US Department of Transportation
Federal Aviation Administration

STAR - Standard Terminal Arrival

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

(1) Transition Routes

(a) Transition Name	(b) Transition Computer Codes	(c) From RNAV WP/ FIX/NAVAID	(d) To RNAV WP/ FIX/NAVAID	(e) Mag Course/ Distance	(f) MEA	(g) MOCA	(h) MAA	(i) Crossing Altitudes / Fixes
KENNEDY	JFK.KRANN2	JFK VOR/DME	TRUIZ	064.00 / 14.98	17000			
		TRUIZ	NEWES	064.16 / 5.02	17000			
		NEWES	BAWLL	064.21 / 33.39	17000			
		BAWLL	STRKK	079.59 / 34.52	17000			
		STRKK	ORW VOR/DME	079.91 / 10.54	17000			
		ORW VOR/DME	OUTTT	084.30 / 7.38	17000			
		OUTTT	KINNG	084.49 / 13.16	11000			
		KINNG	PVD VORTAC	084.64 / 7.00	11000			
MERIT	MERIT.KRANN2	MERIT	STRKK	097.75 / 42.29	17000			
		STRKK	ORW VOR/DME	079.91 / 10.54	17000			
		ORW VOR/DME	OUTTT	084.30 / 7.38	17000			
		OUTTT	KINNG	084.49 / 13.16	11000			
		KINNG	PVD VORTAC	084.64 / 7.00	11000			

(2) Arrival Route Description: FROM OVER PVD VORTAC ON TRACK 076.17/6.00 NM TO FILYP (MEA 11000), THEN ON TRACK 076.25/9.83 NM TO CROSS KRANN AT 11000 AND 270 KIAS (MEA 11000), THENCE...

...LANDING RWY 4L, 4R, 15R, 22R, 32: FROM OVER KRANN ON TRACK 076.03, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

...LANDING RWY 22L: FROM OVER KRANN ON TRACK 076.03/7.64 NM TO CROSS ANSLY AT OR ABOVE 8000 (MEA 8000), THEN ON TRACK 075.94/10.98 NM TO CRADL (MEA 8000), THEN ON TRACK 064.10/8.82 NM TO CROSS KLEBB AT 8000 AND 250 KIAS (MEA 6000), THEN ON TRACK 027.70/13.32 NM TO CROSS ETHYN AT 5000 AND 250 KIAS (MEA 4000), THEN ON TRACK 331.80/16.88 NM TO CROSS PTRIK AT 5000 AND 210 KIAS (MEA 4000), THEN ON TRACK 035.99/6.32 NM TO CROSS TAALE AT 5000 AND 210 KIAS (MEA 3000), THEN ON TRACK 036.00, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

(CONTINUED IN BLOCK 16)

(3) Procedural Data Notes:
NOTE: RADAR REQUIRED. **NOTE:** DME/DME/IRU OR GPS REQUIRED. **NOTE:** RNAV 1. **NOTE:** TURBOJET AIRCRAFT ONLY. **NOTE:** LANDING RWY 4R, 4L: EXPECT VECTORS APPROACHING PVD VORTAC. LANDING RWY 22L, 27, 33L: EXPECT BOS APP TO ISSUE RWY TRANSITION NOT LATER THAN 10NM PRIOR TO KRANN. LANDING ALL OTHER RWYS: EXPECT VECTORS TO FINAL.

(4) Fixes and/or Holding Patterns:
CHART: BOS VOR/DME, CCC VOR/DME, HTO VORTAC, SEY VOR/DME, CHYAN, ERNEI, GOSHI, SOFEE, WACKY, WINNI, BENNN, KLANE.
CHART HOLDING PATTERN: PVD VORTAC (HOLD SW, RT, 055.41 INBOUND, 10 NM LEGS).

(5) Communications: BOSTON APP CON 120.6 263.1; GENERAL EDWARD LAWRENCE LOGAN INTL ATIS ARRIVAL.

