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DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COALDALE	TWO	OAL2.OAL	ONE	11/25/2004	

TYPE: SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 11L/R: CLIMB HEADING 111.35 TO 2000, THEN CLIMBING LEFT TURN TO INTERCEPT FRA VORTAC R-160 TO FRA VORTAC, THENCE...
TAKEOFF RWY 29L/R: CLIMB HEADING 291.36 TO 2000, THEN CLIMBING RIGHT TURN TO INTERCEPT FRA VORTAC R-205 TO FRA VORTAC, THENCE...

... CONTINUE CLIMB TO 15400 ON FRA R-041 AND OAL R-222 TO OAL VORTAC. CROSS ZELSI AT OR ABOVE 14000. EXPECT CLEARANCE TO FILED ALTITUDE AFTER ZELSI.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: DME REQUIRED.
RWY 11L/R, 29L/R: STANDARD WITH MINIMUM CLIMB OF 270 FT PER NM TO 15400.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 11L, ELECTRICAL EQUIPMENT 1222 FT FROM DER, 663 FT RIGHT OF CENTERLINE, 35 FT AGL/363 FT MSL. POLE 1626 FT FROM DER, 736 FT RIGHT OF CENTERLINE, 43 FT AGL/373 FT MSL. SIGN 1692 FT FROM DER, 864 FT RIGHT OF CENTERLINE, 53 FT AGL/383 FT MSL. POLE 647 FT FROM DER, 542 FT LEFT OF CENTERLINE, 19 FT AGL/349 FT MSL.
NOTE: RWY 11R, OBSTRUCTION LIGHT ON RVR EQUIPMENT 328 FT FROM DER, 279 FT LEFT OF CENTERLINE, 24 FT AGL/349 FT MSL. OBSTRUCTION LIGHT ON GLIDESLOPE 663 FT FROM DER, 274 FT LEFT OF CENTERLINE, 37 FT AGL/362 FT MSL. LIGHT POLE 1597 FT FROM DER, 294 FT RIGHT OF CENTERLINE, 25 FT AGL/386 FT MSL.
NOTE: RWY 29L, TREES BEGINNING 1287 FT FROM DER, 175 FT LEFT OF CENTERLINE, UP TO 67 FT AGL/392 FT MSL. TREE 1907 FT FROM DER, 626 FT RIGHT OF CENTERLINE, 55 FT AGL/380 FT MSL.
NOTE: RWY 29R, POLE 1025 FT FROM DER, 559 FT RIGHT OF CENTERLINE, 32 FT AGL/364 FT MSL. TREES BEGINNING 1648 FT FROM DER, 844 FT LEFT OF CENTERLINE, UP TO 67 FT AGL/392 FT MSL.

CONTROLLING OBSTACLES:

RWY 11L/R, 29L/R: 10520 FT MSL AAO 371742.20N/1191055.70W, 13389 FT MSL AAO 373029.70N/1185208.60W.

LOST COMMUNICATIONS PROCEDURES:

QUALITY CHECKED

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

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DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COALDALE	TWO	OAL2.OAL	ONE	11/25/2004	

ADDITIONAL FLIGHT DATA:

AIRPORTS SERVED:

FRESNO YOSEMITE INTL — FRESNO, CA

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, FRESNO DEP CON, FRESNO TWR.

FIXES AND/OR NAVAIDS:

REMARKS:

THE MCA FOR ZELSI AND RESULTING CLIMB GRADIENT ARE BASED ON ATC REQUESTS, NOT OBSTRUCTIONS.
THE 15400 FT CLIMB TERMINATION ALTITUDE IS BASED ON A 13389 FT MSL SPOT + AAO IN ROUTE FROM FRA VORTAC TO OAL VORTAC.

