

On Wednesday, September 25, I attended a meeting of the Redlands Airport Association at the Redlands Airport. Captain David Zamiska of the UPS (United Parcel Service) Flight Operations Technical and Safety team gave a 30-plus minute discussion pertaining to the UPS Airlines effort to establish at San Bernardino International Airport, (a) a "visual approach" for Runway 24, (b) an RNAV (RNP) instrument approach to Runway 24, and (c) an RNAV (RPN) approach to Runway 6 – suitable for their larger 767 cargo jets; and in a few years, suitable for 747 and 777 cargo jets.

I have appended copies of the proposed approaches. UPS is the "lead airline" for these projects. Other airlines may elect to implement them as well, but they must first go to UPS to obtain the specificity of the approaches – assuming the approaches are approved by the FAA.

It is important to note that these drawings provided by UPS are draft proposals. They are currently being "test flown" by UPS 767 jets with FAA "observers" on board. Captain Zamiska seemed to suggest that once they clear the "in-flight observer" approvals, the approaches will then need to be (a) submitted to the FAA for environmental approvals and subsequently, (b) a period for public comment(s).

Some of the issues I see include ...

1. The UPS internal visual approach is almost identical to the proposed RNAV (RNP) Z Rwy 24 approach -- although the "waypoint" names are not quite the same. JESEL on the visual approach appears to be CASSE on the RNP plate; and the other visual waypoints are not identified on the RNP plate until reaching JACAL. Captain Zamiska did mention that both all of the charts are still under development and that some of the waypoint names have already changed; or will be changed.

As you review the appended "visual approach", keep in mind that it is for internal UPS use only. It is a draft only. It will eventually take a form similar to the Jeppesen chart formats, but not until the waypoints have been unified and confirmed.

The RNAV (RNP) approaches will need FAA approvals.

2. The RNAV (RNP) X Rwy 6 is almost the same as the RNAV (GPS) Rwy 6 approach ... but it added the NITTY waypoint approach for airplanes approaching from the north or east ... and the published altitudes are 1000 feet higher at the Initial Fix (IF), UCUDO, and a slightly higher DA (Decision Altitude) at 1409 feet (306 feet above ground) versus 1353 feet (250 feet above ground) for the GPS approach. There are slightly higher visibility requirements as well (1 mile vs. 3/4).

It is worth noting that the Los Angeles FLY chart depicts a VFR traffic corridor through this area below 9500' ... and the UPS chart has their jets descending from 8100 feet down to 6000 feet in this same airspace. But the jets are big ... so most VFR pilots should see them (although wake turbulence could still be an issue).

3. All of these approaches must get past the FAA Environmental assessments. Given the experience of the folks in Lake Arrowhead, it is very probable that the people in East Highland (essentially those living just north of Greenspot Road (VUTOW to JCALL on the Visual Chart) will rise up in arms! Most of those people moved to that area due to its solitude and quietness!
4. Zamiska also seemed to imply that while the present approaches are basically to serve the 767's in the UPS fleet ... it is likely that bigger jets (747 and 777) will begin using these approaches in two to three years. Apparently, there is significant growth intended for the San Bernardino Cargo operations by UPS and/or (he indicated) Amazon. He did not discuss FedEx, although FedEx and Volga-Dnepr also have cargo operations KSBD.

5. While not particularly relevant to the Redlands group but certainly relevant to the Lake Arrowhead folks, the proposed UPS RNAV (RNP) X approach to Runway 6 does suggest that the UPS flights will be flying into KSBD over the ARRAN waypoint (which is a waypoint on Victor 8 just past over Heap's Peak) ... east of the currently impacted Lake Arrowhead area . Whether the FAA would opt to "join" UPS flights via the current EAGLZ approach is something that only the FAA would know.

6. However, the RNAV (RNP) Z to Runway 24 DOES originate via ZIGGY waypoint (which is part of the EAGLZ approach), descending to 6000' over Lake Arrowhead enroute to PESLE waypoint. The WELDR intersection initial approach waypoint that also leads to the PESLE waypoint appears to be west of the Lake Arrowhead area -- but I would need to fly that to be sure.

