Flight Procedure Tracking Form	Action: AMENDMENT	Task Type: SID	Date Open: 05/23/2012	Task #: 2012052326676301002	Request #: 20120523266763
Procedure: SID COWBY (RNAV) FIVE LAS VEGAS NV KLAS		Airport ID: KLAS	Airport: MC CARRAN INTL		Reimbursable #:
City: LAS VEGAS	ST: NV	GPS #:		Estimated Chart Date: 11/15/2012	FICO #:
Fac ID:	Fac. Type:		Specialist: CHARLES ERICKSON		

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:				6/13 GN GN
QA:				IZ 6/20 6/21
Liaison:				SCANNED 6/27

QUALITY CHECKED

Procedure Comments:

Remark Type: INFORMATION

ATTACHED FORMS: 8260-15B, 8260-15C.
CONTACT: ADOLFO URRUTIA AJV-354 LEAD 405.954.2079/4919

NO FLIGHT CHECK REQUIRED - REQUEST TABLE-TOP

TEMPORARY CRANES ARE UP WITH NOTAM ACTION THAT MUST BE READDRESSED IF CRANES ARE STILL UP AT PUBLICATION DATE. FDC 2/9641 & 2/7172

FIG ✓
LOADING 7-13-12

JUL 18 2012

(COWBY5.COWBY) 11013

COWBY FIVE DEPARTURE (RNAV)

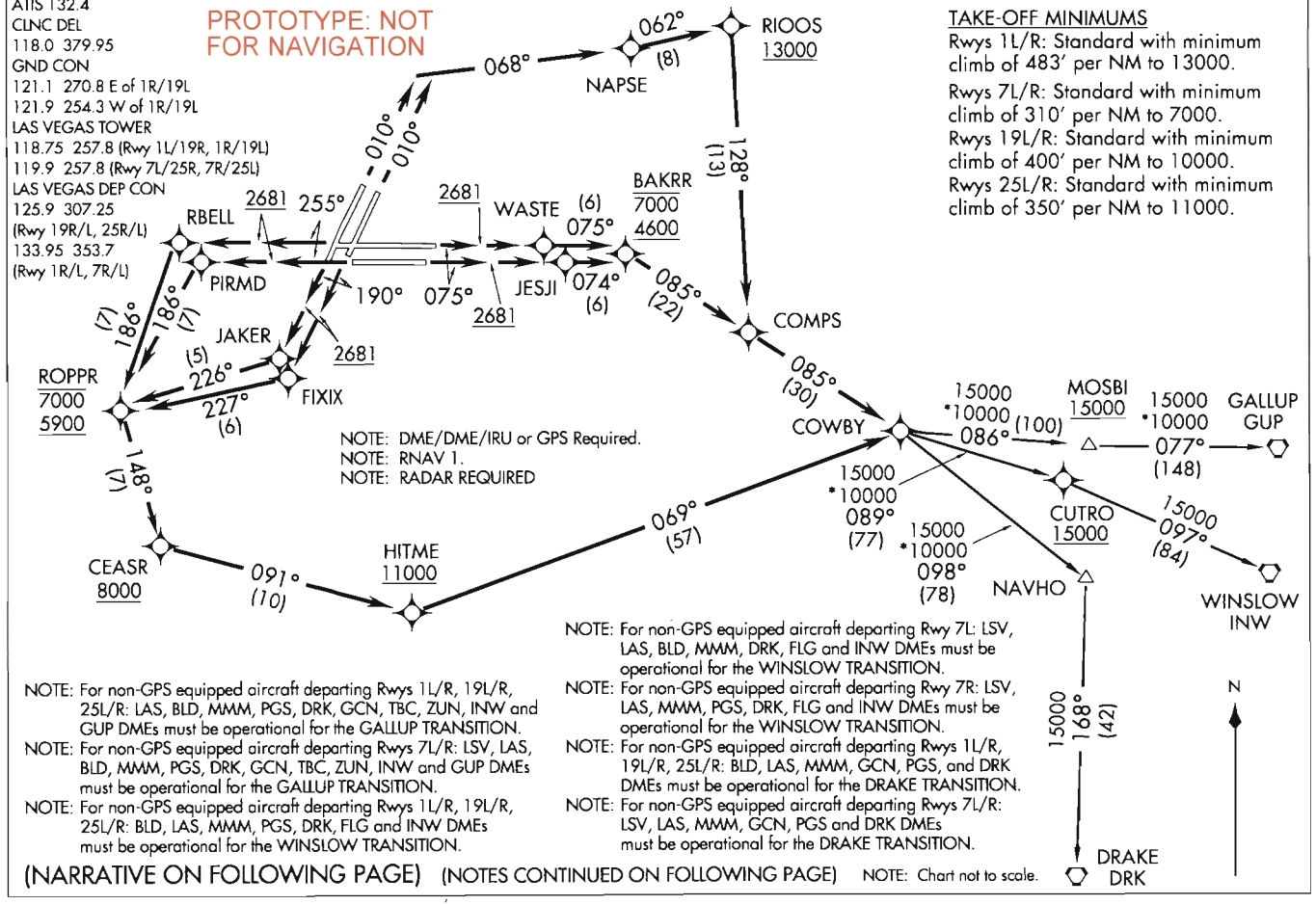
NEW

SL-662 (FAA)

LAS VEGAS / MC CARRAN INTL (LAS)
LAS VEGAS, NEVADA

ATIS 132.4
CLNC DEL
118.0 379.95
GND CON
121.1 270.8 E of 1R/19L
121.9 254.3 W of 1R/19L
LAS VEGAS TOWER
118.75 257.8 (Rwy 1L/19R, 1R/19L)
119.9 257.8 (Rwy 7L/25R, 7R/25L)
LAS VEGAS DEP CON
125.9 307.25
(Rwy 19R/L, 25R/L)
133.95 353.7
(Rwy 1R/L, 7R/L)

PROTOTYPE: NOT FOR NAVIGATION



TAKE-OFF MINIMUMS
Rwys 1L/R: Standard with minimum climb of 483′ per NM to 13000.
Rwys 7L/R: Standard with minimum climb of 310′ per NM to 7000.
Rwys 19L/R: Standard with minimum climb of 400′ per NM to 10000.
Rwys 25L/R: Standard with minimum climb of 350′ per NM to 11000.

