

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date				
QERVO (RNAV)	ONE	MARCS.QERVO1	NONE		25 JAN 2024				
TRANSITION ROUTES: THIS IS A CORRECTED COPY OF THIS PROCEDURE PREVIOUSLY PUBLISHED IN NFDD #239.									
Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
BLEWE	BLEWE.QERVO1	BLEWE	BLEWE						
			OUTLW	194.55	52.34	13000	3600		
			MARCS	207.02	33.54	13000	2300		BETWEEN 13000 AND 15000
CAAGE	CAAGE.QERVO1	CAAGE	CAAGE						
			WEEED	252.50	44.89	13000	2300		
			WAILN	270.98	20.41	13000	2300		
			HOSAY	270.86	27.10	13000	2300		AT/ABOVE FL240
			RODIO	270.64	18.40	13000	2300		
			MARCS	270.44	22.01	13000	2300		BETWEEN 13000 AND 15000
LLEAD	LLEAD.QERVO1	LLEAD	LLEAD						
			WEEED	218.91	112.36	13000	2300		
			WAILN	270.98	20.41	13000	2300		
			HOSAY	270.86	27.10	13000	2300		AT/ABOVE FL240
			RODIO	270.64	18.40	13000	2300		
			MARCS	270.44	22.01	13000	2300		BETWEEN 13000 AND 15000
MOLLR	MOLLR.QERVO1	MOLLR	MOLLR						
			WEEED	275.11	47.87	13000	2300		
			WAILN	270.98	20.41	13000	2300		
			HOSAY	270.86	27.10	13000	2300		AT/ABOVE FL240
			RODIO	270.64	18.40	13000	2300		
			MARCS	270.44	22.01	13000	2300		BETWEEN 13000 AND 15000
NILBE	NILBE.QERVO1	NILBE	NILBE						
			BLEWE	169.53	27.38	13000	3600		
			OUTLW	194.55	52.34	13000	3600		
			MARCS	207.02	33.54	13000	2300		BETWEEN 13000 AND 15000
WAILN	WAILN.QERVO1	WAILN	WAILN						
			HOSAY	270.86	27.10	13000	2300		AT/ABOVE FL240



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Arrival Name QERVO (RNAV)			Number ONE	STAR Computer Code MARCS.QERVO1		Superseded Number NONE			Dated	Effective Date 25 JAN 2024
Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes	
			RODIO	270.64	18.40	13000	2300			
			MARCS	270.44	22.01	13000	2300		BETWEEN 13000 AND 15000	
WINDU	WINDU.QERVO1	WINDU	WINDU							
			BLEWE	194.62	20.39	13000	3600			
			OUTLW	194.55	52.34	13000	3600			
			MARCS	207.02	33.54	13000	2300		BETWEEN 13000 AND 15000	

ARRIVAL ROUTE DESCRIPTION:

KSAT: FROM MARCS ON TRACK 245.44/4.92 TO CROSS PGOUT BETWEEN 11000 AND 13000 AND AT 280 KIAS, THEN ON TRACK 245.04/4.65 TO QERVO.

LANDING KSAT RWY 4: FROM QERVO ON TRACK 217.36/15.17 TO CROSS TEXNN AT OR ABOVE 8000, THEN ON TRACK 217.27/5.95 TO CROSS JEFRE AT OR ABOVE 7000, THEN ON TRACK 217.23/8.01 TO CROSS MCRTY AT 6000 AND AT 210 KIAS, THEN ON TRACK 217.23. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KSAT RWY 13R: FROM QERVO ON TRACK 245.12/6.83 TO CROSS TAHKO AT OR BELOW 11000, THEN ON TRACK 245.14/7.00 TO CROSS FJITA AT OR BELOW 8000, THEN ON TRACK 245.05/4.50 TO TRTLA, THEN ON TRACK 245.70/3.91 TO CROSS SALZA AT 6000 AND AT 210 KIAS, THEN ON TRACK 268.13/7.29 TO DOMNK, THEN ON TRACK 307.53/1.33 TO CROSS CARNE AT 6000 AND AT 210 KIAS, THEN ON TRACK 307.53. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KSAT RWY 22: FROM QERVO ON TRACK 274.02/16.53 TO CROSS TRITP AT 7000 AND AT 210 KIAS, THEN ON TRACK 274.02. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KSAT RWY 31L: FROM QERVO ON TRACK 228.58/10.49 TO DERRR, THEN ON TRACK 227.72/11.14 TO CROSS COMUT AT 6000 AND AT 210 KIAS, THEN ON TRACK 163.84/5.24 TO ALRGI, THEN ON TRACK 127.63/4.50 TO CROSS XLANT AT 6000 AND AT 210 KIAS, THEN ON TRACK 127.63. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KSKF/KBAZ/KCVB/KSSF/KPEZ/5C1/KRND: FROM MARCS ON TRACK 245.44/4.92 TO CROSS PGOUT BETWEEN 11000 AND 13000 AND AT 280 KIAS, THEN ON TRACK 245.04/4.65 TO QERVO, THEN ON TRACK 245.12/2.00 TO CROSS POYYO AT 10000, THEN ON TRACK 245.12. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: JET AND TURBOPROP AIRCRAFT ONLY