Keep in mind that these are all "proposed" routes. UPS is "test flying" them now with FAA observers onboard. Once past the "observers" phase, each of the approaches will be submitted for FAA environmental approvals, and subsequently, FAA Public comments periods and public hearings.

One "casual" note -- one of the folks at the Redlands Airport meeting was flying in the pattern at Redlands (including at least downwind segment) as a UPS 767 was flight testing the visual approach to San Bernardino. That pilot noted that he was above the 767 on visual approach to San Bernardino while downwind at Redlands. He stated that he was well inside of the 767 and could easily see the 767 as well.

Zamiska made the point that the intent of the visual approach (and RNAV (RNP) Z 24 approach) is to be well outside the Redlands pattern area and below the Redlands downwind altitudes to ensure against wake turbulence.

Still, as a pilot, I would have some concern if I were in a high pattern at Redlands, particularly as I turned base -- since the jets could be flying counter-direction and descending through my altitude as I turned that base leg. However, assuming Runway 26 at Redlands was in use, the winds would be blowing any wake turbulence from a 767s up the canyon and away from the base leg ... great in theory, but reality is another exercise.

In talking with the UPS folks afterward, it was apparent that they were pretty much unaware of the medical helicopter flights coming off the desert area to both Loma Linda and Arrowhead Regional trauma centers. Those two hospitals are the primary trauma centers for medical emergencies that occur in the desert.

I'm fairly certain that there are other issues that will surface; although I think the largest hurdle is going to be getting past the environmental and public hearings once the East Highland folks learn that their area will become a primary artery for approaches to KSBD in the afternoons.

The draft approach charts are appended.

// Richard Eastman CFIIMEI : KSBD

UPS is developing 3 instrument approaches, 1 visual approach, and 2 departure procedures for SBD. The handouts (attached) they shared included a plotting of the draft visual approach and the two draft instrument approaches (RNAV Z Rwy 24 & RNAV X Rwy 6). I have asked them for the third instrument approach and 2 departure procedures. The visual approach is a company procedure. The instrument approaches will be public. Their use will require authorization because it requires certain GPS equipment and training to use the approach. It is realistic to see other operators use the instrument approaches if they are authorized.

