

CFI Bootcamp

Flight Instructor Training

IFR

IFR In the Real World

How to Get On and Not Just Get By

Today's Bootcamp+ Network Programming

What's on for Today? – **It's Power Hour 300!**



Live Show – 1st Hour – Show 300!

Open Mic – 2nd Hour – End

Monitor the Chat – Links/Info

Wings Credit for This Presentation

Today's Bootcamp+ Network Programming

What's New?



PH Rebroadcasts Wed – 8 pm EDT
Power Hour Podcasts – Full shows
Gaps Course and SmartStudy Pro
After show with Jeopardy, Give
Aways and More.....

Special Announcement for This Show



Special Deals, Give Aways and Stuff...

First 1/2 day of our CFI Class – Using AI as a Learner and Teacher - FREE

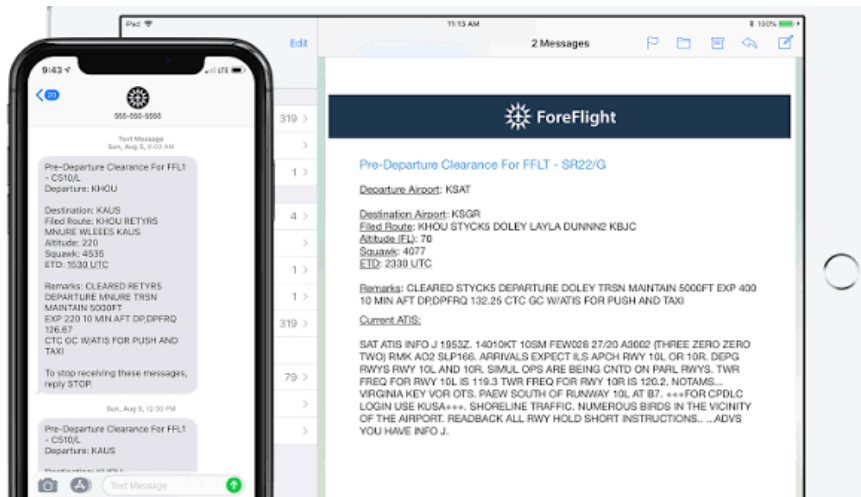
What We Will Cover

- What an IFR clearance is and how do you know you have one?
- Can you accept and IFR clearance?
- Complying with the clearance
- The “if you aren’t three steps ahead, you’re behind” nightmare
- You need Four things



What We Will Cover

- Weird Minimums?
- Climb Gradients
- Timed approaches
- New clearance delivery direct to your EFB is coming
- What is your clearance limit?



Can you accept an IFR clearance?

- Do you hold the certificate/rating?
- Are you IFR current – 61.57?
 - 6 approaches in 6 months, tracking, holding, tracking courses
 - After 6 months – can use a safety pilot to get current – can't fly IFR
- Have you completed an IPC if you let currency lapse?

Area of Operation	IPC (Proficiency Check) ²	Task Title
I – Preflight Preparation	None	N/A
II – Preflight Procedures	None	N/A
III – ATC Clearance and Procedures	B	Holding Procedures
IV – Flight by Reference to Instruments	B	Recovery from Unusual Flight Attitudes
V – Navigation Systems	A	Intercepting and Tracking Navigation Systems and DME Arcs
VI – Instrument Approach Procedures	All	Task A. Nonprecision Approach Task B. Precision Approach Task C. Missed Approach Task D. Circling Approach Task E. Landing from an Instrument Approach
VII – Emergency Operations ³	B, C, D	Task B. One engine inoperative during straight-and-level flight and turns Task C. One engine inoperative – Instrument Approach Task D. Approach with Loss of Primary Flight Instrument Indicators
VIII – Postflight Procedures	All	Task A. Checking Instruments and Equipment

² AATDs can be utilized for the majority of the IPC as specified in the Letter of Authorization issued for the device. However, the circling approach, the landing Task, and the multiengine airplane Tasks must be accomplished in an aircraft or FFS (Level B, C, or D).

³ Task B and C are applicable only to multiengine airplanes.