QUALITY CHECKED

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
KRANN (RNAV)	TWO	KRANN.KRANN2	ONE	15 DEC 2011	20 SEP 2012

(12) Airports Served			
Airport Name	GENERAL EDWARD LAWRENCE LOGAN INTL	City/State	BOSTON, MA
Airport Name		City/State	
Airport Name		City/State	
Airport Name		City/State	
Airport Name		City/State	
Airport Name		City/State	

(13) Lost Communications Procedure:

(14) Remarks:
MINIMUM OPERATIONAL ALTITUDES USED FOR MEAS.

(15) Additional Flight Data:
REFERENCE MAGNETIC VARIATION: KBOS 16W/1995.
DME/DME ASSESMENT: SAT (RNP 2.0).

QUALITY CHECKED

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
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(16) Continuation:

(2) ARRIVAL ROUTE DESCRIPTION (CONTINUED):

...LANDING RWY 27: FROM OVER KRANN ON TRACK 076.03/7.64 NM TO CROSS ANSLY AT OR ABOVE 8000 (MEA 8000), THEN ON TRACK 075.94/10.98 NM TO CRADL (MEA 8000), THEN ON TRACK 064.10/8.82 NM TO CROSS KLEBB AT 8000 AND 250 KIAS (MEA 6000), THEN ON TRACK 024.73/13.01 NM TO CROSS HOKDU AT 5000 AND 210 KIAS (MEA 4000), THEN ON TRACK 025.00, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

...LANDING RWY 33L: FROM OVER KRANN ON TRACK 076.03/7.64 NM TO CROSS ANSLY AT OR ABOVE 8000 (MEA 8000), THEN ON TRACK 070.53/9.33 NM TO CROSS BEREI AT 8000 AND 220 KIAS (MEA 6000), THEN ON TRACK 060.68/7.62 NM TO CROSS BBOGG AT 6000 AND 210 KIAS (MEA 4000), THEN ON TRACK 060.00, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
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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									
JFK VOR/DME	403758.40N / 0734617.00W			IF					JFK.KRANN2
TRUIZ	404759.36N / 0733137.37W	Y	FB	TF	048.00	14.98			
NEWES	405120.21N / 0732641.77W	Y	FB	TF	048.16	5.02			
BAWLL	411331.18N / 0725342.27W	Y	FB	TF	048.21	33.39			
STRKK	412845.63N / 0721233.94W	Y	FB	TF	063.59	34.52			
ORW VOR/DME	413323.05N / 0715957.67W	Y	FB	TF	063.91	10.54			
OUTTT	413606.41N / 0715049.56W	Y	FB	TF	068.30	7.38			
KINNG	414054.91N / 0713429.04W	Y	FB	TF	068.49	13.16			
PVD VORTAC	414327.64N / 0712546.70W	Y	FB	TF	068.64	7.00			
En Route Transition									
MERIT	412255.02N / 0730814.75W	Y		IF					MERIT.KRANN2
STRKK	412845.63N / 0721233.94W	Y	FB	TF	081.75	42.29			
ORW VOR/DME	413323.05N / 0715957.67W	Y	FB	TF	063.91	10.54			
OUTTT	413606.41N / 0715049.56W	Y	FB	TF	068.30	07.38			

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
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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
KINNG	414054.91N / 0713429.04W	Y	FB	TF	068.49	13.16			
PVD VORTAC	414327.64N / 0712546.70W	Y	FB	TF	068.64	7.00			
Common Route									
PVD VORTAC	414327.64N / 0712546.70W	Y		IF					KRANN.KRANN2
FILYP	414626.57N / 0711849.35W	Y	FB	TF	060.17	6.00			
KRANN	415118.69N / 0710724.46W	Y	FB	TF	060.25	9.83	AT 11000	AT 270K	
Runway Transition									
KRANN	415118.69N / 0710724.46W	Y		IF					
ANSLY	415507.53N / 0705832.32W	Y	FB	TF	060.03	7.64	AT/ABOVE 8000		
BEREI	420032.09N / 0704820.74W	Y	FB	TF	054.53	9.33	AT 8000	AT 220K	
BBOGG	420556.98N / 0704109.06W	Y	FO	TF	044.68	7.62	AT 6000	AT 210K	
RW33L				FM	044.00				