NOTE: WAILN TRANSITION FOR HOUSTON TERMINAL AREA DEPARTURES ONLY.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT ERROR: HOLD NE, RT, 216.97 INBOUND, 5 NM LEGS.

CHART HOLDING AT HARDD: HOLD SW, RT, 036.67 INBOUND, 5 NM LEGS.

CHART HOLDING AT RBNSN: HOLD NW, RT, 127.60 INBOUND, 5 NM LEGS.

CHART HOLDING AT RODIO: HOLD E, RT, 270.64 INBOUND, 10 NM LEGS.

CHART HOLDING AT SSLOW: HOLD SE, RT, 307.61 INBOUND, 5 NM LEGS.

CHART HOLDING AT WEEED: HOLD E, RT, 270.98 INBOUND, 12 NM LEGS.

CHART: FOALL, AREEA

COMMUNICATIONS:

CHART: SAN ANTONIO APP CON

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QERVO (RNAV)	ONE	MARCS.QERVO1	NONE		25 JAN 2024

AIRPORTS SERVED:

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KSAT	SAN ANTONIO	TX
5C1	SAN ANTONIO	TX
KCVB	CASTROVILLE	TX
KSKF	SAN ANTONIO	TX
KBAZ	NEW BRAUNFELS	TX
KPEZ	PLEASANTON	TX
KRND	UNIVERSAL CITY	TX
KSSF	SAN ANTONIO	TX

LOST COMMUNICATIONS PREFERENCES:

KSAT RWY 4: AFTER MCRTY, PROCEED TO FOALL AT 5000, THEN ON ILS OR LOC RWY 4 OR RNAV (GPS) Y RWY 4 APPROACH

KSAT RWY 13R: AFTER CARNE, PROCEED TO RBNSN AND HOLD.

KSAT RWY 22: AFTER TRITP PROCEED TO AREEA AT 5000, THEN ON RNAV (GPS) Y RWY 22 APPROACH

KSAT RWY 31L: AFTER XLANT, PROCEED TO SLOW AT 4000 AND HOLD.

REMARKS:**ADDITIONAL FLIGHT DATA:**

DME/DME ASSESSMENT: SAT (RNP 2.0)

MAG VAR: KSAT 04E/2020

CHART AT TRITP TERMINUS: KSAT LDG RWY 22

CHART AT XLANT TERMINUS: KSAT LDG RWY 31L

CHART AT CARNE TERMINUS: KSAT LDG RWY 13R

CHART AT MCRTY TERMINUS: KSAT LDG RWY 4

CHART AT POYYO TERMINUS: LDG 5C1/KBAZ/KCVB/KPEZ/KRND/KSKF/KSSF

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QERVO (RNAV)	ONE	MARCS.QERVO1	NONE		25 JAN 2024
				<i>Digitally signed by</i>	
FLIGHT INSPECTED BY:	ORGANIZATION:	DATE:		MICHAEL GARRITY	
TERRY HESTER	FPO	11/08/2023	Flight Inspected Signature:	Dec 18, 2023	
				<i>Digitally signed by</i>	
DEVELOPED BY:				PATRICK W COMBS	
PATRICK COMBS	AJV-A423	04/17/2023	Developed By Signature:	Aug 03, 2023	
				<i>Digitally signed by</i>	
APPROVED BY:				JASON KRETSCHMER	
MICHAEL GARRITY	AJV-A423		Approved By Signature:	Aug 07, 2023	

CHANGES:

REASONS:

07/25/23: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 04/17/23.

