TMF

Entering Flight Plans



2013 James D Price TMF



Press the FPL (flight plan) button



Enough satellites have been found to determine that you are at Santa Maria Public



Airport, CA, so its identifier, KSMX, has been automatically added.

Push the small knob (labeled "PUSH CRSR") to activate the cursor.

The first letter defaults to "K". Using the small and large knobs, enter your destination. In this case, it's KPRB (Paso Robles, CA).



Note that you are on the "ACTIVE FLIGHT PLAN" page, or FLP page 1 of 2.



You plan to fly this route in the future, so you'll want to save it.

Press the MENU button and the menu appears. Activate the cursor, and select Copy Flight Plan? – then press ENT



When you are ready to depart KPRB, you can quickly load the flight plan back to KSMX.



Press the **FPL** button, and then using the small knob, turn it a click clockwise. Now you are in the FLIGHT PLAN CATALOG or FLP page 2 of 2.



Activate the cursor and highlight the desired Flight Plan (#2),

You must first *Activate* the flight plan. Press the **MENU** button and using the big knob highlight

Activate Flight Plan? Invert Flight Plan? Create New Flight Plan? Crossfill? Copy Flight Plan? Activate Flight Plan?, and then pressENTPress the MENU button again, and highlightInvert Flight Plan?. Press ENT. You areready to return to KSMX.



The KSMX weather is IFR, so you have filed IFR to KPRB via FABEG V27 MQO V113 PRB KPRB. When you call for your clearance, Santa Maria Ground Control issues the following clearance: Cleared to Paso Robles via the Obstacle Departure Procedure, Morro Bay, Paso Robles. Unlike SIDs, ODPs are not in the PROCEDURES database.



SANTA MARIA, CA SANTA MARIA PUB/CAPT G ALLAN HANCOCK
FLD (SMX)
AMDT 6 12124 (FAA)
TAKEOFF MINIMUMS: Rwy 20 , NA-obstacles. Rwy 12 , 400-2 ¹ / ₄ w/min. climb of 287' per NM to 1500 or std. w/ min. climb of 388' per NM to 1200.
Rwy 12, climbing left turn (do not exceed 230 KIAS until established northwest bound to GLJ VOR). Rwy 30, climb beading 294°
All aircraft: climb direct GLJ VOR, then continue climb to airway MEA via GLJ R-300 to intercept MQO R-137
MEA/MCA for assigned route of flight.

aginning

No matter which runway we use for takeoff, all aircraft are to climb direct to the Guadalupe VOR (GLJ), then via the GLJ 300° radial to intercept the Morro Bay VOR (MQO) 137° radial to MQO VORTAC.



Dur

Enter the flight plan: KSMX, GLJ, MQO, PRB, KPRB

нрт	ACTIVE	FLIGHT P	LAN	V RNG A
	HAYPOINT	DTK	DIS	-D+ MENU
302° 015 4.50℃	GLJ	382°	4.5	
TERH	PRB	001%	21.5% 26.0%	
	HSG	FPL 10		PUSH

Using the large knob, highlight the point in the flight plan that you want your radial/radial intersection to PRECEED. In this case, highlight MQO

Turn the small knob one click clockwise and enter the name of your "User Waypoint".

DTK	MQON	-D+ MENU
302 [°] 15 4 50°		
TERH	PRESS ENT TO ACCEPT	Ruy GPS
	HSG_IFPL II	PUSH

DIS

4.5m

Create?

PROC

HSG HPT 00000000

FPL

100

CLR

Let's call the User Waypoint **MQO1** or any other name of five characters or less – just as long as it is not in the Garmin/Jeppesen database.

Since MQO1 is new to the database, the following screen appears:

CREATE USER HAYPOINT MQ01 does not exist. Create User Waypoint? Yes? or No?

GL

4.50%

TERH

NAST

REF HPT RAD

N 34°53.93

MSG

119.4^A

128.8^s

USR MQ01

POSITION

GLU

MOD

OBS

Highlight Yes? and press ENT. This opens the USER Waypoint page (USR).



HPT USR MQO1 GLJ REF HPT RAD DIS DTK GLJ 299.9% 7.7% JSO2% MQO 137.0% 4.50% POSITION TERH N 35°02.58' Create? HISG IMPT D0000000000 MRST 088 MSG FPL NRST 088 MSG FPL	Enter 300.0 in the RAD box. (NOTE: The Garmin may change your entry by 1/10 th of a degree. That's acceptable). Press ENT , which advances the cursor to the DIS box. Accept the value (do not modify it) by pressing ENT . If MQO is not in the 2 nd REF WPT box,
enter it and press ENT – advancing to the	2 nd RAD box. Enter 137.0 and press
ENT which highlights the POSITION box (I	_atitude / Longitude). Accept the value (do

not modify) by pressing ENT which highlights Create? . Press ENT to create the new user waypoint.