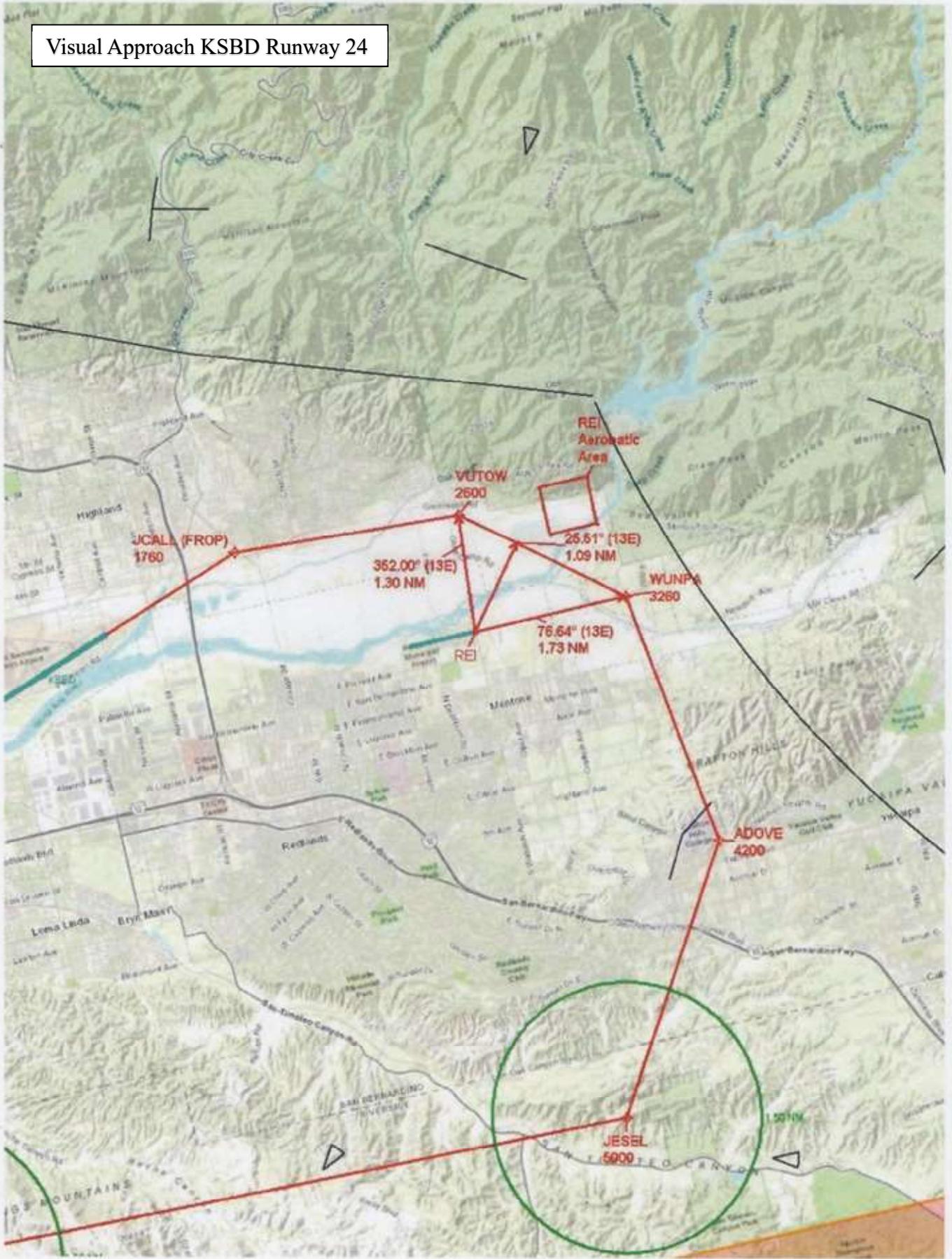
This activity will impact Redlands airport. The increase in heavy jet activity at San Bernardino may also impact GA VFR operations in the Banning Pass and at RIV RIR and RAL. Most of the approaches use PDZ as a fix.

I asked them to share the date and location of the FAA public hearing involved with approval of the procedures. I would like to make that information available to stakeholders.