1. ADDED BLEWE AND WINDU TRANSITIONS - ATC UPDATED REQUEST.
2. UPDATED NILBE TRANSITION MOCA BLEWE TO OUTLW FROM 2600 TO 3600 - UPDATED OBSTACLE EVALUATION AREA CONSTRUCTION.

08/11/23: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 04/17/23.

1. CHANGED EFFECTIVE DATE FROM ROUTINE TO 10/05/2023 - HARD DATED

12/7/2023 THIS A CORRECTED COPY OF THE FORM APPROVED ON 11/22/2023

8260-17.1

1. FIX AND/OR HOLDING PATTERNS: CHANGED PATTERN FROM CHART HOLDING AT SSLOW: HOLD SE, RT, 307.61 INBOUND, 5 NM LEGS.TO CHART HOLDING AT SLOW: HOLD SE, RT, 307.61 INBOUND, 5 NM LEGS

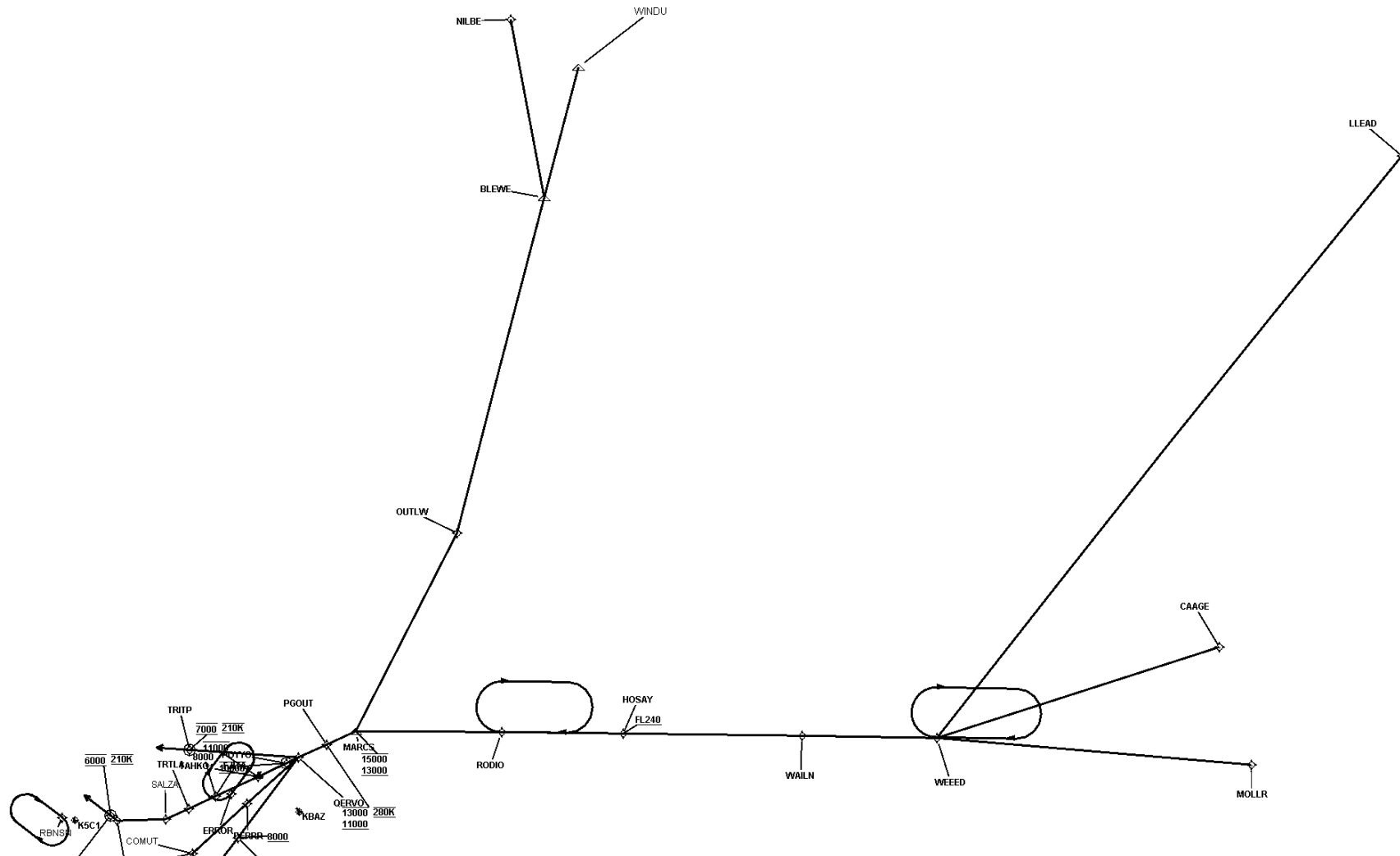
12/13/2023: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 12/08/2023.