QUALITY 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
COALDALE	TWO	OAL2.OAL	ONE	11/25/2004	

FLIGHT INSPECTED BY:

REQUIRED EFFECTIVE DATE:
ROUTINE

DEVELOPED BY:
MARK ADAMS AJV-354

APPROVED BY:
DEZ SILAGYI AJV-354

COORDINATED WITH:
ATA, APA, AOPA, NBAA, ALPA, ZOA, FRESNO ATCT, FRESNO APP CON, ARPT MGR, WST FPO

CHANGES:

1. CHANGED FROM CZQ VORTAC TO FRA VORTAC FOR NAVIGATION TO OAL VORTAC.
2. CHANGED MCA FIX FROM GIVEN TO ZELSI.
3. ADDED NOTE FOR DME REQUIREMENT.
4. DECREASED CLIMB GRADIENT FROM 340'/NM TO 270'/NM.
5. INCREASED CLIMB TERMINATION ALTITUDE FROM 14000 TO 15400.

REASONS:

1, 2. PER CHECKLIST.
3. LACK OF USABLE CROSSING RADIAL FACILITY AT ZELSI.
4. REQUIRED TO CROSS ZELSI AT OR ABOVE 14000.
5. REQUIRED TO CLEAR 13389 SPOT + AAO WITH 2000 FT ROC.

QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COALDALE	TWO	OAL2.OAL	ONE	11/25/2004	

ARINC PACKET - 424-18 - SID

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        FRA   K2011560VTLA N37061592W119354360    N37061592W119354360E0170023801     NARFRIANT
        SUSAD        OAL   K2011770VTH  N38001175W117461366    N38001175W117461366E0170048002     NARCOALDALE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   ZELSI K20    R     N37191580W119095314                      E0134     NAR           ZELSI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFATK2AFAT     0     092YHN36463430W119430530E014000336         1800018000C    MNAR    FRESNO YOSEMITE INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFATK2DOAL2  1RW11B 010         0        VA                        1114        + 02000     18000
        SUSAP KFATK2DOAL2  1RW11B 020FRA  K2D 0VE  L   CFYFRA K2      0000000034000250D
        SUSAP KFATK2DOAL2  1RW29B 010         0        VA                        2914        + 02000     18000
        SUSAP KFATK2DOAL2  1RW29B 020FRA  K2D 0VE  R   CFYFRA K2      0000000002500200D
        SUSAP KFATK2DOAL2  2      010FRA  K2D 0V       IF                                                18000
        SUSAP KFATK2DOAL2  2      020ZELSIK2EA0E       TF                        0410        + 14000
        SUSAP KFATK2DOAL2  2      030OAL  K2D 0VE      TF                        0420        + 15400

