

# Confounded SIDs And STARS

*The lack of standardization requires a careful review before accepting these in a clearance.*

By Wally Roberts

CHART READING AND INTERPRETATION are near the top of the list in the continuing challenge to be a safe, proficient, and legal instrument pilot. The charting of IAPs follows a reasonably consistent pattern of procedure design and charting—at least for the seasoned eye.

SIDs and STARS, however, can vary wildly in chart readability and ease of comprehension. IAPs are regulatory IFR “letdown” procedures, provided primarily for the benefit of the pilot. SIDs and STARS are different beasts: they are textual and graphical depictions of standard air traffic terminal route clearances.

The design of IAPs is fairly uniform, regardless of geographical locale. But, SIDs and STARS are designed by FAA regional ATC staffs, with resulting regional variations in procedural nuances.

## KFLL SID

The Ft. Lauderdale Seven Departure (on right) seems at first glance to be a SID for only Ft. Lauderdale-Hollywood International Airport. But, the SID really serves Hollywood, Executive, and Pompano Beach airports, as indicated by the separate take-off instructions. The left-hand column first lists takeoff instructions for Hollywood International, followed by separate instructions for Executive/Pompano Beach airports. Finally, a departure instruction is listed for Hollywood International.

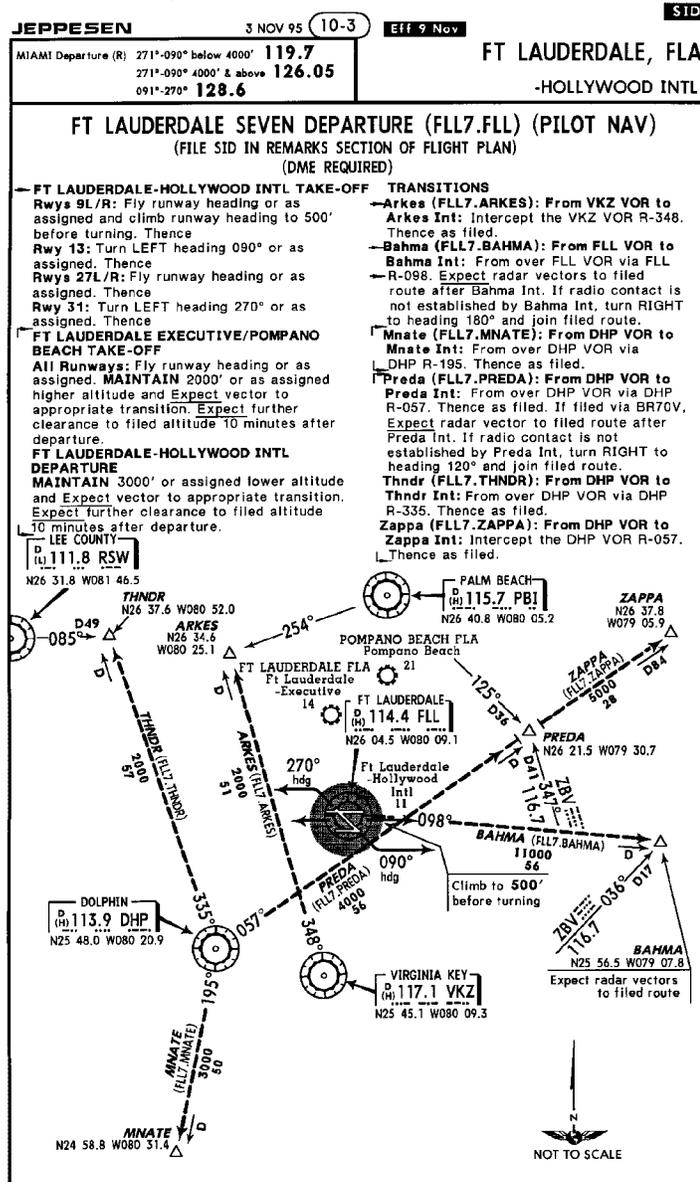
To fully comprehend this SID, you need to join together three elements: (1) the runway-specific take-off instruction, (2) the departure instruction, and (3) the transition.

Pay special note to the fact that the departure instruction and the take-off instructions for Hollywood International are listed separately, but the departure instruction is included within the text of the take-off instructions for Executive/Pompano Beach airports.

Let’s say your clearance is “Cleared to Pee Dee Que Airport via the Fort Lauderdale Seven, Thunder Transition, then as filed. Fly heading zero-five-zero.”