1. CHANGED RBNSN HOLDING FROM 127.45 TO 127.60 - CORRECT ADMINISTRATIVE ERROR.

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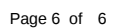
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QERVO (RNAV)	ONE	MARCS.QERVO1	NONE		25 JAN 2024
Graphic Depiction 1					



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Graphic Depiction 2



FEDERAL AVIATION ADMINISTRATION
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STAR (DATA RECORD)

Arrival Name QERVO (RNAV)		Number ONE		STAR Computer Code MARCS.QERVO1		Superseded Number NONE		Dated	Effective Date 25 JAN 2024
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
BLEWE	311227.65N / 0971232.47W	Y		IF					BLEWE.QERVO1
OUTLW	302242.22N / 0973147.67W	Y	FB	TF	198.55	52.34			
MARCS	295352.04N / 0975140.70W	Y	FB	TF	211.02	33.54	13000B15000		
En Route Transition									
CAAGE	295724.76N / 0952045.25W	Y		IF					CAAGE.QERVO1
WEEED	294645.14N / 0961054.94W	Y	FB	TF	256.50	44.89			
WAILN	294829.63N / 0963417.12W	Y	FB	TF	274.98	20.41			
HOSAY	295044.02N / 0970520.01W	Y	FB	TF	274.86	27.10	AT/ABOVE FL240		
RODIO	295211.90N / 0972625.75W	Y	FB	TF	274.64	18.40			
MARCS	295352.04N / 0975140.70W	Y	FB	TF	274.44	22.01	13000B15000		
En Route Transition									
LLEAD	310944.36N / 0944301.07W	Y		IF					LLEAD.QERVO1
WEEED	294645.14N / 0961054.94W	Y	FB	TF	222.91	112.36			
WAILN	294829.63N / 0963417.12W	Y	FB	TF	274.98	20.41			
HOSAY	295044.02N / 0970520.01W	Y	FB	TF	274.86	27.10	AT/ABOVE FL240		
RODIO	295211.90N / 0972625.75W	Y	FB	TF	274.64	18.40			
MARCS	295352.04N / 0975140.70W	Y	FB	TF	274.44	22.01	13000B15000		
En Route Transition									
MOLLR	293920.23N / 0951635.83W	Y		IF					MOLLR.QERVO1
WEEED	294645.14N / 0961054.94W	Y	FB	TF	279.11	47.87			
WAILN	294829.63N / 0963417.12W	Y	FB	TF	274.98	20.41			
HOSAY	295044.02N / 0970520.01W	Y	FB	TF	274.86	27.10	AT/ABOVE FL240		
RODIO	295211.90N / 0972625.75W	Y	FB	TF	274.64	18.40			
MARCS	295352.04N / 0975140.70W	Y	FB	TF	274.44	22.01	13000B15000		