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFATK2GRW11L   0092271114 N36470062W119434517+0000    +0070700336000045150RIRPW0
        SUSAP KFATK2GRW11R   0080081114 N36465902W119435671+0000    +0069000331000045150R
        SUSAP KFATK2GRW29L   0080082914 N36461320W119423643+0000    +0068900330000044150R
        SUSAP KFATK2GRW29R   0092272914 N36460960W119421581+0000    +0069600332031258150IIFAT3
```

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
COALDALE	TWO	OAL2.OAL	ONE	11/25/2004	

ARINC SUMMARY - 424-18 - SID

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	RW11B		010		VA		FB		111.4()		AA 02000	
	RW11B	FRA	020		CF	L	FB		340.0()	025.0		
	RW29B		010		VA		FB		291.4()		AA 02000	
	RW29B	FRA	020		CF	R	FB		025.0()	020.0		
		FRA	010		IF		FB					
		ZELSI	020		TF		FB		041.0()		AA 14000	
		OAL	030		TF		FB		042.0()		AA 15400	

POINT DATA

WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
FRA	N370615.92	W1193543.60	N3706.265	W11935.727
OAL	N380011.75	W1174613.66	N3800.196	W11746.228
ZELSI	N371915.80	W1190953.14	N3719.263	W11909.886
RW11L	N364700.62	W1194345.17	N3647.010	W11943.753
RW11R	N364659.02	W1194356.71	N3646.984	W11943.945
RW29L	N364613.20	W1194236.43	N3646.220	W11942.607
RW29R	N364609.60	W1194215.81	N3646.160	W11942.264

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW11L	00336	45
RW11R	00331	45
RW29L	00330	44
RW29R	00332	58

QUALITY CHECKED 1

RADIO FIX AND HOLDING DATA RECORD

NAME: ZELSI **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 371915.80N/1190953.14W **TYPE:** DME

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

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	FRIANT	FRA	VORTAC	L	040.70	057.70	24.38	24.38		14000	17500

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	COALDALE	1		KFAT	FRESNO	CA (US)

REQUIRED CHARTING: DP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 11/15/2012

DEVELOPED BY: **DATE:** 07/21/2012 **OFFICE:** AJV-354 **NAME:** MARK ADAMS

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: FRESNO APP CON
OTHER:

QUALITY CHECKED

REVIEW / INQUIRY

RADIO FIX AND HOLDING DATA RECORD

NAME: COALDALE VORTAC **STATE:** NV **COUNTRY:** US

LATITUDE/LONGITUDE: 380011.75N/1174613.66W **TYPE:**

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	COALDALE	OAL	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	SE	OAL	VORTAC	129.00	309.00	R	1-1 1/2		11000	17500	9	16
2	NE	OAL	VORTAC	067.00	247.00	R	1-1 1/2		11000	45000	9	29

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	374924.00N/1174430.00W	8002	4E
2	230	AAO	380130.60N/1172935.90W	9308	6A

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	230	281
2	230	280

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 1, 2 ATC REQUEST.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BARGN (RNAV)			KPHX	PHOENIX	AZ (US)
DP	SMALL (RNAV)			KPHX	PHOENIX	AZ (US)
DP	COALDALE			KFAT	FRESNO	CA (US)
DP	FRESNO			KFAT	FRESNO	CA (US)
DP	OZIEE (RNAV)			KAPC	NAPA	CA (US)
DP	KATSO			KMCC	SACRAMENTO	CA (US)
DP	PALLY (RNAV)			KHND	LAS VEGAS	NV (US)
DP	SHEAD (RNAV)			KLAS	LAS VEGAS	NV (US)
DP	EDETH (RNAV)			KSLC	SALT LAKE CITY	UT (US)
DP	FAIRFIELD			KSLC	SALT LAKE CITY	UT (US)
DP	PECOP (RNAV)			KSLC	SALT LAKE CITY	UT (US)
DP	SEVYR			KSLC	SALT LAKE CITY	UT (US)
DP	WEVIC (RNAV)			KSLC	SALT LAKE CITY	UT (US)
EN ROUTE	J148					(US)
EN ROUTE	J58					(US)
EN ROUTE	J80					(US)
EN ROUTE	J92					(US)
