

BIFP COPTR Supplement

Overview

- Departure Procedures (P4xx Chap 3)
- TH-57 Point to Points
- How to Conduct an Approach

Departure Procedures

Clearance Delivery

- During the brief your IP will tell you either the Eastern or Western OP Area. On the walk call Base Ops and file for NDZ 203/206 Departure
- After Comm/Nav, Get ATIS. Switch to Ch 2 and make your call “South Clearance, Navy 7E131, NDZ 203/206, 3 Souls”. Be ready to write down your clearance. (pre-printed kneeboard or paper)
- They will then read your clearance (CRAFT)
 - Clearance limit (usually “As filed”)
 - Route
 - Altitude
 - Frequency (Pensacola Dep, usually 124.85)
 - Transponder (Squawk)
 - “Navy 7E131 cleared for the Waben/Bawdi Departure, climb to 1700, expect 2200 five min after, Departure Freq 124.85, Squawk 0302”. You will read this back.
- Setup for your departure (TINTS) and brief departure before T/O checks.
- Task your IP to put KNDZ-CEW-Waben-NBJ-KNDZ or KNDZ-NSE-CEW-KNDZ in the GTN

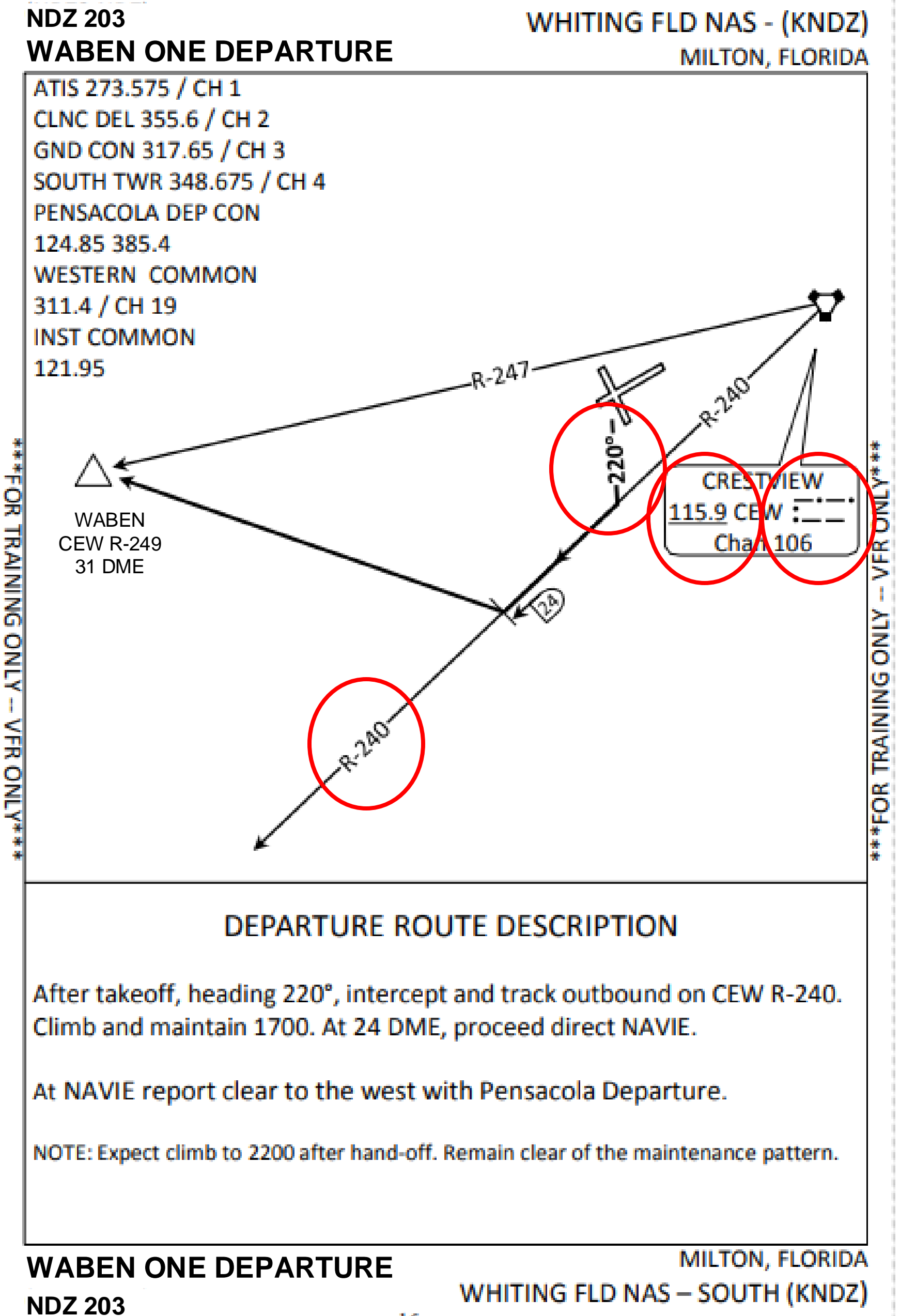
C
R
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DEP ELEV		CLNC DEL		GND CONT		TOWER			
ALT CORR		TIME OFF		TAS		LBS PH			
C R A F T						Time Tank Torque Transponder			
DEST ELEV		APCCONT		TOWER		GND CONT			
ROUTE TO	IDENT CHAN	CUS	DIST	ETE	ETA ATA	LEG FUEL	EFR AFR	GS	NOTES
Gas & Gauges	Time Tank		Time Tank		ATIS Airport _____				
					ATIS Airport _____				
Time Tank	Time Tank		Time Tank		ATIS Airport _____				
					ATIS Airport _____				
ALTERNATE		ROUTE		ALTITUDE		FUEL		TIME	
ALT ELEV		APC CONT		TOWER		GND CONT			
Clearance Delivery, Navy7E___ IFR to ___, ___ souls									
South Ground, Navy7E___, taxi with clearance from ___ with Information ___									
South Tower, Navy7E___, holding short Spot ___, IFR departure, request ITO.									
Crestview: CEW 115.9 I-PNS48: LOC 111.1 Saulley NUN: 112.25 Gateswood: NBJ 60x									
Whiting: NSE 70x Santa Rosa: NGS 63x Semmes SJI: 115.3									

