switch is selected on the airport lighting panel. Departures shall be coordinated with I90.

2-11. LUAW PROCEDURES

LUAW procedures may only be used after the ATM determines that an operational need exists. OS/CIC's are authorized to implement LUAW procedures using the following guidelines:

a. Aircraft may not be LUAW at an intersection between sunset and sunrise.

b. LC shall not be combined with any non-Local Control position. (HC and LA are considered LC positions).

c. OS/CIC shall not be combined with a control position (LC, HC, or GC).

d. LA must be open when authorizing more than 1 aircraft to LUAW on the same runway.

e. LC shall not use LUAW on intersecting runways simultaneously.

f. Do not authorize an aircraft to LUAW if an aircraft has been cleared to land on that runway. Do not clear an aircraft to land if an aircraft has been LUAW on that runway unless the following conditions are met:

1. Safety Logic is operating in "Full Core Alert Mode" *(Normal, Rain or RADAR),* Limited - is NOT Full Core Alert).

2. Ceiling must be 800' or greater

3. Visibility must be 2 miles or better.

4. There are no restrictions based on runway geometry.

5. There are no fleet mix restrictions.

g. LUAW procedures may be curtailed at the OS/CIC's discretion when traffic volume or complexity warrants.

h. Although all runways and the taxiways which intersect them are visible from the tower, the following situations depict visibility limitations aircraft may encounter:

1. Aircraft in position on Runways 4 or 35 and aircraft in position on Runway 30L are not visible to each other

2. Aircraft in position on Runways 30L or 30R and aircraft in position on Runway 22 are not visible to each other.

3. Aircraft in position on Runways 12L, 12R and 17 and aircraft in position on Runway 22 are not visible to each other

i. Intersection departure distances are provided in appendix A**.**

j. Distance from runway and speed of aircraft on final must be closely monitored when using LUAW procedures as well as expected runway occupancy time.

k. Due to close proximity of intersections on taxiway Golf, extra vigilance is required.

l. Strip management shall be in accordance with paragraph 7-1.c.7

m. LAHSO OPERATIONS ARE NOT AUTHORIZED

2-12. ENGINE RUN UPS.

Engine run ups are to be approved by City Operations after consideration has been given to day of week, time of day, cloud cover, winds, location, engine size, duration of test, nature of emergency, etc.

a. The primary location for engine run up tests is on the Taxiway Golf holding bay with aircraft positioned on a heading of 190-220 degrees. If a different location is required due to one or more of the above conditions, Airport Operations will assign that location on a case-by-case basis. Alternative locations include, but are not limited to:

1. Taxiway Mike between Taxiways Papa and Mike-3

2. Taxiway Mike between Taxiways Hotel and Mike-1

3. Taxiway Kilo between Taxiways Juliet and Kilo-1

Note: *Extra caution should be used when small aircraft are operating behind large aircraft performing high-power run-ups.*

b. When performing engine run ups at the alternative locations, aircraft are to be positioned so that they are parallel to the taxiway. The heading will depend on the conditions mentioned above.

c. Engine run up tests are normally restricted between the hours of 0700 and 2200 local time. Exceptions to this restriction may be approved by Airport Operations only if a scheduled morning departure would have to be canceled without the run up. The maintenance supervisor on duty is responsible for coordinating with Operations for this permission.

d. Pilots/mechanics must contact the FAA Control Tower on ground control frequency for clearance to the designated area. Radio contact must be maintained with the tower at all times.

e. Engine run ups may be conducted on Taxiway Romeo east of Runway 4 by Reciprocating/Turboprop engine aircraft only. Aircraft should be positioned so that the prop blast is directed towards 040 degrees.

f. Run-up pads at the approach ends of runways may only be used by reciprocating engine aircraft for pre-takeoff checks.

2-13. GLIDESLOPE CRITICAL AREA.

a. No aircraft or vehicle shall be allowed to enter the Glideslope critical area when the ceiling is reported to be less than 800 feet and/or the visibility is reported to be less than 2 miles and an aircraft conducting an ILS approach is inside the final-approach fix.

b. Critical areas are:

1. Runway 4 - Taxiway “K” and Taxiway “K-1”
2. Runway 30L - Taxiway “Q” and Taxiway “N”
3. Runway 12R - Taxiway “F” west of Runway 12R

2-14. WIND DISPLAYS

The ITWS ribbon display(s) shall be used as the primary source of wind information. If it is suspected that the displayed wind data is erroneous, notify maintenance and continue to issue displayed data until advised by maintenance that the system is unreliable or unusable. If advised that the displayed data is unusable, use alternate methods of relaying wind information, *(i.e. estimate using windsock).*

2-15. BIRD ACTIVITY.

When a bird strike is reported or an abnormal amount of bird activity is observed by tower personnel:

a. Ensure that the provisions of Handbook 7110.65 para 2-1-22 are followed.

b. Inform airport management of any unusual bird activity.

c. Advise the OS/CIC.

d. Complete MOR entry in CEDAR

2-16. REPORTING ESSENTIAL FLIGHT INFORMATION.

a. Under normal conditions, airport representatives will give NOTAM information directly to the Automated Flight Service Station (AFSS). However, under emergency conditions, Hobby Tower personnel shall relay NOTAM information upon request to the AFSS for dissemination as received from any airport representative indicated below.

b. NOTAM information relayed to AFSS shall be recorded on the FAA Form 7230-4 including the airport representative's name.

Example: NOTAM RY 22 CLSD 1900 TO 2100 FOR REPAIRS (COX).

c. Airport personnel authorized to issue NOTAM's are:

1. Airport Manager

2. Assistant Managers

3. Operations & Safety Officers

4. Airport Police (Captains, Lieutenants and Sergeants)

d. The airport manager's office shall supply Hobby Tower with a current list of personnel authorized to issue NOTAM's. This list shall be kept in the Operational Supervisor's binder.

e. The OS/CIC shall ensure that the current NOTAM information received from City Operations is entered on the appropriate page of the IDS-4.

2-17. THREE HOUR TARMAC RULES.

A Pilot-in-Command may request to return to the gate to comply with the Three Hour Tarmac Rule. When a request is received, notify the OS/CIC and:

a. Provide expeditious handling to comply with the pilot's request.

b. Approve requests unless:

1. The movement of the aircraft would result in an airborne holding delay or a ground delay of 15 minutes or more.

2. The movement of this aircraft would result in placing another aircraft in jeopardy of violating the Three Hour Tarmac Rule.

3. This request would displace departures already in delay status and result in delays in excess of an additional 15 minutes.

4. This request would result in a diversion or airborne holding of more than 3 aircraft.

c. Consider operational complexity, surface operations, other arrival/departure runways, taxi routes, ramp areas and low visibility operations.

d. Consider security and customs concerns.

e. Consider local safety concerns, such as multiple runway crossings

f. Consider location of alternate de-planement areas, if applicable

g. Consider taxiway/runway closures and/or airport construction

h. An aircraft requesting taxi clearance should be accommodated as soon as operationally possible. If a taxi request cannot be accomplished in a timely manner, the following phraseology is suggested:

1. "…expect a (minute) delay due to (reason)

OR

2. "…unable due to operational disruption."

