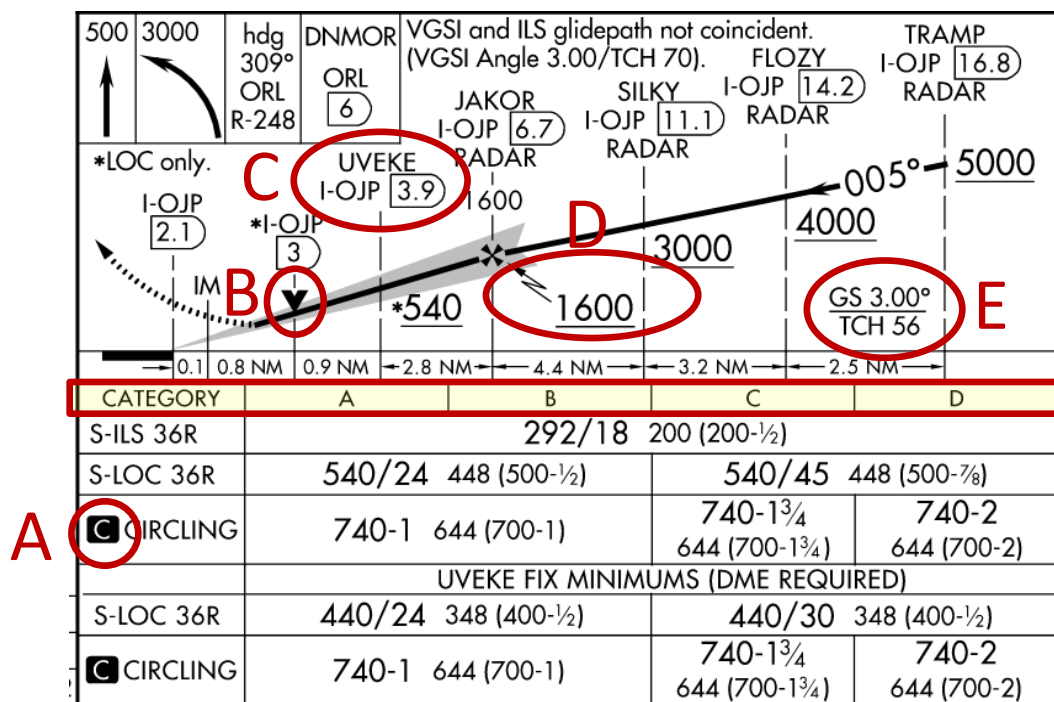


# Navigation, IFR – Part 2

## Terminal Procedures – Approaches

- What are the four (you might consider this five – technically there are five) basic parts of an approach plate?
- Missed approach:
  - Where is the missed approach point shown on an approach plate?
  - What two places are the missed approach procedure steps / instructions found?
  - If a secondary missed approach is published, where do you get the instructions?
- What is indicated by the item or items (included in the circle) lettered A through E on the image at the right?