- Submitted by the Redlands Pilot Association

Visual Diagrams of the Chart Proposals Follow  
On the Next Pages

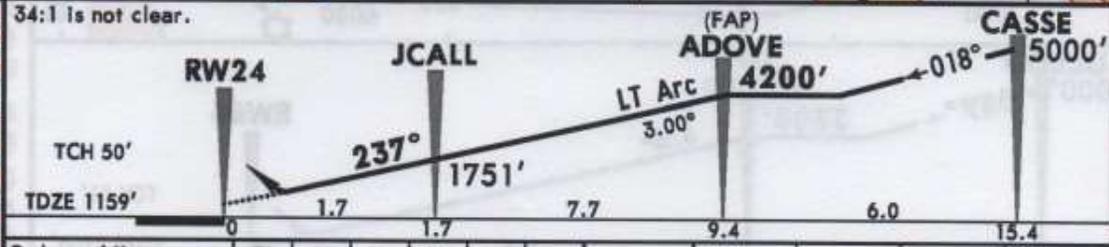
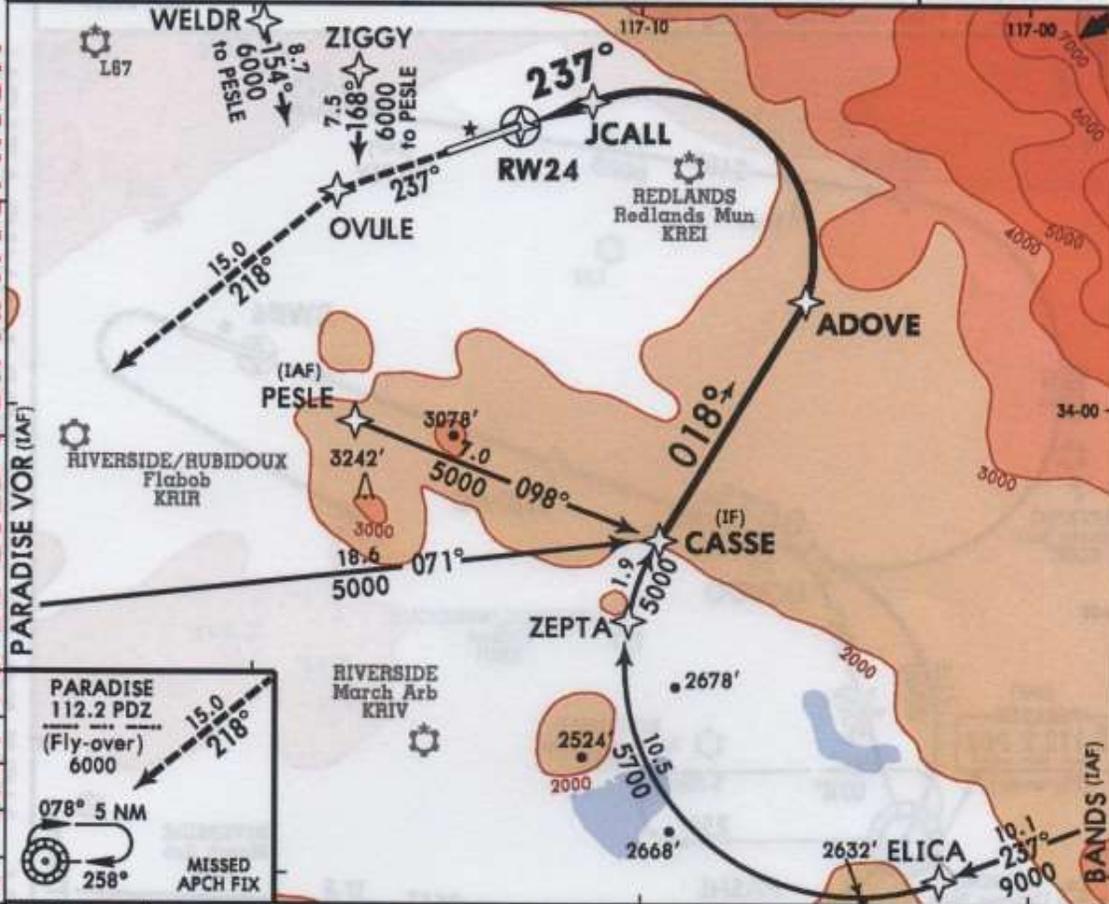
Visual Approach KSBD Runway 24



|  |                                  |  |  |                                      |  |                  |          |  |
|--|----------------------------------|--|--|--------------------------------------|--|------------------|----------|--|
| ATIS (AWOS-3 when Twr Inop)<br>124.175   |                                  | SOCAL Approach (R)<br>127.0                  |  | *SAN BERNARDINO Tower<br>CTAF 119.45 |  | *Ground<br>121.8 |          |  |
| RNAV   | Final<br>Apch Crs<br><b>237°</b> | Minimum Alt<br>ADOVE<br><b>4200'</b> (3041') | RNP 0.30<br>DA(H)<br><b>1585'</b> (426') | Apt Elev 1159'<br>TDZE 1159'         |  |                  |          |  |
| MISSED APCH: Climb to 2000' on track 237° to OVULE and then climb to 6000' on track 218° to PDZ VOR and hold.                    |                                  |  |  |                                      |  |                  |          |  |
| Alt Set: INCHES  |                                  | Trans level: FL 180                          |  | Trans alt: 18000'                    |  |                  |          |  |
| RNP AR APCH, RF Required   |                                  |  |  |                                      |  |                  | MSA RW24 |  |
| 1. For uncompensated Baro-VNAV systems, procedure not authorized below -17°C or above 54°C. 2. Pilot controlled lighting 119.45. |                                  |  |  |                                      |  |                  |          |  |