Section 2. STARS PROCEDURES

2-20. INFORMATION DISPLAYED.

a. Data blocks: Controller's shall display the position symbol, ACID, Type, Altitude and speed for aircraft in their airspace.

b. The automatic altitude readout of an aircraft under another controller's jurisdiction may be used for vertical separation purposes without verbal coordination provided the operation is conducted using single site radar coverage.

c. General System Information shall include: ATIS code, HOU Altimeter, Runway and Approach in use.

d. MVA map – LC and HC shall display the MVA map that correlates with the RADAR site in use,

2-21. ALTITUDE FILTERS.

Altitude filters shall be set on both tracked and untracked targets as follows:

a. Local Control

1. Lower limits - 000 feet.

2. Upper limits – 1,000 feet above tower airspace.

Example: Multi-Function, filter 000060 space 000060

b. Helicopter Control

1. Lower limits – 000 feet

2. Upper limits – 2,000 feet (minimum)

2-22. CHANGING MODE LEVEL

a. STARS will normally be operated in FUSION mode. If FUSION fails:

1. Transition to South RADAR – FSL mode *(ESL mode if necessary).*

2. If South RADAR fails: transition to North RADAR – FSL mode *(ESL mode if necessary).*

b. The OS/CIC shall:

1. Make the determination to transition modes

2. Coordinate with other tower positions and I90 if transition will affect their operation.

3. Assist affected positions in the transition

4. Ensure that displayed information is adequate

2-23. RADAR SERVICES

a. Provide Class B services as directed in JO 7110.65.

b. Provide all radar identified aircraft/helicopters appropriate radar services. Advise the aircraft when:

1. Radar contact is established or when radar contact is lost

2. Radar services are terminated

3. Leaving the Houston Class B airspace.

c. All aircraft/helicopters operating in HOU Tower Class B airspace shall be radar identified prior to entering Class B airspace, and shall display a full data block to the maximum extent possible. Medical helicopters that depart Bravo airspace westbound from the Medical center need not be radar identified.

2-24. RADAR FAILURE

In the event of a RADAR failure

a. Coordinate with the I90 FLM and Hobby final

b. Hobby tower's airspace reverts back to I90.

c. Automatic releases are cancelled.

d. Helicopter Control (HC) shall be closed and combined with LC.

2-26-2-99. RESERVED

CHAPTER 3. COORDINATION

3-1. INTERPHONE MESSAGE FORMAT.

The following are step-by-step procedures to be used in inter-phone coordination:

a. Receiver states position identification

b. Caller states position identification *(may be omitted for intra-facility coordination)*

c. Caller states message.

d. Receiver states response to caller's message

e. Receiver states operating initials. *(may be omitted for intra-facility coordination)*

f. Caller states operating initials. *(may be omitted for intra-facility coordination)*

3-2. USE OF HOTLINES/OVERRIDE LINES.

a. The hotlines connect to a speaker that is audible to several positions at I-90. There is a two second delay between the time the line is activated and the time the speaker is activated. Use the following inter-phone format to ensure that the appropriate position at I90 hears the call: "(I90 position), Hobby on the (appropriate line), (I90 position).

Example: "South, Hobby, on the one line, south."

b. The override lines connect directly to the headset of a control position. Use the hotlines/override lines as appropriate to coordinate other exchanges of information.

3-3. COORDINATION BETWEEN LOCAL CONTROL AND GROUND CONTROL.

a. LC shall advise GC and Hobby final *(if necessary)* when an aircraft's landing runway is other than that displayed in the STARS field 2 (scratch pad).

b. LC shall advise GC when an aircraft's departure runway assignment is changed.

c. GC shall advise LC of all known maintenance personnel (City or FAA) inside the Runway Safety Area (RSA). No operations shall be allowed if a vehicle is present in the RSA.

d. GC shall obtain approval from LC prior to assigning a departure runway that is not part of the flow

e. GC shall advise LC of any aircraft assigned an intersection departure by marking the strip with the runway and intersection assigned. (i.e. 12R/K)

f. GC shall obtain approval from LC, via the landline, prior to issuance of any clearance that crosses or uses any portion of an active runway. Before coordinating, determine if the operation is feasible. When coordinating, reference any of LC's traffic that may conflict with the intended operation.

g. "Coded Crossings" shall be used in coordination between LC and GC

1. *"Cross Alpha"* cross RY 4/22 on TWY 'Y' *(approach end RY 22)*

2. *"Cross Bravo"* cross RY 4/22 to/from TWY 'B' from/to 'K2'

3.	*"Cross Romeo"*	cross RY 4/22 from TWY 'R' to TWY 'C'
4.	*"Cross Charlie"*	cross RY 4/22 on TWY 'C' or southbound onto TWY 'R' from TWY 'C'
5.	*Alpha Transition"*	taxi NE on RY 4/22 from TWY 'C' to TWY 'Y'
6.	*Bravo Transition*	taxi NE on RY 4/22 from TWY 'C' to TWY 'B'
7.	*"Cross Mike"*	cross RY 4/22 on TWY 'M'
8.	*"Cross Juliet"*	cross RY 4/22 to/from TWY 'J' from/to 'H2'
9.	*"Cross Golf"*	cross RY 4/22 on TWY 'G' *(approach end RY 4)*
10.	*"Cross Delta"*	cross RY 12L on TWY 'D'
11.	*"Echo East"*	cross RYs 12R/30L, 17/35 and 12L/30R on TWY 'E' to the north ramp.
12.	*"Echo West"*	cross RYs 12L/30R, 17/35 and 12R/30L on TWY 'E' to the west ramp.
13.	*"Cross Foxtrot"*	cross RY 17/35 on TWY 'F"
14.	*"Hotel East"*	cross RYs 12R/30L and 12L/30R on TWY 'H'
15.	*"Hotel West"*	cross RYs 12L/30R and 12R/30L on TWY 'H'
16.	*"Kilo East"*	cross RYs 12R/30L and 12L/30R on TWY 'K'
17.	*"Kilo West"*	cross RYs 12L/30R and 12R/30L on TWY 'K'
18.	*"Lima East"*	cross RYs 12R/30L and 12L/30R on TWY 'L'
19.	*"Lima West"*	cross RYs 12L/30R and 12R/30L on TWY 'L'
20.	*"Cross Papa"*	cross RY 30R on TWY 'P' *(approach end RY 30R)*
21.	*"Cross Enterprise"*	cross RY 30L on TWY 'N' *(approach end RY 30L)*
22.	*"Cross Foxtrot"*	cross RY 17 on TWY 'F'
23.	*"Cross Exec"*	cross RY 17/35 and 4/22 from/to TWY K1 to/from TWY 'G'
24.	*"Cross Braniff"*	cross RY 35 on TWY 'K' *(approach end RY 35)*
25.	*"Cross Blue line"*	cross RY 12L/30R on RY 4/22.
26.	*"Cross Orange line"*	cross RY 12R/30L on RY 4/22.
27.	*"Cross Green line"*	cross RY 17/35 on RY 4/22.

e. Coordination Restrictions:

1. Coordination to cross or use any portion of an active runway shall be on the landline. GC shall advise LC and LC shall acknowledge when the operation is complete. It is not required to make this notification on the landline

2. Coordination to cross Runway 17/35 westbound on Taxiway Hotel shall not be initiated or approved until the aircraft/vehicle is south of Runway 12R/30L.

