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

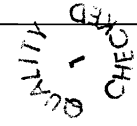
(1) Transition Routes

(a) Transition Name	(b) Transition Computer Codes	(c) From RNAV/ FIX/NAVAID	(d) To RNAV/ FIX/NAVAID	(e) Mag Course/ Distance	(f) MEA	(g) MOCA	(h) MAA	(i) Crossing Altitudes / Fixes
BOXKR	BOXKR.COSTR3	BOXKR	SYKES	076.40/14.08	FL180			
			GUMMY	076.52/29.20	16000			
			LAL VORTAC	076.76/29.17	12000			
			ANDRO	066.99/07.78	10000			
			SETME	067.28/02.73	10000			
			COSTR	067.21/04.98	8000			
LA BELLE	LBV.COSTR3	LBV VORTAC	DOWNN	340.51/45.27	10000			
			MOANS	007.01/24.12	10000			
			COSTR	003.50/11.82	8000			
ST PETERSBURG	PIE.COSTR3	PIE VORTAC	GUMMY	127.00/09.43	16000			
			LAL VORTAC	076.76/29.17	12000			
			ANDRO	066.99/07.78	10000			
			SETME	067.28/02.73	10000			
			COSTR	067.21/04.98	8000			

(2) Arrival Route Description:
FROM OVER COSTR ON TRACK 060.76/13.55 TO BIGGR (MEA 6000), THENCE AS DEPICTED TO KNUKL, THEN ON TRACK 095.00. EXPECT RADAR VECTORS.

(3) Procedural Data Notes:
RNAV1. RADAR REQUIRED. DME/DME/IRU OR GPS REQUIRED. TURBOJET/TURBOPROP AIRCRAFT ONLY.
FOR AIRCRAFT LANDING SATELLITE AIRPORTS, EXPECT RADAR VECTORS AFTER COSTR.
EXPECT TO CROSS SYKES AT FL230. EXPECT TO CROSS PIE AT FL210.
KMCO LANDING SOUTH, EXPECT TO CROSS MOANS AT 13000.
KMCO LANDING NORTH, EXPECT TO CROSS MOANS AT 10000 AND 250 KIAS.
EXPECT TO CROSS ANDRO AT 13000. KMCO LANDING NORTH, EXPECT 250 KIAS.
KMCO LANDING NORTH, EXPECT RADAR VECTORS AFTER COSTR.

(4) Fixes and/or Holding Patterns:
CHART HOLDING AT COSTR (HOLD SW, RT, 067.21 INBOUND). CHART HOLDING AT SYKES (HOLD W, RT, 076.40 INBOUND).
CHART HOLDING AT GUMMY (HOLD W, RT, 076.52 INBOUND). CHART HOLDING AT DOWNN (HOLD S, LT, 007.00 INBOUND).
CHART HOLDING AT MOANS (HOLD S, LT 007.01 INBOUND).



(5) Communications:
ORLANDO APP CON 125.55/338.2, ORLANDO INTL ATIS 121.25.

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

(12) Airports Served	
Airport Name: ORLANDO INTL	City/State: ORLANDO, FL
Airport Name: EXECUTIVE	City/State: ORLANDO, FL
Airport Name: ORLANDO SANFORD INTL	City/State: ORLANDO, FL
Airport Name: KISSIMMEE GATEWAY	City/State: ORLANDO, FL
Airport Name: LEESBURG INTL	City/State: LEESBURG, FL
Airport Name: ORLANDO APOPKA	City/State: APOPKA, FL

(13) Lost Communications Procedure:
KMCO LANDING NORTH: CONTINUE TRACK TO COSTR, THEN PROCEED DIRECT TO EXBAN, TURN LEFT TO INTERCEPT THE RWY 36L FINAL APPROACH COURSE, CONDUCT APPROACH.
KMCO LANDING SOUTH: CONTINUE TRACK TO KNUKL, THEN TURN RIGHT TO INTERCEPT THE RWY 18R FINAL APPROACH COURSE, CONDUCT APPROACH.

(14) Remarks:
MEAS FOR DME/DME/IRU COVERAGE.
OBSTACLE 12-020098 (823 MSL TOWER) 2C ACCURACY CODE VERIFIED BY TERRAIN AND OBSTACLE DATA TEAM.
OBSTACLE 12-003542 (549 MSL TOWER) 4D ACCURACY CODE REQUESTED FROM FLIGHT CHECK.

(15) Additional Flight Data:
REFERENCE MAGNETIC VARIATION = KMCO 6W/2015.
CHART EXBAN AND GROPP.

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

(16) Continuation (1 of 2):

(1) Transition Routes

(a) Transition Name	(b) Transition Computer Codes	(c) From RNAV/ FIX/NAVAID	(d) To RNAV/ FIX/NAVAID	(e) Mag Course/ Distance	(f) MEA
LEE COUNTY	RSW.COSTR3	RSW VORTAC	DOWNN	007.00/58.70	10000
			MOANS	007.01/24.12	10000
			COSTR	003.50/11.82	8000
SIMMR	SIMMR.COSTR3	SIMMR	SYKES	102.35/61.89	FL180
			GUMMY	076.52/29.20	16000
			LAL VORTAC	076.76/29.17	12000
			ANDRO	066.99/07.78	10000
			SETME	067.28/02.73	10000
			COSTR	067.21/04.98	8000

(17) Changes:

1. MAGNETIC HEADINGS.
2. CRITICAL DMES ELIMINATED.
3. ALL MEAS.
4. FM LEG HEADING CHANGED FROM 090 TO 095.
5. ADDED LOST COMM PROCEDURE.

(18) Reasons for Changes:

1. KMCO EPOCH YEAR ROTATION.
2. CRITICAL DME ELIMINATION PROJECT.
3. DME/DME/IRU COVERAGE.

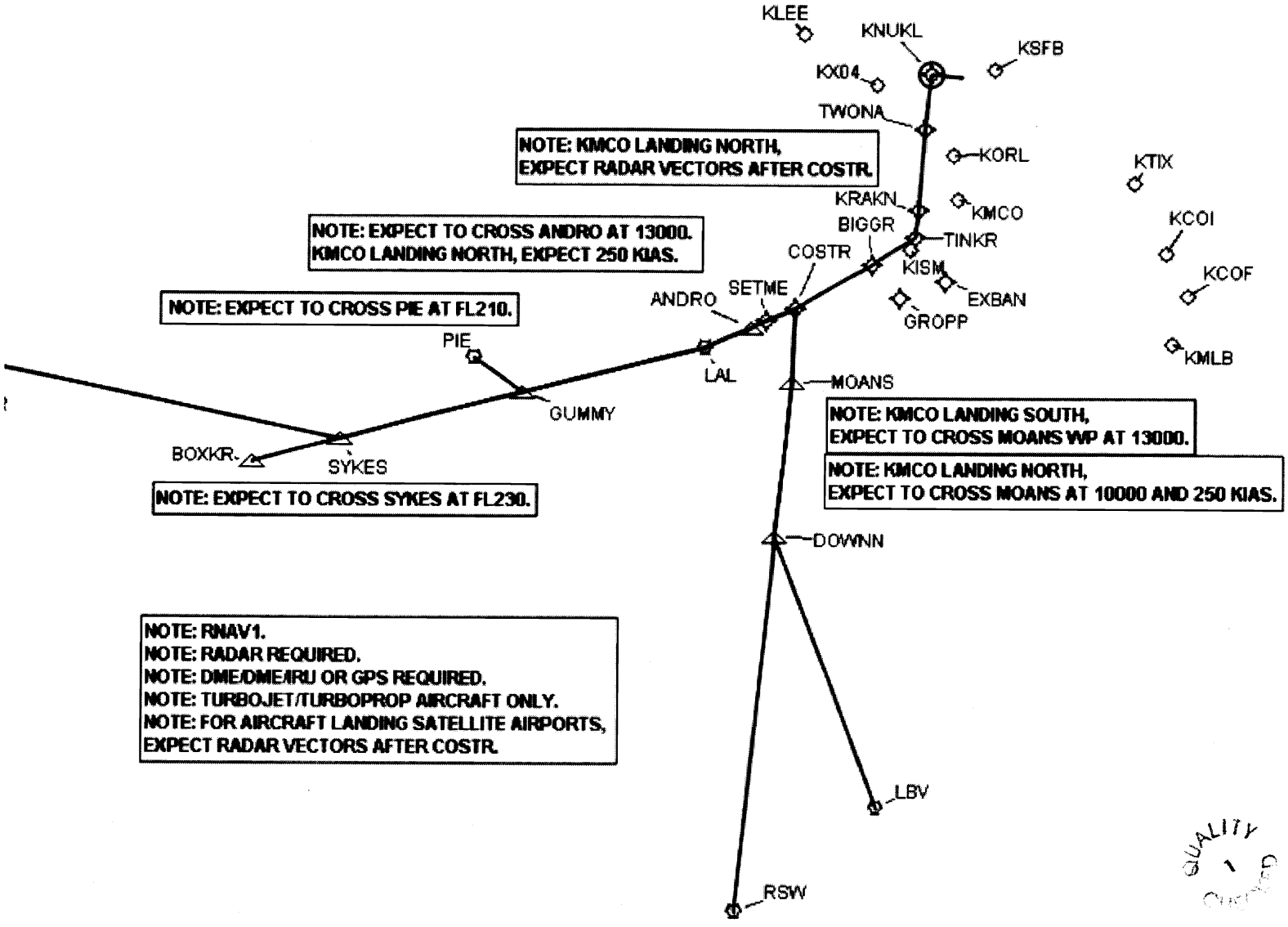
4-5. ATC REQUEST.

	Name *(Typed and Signed)*, Title and Organization		DATE
Developed By	DUANE SEMCKEN		
Approved	**FIFO**		
	Reg. ATD		

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	**THREE**	**COSTR.COSTR3**	**TWO**	**10 JUN 09**	

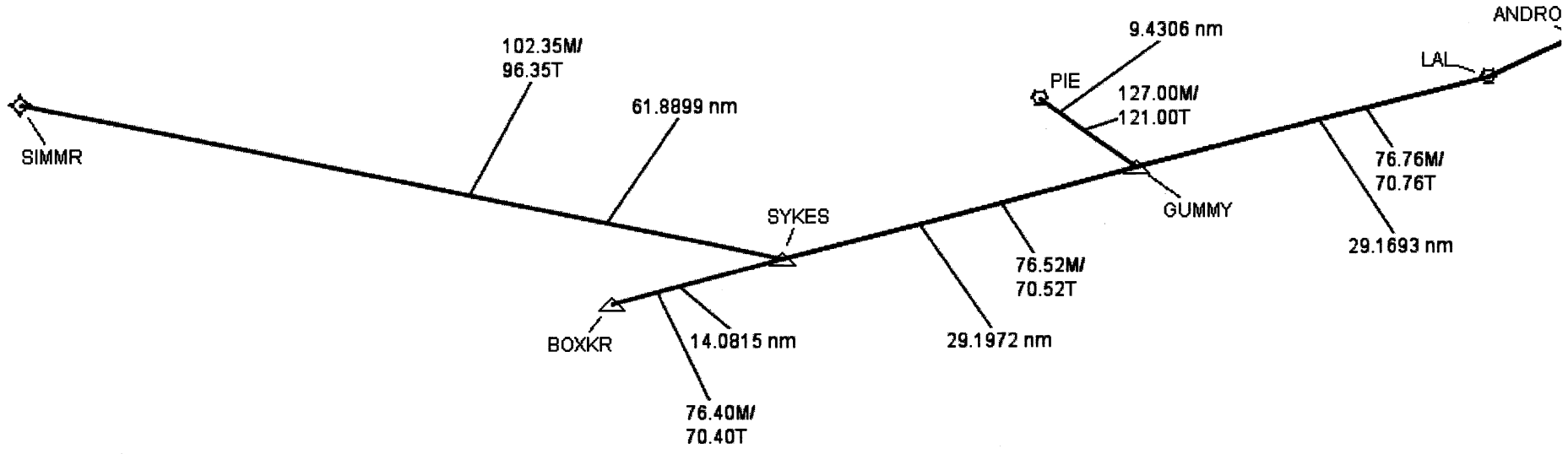
FAA Form 7100-4 (7/02)

(19) Graphic Depiction (1 of 5):



(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

(19) Graphic Depiction (2 of 5):



(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

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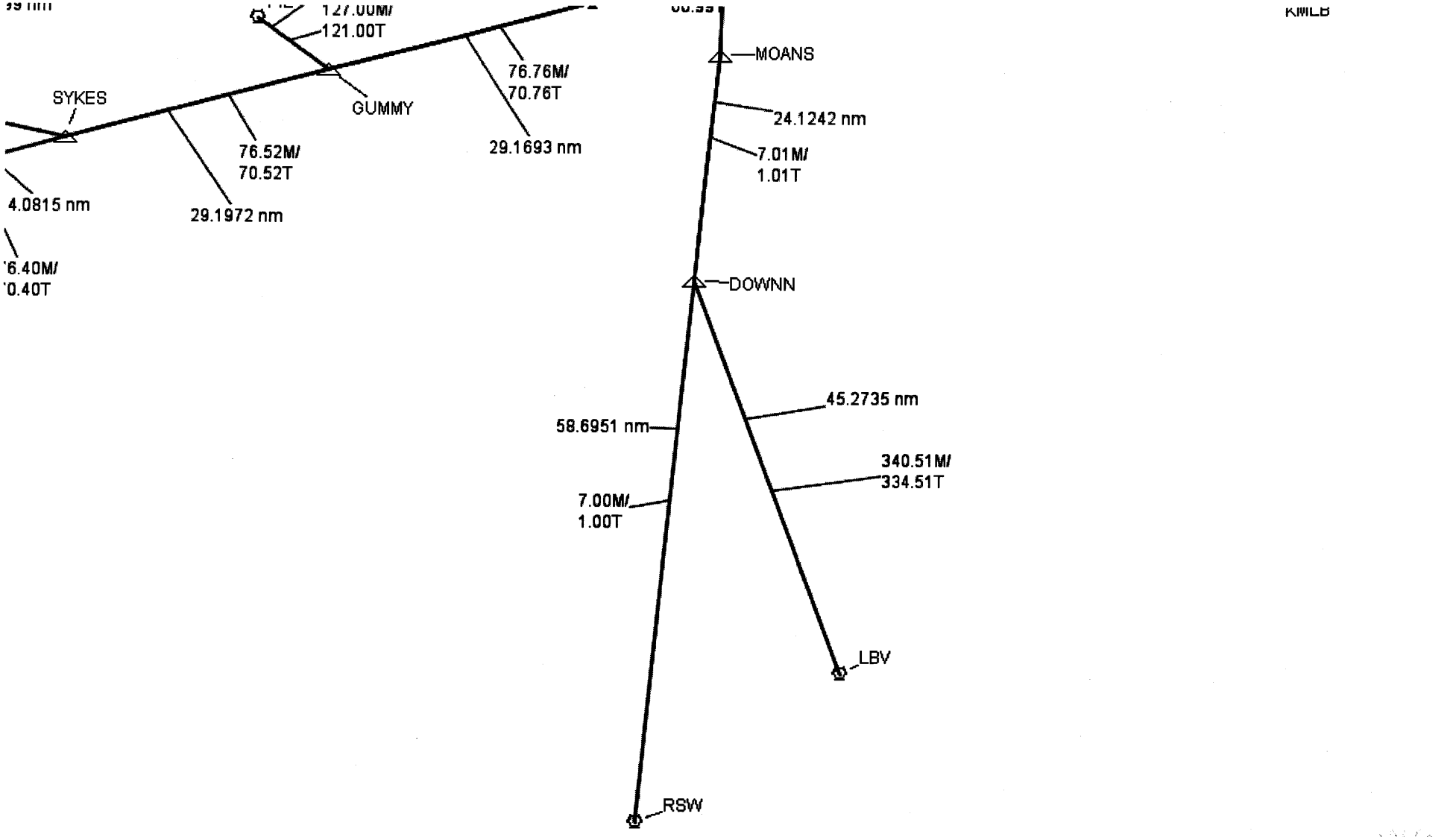
(19) Graphic Depiction (3 of 5):