TINTS

- NAVAIDS (TINTS / STINTS)

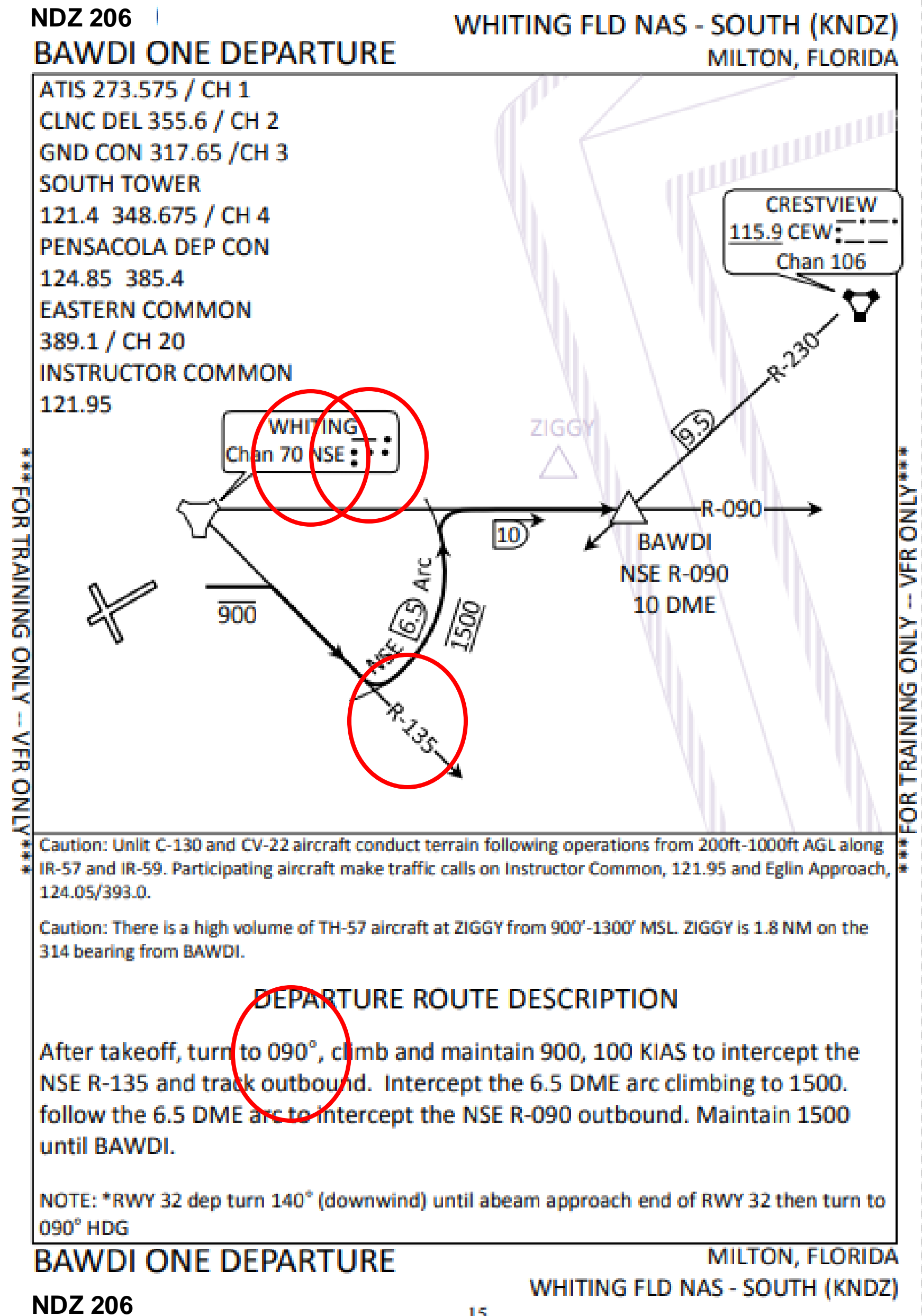
- Tune
- ID
- Needles (NAV)
- Twist (HSI & Hdg bug)
- Select (Nav 2)
- Brief
 - “We are taking off from Spot 4, Rwy 32, at 200’ we’ll turn left to 220°, climbing up to 1700’, expect 2200’ five minutes after. Intercept the 240° radial , turn right, track outbound to 24 DME. Once reaching 24 DME, turn right to approximate heading of 285°, to WABEN, which is on the 249 radial at 31 DME”.