3. Coordination for a Hotel East crossing shall not be initiated or approved until the aircraft/vehicle is east of Runway 17/35.

4. Anytime Runway 17 is assigned as a departure runway, either full length or from one of the intersections, west bound Juliet and 17/Hotel crossings shall not be requested or granted concurrently. A 17/Hotel crossing shall not be requested or granted until after the Juliet crossing is complete.

5. GC shall complete all coordinated runway crossings prior to relinquishing the position.

f. Area of Control

1. South & North Flow operations: LC shall retain control of arrivals operating between the parallel runways. *(see appendix C*) GC shall give way to LC's traffic.

2. LC and GC shall have priority on taxiways as depicted in the "Preferred taxi and ground movement" maps in appendix B.

g. Transfer of Control Points (TCP)

1. Runway 12R/17 departures on taxiways Delta and Echo shall be switched from GC frequency to LC frequency holding short of Runway 12L.

2. Runway 17 departures from the west ramp shall be transferred from GC frequency to LC frequency holding short of Runway 12R.

3. Runway 35/G departures when runway 4/22 is active shall be transferred from GC frequency to LC frequency holding short of runway 4/22.

NOTE: Aircraft covered by above paragraphs 1, 2 and3 shall be instructed by Ground Control to monitor tower frequency for runway crossing clearance.

3-4. COORDINATION BETWEEN LOCAL CONTROL AND HELICOPTER CONTROL.

a. General

1. HC shall utilize coded arrival/departure routes to the greatest extent possible.

2. HC shall advise GC of helicopter landings/departures prior to authorizing helicopters to land or depart. (i.e. "South Ramp down").

Note: This is not required to be done on a landline.

3. (North and South Flow) HC shall not allow helicopters from the east ramps departing or arriving from the north, to overfly any portion of runway 22. HC shall instruct the helicopter to remain east of the approach end of runway 22

b. Arrivals

1. HC shall utilize automated point-out procedures to coordinate arrivals from the outer fixes (GOLD, BROADWAY, BALLPARK and STONE) to the inner fixes (TOWER, TERMINAL, TRIANGLE and SOUTH RAMP).

2. If landing does not require crossing runways, no further coordination is required with LC, including arrivals from the north going to the east ramps during North or South flow.

3. Coordination to cross active runways shall be on the landline. HC shall:

(a) Reference all of LC's pertinent traffic. (landing, departing or taxiing)

(b) State the call sign

(c) State the destination (i.e. south ramp, plate etc.)

(1) If the destination is a "ramp" there is no implied altitude restriction over the runway

(2) If the destination is either "the triangle" or "the plate", the coordination implies that the aircraft will remain at 500' AGL over the runways.

Examples:

"behind SWA32, Police 72F into the triangle" (alt restriction = 500')

or

"behind SWA32, Police 72F to the HPD ramp" (alt restriction = none)

c. Departures

1. Coordination to depart the airport shall be on a recorded landline.

(a) HC shall reference all of LC's pertinent traffic. (landing, departing or taxiing)

(b) State the departure point

(1) If the departure point is either "Triangle" or "Plate", the Helicopter shall be at 500' AGL before crossing over the runways.

(2) If the departure point is from a ramp, there is no implied altitude restriction.

(c) State the direction of departure:

(1) A direction destination (Northbound, westbound, etc.) implies HC will instruct the helicopter to proceed direct to the inner fix crossing runways as needed.

(2) A "direct – outer fix" implies HC will instruct the helicopter to proceed direct to the outer fix <u>without</u> overflying the inner fix and without crossing any runways.

Examples:

"behind SWA32, Triangle direct Broadway" *(the helicopter will be instructed to proceed direct to Broadway without overflying the terminal)*

or

"behind SWA32, West ramp, northbound" *(the helicopter will be*

instructed to proceed direct to the terminal to intercept the coded departure route)

2. In all cases, HC shall monitor the RADAR and maintain separation from all of LC's traffic. The coded route shall be joined as soon as practical.

d. Overflights

1. HC shall enter aircraft type and route information in the data block for all pipeline aircraft flying Delta Routes

(a) Type: HELO, C172, etc

(b) Route: D2 (indicates D2 route)

2. AIT may be used for Pipeline aircraft under the following conditions

(a) Type aircraft and coded route shall be in the data block

(b) Automated point-outs may only be used when there is no applicable traffic that would need to be referenced. Otherwise verbal point-outs shall be made over the landline.

(c) Automated data-block hand-offs may be used however LC must use extra diligence to ensure that they hand-off and that HC takes the hand-off back before the aircraft reenters HC's airspace. Verbal hand-offs with no data-block transfer are permissible.

e. Vertex Helicopter: Due to Vertex Helicopter's location on the airfield, extra caution must be used in order to ensure a safe operation. In an effort to ensure effective communication and coordination between LC and HC, the identifier **VTX** shall be used for all Vertex helicopters.

CHAPTER 4. FLIGHT PROGRESS STRIPS

Manually prepared flight progress strips shall comply with the FAAO 7110.65.

(1) **ACID** (1A)	(4) **BCN**	(7) **FIX** 7A	(9) **RTE**	10	11	**12**
(2) **TYP** **2A**	(5) **PTIM**	**8**		**13**	14	15
(3) **CID**	(6) **RAL**		9A	16	17	18

(Figure 4-1)

4-1. IFR: *(Refer to figure 4-1)*

Box 2a - Utilize the following symbology to depict the departure gate:

GATE	SYMBOL	SID/PDR	NOTES
GOMER	M	LOA	Not landing DFW area
	D	CRIED, GIFFA, LOA	Landing DFW area
CLEEP	C	LFK	
	W	AEX, ELD, RAECN	
TRIOS	S	SBI	
BOLOS	B	*RV* VUH	
	X	BOWFN	Weather reroute only – may **NOT** be used unless I90 and ZHU TMU have activated the route swap.
GULF	U	VUH	MUSYL transition
	K	KENGS	MUSYL transition KENGS
AGGIT	H	NGP	aoa FL180
FREEP	F	PSX, HUB243	
PRARI	P	IDU	
	N	IDU..CLL	Aircraft overflying CLL
	Z	WAILN	Landing SAT area
Local	L		

NOTE: Aircraft assigned an initial altitude of 3,000' shall use the same letters as above with a circle drawn around the letter. E.g.; (P) (C) (L) additionally these aircraft shall have their frequency written in box 9a.