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|                        |     |     |     |     |     |     |                |                                |
|------------------------|-----|-----|-----|-----|-----|-----|----------------|--------------------------------|
| Gnd speed-Kts          | 70  | 90  | 100 | 120 | 140 | 160 | REIL<br>PAPI-L | 2000'<br>↑<br>on 237°<br>OVULE |
| Glide Path Angle 3.00° | 372 | 478 | 531 | 637 | 743 | 849 |                |                                |

MAP at DA  
 TERPS STRAIGHT-IN LANDING RWY 24  
 RNP 0.30  
 DA(H) 1585' (426')

|   |       |
|---|-------|
| A |       |
| B |       |
| C |       |
| D | 1 3/8 |

KSBD/SBD

UPS Airlines

SAN BERNARDINO, CALIF

SAN BERNARDINO INTL

PROOF

12-20

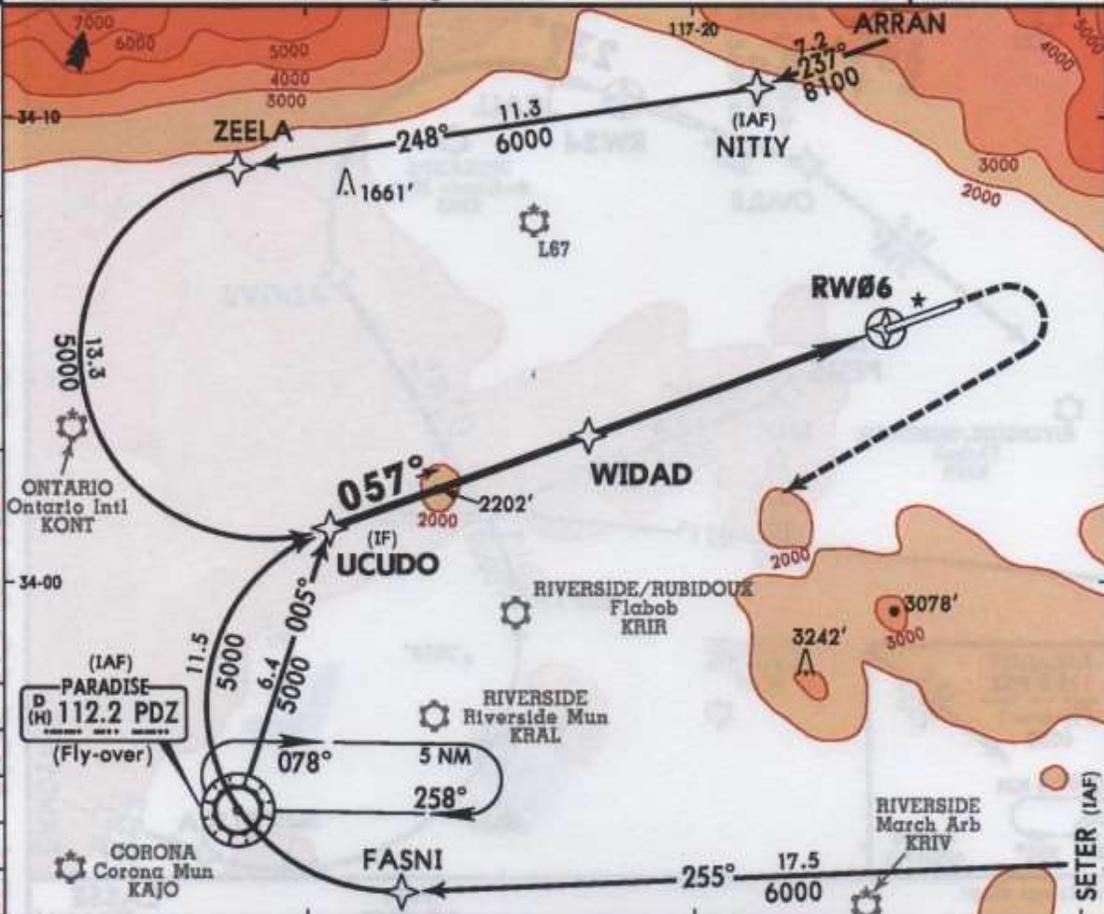
B757/B767 ONLY

RNAV (RNP) X Rwy 6

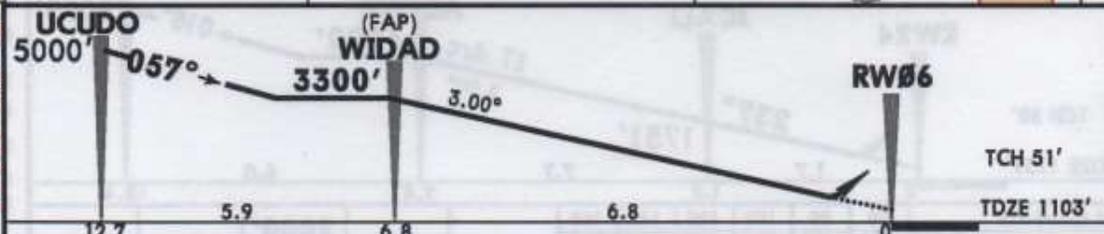
BRIEFING STRIP™

|   |                                  |   |   |                                      |  |                        |  |  |
|---|----------------------------------|---|---|--------------------------------------|--|------------------------|--|--|
| ATIS (AWOS-3 when Twr Inop)<br>124.175  |                                  | SOCAL Approach (R)<br>127.0                 |   | *SAN BERNARDINO Tower<br>CTAF 119.45 |  | *Ground<br>121.8       |  |  |
| RNAV  | Final<br>Apch Crs<br><b>057°</b> | Minimum Alt<br><b>WIDAD</b><br>3300'(2197') | RNP 0.30<br>DA(H)<br><b>1409'(306')</b> | Apt Elev 1159'<br>TDZE 1103'         |  | 12,800<br><br>MSA RW06 |  |  |