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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
NILBE	313943.80N / 0971608.45W	Y		IF					NILBE.QERVO1
BLEWE	311227.65N / 0971232.47W	Y	FB	TF	173.53	27.38			
OUTLW	302242.22N / 0973147.67W	Y	FB	TF	198.55	52.34			
MARCS	295352.04N / 0975140.70W	Y	FB	TF	211.02	33.54	13000B15000		
En Route Transition									
WAILN	294829.63N / 0963417.12W	Y		IF					WAILN.QERVO1
HOSAY	295044.02N / 0970520.01W	Y	FB	TF	274.86	27.10	AT/ABOVE FL240		
RODIO	295211.90N / 0972625.75W	Y	FB	TF	274.64	18.40			
MARCS	295352.04N / 0975140.70W	Y	FB	TF	274.44	22.01	13000B15000		
En Route Transition									
WINDU	313149.93N / 0970457.06W	Y		IF					WINDU.QERVO1
BLEWE	311227.65N / 0971232.47W	Y	FB	TF	198.62	20.39			
OUTLW	302242.22N / 0973147.67W	Y	FB	TF	198.55	52.34			
MARCS	295352.04N / 0975140.70W	Y	FB	TF	211.02	33.54	13000B15000		
Common Route									
MARCS	295352.04N / 0975140.70W	Y		IF			13000B15000		MARCS.QERVO1
PGOUT	295207.96N / 0975658.71W	Y	FB	TF	249.44	04.92	11000B13000	AT 280K	
QERVO	295027.75N / 0980158.46W	Y	FB	TF	249.04	04.65			
Common Route									
MARCS	295352.04N / 0975140.70W	Y		IF			13000B15000		MARCS.QERVO1
PGOUT	295207.96N / 0975658.71W	Y	FB	TF	249.44	04.92	11000B13000	AT 280K	
QERVO	295027.75N / 0980158.46W	Y	FB	TF	249.04	04.65			

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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
POYYO	294944.86N / 0980407.36W	Y	FO	TF	249.12	02.00	AT 10000		
5C1,KBAZ,KCVB, KPEZ,KRND,KSKF, KSSF				FM	249.12				
Runway Transition									
QERVO	295027.75N / 0980158.46W	Y		IF					
TEXNN	293902.62N / 0981328.53W	Y	FB	TF	221.36	15.17	AT/ABOVE 8000		
JEFRE	293433.54N / 0981758.57W	Y	FB	TF	221.27	05.95	AT/ABOVE 7000		
MCRTY	292831.05N / 0982401.46W	Y	FO	TF	221.23	08.01	AT 6000	AT 210K	
KSAT:RWY 4				FM	221.23				
Runway Transition									
QERVO	295027.75N / 0980158.46W	Y		IF					
TAHKO	294801.20N / 0980918.40W	Y	FB	TF	249.12	06.83	AT/BELOW 11000		
FJITA	294531.17N / 0981649.01W	Y	FB	TF	249.14	07.00	AT/BELOW 8000		
TRTLA	294354.29N / 0982138.62W	Y	FB	TF	249.05	04.50			
SALZA	294232.60N / 0982551.34W	Y	FB	TF	249.70	03.91	AT 6000	AT 210K	
DOMNK	294248.63N / 0983413.45W	Y	FB	TF	272.13	07.29			
CARNE	294341.83N / 0983522.29W	Y	FO	TF	311.53	01.33	AT 6000	AT 210K	
KSAT:RWY 13R				FM	311.53				
Runway Transition									
QERVO	295027.75N / 0980158.46W	Y		IF					
TRITP	295245.11N / 0982048.14W	Y	FO	TF	278.02	16.53	AT 7000	AT 210K	
KSAT:RWY 22				FM	278.02				
Runway Transition									
QERVO	295027.75N / 0980158.46W	Y		IF					
DERRR	294404.08N / 0981132.49W	Y	FB	TF	232.58	10.49			
COMUT	293708.44N / 0982134.69W	Y	FB	TF	231.72	11.14	AT 6000	AT 210K	

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<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG</u> <u>TYPE</u>	<u>TC</u>	<u>DIST</u> <u>(NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
ALRGI	293200.61N / 0982018.87W	Y	FB	TF	167.84	05.24			
XLANT	292900.76N / 0981627.62W	Y	FO	TF	131.63	04.50	AT 6000	AT 210K	
KSAT:RWY 31L				FM	131.63				