NOTE: When rerouting of aircraft is necessary, departure gate strip marking shall include the reroute departure gate followed by the primary departure gate.

Example: **P/D** - for a Dallas reroute over Industry

Box 1 - Aircraft Identification

Box 1A - Revision number

Box 2 - Type aircraft

Box 3. - CID: *"Check Mark" by CID indicates entered in Delay-Ops*

Box 4 - Beacon code – Check mark by code indicate STARS data has been checked..

Box 7A - Parking location (use symbology below)

N	-	North Ramp	E	-	East Ramp
NE	-	Northeast Ramp	SE	-	Southeast Ramp
R	-	East Ramp *(off taxiway 'R')*	S	-	South Ramp
P	-	East Ramp *(off taxiway 'P')*	W	-	West Ramp

Box 8 - Departure runway or departure runway/intersection. (i.e. 12R/K)

Box 9A - Special departure instructions. (Circle instructions - place a check mark by the circled data when issued).

Box 10 - *(gate hold only)* Time pilot advises ready to start engines.

Box 11 - *(gate hold only)* Expected engine start time

Box 12 - IFR clearance issued. ("*Check mark" if issued verbally, "P" if by PDC).*

Box 13 - ATIS code *received* by pilot.

Box 14 - Time, release is requested from I-90

Box 15 - Time released by I-90

Box 16-18 - Not Used.

4-2. VFR: *(Refer to figure 4-1)*

Box 1. - Aircraft ID

Box 2 - Aircraft Type

Box 2A. - Departure gate *(if required)*

Box 4. - Beacon code

Box 6 - Requested/Assigned altitude

Box 7A - Parking location

Box 8 - Assigned runway or runway/intersection

Box 9. - A large letter "V"; the direction of flight (destination airport if local area, "LCL" if local air work) and departure frequency, if applicable.

Box 13 - ATIS code received by pilot

CHAPTER 5. POSITION RELIEF BRIEFING

a. Tower personnel, prior to assuming any position for the first time on a shift shall familiarize themselves with the information in CEDAR (Log) and the SIA.

b. Position relief briefings shall be conducted in accordance with FAAO 7110.65, Appendix D, Standard Operating Practice (SOP) for the Transfer of Position Responsibility

c. Controllers shall pre-brief using the pre-brief checklist in *appendix A-2* prior to plugging in for a relief briefing at any operational position. There is no pre-brief for the OS/CIC position

d. Prior to obtaining a relief briefing the relieving controller shall monitor the position long enough to become familiar with the traffic situation.

e. Relief briefings shall be recorded using the RB function of the RDVS in accordance with FAAO 7210.3. The controller being relieved will activate the RB button.

f. Position briefings shall be per the position checklist in *appendix A-3.* Items in **RED** must be verbally stated. Items in **BLACK** need only be mentioned if applicable. Note: The OS/CIC position shall use the checklist in *appendix A-1* to brief.

g. The controller being relieved and the relieving controller share equal responsibility for the completeness and accuracy of the briefing.

h. Local and Ground Control are critically dependent positions and shall not be simultaneously relieved. A minimum of 2 minutes must elapse after completion of position relief on either position before beginning relief on the other.

i. Controllers being relieved must remain at the position and monitor the operation for a minimum of 2 minutes. After the 2 minutes have elapsed, the relieved controller must indicate completion by use of the RB function of RDVS. "(*initials*)" off."

Note: *The ATM waives this requirement for the FD/CD, LA, HC and OS/CIC position.*

j. **Supervisor Notification**: All personnel shall ensure that the OS/CIC is notified of conditions that impact operations, including but not limited to:

1. Weather/PIREPs

2. Equipment status

3. Emergency situations

4. Special flights / operations

5. Pilot initiated aborted takeoffs and missed approaches

6. TCAS/RA reports

7. Any unusual situations

CHAPTER 6. SMGCS OPERATIONS (Surface Movement Guidance and Control System)

6-1. INSTITUTION OF SMGCS PROCEDURES.

When weather conditions indicate the probability that RVR readings could diminish to 1,200' or lower, Hobby Airport Operations shall be advised.

6-2. PROCEDURES.

If the RVR drops to 1200' or below or appears to be imminent:

a. Notify Airport Operations that SMGCS operations are in use or imminent

b. Notify ARFF Station 81 via ECN that SMGCS operations are in use or imminent

c. Turn on back-up generators for:

1. ATCT Building

2. Runway 4 ALSF approach lights

3. Airfield Lighting System

d. Activate Airfield Lighting System to day or night SMGCS lighting setting, as appropriate

6-3. SMGCS OPERATIONS

a. Airport Operations shall:

1. Terminate all construction activity in movement areas and determine whether construction shall be terminated or limited in non-movement areas.

2. Provide "Follow-Me" service to and from runways/parking areas to Ground Position Markings (GPM). *(See appendix C for GPM's)*

NOTE: Airport Operations and ARFF vehicles are allowed unescorted entry onto movement areas. All others require escort service by Airport Operations.

b. Hobby Tower shall:

1. Broadcast on the ATIS: "SMGCS low visibility Operations are in effect."

2. Only use Runway 4. All other runways shall be designated as Inactive

3. Designate Taxiway Golf, south of runway 4 as inactive so as to prevent an inadvertent encroachment into the Precision Obstacle Free Zone (POFZ).

NOTE: This portion of Taxiway Golf does not have SMGCS lighting installed

4. Use taxiway Yankee is for westbound traffic.

5. Use Taxiway Zulu is for eastbound traffic.

6-4. DEPARTURES.

a. Pilots are responsible for contacting ATC prior to pushback or repositioning aircraft. The movement of aircraft to a GPM or movement area boundary line may be accomplished with a follow-me vehicle or other appropriate means, including unassisted taxi if visibility on the aprons permits. When holding short of a GPM, pilots shall contact ground control for taxi instructions.

b. Hobby tower will use pilot position reports to monitor the aircraft position prior to its entry onto the movement area.

c. (Follow-me service) Air carriers may request follow-me service. All other aircraft shall be escorted by Airport Operations from the non-movement area boundary marking to a GPM or runway entrance.

6-5. DEPARTURE TAXI ROUTES *(depicted in Appendix D)*

a. North Ramp-West side of terminal: Aircraft will taxi with ATC clearance to one of the GPM's and then call GC for clearance to continue taxi into the movement area. Aircraft will taxi eastbound on taxiway Zulu to H-1 and then via Hotel to Runway 4.

b. North Ramp- East side of terminal: Aircraft will taxi with ATC clearance to one of the GPM's and then call GC for clearance to continue taxi onto the movement area. Aircraft will taxi westbound on taxiways Yankee to H-1 and then via Hotel to Runway 4.

c. North Ramp-South side of terminal: After receiving pushback clearance onto taxiway Y, aircraft will request to continue to taxi in the movement area along the low visibility taxi route.