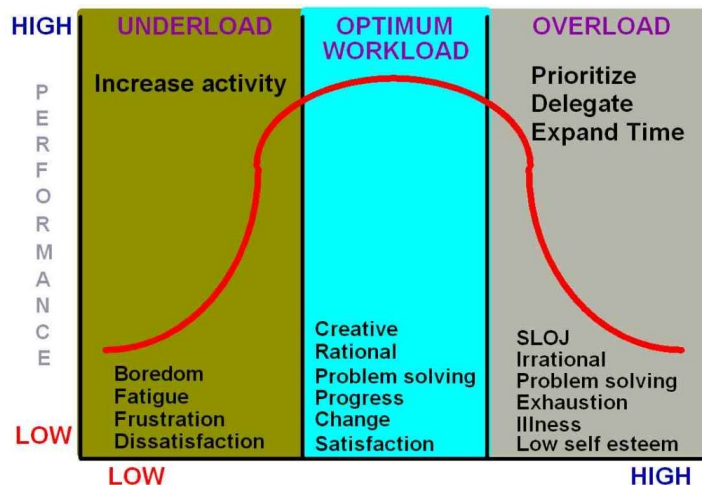
If you aren't three steps ahead, you're behind?

- Makes you and passengers anxious
- Unnecessary
- Who wants to fly with level of stress and make busy work?
- Is there a better way? YES



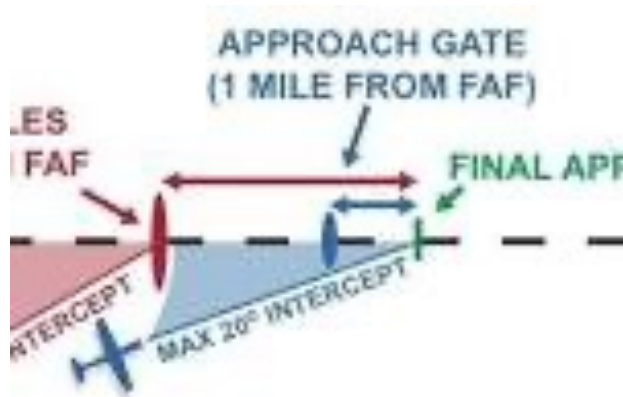
You need Four things

- Where you are and how fast you are going
- When will you be 15 min away from high workload - approach
- A mnemonic to organize you to be confident all is ready
- What the controller or you will likely need to do next



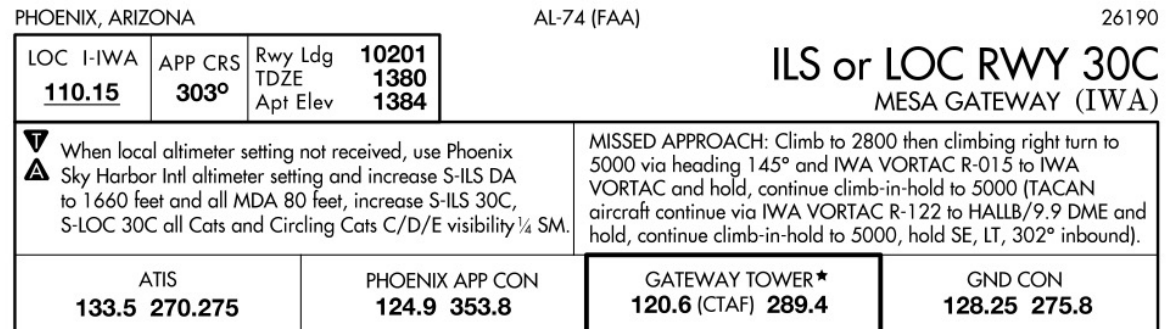
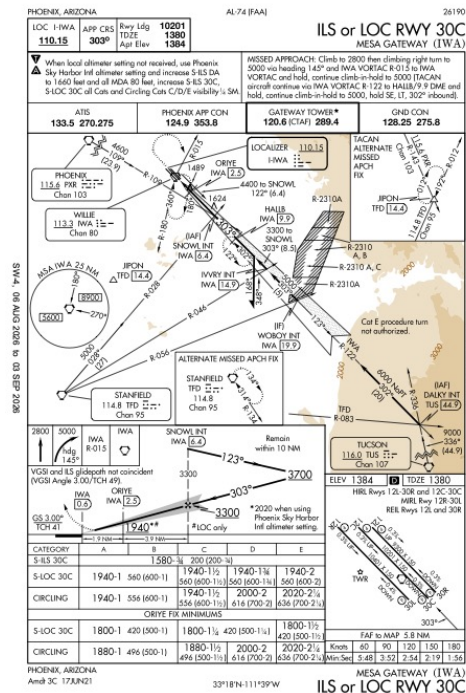
When you are 15 min away from high workload

- This allows enough time to set up and brief an approach
- Recognize if this will be a vectored or pilot nav approach
- Vectors – Downwind, base, angled final typical
- The approach Gate - < 1 mile of the FAF and at least 5 miles to runway threshold– No vectors to final
- What is your sequence?