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
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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
Runway Transition									
KRANN	415118.69N / 0710724.46W	Y		IF					
ANSLY	415507.53N / 0705832.32W	Y	FB	TF	060.03	7.64	AT/ABOVE 8000		
CRADL	420036.88N / 0704547.55W	Y	FB	TF	059.94	10.98			
KLEBB	420630.28N / 0703658.08W	Y	FB	TF	048.10	8.82	AT 8000	AT 250K	
ETHYN	421933.13N / 0703319.59W	Y	FB	TF	011.70	13.32	AT 5000	AT 250K	
PTRIK	423138.24N / 0704914.28W	Y	FB	TF	315.80	16.88	AT 5000	AT 210K	
TAALE	423734.55N / 0704618.74W	Y	FO	TF	019.99	6.32	AT 5000	AT 210K	
RW22L				FM	020.00				
Runway Transition									
KRANN	415118.69N / 0710724.46W	Y		IF					
RWY 4L, 4R, 15R, 22R, 32.				FM	060.03				

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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
Runway Transition									
KRANN	415118.69N / 0710724.46W	Y		IF					
ANSLY	415507.53N / 0705832.32W	Y	FB	TF	060.03	7.64	AT/ABOVE 8000		
CRADL	420036.88N / 0704547.55W	Y	FB	TF	059.94	10.98			
KLEBB	420630.28N / 0703658.08W	Y	FB	TF	048.10	8.82	AT 8000	AT 250K	
HOKDU	421922.29N / 0703418.28W	Y	FO	TF	008.73	13.01	AT 5000	AT 210K	
RW27				FM	009.00				

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
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STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        BOS   K6011270VDH  N42212682W070592237    N42212682W070592237W0160000202     NARBOSTON
        SUSAD        JFK   K6011590VDH  N40375840W073461700    N40375840W073461700W0120000112     NARKENNEDY
        SUSAD        ORW   K6011000VDL  N41332305W071595767    N41332305W071595767W0140003101     NARNORWICH
        SUSAD        PVD   K6011560VTHA N41432764W071254667    N41432764W071254667W0140000492     NARPROVIDENCE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   ANSLY K60    W     N41550753W070583232                    W0149     NAR           ANSLY
        SUSAEAENRT   BAWLL K60    C   H N41133118W072534227                    W0138     NAR           BAWLL
        SUSAEAENRT   BBOGG K60    W     N42055698W070410906                    W0151     NAR           BBOGG
        SUSAEAENRT   BEREI K60    W     N42003209W070482074                    W0150     NAR           BEREI
        SUSAEAENRT   CRADL K60    W     N42003688W070454755                    W0150     NAR           CRADL
        SUSAEAENRT   ETHYN K60    W     N42193313W070331959                    W0152     NAR           ETHYN
        SUSAEAENRT   FILYP K60    W     N41462657W071184935                    W0147     NAR           FILYP
        SUSAEAENRT   HOKDU K60    W     N42192229W070341828                    W0152     NAR           HOKDU
        SUSAEAENRT   KINNG K60    W     N41405491W071342904                    W0146     NAR           KINNG
        SUSAEAENRT   KLEBB K60    W     N42063028W070365808                    W0151     NAR           KLEBB
        SUSAEAENRT   KRANN K60    C     N41511869W071072446                    W0148     NAR           KRANN
        SUSAEAENRT   MERIT K60    C   L N41225502W073081475                    W0137     NAR           MERIT
        SUSAEAENRT   NEWES K60    C   H N40512021W073264177                    W0134     NAR           NEWES
        SUSAEAENRT   OUTTT K60    C     N41360641W071504956                    W0144     NAR           OUTTT
        SUSAEAENRT   PTRIK K60    W     N42313824W070491428                    W0152     NAR           PTRIK
        SUSAEAENRT   STRKK K60    W     N41284563W072123394                    W0142     NAR           STRKK
        SUSAEAENRT   TAALE K60    W     N42373455W070461874                    W0152     NAR           TAALE
        SUSAEAENRT   TRUIZ K60    C     N40475936W073313737                    W0134     NAR           TRUIZ

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KBOSK6ABOS     0     100YHN42214670W071002310W016000020         1800018000C    MNAR    GENERAL EDWARD LAWRENCE LOGAN