1. Aircraft located on the east side gates will follow paragraph b above.

2. Aircraft located on the west side gates will follow paragraph a above.

d. West Ramp: Aircraft will taxi with ATC clearance south bound on taxiway Golf and hold at the "G1" Geographic Position Marking (GPM). When directed by ATC, aircraft will turn right on Taxiway Hotel and hold short of Runway 4.

e. South Ramp: Aircraft will taxi with ATC clearance northwest bound on taxiway Juliet and hold at "J1" Geographic Position Marking (GPM). When directed by ATC, aircraft will turn left onto taxiway Kilo and hold short of the ILS critical area and await takeoff clearance from ATC on taxiway K-1.

f. Southeast/Papa Ramp: Aircraft will taxi with ATC clearance northwest bound on taxiway Charlie to "C1" Geographic Position Marking (GPM). When directed by ATC, aircraft will turn left onto taxiway Kilo and hold short of the ILS critical area and await takeoff clearance from ATC on taxiway K-1.

g. East/Southwest Maintenance/Signature Ramps: Aircraft will exit their ramps, with ATC clearance southwest bound onto taxiway Kilo, and hold short of the ILS critical area and await takeoff clearance from ATC on taxiway K-1.

Representative GPM

6-6. ARRIVALS

a. Taxiways Y and K are used as the primary arrival taxiways.

b. When the RVR is between 600 and 1200 feet, the SMGCS lighting shall be illuminated. Non-SMGCS route lighting may be illuminated at various times for operational reasons.

c. (Follow-me service) Air carriers may request follow-me service. All other aircraft shall be escorted by Airport Operations from the runway exit or a GPM to the non-movement area boundary marking nearest the aircraft's parking location.

6-7. ARRIVAL TAXI ROUTES *(depicted in Appendix D)*

a. North Ramp -West side of terminal: Exit Runway 4 onto taxiway Y and then proceed westbound on taxiway Y to the west side taxi lane. *Request escort if needed.*

b. North Ramp - East side of terminal: Exit Runway 4 onto taxiway Y and then proceed westbound on taxiway Y to the east side taxi lane. *Request escort if needed*.

c. North Ramp - South side of terminal: Exit Runway 4 onto taxiway Y and then proceed westbound on taxiway Y to the Central Concourse *Request escort if needed*.

d. West Ramp: Exit Runway 4 onto taxiway Y then via Taxiways Y, H1, H and G to the appropriate ramp. *Request escort if needed.*

e. South Ramp: Exit Runway 4 onto taxiway K, cross 12L/30R (when directed by ATC). After crossing runway 12L/30R, turn left on taxiway M and hold at the "M1" GPM. After receiving clearance from ATC, turn right onto taxiway L cross runway 12R/30L and continue to the south ramp taxi lane. *Request escort if needed.*

f. Southeast/Papa Ramp: Exit Runway 4 onto taxiway K, cross 12L/30R (when directed by ATC). After crossing Runway 12L/30R, turn left on taxiway M and hold at the "M1" GPM. After receiving clearance from ATC, taxi via M and after receiving clearance from ATC, turn left onto taxiway P cross runway 12L/30R and continue to the Papa ramp. *Request escort if needed.*

g. East/Southwest Maintenance/Signature Ramps: Exit Runway 4 onto taxiway K. Proceed to the east ramp. *Request escort if needed*

CHAPTER 7. POSITION DUTIES AND RESPONSIBILITIES

7-1. LOCAL CONTROL (LC).

a. General

1. Primary frequency 118.7, backup frequency 120.2.

2. Shall monitor frequency 120.95 unless; HC is open or it is being used by another operational position.

3. Issue clearances for movement on active runways and within the airspace depicted in Appendix D from the surface up to and including 5000 MSL, excluding the descent area for the runway in use above 1000 feet and airspace delegated to HC.

4. Determine whether the "quick look" function for silent handoffs is to be utilized.

5. When HOU STARS is out of service, relinquish control of all airspace to the appropriate controller. Record the sequence of arrival aircraft on a writing tablet.

6. When HOU STARS is in ESL mode automatic releases are cancelled, but local still retains control of designated airspace.

7. Shall utilize magnetic tags to indicate flow restrictions, runway closures, special instructions, etc.

b. Weather

1. Solicit PIREPs when required.

2. Make visibility observations

3. Forward all visibility changes to FD and the OS/CIC

4. Broadcast Hazardous In-flight Weather Advisory Service (HIWAS) information as required by FAA 7110.65.

5. Shall inform Hobby Final when the Class B surface area changes from VFR to IFR, or IFR to VFR and when the weather on final is different from what the IDS is displaying.

6. If IFR HC shall be combined with LC.

c. Departures

1. Shall automatically release and retain control of departures until radar or vertical separation exists. Point out any aircraft that may enter airspace other than that owned by the receiving controller.

2. When automatic releases are canceled, shall request release from I90.

3. Shall control departures to ensure they do not turn early into airspace owned by HC (“Triangle” and “Plate”)

4. Shall assign headings that ensure departures exit the Hobby Class B airspace via the appropriate departure corridor except aircraft which will remain clear of I90 airspace.

*Note: TRACON has control for turns once aircraft have left 3000 feet, reference all tagged target*s.

Note: (south flow) LYD may turn departures to the west reference all tagged targets.

5. Shall relay to the departure controller appropriate information on departures as contained in the Houston TRACON/Hobby ATCT Letter of Agreement *(I90/HOU LOA).*

6. Shall hand off via inter-phone all primary and non-tagged targets to departure control.

7. Shall NOT issue a departure clearance to a fixed wing aircraft until they have received the flight progress strip from GC.

8. Shall utilize strip bay management procedures as follows:

(a) Shall place a visual aid in the local control strip bay when men and equipment, aircraft, or a vehicle, are on an active runway.

(b) When an aircraft is ready for departure, the strip is offset in the bay to the right unless a runway crossing will occur prior to take-off clearance, then the strip is offset to the left.

(c) When an aircraft is LUAW, the strip is moved 1/4 of the way out of the holder.

(d) When the aircraft is cleared for takeoff, the strip is moved 3/4 of the way out of the holder.

(e) When the aircraft is switched to departure, the strip is stored.

9. Runway alignment for take-off:

(a) *(if possible)* Runway 12R departures from Delta shall be issued LUAW prior to take-off clearance to preclude inadvertent departure on runway 17.

(b) *(if possible)* Runway 4 departures from Kilo 1 shall be issued LUAW prior to take-off clearance to preclude inadvertent departure from runway 35.

(c) If the traffic situation does not allow for LUAW, visually verify that the aircraft lines up for correct runway. If unable to visually verify alignment, solicit runway alignment confirmation from pilot.

EXAMPLE: SWA54, verify aligned with Runway 12R.

d. Arrivals

1. “Quick look" HOU final when using alpha numeric intelligence for silent handoffs.

2. Have the options of changing the landing runway assignments of arriving aircraft, provided Hobby Tower ensures separation with all successive arrivals. If this runway change is to runway 17 or 35 use caution for traffic HC may have on the coded routes.