(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

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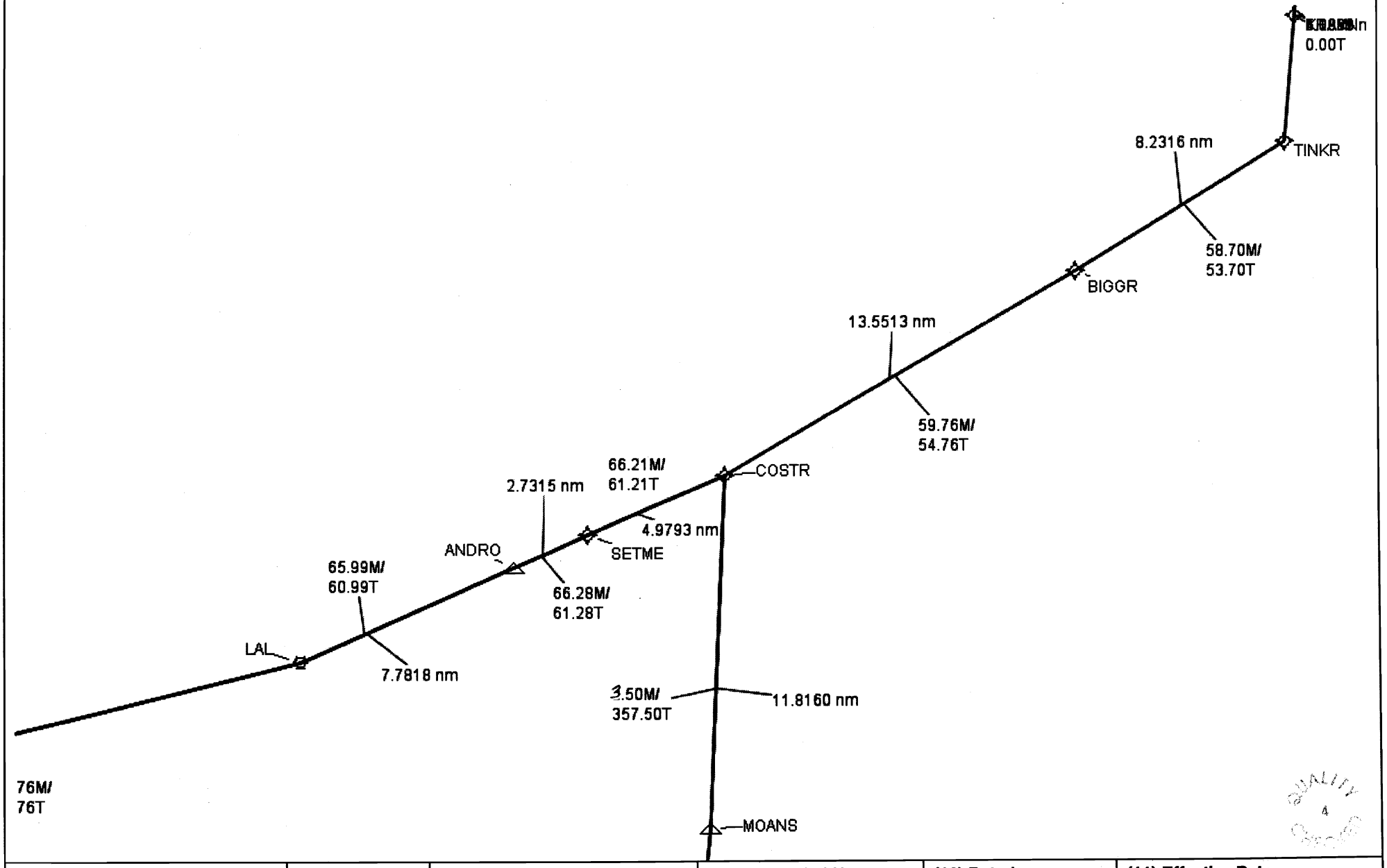
(19) Graphic Depiction (4 of 5):



(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

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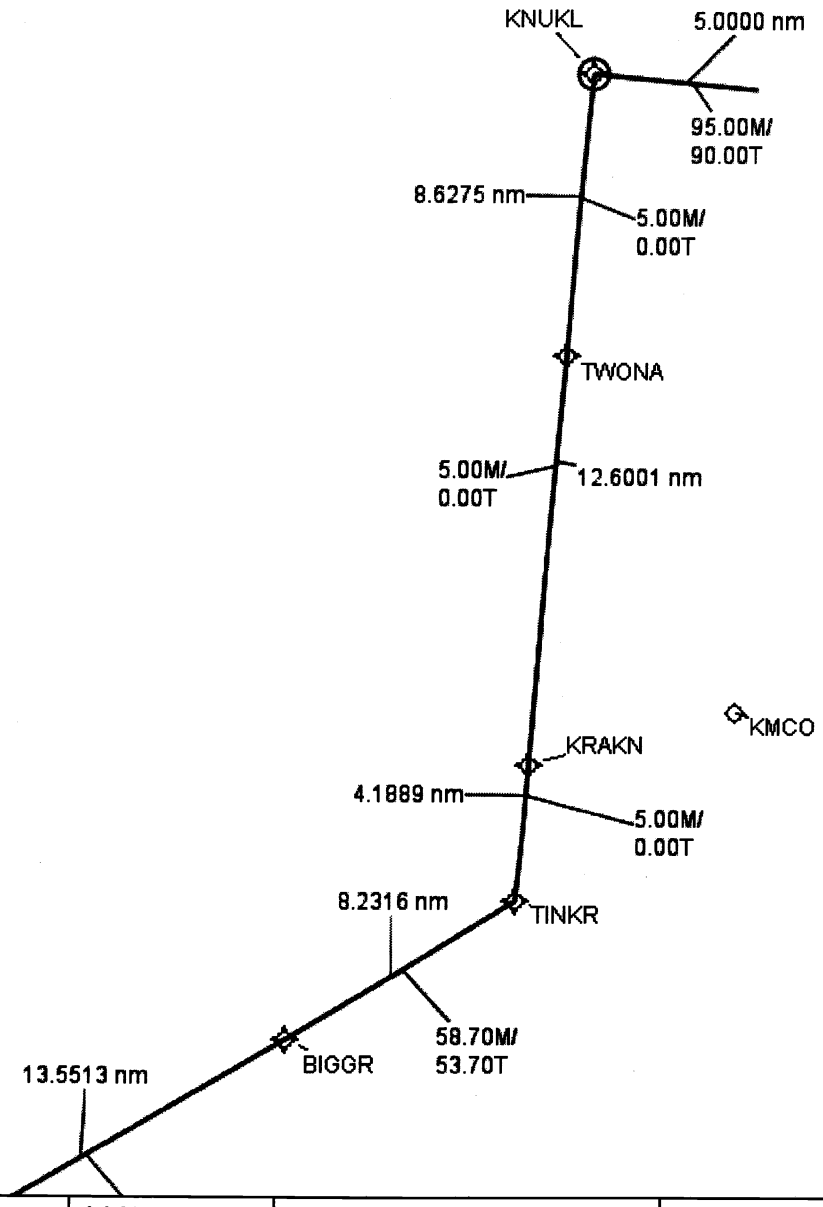
(19) Graphic Depiction (5 of 5):



(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

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(16) Continuation (2 of 2):

(12) Additional Airports Served:

SPACE COAST RGNL	TITUSVILLE, FL.
MERRITT ISLAND	MERRITT ISLAND, FL.
PATRICK AFB	COCOA BEACH, FL.
MELBOURNE INTL	MELBOURNE, FL

(BLOCK 2 DETAILED ARRIVAL ROUTE DESCRIPTION)
FROM OVER COSTR ON TRACK 060.76/13.55 TO BIGGR (MEA 6000), THEN ON TRACK 059.70/08.23 TO TINKR (MEA 4000), THEN ON TRACK 006.00/04.19 TO KRAKN (MEA 4000), THEN ON TRACK 006.00/12.60 TO TWONA (MEA 3000), THEN ON TRACK 006.00/08.63 TO KNUKL (MEA 3000), THEN ON TRACK 095.00.

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

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RNAV STAR (Data Record)

(1) FIX/NAVAID	(2) LAT/LONG	(3) C	(4) FO/FB	(5) LEG	(6) TC	(7) DIST	(8) ALTITUDE	(9) SPEED	(10) REMARKS
En Route Transition									
BOXKR	273509.57 N/ 0831755.64 W	Y		IF					BOXKR.COSTR3
SYKES	273952.96 N/ 0830259.22 W	Y	FB	TF	070.40	14.08			EXPECT FL230. HOLDING - RIGHT TURNS
GUMMY	274935.41 N/ 0823156.47 W	Y	FB	TF	070.52	29.20			HOLDING - RIGHT TURNS
LAL VORTAC	275910.25 N/ 0820049.99 W	Y	FB	TF	070.76	29.17			
ANDRO	280257.05 N/ 0815308.47 W	Y	FB	TF	060.99	07.78			EXPECT 13000. KMCO LANDING NORTH, EXPECT 250K
SETME	280416.00 N/ 0815026.00 W	Y	FB	TF	061.28	02.73			
COSTR	280640.17 N/ 0814529.90 W	Y	FB	TF	061.21	04.98			HOLDING - RIGHT TURNS
En Route Transition									
LBV VORTAC	264941.43 N/ 0812329.17 W	Y		IF					LBV.COSTR3
DOWNN	273038.76 N/ 0814523.68 W	Y	FB	TF	334.51	45.27			
MOANS	275449.97 N/ 0814454.89 W	Y	FB	TF	001.01	24.12			KMCO LANDING NORTH, EXPECT 10000/250K KMCO LANDING SOUTH, EXPECT 13000 HOLDING-LEFT TURNS
COSTR	280640.17 N/ 0814529.90 W	Y	FB	TF	357.50	11.82			HOLDING - RIGHT TURNS
En Route Transition									

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

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RNAV STAR (Data Record)

(1) FIX/NAVAID	(2) LAT/LONG	(3) C	(4) FO/FB	(5) LEG	(6) TC	(7) DIST	(8) ALTITUDE	(9) SPEED	(10) REMARKS
PIE VORTAC	275427.95 N/ 0824103.51W	Y		IF					PIE.COSTR3 EXPECT FL210
GUMMY	274935.41 N/ 0823156.47 W	Y	FB	TF	121.00	09.43			HOLDING - RIGHT TURNS
LAL VORTAC	275910.25 N/ 0820049.99 W	Y	FB	TF	070.76	29.17			
ANDRO	280257.05 N/ 0815308.47 W	Y	FB	TF	060.99	07.78			EXPECT 13000. KMCO LANDING NORTH, EXPECT 250K
SETME	280416.00 N/ 0815026.00 W	Y	FB	TF	061.28	02.73			
COSTR	280640.17 N/ 0814529.90 W	Y	FB	TF	061.21	04.98			HOLDING - RIGHT TURNS
En Route Transition									
RSW VORTAC	263147.55 N/ 0814632.76 W	Y		IF					RSW.COSTR3
DOWNN	273038.76 N/ 0814523.68 W	Y	FB	TF	001.00	58.70			HOLDING - LEFT TURNS
MOANS	275449.97 N/ 0814454.89 W	Y	FB	TF	001.01	24.12			KMCO LANDING NORTH, EXPECT 10000/250K KMCO LANDING SOUTH, EXPECT 13000 HOLDING-LEFT TURNS
COSTR	280640.17 N/ 0814529.90 W	Y	FB	TF	357.50	11.82			HOLDING - RIGHT TURNS
En Route Transition									
SIMMR	274702.10 N/ 0841215.80 W	Y		IF					SIMMR.COSTR3
SYKES	273952.96 N/ 0830259.22 W	Y	FB	TF	096.35	61.89			EXPECT FL230. HOLDING - RIGHT TURNS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

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RNAV STAR (Data Record)

(1) FIX/NAVAID	(2) LAT/LONG	(3) C	(4) FO/FB	(5) LEG	(6) TC	(7) DIST	(8) ALTITUDE	(9) SPEED	(10) REMARKS
GUMMY	274935.41 N/ 0823156.47 W	Y	FB	TF	070.52	29.20			HOLDING - RIGHT TURNS
LAL VORTAC	275910.25 N/ 0820049.99 W	Y	FB	TF	070.76	29.17			
ANDRO	280257.05 N/ 0815308.47 W	Y	FB	TF	060.99	07.78			EXPECT 13000. KMCO LANDING NORTH, EXPECT 250K
SETME	280416.00 N/ 0815026.00 W	Y	FB	TF	061.28	02.73			
COSTR	280640.17 N/ 0814529.90 W	Y	FB	TF	061.21	04.98			HOLDING - RIGHT TURNS
Common Route									
COSTR	280640.17 N/ 0814529.90 W	Y		IF					HOLDING - RIGHT TURNS
BIGGR	281430.00 N/ 0813258.00 W	Y	FB	TF	054.76	13.55			
TINKR	281923.00 N/ 0812527.00 W	Y	FB	TF	053.70	08.23			
KRAKN	282335.00 N/ 0812527.00 W	Y	FB	TF	000.00	04.19			
TWONA	283613.00 N/ 0812527.00 W	Y	FB	TF	000.00	12.60			
KNUKL	284452.00 N/ 0812527.00 W	Y	FO	TF	000.00	08.63			
				FM	089.00				

QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	10 JUN 09	

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STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

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        SUSAEAENRT   BOXKR K70    C   H N27350957W083175564                    W0045     NAR          BOXKR
        SUSAEAENRT   COSTR K70    W     N28064017W081452990                    W0056     NAR          COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                    W0055     NAR          DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                    W0050     NAR          GUMMY
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        SUSAEAENRT   KRAKN K70    W     N28233500W081252700                    W0058     NAR          KRAKN
        SUSAEAENRT   MOANS K70    C     N27544997W081445489                    W0055     NAR          MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                    W0055     NAR          SETME
        SUSAEAENRT   SIMMR K70    W   B N27470210W084121580                    W0039     NAR          SIMMR
        SUSAEAENRT   SYKES K70    C     N27395296W083025922                    W0046     NAR          SYKES
        SUSAEAENRT   TINKR K70    W     N28192300W081252700                    W0058     NAR          TINKR
        SUSAEAENRT   TWONA K70    W     N28361300W081252700                    W0059     NAR          TWONA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
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        SUSAP KMCOK7ECOSTR34BOXKR 040LAL  K7D 0V    010TF                    07680292
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP KMCOK7GRW36R   0120050055 N28245515W081191904+0000    -0000100091000056200IIOJP3
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

FAA Form 7100-3 (9/02)

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
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SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW17L	N282637.31	W0811657.29	N2826.622	W08116.955
RW17R	N282608.20	W0811745.17	N2826.137	W08117.753
RW18L	N282654.00	W0811920.30	N2826.900	W08119.338
RW18R	N282653.86	W0811937.11	N2826.898	W08119.619
RW35L	N282429.20	W0811744.13	N2824.487	W08117.736
RW35R	N282508.20	W0811656.38	N2825.137	W08116.940
RW36L	N282455.01	W0811935.83	N2824.917	W08119.597
RW36R	N282455.15	W0811919.04	N2824.919	W08119.317