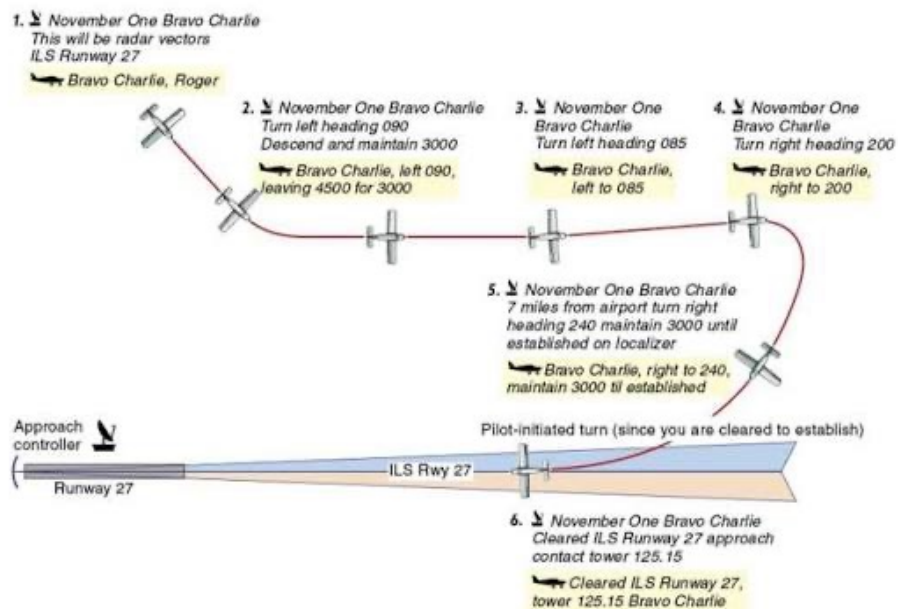
A mnemonic to organize you and get ready

- AHRMST – ATIS, Heading, Radios, Missed, Minimums, Markers, Security, Time
- Use this to brief the approach and set things up – 15 min needed