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KBOSK6EKRANN24JFK   010JFK  K6D 0V       IF                                          18000
        SUSAP KBOSK6EKRANN24JFK   020TRUIZK6EA0E    010TF                    06400150
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QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
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SUSAP KBOSK6EKRANN24JFK   030NEWESK6EA0E    010TF                    06420050
SUSAP KBOSK6EKRANN24JFK   040BAWLLK6EA0E    010TF                    06420334
SUSAP KBOSK6EKRANN24JFK   050STRKKK6EA0E    010TF                    07960345
SUSAP KBOSK6EKRANN24JFK   060ORW  K6D 0V    010TF                    07990105
SUSAP KBOSK6EKRANN24JFK   070OUTTTK6EA0E    010TF                    08430074
SUSAP KBOSK6EKRANN24JFK   080KINNGK6EA0E    010TF                    08450132
SUSAP KBOSK6EKRANN24JFK   090PVD  K6D 0VE H 010TF                    08460070
SUSAP KBOSK6EKRANN24MERIT 010MERITK6EA0E       IF                                                18000
SUSAP KBOSK6EKRANN24MERIT 020STRKKK6EA0E    010TF                    09780423
SUSAP KBOSK6EKRANN24MERIT 030ORW  K6D 0V    010TF                    07990105
SUSAP KBOSK6EKRANN24MERIT 040OUTTTK6EA0E    010TF                    08430074
SUSAP KBOSK6EKRANN24MERIT 050KINNGK6EA0E    010TF                    08450132
SUSAP KBOSK6EKRANN24MERIT 060PVD  K6D 0VE H 010TF                    08460070
SUSAP KBOSK6EKRANN25      010PVD  K6D 0V  H    IF                                                18000
SUSAP KBOSK6EKRANN25      020FILYPK6EA0E    010TF                    07620060
SUSAP KBOSK6EKRANN25      030KRANNK6EA0EE   010TF                    07630098      11000          270
SUSAP KBOSK6EKRANN26RW04B 010KRANNK6EA0E       IF                                                18000
SUSAP KBOSK6EKRANN26RW04B 020KRANNK6EA0EE      FM BOS K6      207303070760    D
SUSAP KBOSK6EKRANN26RW15R 010KRANNK6EA0E       IF                                                18000
SUSAP KBOSK6EKRANN26RW15R 020KRANNK6EA0EE      FM BOS K6      207303070760    D
SUSAP KBOSK6EKRANN26RW22L 010KRANNK6EA0E       IF                                                18000
SUSAP KBOSK6EKRANN26RW22L 020ANSLYK6EA0E    010TF                    07600076    + 08000
SUSAP KBOSK6EKRANN26RW22L 030CRADLK6EA0E    010TF                    07590110
SUSAP KBOSK6EKRANN26RW22L 040KLEBBK6EA0E    010TF                    06410088      08000          250
SUSAP KBOSK6EKRANN26RW22L 050ETHYNK6EA0E    010TF                    02770133      05000          250
SUSAP KBOSK6EKRANN26RW22L 060PTRIKK6EA0E    010TF                    33180169      05000          210
SUSAP KBOSK6EKRANN26RW22L 070TAALEK6EA0EY   010TF                    03600063      05000          210
SUSAP KBOSK6EKRANN26RW22L 080TAALEK6EA0EE      FM BOS K6      046901880360    D     05000          210
SUSAP KBOSK6EKRANN26RW22R 010KRANNK6EA0E       IF                                                18000
SUSAP KBOSK6EKRANN26RW22R 020KRANNK6EA0EE      FM BOS K6      207303070760    D
SUSAP KBOSK6EKRANN26RW27  010KRANNK6EA0E       IF                                                18000
SUSAP KBOSK6EKRANN26RW27  020ANSLYK6EA0E    010TF                    07600076    + 08000
SUSAP KBOSK6EKRANN26RW27  030CRADLK6EA0E    010TF                    07590110
SUSAP KBOSK6EKRANN26RW27  040KLEBBK6EA0E    010TF                    06410088      08000          250
SUSAP KBOSK6EKRANN26RW27  050HOKDUK6EA0EY   010TF                    02470130      05000          210
SUSAP KBOSK6EKRANN26RW27  060HOKDUK6EA0EE      FM BOS K6      112201870250    D     05000          210
SUSAP KBOSK6EKRANN26RW32  010KRANNK6EA0E       IF                                                18000
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SUSAP KBOSK6EKRANN26RW33L 010KRANNK6EA0E       IF                                                18000
SUSAP KBOSK6EKRANN26RW33L 020ANSLYK6EA0E    010TF                    07600076    + 08000
SUSAP KBOSK6EKRANN26RW33L 030BEREIK6EA0E    010TF                    07050093      08000          220
SUSAP KBOSK6EKRANN26RW33L 040BBOGGK6EA0EY   010TF                    06070076      06000          210
SUSAP KBOSK6EKRANN26RW33L 050BBOGGK6EA0EE      FM BOS K6      154702060600    D     06000          210
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QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
KRANN RNAV	TWO	KRANN.KRANN2	ONE	15 DEC 2011	20 SEP 2012