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW17L	00090	55
RW17R	00090	53
RW18L	00093	55
RW18R	00093	55
RW35L	00087	57
RW35R	00090	57
RW36L	00091	55
RW36R	00091	56

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC PACKET - 424-18 - STAR

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        SUSAD        LBV   K7011040VTL   N26494143W081232917    N26494143W081232917E0010000301     NARLA BELLE
        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

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        SUSAEAENRT   BOXKR K70    C   H N27350957W083175564                    W0045     NAR          BOXKR
        SUSAEAENRT   COSTR K70    W     N28064017W081452990                    W0056     NAR          COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                    W0055     NAR          DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                    W0050     NAR          GUMMY
        SUSAEAENRT   KNUKL K70    W     N28445200W081252700                    W0059     NAR          KNUKL
        SUSAEAENRT   KRAKN K70    W     N28233500W081252700                    W0058     NAR          KRAKN
        SUSAEAENRT   MOANS K70    C     N27544997W081445489                    W0055     NAR          MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                    W0055     NAR          SETME
        SUSAEAENRT   SIMMR K70    W   B N27470210W084121580                    W0039     NAR          SIMMR
        SUSAEAENRT   SYKES K70    C     N27395296W083025922                    W0046     NAR          SYKES
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        SUSAP KORLK7ECOSTR34BOXKR 020SYKESK7EA0E  H 010TF                    07640141
        SUSAP KORLK7ECOSTR34BOXKR 030GUMMYK7EA0E  H 010TF                    07650292
        SUSAP KORLK7ECOSTR34BOXKR 040LAL  K7D 0V    010TF                    07680292
        SUSAP KORLK7ECOSTR34BOXKR 050ANDROK7EA0E    010TF                    06700078
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP KORLK7ECOSTR34BOXKR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KORLK7ECOSTR34LBV   010LBV  K7D 0V       IF                                        18000
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SUSAP KORLK7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP KORLK7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP KORLK7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
SUSAP KORLK7ECOSTR34PIE   050SETMEK7EA0E    010TF                    06730027
SUSAP KORLK7ECOSTR34PIE   060COSTRK7EA0EE H 010TF                    06720050
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SUSAP KORLK7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KORLK7ECOSTR34RSW   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KORLK7ECOSTR34SIMMR 010SIMMRK7EA0E      IF                                        18000
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SUSAP KORLK7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
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SUSAP KORLK7ECOSTR34SIMMR 070COSTRK7EA0EE H 010TF                    06720050
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SUSAP KORLK7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP KORLK7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP KORLK7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D

          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SUSAP KORLK7GRW14    0046251368 N28325568W081202865+0100    +00040001040000281OOV
SUSAP KORLK7GRW25    0060042527 N28325769W081191955-0100    +00057001100000461501IEXO1
SUSAP KORLK7GRW32    0046253169 N28322573W081194942-0100    +0005500109000028100V
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

FAA Form 7100-3 (9/02)

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW07	N283234.18	W0812021.39	N2832.570	W08120.357
RW14	N283255.68	W0812028.65	N2832.928	W08120.478
RW25	N283257.69	W0811919.55	N2832.962	W08119.326
RW32	N283225.73	W0811949.42	N2832.429	W08119.824

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW07	00106	39
RW14	00104	28
RW25	00110	46
RW32	00109	28

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC PACKET - 424-18 - STAR

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        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

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        SUSAEAENRT   COSTR K70    W     N28064017W081452990                W0056     NAR          COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                W0055     NAR          DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                W0050     NAR          GUMMY
        SUSAEAENRT   KNUKL K70    W     N28445200W081252700                W0059     NAR          KNUKL
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        SUSAEAENRT   MOANS K70    C     N27544997W081445489                W0055     NAR          MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                W0055     NAR          SETME
        SUSAEAENRT   SIMMR K70    W   B N27470210W084121580                W0039     NAR          SIMMR
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        SUSAEAENRT   TWONA K70    W     N28361300W081252700                W0059     NAR          TWONA

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        SUSAP KSFBK7ECOSTR34BOXKR 020SYKESK7EA0E  H 010TF                    07640141
        SUSAP KSFBK7ECOSTR34BOXKR 030GUMMYK7EA0E  H 010TF                    07650292
        SUSAP KSFBK7ECOSTR34BOXKR 040LAL  K7D 0V    010TF                    07680292
        SUSAP KSFBK7ECOSTR34BOXKR 050ANDROK7EA0E    010TF                    06700078
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP KSFBK7ECOSTR34BOXKR 060SETMEK7EA0E    010TF                    06730027
SUSAP KSFBK7ECOSTR34BOXKR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KSFBK7ECOSTR34LBV   010LBV  K7D 0V       IF                                        18000
SUSAP KSFBK7ECOSTR34LBV   020DOWNNK7EA0E  H 010TF                    34050453
SUSAP KSFBK7ECOSTR34LBV   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KSFBK7ECOSTR34LBV   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KSFBK7ECOSTR34PIE   010PIE  K7D 0V       IF                                        18000
SUSAP KSFBK7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP KSFBK7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP KSFBK7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
SUSAP KSFBK7ECOSTR34PIE   050SETMEK7EA0E    010TF                    06730027
SUSAP KSFBK7ECOSTR34PIE   060COSTRK7EA0EE H 010TF                    06720050
SUSAP KSFBK7ECOSTR34RSW   010RSW  K7D 0V       IF                                        18000
SUSAP KSFBK7ECOSTR34RSW   020DOWNNK7EA0E  H 010TF                    00700587
SUSAP KSFBK7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KSFBK7ECOSTR34RSW   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KSFBK7ECOSTR34SIMMR 010SIMMRK7EA0E    IF                                        18000
SUSAP KSFBK7ECOSTR34SIMMR 020SYKESK7EA0E  H 010TF                    10240619
SUSAP KSFBK7ECOSTR34SIMMR 030GUMMYK7EA0E  H 010TF                    07650292
SUSAP KSFBK7ECOSTR34SIMMR 040LAL  K7D 0V    010TF                    07680292
SUSAP KSFBK7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
SUSAP KSFBK7ECOSTR34SIMMR 060SETMEK7EA0E    010TF                    06730027
SUSAP KSFBK7ECOSTR34SIMMR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KSFBK7ECOSTR35ALL   010COSTRK7EA0E  H    IF                                        18000
SUSAP KSFBK7ECOSTR35ALL   020BIGGRK7EA0E    010TF                    06080136
SUSAP KSFBK7ECOSTR35ALL   030TINKRK7EA0E    010TF                    05970082
SUSAP KSFBK7ECOSTR35ALL   040KRAKNK7EA0E    010TF                    00600042
SUSAP KSFBK7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP KSFBK7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP KSFBK7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D

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RUNWAY 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SUSAP KSFBK7GRW09L   0096010949 N28465427W081151020-0200    -0011100055100054150IISND1
SUSAP KSFBK7GRW09R   0066470949 N28461182W081135238-0300    -0015800039164745075IIOOS1
SUSAP KSFBK7GRW18    0060021849 N28465983W081140524-0100    -0013100048000045150R
SUSAP KSFBK7GRW27C   0035782749 N28464249W081140350+0100    -0013300048000027075V
SUSAP KSFBK7GRW27L   0066472749 N28461189W081125620+0300    -0020400024000045075R
SUSAP KSFBK7GRW27R   0096012749 N28465441W081134028+0200    -0016800036059945150IIFNU1
SUSAP KSFBK7GRW36    0060020049 N28460040W081140510+0100    -0014700043000045150V
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW09C	N284642.43	W0811443.71	N2846.707	W08114.729
RW09L	N284654.27	W0811510.20	N2846.905	W08115.170
RW09R	N284611.82	W0811352.38	N2846.197	W08113.873
RW18	N284659.83	W0811405.24	N2846.997	W08114.087
RW27C	N284642.49	W0811403.50	N2846.708	W08114.058
RW27L	N284611.89	W0811256.20	N2846.198	W08112.937
RW27R	N284654.41	W0811340.28	N2846.907	W08113.671
RW36	N284600.40	W0811405.10	N2846.007	W08114.085

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
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RW09L	00055	54
RW09R	00039	45
RW18	00048	45
RW27C	00048	27
RW27L	00024	45
RW27R	00036	45
RW36	00043	45

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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        SUSAD       PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD       RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD       SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

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        SUSAEAENRT  BOXKR K70   C   H N27350957W083175564                    W0045    NAR          BOXKR
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        SUSAEAENRT  GUMMY K70   C     N27493541W082315647                    W0050    NAR          GUMMY
        SUSAEAENRT  KNUKL K70   W     N28445200W081252700                    W0059    NAR          KNUKL
        SUSAEAENRT  KRAKN K70   W     N28233500W081252700                    W0058    NAR          KRAKN
        SUSAEAENRT  MOANS K70   C     N27544997W081445489                    W0055    NAR          MOANS
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        SUSAEAENRT  SYKES K70   C     N27395296W083025922                    W0046    NAR          SYKES
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        SUSAEAENRT  TWONA K70   W     N28361300W081252700                    W0059    NAR          TWONA

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AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KISMK7ECOSTR34BOXKR 030GUMMYK7EA0E  H 010TF                    07650292
        SUSAP KISMK7ECOSTR34BOXKR 040LAL  K7D 0V    010TF                    07680292
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP KISMK7ECOSTR34LBV   020DOWNNK7EA0E  H 010TF                    34050453
SUSAP KISMK7ECOSTR34LBV   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KISMK7ECOSTR34LBV   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KISMK7ECOSTR34PIE   010PIE  K7D 0V      IF                                                18000
SUSAP KISMK7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP KISMK7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP KISMK7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
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SUSAP KISMK7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
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SUSAP KISMK7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
SUSAP KISMK7ECOSTR34SIMMR 060SETMEK7EA0E    010TF                    06730027
SUSAP KISMK7ECOSTR34SIMMR 070COSTRK7EA0EE H 010TF                    06720050
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SUSAP KISMK7ECOSTR35ALL   030TINKRK7EA0E    010TF                    05970082
SUSAP KISMK7ECOSTR35ALL   040KRAKNK7EA0E    010TF                    00600042
SUSAP KISMK7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP KISMK7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP KISMK7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D

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RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SUSAP KISMK7GRW33    0060013331 N28165606W081255462+0100    -0004500076000045100R
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

FAA Form 7100-3 (9/02)

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW06	N281712.64	W0812638.58	N2817.211	W08126.643
RW15	N281746.49	W0812630.11	N2817.775	W08126.502
RW24	N281738.83	W0812551.11	N2817.647	W08125.852
RW33	N281656.06	W0812554.62	N2816.934	W08125.910

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW06	00080	45
RW15	00080	51
RW24	00078	45
RW33	00076	45

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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        SUSAD        LBV   K7011040VTL  N26494143W081232917    N26494143W081232917E0010000301     NARLA BELLE
        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

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        SUSAEAENRT   BOXKR K70    C   H N27350957W083175564                    W0045     NAR          BOXKR
        SUSAEAENRT   COSTR K70    W     N28064017W081452990                    W0056     NAR          COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                    W0055     NAR          DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                    W0050     NAR          GUMMY
        SUSAEAENRT   KNUKL K70    W     N28445200W081252700                    W0059     NAR          KNUKL
        SUSAEAENRT   KRAKN K70    W     N28233500W081252700                    W0058     NAR          KRAKN
        SUSAEAENRT   MOANS K70    C     N27544997W081445489                    W0055     NAR          MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                    W0055     NAR          SETME
        SUSAEAENRT   SIMMR K70    W   B N27470210W084121580                    W0039     NAR          SIMMR
        SUSAEAENRT   SYKES K70    C     N27395296W083025922                    W0046     NAR          SYKES
        SUSAEAENRT   TINKR K70    W     N28192300W081252700                    W0058     NAR          TINKR
        SUSAEAENRT   TWONA K70    W     N28361300W081252700                    W0059     NAR          TWONA

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AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KLEEK7ECOSTR34BOXKR 020SYKESK7EA0E   H 010TF                    07640141
        SUSAP KLEEK7ECOSTR34BOXKR 030GUMMYK7EA0E   H 010TF                    07650292
        SUSAP KLEEK7ECOSTR34BOXKR 040LAL  K7D 0V     010TF                    07680292
        SUSAP KLEEK7ECOSTR34BOXKR 050ANDROK7EA0E     010TF                    06700078
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP KLEEK7ECOSTR34BOXKR 060SETMEK7EA0E    010TF                    06730027
SUSAP KLEEK7ECOSTR34BOXKR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KLEEK7ECOSTR34LBV   010LBV  K7D 0V       IF                                                  18000
SUSAP KLEEK7ECOSTR34LBV   020DOWNNK7EA0E  H 010TF                    34050453
SUSAP KLEEK7ECOSTR34LBV   030MOANSK7EA0E  H 010TF                    00700241
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SUSAP KLEEK7ECOSTR34PIE   010PIE  K7D 0V       IF                                                  18000
SUSAP KLEEK7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP KLEEK7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP KLEEK7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
SUSAP KLEEK7ECOSTR34PIE   050SETMEK7EA0E    010TF                    06730027
SUSAP KLEEK7ECOSTR34PIE   060COSTRK7EA0EE H 010TF                    06720050
SUSAP KLEEK7ECOSTR34RSW   010RSW  K7D 0V       IF                                                  18000
SUSAP KLEEK7ECOSTR34RSW   020DOWNNK7EA0E  H 010TF                    00700587
SUSAP KLEEK7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KLEEK7ECOSTR34RSW   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KLEEK7ECOSTR34SIMMR 010SIMMRK7EA0E      IF                                                  18000
SUSAP KLEEK7ECOSTR34SIMMR 020SYKESK7EA0E  H 010TF                    10240619
SUSAP KLEEK7ECOSTR34SIMMR 030GUMMYK7EA0E  H 010TF                    07650292
SUSAP KLEEK7ECOSTR34SIMMR 040LAL  K7D 0V    010TF                    07680292
SUSAP KLEEK7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
SUSAP KLEEK7ECOSTR34SIMMR 060SETMEK7EA0E    010TF                    06730027
SUSAP KLEEK7ECOSTR34SIMMR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KLEEK7ECOSTR35ALL   010COSTRK7EA0E  H    IF                                                  18000
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SUSAP KLEEK7ECOSTR35ALL   030TINKRK7EA0E    010TF                    05970082
SUSAP KLEEK7ECOSTR35ALL   040KRAKNK7EA0E    010TF                    00600042
SUSAP KLEEK7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP KLEEK7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP KLEEK7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D

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RUNWAY 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SUSAP KLEEK7GRW03    0049570400 N28485817W081484244+0200    -0007200067000045100R
SUSAP KLEEK7GRW13    0063001348 N28494383W081485802-0100    -0005000074028955100R
SUSAP KLEEK7GRW21    0049572200 N28493586W081481249-0200    -0005100074031045100V
SUSAP KLEEK7GRW31    0063003148 N28490828W081480957+0100    -0007100067040045100R
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW03	N284858.17	W0814842.44	N2848.970	W08148.707
RW13	N284943.83	W0814858.02	N2849.731	W08148.967
RW21	N284935.86	W0814812.49	N2849.598	W08148.208
RW31	N284908.28	W0814809.57	N2849.138	W08148.160

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW03	00067	45
RW13	00074	55
RW21	00074	45
RW31	00067	45

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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        SUSAD        LBV   K7011040VTL  N26494143W081232917    N26494143W081232917E0010000301     NARLA BELLE
        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