TINTS

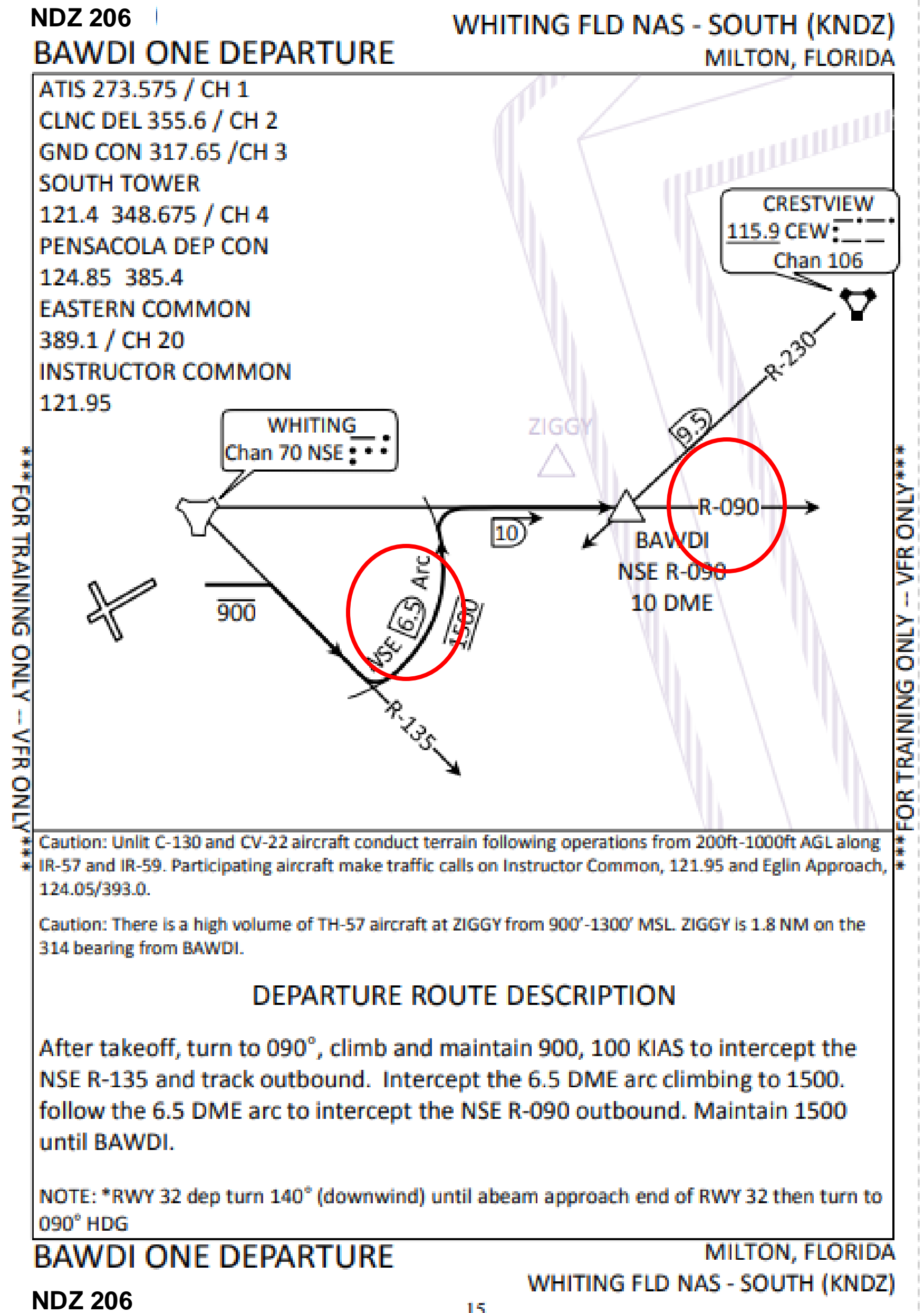
- NAVAIDS (TINTS / STINTS)

- Tune
- ID
- Needles (NAV)
- Twist (HSI & Hdg bug)
- Select (Nav 2)
- Brief
 - “We are taking off from Spot 1, Rwy 05, once reaching 200’, climbing right turn to 090°, continue up to 900’. Turn right to intercept the 135° radial and track outbound. We will turn left at 6.5 DME to get on the arc, call me .2 prior. During the turn, I’ll execute a cyclic climb to 1500’. We will hold the arc on the 6.5 DME. We will turn right at the 095° radial, call me two radials prior, to intercept the 090° radial outbound and track to Bawdi on the 090° radial at 10 DME”



Arc and Radial Leads

- Lead all arcs by .5 DME. That means you need to be turning then, so tell your IP to give you a heads up .2 (or whatever you want) lead.
- When to get off the arc - divide 30 by DME. So $30/6.5$ is about 5 radials prior, so at 095 radial you will need to start your right turn to intercept and track outbound on the 090 radial to Bawdi.
- 6Ts – Execute at your IP's .2 call out. These will remind you to task your IP to twist in the new heading of 090.
- Remember to use the RMI to hold the arc.