NOTE: DME/DME/IRU or GPS Required.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED

NOTE: For non-GPS equipped aircraft departing Rwys 1L/R, 19L/R, 25L/R: LAS, BLD, MMM, PGS, DRK, GCN, TBC, ZUN, INW and GUP DMEs must be operational for the GALLUP TRANSITION.
NOTE: For non-GPS equipped aircraft departing Rwys 7L/R: LSV, LAS, BLD, MMM, PGS, DRK, GCN, TBC, ZUN, INW and GUP DMEs must be operational for the GALLUP TRANSITION.
NOTE: For non-GPS equipped aircraft departing Rwys 1L/R, 19L/R, 25L/R: BLD, LAS, MMM, PGS, DRK, FLG and INW DMEs must be operational for the WINSLOW TRANSITION.

NOTE: For non-GPS equipped aircraft departing Rwy 7L: LSV, LAS, BLD, MMM, DRK, FLG and INW DMEs must be operational for the WINSLOW TRANSITION.
NOTE: For non-GPS equipped aircraft departing Rwy 7R: LSV, LAS, MMM, PGS, DRK, FLG and INW DMEs must be operational for the WINSLOW TRANSITION.
NOTE: For non-GPS equipped aircraft departing Rwys 1L/R, 19L/R, 25L/R: BLD, LAS, MMM, GCN, PGS, and DRK DMEs must be operational for the DRAKE TRANSITION.
NOTE: For non-GPS equipped aircraft departing Rwys 7L/R: LSV, LAS, MMM, GCN, PGS and DRK DMEs must be operational for the DRAKE TRANSITION.

(NARRATIVE ON FOLLOWING PAGE) (NOTES CONTINUED ON FOLLOWING PAGE) NOTE: Chart not to scale.

COWBY FIVE DEPARTURE (RNAV)
(COWBY5.COWBY) 11013
LAS VEGAS, NEVADA
LAS VEGAS / MC CARRAN INTL (LAS)

F16

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 1L/R: Climb heading 010° to intercept course 068° to NAPSE, then on track 062° to cross RIOOS at or above 13000, then on track 128° to COMPS, then on track 085° to COWBY, thence....

TAKE-OFF RUNWAY 7L: Climb heading 075° to 2681', then direct WASTE, then on track 075° to cross BAKRR at or below 7000 and at or above 4600, then on track 085° to COMPS, then on track 085° to COWBY, thence....

TAKE-OFF RUNWAY 7R: Climb heading 075° to 2681', then direct JESJI, then on track 074° to cross BAKRR at or below 7000 and at or above 4600, then on track 085° to COMPS, then on track 085° to COWBY, thence....

TAKE-OFF RUNWAY 19L: Climb heading 190° to 2681', then direct FIXIX, then on track 227° to cross ROPPR at or below 7000 and at or above 5900, then on track 148° to cross CEASR at or above 8000, then on track 091° to cross HITME at or above 11000, then on track 069° to COWBY, thence....

TAKE-OFF RUNWAY 19R: Climb heading 190° to 2681', then direct JAKER, then on track 226° to cross ROPPR at or below 7000 and at or above 5900, then on track 148° to cross CEASR at or above 8000, then on track 091° to cross HITME at or above 11000, then on track 069° to COWBY, thence....

TAKE-OFF RUNWAY 25L: Climb heading 255° to 2681', then direct PIRMD, then on track 186° to cross ROPPR at or below 7000 and at or above 5900, then on track 148° to cross CEASR at or above 8000, then on track 091° to cross HITME at or above 11000, then on track 069°to COWBY, thence....

TAKE-OFF RUNWAY 25R: Climb heading 255° to 2681', then direct RBELL, then on track 186° to cross ROPPR at or below 7000 and at or above 5900, then on track 148° to cross CEASR at or above 8000, then on track 091° to cross HITME at or above 11000, then on track 069° to COWBY, thence....

....via (Transition) maintain FL190, expect filed altitude 10 minutes after departure.

DRAKE TRANSITION (COWBY5.DRK)
GALLUP TRANSITION (COWBY5.GUP)
WINSLOW TRANSITION (COWBY5.INW)

PROTOTYPE: NOT FOR NAVIGATION

TAKE-OFF OBSTACLE NOTES

RWY 1L: Building 1508' from DER, 463' left of centerline, 71' AGL/2146' MSL. Pole 453' from DER, 283' left of centerline, 38' AGL/2118' MSL. Sign 1042' from DER, 694' left of centerline, 35' AGL/2124' MSL.
RWY 1R: Sign 1331' from DER, 448' right of centerline, 60' AGL/2120' MSL. Vents 604' from DER, 539' right of centerline, up to 17' AGL/2095' MSL.
RWY 7L: Trees 761' from DER, left and right of centerline, up to 42' AGL/2074' MSL. Pole 747' from DER, 442' right of centerline, 25' AGL/2057' MSL.
RWY 7R: Tower 1457' from DER, 847' right of centerline, 65' AGL/2096' MSL.
RWY 19L: Multiple buildings, trees and poles 1394' from DER, 251' right of centerline, up to 96' AGL/2284' MSL. Sign 2181' from DER, 1062' right of centerline, 36' AGL/2236' MSL.
RWY 19R: Trees 1563' from DER, 329' left of centerline, up to 55' AGL/2236' MSL. Multiple buildings, signs and poles 197' from DER, 59' right of centerline, up to 75' AGL/2291' MSL.
RWY 25L: Multiple poles, signs and buildings 1003' from DER, 145' left of centerline, up to 97' AGL/2291' MSL. Trees 2837' from DER, 1008' left of centerline, 72' AGL/2230' MSL. Railroad 2564' from DER, 773' left of centerline, 66' AGL/2223' MSL.
RWY 25R: Multiple poles and trees 533' from DER, 1' left of centerline, up to 271' AGL/2457' MSL. Building 1822' from DER, 652' left of centerline, 59' AGL/2238' MSL. Roads 669' from DER, 17' right of centerline, up to 29' AGL/2208' MSL.