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        SUSAEAENRT   COSTR K70    W     N28064017W081452990                    W0056     NAR          COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                    W0055     NAR          DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                    W0050     NAR          GUMMY
        SUSAEAENRT   KNUKL K70    W     N28445200W081252700                    W0059     NAR          KNUKL
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        SUSAEAENRT   MOANS K70    C     N27544997W081445489                    W0055     NAR          MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                    W0055     NAR          SETME
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        SUSAEAENRT   SYKES K70    C     N27395296W083025922                    W0046     NAR          SYKES
        SUSAEAENRT   TINKR K70    W     N28192300W081252700                    W0058     NAR          TINKR
        SUSAEAENRT   TWONA K70    W     N28361300W081252700                    W0059     NAR          TWONA

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AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP X04 K7ECOSTR34BOXKR 020SYKESK7EA0E   H 010TF                    07640141
        SUSAP X04 K7ECOSTR34BOXKR 030GUMMYK7EA0E   H 010TF                    07650292
        SUSAP X04 K7ECOSTR34BOXKR 040LAL  K7D 0V     010TF                    07680292
        SUSAP X04 K7ECOSTR34BOXKR 050ANDROK7EA0E     010TF                    06700078
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP X04 K7ECOSTR34BOXKR 060SETMEK7EA0E    010TF                    06730027
SUSAP X04 K7ECOSTR34BOXKR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP X04 K7ECOSTR34LBV   010LBV  K7D 0V      IF                                                  18000
SUSAP X04 K7ECOSTR34LBV   020DOWNNK7EA0E  H 010TF                    34050453
SUSAP X04 K7ECOSTR34LBV   030MOANSK7EA0E  H 010TF                    00700241
SUSAP X04 K7ECOSTR34LBV   040COSTRK7EA0EE H 010TF                    00350118
SUSAP X04 K7ECOSTR34PIE   010PIE  K7D 0V      IF                                                  18000
SUSAP X04 K7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP X04 K7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP X04 K7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
SUSAP X04 K7ECOSTR34PIE   050SETMEK7EA0E    010TF                    06730027
SUSAP X04 K7ECOSTR34PIE   060COSTRK7EA0EE H 010TF                    06720050
SUSAP X04 K7ECOSTR34RSW   010RSW  K7D 0V      IF                                                  18000
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SUSAP X04 K7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
SUSAP X04 K7ECOSTR34RSW   040COSTRK7EA0EE H 010TF                    00350118
SUSAP X04 K7ECOSTR34SIMMR 010SIMMRK7EA0E      IF                                                  18000
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SUSAP X04 K7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
SUSAP X04 K7ECOSTR34SIMMR 060SETMEK7EA0E    010TF                    06730027
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SUSAP X04 K7ECOSTR35ALL   010COSTRK7EA0E  H   IF                                                  18000
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SUSAP X04 K7ECOSTR35ALL   040KRAKNK7EA0E    010TF                    00600042
SUSAP X04 K7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP X04 K7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP X04 K7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D

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SUSAP X04 K7GRW33    0039873343 N28421013W081344329+0400    +00107001250000250 60V
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW15	N284235.75	W0813501.28	N2842.596	W08135.021
RW33	N284210.13	W0813443.29	N2842.169	W08134.722

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW15	00139	10
RW33	00125	25

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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        SUSAD        LBV   K7011040VTL  N26494143W081232917    N26494143W081232917E0010000301     NARLA BELLE
        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

                1         2         3         4         5         6         7         8         9         0         1         2         3
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        SUSAEAENRT   BIGGR K70    W     N28143000W081325800                    W0057     NAR          BIGGR
        SUSAEAENRT   BOXKR K70    C   H N27350957W083175564                    W0045     NAR          BOXKR
        SUSAEAENRT   COSTR K70    W     N28064017W081452990                    W0056     NAR          COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                    W0055     NAR          DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                    W0050     NAR          GUMMY
        SUSAEAENRT   KNUKL K70    W     N28445200W081252700                    W0059     NAR          KNUKL
        SUSAEAENRT   KRAKN K70    W     N28233500W081252700                    W0058     NAR          KRAKN
        SUSAEAENRT   MOANS K70    C     N27544997W081445489                    W0055     NAR          MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                    W0055     NAR          SETME
        SUSAEAENRT   SIMMR K70    W   B N27470210W084121580                    W0039     NAR          SIMMR
        SUSAEAENRT   SYKES K70    C     N27395296W083025922                    W0046     NAR          SYKES
        SUSAEAENRT   TINKR K70    W     N28192300W081252700                    W0058     NAR          TINKR
        SUSAEAENRT   TWONA K70    W     N28361300W081252700                    W0059     NAR          TWONA

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AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KTIXK7ATIX     0     073YHN28305328W080475722W005000034          1800018000C    MNAR    SPACE COAST RGNL

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SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KTIXK7ECOSTR34BOXKR 020SYKESK7EA0E  H 010TF                    07640141
        SUSAP KTIXK7ECOSTR34BOXKR 030GUMMYK7EA0E  H 010TF                    07650292
        SUSAP KTIXK7ECOSTR34BOXKR 040LAL  K7D 0V    010TF                    07680292
        SUSAP KTIXK7ECOSTR34BOXKR 050ANDROK7EA0E    010TF                    06700078
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP KTIXK7ECOSTR34BOXKR 060SETMEK7EA0E    010TF                    06730027
SUSAP KTIXK7ECOSTR34BOXKR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KTIXK7ECOSTR34LBV   010LBV  K7D 0V       IF                                        18000
SUSAP KTIXK7ECOSTR34LBV   020DOWNNK7EA0E  H 010TF                    34050453
SUSAP KTIXK7ECOSTR34LBV   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KTIXK7ECOSTR34LBV   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KTIXK7ECOSTR34PIE   010PIE  K7D 0V       IF                                        18000
SUSAP KTIXK7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP KTIXK7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP KTIXK7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
SUSAP KTIXK7ECOSTR34PIE   050SETMEK7EA0E    010TF                    06730027
SUSAP KTIXK7ECOSTR34PIE   060COSTRK7EA0EE H 010TF                    06720050
SUSAP KTIXK7ECOSTR34RSW   010RSW  K7D 0V       IF                                        18000
SUSAP KTIXK7ECOSTR34RSW   020DOWNNK7EA0E  H 010TF                    00700587
SUSAP KTIXK7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KTIXK7ECOSTR34RSW   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KTIXK7ECOSTR34SIMMR 010SIMMRK7EA0E      IF                                        18000
SUSAP KTIXK7ECOSTR34SIMMR 020SYKESK7EA0E  H 010TF                    10240619
SUSAP KTIXK7ECOSTR34SIMMR 030GUMMYK7EA0E  H 010TF                    07650292
SUSAP KTIXK7ECOSTR34SIMMR 040LAL  K7D 0V    010TF                    07680292
SUSAP KTIXK7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
SUSAP KTIXK7ECOSTR34SIMMR 060SETMEK7EA0E    010TF                    06730027
SUSAP KTIXK7ECOSTR34SIMMR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KTIXK7ECOSTR35ALL   010COSTRK7EA0E  H    IF                                        18000
SUSAP KTIXK7ECOSTR35ALL   020BIGGRK7EA0E    010TF                    06080136
SUSAP KTIXK7ECOSTR35ALL   030TINKRK7EA0E    010TF                    05970082
SUSAP KTIXK7ECOSTR35ALL   040KRAKNK7EA0E    010TF                    00600042
SUSAP KTIXK7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP KTIXK7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP KTIXK7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D

          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SUSAP KTIXK7GRW09    0050000941 N28305422W080483629+0000    -0018300032019060100R
SUSAP KTIXK7GRW18    0073191841 N28312543W080474879+0100    -0019000030032250150R
SUSAP KTIXK7GRW27    0050002741 N28305494W080474238+0000    -0018500031000045100V
SUSAP KTIXK7GRW36    0073190041 N28301616W080474759-0100    -0017800034000058150IITIX1
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

FAA Form 7100-3 (9/02)

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW09	N283054.22	W0804836.29	N2830.904	W08048.605
RW18	N283125.43	W0804748.79	N2831.424	W08047.813
RW27	N283054.94	W0804742.38	N2830.916	W08047.706
RW36	N283016.16	W0804747.59	N2830.269	W08047.793

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW09	00032	60
RW18	00030	50
RW27	00031	45
RW36	00034	58

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC PACKET - 424-18 - STAR

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        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

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        SUSAEAENRT   BOXKR K70    C   H N27350957W083175564                    W0045     NAR           BOXKR
        SUSAEAENRT   COSTR K70    W     N28064017W081452990                    W0056     NAR           COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                    W0055     NAR           DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                    W0050     NAR           GUMMY
        SUSAEAENRT   KNUKL K70    W     N28445200W081252700                    W0059     NAR           KNUKL
        SUSAEAENRT   KRAKN K70    W     N28233500W081252700                    W0058     NAR           KRAKN
        SUSAEAENRT   MOANS K70    C     N27544997W081445489                    W0055     NAR           MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                    W0055     NAR           SETME
        SUSAEAENRT   SIMMR K70    W   B N27470210W084121580                    W0039     NAR           SIMMR
        SUSAEAENRT   SYKES K70    C     N27395296W083025922                    W0046     NAR           SYKES
        SUSAEAENRT   TINKR K70    W     N28192300W081252700                    W0058     NAR           TINKR
        SUSAEAENRT   TWONA K70    W     N28361300W081252700                    W0059     NAR           TWONA

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AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KCOIK7ECOSTR34BOXKR 020SYKESK7EA0E  H 010TF                    07640141
        SUSAP KCOIK7ECOSTR34BOXKR 030GUMMYK7EA0E  H 010TF                    07650292
        SUSAP KCOIK7ECOSTR34BOXKR 040LAL  K7D 0V    010TF                    07680292
        SUSAP KCOIK7ECOSTR34BOXKR 050ANDROK7EA0E    010TF                    06700078
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP KCOIK7ECOSTR34BOXKR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KCOIK7ECOSTR34LBV   010LBV  K7D 0V      IF                                        18000
SUSAP KCOIK7ECOSTR34LBV   020DOWNNK7EA0E  H 010TF                    34050453
SUSAP KCOIK7ECOSTR34LBV   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KCOIK7ECOSTR34LBV   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KCOIK7ECOSTR34PIE   010PIE  K7D 0V      IF                                        18000
SUSAP KCOIK7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP KCOIK7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP KCOIK7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
SUSAP KCOIK7ECOSTR34PIE   050SETMEK7EA0E    010TF                    06730027
SUSAP KCOIK7ECOSTR34PIE   060COSTRK7EA0EE H 010TF                    06720050
SUSAP KCOIK7ECOSTR34RSW   010RSW  K7D 0V      IF                                        18000
SUSAP KCOIK7ECOSTR34RSW   020DOWNNK7EA0E  H 010TF                    00700587
SUSAP KCOIK7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KCOIK7ECOSTR34RSW   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KCOIK7ECOSTR34SIMMR 010SIMMRK7EA0E      IF                                        18000
SUSAP KCOIK7ECOSTR34SIMMR 020SYKESK7EA0E  H 010TF                    10240619
SUSAP KCOIK7ECOSTR34SIMMR 030GUMMYK7EA0E  H 010TF                    07650292
SUSAP KCOIK7ECOSTR34SIMMR 040LAL  K7D 0V    010TF                    07680292
SUSAP KCOIK7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
SUSAP KCOIK7ECOSTR34SIMMR 060SETMEK7EA0E    010TF                    06730027
SUSAP KCOIK7ECOSTR34SIMMR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KCOIK7ECOSTR35ALL   010COSTRK7EA0E  H    IF                                        18000
SUSAP KCOIK7ECOSTR35ALL   020BIGGRK7EA0E    010TF                    06080136
SUSAP KCOIK7ECOSTR35ALL   030TINKRK7EA0E    010TF                    05970082
SUSAP KCOIK7ECOSTR35ALL   040KRAKNK7EA0E    010TF                    00600042
SUSAP KCOIK7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP KCOIK7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP KCOIK7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D

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RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SUSAP KCOIK7GRW11    0036011143 N28203566W080412676-0100    -00264000060000033075R
SUSAP KCOIK7GRW29    0036012943 N28202385W080404873+0100    -00273000030000031075V
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW11	N282035.66	W0804126.76	N2820.594	W08041.446
RW29	N282023.85	W0804048.73	N2820.398	W08040.812

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW11	00006	33
RW29	00003	31

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAD        LBV   K7011040VTL  N26494143W081232917    N26494143W081232917E0010000301     NARLA BELLE
        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAEAENRT   ANDRO K70    C     N28025705W081530847                    W0055     NAR           ANDRO
        SUSAEAENRT   BIGGR K70    W     N28143000W081325800                    W0057     NAR           BIGGR
        SUSAEAENRT   BOXKR K70    C   H N27350957W083175564                    W0045     NAR           BOXKR
        SUSAEAENRT   COSTR K70    W     N28064017W081452990                    W0056     NAR           COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                    W0055     NAR           DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                    W0050     NAR           GUMMY
        SUSAEAENRT   KNUKL K70    W     N28445200W081252700                    W0059     NAR           KNUKL
        SUSAEAENRT   KRAKN K70    W     N28233500W081252700                    W0058     NAR           KRAKN
        SUSAEAENRT   MOANS K70    C     N27544997W081445489                    W0055     NAR           MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                    W0055     NAR           SETME
        SUSAEAENRT   SIMMR K70    W   B N27470210W084121580                    W0039     NAR           SIMMR
        SUSAEAENRT   SYKES K70    C     N27395296W083025922                    W0046     NAR           SYKES
        SUSAEAENRT   TINKR K70    W     N28192300W081252700                    W0058     NAR           TINKR
        SUSAEAENRT   TWONA K70    W     N28361300W081252700                    W0059     NAR           TWONA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KCOFK7ACOF     0     090YHN28140602W080363593W004000008          1800018000M    MWGE    PATRICK AFB

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SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KCOFK7ECOSTR34BOXKR 010BOXKRK7EA0E       IF                                          18000
        SUSAP KCOFK7ECOSTR34BOXKR 020SYKESK7EA0E   H 010TF                    07640141
        SUSAP KCOFK7ECOSTR34BOXKR 030GUMMYK7EA0E   H 010TF                    07650292
        SUSAP KCOFK7ECOSTR34BOXKR 040LAL  K7D 0V     010TF                    07680292
        SUSAP KCOFK7ECOSTR34BOXKR 050ANDROK7EA0E     010TF                    06700078
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

FAA Form 7100-3 (9/02)

