US Department of Transportation
Federal Aviation Administration

STAR - Standard Terminal Arrival

1. Bearings, headings, courses and radials are listed to the nearest hundredth (e.g. 360.00)
2. Distances are in nautical miles to nearest hundredth (e.g. 00.00)
3. Altitudes are minimum altitudes unless otherwise indicated

(1) Transition Routes

(a) Transition Name	(b) Transition Computer Codes	(c) From RNAV WP/ FIX/NAVAID	(d) To RNAV WP/ FIX/NAVAID	(e) Mag Course/ Distance	(f) MEA	(g) MOCA	(h) MAA	(i) Crossing Altitudes / Fixes
CHOO CHOO	GQO.LUGOH1	GQO VORTAC	RQZ VORTAC	261.77 & 259.92/73.74 (GQO R-262 & RQZ R-080)	18000			
		RQZ VORTAC	MSL VORTAC	260.97 & 261.48/42.75 (RQZ R-261 & MSL R-081)	18000			
		MSL VORTAC	FASON/MSL 33.00 DME	265.93/33.00 (MSL R-266)	18000			AT/ABOVE FL240
		FASON/MSL 33.00 DME	CRAMM/MSL 69.76 DME	265.93/36.76 (MSL R-266)	10000			
		CRAMM/HLI 30.65 DME	LUGOH/HLI 17.00 DME	282.00/13.65 (HLI R-102)	4000			
TUPELO	OTB.LUGOH1	OTB VOR/DME	LUGOH/OTB 33.66 DME	323.33/33.66 (OTB R-323)	4000			
VULCAN	VUZ.LUGOH1	VUZ VORTAC	HAB VORTAC	298.01 & 297.39/63.90 (GQO R-298 & HAB R-117)	13000			
		HAB VORTAC	ERASE/HAB 16.00 DME	299.02/16.00 (HAB R-299)	13000			AT/ABOVE FL240
		ERASE/HAB 16.00 DME	CRAMM/HAB 51.24 DME	299.02/35.24 (HAB R-299)	8000			
		CRAMM/HLI 30.65 DME	LUGOH/HLI 17.00 DME	282.00/13.65 (HLI R-102)	4000			

(2) Arrival Route Description:

LANDING NORTH: FROM OVER LUGOH/HLI 17.00 DME ON HLI VORTAC R-102.00 TO CROSS MASHH/HLI 12.00 DME AT 10000 AND 230 KIAS (MEA 3000), THEN ON HEADING 270.00, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING SOUTH: FROM OVER LUGOH/HLI 17.00 DME ON HLI VORTAC R-102.00 TO CROSS MASHH/HLI 12.00 DME AT/ABOVE 10000 AND AT/BELOW 16000 (MEA 3000), THEN ON HLI VORTAC R-102.00 TO HLI VORTAC (MEA 3000), THEN ON MEM VORTAC R-120.27 TO CROSS LARUE/MEM 18.00 DME AT 250 KIAS (MEA 3000), THEN ON MEM VORTAC R-120.27 TO CROSS FLOND/MEM 9.86 DME AT/ABOVE 9000 AND AT/BELOW 11000 AND AT 210 KIAS (MEA 3000), THEN ON MEM VORTAC R-120.27 TO CROSS GIVME/MEM 5.87 DME AT OR ABOVE 8000 (MEA 3000), THEN ON HEADING 360.00, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

(3) Procedural Data Notes:
NOTE: DME AND RADAR REQUIRED. **NOTE:** PROCEDURE NOT AVAILABLE FOR RNAV CAPABLE TURBOJETS. **NOTE:** RNAV CAPABLE TURBOJETS MUST FILE THE MASHH RNAV STAR. **NOTE:** MAINTAIN LAST ASSIGNED ALTITUDE UNTIL CLEARED TO "DESCEND VIA THE LUGOH ONE", THEN COMPLY WITH ALTITUDE RESTRICTIONS AS PUBLISHED. **CHART:** CROSS FASON AND ERASE AT 290 KIAS.

(4) Fixes and/or Holding Patterns:
CHART HOLDING PATTERNS: FASON (HOLD E, RT, 265.92 INBOUND, 15 NM LEGS); CRAMM (HOLD E, RT, 282.00 INBOUND, 10 NM LEGS); MASHH (HOLD E, LT, 282.00 INBOUND, 7 NM LEGS); LARUE (HOLD SE, RT, 300.27 INBOUND, 6 NM LEGS).

(5) Communications: CHART: MEMPHIS APPROACH CONTROL 125.8, 338.3; MEMPHIS INTL ATIS.