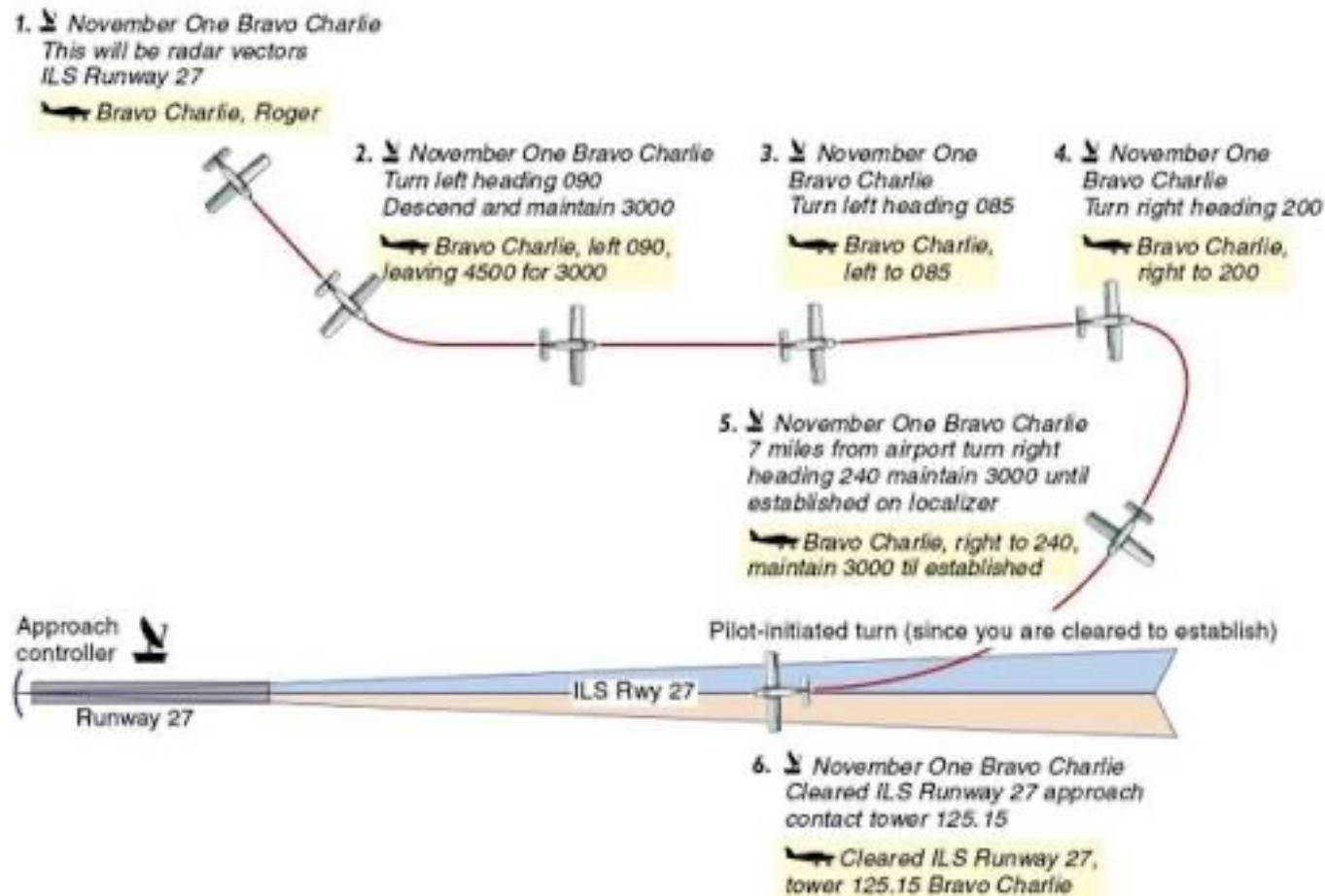


What the controller or you are likely to do next

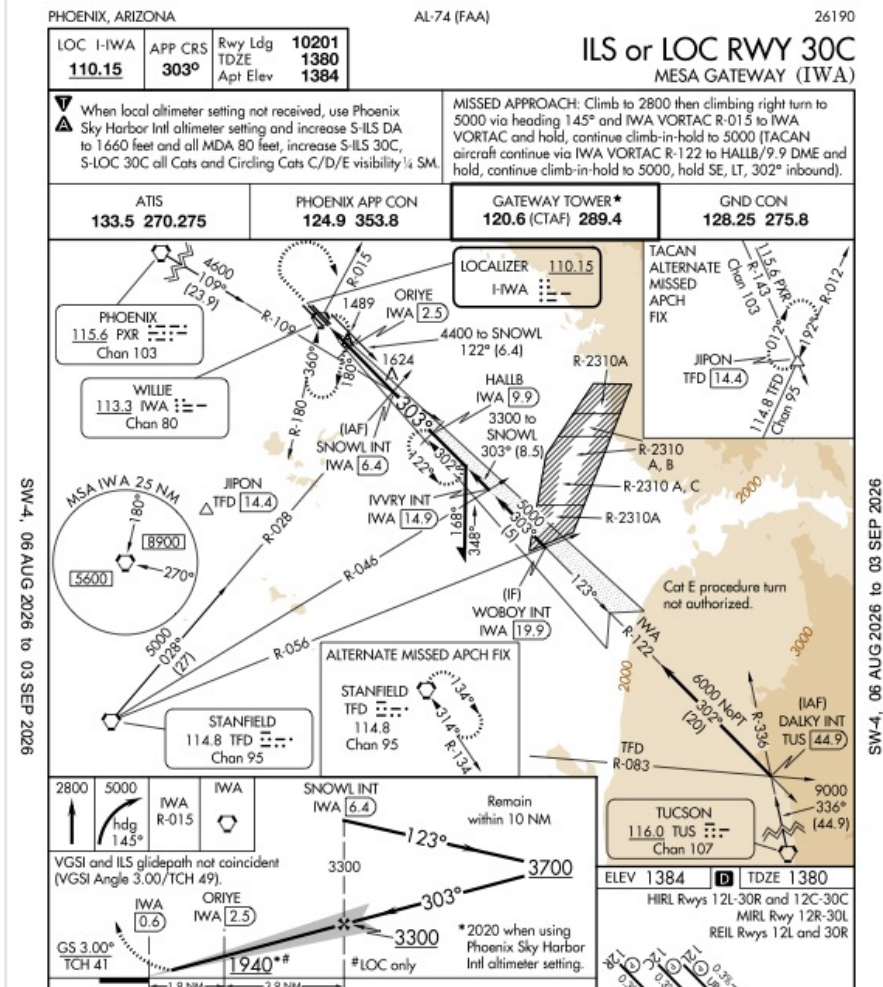
- Radar vectors to where?
- IAF with course reversal – Procedure turn or not, Hold in lieu
- A crossing clearance that is not an IAF – Feeder route required