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SUSAP KCOFK7ECOSTR34BOXKR 060SETMEK7EA0E    010TF                    06730027
SUSAP KCOFK7ECOSTR34BOXKR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KCOFK7ECOSTR34LBV   010LBV  K7D 0V       IF                                    18000
SUSAP KCOFK7ECOSTR34LBV   020DOWNNK7EA0E  H 010TF                    34050453
SUSAP KCOFK7ECOSTR34LBV   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KCOFK7ECOSTR34LBV   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KCOFK7ECOSTR34PIE   010PIE  K7D 0V       IF                                    18000
SUSAP KCOFK7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP KCOFK7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP KCOFK7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
SUSAP KCOFK7ECOSTR34PIE   050SETMEK7EA0E    010TF                    06730027
SUSAP KCOFK7ECOSTR34PIE   060COSTRK7EA0EE H 010TF                    06720050
SUSAP KCOFK7ECOSTR34RSW   010RSW  K7D 0V       IF                                    18000
SUSAP KCOFK7ECOSTR34RSW   020DOWNNK7EA0E  H 010TF                    00700587
SUSAP KCOFK7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KCOFK7ECOSTR34RSW   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KCOFK7ECOSTR34SIMMR 010SIMMRK7EA0E      IF                                    18000
SUSAP KCOFK7ECOSTR34SIMMR 020SYKESK7EA0E  H 010TF                    10240619
SUSAP KCOFK7ECOSTR34SIMMR 030GUMMYK7EA0E  H 010TF                    07650292
SUSAP KCOFK7ECOSTR34SIMMR 040LAL  K7D 0V    010TF                    07680292
SUSAP KCOFK7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
SUSAP KCOFK7ECOSTR34SIMMR 060SETMEK7EA0E    010TF                    06730027
SUSAP KCOFK7ECOSTR34SIMMR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KCOFK7ECOSTR35ALL   010COSTRK7EA0E  H    IF                                    18000
SUSAP KCOFK7ECOSTR35ALL   020BIGGRK7EA0E    010TF                    06080136
SUSAP KCOFK7ECOSTR35ALL   030TINKRK7EA0E    010TF                    05970082
SUSAP KCOFK7ECOSTR35ALL   040KRAKNK7EA0E    010TF                    00600042
SUSAP KCOFK7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP KCOFK7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP KCOFK7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KCOFK7GRW11    0040031111 N28142984W080365501+0100    -0026900004000051200V
        SUSAP KCOFK7GRW20    0090232039 N28144003W080361976+0000    -0026000008000049200IIPKC1
        SUSAP KCOFK7GRW29    0040032911 N28141907W080361544-0100    -0026100007030043200V
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW02	N281316.04	W0803654.13	N2813.267	W08036.902
RW11	N281429.84	W0803655.01	N2814.497	W08036.917
RW20	N281440.03	W0803619.76	N2814.667	W08036.329
RW29	N281419.07	W0803615.44	N2814.318	W08036.257

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW02	00005	52
RW11	00004	51
RW20	00008	49
RW29	00007	43

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

ARINC PACKET - 424-18 - STAR

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        SUSAD        LAL   K7011600VTH  N27591025W082005001    N27591025W082005001E0010001342     NARLAKELAND
        SUSAD        LBV   K7011040VTL  N26494143W081232917    N26494143W081232917E0010000301     NARLA BELLE
        SUSAD        PIE   K7011640VTHA N27542795W082410351    N27542795W082410351W0050000092     NARST PETERSBURG
        SUSAD        RSW   K7011180VTLA N26314755W081463276    N26314755W081463276W0020000251     NARLEE COUNTY
        SUSAD        SGJ   K7010940VDTW N29572421W081194879    N29572421W081194879W0060000060     NARST AUGUSTINE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAEAENRT   ANDRO K70    C     N28025705W081530847                    W0055     NAR          ANDRO
        SUSAEAENRT   BIGGR K70    W     N28143000W081325800                    W0057     NAR          BIGGR
        SUSAEAENRT   BOXKR K70    C   H N27350957W083175564                    W0045     NAR          BOXKR
        SUSAEAENRT   COSTR K70    W     N28064017W081452990                    W0056     NAR          COSTR
        SUSAEAENRT   DOWNN K70    C   L N27303876W081452368                    W0055     NAR          DOWNN
        SUSAEAENRT   GUMMY K70    C     N27493541W082315647                    W0050     NAR          GUMMY
        SUSAEAENRT   KNUKL K70    W     N28445200W081252700                    W0059     NAR          KNUKL
        SUSAEAENRT   KRAKN K70    W     N28233500W081252700                    W0058     NAR          KRAKN
        SUSAEAENRT   MOANS K70    C     N27544997W081445489                    W0055     NAR          MOANS
        SUSAEAENRT   SETME K70    W     N28041600W081502600                    W0055     NAR          SETME
        SUSAEAENRT   SIMMR K70    W   B N27470210W084121580                    W0039     NAR          SIMMR
        SUSAEAENRT   SYKES K70    C     N27395296W083025922                    W0046     NAR          SYKES
        SUSAEAENRT   TINKR K70    W     N28192300W081252700                    W0058     NAR          TINKR
        SUSAEAENRT   TWONA K70    W     N28361300W081252700                    W0059     NAR          TWONA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KMLBK7AMLB     0     101YHN28060991W080384293W007000033         1800018000C    MNAR    MELBOURNE INTL