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY	FIVE	COWBY5.COWBY	FOUR	01/13/11	

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 1L/R: CLIMB HEADING 009.92 TO INTERCEPT COURSE 068.00 TO NAPSE, THEN ON TRACK 061.95 TO CROSS RIOOS AT OR ABOVE 13000, THEN ON TRACK 128.39 TO COMPS,THEN ON TRACK 085.07 TO COWBY, THENCE...
TAKEOFF RWY 7L: CLIMB HEADING 074.96 TO 2681, THEN DIRECT WASTE, THEN ON TRACK 075.31 TO CROSS BAKRR AT OR BELOW 7000 AND AT OR ABOVE 4600, THEN ON TRACK 084.81 TO COMPS, THEN ON TRACK 085.07 TO COWBY, THENCE...
TAKEOFF RWY 7R: CLIMB HEADING 074.95 TO 2681, THEN DIRECT JESJI, THEN ON TRACK 073.75 TO CROSS BAKRR AT OR BELOW 7000 AND AT OR ABOVE 4600, THEN ON TRACK 084.81 TO COMPS, THEN ON TRACK 085.07 TO COWBY, THENCE...
TAKEOFF RWY 19L: CLIMB HEADING 189.92 TO 2681, THEN DIRECT FIXIX, THEN ON TRACK 226.76 TO CROSS ROPPR AT OR BELOW 7000 AND AT OR ABOVE 5900, THEN ON TRACK 147.84 TO CROSS CEASR AT OR ABOVE 8000, THEN ON TRACK 091.35 TO CROSS HITME AT OR ABOVE 11000, THEN ON TRACK 068.54 TO COWBY, THENCE...
TAKEOFF RWY 19R: CLIMB HEADING 189.91 TO 2681, THEN DIRECT JAKER, THEN ON TRACK 226.01 TO CROSS ROPPR AT OR BELOW 7000 AND AT OR ABOVE 5900, THEN ON TRACK 147 .84 TO CROSS CEASR AT OR ABOVE 8000, THEN ON TRACK 091.35 TO CROSS HITME AT OR ABOVE 11000, THEN ON TRACK 068.54 TO COWBY, THENCE...
TAKEOFF RWY 25L: CLIMB HEADING 254.96 TO 2681, THEN DIRECT PIRMD, THEN ON TRACK 186.12 TO CROSS ROPPR AT OR BELOW 7000 AND AT OR ABOVE 5900, THEN ON TRACK 147.84 TO CROSS CEASR AT OR ABOVE 8000, THEN ON TRACK 091.35 TO CROSS HITME AT OR ABOVE 11000, THEN ON TRACK 068.54 TO COWBY, THENCE...
TAKEOFF RWY 25R: CLIMB HEADING 254.93 TO 2681, THEN DIRECT RBELL, THEN ON TRACK 185.85 TO CROSS ROPPR AT OR BELOW 7000 AND AT OR ABOVE 5900, THEN ON TRACK 147.84 TO CROSS CEASR AT OR ABOVE 8000, THEN ON TRACK 091.35 TO CROSS HITME AT OR ABOVE 11000, THEN ON TRACK 068.54 TO COWBY, THENCE...

...VIA (TRANSITION). MAINTAIN FL190, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes
DRAKE	COWBY5.DRK	COWBY	NAVHO	097.97 TRACK	77.93	15000	10000	
		NAVHO	DRK VORTAC	167.72 TRACK	42.24	15000		
GALLUP	COWBY5.GUP	COWBY	MOSBI	085.83 TRACK	100.01	15000	10000	AT/ABOVE 15000
		MOSBI	GUP VORTAC	076.83 TRACK	148.17	15000	10000	
WILSLOW	COWBY5.INW	COWBY	CUTRO	088.99 TRACK	76.61	15000	10000	AT/ABOVE 15000
		CUTRO	INW VORTAC	097.19 TRACK	84.49	15000		

QUALITY CHECKED

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY	FIVE	COWBY5.COWBY	FOUR	01/13/11	