EN ROUTE	Q136					(US)
EN ROUTE	V105					(US)
EN ROUTE	V244					(US)
EN ROUTE	V564					(US)
IAP	LDA/DME RWY 16			KBIH	BISHOP	CA (US)
IAP	VOR OR GPS-A			KBIH	BISHOP	CA (US)
IAP	VOR/DME OR GPS-B			KBIH	BISHOP	CA (US)
STAR	OAKEY			KSUU	FAIRFIELD	CA (US)
STAR	GIVEN			KFAT	FRESNO	CA (US)
STAR	MADWIN			KHWD	HAYWARD	CA (US)
STAR	MADWIN			KOAK	OAKLAND	CA (US)
STAR	MANTECA			KOAK	OAKLAND	CA (US)
STAR	LOCKE			KSFO	SAN FRANCISCO	CA (US)
STAR	MODESTO			KSFO	SAN FRANCISCO	CA (US)
STAR	YOSEM (RNAV)			KSFO	SAN FRANCISCO	CA (US)
STAR	EL NIDO			KSJC	SAN JOSE	CA (US)
STAR	JAWWS			KSJC	SAN JOSE	CA (US)
STAR	DOBNE			KRNO	RENO	NV (US)
STAR	TARVR			KRNO	RENO	NV (US)

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

COMPULSORY REPORTING POINT: BOTH

QUALITY CHECKED

RECORD REVISION NUMBER: 10 **DATE OF REVISION:** 06/30/2011

REASON FOR REVISION:
ADMIN REVISION, FAC1 IN HISTORY STATUS.
FIX USE UPDATED.
PAT1 CHANGED CONTROLLING OBSTACLE TO 8002' AAO.

DEVELOPED BY:	**DATE:** 08/10/2010	**OFFICE:** AVN-130	**NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)
APPROVED BY:	**DATE:** 05/18/2011	**OFFICE:** AVN-130	**NAME:** DEZ SILAGYI
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: ZLC, ZLA, SLC APP CON, NORCAL APP CON, SOCAL APP CON, PHX APP CON,
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FRIANT VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 370615.92N/1193543.61W **TYPE:**

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	FRIANT	FRA	VORTAC	L							17500

FIX RESTRICTIONS:
MCA V230 9000 NORTHEAST BOUND

HOLDING: **HOLDING TYPE OF ACTION:** CANCEL

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	COALDALE			KFAT	FRESNO	CA (US)
DP	FRESNO			KFAT	FRESNO	CA (US)
DP	TAKEOFF MINIMUMS			KMAE	MADERA	CA (US)
EN ROUTE	V230					CA (US)
EN ROUTE	V459					CA (US)
EN ROUTE	J7					CA (US)
EN ROUTE	V332					CA (US)
IAP	VOR OR GPS-A			KBIH	BISHOP	CA (US)
IAP	HI-VOR/DME OR TACAN RWY 11L			KFAT	FRESNO	CA (US)
IAP	HI-VOR/DME OR TACAN RWY 29R			KFAT	FRESNO	CA (US)
IAP	ILS OR LOC/DME RWY 29R			KFAT	FRESNO	CA (US)
IAP	ILS RWY 29R (CAT II)			KFAT	FRESNO	CA (US)
IAP	ILS RWY 29R (CAT III)			KFAT	FRESNO	CA (US)
IAP	LOC RWY 11L			KFAT	FRESNO	CA (US)
IAP	RNAV (GPS) RWY 11L			KFAT	FRESNO	CA (US)
IAP	RNAV (GPS) RWY 11R			KFAT	FRESNO	CA (US)
IAP	VOR/DME OR TACAN RWY 11L			KFAT	FRESNO	CA (US)
IAP	VOR/DME OR TACAN RWY 29R			KFAT	FRESNO	CA (US)
IAP	VOR RWY 30			KMAE	MADERA	CA (US)
IAP	FROGO			KSMF	SACRAMENTO	CA (US)
STAR	ALTTA			KFAT	FRESNO	CA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 11/25/2004

REASON FOR REVISION:
BLOCK 1A: CHANGED MRA/MAA TO -/175 VICE 34/400.
BLOCK 1C: CHANGED AIR/GROUND COM TO 3400 VICE 19000.
BLOCK 1E: CHANGED COMPULSORY TO ON REQUEST FOR LOW AIRSPACE. DELETED FLAG NOTE V165 4000N, AIRWAY NOT OFF THIS NAVAID. CHANGED MCA V230 FROM 4000 NE TO 9000 NE.
BLOCK 2: CANCELED HOLDING.
BLOCK 3: DELETED NOTE RESTRICTED TO MILITARY USE, HOLDING PATTERN ASSOCIATED WITH IAPS TO FRESNO.
BLOCK 4A: DELETED COMPULSORY REPORTING POINT. BLOCK 4B: DELETED HOLDING.
BLOCK 5: ADDED DP, STAR, AL, E/R LOW, E/R HIGH.
BLOCK 7: DELETED OBSTACLE

DEVELOPED BY: **DATE:** 12/15/2003 **OFFICE:** AVN-120 **NAME:** MIKE CURRIE

APPROVED BY: **DATE:** 11/25/2004 **OFFICE:** AVN-120 **NAME:** JIM EMORY

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: LAX
ARTCC: ZOA
ATC FACILITY: FRESNO ATCT
OTHER: FRESNO APP CON

INFO ONLY

QUALITY CHECKED