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SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KMLBK7ECOSTR34BOXKR 010BOXKRK7EA0E       IF                                                  18000
        SUSAP KMLBK7ECOSTR34BOXKR 020SYKESK7EA0E  H 010TF                    07640141
        SUSAP KMLBK7ECOSTR34BOXKR 030GUMMYK7EA0E  H 010TF                    07650292
        SUSAP KMLBK7ECOSTR34BOXKR 040LAL  K7D 0V    010TF                    07680292
        SUSAP KMLBK7ECOSTR34BOXKR 050ANDROK7EA0E    010TF                    06700078
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(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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SUSAP KMLBK7ECOSTR34BOXKR 060SETMEK7EA0E    010TF                    06730027
SUSAP KMLBK7ECOSTR34BOXKR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KMLBK7ECOSTR34LBV   010LBV  K7D 0V       IF                                        18000
SUSAP KMLBK7ECOSTR34LBV   020DOWNNK7EA0E  H 010TF                    34050453
SUSAP KMLBK7ECOSTR34LBV   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KMLBK7ECOSTR34LBV   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KMLBK7ECOSTR34PIE   010PIE  K7D 0V       IF                                        18000
SUSAP KMLBK7ECOSTR34PIE   020GUMMYK7EA0E  H 010TF                    12700094
SUSAP KMLBK7ECOSTR34PIE   030LAL  K7D 0V    010TF                    07680292
SUSAP KMLBK7ECOSTR34PIE   040ANDROK7EA0E    010TF                    06700078
SUSAP KMLBK7ECOSTR34PIE   050SETMEK7EA0E    010TF                    06730027
SUSAP KMLBK7ECOSTR34PIE   060COSTRK7EA0EE H 010TF                    06720050
SUSAP KMLBK7ECOSTR34RSW   010RSW  K7D 0V       IF                                        18000
SUSAP KMLBK7ECOSTR34RSW   020DOWNNK7EA0E  H 010TF                    00700587
SUSAP KMLBK7ECOSTR34RSW   030MOANSK7EA0E  H 010TF                    00700241
SUSAP KMLBK7ECOSTR34RSW   040COSTRK7EA0EE H 010TF                    00350118
SUSAP KMLBK7ECOSTR34SIMMR 010SIMMRK7EA0E      IF                                        18000
SUSAP KMLBK7ECOSTR34SIMMR 020SYKESK7EA0E  H 010TF                    10240619
SUSAP KMLBK7ECOSTR34SIMMR 030GUMMYK7EA0E  H 010TF                    07650292
SUSAP KMLBK7ECOSTR34SIMMR 040LAL  K7D 0V    010TF                    07680292
SUSAP KMLBK7ECOSTR34SIMMR 050ANDROK7EA0E    010TF                    06700078
SUSAP KMLBK7ECOSTR34SIMMR 060SETMEK7EA0E    010TF                    06730027
SUSAP KMLBK7ECOSTR34SIMMR 070COSTRK7EA0EE H 010TF                    06720050
SUSAP KMLBK7ECOSTR35ALL   010COSTRK7EA0E  H    IF                                        18000
SUSAP KMLBK7ECOSTR35ALL   020BIGGRK7EA0E    010TF                    06080136
SUSAP KMLBK7ECOSTR35ALL   030TINKRK7EA0E    010TF                    05970082
SUSAP KMLBK7ECOSTR35ALL   040KRAKNK7EA0E    010TF                    00600042
SUSAP KMLBK7ECOSTR35ALL   050TWONAK7EA0E    010TF                    00600126
SUSAP KMLBK7ECOSTR35ALL   060KNUKLK7EA0EY   010TF                    00600086
SUSAP KMLBK7ECOSTR35ALL   070KNUKLK7EA0EE      FM SGJ K7      189907250950    D
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
SUSAP KMLBK7GRW05    0030010491 N28054525W080381461-0100    -0020500025000019075V
SUSAP KMLBK7GRW09L   0060000939 N28061946W080393549-0100    -0018900031000055150R
SUSAP KMLBK7GRW09R   0101810939 N28060461W080394008-0100    -00186000320000611501IMLB1
SUSAP KMLBK7GRW23    0030012291 N28060730W080375214+0100    -0021700021000019075V
SUSAP KMLBK7GRW27L   0101812739 N28060971W080375436+0100    -0021400022070052150R
SUSAP KMLBK7GRW27R   0060002739 N28062269W080382860+0100    -0020300026000055150R
```

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

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
	BOXKR	BOXKR	010		IF		FB					
	BOXKR	SYKES	020		TF		FB	1.0	076.4()	014.1		
	BOXKR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	BOXKR	LAL	040		TF		FB	1.0	076.8()	029.2		
	BOXKR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	BOXKR	SETME	060		TF		FB	1.0	067.3()	002.7		
	BOXKR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	LBV	LBV	010		IF		FB					
	LBV	DOWNN	020		TF		FB	1.0	340.5()	045.3		
	LBV	MOANS	030		TF		FB	1.0	007.0()	024.1		
	LBV	COSTR	040		TF		FB	1.0	003.5()	011.8		
	PIE	PIE	010		IF		FB					
	PIE	GUMMY	020		TF		FB	1.0	127.0()	009.4		
	PIE	LAL	030		TF		FB	1.0	076.8()	029.2		
	PIE	ANDRO	040		TF		FB	1.0	067.0()	007.8		
	PIE	SETME	050		TF		FB	1.0	067.3()	002.7		
	PIE	COSTR	060		TF		FB	1.0	067.2()	005.0		
	RSW	RSW	010		IF		FB					
	RSW	DOWNN	020		TF		FB	1.0	007.0()	058.7		
	RSW	MOANS	030		TF		FB	1.0	007.0()	024.1		
	RSW	COSTR	040		TF		FB	1.0	003.5()	011.8		
	SIMMR	SIMMR	010		IF		FB					
	SIMMR	SYKES	020		TF		FB	1.0	102.4()	061.9		
	SIMMR	GUMMY	030		TF		FB	1.0	076.5()	029.2		
	SIMMR	LAL	040		TF		FB	1.0	076.8()	029.2		
	SIMMR	ANDRO	050		TF		FB	1.0	067.0()	007.8		
	SIMMR	SETME	060		TF		FB	1.0	067.3()	002.7		
	SIMMR	COSTR	070		TF		FB	1.0	067.2()	005.0		
	ALL	COSTR	010		IF		FB					
	ALL	BIGGR	020		TF		FB	1.0	060.8()	013.6		
	ALL	TINKR	030		TF		FB	1.0	059.7()	008.2		
	ALL	KRAKN	040		TF		FB	1.0	006.0()	004.2		
	ALL	TWONA	050		TF		FB	1.0	006.0()	012.6		
	ALL	KNUKL	060		TF		FO	1.0	006.0()	008.6		
	ALL	KNUKL	070		FM		FB		095.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

FAA Form 7100-3 (9/02)

LAL	N275910.25	W0820050.01	N2759.171	W08200.834
LBV	N264941.43	W0812329.17	N2649.691	W08123.486
PIE	N275427.95	W0824103.51	N2754.466	W08241.059
RSW	N263147.55	W0814632.76	N2631.793	W08146.546
SGJ	N295724.21	W0811948.79	N2957.404	W08119.813
ANDRO	N280257.05	W0815308.47	N2802.951	W08153.141
BIGGR	N281430.00	W0813258.00	N2814.500	W08132.967
BOXKR	N273509.57	W0831755.64	N2735.160	W08317.927
COSTR	N280640.17	W0814529.90	N2806.670	W08145.498
DOWNN	N273038.76	W0814523.68	N2730.646	W08145.395
GUMMY	N274935.41	W0823156.47	N2749.590	W08231.941
KNUKL	N284452.00	W0812527.00	N2844.867	W08125.450
KRAKN	N282335.00	W0812527.00	N2823.583	W08125.450
MOANS	N275449.97	W0814454.89	N2754.833	W08144.915
SETME	N280416.00	W0815026.00	N2804.267	W08150.433
SIMMR	N274702.10	W0841215.80	N2747.035	W08412.263
SYKES	N273952.96	W0830259.22	N2739.883	W08302.987
TINKR	N281923.00	W0812527.00	N2819.383	W08125.450
TWONA	N283613.00	W0812527.00	N2836.217	W08125.450
RW05	N280545.25	W0803814.61	N2805.754	W08038.244
RW09L	N280619.46	W0803935.49	N2806.324	W08039.592
RW09R	N280604.61	W0803940.08	N2806.077	W08039.668
RW23	N280607.30	W0803752.14	N2806.122	W08037.869
RW27L	N280609.71	W0803754.36	N2806.162	W08037.906
RW27R	N280622.69	W0803828.60	N2806.378	W08038.477

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW05	00025	19
RW09L	00031	55
RW09R	00032	61
RW23	00021	19
RW27L	00022	52
RW27R	00026	55

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
COSTR RNAV	THREE	COSTR.COSTR3	TWO	06/10/2009	

RADIO FIX AND HOLDING DATA RECORD

NAME: ANDRO **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 280257.05N/0815308.47W **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	LAKELAND	LAL	VORTAC	H	059.99	060.99	7.78	7.78		13000	45000
2	OCALA	OCF	VORTAC	L	165.00	165.00		69.88		13000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
OCF	VORTAC	R-165	70	13000	45000

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

REMARKS:
LAKELAND (FAC 1) AND OCALA (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)			KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)			KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)			KLEE	LEESBURG	FL (US)
STAR	MINEE	1, 2		KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)			KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)			KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE	1, 2		KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)			KISM	ORLANDO	FL (US)
STAR	MINEE	1, 2		KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)
STAR	MINEE	1, 2		KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KORL	ORLANDO	FL (US)
STAR	MINEE	1, 2		KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KSFB	ORLANDO	FL (US)
STAR	MINEE	1, 2		KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KTIX	TITUSVILLE	FL (US)
STAR	MINEE	1, 2		KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FAC 1 AND 2 TO CURRENT AVNIS DATA.
MADE FAC 1 AND 2 COORD FACS.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 04/06/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON, MCO ATCT
OTHER: ZJX

RADIO FIX AND HOLDING DATA RECORD

NAME: BOXKR **STATE:** OG **COUNTRY:** US

LATITUDE/LONGITUDE: 273509.57N/0831755.64W **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	LAKELAND	LAL	VORTAC	H	250.00	251.00	72.45	72.45		13000	45000
2	SARASOTA	SRQ	VORTAC	H	290.44	285.44	40.66	40.66		13000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
LAL	VORTAC	R-250	73	13000	45000
SRQ	VORTAC	R-290	41	13000	14600

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

REMARKS:
LAKELAND (FAC 1) AND SARASOTA (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)			KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)			KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)			KLEE	LEESBURG	FL (US)
STAR	MINEE	1, 2		KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)			KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)			KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE	1, 2		KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)			KISM	ORLANDO	FL (US)
STAR	MINEE	1, 2		KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)
STAR	MINEE	1, 2		KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KORL	ORLANDO	FL (US)
STAR	MINEE	1, 2		KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KSFB	ORLANDO	FL (US)
STAR	MINEE	1, 2		KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KTIX	TITUSVILLE	FL (US)
STAR	MINEE	1, 2		KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED SRQ ESV RADIAL.
MADE FAC 1 AND FAC 2 COORD FACS.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 04/06/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON
OTHER: MCO ATCT, ZJX

RADIO FIX AND HOLDING DATA RECORD

NAME: COSTR **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 280640.17N/0814529.90W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

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	SW		WP	247.21	067.21	R		7	8000	12000	9	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (12-003145)	275629.00N/0815451.00W	832	2C

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
KMCO 6W MAG VAR USED FOR PAT 1.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)		1	KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)		1	KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)		1	KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)		1	KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)		1	KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)		1	KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
CHANGED PAT 1 CRS INBOUND FROM 066.21 TO 067.21.
CHANGED PAT 1 DME FROM 5 TO 7.
CHANGED PAT 1 MIN HOLDING ALT FROM 5000 TO 8000.
CHANGED PAT 1 MIN TEMPLATE FROM 6 TO 9.
CHANGED AIRSPEED FROM 200 TO 230; UPDATED CONTROLLING OBSTRUCTION.
ADDED KMCO MAG VAR REMARK.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 04/05/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON
OTHER: ZJX, MCO ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: DOWNN **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 273038.76N/0814523.68W **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	LAKELAND	LAL	VORTAC	H	153.23	154.23	31.57	31.57		2200	17500
2	SARASOTA	SRQ	VORTAC	H	086.61	081.61		43.52		2200	45000
3	LEE COUNTY	RSW	VORTAC	L	003.00	001.00	58.70	58.70		10000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
SRQ	VORTAC	R-087	44	2200	14600
RSW	VORTAC	R-003	59	10000	45000

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	S		WP	187.00	007.00	L		7	10000	17000	10	17
2	S	RSW	VORTAC	003.00	003.00	L	1-1 1/2		10000	23000	13	21

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (12-001311)	273334.00N/0814910.00W	551	5D
2	265	TOWER (12-004424)	273838.60N/0814758.80W	813	5D

REASON FOR NONSTANDARD HOLDING:
PAT 1 ATC REQUEST
PAT 2 ATC REQUEST

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
SARASOTA (FAC 2) AND LAKELAND (FAC 1) USED TO ESTABLISH FIX COORDINATES
PAT 2 265K AIRSPEED USED FOR HOLDING ABOVE 10,000.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
KMCO 6W MAG VAR USED FOR PAT 1.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V157-521	1, 2, 3				FL (US)
IAP	RNAV (GPS) RWY 23			KX06	ARCADIA	FL (US)
IAP	RNAV (GPS) RWY 10			KAVO	AVON PARK	FL (US)
STAR	COSTR (RNAV)		1	KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)		1	KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)		1	KLEE	LEESBURG	FL (US)
STAR	MINEE	1, 2, 3	2	KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)		1	KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)		1	KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE	1, 2, 3	2	KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)		1	KISM	ORLANDO	FL (US)
STAR	MINEE	1, 2, 3	2	KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KMCO	ORLANDO	FL (US)
STAR	MINEE	1, 2, 3	2	KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KORL	ORLANDO	FL (US)
STAR	MINEE	1, 2, 3	2	KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KSFB	ORLANDO	FL (US)
STAR	MINEE	1, 2, 3	2	KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KTIX	TITUSVILLE	FL (US)
STAR	MINEE	1, 2, 3	2	KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: STAR, IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:

MADE FAC 1 AND 2 COORD FACS.
CHANGED FAC 2 TRUE BRG FROM 81.62 TO 81.61.
UPDATED RSW ESV - CHANGED FAC 3 MAA.
CHANGED PAT 1 CRS INBOUND FROM 06.00 TO 07.00.
UPDATED CONTROLLING OBSTRUCTION FOR PAT 1.
ADDED KMCO MAG VAR REMARK.
UPDATED FIX USE.
UPDATED DISTRIBUTION.

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON, MCO ATCT
OTHER: ZJX

RADIO FIX AND HOLDING DATA RECORD

NAME: GROPP **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 280946.70N/0812718.01W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)			KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)			KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)			KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)			KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)			KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)			KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
REMOVED FAC 1 FROM FIX MAKE-UP.
UPDATED FIX USE.
UPDATED DISTRIBUTION.

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON, MCO ATCT
OTHER: ZJX

RADIO FIX AND HOLDING DATA RECORD

NAME: GUMMY **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 274935.41N/0823156.47W **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	ST PETERSBURG	PIE	VORTAC	H	126.00	121.00	9.43	9.43		13000	45000
2	LAKELAND	LAL	VORTAC	H	250.00	251.00	29.17	29.17		13000	45000

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	256.52	076.52	R		10	16000	20000	16	18

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	265	TOWER (12-002201)	275201.58N/0823725.87W	660	1A

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
ST PETERSBURG (FAC 1) AND LAKELAND (FAC 2) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
KMCO 6W MAG VAR USED FOR PAT 1.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)		1	KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)		1	KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)		1	KLEE	LEESBURG	FL (US)
STAR	MINEE	1, 2		KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)		1	KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)		1	KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE	1, 2		KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)		1	KISM	ORLANDO	FL (US)
STAR	MINEE	1, 2		KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KMCO	ORLANDO	FL (US)
STAR	MINEE	1, 2		KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KORL	ORLANDO	FL (US)
STAR	MINEE	1, 2		KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KSFB	ORLANDO	FL (US)
STAR	MINEE	1, 2		KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KTIX	TITUSVILLE	FL (US)
STAR	MINEE	1, 2		KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FACS TO CURRENT AVNIS DATA.