3. When STARS is in operation, shall be responsible for the separation of aircraft 5 nm from the runway or the final approach fix, whichever is farther.

4. Shall verbally coordinate missed approaches with the final controller.

5. Shall advise Hobby Final if unable to provide visual separation inside the final approach fix.

e. Practice Approaches

1. Turbojet air carrier aircraft are not normally permitted to make practice instrument approaches, touch-and-go landings, or other landings and takeoffs for training purposes. Exceptions to this policy may be granted on an individual basis for instrument calibration or equipment functional test if permitted by airport traffic.

f. Emergencies:

1. Assist the emergency aircraft to extent possible, affording it "priority" status until the emergency is terminated by OPS 3.

2. Treat all runways and crossing runway intersections as closed until "OPS3" reopens each.

3. Clear "OPS3" onto the emergency runway ASAP after the emergency aircraft lands.

4. Instruct emergency aircraft where to exit runway and to contact GC on the DEF frequency.

5. Coordinate with city operations (OPS3) to reopen crossing runway intersections and landing runway.

7-2. LOCAL ASSIST (LA)

a. Monitors tower frequency in use.

b. At the discretion of Local Control, Local Assist may accept /initiate handoffs/point-outs and coordinate with adjacent facilities as needed.

c. Assist Local Control in maintaining traffic vigilance

7-3. HELICOPTER CONTROL (HC)

a. General

1. Primary frequency 120.95, backup frequency 120.2.

2. Shall issue clearances for movement of VFR aircraft within the airspace depicted in Appendix D from the surface up to and including 1000 MSL. *(Note: ALL IFR aircraft shall be worked by LC only).*

3. Shall not allow any aircraft to enter LC inner 3 mile ring without prior coordination.

4. When HOU STARS is out of service, HC shall be combined with Local Control.

b. Weather

1. Solicit PIREPs when required.

2. Broadcast Hazardous In-flight Weather Advisory Service (HIWAS) information as required by FAA 7110.65.

3. Shall be combined with Local Control whenever Hobby airport is IFR.

c. Departures

1. Shall advise GC prior to authorizing any helicopter to depart. This is not required to be on the landline.

2. Shall call traffic on all moving aircraft/vehicles in the vicinity of the departing helicopter.

3. Shall coordinate with LC on the landline prior to authorizing any helicopter to depart into LC's airspace.

Note: The plate and triangle are not in LC's airspace. Therefore, LC only needs to be advised that HC is climbing into the plate/triangle.

(a) Coordination for a specified direction (i.e. "westbound") implies HC will instruct the aircraft to proceed direct to the inner-fix of the route being flown and then to proceed outbound on the route. LC's approval implies permission to cross all necessary runways to get to the inner-fix.

"Triangle westbound" – approval allows HC to clear a helo from the triangle to the tower and then outbound a coded route to the west (DeBakey, Dome or Gator)

(b) Coordination direct to the outer-fix implies HC will instruct the helicopter to proceed direct to the outer-fix without overflying the inner fix. *(see 7-3.e)*

4. To the extent possible, assign coded departure routes to all helicopters and ensure they stay on those routes.

5. (South/North flow) All northbound helicopter departures from the East ramp and HPD ramp shall be instructed to remain east of the approach end of runway 22 direct to BROADWAY intersection

6. Ensure all airborne aircraft are properly tagged and displayed on STARS.

d. Arrivals

1. To the extent possible, assign coded arrival routes to all helicopters and ensure they remain on those routes.

2. Shall coordinate with LC prior to allowing any helicopter to enter LC's airspace. If the arrival is on a coded route, automated point out procedures should be used.

3. Shall coordinate with LC, over the landline to cross over any portion of an active runway.

4. (South/North flow) All arrivals from the north to the East ramp and HPD ramp shall be instructed to remain east of the approach end of runway 22 to get to the ramp.

5. Shall advise GC prior to allowing any helicopter to land at Hobby airport. This is not required to be on the landline.

e. Runway Crossing – All departures shall be instructed to overfly the inner fix of there route except as listed below.

1. South Flow - East/HPD ramp – remain east of RY 22, direct to Broadway

2. Church Flow – West ramp – remain west of RY 12R, direct to Broadway

3. East Flow – East ramp – remain east of RY 30L, direct to Stone

4. North Flow – East/HPD ramp – remain east of RY 22, direct to Broadway

7-4. GROUND CONTROL (GC)

a. General

1. Primary frequency 121.9, backup frequency 120.2

2. Shall assist LC and HC in maintaining traffic vigilance.

3. Area of responsibility is all taxiways (see appendix B) and inactive runways

4. Shall continually scan the movement areas, work environment, and all areas of responsibility.

5. Shall maintain an awareness of activities in the cab that will affect the GC operation by: observing, listening, monitoring radio frequencies, moving about so as to observe areas normally hidden by obstructions and adjusting to the activity. Areas include, but are not limited to:

(a) Outside Environment

(1) Taxiways/runways

(2) Parking areas for taxiway entry

(b) Inside Environment

(1) Wind instruments

(2) RVR indicators

(3) STARS/ASDE-X

(4) Strips/pad

6. Shall broadcast Hazardous In-flight Weather Advisory Service (HIWAS) information as required by FAA 7110.65.

7. Shall ensure all aircraft taxiing for departure have the current ATIS information.

8. When directed by the OS/CIC or when delays are anticipated, shall enter aircraft beacon codes in DelayOps. Place "Check Mark" by CID to indicate aircraft has been entered in DelayOps.

9. Shall operate the airfield lighting systems as needed.

b. Taxiing

1. Issue clearances and instructions for aircraft and vehicles operating on the airport movement area, except for active runways.

2. Shall approve an aircraft's "push-back" when that movement causes the aircraft to enter the movement area. This typically occurs on the:

(a) Terminal ramp (Gates 29, 31, 32, 50, 51)

(b) West ramp/United Maintenance

Phraseology: "*(ACID)* **pushback approved" or "***(ACID)* **push approved"**

3. Shall coordinate and obtain approval from LC, via the landline, prior to issuance of any clearance that crosses or uses any portion of an active runway. Before

coordinating, determine if the operation is feasible. When coordinating, reference any of LC's traffic that may conflict with the intended operation.

4. Shall use flight progress strips for all departures. Ensure parking location and departure runway are shown on the strip (per chapter 4).

5. When ASDE is out of service:

(a) Shall record on a pad, the arrival sequence as well as all other moving aircraft.

(b) If the entire route is not visible from the tower, aircraft from the terminal/north ramp must be assigned runway 4 and taxied there via taxiway hotel.

c. Emergencies: If an extra frequency is available, all non-medical emergencies shall be worked on that frequency, hereby known as the DEF (Discrete Emergency Frequency).

1. Ground Control (GC) shall:

(a) Monitor frequency 121.9 at all times

(b) Coordinate with the OS/CIC as to the status of a DEF and who will work the DEF.

(c) Afford priority status to the emergency aircraft and all vehicles responding to the emergency.