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

TAKEOFF MINIMUMS:
RWY 1L/R: STANDARD WITH MINIMUM CLIMB OF 483 PER NM TO 13000.
RWY 7L/R: STANDARD WITH MINIMUM CLIMB OF 310 FT PER NM TO 7000.
RWY 19L/R: STANDARD WITH MINIMUM CLIMB OF 400 FT PER NM TO 10000.
RWY 25L/R: STANDARD WITH MINIMUM CLIMB OF 350 FT PER NM TO 11000.
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 1L/R, 19L/R, 25L/R: LAS, BLD, MMM, PGS, DRK, GCN, TBC, ZUN, INW AND GUP DME'S MUST BE OPERATIONAL FOR THE GALLUP TRANSITION.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 7L/R: LSV, LAS, BLD, MMM, PGS, DRK, GCN, TBC, ZUN, INW AND GUP DME'S MUST BE OPERATIONAL FOR THE GALLUP TRANSITION.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 1L/R, 19L/R, 25L/R: BLD, LAS, MMM, PGS, DRK, FLG AND INW DME'S MUST BE OPERATIONAL FOR THE WINSLOW TRANSITION.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWY 7L: LSV, LAS, BLD, MMM, DRK, FLG AND INW DME'S MUST BE OPERATIONAL FOR THE WINSLOW TRANSITION.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWY 7R: LSV, LAS, MMM, PGS, DRK, FLG AND INW DME'S MUST BE OPERATIONAL FOR THE WINSLOW TRANSITION.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 7L/R: LSV, LAS, MMM, GCN, PGS AND DRK DME'S MUST BE OPERATIONAL FOR THE DRAKE TRANSITION.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 1L/R, 19L/R, 25L/R: BLD, LAS, MMM, GCN, PGS AND DRK DME'S MUST BE OPERATIONAL FOR THE DRAKE TRANSITION.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 1L, BUILDING 1508 FT FROM DER, 463 FT LEFT OF CENTERLINE , 71 FT AGL/2146 FT MSL. POLE 453 FT FROM DER, 283 FT LEFT OF CENTERLINE, 38 FT AGL/2118 FT MSL. SIGN 1042 FT FROM DER, 694 FT LEFT OF CENTERLINE, 35 FT AGL/2124 FT MSL.
NOTE: RWY 1R, SIGN 1331 FT FROM DER, 448 FT RIGHT OF CENTERLINE, 60 FT AGL/2120 FT MSL. VENTS 604 FT FROM DER, 539 FT RIGHT OF CENTERLINE, UP TO 17 FT AGL/2095 FT MSL.
NOTE: RWY 7L, TREES 761 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 42 FT AGL/ 2074 FT MSL. POLE 747 FT FROM DER, 442 FT RIGHT OF CENTERLINE, 25 FT AGL/2057 FT MSL.
NOTE: RWY 7R, TOWER 1457 FT FROM DER, 847 FT RIGHT OF CENTERLINE, 65 FT AGL/2096 FT MSL.
NOTE: RWY 19L, MULTIPLE BUILDINGS, TREES AND POLES BEGINNING 1394 FT FROM DER, 251 FT RIGHT OF CENTERLINE, UP TO 96 FT AGL/2284 FT MSL. SIGN 2181 FT FROM DER, 1062 FT RIGHT OF CENTERLINE, 36 FT AGL/2236 FT MSL.
NOTE: RWY 19R, TREES BEGINNING 1563 FROM DER, 329 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/2236 FT MSL. MULTIPLE BUILDINGS SIGNS AND POLES BEGINNING 197 FT FROM DER, 59 FT RIGHT OF CENTERLINE, UP TO 75 FT AGL/2291 FT MSL.
NOTE: RWY 25L, MULTIPLE POLES, SIGN AND BUILDINGS BEGINNING 1003 FT FROM DER, 145 FT LEFT OF CENTERLINE, UP TO 97 FT AGL/2291 FT MLS. TREE 2837 FT FROM DER, 1008 FT LEFT OF CENTERLINE, 72 FT AGL/2230 FT MSL. RAILROAD 2564 FT FROM DER, 773 FT LEFT OF CENTERLINE, 66 FT AGL/2223 FT MSL.
NOTE: RWY 25R, MULTIPLE POLES AND TREES BEGINNING 533 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 271 FT AGL/2457 FT MSL. BUILDING 1822 FT FROM DER, 652 FT LEFT OF CENTERLINE, 59 FT AGL/2238 FT MSL. ROADS BEGINNING 669 FT FROM DER, 17 FT RIGHT OF CENTERLINE, UP TO 29 FT AGL/2208 FT MSL

CONTROLLING OBSTACLES:

RWY 19L/R, 25L/R: 4753 FT MSL AAO 355440.10N/1151859.90W. **RWY 1L/R:** 4280 FT MSL AAO 361038.70N/1145940.50W

QUALITY 4 CHECKED

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY	FIVE	COWBY5.COWBY	FOUR	01/13/11	

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

DME/DME ASSESMENT: SAT (RNP 2.0).
REFERENCE MAG VAR: KLAS 15E, EPOCH YR 1980

AIRPORTS SERVED:

MCCARRAN INTL — LAS VEGAS, NV

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, LAS TWR, LAS DEP CON

FIXES AND/OR NAVAIDS:

REMARKS:

COWBY FIVE REFLECTS THE COWBY FOUR ABSENT (ATC) NEXT TO THE ALTITUDES. ALL PREVIOUS ALTITUDE RESTRICTIONS REMAIN IN PLACE.

QUALITY A CHECKED

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY	FIVE	COWBY5.COWBY	FOUR	01/13/11	

FLIGHT INSPECTED BY:

REQUIRED EFFECTIVE DATE:
ROUTINE

DEVELOPED BY:
CHARLES ERICKSON AJV-354 05/27/12

APPROVED BY:
DEZ SILAGYI AJV-354

COORDINATED WITH:
ATA, ALPA, APA, AOPA, NBAA, ZLA. ZAB, LAS TWR, LAS APP CON, AMGR

CHANGES:

1. REMOVED (ATC) FROM ALTITUDE RESTRICTIONS HOWEVER LEFT ALL ALTITUDE RESTRICTIONS IN PLACE.
2. REMOVED INITIAL CLIMB GRADIENT FOR RWY 1L/R

REASONS:

1. ATC ALTITUDES DESIGNATIONS NO LONGER IN USE.
2. AMENDED TO CURRENT CRITERIA.

QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY	FIVE	COWBY5.COWBY	FOUR	01/13/11	