MADE FAC 1 AND 2 COORD FACS.
CHANGED PAT 1 CRS INBOUND FROM 75.52 TO 76.52.
CHANGED PAT 1 DME FROM 8 TO 10.
CHANGED PAT 1 MIN HOLDING ALT FROM 13000 TO 16000.
CHANGED PAT 1 MIN TEMPLATE FROM 11 TO 16.
CHANGED PAT 1 AIRSPEED FROM 230 TO 265.
ADDED KMCO MAG VAR NOTE.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 04/06/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON

OTHER: ZJX, MCO ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: LA BELLE VORTAC **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 264941.43N/0812329.17W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

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	LA BELLE	LBV	VORTAC	L							45000

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

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (12-003573)	264641.23N/0812537.97W	430	1A

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 2000.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ALICO			KRSW	FORT MYERS	FL (US)
DP	SCUBY			KRSW	FORT MYERS	FL (US)
DP	MIAMI			KHWO	HOLLYWOOD	FL (US)
DP	MIAMI			KMIA	MIAMI	FL (US)
DP	POTTR			KMIA	MIAMI	FL (US)
DP	MIAMI			KOPF	MIAMI	FL (US)
DP	MIAMI			KTMB	MIAMI	FL (US)
DP	NAPLES			KAPF	NAPLES	FL (US)
DP	PALM BEACH			KPBI	WEST PALM BEACH	FL (US)
EN ROUTE	J43					(US)
EN ROUTE	J616					(US)
EN ROUTE	J73					(US)
EN ROUTE	V157					(US)
EN ROUTE	V225					(US)
EN ROUTE	V492					(US)
EN ROUTE	V529					(US)
EN ROUTE	V97					(US)
IAP	ILS OR LOC RWY 5			KFMY	FORT MYERS	FL (US)
IAP	RNAV (GPS) RWY 23			KFMY	FORT MYERS	FL (US)
IAP	VOR RWY 13			KFMY	FORT MYERS	FL (US)
IAP	ILS OR LOC RWY 6			KRSW	FORT MYERS	FL (US)
IAP	RNAV (GPS) RWY 24			KRSW	FORT MYERS	FL (US)
IAP	VOR/DME OR TACAN RWY 24			KRSW	FORT MYERS	FL (US)
IAP	RNAV (GPS) RWY 27			KIMM	IMMOKALEE	FL (US)
IAP	VOR RWY 18			KIMM	IMMOKALEE	FL (US)
IAP	RNAV (GPS) RWY 32			KX14	LA BELLE	FL (US)
IAP	VOR RWY 23			KAPF	NAPLES	FL (US)
IAP	VOR RWY 5			KAPF	NAPLES	FL (US)
IAP	RNAV (GPS) Y RWY 36			KSEF	SEBRING	FL (US)
IAP	RNAV (GPS) Z RWY 36			KSEF	SEBRING	FL (US)
STAR	COSTR (RNAV)			KX04	APOPKA	FL (US)
STAR	BRDGE			KCLW	CLEARWATER	FL (US)
STAR	COSTR (RNAV)			KCOF	COCOA BEACH	FL (US)
STAR	FORTL			KFLL	FORT LAUDERDALE	FL (US)
STAR	JOSFF			KFMY	FORT MYERS	FL (US)
STAR	SHFTY (RNAV)			KFMY	FORT MYERS	FL (US)
STAR	JOSFF			KRSW	FORT MYERS	FL (US)
STAR	SHFTY (RNAV)			KRSW	FORT MYERS	FL (US)
STAR	CYPRESS			KHST	HOMESTEAD	FL (US)
STAR	CYPRESS			KX51	HOMESTEAD	FL (US)
STAR	CYPRESS			K07FA	KEY LARGO	FL (US)
STAR	COSTR (RNAV)			KLEE	LEESBURG	FL (US)
STAR	MINEE			KLEE	LEESBURG	FL (US)
STAR	SHFTY (RNAV)			KMKY	MARCO ISLAND	FL (US)
STAR	ZEILR			KMKY	MARCO ISLAND	FL (US)
STAR	COSTR (RNAV)			KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)			KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE			KCOI	MERRITT ISLAND	FL (US)
STAR	CYPRESS			KMIA	MIAMI	FL (US)
STAR	DVALL			KMIA	MIAMI	FL (US)
STAR	CYPRESS			KOPF	MIAMI	FL (US)
STAR	CYPRESS			KTMB	MIAMI	FL (US)
STAR	SHFTY (RNAV)			KAPF	NAPLES	FL (US)
STAR	ZEILR			KAPF	NAPLES	FL (US)
STAR	COSTR (RNAV)			KISM	ORLANDO	FL (US)
STAR	MINEE			KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)

STAR	MINEE	KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)	KORL	ORLANDO	FL (US)
STAR	MINEE	KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)	KSFB	ORLANDO	FL (US)
STAR	MINEE	KSFB	ORLANDO	FL (US)
STAR	BRDGE	KSPG	ST PETERSBURG	FL (US)
STAR	BRDGE	KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	DEAKK (RNAV)	KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	BRDGE	KMCF	TAMPA	FL (US)
STAR	DEAKK (RNAV)	KMCF	TAMPA	FL (US)
STAR	BRDGE	KTPA	TAMPA	FL (US)
STAR	DEAKK (RNAV)	KTPA	TAMPA	FL (US)
STAR	BRDGE	KTPF	TAMPA	FL (US)
STAR	BRDGE	KVDF	TAMPA	FL (US)
STAR	DEAKK (RNAV)	KVDF	TAMPA	FL (US)
STAR	COSTR (RNAV)	KTIX	TITUSVILLE	FL (US)
STAR	MINEE	KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED UPN HOLDING CONTROLLING OBSTRUCTION.
REMOVED UPN HOLDING OBSTACLE REMARK.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON, RSW APP CON
OTHER: ZJX, MCO ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: LAKELAND VORTAC **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 275910.25N/0820049.99W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

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	LAKELAND	LAL	VORTAC	H							45000

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	E	LAL	VORTAC	095.09	275.09	L	1-1 1/2		2000	17500	4	16
2	W		WP	280.81	100.81	R		4	2000	17500	4	17
3	W	LAL	VORTAC	251.00	071.00	R	1-1 1/2		2000	17500	4	16
4	W	LAL	VORTAC	283.71	103.71	R	1		2000	6000	4	5
5	W		WP	257.00	077.00	R		4	2000	6000	4	6
6	W	LAL	VORTAC	281.00	101.00	R	1		2000	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (12-003145)	275629.00N/0815451.00W	832	2C
2	200	TOWER (12-020527)	275436.16N/0815932.06W	550	1A
3	200	TOWER (12-020527)	275436.16N/0815932.06W	550	1A
4	200	TOWER (12-020527)	275436.16N/0815932.06W	550	1A
5	200	TOWER (12-003386)	280241.68N/0820150.80W	540	1A
6	200	TOWER (12-020527)	275436.16N/0815932.06W	550	1A

REASON FOR NONSTANDARD HOLDING:
PAT 1 ATC REQUEST

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CSHEL (RNAV)			KFMY	FORT MYERS	FL (US)
DP	ALICO			KRSW	FORT MYERS	FL (US)
DP	CSHEL (RNAV)			KRSW	FORT MYERS	FL (US)
DP	SCUBY			KRSW	FORT MYERS	FL (US)
DP	CSHEL (RNAV)			KMKY	MARCO ISLAND	FL (US)
DP	MELBOURNE			KMLB	MELBOURNE	FL (US)
DP	CSHEL (RNAV)			KAPF	NAPLES	FL (US)
DP	NAPLES			KAPF	NAPLES	FL (US)
DP	CITRUS			KMCO	ORLANDO	FL (US)
DP	ORLANDO			KMCO	ORLANDO	FL (US)
DP	MALRY			KORL	ORLANDO	FL (US)
DP	SOAPS			KORL	ORLANDO	FL (US)
DP	SANFORD			KSFB	ORLANDO	FL (US)
DP	SARASOTA			KSRQ	SARASOTA/BRADENTON	FL (US)
DP	ST PETE			KPIE	ST PETERSBURG/CLEARWATER	FL (US)
DP	CROWD (RNAV)			KTPA	TAMPA	FL (US)
DP	ENDED (RNAV)			KTPA	TAMPA	FL (US)
DP	TAMPA			KTPA	TAMPA	FL (US)
DP	PALM BEACH			KPBI	WEST PALM BEACH	FL (US)
EN ROUTE	J73					(US)
EN ROUTE	V157					(US)
EN ROUTE	V157-521					(US)
EN ROUTE	V441					(US)
EN ROUTE	V441-533					(US)
EN ROUTE	V511					(US)
EN ROUTE	V533					(US)
EN ROUTE	V7					(US)
EN ROUTE	V7-521					(US)
IAP	RNAV (GPS) RWY 27R			KBOW	BARTOW	FL (US)
IAP	VOR/DME RWY 09L		6	KBOW	BARTOW	FL (US)
IAP	ILS RWY 09			KBKV	BROOKSVILLE	FL (US)
IAP	RNAV (GPS) RWY 6			KX07	LAKE WALES	FL (US)
IAP	VOR/DME-B		4	KX07	LAKE WALES	FL (US)
IAP	ILS OR LOC RWY 5			KLAL	LAKELAND	FL (US)
IAP	NDB RWY 5			KLAL	LAKELAND	FL (US)
IAP	VOR RWY 27			KLAL	LAKELAND	FL (US)
IAP	VOR RWY 9			KLAL	LAKELAND	FL (US)
IAP	ILS OR LOC RWY 15			KISM	ORLANDO	FL (US)

IAP	ILS OR LOC RWY 17L		KMCO	ORLANDO	FL (US)
IAP	ILS OR LOC RWY 17R		KMCO	ORLANDO	FL (US)
IAP	ILS OR LOC RWY 35R		KMCO	ORLANDO	FL (US)
IAP	ILS RWY 17L (CAT II)		KMCO	ORLANDO	FL (US)
IAP	ILS RWY 17R(CAT II)		KMCO	ORLANDO	FL (US)
IAP	ILS RWY 35R(CAT II)		KMCO	ORLANDO	FL (US)
IAP	VOR/DME RWY 18L		KMCO	ORLANDO	FL (US)
IAP	VOR/DME RWY 18R		KMCO	ORLANDO	FL (US)
IAP	RNAV (GPS) RWY 10	2	KPCM	PLANT CITY	FL (US)
IAP	VOR RWY 28	1	KPCM	PLANT CITY	FL (US)
IAP	ILS OR LOC RWY 14		KSRQ	SARASOTA (BRADENTON)	FL (US)
IAP	ILS OR LOC RWY 32		KSRQ	SARASOTA (BRADENTON)	FL (US)
IAP	VOR RWY 14		KSRQ	SARASOTA (BRADENTON)	FL (US)
IAP	VOR RWY 32		KSRQ	SARASOTA (BRADENTON)	FL (US)
IAP	ILS OR LOC RWY 17L		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	ILS RWY 17L(CAT II)		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	ILS OR LOC RWY 19L		KTPA	TAMPA	FL (US)
IAP	ILS OR LOC RWY 19R		KTPA	TAMPA	FL (US)
IAP	ILS RWY 17L (SA CAT I)		KTPA	TAMPA	FL (US)
IAP	ILS RWY 19L (CAT II)		KTPA	TAMPA	FL (US)
IAP	ILS RWY 19L (SA CAT I)		KTPA	TAMPA	FL (US)
IAP	LOC RWY 01R	6	KTPA	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 01R		KTPA	TAMPA	FL (US)
IAP	VOR RWY 10		KTPA	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 22	5	KTPF	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 36	5	KTPF	TAMPA	FL (US)
IAP	ILS OR LOC RWY 23	1	KVDF	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 23	5	KVDF	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 5	5	KVDF	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 18		KCHN	WAUCHULA	FL (US)
IAP	RNAV (GPS) RWY 5		KGIF	WINTER HAVEN	FL (US)
IAP	VOR/DME-A	3	KGIF	WINTER HAVEN	FL (US)
IAP	NDB RWY 18		KZPH	ZEPHYRHILLS	FL (US)
IAP	NDB RWY 22		KZPH	ZEPHYRHILLS	FL (US)
IAP	NDB RWY 36		KZPH	ZEPHYRHILLS	FL (US)
IAP	NDB RWY 4		KZPH	ZEPHYRHILLS	FL (US)
STAR	COSTR (RNAV)		KX04	APOPKA	FL (US)
STAR	GOOFY		KX04	APOPKA	FL (US)
STAR	BRDGE		KCLW	CLEARWATER	FL (US)
STAR	BRDGE		KCLW	CLEARWATER	FL (US)
STAR	COSTR (RNAV)		KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)		KLEE	LEESBURG	FL (US)
STAR	GOOFY		KLEE	LEESBURG	FL (US)
STAR	MINEE		KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)		KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)		KCOI	MERRITT ISLAND	FL (US)
STAR	GOOFY		KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE		KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)		KISM	ORLANDO	FL (US)
STAR	GOOFY		KISM	ORLANDO	FL (US)
STAR	LEESE		KISM	ORLANDO	FL (US)
STAR	MINEE		KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)		KMCO	ORLANDO	FL (US)
STAR	GOOFY		KMCO	ORLANDO	FL (US)
STAR	LEESE		KMCO	ORLANDO	FL (US)
STAR	MINEE		KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)		KORL	ORLANDO	FL (US)
STAR	GOOFY		KORL	ORLANDO	FL (US)
STAR	LEESE		KORL	ORLANDO	FL (US)
STAR	MINEE		KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)		KSFB	ORLANDO	FL (US)
STAR	GOOFY		KSFB	ORLANDO	FL (US)
STAR	MINEE		KSFB	ORLANDO	FL (US)
STAR	TRAPR (RNAV)		KSRQ	SARASOTA/BRADENTON	FL (US)
STAR	BRDGE		KSPG	ST PETERSBURG	FL (US)
STAR	DARBS		KSPG	ST PETERSBURG	FL (US)
STAR	LZARD		KSPG	ST PETERSBURG	FL (US)
STAR	BRDGE		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	DADES (RNAV)		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	DARBS		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	DEAKK (RNAV)		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	FOOXX (RNAV)		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	LZARD		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	BRDGE		KMCF	TAMPA	FL (US)
STAR	DADES (RNAV)		KMCF	TAMPA	FL (US)
STAR	DARBS		KMCF	TAMPA	FL (US)
STAR	DEAKK (RNAV)		KMCF	TAMPA	FL (US)
STAR	FOOXX (RNAV)		KMCF	TAMPA	FL (US)
STAR	LZARD		KMCF	TAMPA	FL (US)
STAR	BRDGE		KTPA	TAMPA	FL (US)
STAR	DADES (RNAV)		KTPA	TAMPA	FL (US)
STAR	DARBS		KTPA	TAMPA	FL (US)
STAR	DEAKK (RNAV)		KTPA	TAMPA	FL (US)
STAR	FOOXX (RNAV)		KTPA	TAMPA	FL (US)
STAR	LZARD		KTPA	TAMPA	FL (US)
STAR	BRDGE		KTPF	TAMPA	FL (US)
STAR	DARBS		KTPF	TAMPA	FL (US)
STAR	LZARD		KTPF	TAMPA	FL (US)
STAR	DADES (RNAV)		KVDF	TAMPA	FL (US)
STAR	DEAKK (RNAV)		KVDF	TAMPA	FL (US)

STAR	FOOXX (RNAV)	KVDF	TAMPA	FL (US)
STAR	LZARD	KVDF	TAMPA	FL (US)
STAR	COSTR (RNAV)	KTIX	TITUSVILLE	FL (US)
STAR	GOOFY	KTIX	TITUSVILLE	FL (US)
STAR	MINEE	KTIX	TITUSVILLE	FL (US)
STAR	TRAPR (RNAV)	KVNC	VENICE	FL (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 17 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED PAT 2-6 CONTROLLING OBSTRUCTIONS.
UPDATED DISTRIBUTION.

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: TPA APP CON, LAL ATCT, ZJX
OTHER: MCO APP CON, MCO ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: LEE COUNTY VORTAC **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 263147.55N/0814632.76W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

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	LEE COUNTY	RSW	VORTAC	L							45000

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

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (12-002609)	262523.00N/0813748.00W	1249	3D

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 2600.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	FT. LAUDERDALE			KFLL	FORT LAUDERDALE	FL (US)
DP	FT. LAUDERDALE			KFXE	FORT LAUDERDALE	FL (US)
DP	ALICO			KRSW	FORT MYERS	FL (US)
DP	SCUBY			KRSW	FORT MYERS	FL (US)
DP	MIAMI			KHWO	HOLLYWOOD	FL (US)
DP	MIAMI			KMIA	MIAMI	FL (US)
DP	POTTR			KMIA	MIAMI	FL (US)
DP	MIAMI			KOPF	MIAMI	FL (US)
DP	MIAMI			KTMB	MIAMI	FL (US)
DP	NAPLES			KAPF	NAPLES	FL (US)
DP	CITRUS			KMCO	ORLANDO	FL (US)
DP	ORLANDO			KMCO	ORLANDO	FL (US)
DP	SANFORD			KSFB	ORLANDO	FL (US)
DP	FT. LAUDERDALE			KPMP	POMPANO BEACH	FL (US)
DP	SARASOTA			KSRQ	SARASOTA/BRADENTON	FL (US)
DP	ST. PETE			KPIE	ST PETERSBURG-CLEARWATER	FL (US)
DP	TAMPA			KTPA	TAMPA	FL (US)
DP	PALM BEACH			KPBI	WEST PALM BEACH	FL (US)
EN ROUTE	J41					(US)
EN ROUTE	J614					(US)
EN ROUTE	J75					(US)
EN ROUTE	V225					(US)
EN ROUTE	V35					(US)
EN ROUTE	V521					(US)
EN ROUTE	V539					(US)
EN ROUTE	V579					(US)
EN ROUTE	V599					(US)
EN ROUTE	V7					(US)
IAP	ILS OR LOC RWY 5			KFMY	FORT MYERS	FL (US)
IAP	RNAV (GPS) RWY 13			KFMY	FORT MYERS	FL (US)
IAP	RNAV (GPS) RWY 31			KFMY	FORT MYERS	FL (US)
IAP	VOR RWY 13			KFMY	FORT MYERS	FL (US)
IAP	ILS OR LOC RWY 6			KRSW	FORT MYERS	FL (US)
IAP	VOR/DME OR TACAN RWY 24			KRSW	FORT MYERS	FL (US)
IAP	VOR RWY 18			KIMM	IMMOKALEE	FL (US)
IAP	VOR RWY 23			KAPF	NAPLES	FL (US)
IAP	VOR RWY 5			KAPF	NAPLES	FL (US)
IAP	RNAV (GPS) RWY 33			KPGD	PUNTA GORDA	FL (US)
IAP	RNAV (GPS) RWY 4			KPGD	PUNTA GORDA	FL (US)
STAR	COSTR (RNAV)			KX04	APOPKA	FL (US)
STAR	BRDGE			KCLW	CLEARWATER	FL (US)
STAR	COSTR (RNAV)			KCOF	COCOA BEACH	FL (US)
STAR	FORTL			KFLL	FORT LAUDERDALE	FL (US)
STAR	JOSFF			KFMY	FORT MYERS	FL (US)
STAR	SHFTY (RNAV)			KFMY	FORT MYERS	FL (US)
STAR	JOSFF			KRSW	FORT MYERS	FL (US)
STAR	SHIFTY (RNAV)			KRSW	FORT MYERS	FL (US)
STAR	CYPRESS			KHST	HOMESTEAD	FL (US)
STAR	CYPRESS			KX51	HOMESTEAD	FL (US)
STAR	CYPRESS			K07FA	KEY LARGO	FL (US)
STAR	COSTR (RNAV)			KLEE	LEESBURG	FL (US)
STAR	MINEE			KLEE	LEESBURG	FL (US)
STAR	SHIFTY (RNAV)			KMKY	MARCO ISLAND	FL (US)
STAR	ZEILR			KMKY	MARCO ISLAND	FL (US)
STAR	COSTR (RNAV)			KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)			KCOI	MERRITT ISLAND	FL (US)
STAR	CYPRESS			KCOI	MERRITT ISLAND	FL (US)

STAR	MINEE	KCOI	MERRITT ISLAND	FL (US)
STAR	CYPRESS	KMIA	MIAMI	FL (US)
STAR	CYPRESS	KOPF	MIAMI	FL (US)
STAR	CYPRESS	KTMB	MIAMI	FL (US)
STAR	SHIFTY (RNAV)	KAPF	NAPLES	FL (US)
STAR	ZEILER	KAPF	NAPLES	FL (US)
STAR	ZEILR	KAPF	NAPLES	FL (US)
STAR	COSTR (RNAV)	KISM	ORLANDO	FL (US)
STAR	MINEE	KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)	KMCO	ORLANDO	FL (US)
STAR	MINEE	KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)	KORL	ORLANDO	FL (US)
STAR	MINEE	KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)	KSFB	ORLANDO	FL (US)
STAR	MINEE	KSFB	ORLANDO	FL (US)
STAR	BRDGE	KSPG	ST PETERSBURG	FL (US)
STAR	BRDGE	KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	DEAKK (RNAV)	KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	BRDGE	KMCF	TAMPA	FL (US)
STAR	DEAKK (RNAV)	KMCF	TAMPA	FL (US)
STAR	BRDGE	KTPA	TAMPA	FL (US)
STAR	DEAKK (RNAV)	KTPA	TAMPA	FL (US)
STAR	BRDGE	KTPF	TAMPA	FL (US)
STAR	BRDGE	KVDF	TAMPA	FL (US)
STAR	DEAKK (RNAV)	KVDF	TAMPA	FL (US)
STAR	COSTR (RNAV)	KTIX	TITUSVILLE	FL (US)
STAR	MINEE	KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED UPN HOLDING CONTROLLING OBSTRUCTION.
UPDATED FIX USE.
UPDATED DISTRIBUTION.

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: TPA APP CON, MCO APP CON
OTHER: MCO ATCT, ZJX

RADIO FIX AND HOLDING DATA RECORD

NAME: MOANS **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 275449.97N/0814454.89W **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	LEE COUNTY	RSW	VORTAC	L	003.00	001.00	82.82	82.82		10000	45000
2	LAKELAND	LAL	VORTAC	H	106.00	107.00		14.75		10000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
RSW	VORTAC	R-003	83	10000	45000

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	S	RSW	VORTAC	003.00	003.00	L	1-1 1/2		10000	23000	11	21
2	S		WP	187.01	007.01	L		7	10000	17000	10	17

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (12-020098)	275111.49N/0815201.53W	823	2C
2	230	TOWER (12-020098)	275111.49N/0815201.53W	823	2C

REASON FOR NONSTANDARD HOLDING:
PAT 1 AVOID R-2901AB
PAT 2 AVOID R-2901AB

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
LAKELAND (FAC 2) AND LEE COUNTY (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
KMCO 6W MAG VAR USED FOR PAT 2.
PAT 1 AND 2 CONTROLLING OBSTRUCTION AC VERIFIED BY TERRAIN AND OBSTACLE DATA TEAM.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)		2	KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)		2	KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)		2	KLEE	LEESBURG	FL (US)