You’re departing Hollywood International on Runway 9L. The take-off instruction for that runway states: “Fly

runway heading or as assigned and climb runway heading to 500’ feet before turning. Thence...” Since you’re assigned heading 050, fly runway heading to 500 feet, then turn left to 050. Because no altitude assignment was included in the clearance, climb to 3,000



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*This is definitely one SID you should review carefully before accepting. The departure instruction and the take-off instructions for Hollywood International are listed separately, but the departure instruction is included within the text of the take-off instructions for Executive/Pompano Beach airports.*

# CHART REVIEW

feet, as set forth in the departure instructions on the chart. Maintain the 050 heading until departure control starts providing active radar vectors, presumably to the Thndr Transition.

(If lost com rules come into play, then you'd have to follow your best interpretation of FAR 91.185, except for the Bahma and Preda transitions, which have lost com alternatives spelled out. Note also the departure instructions provide lost com instructions for altitude—"Ex-

pect further clearance to filed altitude 10 minutes after departure.")

There are other factors worthy of note on this SID: (1) Any required turns from runways other than Runway 9L/R at Hollywood Airport should be made at 411 feet msl, unless a higher turning altitude is assigned by ATC. (2) At Executive/Pompano Beach airports, the initial assigned altitude is 2,000 feet, versus 3,000 feet for Hollywood Airport.

(Whew!) The same goes for the Preda Transition, but only if filed via BR70V.

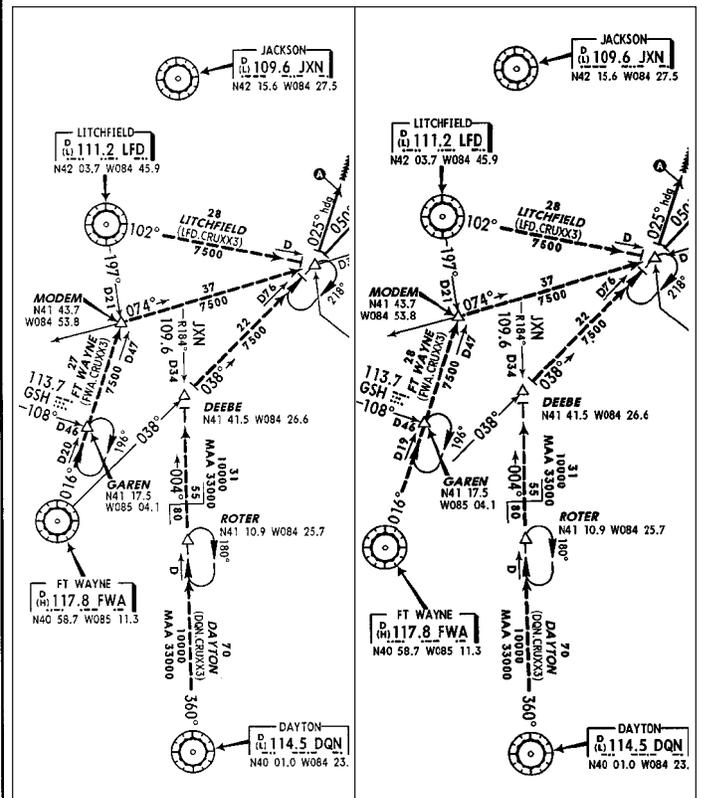
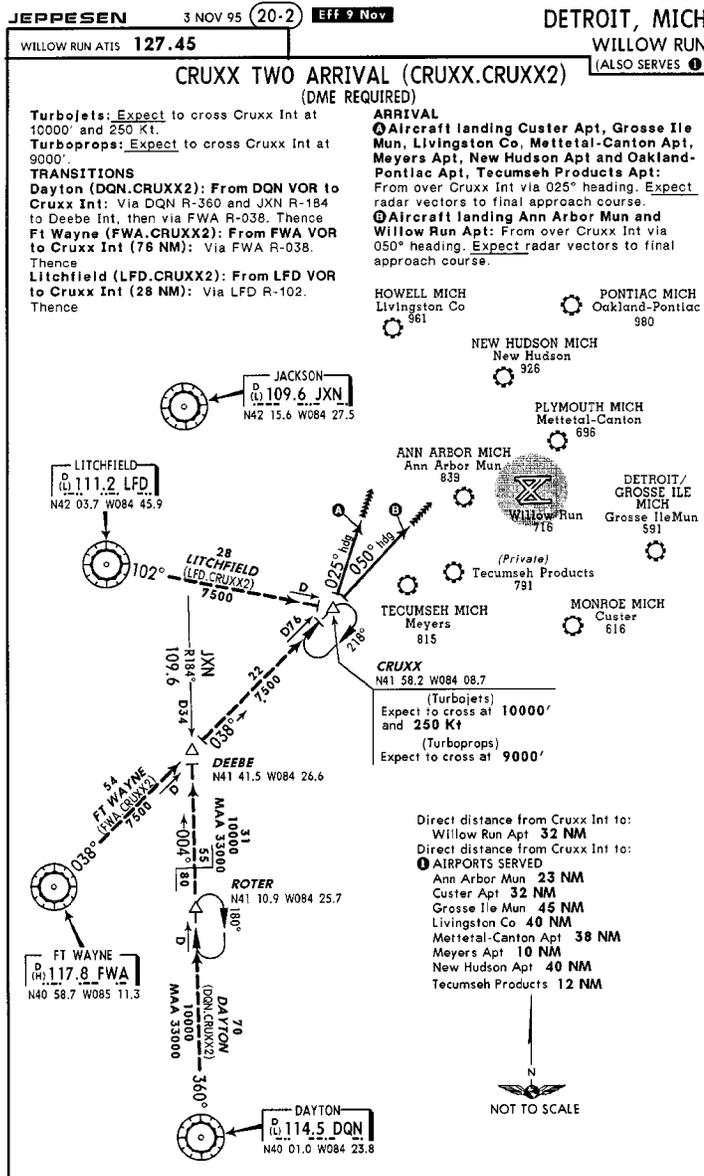
This SID is really a radar vector SID, the "Pilot Nav" annotation notwithstanding. If it stated "Radar Vector" instead of "Pilot Nav," perhaps pilots would be attuned a bit more to ferreting the vector imperatives.