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STAR (Data Record)

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                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KBOSK6GRW04R   0100050357 N42211455W071003727+0000    -00223000181154511 50IIBOS3
        SUSAP KBOSK6GRW15R   0100831512 N42222120W071005613+0000    -00224000170881601 50IIMDC1
        SUSAP KBOSK6GRW22L   0100052157 N42222569W071000284+0000    -00229000161199551 50IILQN1
        SUSAP KBOSK6GRW22R   0078612157 N42223426W071001993+0000    -00230000150815501 50V
        SUSAP KBOSK6GRW27    0070002726 N42213678W070591573+0000    -00232000150000571 50IIDGU1
        SUSAP KBOSK6GRW32    0050003217 N42205496W071002969-0100    -00216000200000451 00R
        SUSAP KBOSK6GRW33L   0100833312 N42211674W070592971+0000    -00231000150000571 50IILIP1
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QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
KRANN RNAV	TWO	KRANN.KRANN2	ONE	15 DEC 2011	20 SEP 2012

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STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	JFK	JFK	010		IF		FB					
	JFK	TRUIZ	020		TF		FB	1.0	064.0()	015.0		
	JFK	NEWES	030		TF		FB	1.0	064.2()	005.0		
	JFK	BAWLL	040		TF		FB	1.0	064.2()	033.4		
	JFK	STRKK	050		TF		FB	1.0	079.6()	034.5		
	JFK	ORW	060		TF		FB	1.0	079.9()	010.5		
	JFK	OUTTT	070		TF		FB	1.0	084.3()	007.4		
	JFK	KINNG	080		TF		FB	1.0	084.5()	013.2		
	JFK	PVD	090		TF		FB	1.0	084.6()	007.0		
	MERIT	MERIT	010		IF		FB					
	MERIT	STRKK	020		TF		FB	1.0	097.8()	042.3		
	MERIT	ORW	030		TF		FB	1.0	079.9()	010.5		
	MERIT	OUTTT	040		TF		FB	1.0	084.3()	007.4		
	MERIT	KINNG	050		TF		FB	1.0	084.5()	013.2		
	MERIT	PVD	060		TF		FB	1.0	084.6()	007.0		
		PVD	010		IF		FB					
		FILYP	020		TF		FB	1.0	076.2()	006.0		
		KRANN	030		TF		FB	1.0	076.3()	009.8	AT 11000	AT 270
	RW04B	KRANN	010		IF		FB					
	RW04B	KRANN	020		FM		FB		076.0()			
	RW15R	KRANN	010		IF		FB					
	RW15R	KRANN	020		FM		FB		076.0()			
	RW22L	KRANN	010		IF		FB					
	RW22L	ANSLY	020		TF		FB	1.0	076.0()	007.6	AA 08000	
	RW22L	CRADL	030		TF		FB	1.0	075.9()	011.0		
	RW22L	KLEBB	040		TF		FB	1.0	064.1()	008.8	AT 08000	AT 250
	RW22L	ETHYN	050		TF		FB	1.0	027.7()	013.3	AT 05000	AT 250
	RW22L	PTRIK	060		TF		FB	1.0	331.8()	016.9	AT 05000	AT 210
	RW22L	TAALE	070		TF		FO	1.0	036.0()	006.3	AT 05000	AT 210
	RW22L	TAALE	080		FM		FB		036.0()		AT 05000	AT 210
	RW22R	KRANN	010		IF		FB					
	RW22R	KRANN	020		FM		FB		076.0()			
	RW27	KRANN	010		IF		FB					
	RW27	ANSLY	020		TF		FB	1.0	076.0()	007.6	AA 08000	
	RW27	CRADL	030		TF		FB	1.0	075.9()	011.0		
	RW27	KLEBB	040		TF		FB	1.0	064.1()	008.8	AT 08000	AT 250
	RW27	HOKDU	050		TF		FO	1.0	024.7()	013.0	AT 05000	AT 210
	RW27	HOKDU	060		FM		FB		025.0()		AT 05000	AT 210