| MISSED APCH: Climb to 2000' then climbing RIGHT turn to 6000' direct PDZ VOR and hold. Missed approach requires minimum climb of 345'/NM to 4000'. If unable to meet climb gradient, see RNAV (GPS) Y Rwy 6 (chart 12-1). |                                  |   |   |                                      |  |                        |  |  |
| Alt Set: INCHES   |                                  | Trans level: FL 180                         |   | Trans alt: 18000'                    |  |                        |  |  |
| RNP AR APCH   |                                  |   |   |                                      |  |                        |  |  |
| 1. For uncompensated Baro-VNAV systems, procedure not authorized below -17°C or above 54°C. 2. Pilot controlled lighting 119.45.  |                                  |   |   |                                      |  |                        |  |  |

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|                  |       |     |     |     |     |     |        |       |       |       |
|------------------|-------|-----|-----|-----|-----|-----|--------|-------|-------|-------|
| Gnd speed-Kts    | 70    | 90  | 100 | 120 | 140 | 160 | REIL   | 2000' | 6000' | PDZ   |
| Glide Path Angle | 3.00° | 372 | 478 | 531 | 637 | 743 | PAPI-L | ↑     | RT    | 112.2 |

MAP at DA

TERPS

STRAIGHT-IN LANDING RWY 6  
RNP 0.30  
DA(H) 1409'(306')

TERPS AMEND 0

|   |   |
|---|---|
| A |   |
| B |   |
| C |   |
| D | 1 |