Taxiing and Takeoff

- Taxi request to S. Ground (Step 3) “South Ground, Navy 7E131 taxi NDZ 203/206 (as filed or with clearance) from Spot X with Charlie”
- IP will taxi from the spot you will execute the ITO checklist. Actually check your instruments, opportunity to double check your Nav setup (make sure you are using the correct Navaid), freq and squawk when covering these steps. This is a silent checklist, unless you need your IP to do something (turn left/right or if something is off)
- Holding short of the spot IP will call Tower (Step 4) “South Tower, Navy 7E131 holding short Spot 1 Waben/Bawdi departure request ITO.”
- If Tower has separation, “Navy 7E131 cleared to take off Spot 1, ITO approved” or “Hold short”
- (Step 5) Knock out 4 Ts, set a/c down on the spot, brief IP about Torque calls during ITO (see Instrument FTI for procedures). “Call my torque by 5 above 50 and by 1s above 80, 90 is my max torque”
- Fly the runway heading, at 200 ft (KNDZ or per FTI at other airports) turn to departure heading and follow departure procedures.

DEP ELEV	CLNC DEL	GND CONT	TOWER						
ALT CORR	TIME OFF	TAS	LBS PH						
CLEARANCE			Time						
C			Tank						
R	6 & 7		Torque						
A			Transponder						
F									
T									
DEST ELEV	APC CONT	TOWER	GND CONT						
ROUTE TO	IDENT CHAN	CUS	DIST	ETE	ETA ATA	LEG FUEL	EFR AFR	GS	NOTES
Gas & Gauges	Time		Time		ATIS Airport				
	Tank		Tank		ATIS Airport				
Time	Time		Time		ATIS Airport				
Tank	Tank		Tank		ATIS Airport				
ALTERNATE		ROUTE		ALTITUDE		FUEL		TIME	
ALT ELEV		APC CONT		TOWER		GND CONT			
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Whiting: NSE 70x Santa Rosa: NGS 63x Semmes SJI: 115.5									

3

4

Departure Calls

- KNDZ Tower: “Navy 7E131 switch Pensacola Departure 124.85”
- Task IP to switch 124.85 and select Comm 1
- Navy 7E131: “Pensacola Departure, Navy 7E131 off South Whiting, leaving 1100 to 1700 or level 1700 on the Waben Departure” or level 900 on the Bawdi Departure off South Whiting”.
- Pensacola Departure: “Navy 7E131 radar contact, continue your climb to 2200 on WABEN departure”
- Transfer the controls, tell your IP heading and altitude and execute level off checks (silent checklist). Do a couple of items, check instruments and make sure PAC is holding parameters, continue level off checks. Call out if you have deviations.
- At Waben “Navy 7E131 Waben, clear to the west or Bawdi, clear to the east”. Squawk 4777 in the western working area and 4677 in the eastern working area.