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW01L (AER)*	360436.44N/1151010.30W*	N	-	-	-	-			*DISPL THLD (584), CG 483 FT /NM TO 13000
	360737.48N/1150826.67W	-	-	VI	024.92	1.94			DO NOT CHART DISTANCE. RECOMMENDED NAVAID: LAS VORTAC
NAPSE	360934.00N/1144914.00W	Y	FB	CF	083.00	15.74			RIGHT TURN, VI/CF PERMITTED
RIOOS	361120.81N/1143943.64W	Y	FB	TF	076.95	7.90	AT/ABOVE 13000		
COMPS	360040.66N/1142958.59W	Y	FB	TF	143.39	13.26			
COWBY	355524.84N/1135409.94W	Y	FB	TF	100.07	29.54			
RW01R (AER)*	360431.68N/1151000.43W*	N	-	-	-	-			*DISPL THLD (491), CG 483 FT /NM TO 13000
	360739.01N/1150813.20W	-	-	VI	024.92	1.91			DO NOT CHART DISTANCE. RECOMMENDED NAVAID: LAS VORTAC
NAPSE	360934.00N/1144914.00W	Y	FB	CF	083.00	15.53			RIGHT TURN, VI/CF PERMITTED
RIOOS	361120.81N/1143943.64W	Y	FB	TF	076.95	7.90	AT/ABOVE 13000		
COMPS	360040.66N/1142958.59W	Y	FB	TF	143.39	13.26			
COWBY	355524.84N/1135409.94W	Y	FB	TF	100.07	29.54			
RW07L (AER)*	360434.95N/1150946.63W*	N	-	-	-	-			*DISL THLD (2139)
2681 MSL		-	-	VA	089.96	-			CG 310 FT/NM TO 7000
WASTE	360435.14N/1150425.72W	Y	FB	DF	-	-			
BAKRR	360433.00N/1145711.00W	Y	FB	TF	090.31	05.87	AT/BELOW 7000 AT/ABOVE 4600		
COMPS	360040.66N/1142958.59W	Y	FB	TF	099.81	22.40			
COWBY	355524.84N/1135409.94W	Y	FB	TF	100.07	29.54			
RW07R (AER)	360425.06N/1150941.16W	N	-	-	-	-			
2681 MSL		-	-	VA	089.95	-			CG 310 FT/NM TO 7000
JESJI	360425.22N/1150442.73W	Y	FB	DF	-	-			
BAKRR	360433.00N/1145711.00W	Y	FB	TF	088.75	6.10	AT/BELOW 7000 AT/ABOVE 4600		
COMPS	360040.66N/1142958.59W	Y	FB	TF	099.81	22.40			
COWBY	355524.84N/1135409.94W	Y	FB	TF	100.07	29.54			

QUALITY CHECKED 1

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY	FIVE	COWBY5.COWBY	FOUR	01/13/11	

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW19L (AER)	360547.06N/1150917.28W	N	-	-	-	-			
2681 MSL		-	-	VA	204.92	-			CG 400 FT/NM TO 10000
FIXIX	360054.10N/1151204.79W	Y	FB	DF	-	-			
ROPPR	355816.27N/1151805.99W	Y	FB	TF	241.76	5.55	AT/BELOW 7000 AT/ABOVE 5900		
CEASR	355159.04N/1151542.89W	Y	FB	TF	162.84	6.57	AT/ABOVE 8000		
HITME	354917.00N/1150427.00W	Y	FB	TF	106.35	9.55	AT/ABOVE11000		
COWBY	355524.84N/1135409.94W	Y	FB	TF	083.54	57.45			
RW19R (AER)	360551.76N/1150927.28W	N	-	-	-	-			
2681 MSL		-	-	VA	204.91	-			CG 400 FT/NM TO 10000
JAKER	360053.20N1151217.95W	Y	FB	DF	-	-			
ROPPR	355816.27N/1151805.99W	Y	FB	TF	241.01	5.38	AT/BELOW 7000 AT/ABOVE 5900		
CEASR	355159.04N/1151542.89W	Y	FB	TF	162.84	6.57	AT/ABOVE 8000		
HITME	354917.00N/1150427.00W	Y	FB	TF	106.35	9.55	AT/ABOVE11000		
COWBY	355524.84N/1135409.94W	Y	FB	TF	083.54	57.45			
RW25L (AER)	360425.16N/1150732.96W	N	-	-	-	-			
2681 MSL		-	-	VA	269.96	-			CG 350 FT/NM TO 11000
PIRMD	360424.61N/1151511.00W	Y	FB	DF	-	-			
ROPPR	355816.27N/1151805.99W	Y	FB	TF	201.12	6.57	AT/BELOW 7000 AT/ABOVE 5900		
CEASR	355159.04N/1151542.89W	Y	FB	TF	162.84	6.57	AT/ABOVE 8000		
HITME	354917.00N/1150427.00W	Y	FB	TF	106.35	9.55	AT/ABOVE 11000		
COWBY	355524.84N/1135409.94W	Y	FB	TF	083.54	57.45			
RW25R (AER)*	360435.05N/1150732.97W*	N	-	-	-	-			*DISPL THLD (1397)
2681 MSL		-	-	VA	269.93	-			CG 350 FT/NM TO 11000
RBELL	360434.51N/1151508.75W	Y	FB	DF	-	-			
ROPPR	355816.27N/1151805.99W	Y	FB	TF	200.85	6.74	AT/BELOW 7000 AT/ABOVE 5900		
CEASR	355159.04N/1151542.89W	Y	FB	TF	162.84	6.57	AT/ABOVE 8000		
HITME	354917.00N/1150427.00W	Y	FB	TF	106.35	9.55	AT/ABOVE 11000		
COWBY	355524.84N/1135409.94W	Y	FB	TF	083.54	57.45			

QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY	FIVE	COWBY5.COWBY	FOUR	01/13/11	