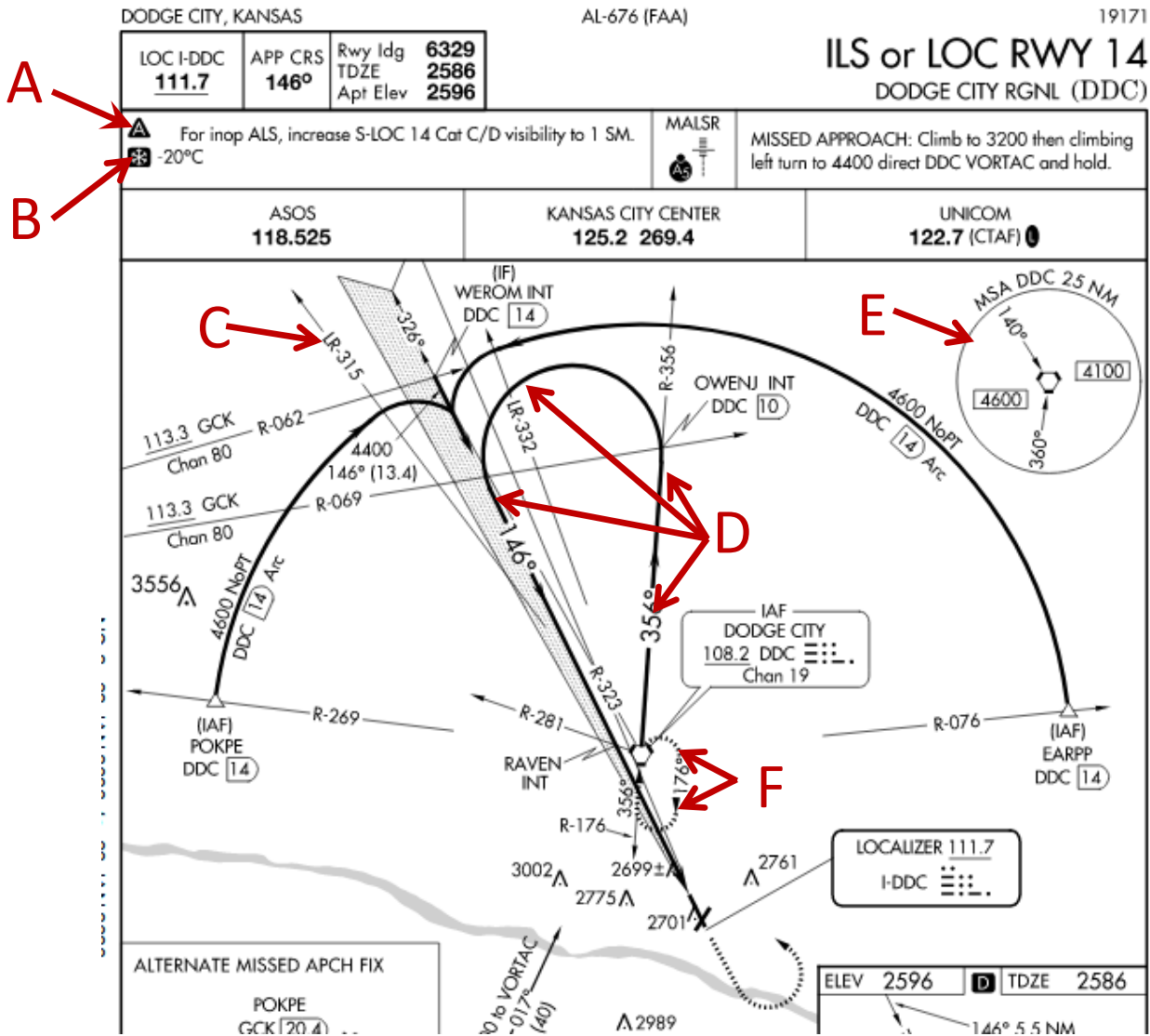
- A –
- B –
- C –
- D –
- E –



- In the image above there is a line 'CATEGORY' highlighted in yellow –
  - What does this apply to and how is the CATEGORY determined?
  - What general rule is applied if the criterion for determining the CATEGORY is not published in the POH or AOM?
- In the image above what is the distinction / difference between minimums shown in a format like 540/24 vs. those shown in a format like 740/1 3/4 ? What do each of the numbers represent?
- In the image above are the visual glideslope (in this case, indicated by VASI lights) and ILS glidepath the same? If not, how do they differ?

7. What are the four segments of an instrument approach?

8. Identify the lettered items on the approach plate portion shown below:

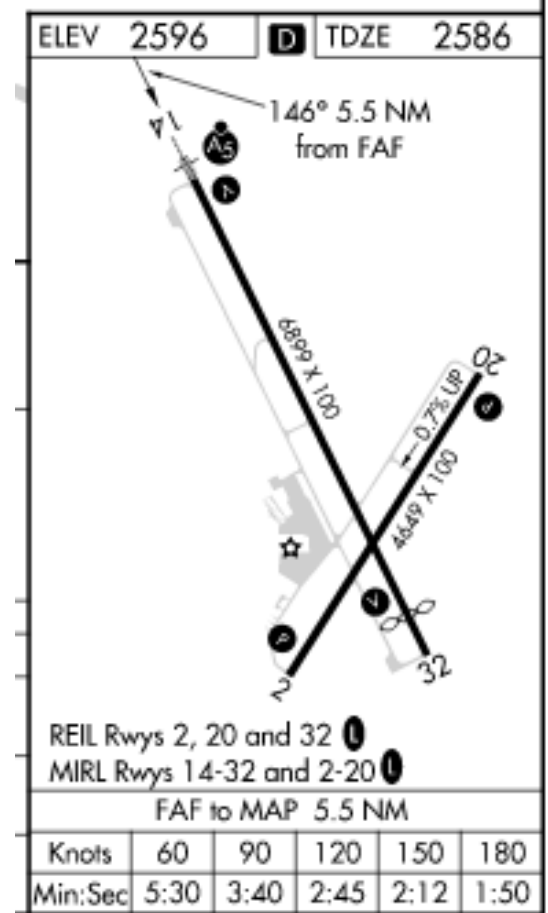


9. For the approach plate segment above, what type of approach lighting is available for Rwy 14? Does the lighting operate all the time? If not, how (specifically) is it actuated?

10. For the approach plate segment above, identify the initial approach fixes. Is there a situation or situations where you would not be required to use an initial approach fix for this approach? If so, please describe.