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
LUGOH	ONE	LUGOH.LUGOH1	NEW		26 JUL 2012

(12) Airports Served			
Airport Name	MEMPHIS INTL	City/State	MEMPHIS, TN
Airport Name		City/State	
Airport Name		City/State	
Airport Name		City/State	
Airport Name		City/State	
Airport Name		City/State	

(13) Lost Communications Procedure:

(14) Remarks:

(15) Additional Flight Data:

QUALITY CHECKED

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
LUGOH	ONE	LUGOH.LUGOH1	NEW		26 JUL 2012

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        GQO   K7011580VTHA N34574054W085091214    N34574054W085091214E0010010152     NARCHOO CHOO
        SUSAD        HAB   K7011040VTLA N34115557W088004183    N34115557W088004183E0020008021     NARHAMILTON
        SUSAD        HLI   K7011240VTL  N34461288W089294747    N34461288W089294747E0030006241     NARHOLLY SPRINGS
        SUSAD        MSL   K7011650VTLW N34422473W087292946    N34422473W087292946E0010005831     NARMUSCLE SHOALS
        SUSAD        OTB   K7010980VDLW N34132588W088475044    N34132588W088475044E0040003641     NARTUPELO
        SUSAD        RQZ   K7011220VTLW N34475006W086380185    N34475006W086380185E0020011051     NARROCKET
        SUSAD        VUZ   K7011440VTHA N33401248W086535941    N33401248W086535941E0020007432     NARVULCAN

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   CRAMM K70    C   H N34381105W088535488                    W0016     NAR           CRAMM
        SUSAEAENRT   ERASE K70    C     N34201002W088171532                    W0020     NAR           ERASE
        SUSAEAENRT   FASON K70    C     N34403198W088092698                    W0021     NAR           FASON
        SUSAEAENRT   FLOND K70    C     N34554638W089484451                    W0010     NAR           FLOND
        SUSAEAENRT   GIVME K70    C     N34575118W089525332                    W0009     NAR           GIVME
        SUSAEAENRT   LARUE K70    C     N34513148W089401781                    W0011     NAR           LARUE
        SUSAEAENRT   LUGOH K70    C     N34414693W089095248                    W0014     NAR           LUGOH
        SUSAEAENRT   MASHH K70    C     N34430551W089154370                    W0013     NAR           MASHH

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMEMK7AMEM     0     111YHN35023270W089583600E001000341         1800018000C    MNAR    MEMPHIS INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMEMK7ELUGOH11GQO   010GQO  K7D 0V       IF                                                  18000
        SUSAP KMEMK7ELUGOH11GQO   020RQZ  K7D 0V       TF                     26180737
        SUSAP KMEMK7ELUGOH11GQO   030MSL  K7D 0V       TF                     26100428
        SUSAP KMEMK7ELUGOH11GQO   040FASONK7EA0E  H     TF                     26590330    + FL240          290
        SUSAP KMEMK7ELUGOH11GQO   050CRAMMK7EA0E  H     TF                     26590368
        SUSAP KMEMK7ELUGOH11GQO   060LUGOHK7EA0EE       TF                     28200137
        SUSAP KMEMK7ELUGOH11OTB   010OTB  K7D 0V       IF                                                  18000
        SUSAP KMEMK7ELUGOH11OTB   020LUGOHK7EA0EE       TF                     32330337
        SUSAP KMEMK7ELUGOH11VUZ   010VUZ  K7D 0V       IF                                                  18000
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
LUGOH	ONE	LUGOH.LUGOH1	NONE		26 JUL 2012

FAA Form 7100-3 (9/02)

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

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SUSAP KMEMK7ELUGOH11VUZ   020HAB  K7D 0V       TF                    29800639
SUSAP KMEMK7ELUGOH11VUZ   030ERASEK7EA0E  H    TF                    29900160    + FL240          290
SUSAP KMEMK7ELUGOH11VUZ   040CRAMMK7EA0E  H    TF                    29900352
SUSAP KMEMK7ELUGOH11VUZ   050LUGOHK7EA0EE      TF                    28200137
SUSAP KMEMK7ELUGOH13RW18B 010LUGOHK7EA0E       IF                                         18000
SUSAP KMEMK7ELUGOH13RW18B 020MASHHK7EA0E  H    TF                    28200050    B 1600010000
SUSAP KMEMK7ELUGOH13RW18B 030HLI  K7D 0V       TF                    28200120
SUSAP KMEMK7ELUGOH13RW18B 040LARUEK7EA0E  H    TF                    3003                         250
SUSAP KMEMK7ELUGOH13RW18B 050FLONDK7EA0E       TF                    30030081    B 1100009000     210
SUSAP KMEMK7ELUGOH13RW18B 060GIVMEK7EA0E       TF                    30030040    + 08000
SUSAP KMEMK7ELUGOH13RW18B 070KMEM K7PA0AE      VM                    3600
SUSAP KMEMK7ELUGOH13RW36B 010LUGOHK7EA0E       IF                                         18000
SUSAP KMEMK7ELUGOH13RW36B 020MASHHK7EA0E  H    TF                    28200050      10000          230
SUSAP KMEMK7ELUGOH13RW36B 030KMEM K7PA0AE      VM                    2700
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                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMEMK7GRW18C   0111201780 N35031654W089583421+0600    +0055100271000054150IISDU1
        SUSAP KMEMK7GRW18L   0090001780 N35025574W089582263+0600    +0057200278000060150IIEXS1
        SUSAP KMEMK7GRW18R   0093201780 N35025816W089591479+0300    +0060100288000052150IIOOI1
        SUSAP KMEMK7GRW36C   0111203580 N35012658W089583190-0600    +0076500341000060150IITSE3
        SUSAP KMEMK7GRW36L   0093203580 N35012598W089591281-0300    +0070300321000059150IIOHN3
        SUSAP KMEMK7GRW36R   0090003580 N35012674W089582075-0600    +0074600335000058150IIMYO3
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
LUGOH	ONE	LUGOH.LUGOH1	NONE		26 JUL 2012