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
COWBY	355524.84N/1135409.94W	Y	-	IF	-	-			COWBY5.DRK
NAVHO	352425.02N/1122623.53W	Y	FB	IF	112.97	77.93			
DRK VORTAC	344209.20N/1122849.26W	Y	FB	TF	182.72	42.24			
COWBY	355524.84N/1135409.94W	Y	-	IF	-	-			COWBY5.GUP
MOSBI	353534.60N/1115342.70W	Y	FB	TF	100.83	100.01	AT/ABOVE 15000		
GUP VORTAC	352833.60N/1085221.40	Y	FB	TF	091.83	148.17			
COWBY	355524.84N/1135409.94W	Y	-	IF	-	-			COWBY5.INW
CUTRO	353616.98N/1122300.00W	Y	FB	TF	103.99	76.61	AT/ABOVE 15000		
INW VORTAC	350341.77N/1104742.09W	Y	FB	TF	112.19	84.49			

QUALITY 3 CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY RNAV	FIVE	COWBY5.COWBY	FOUR	01/13/11	

ARINC PACKET - 424-18 - SID

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                1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        DRK   K2011410VTHW N34420920W112284926    N34420920W112284926E0140049632     NARDRAKE
        SUSAD        GUP   K2011510VTH  N35283360W108522140    N35283360W108522140E0140070532     NARGALLUP
        SUSAD        INW   K2011260VTHA N35034176W110474207    N35034176W110474207E0140049132     NARWINSLOW
        SUSAD        LAS   K2011690VTHW N36044693W115093526    N36044693W115093526E0150021362     NARLAS VEGAS

                1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BAKRR K20    W     N36043300W114571100                    E0121     NAR           BAKRR
        SUSAEAENRT   CEASR K20    W     N35515904W115154289                    E0122     NAR           CEASR
        SUSAEAENRT   COMPS K20    W     N36004066W114295859                    E0120     NAR           COMPS
        SUSAEAENRT   COWBY K20    C   B N35552484W113540994                    E0118     NAR           COWBY
        SUSAEAENRT   CUTRO K20    W   H N35361698W112230000                    E0113     NAR           CUTRO
        SUSAEAENRT   FIXIX K20    W     N36005410W115120479                    E0122     NAR           FIXIX
        SUSAEAENRT   HITME K20    W     N35491700W115042700                    E0121     NAR           HITME
        SUSAEAENRT   JAKER K20    W     N36005320W115121795                    E0122     NAR           JAKER
        SUSAEAENRT   JESJI K20    W     N36042522W115044273                    E0122     NAR           JESJI
        SUSAEAENRT   MOSBI K20    W   H N35353460W111534270                    E0111     NAR           MOSBI
        SUSAEAENRT   NAPSE K20    W     N36093400W114491400                    E0121     NAR           NAPSE
        SUSAEAENRT   NAVHO K20    C   B N35242502W112262353                    E0113     NAR           NAVHO
        SUSAEAENRT   PIRMD K20    W     N36042461W115151100                    E0122     NAR           PIRMD
        SUSAEAENRT   RBELL K20    W     N36043451W115150875                    E0122     NAR           RBELL
        SUSAEAENRT   RIOOS K20    W     N36112081W114394364                    E0121     NAR           RIOOS
        SUSAEAENRT   ROPPR K20    W     N35581627W115180599                    E0122     NAR           ROPPR
        SUSAEAENRT   WASTE K20    W     N36043514W115042572                    E0122     NAR           WASTE

                1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KLASK2ALAS     0     145YHN36044820W115090810E015002181         1800018000C    MNAR    MC CARRAN INTL

                1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KLASK2DCOWBY54RW01L 010         0        VI                    0099                    18000
        SUSAP KLASK2DCOWBY54RW01L 020NAPSEK2EA0E    010CF LAS K2      0587017206800157D
        SUSAP KLASK2DCOWBY54RW01L 030RIOOSK2EA0E    010TF                    06200079    + 13000
        SUSAP KLASK2DCOWBY54RW01L 040COMPSK2EA0E    010TF                    12840133
        SUSAP KLASK2DCOWBY54RW01L 050COWBYK2EA0EE   010TF                    08510295
        SUSAP KLASK2DCOWBY54RW01R 010         0        VI                    0099                    18000
        SUSAP KLASK2DCOWBY54RW01R 020NAPSEK2EA0E    010CF LAS K2      0587017206800155D
```

QUALITY 1 CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY RNAV	FIVE	COWBY5.COWBY	FOUR	01/13/11	