11. From the KDDC ILS or LOC Rwy 14 approach plate excerpt at the right –

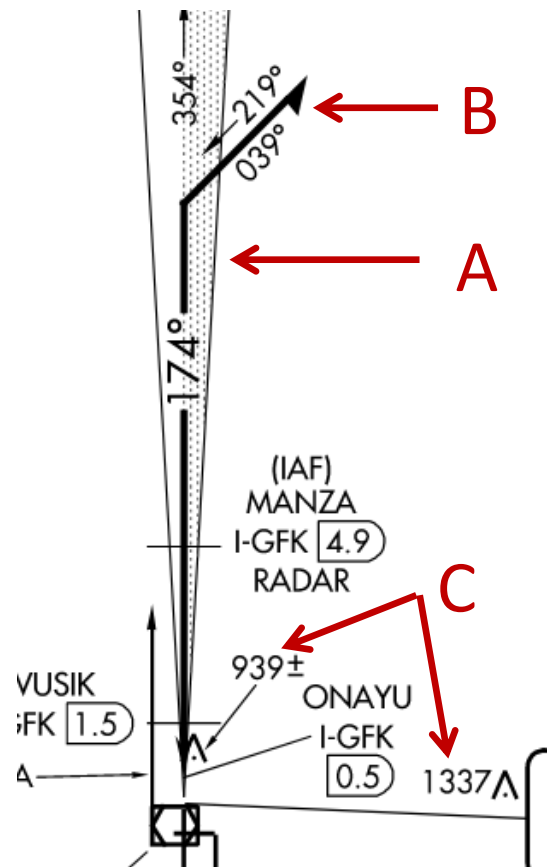
- Are there lights directly associated with one or more runways and if so, what are they?
- Is there lighting that provides visual glide path indication for one or more runways? If so, for which runways and what specific system / light configuration is it / are they?
- Are the lighting systems in 'a' and 'b', above, turned on by the tower based on pilot request?
- Is there a displaced threshold for any of the runways? If so, which one(s)?
- What does the 'reverse D' (white 'D' inside a black square) at the top center of the diagram indicate?



DODGE CITY RGNL (DDC)  
ILS or LOC RWY 14

12. For the segment from the plan view of an approach plate shown at right –

- What is the significance of the shading of the 'feather' ('A')
- What does the symbol at 'B' indicate? Why would this be needed for this approach?
- What is MANZA and how is it identified?
- What do the numbers at 'C' signify?



Gimme a ticket for an aeroplane  
Ain't got time to take a fast train  
Lonely days are gone, I'm a goin' home  
My baby, she wrote me a letter  
The Boxtops, 1967

One letter? Lucky guy. On approach plates we have to deal with a lot of letters. A's, B's, Y's and X's plus stuff like LOC, DME, MALSR, REIL, DA ... it goes on and on. Here's some questions about those letters:

13. Why are some approaches to the same runway labeled 'ILS Y or LOC Y Rwy 22' and 'ILS Z or LOC Z Rwy 22'? See these examples – [KPAE Y Approach](#); [KPAE Z Approach](#)
14. So, you've explained about approaches which include a letter from the end of the alphabet, why are some approaches only identified by a letter from the beginning of the alphabet (and there is no runway designation)? See these examples – [KETB VOR/DME-B](#); [KLG A LDA-A](#)
15. And since we brought it up –
  - a. What *is* an LDA approach? And ...
  - b. What is an SDF approach?
16. RNAV approaches – today RNAV usually means GPS to most of us (but the term was used well before GPS existed – and it still doesn't mean *just* GPS – see below):
  - a. Why are some approaches titled 'RNAV (GPS)' and some are titled 'RNAV (RNP)?
  - b. What is LPV, LNAV/VNAV and LNAV when you see this in the Minimums section of the approach plate?
  - c. Required equipment is identified on an approach plate. For some RNAV approaches (and other terminal procedures) you may see 'DME/DME/IRU or GPS required'. What is DME/DME/IRU?
17. Lots of letters left – what do these stand for?
  - a. REIL (you see this in the airport diagram section of the approach plate)
  - b. TDZ/CL (you see this in the airport diagram section of the approach plate also)
  - c. TDZE
  - d. VGSI (you see this in the profile section of the approach plate)
  - e. TCH (you see this in the profile section of the approach plate also)
  - f. MSA (its next to the circle on an FAA approach plate and the Jeppesen charts that have not been changed to the new format)
  - g. NoPT (not on all approach plates, just ones where it would apply)
  - h. S-ILS (another one seen in the profile section of the approach plate)
18. Do you prefer to use FAA approach plates or those published by Jeppesen? Why?