Typical Vectoring Sequence



Cleared to cross a fix that isn't an IAF



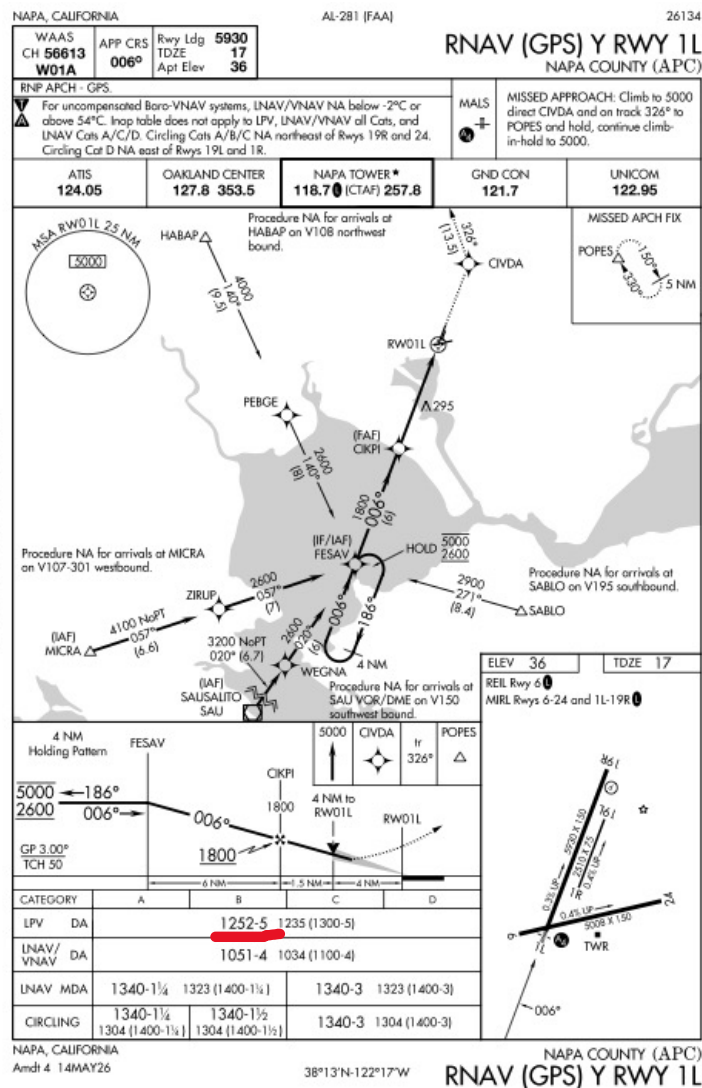
Weird Minimums?

- Something odd? High visibility, high minimums?
- Check the missed approach for climb gradient or terrain

CATEGORY	A	B	C	D
LPV DA	<u>1252-5</u> 1235 (1300-5)			
LNAV/ VNAV DA	1051-4 1034 (1100-4)			
LNAV MDA	1340-1½ 1323 (1400-1½)	1340-3 1323 (1400-3)		
CIRCLING	1340-1½ 1304 (1400-1½)	1340-1½ 1304 (1400-1½)	1340-3 1304 (1400-3)	

Weird Minimums?