```
SUSAP KLASK2DCOWBY54RW01R 030RIOOSK2EA0E    010TF                    06200079    + 13000
SUSAP KLASK2DCOWBY54RW01R 040COMPSK2EA0E    010TF                    12840133
SUSAP KLASK2DCOWBY54RW01R 050COWBYK2EA0EE   010TF                    08510295
SUSAP KLASK2DCOWBY54RW07L 010          0       VA                    0750        + 02681     18000
SUSAP KLASK2DCOWBY54RW07L 020WASTEK2EA0E    010DF
SUSAP KLASK2DCOWBY54RW07L 030BAKRRK2EA0E    010TF                    07530059    B 0700004600
SUSAP KLASK2DCOWBY54RW07L 040COMPSK2EA0E    010TF                    08480224
SUSAP KLASK2DCOWBY54RW07L 050COWBYK2EA0EE   010TF                    08510295
SUSAP KLASK2DCOWBY54RW07R 010          0       VA                    0750        + 02681     18000
SUSAP KLASK2DCOWBY54RW07R 020JESJIK2EA0E    010DF
SUSAP KLASK2DCOWBY54RW07R 030BAKRRK2EA0E    010TF                    07380061    B 0700004600
SUSAP KLASK2DCOWBY54RW07R 040COMPSK2EA0E    010TF                    08480224
SUSAP KLASK2DCOWBY54RW07R 050COWBYK2EA0EE   010TF                    08510295
SUSAP KLASK2DCOWBY54RW19L 010          0       VA                    1899        + 02681     18000
SUSAP KLASK2DCOWBY54RW19L 020FIXIXK2EA0E    010DF
SUSAP KLASK2DCOWBY54RW19L 030ROPPRK2EA0E    010TF                    22680056    B 0700005900
SUSAP KLASK2DCOWBY54RW19L 040CEASRK2EA0E    010TF                    14780066    + 08000
SUSAP KLASK2DCOWBY54RW19L 050HITMEK2EA0E    010TF                    09140096    + 11000
SUSAP KLASK2DCOWBY54RW19L 060COWBYK2EA0EE   010TF                    06850575
SUSAP KLASK2DCOWBY54RW19R 010          0       VA                    1899        + 02681     18000
SUSAP KLASK2DCOWBY54RW19R 020JAKERK2EA0E    010DF
SUSAP KLASK2DCOWBY54RW19R 030ROPPRK2EA0E    010TF                    22600054    B 0700005900
SUSAP KLASK2DCOWBY54RW19R 040CEASRK2EA0E    010TF                    14780066    + 08000
SUSAP KLASK2DCOWBY54RW19R 050HITMEK2EA0E    010TF                    09140096    + 11000
SUSAP KLASK2DCOWBY54RW19R 060COWBYK2EA0EE   010TF                    06850575
SUSAP KLASK2DCOWBY54RW25L 010          0       VA                    2550        + 02681     18000
SUSAP KLASK2DCOWBY54RW25L 020PIRMDK2EA0E    010DF
SUSAP KLASK2DCOWBY54RW25L 030ROPPRK2EA0E    010TF                    18610066    B 0700005900
SUSAP KLASK2DCOWBY54RW25L 040CEASRK2EA0E    010TF                    14780066    + 08000
SUSAP KLASK2DCOWBY54RW25L 050HITMEK2EA0E    010TF                    09140096    + 11000
SUSAP KLASK2DCOWBY54RW25L 060COWBYK2EA0EE   010TF                    06850575
SUSAP KLASK2DCOWBY54RW25R 010          0       VA                    2549        + 02681     18000
SUSAP KLASK2DCOWBY54RW25R 020RBELLK2EA0E    010DF
SUSAP KLASK2DCOWBY54RW25R 030ROPPRK2EA0E    010TF                    18590067    B 0700005900
SUSAP KLASK2DCOWBY54RW25R 040CEASRK2EA0E    010TF                    14780066    + 08000
SUSAP KLASK2DCOWBY54RW25R 050HITMEK2EA0E    010TF                    09140096    + 11000
SUSAP KLASK2DCOWBY54RW25R 060COWBYK2EA0EE   010TF                    06850575
SUSAP KLASK2DCOWBY56DRK   010COWBYK2EA0E       IF                                            18000
SUSAP KLASK2DCOWBY56DRK   020NAVHOK2EA0E    010TF                    09800779
SUSAP KLASK2DCOWBY56DRK   030DRK  K2D 0VE   010TF                    16770422
SUSAP KLASK2DCOWBY56GUP   010COWBYK2EA0E       IF                                            18000
SUSAP KLASK2DCOWBY56GUP   020MOSBIK2EA0E    010TF                    08581000    + 15000
SUSAP KLASK2DCOWBY56GUP   030GUP  K2D 0VE   010TF                    07681482
SUSAP KLASK2DCOWBY56INW   010COWBYK2EA0E       IF                                            18000
SUSAP KLASK2DCOWBY56INW   020CUTROK2EA0E    010TF                    08900766    + 15000
SUSAP KLASK2DCOWBY56INW   030INW  K2D 0VE   010TF                    09720845
```

QUALITY CHECKED 1

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY RNAV	FIVE	COWBY5.COWBY	FOUR	01/13/11	

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KLASK2GRW01L   0089850099 N36043644W115101030-1000    +06354021760584591 50IICUA1
        SUSAP KLASK2GRW01R   0097750099 N36043168W115100043-1000    +0633602170049150150R
        SUSAP KLASK2GRW07L   0145100749 N36043495W115094663-1000    +0629002155213976150V
        SUSAP KLASK2GRW07R   0105260749 N36042506W115094116-1000    +0629502157000061150V
        SUSAP KLASK2GRW19L   0097751899 N36054706W115091728+1000    +0606202080087875150R
        SUSAP KLASK2GRW19R   0089851899 N36055176W115092719+1000    +0608702089000075150R
        SUSAP KLASK2GRW25L   0105262550 N36042516W115073296+1000    +05963020480000661 50IIRLE1
        SUSAP KLASK2GRW25R   0145102550 N36043505W115073297+1000    +05950020441397661 50IILAS1
```

QUALITY CHECKED 1

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY RNAV	FIVE	COWBY5.COWBY	FOUR	01/13/11	