STAR	MINEE	1, 2	1	KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)		2	KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)		2	KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE	1, 2	1	KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)		2	KISM	ORLANDO	FL (US)
STAR	MINEE	1, 2	1	KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)		2	KMCO	ORLANDO	FL (US)
STAR	MINEE	1, 2	1	KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)		2	KORL	ORLANDO	FL (US)
STAR	MINEE	1, 2	1	KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)		2	KSFB	ORLANDO	FL (US)
STAR	MINEE	1, 2	1	KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)		2	KTIX	TITUSVILLE	FL (US)
STAR	MINEE	1, 2	1	KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FAC 1 AND 2 TO CURRENT AVNIS DATA.
MADE FAC 1 AND 2 COORD FACS.
UPDATED RSW ESV - CHANGED FAC 1 MAA FROM 23000 TO 45000.
CHANGED PAT 2 CRS INBOUND FROM 06.01 TO 07.01.
ADDED KMCO MAG VAR REMARK.
UPDATED FIX USE.

DEVELOPED BY:	**DATE:** 04/09/2012	**OFFICE:** AJV-352	**NAME:** DONALD SMITH (WES COMBS)
APPROVED BY:	**DATE:**	**OFFICE:** AJV-352	**NAME:** DARRYEL ADAMS
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON
OTHER: ZJX, MCO ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: SYKES **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 273952.96N/0830259.22W **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	LAKELAND	LAL	VORTAC	H	250.00	251.00	58.37	58.37		13000	45000
2	SARASOTA	SRQ	VORTAC	H	305.85	300.85		30.17		13000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
LAL	VORTAC	R-250	59	13000	14700

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	256.40	076.40	R		10	18000	20000	17	18

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	265	SHIP	274106.50N/0830442.72W	208	2C

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
LAKELAND (FAC 1) AND SARASOTA (FAC 2) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
KMCO MAGVAR 6W USED FOR PAT 1.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	SYKES (RNAV)			KTPA	TAMPA	FL (US)
STAR	COSTR (RNAV)		1	KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)		1	KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)		1	KLEE	LEESBURG	FL (US)
STAR	MINEE	1, 2		KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)		1	KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)		1	KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE	1, 2		KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)		1	KISM	ORLANDO	FL (US)
STAR	MINEE	1, 2		KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KMCO	ORLANDO	FL (US)
STAR	MINEE	1, 2		KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KORL	ORLANDO	FL (US)
STAR	MINEE	1, 2		KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KSFB	ORLANDO	FL (US)
STAR	MINEE	1, 2		KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)		1	KTIX	TITUSVILLE	FL (US)
STAR	MINEE	1, 2		KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: DP, STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
MADE FAC 1 AND 2 COORD FACS.
CHANGED PAT 1 MIN ALT FROM 13000 TO 18000.
CHANGED PAT 1 DME LENGTH FROM 8 TO 10.
CHANGED PAT 1 MIN TEMPLATE FROM 12 TO 17.
CHANGED PAT 1 MAX TEMPLATE FROM 19 TO 18.
CHANGED PAT 1 CRS INBOUND FROM 75.40 TO 76.40.
CHANGED PAT 1 AIRSPEED FROM 230 TO 265.
UPDATED PAT 1 CONTROLLING OBSTRUCTION.
UPDATED FIX USE.
UPDATED DISTRIBUTION.

DEVELOPED BY: **DATE:** 04/06/2012 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (WES COMBS)

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON, MCO ATCT, ZJX
OTHER: TPA APP CON, TPA ATCT,

RADIO FIX AND HOLDING DATA RECORD

NAME: BIGGR **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 281430.00N/0813258.00W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
REMOVED FAC 1.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 08/10/2010 **OFFICE:** AVN-110 **NAME:** HOWARD HAWKINS

APPROVED BY: **DATE:** 12/06/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON
OTHER: ZJX, MCO ATCT

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: EXBAN **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 281248.91N/0811927.96W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

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	S		WP	185.45	005.45	L		4	2000	10000	4	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (12-004624)	281028.20N/0811700.10W	580	2C

REASON FOR NONSTANDARD HOLDING:
PAT 1 AT REQUIREMENT

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITIOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 18R		1	KMCO	ORLANDO	FL (US)
IAP	RNAV (GPS) RWY 36L		1	KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
CHANGED HOLD PAT 1 CRS INBOUND & RAD/CRS/BRG FROM 004.45/184.45 TO 005.45/185.45.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 03/29/2012 **OFFICE:** AJV-352 **NAME:** BRIAN SHAFFER

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON
OTHER: ZJX

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: KNUKL **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 284452.00N/0812527.00W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
REMOVED FAC 1.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 08/10/2010 **OFFICE:** AVN-110 **NAME:** HOWARD HAWKINS

APPROVED BY: **DATE:** 12/06/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZJX
ATC FACILITY: MCO APP CON
OTHER: ZMA, MCO ATCT

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: KRAKN **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 282335.00N/0812527.00W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
REOMVED FAC 1.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 08/10/2010 **OFFICE:** AVN-110 **NAME:** HOWARD HAWKINS

APPROVED BY: **DATE:** 12/06/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON
OTHER: ZJX, MCO ATCT

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: SETME **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 280416.00N/0815026.00W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)			KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)			KCOF	COCOA BEACH	FL (US)
STAR	COSTR (RNAV)			KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)			KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)			KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)			KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KSFB	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
REMOVED FAC 1.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 08/10/2010 **OFFICE:** AVN-110 **NAME:** HOWARD HAWKINS

APPROVED BY: **DATE:** 12/06/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON
OTHER: MCO ATCT

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: ST PETERSBURG VORTAC **STATE:** FL **COUNTRY:** US

INFO ONLY

LATITUDE/LONGITUDE: 275427.95N/0824103.51W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

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	ST PETERSBURG	PIE	VORTAC	H							45000

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	N	PIE	VORTAC	344.00	164.00	R	1-1 1/2		1700	17500	4	16
2	W	PIE	VORTAC	276.00	096.00	R	1-1 1/2		1700	17500	4	16
3	W		WP	276.00	096.00	R		4	3000	17500	5	17
4	N		WP	337.97	157.97	R		4	2000	6000	4	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (12-002427)	275646.00N/0824710.00W	379	5D
2	200	TOWER (12-002201)	275201.58N/0823725.87W	660	1A
2	310	TOWER (12-002201)	275201.58N/0823725.87W	660	1A
3	200	TOWER (12-002201)	275201.58N/0823725.87W	660	1A
3	310	TOWER (12-002201)	275201.58N/0823725.87W	660	1A
4	200	TOWER (12-002427)	275646.00N/0824710.00W	379	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	ILS RWY 01L (CAT III)	KTPA	TAMPA	FL (US)
2	ILS OR LOC RWY 01L	KTPA	TAMPA	FL (US)
2	ILS RWY 01L (CAT II)	KTPA	TAMPA	FL (US)
2	ILS OR LOC RWY 19R	KTPA	TAMPA	FL (US)
2	ILS RWY 01L (SA CAT I)	KTPA	TAMPA	FL (US)
3	RNAV (GPS) RWY 19R	KTPA	TAMPA	FL (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ALICO			KRSW	FORT MYERS	FL (US)
DP	SCUBY			KRSW	FORT MYERS	FL (US)
DP	MELBOURNE			KMLB	MELBOURNE	FL (US)
DP	NAPLES (OBSTACLE)			KAPF	NAPLES	FL (US)
DP	CITRUS			KMCO	ORLANDO	FL (US)
DP	ORLANDO			KMCO	ORLANDO	FL (US)
DP	SANFORD (OBSTACLE			KSFB	ORLANDO	FL (US)
DP	SARASOTA			KSRQ	SARASOTA/BRADENTON	FL (US)
DP	ST PETE			KPIE	ST PETERSBURG/CLEARWATER	FL (US)
DP	TAMPA			KTPA	TAMPA	FL (US)
DP	PALM BEACH (OBSTACLE)			KPBI	WEST PALM BEACH	FL (US)
EN ROUTE	J119					(US)
EN ROUTE	J41					(US)
EN ROUTE	J43					(US)
EN ROUTE	Q104					(US)
EN ROUTE	V152					(US)
EN ROUTE	V35					(US)
EN ROUTE	V441					(US)
EN ROUTE	V492					(US)
EN ROUTE	V509					(US)
EN ROUTE	V533					(US)
EN ROUTE	V579					(US)
EN ROUTE	V581					(US)
EN ROUTE	V97					(US)
IAP	ILS OR LOC RWY 9			KBKV	BROOKSVILLE	FL (US)
IAP	ILS OR LOC RWY 5			KLAL	LAKELAND	FL (US)
IAP	NDB RWY 5			KLAL	LAKELAND	FL (US)
IAP	VOR RWY 27			KLAL	LAKELAND	FL (US)
IAP	VOR RWY 9			KLAL	LAKELAND	FL (US)
IAP	RNAV (GPS) RWY 10			KPCM	PLANT CITY	FL (US)
IAP	RNAV (GPS) RWY 14			KSRQ	SARASOTA (BRADENTON)	FL (US)
IAP	ILS OR LOC RWY 14			KSRQ	SARASOTA/BRADENTON	FL (US)
IAP	ILS OR LOC RWY 32			KSRQ	SARASOTA/BRADENTON	FL (US)
IAP	RNAV (GPS) RWY 22			KSRQ	SARASOTA/BRADENTON	FL (US)

IAP	VOR RWY 14		KSRQ	SARASOTA/BRADENTON	FL (US)
IAP	VOR RWY 32		KSRQ	SARASOTA/BRADENTON	FL (US)
IAP	RNAV (GPS) RWY 18	4	KSPG	ST PETERSBURG	FL (US)
IAP	RNAV (GPS) RWY 7		KSPG	ST PETERSBURG	FL (US)
IAP	VOR RWY 18	1	KSPG	ST PETERSBURG	FL (US)
IAP	ILS OR LOC RWY 18L		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	ILS OR LOC/DME RWY 36R		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	ILS RWY 18L (CAT II)		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	ILS RWY 18L (SA CAT I)		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	NORTH BAY VISUAL RWY 18L		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	RNAV (GPS) RWY 18L		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	RNAV (GPS) RWY 36R		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	RNAV (GPS)-A		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	VOR RWY 36R		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	VOR RWY 4		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	VOR/DME RWY 18L		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	VOR/DME-B (SPECIAL)		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
IAP	ILS OR LOC RWY 01L	2	KTPA	TAMPA	FL (US)
IAP	ILS OR LOC RWY 19L		KTPA	TAMPA	FL (US)
IAP	ILS OR LOC RWY 19R	2	KTPA	TAMPA	FL (US)
IAP	ILS RWY 01L (CAT II)	2	KTPA	TAMPA	FL (US)
IAP	ILS RWY 01L (CAT III)	2	KTPA	TAMPA	FL (US)
IAP	ILS RWY 01L (SA CAT I)	2	KTPA	TAMPA	FL (US)
IAP	ILS RWY 19 (SA CAT I)		KTPA	TAMPA	FL (US)
IAP	ILS RWY 19L (CAT II)		KTPA	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 01L		KTPA	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 10		KTPA	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 19R	3	KTPA	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 28		KTPA	TAMPA	FL (US)
IAP	VOR RWY 10		KTPA	TAMPA	FL (US)
IAP	NDB RWY 4		KTPF	TAMPA	FL (US)
IAP	RNAV (GPS) RWY 22		KTPF	TAMPA	FL (US)
IAP	ILS OR LOC RWY 23	2	KVDF	TAMPA	FL (US)
IAP	NDB RWY 18		KZPH	ZEPHYRHILLS	FL (US)
IAP	NDB RWY 22		KZPH	ZEPHYRHILLS	FL (US)
IAP	NDB RWY 36		KZPH	ZEPHYRHILLS	FL (US)
IAP	NDB RWY 4		KZPH	ZEPHYRHILLS	FL (US)
STAR	COSTR (RNAV)		KX04	APOPKA	FL (US)
STAR	BRDGE		KCLW	CLEARWATER	FL (US)
STAR	COSTR (RNAV)		KCOF	COCOA BEACH	FL (US)
STAR	FORTL		KFLL	FORT LAUDERDALE	FL (US)
STAR	FORTL		KFXE	FORT LAUDERDALE	FL (US)
STAR	JOSFF		KFMY	FORT MYERS	FL (US)
STAR	JOSFF		KRSW	FORT MYERS	FL (US)
STAR	FORTL		KHWO	HOLLYWOOD	FL (US)
STAR	CYPRESS		KHST	HOMESTEAD	FL (US)
STAR	CYPRESS		KX51	HOMESTEAD	FL (US)
STAR	CYPRESS		K07FA	KEY LARGO	FL (US)
STAR	COSTR (RNAV)		KLEE	LEESBURG	FL (US)
STAR	MINEE		KLEE	LEESBURG	FL (US)
STAR	ZEILR		KMKY	MARCO ISLAND	FL (US)
STAR	COSTR (RNAV)		KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)		KCOI	MERRITT ISLAND	FL (US)
STAR	MINEE		KCOI	MERRITT ISLAND	FL (US)
STAR	CYPRESS		KMIA	MIAMI	FL (US)
STAR	CYPRESS		KOPF	MIAMI	FL (US)
STAR	FORTL		KOPF	MIAMI	FL (US)
STAR	CYPRESS		KTMB	MIAMI	FL (US)
STAR	ZEILR		KAPF	NAPLES	FL (US)
STAR	COSTR (RNAV)		KISM	ORLANDO	FL (US)
STAR	MINEE		KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)		KMCO	ORLANDO	FL (US)
STAR	MINEE		KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)		KORL	ORLANDO	FL (US)
STAR	MINEE		KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)		KSFB	ORLANDO	FL (US)
STAR	MINEE		KSFB	ORLANDO	FL (US)
STAR	FORTL		KPMP	POMPANO BEACH	FL (US)
STAR	CLAMP		KSRQ	SARASOTA/BRADENTON	FL (US)
STAR	BRDGE		KSPG	ST PETERSBURG	FL (US)
STAR	DARBS		KSPG	ST PETERSBURG	FL (US)
STAR	LZARD		KSPG	ST PETERSBURG	FL (US)
STAR	BRDGE		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	DARBS		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	LZARD		KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	BRDGE		KMCF	TAMPA	FL (US)
STAR	DARBS		KMCF	TAMPA	FL (US)
STAR	LZARD		KMCF	TAMPA	FL (US)
STAR	BRDGE		KTPA	TAMPA	FL (US)
STAR	DARBS		KTPA	TAMPA	FL (US)
STAR	LZARD		KTPA	TAMPA	FL (US)
STAR	BRDGE		KTPF	TAMPA	FL (US)
STAR	DARBS		KTPF	TAMPA	FL (US)
STAR	LZARD		KTPF	TAMPA	FL (US)
STAR	BRDGE		KVDF	TAMPA	FL (US)
STAR	LZARD		KVDF	TAMPA	FL (US)
STAR	COSTR (RNAV)		KTIX	TITUSVILLE	FL (US)
STAR	MINEE		KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
PAT 1 RAD/CRS/BRG CHANGED FROM 330.00 TO 344.00, CRS INBOUND CHANGED FROM 150.00 TO 164.00.
PAT 2/3 RAD/CRS/BRG CHANGED FROM 270.00 TO 276.00, CRS INBOUND CHANGED FROM 090.00 TO 096.00.
UPDATED CONTROLLING OBSTACLES FOR PATTERNS 1 THRU 4.
CHANGED PATTERN 3 DME LEG LENGTH FROM 5 TO 4.
ADDED "PRECIPITOUS TERRAIN EVALUATION COMPLETED" TO REMARKS.
UPDATED FIX USE INFORMATION.

DEVELOPED BY:	**DATE:** 08/15/2010	**OFFICE:** AVN-110	**NAME:** GEORGETTE BARNETT
APPROVED BY:	**DATE:**	**OFFICE:** AVN-110	**NAME:** GEORGE DAVIS
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA, ZJX
ATC FACILITY: TPA
OTHER:

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: TINKR **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 281923.00N/0812527.00W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
REMOVE FAC 1.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 08/10/2010 **OFFICE:** AVN-110 **NAME:** HOWARD HAWKINS

APPROVED BY: **DATE:** 12/06/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MCO APP CON
OTHER: ZJX, MCO ATCT

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: TWONA **STATE:** FL **COUNTRY:** US

LATITUDE/LONGITUDE: 283613.00N/0812527.00W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	BUGGZ (RNAV)			KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)
STAR	PIGLT (RNAV)			KMCO	ORLANDO	FL (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
REMOVED FAC 1.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 08/10/2010 **OFFICE:** AVN-110 **NAME:** HOWARD HAWKINS

APPROVED BY: **DATE:** 12/06/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZJX
ATC FACILITY: MCO APP CON
OTHER:

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: SIMMR **STATE:** OG **COUNTRY:** US

LATITUDE/LONGITUDE: 274702.10N/0841215.80W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	SRKUS (RNAV)			KSRQ	SARASOTA/BRADENTON	FL (US)
DP	SYKES (RNAV)			KTPA	TAMPA	FL (US)
DP	SRKUS (RNAV)			KVNC	VENICE	FL (US)
STAR	COSTR (RNAV)			KX04	APOPKA	FL (US)
STAR	COSTR (RNAV)			KCOF	COCOA BEACH	FL (US)
STAR	BLOND (RNAV)			KLAL	LAKELAND	FL (US)
STAR	COSTR (RNAV)			KLEE	LEESBURG	FL (US)
STAR	COSTR (RNAV)			KMLB	MELBOURNE	FL (US)
STAR	COSTR (RNAV)			KCOI	MERRITT ISLAND	FL (US)
STAR	COSTR (RNAV)			KISM	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KMCO	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KORL	ORLANDO	FL (US)
STAR	COSTR (RNAV)			KSFB	ORLANDO	FL (US)
STAR	BLOND (RNAV)			KSRQ	SARASOTA/BRADENTON	FL (US)
STAR	BLOND (RNAV)			KPIE	ST PETERSBURG-CLEARWATER	FL (US)
STAR	BLOND (RNAV)			KMCF	TAMPA	FL (US)
STAR	BLOND (RNAV)			KTPA	TAMPA	FL (US)
STAR	BLOND (RNAV)			KVDF	TAMPA	FL (US)
STAR	COSTR (RNAV)			KTIX	TITUSVILLE	FL (US)

REQUIRED CHARTING: DP, STAR, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 04/08/2010

REASON FOR REVISION:
DELETED FAC 1 DATA (WP).

DEVELOPED BY: **DATE:** 10/09/2009 **OFFICE:** AVN-110 **NAME:** BRIAN SHAFFER

APPROVED BY: **DATE:** 03/09/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: TPA APP CON
OTHER:

INFO ONLY