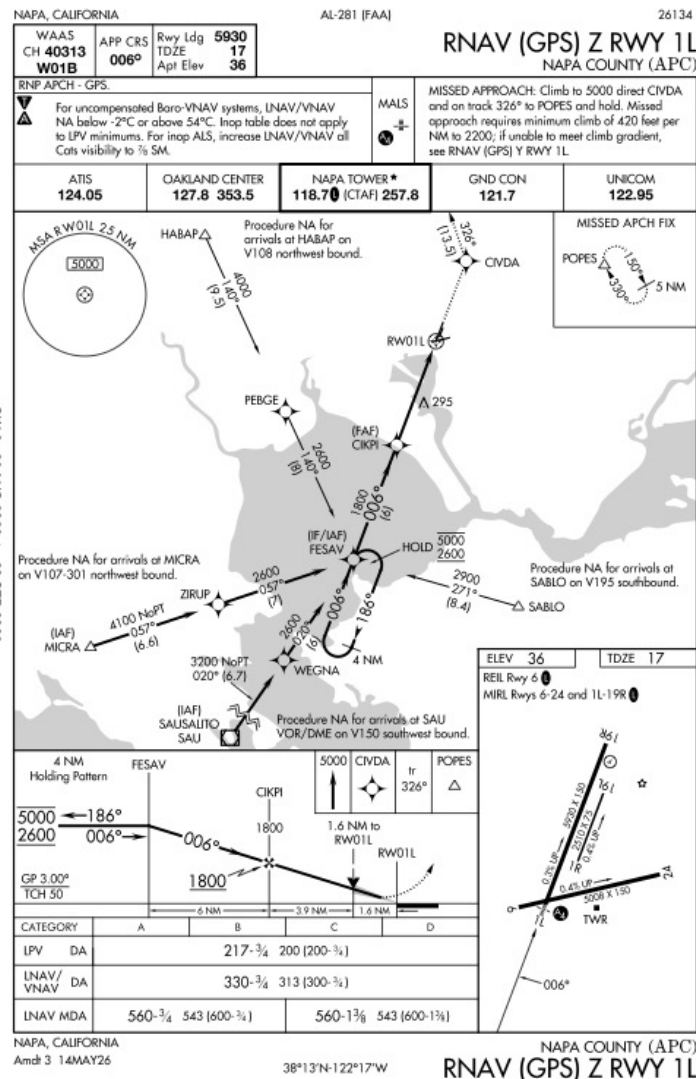
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CIRCLING	1340-1½ 1304 (1400-1½)	1340-1½ 1304 (1400-1½)	1340-3 1304 (1400-3)	



Weird Minimums?

CATEGORY	A	B	C	D
IPV DA		217- $\frac{3}{4}$	200 (200- $\frac{3}{4}$)	
LNAV/VNAV DA		330- $\frac{3}{4}$	313 (300- $\frac{3}{4}$)	
LNAV MDA	560- $\frac{3}{4}$	543 (600- $\frac{3}{4}$)	560-1 $\frac{3}{8}$	543 (600-1 $\frac{3}{8}$)

MISSED APPROACH: Climb to 5000 direct CIVDA and on track 326° to POPES and hold. Missed approach requires minimum climb of 420 feet per NM to 2200; if unable to meet climb gradient, see RNAV (GPS) Y RWY 1L.



Climb gradients

- In the takeoff minimums section or missed approach notes
- Based on a ground speed - consider the tailwind if turning
- Ft/min vs Ft/nm (Gradient)
- Easy conversion – $(GS/60) * Ft/nm = Ft/min$
 - Easy math – 60=1nm/min, 90=1.5 and 120=2