ARINC SUMMARY - 424-18 - SID

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	RW01L		010		VI		FB		009.9()			
	RW01L	NAPSE	020		CF		FB	1.0	068.0()	015.7		
	RW01L	RIOOS	030		TF		FB	1.0	062.0()	007.9	AA 13000	
	RW01L	COMPS	040		TF		FB	1.0	128.4()	013.3		
	RW01L	COWBY	050		TF		FB	1.0	085.1()	029.5		
	RW01R		010		VI		FB		009.9()			
	RW01R	NAPSE	020		CF		FB	1.0	068.0()	015.5		
	RW01R	RIOOS	030		TF		FB	1.0	062.0()	007.9	AA 13000	
	RW01R	COMPS	040		TF		FB	1.0	128.4()	013.3		
	RW01R	COWBY	050		TF		FB	1.0	085.1()	029.5		
	RW07L		010		VA		FB		075.0()		AA 02681	
	RW07L	WASTE	020		DF		FB	1.0				
	RW07L	BAKRR	030		TF		FB	1.0	075.3()	005.9	BT 0700004600	
	RW07L	COMPS	040		TF		FB	1.0	084.8()	022.4		
	RW07L	COWBY	050		TF		FB	1.0	085.1()	029.5		
	RW07R		010		VA		FB		075.0()		AA 02681	
	RW07R	JESJI	020		DF		FB	1.0				
	RW07R	BAKRR	030		TF		FB	1.0	073.8()	006.1	BT 0700004600	
	RW07R	COMPS	040		TF		FB	1.0	084.8()	022.4		
	RW07R	COWBY	050		TF		FB	1.0	085.1()	029.5		
	RW19L		010		VA		FB		189.9()		AA 02681	
	RW19L	FIXIX	020		DF		FB	1.0				
	RW19L	ROPPR	030		TF		FB	1.0	226.8()	005.6	BT 0700005900	
	RW19L	CEASR	040		TF		FB	1.0	147.8()	006.6	AA 08000	
	RW19L	HITME	050		TF		FB	1.0	091.4()	009.6	AA 11000	
	RW19L	COWBY	060		TF		FB	1.0	068.5()	057.5		
	RW19R		010		VA		FB		189.9()		AA 02681	
	RW19R	JAKER	020		DF		FB	1.0				
	RW19R	ROPPR	030		TF		FB	1.0	226.0()	005.4	BT 0700005900	
	RW19R	CEASR	040		TF		FB	1.0	147.8()	006.6	AA 08000	
	RW19R	HITME	050		TF		FB	1.0	091.4()	009.6	AA 11000	
	RW19R	COWBY	060		TF		FB	1.0	068.5()	057.5		
	RW25L		010		VA		FB		255.0()		AA 02681	
	RW25L	PIRMD	020		DF		FB	1.0				
	RW25L	ROPPR	030		TF		FB	1.0	186.1()	006.6	BT 0700005900	
	RW25L	CEASR	040		TF		FB	1.0	147.8()	006.6	AA 08000	
	RW25L	HITME	050		TF		FB	1.0	091.4()	009.6	AA 11000	
	RW25L	COWBY	060		TF		FB	1.0	068.5()	057.5		
	RW25R		010		VA		FB		254.9()		AA 02681	
	RW25R	RBELL	020		DF		FB	1.0				
	RW25R	ROPPR	030		TF		FB	1.0	185.9()	006.7	BT 0700005900	
	RW25R	CEASR	040		TF		FB	1.0	147.8()	006.6	AA 08000	

QUALITY CHECKED 1

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY RNAV	FIVE	COWBY5.COWBY	FOUR	01/13/11	

RW25R	HITME	050	TF	FB	1.0	091.4()	009.6	AA 11000
RW25R	COWBY	060	TF	FB	1.0	068.5()	057.5	
DRK	COWBY	010	IF	FB				
DRK	NAVHO	020	TF	FB	1.0	098.0()	077.9	
DRK	DRK	030	TF	FB	1.0	167.7()	042.2	
GUP	COWBY	010	IF	FB				
GUP	MOSBI	020	TF	FB	1.0	085.8()	100.0	AA 15000
GUP	GUP	030	TF	FB	1.0	076.8()	148.2	
INW	COWBY	010	IF	FB				
INW	CUTRO	020	TF	FB	1.0	089.0()	076.6	AA 15000
INW	INW	030	TF	FB	1.0	097.2()	084.5	

POINT DATA

WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
DRK	N344209.20	W1122849.26	N3442.153	W11228.821
GUP	N352833.60	W1085221.40	N3528.560	W10852.357
INW	N350341.76	W1104742.07	N3503.696	W11047.701
LAS	N360446.93	W1150935.26	N3604.782	W11509.588
BAKRR	N360433.00	W1145711.00	N3604.550	W11457.183
CEASR	N355159.04	W1151542.89	N3551.984	W11515.715
COMPS	N360040.66	W1142958.59	N3600.678	W11429.977
COWBY	N355524.84	W1135409.94	N3555.414	W11354.166
CUTRO	N353616.98	W1122300.00	N3536.283	W11223.000
FIXIX	N360054.10	W1151204.79	N3600.902	W11512.080
HITME	N354917.00	W1150427.00	N3549.283	W11504.450
JAKER	N360053.20	W1151217.95	N3600.887	W11512.299
JESJI	N360425.22	W1150442.73	N3604.420	W11504.712
MOSBI	N353534.60	W1115342.70	N3535.577	W11153.712
NAPSE	N360934.00	W1144914.00	N3609.567	W11449.233
NAVHO	N352425.02	W1122623.53	N3524.417	W11226.392
PIRMD	N360424.61	W1151511.00	N3604.410	W11515.183
RBELL	N360434.51	W1151508.75	N3604.575	W11515.146
RIOOS	N361120.81	W1143943.64	N3611.347	W11439.727
ROPPR	N355816.27	W1151805.99	N3558.271	W11518.100
WASTE	N360435.14	W1150425.72	N3604.586	W11504.429
RW01L	N360436.44	W1151010.30	N3604.607	W11510.172
RW01R	N360431.68	W1151000.43	N3604.528	W11510.007
RW07L	N360434.95	W1150946.63	N3604.583	W11509.777
RW07R	N360425.06	W1150941.16	N3604.418	W11509.686
RW19L	N360547.06	W1150917.28	N3605.784	W11509.288
RW19R	N360551.76	W1150927.19	N3605.863	W11509.453
RW25L	N360425.16	W1150732.96	N3604.419	W11507.549
RW25R	N360435.05	W1150732.97	N3604.584	W11507.550

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH

QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COWBY RNAV	FIVE	COWBY5.COWBY	FOUR	01/13/11	

RW01L	02176	59
RW01R	02170	50
RW07L	02155	76
RW07R	02157	61
RW19L	02080	75
RW19R	02089	75
RW25L	02048	66
RW25R	02044	66

QUALITY CHECKED 1