(d) With the exception of emergency vehicles and OPS3, GC shall keep all other aircraft and vehicles away from the emergency aircraft until the incident commander returns the DEF back to ATC.

2. Ground Control (GC/DEF) shall:

(a) Assist the emergency aircraft to extent possible, affording it "priority" status until the emergency is terminated by OPS 3.

(b) With the exception of emergency vehicles and OPS3, GC/DEF shall keep all other aircraft and vehicles away from the emergency aircraft until the incident commander returns the DEF back to ATC.

(c) Direct ARFF vehicles to their standby positions and after coordination with LC and the after the emergency aircraft has landed, shall issue a clearance for the emergency vehicles to proceed onto the runway to follow the aircraft.

(d) Instruct all non-medical emergency aircraft where to stop so that they may be inspected by ARFF.

(e) After advising AR21 (the incident commander), "the frequency is yours", monitor the frequency to ensure that all movement on the "movement area" is safe and to keep the tower apprised as to the state of the emergency, assisting when necessary.

(f) After AR21 (the incident commander), returns the frequency *(gives the frequency back)*, taxi the emergency aircraft and all ARFF vehicles to their requested destinations

d. Multiple Runway Crossings.

1. The intersection of runways 4/22 and 17/35 is considered the same piece of pavement for crossing purposes.
2. The intersection of runway 12R/30L and 17/35 is considered the same piece of pavement for crossing purposes.
3. Hobby Tower's waiver allows multiple runway crossings to be issued with a single clearance at the intersections listed below *(See appendix F for map)*

Taxiway	Runways being crossed	Coded crossing coordination
E	12R/30L, 17/35, 12L/30R	"Echo (east/west)"
D	12L/30R, 17/35	none
H	12R/30L, 12L/30R	"Hotel (east/west)"
K	12R/30L, 12L/30R	"Kilo (east/west)"
L	12R/30L, 12L/30R	"Lima (east/west)"

7-5. FLIGHT DATA (FD)

a. Weather.

1. *(In accordance with the 7110.65 para. 2-6-6).* When the weather service (CWS) or the tower ~~is reporting~~observes the prevailing visibility to be less than 4 miles, FD shall take tower visibility observations and forward them to the (CWS) and advise the OS/CIC.

2. Record and forward PIREPS. Enter PIREPS on the applicable IDS-4 page.

3. Forward all SIGMET's, CWA's, PIREP's, GI messages, flow control messages, SWAP's and MIT messages to the OS/CIC for dissemination to the appropriate control position.

4. Update the GSI area. *(Altimeter, approach in use and ATIS code)*

5. Update and ensure all current GI's (flow messages, AIRMETS, CWAs and PIREP's) are posted in the Status Information Area (SIA) at Flight Data. This information shall be retained in Flight Data's strip bay until expiration/cancellation. Retain expired messages for inclusion in daily flight progress strip bundle.

b. ATIS (Automatic Terminal Information Service):

1. Record, update, and monitor ATIS/D-ATIS broadcasts.

2. Request the OS/CIC, or other CPC, listen to the playback prior to broadcast to evaluate content, clarity, and overall quality. Only if no other qualified individual is available should the person preparing the message review it prior to broadcast.

(a) If using D-ATIS, verify text message screen is accurate

(b) Select Review and check the message for accuracy

(c) Shall ensure all operating positions and the OS/CIC are aware of the new ATIS code

3. Inform I90 of the ATIS code by entering appropriate message in the IDS and STARS. This entry will also acknowledge receipt of weather information.

c. Clearances

1. Make necessary altitude and/or departure gate amendments for Hobby departures. Ensure STARS data blocks reflect amended information.

2. When Clearances are received via the FDIO and do not conform to local PDR's, or route is unknown, contact the appropriate Houston Center Flight Data to verify the route of flight.

3. Enter VFR and local IFR departures into the STARS, ensuring assignment to the appropriate tab list.

4. Enter departure time, via FDIO or inter-phone, for aircraft that will not automatically acquire.

7-6. CLEARANCE DELIVERY (CD)

a. General

1. Primary frequency 125.45, backup frequency 120.2

2. Broadcast Hazardous In-flight Weather Advisory Service (HIWAS) information as required by FAA 7110.65.

b. Clearances

1. Formulate clearances and prepare departure flight progress strips in accordance with strip marking procedures defined in Chapter 4.

2. Issue and ensure receipt of clearances to aircraft departing Hobby Airport.

3. Ensure correct aircraft parking location is marked on flight progress strips and record receipt of current ATIS code on flight progress strips except those whose clearances have been delivered via PDC.

c. PDC Procedures

1. Review proposed clearances received via TDLS terminal for accuracy and route integrity

2. Ensure entry of mandatory fields

(a) Altitude assignment

(b) Departure frequency

(c) Pre-Taxi instructions (If appropriate)

3. Ensure that remarks in the free text portion of the message are understandable to the pilot

4. Transmit the clearance via PDC. PDR/PDAR's shall be included except the following shall not be transmitted via PDC.

(a) Revised or amended flight plans

(b) Full Route Clearances

(c) Flow control/TMU or ZHU re-routes

(d) Clearances that may cause misunderstanding or be misinterpreted by the pilot

(e) Flight plans that include a PDR/PDAR which does not either complete the route or return the flight to the filed route of flight

5. After PDC Clearance is successfully transmitted, mark strip and pass to GC.

d. Gate Hold Procedures

1. Implement gate hold procedures when instructed by the OS/CIC.

2. Instruct the pilot to "Advise when ready to start engines." When the pilot calls ready, the length of delay shall be added to the time to determine the expect engine start time. Advise the pilot to monitor Clearance Delivery for possible changes.

Phraseology: "Expect engine start up (time)".

3. When engines may be started, inform pilot "Start engine, advise when ready to taxi."

4. When aircraft advise "Ready to taxi" inform the pilot to monitor ground control for taxi instructions and forward the flight progress strip to the ground control position.

5. Make an ATIS advising "Gate Hold Procedures are in effect".

NOTE: In the event a pilot is unable to remain in radio contact with Hobby Tower, they are expected to advise clearance delivery on initial contact. In addition, affected pilots will be advised to check with Hobby Tower periodically for updates. (5, 15, 30 minute increments, as traffic dictates.)

7-7 Operational Supervisor/Controller-in-Charge

Watch supervision requires maintaining situational awareness of traffic activity and operational conditions in order to provide timely assistance to specialists and that ensure available resources are deployed for optimal efficiency.

a. Watch supervision may be performed by an Operational Supervisor (OS) or controller-in-charge (CIC).

b. Maintain situational awareness**.** Situational awareness is defined as a continuous extraction of environmental information. Integrate this information with previous knowledge to form a coherent mental picture and use that picture in directing future events. Simply put, situational awareness means knowing what is going on around you. In order to enhance your ability to maintain situational awareness, the following activities should not be conducted by the OS/CIC: Facility tours, developing watch schedules, non-operational phone calls, emailing, writing training reports, in-depth investigations, or team meetings.