HPT	ACTIVE FLIGHT PLAN			
GLU	00 KSMX /	/ KPRB		
DTK	HAYPOINT	DTK	DIS	
302 [°]	KSMX			
DIS	GLJ	302%	4.5%	
4.00m	MQ01	302 [°]	7.7%	
TERH	MQO	319 %	14.0%	

The flight plan now reads KSMX, GLJ, MQO1, then MQO, PRB, KPRB.



Press the "FPL" button to return to the NAV page MAP (NAV page 2 of 7).

ALTERNATE / FALLBACK WAYS TO FLY AN ODP

#1, using two VORs. If you have problems programming your GNS 430/530, you could fall back to the old fashioned way by using the GNS' VOR and the aircraft's other VOR. (300 degrees Guadalupe (GLJ) outbound and 317 degrees Morro Bay (MQO) inbound).

#2, using a VOR and the 430/530 GPS and OBS. Instead of using the MQO VOR in the GNS, you could use the OBS feature. With MQO as the "TO" waypoint, press OBS, and put 317 in the CDI/HIS. When the CDI/HIS centers, follow that course inbound to MQO. When crossing MQO, don't forget to press the OBS button to put the 430/50 back in the GPS navigation mode.



ENTERING AN IFR FLIGHT PLAN WITH A PUBLISHED SID*

				SZ DNO A
НРТ	HUTIVE F	LIGHIF	LAIN	V mmu Z
	88/	KSAN		The Market
DTK	HAYPOINT	DTK	DIS	MENU
mana M	KSAN			COLOR TRUN
DIS		Š.	0.000	CLH ENT
D.	Section	M		DEPAULT CODE
		M		NAV GPS
ENR	Concernance and and and and		0	Ser.
	HSG	EPI II		PUSH
Const Different."	Lange Comments			CRSR
NRST	OB8 MSG	FPL	PROC	
				And and a second se
				GPS 400
HPT	PROC	EDURES	1	
HPT	PROC	EDURES	-Final?	
НРТ DTK	PROC Activoto Vec	<mark>EDURES</mark> tar-To	-Final?	
HPT DTK	PROC Activate Vec Activate Apr	EDURES	-Final?	
HPT	PROC Activate Vec Activate App Select Appro	EDURES star-To woach? aach?	-Final?	CLR ENT
DTK	PROC Activate Vec Activate App Select Appro Select Arriv	EDURES star-To wooch? oach? val?	Final?	GPS ADD TRNG A THE MENU CLR ENT 1
HPT DTK DIS	PROC Activate Vec Activate Appro Select Appro Select Arriv	EDURES star-To woach? ach? al?	-Finul?	GPS ADD T RNG A T RNG A T RNG A T RNU CLR ENT OBENALT GPS NAV
HPT	PROC Activate Vec Activate App Select Appro Select Arriv Select Depar	edures ctar—To woach? aach? ral?	-Final?	CLR ENT
HPT DTK DTK DIS ENR	PROC Activate Vec Activate App Select Appro Select Arriv Select Depar	edures star-To woach? ach? al? sture?	-Final?	CLR ENT
HPT DTK DTK DIS ENR	PROC Activate Vec Activate App Select Appro Select Arriv Select Depar	EDURES starTo wroach? wal? sture?	-Final?	CLR ENT
HPT	PROC Activate Vec Activate App Select Appro Select Arriv Select Depar	EDURES star-To proach? pach? rai? rture?	Final?	CLR ENT CLR ENT CLR ENT CLR ENT CLR CRS

At San Diego (KSAN), you've called clearance delivery for an IFR clearance to Palm Springs (KPSP). You are cleared via the BORDER SIX DEPARTURE, Julian transition, Thermal (TRM) to Palm Springs (KPSP).

Press the **PROC** button, and highlight **Select Departure?**, then press **ENT**. This displays the Departure Menu.



Select the departure runway, in this case, choose RW27 and ENT

*Screen shots were taken using the Garmin simulator. The BRDR5 departure is in the simulator's database.

Highlight the BRDR6 and ENT



НРТ	APT KSAN S Put	lic	
DTK		BRDR5	-D+ MENU
DIS		RUNHAY RW27	
ENR	BROHS		NAV GPS
Jupor	HSG HPT		PUSH CRSR



HPT PGY	ACTIVE	FLIGHT P	LAN	
DTK 081% DIS 13.0%	HAVPOINT RW27 PGY BROWS JLI	отк 081° 071° 005°	DIS 13.0% 10.7% 31.9%	
	HSG	FPL ID		PUSH CRSR
NRST	(088) MS(G (FPL)	PROC	

The ACTIVE FLIGHT PLAN shows that a SID has been loaded, for a runway 27 departure, JLI transition.

JLI	005 [°]	31.9%
Enroute		
TRM	024°	36.2%
KPSP	292 [°] [™]	21.1%

Note the cyan **Enroute** below JLI. At JLI, the **to waypoint** will switch from JLI to TRM.