FAA Form 7100-3 (9/02)

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	GQO	GQO	010		IF		FB					
	GQO	RQZ	020		TF		FB		261.8()	073.7		
	GQO	MSL	030		TF		FB		261.0()	042.8		
	GQO	FASON	040		TF		FB		265.9()	033.0	AA FL240	AT 290
	GQO	CRAMM	050		TF		FB		265.9()	036.8		
	GQO	LUGOH	060		TF		FB		282.0()	013.7		
	OTB	OTB	010		IF		FB					
	OTB	LUGOH	020		TF		FB		323.3()	033.7		
	VUZ	VUZ	010		IF		FB					
	VUZ	HAB	020		TF		FB		298.0()	063.9		
	VUZ	ERASE	030		TF		FB		299.0()	016.0	AA FL240	AT 290
	VUZ	CRAMM	040		TF		FB		299.0()	035.2		
	VUZ	LUGOH	050		TF		FB		282.0()	013.7		
	RW18B	LUGOH	010		IF		FB					
	RW18B	MASHH	020		TF		FB		282.0()	005.0	BT 1600010000	
	RW18B	HLI	030		TF		FB		282.0()	012.0		
	RW18B	LARUE	040		TF		FB		300.3()			AT 250
	RW18B	FLOND	050		TF		FB		300.3()	008.1	BT 1100009000	AT 210
	RW18B	GIVME	060		TF		FB		300.3()	004.0	AA 08000	
	RW18B	KMEM	070		VM		FB		360.0()			
	RW36B	LUGOH	010		IF		FB					
	RW36B	MASHH	020		TF		FB		282.0()	005.0	AT 10000	AT 230
	RW36B	KMEM	030		VM		FB		270.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	GQO	N345740.54	W0850912.14	N3457.676	W08509.202
	HAB	N341155.57	W0880041.83	N3411.926	W08800.697
	HLI	N344612.88	W0892947.47	N3446.215	W08929.791
	MSL	N344224.73	W0872929.46	N3442.412	W08729.491
	OTB	N341325.88	W0884750.44	N3413.431	W08847.841
	RQZ	N344750.06	W0863801.85	N3447.834	W08638.031
	VUZ	N334012.48	W0865359.41	N3340.208	W08653.990
	CRAMM	N343811.05	W0885354.88	N3438.184	W08853.915
	ERASE	N342010.02	W0881715.32	N3420.167	W08817.255
	FASON	N344031.98	W0880926.98	N3440.533	W08809.450
	FLOND	N345546.38	W0894844.51	N3455.773	W08948.742
	GIVME	N345751.18	W0895253.32	N3457.853	W08952.889

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FAA Form 7100-3 (9/02)

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

LARUE	N345131.48	W0894017.81	N3451.525	W08940.297
LUGOH	N344146.93	W0890952.48	N3441.782	W08909.875
MASHH	N344305.51	W0891543.70	N3443.092	W08915.728
RW18C	N350316.54	W0895834.21	N3503.276	W08958.570
RW18L	N350255.74	W0895822.63	N3502.929	W08958.377
RW18R	N350258.16	W0895914.79	N3502.969	W08959.247
RW36C	N350126.58	W0895831.90	N3501.443	W08958.532
RW36L	N350125.98	W0895912.81	N3501.433	W08959.214
RW36R	N350126.74	W0895820.75	N3501.446	W08958.346

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW18C	00271	54
RW18L	00278	60
RW18R	00288	52
RW36C	00341	60
RW36L	00321	59
RW36R	00335	58

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LUGOH	ONE	LUGOH.LUGOH1	NONE		26 JUL 2012

FAA Form 7100-3 (9/02)