Note: Administrative duties must not be accomplished to the detriment of operational duties

c. Provide guidance/goals for the shift by ensuring an atmosphere conducive to an effective performance by the team that fosters the safe, orderly and expeditious flow of traffic with an emphasis on eliminating errors and runway incursions by:

1. Eliminating/minimizing distractions (i.e. personal phone calls)

2. Ensuring professional conduct and teamwork.

3. Emphasizing the use of standard phraseology.

4. Make appropriate on-the-spot corrections when technical performance issues are noted.

d. In the role of an Operational Supervisor, a CIC shall have the same responsibility, and accountability as a supervisor, whether the authority and responsibilities were assigned by written directive, verbal direction, or local practice, with the following exceptions:

1. Evaluating and counseling employees on their performance.

2. Recommending selections, promotions, awards, disciplinary actions, and separations.

3. Site Coordinator for drug or alcohol testing.

e. Monitor/manage traffic volume/flow.

1. Advise I90 TMU when delays exceed 15 minutes and thereafter when traffic delays increase/decrease by 15 minute intervals. This may be accomplished by “Delay Ops”.

2. Advise ATM when delays exceed 30 minutes.

3. Determine the runway(s) in use and usage of LUAW procedures. Coordinates with I90 when runway changes are required.

4. Coordinate with City Operations for all runway and taxiway closures.

5. Determine alternate taxi routes when preferred routes are not available.

6. Institute/cancel SMGCS procedures

7. Ensure all personnel are aware of ASDE-X Status

f. Position Assignments.

1. Direct the combining and de-combining of positions. Staffing and complexity factors such as traffic volume, weather, closures, flow restrictions, equipment outages, unusual operations, runway configuration, etc., must be considered in determining when to combine/de-combine positions.

2. Positions may only be combined as follows:

(a) FD may only be combined to CD

(b) HC, GC, LA and CD may only be combined to LC

(c) OS/CIC may combined to any position, however combining to LC should be as a last resort

3. The LA and HC positions shall be combined/decombined as dictated by traffic volume and complexity.

4. When 2 or more ATCS's are on duty, the FD/CD position should be staffed. The OS/CIC may authorize this position be combined from 2330L to 0600L daily.

5. LA must be open in order to LUAW more than one aircraft on the same runway. OS/CIC approval is required to combine these positions.

6. LC and GC positions shall be de-combined when deemed necessary by the OS/CIC. They shall be de-combined when using LUAW procedures. They should be de-combined during all periods of moderate or greater traffic volume/complexity when personnel are available.

7. Newly position certified controllers may not be assigned to combined positions until they have a minimum of 20 hours on both positions

Example: a newly certified controller may not work LC and GC combined before having at least 20 hours on both positions.

This does not apply to positions that are normally worked as combined positions.

Example: (LC & LA, LC & HC or CD & FD)

g. Position relief. Manage position rotation to ensure equitable and adequate breaks. Stagger relief briefings to maintain continuity, avoid "line-changes".

h. Ensure controllers properly pre-brief. Ensure the position briefings and transfer of position responsibility is carried out in accordance with this order.

i. Direct the on-the-job training of developmentals, considering:

1. Available personnel/staffing requirements

2. Developmentals stage of training and needs

j. Equipment and Status Information Area (SIA).

1. When outages occur, notify responsible maintenance agency as well as all appropriate aviation interests, (e.g., Airport operations, I90, adjacent airports). Report all power outages to Airport Operations.
2. Ensure appropriate log entries are completed.
3. Ensure ITWS and ASDE-X systems are set to the appropriate flow.
4. Ensure all runway and taxiway closures are depicted correctly on the ASDE-X.
5. Ensure all SIA's are accurate and up to date, including:
   (a) CEDAR *(facility log)*
   (b) Grease board at FD
   (c) Magnets on LC's radar scope
   (d) IDS-4
6. Ensure the appropriate airport/approach lighting settings are selected.

k. Data collection and reporting.

1. Serve as a central source for collection and dissemination of Pilot Reports (PIREPs), Center Weather Advisory (CWA), and SIGMET information.
2. Disseminate HIWAS information to the appropriate positions and ensure HIWAS broadcasts are conducted.
3. When prevailing visibility is less than 4 miles, ensure all positions receive and acknowledge current tower visibility. This includes Hobby final.
4. Prepare invalid mode C reports and forward to QA.
5. Issue/cancel NOTAM's in accordance with procedures in paragraph 2-16.
6. CIC of the mid shift shall compile and enter delays attributed to local initiatives in OPSNET before midnight. Ground Stops, EDCT's and AFP's do not need to be reported.
7. Check, post, and disseminate NOTAM information on the appropriate page of the IDS-4.
8. Report bird strikes to City Operations and create a MOR entry in CEDAR.
9. Prepare ASDE alarm forms and forward to QA.
10. Ensure Watch Checklist is completed in accordance with HOU 7210.1

l. Monitor presidential aircraft movement. Be present at each position providing ATC service to the Presidential aircraft from the flight's entry in the facility's airspace until the flight exits the facility's airspace. Aurally and visually monitor the flight to ensure that separation, control, and coordination are accomplished.

m. The OS/CIC shall monitor frequency 120.2 at all times unless that frequency has been assigned to an operational position (LC, GC, HC, CD, and FD).

n. During an emergency, the OS/CIC shall monitor or assign a CPC who is GC qualified to work the DEF *(normally 120.2).* This may be assigned to GC if traffic is light.

o. Report observed or reported aircraft malfunctions, incidents and irregularities as required by directives.

p. Notify appropriate individual (OS/ATM) when unusual circumstances require assistance.

q. Approve/disapprove leave requests, or shift/RDO swaps.

r. Three Hour Tarmac Rule: When a tarmac delay request is received:

1. Determine whether or not a "significant disruption" would result in approving taxi requests due to the Three Hour Tarmac Rule (HOU 7110.1 par. 2-17)

2. Notifying the overlying facility (I-90)

3. Notify the Washington Operations Center (WOC) through the regional Operations Center (ROC)

s. Air Traffic Incidents:

1. On the OS/CIC's computer, there is a folder icon called "Packages & Forms". Cheat-sheets for processing incidents can be found there.

2. OS – shall enter all required information into the "ATQA" *(Air Traffic Quality Assurance)* program

3. CIC – shall enter all required information using the appropriate form(s) found on the W drive.

W:\AT\Packages & Forms *(same icon mentioned above).*

4. Forms from either source shall be printed out and faxed to the ROC as required.

t. Contingencies for changing ATC service levels

In the event that Hobby tower is unable to provide a normal level of service, the OS/CIC shall utilize the ACT2 (Automated Contingency Tool). The ACT2 is located on the desktop of the OS/CIC computer as well as a printed version located in the OS/CIC's flip chart. There are three predetermined contingency levels.

1. ATC alert

2. VFR tower

3. ATC zero

***7*-8-99. Reserved**