Climb gradients

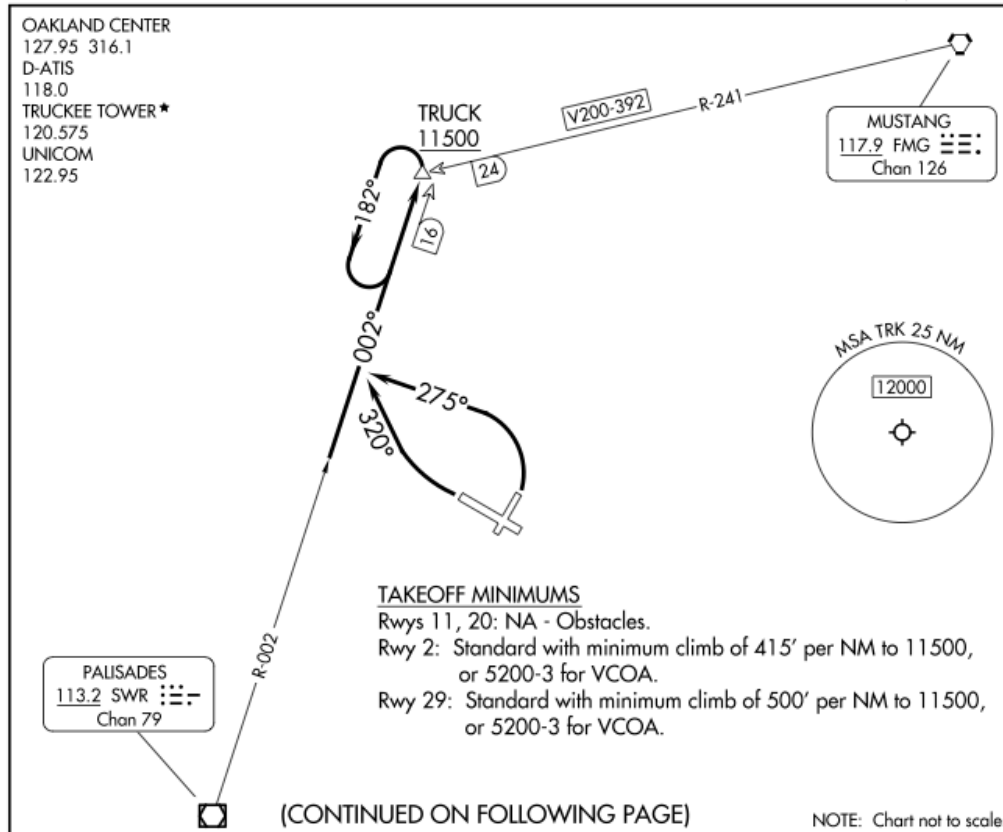
(TRUCK5.TRUCK) 24025

TRUCK FIVE DEPARTURE (OBSTACLE)

AL-6021 (FAA)

TRUCKEE-TAHOE (TRK)

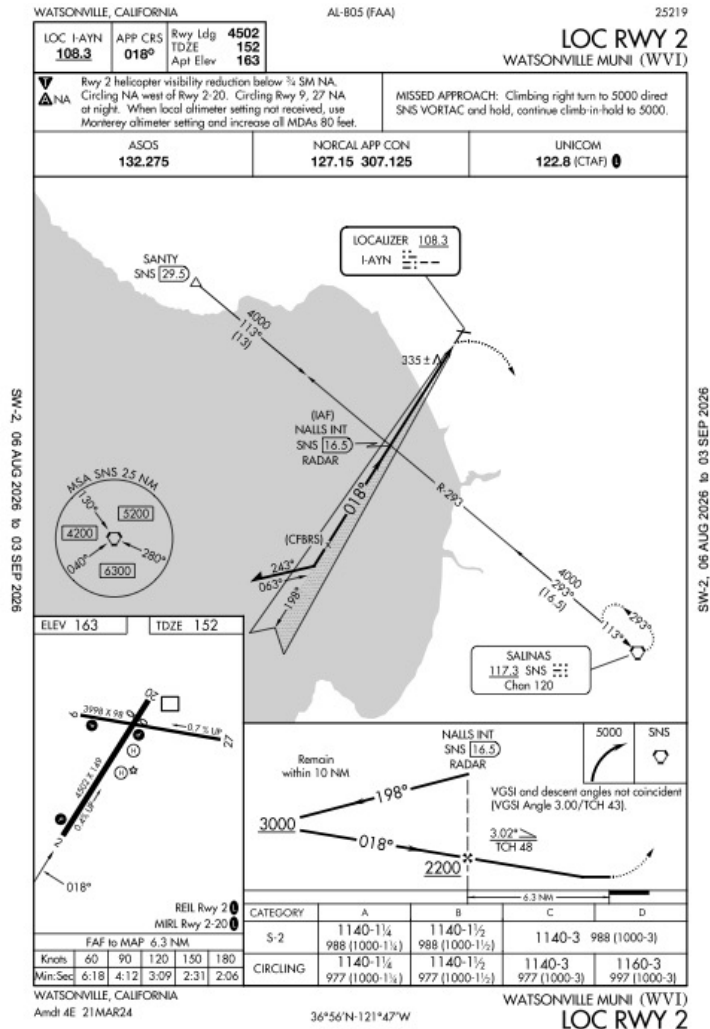
TRUCKEE, CALIFORNIA



Timed approaches

- Not used outside of the US that much
- Allow time to be used to identify the MAP from the FAF
- Based upon GROUNDSPPEED – Consider the HW or TW

Timed approaches



Special Announcement!

Reminders!



CFI Study Group on Facebook



National Association of
Flight Instructors

Join SAFE, NAFI and the CFI Study Group by Clicking on the Images Above

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