Study this SID carefully, and envision what you would do for different runways and transitions.

The human-factors aspects of this SID are abysmal, not to mention the grammatical construction. Nonetheless, your responsibility as a proficient instrument pilot is to either understand it and use it correctly, or refuse to accept it as part of your clearance. At a busy airport, however, refusal of the principal SID could result in some considerable delay in getting airborne.

I can't emphasize enough that you  
*(continued on page 14)*

(3) the Bahma Transition terminates at Bahma Intersection with an expected radar vector. You get to plan on a vector after take-off to a pilot-nav transition, followed by yet another radar vector!



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The Cruxx Two Arrival (left) was revised in March and became the Cruxx Three. The change was in the Ft. Wayne transition, which had been from the FWA R-038, and was changed to the FWA R-016. The two right illustrations show the new transition. The middle chart shows the change effective March 21, 1997, which pilots could have misinterpreted as the previous chart. The chart on the right shows the May 9, 1997 revision, which shows a break in the R-038.

## SIDs & STARS

*(continued from page 7)*

“buy into” the SID once you accept such a procedure as part of your ATC clearance. If you fly it contrary to what is set forth, you’re risking enforcement action that will likely see the FAA prevail. The legal forum in which the FAA operates takes the view that, once you accept such a procedure, you’ve implied you understand and will fly it correctly.

### CRUXX STAR

Page 7 shows the past current (left) and the current (right) CRUXX STAR into Detroit Willow Run Airport (YIP). This arrival also serves seven other airports, as indicated under Note 1 on the lower right corner of the chart.

On March 27, 1997, the Ft Wayne Transition was revised from departing FWA on the 038 radial to departing the VOR on the 016 radial. As a result, the arrival name was changed from the Cruxx Two to the Cruxx Three. The

chart change only states “arrival revised.”

Pilots unfamiliar with this STAR and assigned the Ft. Wayne Transition would likely fly it correctly. However, this STAR is routinely assigned to pilots on the ground at places like Indianapolis, filed for the Detroit area. Some pilots fly this route over and over again. When the Cruxx Three came into effect on March 27, ATC noted that quite a few flights assigned the Ft. Wayne Transition flew out the 038 radial instead of the 016 radial, thus compromising separation with aircraft flying the Dayton Transition.

Jeppesen revised the chart on May 9, to show a break in the FWA R-038, so pilots would better notice the R-016 transition.

Again, all pilots should know better, human-factors notwithstanding. The demands of the system are often difficult to seemingly unreasonable, and sometimes nearly overwhelming. But, once you accept it you’ve bought into it.