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
KRANN RNAV	TWO	KRANN.KRANN2	ONE	15 DEC 2011	20 SEP 2012

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STAR (Data Record)

RW32	KRANN	010	IF	FB						
RW32	KRANN	020	FM	FB		076.0()				
RW33L	KRANN	010	IF	FB						
RW33L	ANSLY	020	TF	FB	1.0	076.0()	007.6	AA 08000		
RW33L	BEREI	030	TF	FB	1.0	070.5()	009.3	AT 08000		AT 220
RW33L	BBOGG	040	TF	FO	1.0	060.7()	007.6	AT 06000		AT 210
RW33L	BBOGG	050	FM	FB		060.0()		AT 06000		AT 210

POINT DATA

WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
BOS	N422126.82	W0705922.37	N4221.447	W07059.373
JFK	N403758.40	W0734617.00	N4037.973	W07346.283
ORW	N413323.05	W0715957.67	N4133.384	W07159.961
PVD	N414327.64	W0712546.67	N4143.461	W07125.778
ANSLY	N415507.53	W0705832.32	N4155.126	W07058.539
BAWLL	N411331.18	W0725342.27	N4113.520	W07253.705
BBOGG	N420556.98	W0704109.06	N4205.950	W07041.151
BEREI	N420032.09	W0704820.74	N4200.535	W07048.346
CRADL	N420036.88	W0704547.55	N4200.615	W07045.793
ETHYN	N421933.13	W0703319.59	N4219.552	W07033.327
FILYP	N414626.57	W0711849.35	N4146.443	W07118.823
HOKDU	N421922.29	W0703418.28	N4219.372	W07034.305
KINNG	N414054.91	W0713429.04	N4140.915	W07134.484
KLEBB	N420630.28	W0703658.08	N4206.505	W07036.968
KRANN	N415118.69	W0710724.46	N4151.312	W07107.408
MERIT	N412255.02	W0730814.75	N4122.917	W07308.246
NEWES	N405120.21	W0732641.77	N4051.337	W07326.696
OUTTT	N413606.41	W0715049.56	N4136.107	W07150.826
PTRIK	N423138.24	W0704914.28	N4231.637	W07049.238
STRKK	N412845.63	W0721233.94	N4128.761	W07212.566
TAALE	N423734.55	W0704618.74	N4237.576	W07046.312
TRUIZ	N404759.36	W0733137.37	N4047.989	W07331.623
RW04L	N422128.76	W0710051.62	N4221.479	W07100.860
RW04R	N422114.55	W0710037.27	N4221.243	W07100.621
RW15R	N422221.20	W0710056.13	N4222.353	W07100.936
RW22L	N422225.69	W0710002.84	N4222.428	W07100.047
RW22R	N422234.26	W0710019.93	N4222.571	W07100.332
RW27	N422136.78	W0705915.73	N4221.613	W07059.262
RW32	N422054.96	W0710029.69	N4220.916	W07100.495
RW33L	N422116.74	W0705929.71	N4221.279	W07059.495

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
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RW04L	00014	50
RW04R	00018	51
RW15R	00017	60
RW22L	00016	55
RW22R	00015	50
RW27	00015	57
RW32	00020	45
RW33L	00015	57

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
KRANN RNAV	TWO	KRANN.KRANN2	ONE	15 DEC 2011	20 SEP 2012

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