Point to Point

Point to Point

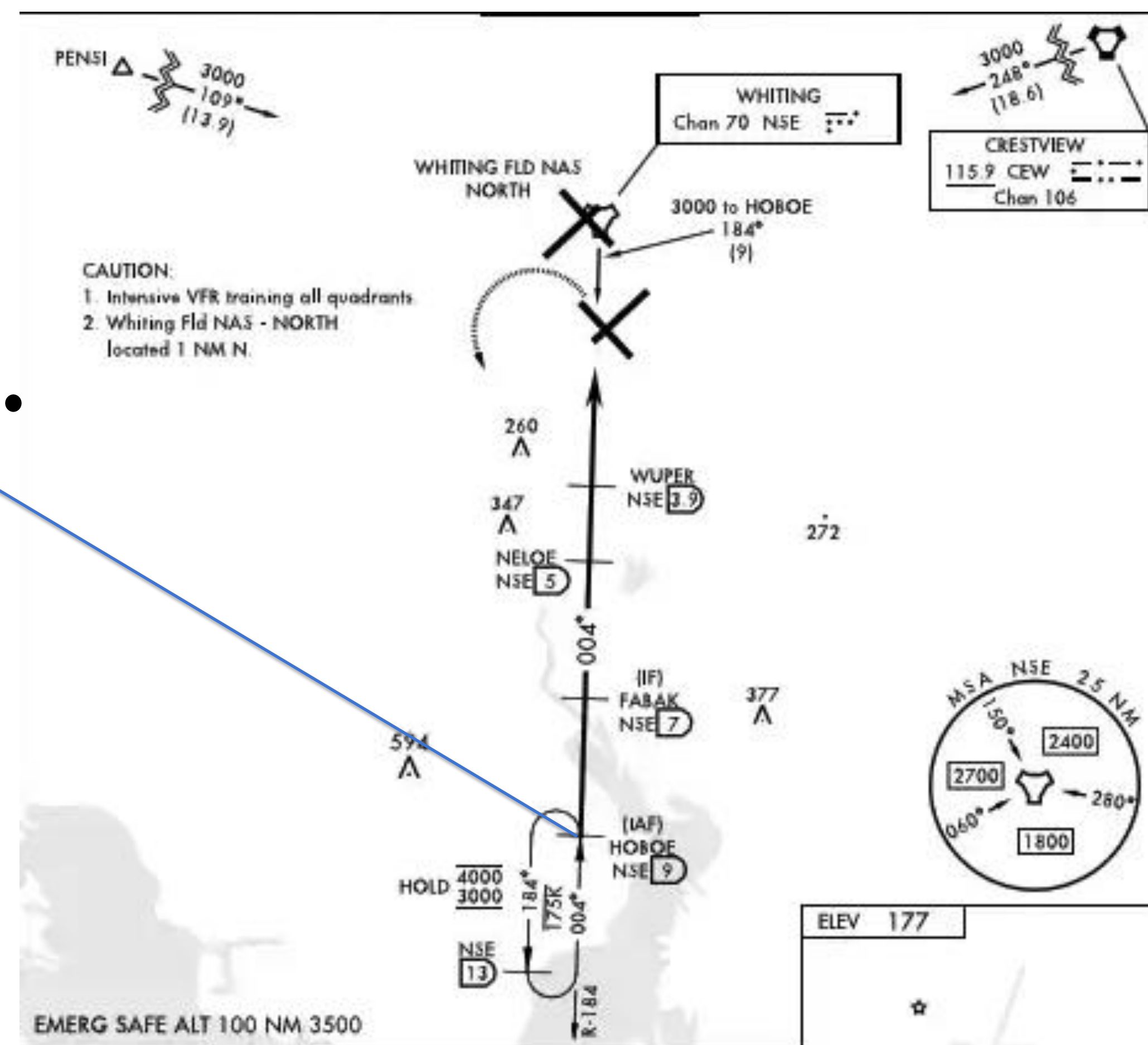
Pencil Method

- Transfer controls to your IP, provide heading and altitude to maintain.
- Tune in the correct frequency in the KLN 88. Look at the DME readout for the radial and distance you are currently on. Mark yourself on the departure or approach plate and determine an approximate heading to your desired point. Task your IP to turn to the heading.
- You are always on the tail of the needle. Plot yourself on the yellow needle of the RMI proportional to the radial/DME in which you want to fly.
- Use your pencil or finger to make an imaginary line between the two points. Drag your pencil/finger to the center of the RMI and determine the direction that it's pointing. That is your steer heading. (compare to heading off of FLIP so you can prevent going 180 out) Update your point to point calculations multiple times enroute.
- Use good CRM throughout. Continue to back up the PAC, checking altitude and last heading assigned.

Point to Point

- Tune in the correct frequency in Nav 2, look at the DME readout to determine your current radial and distance. Mark yourself on the approach plate swag a heading to the point you are going and give your IP a heading to turn.
- Pensacola Approach: “Navy 7E131 cleared direct to Hoboe”.

15.0_{MI} 270_{RAD}



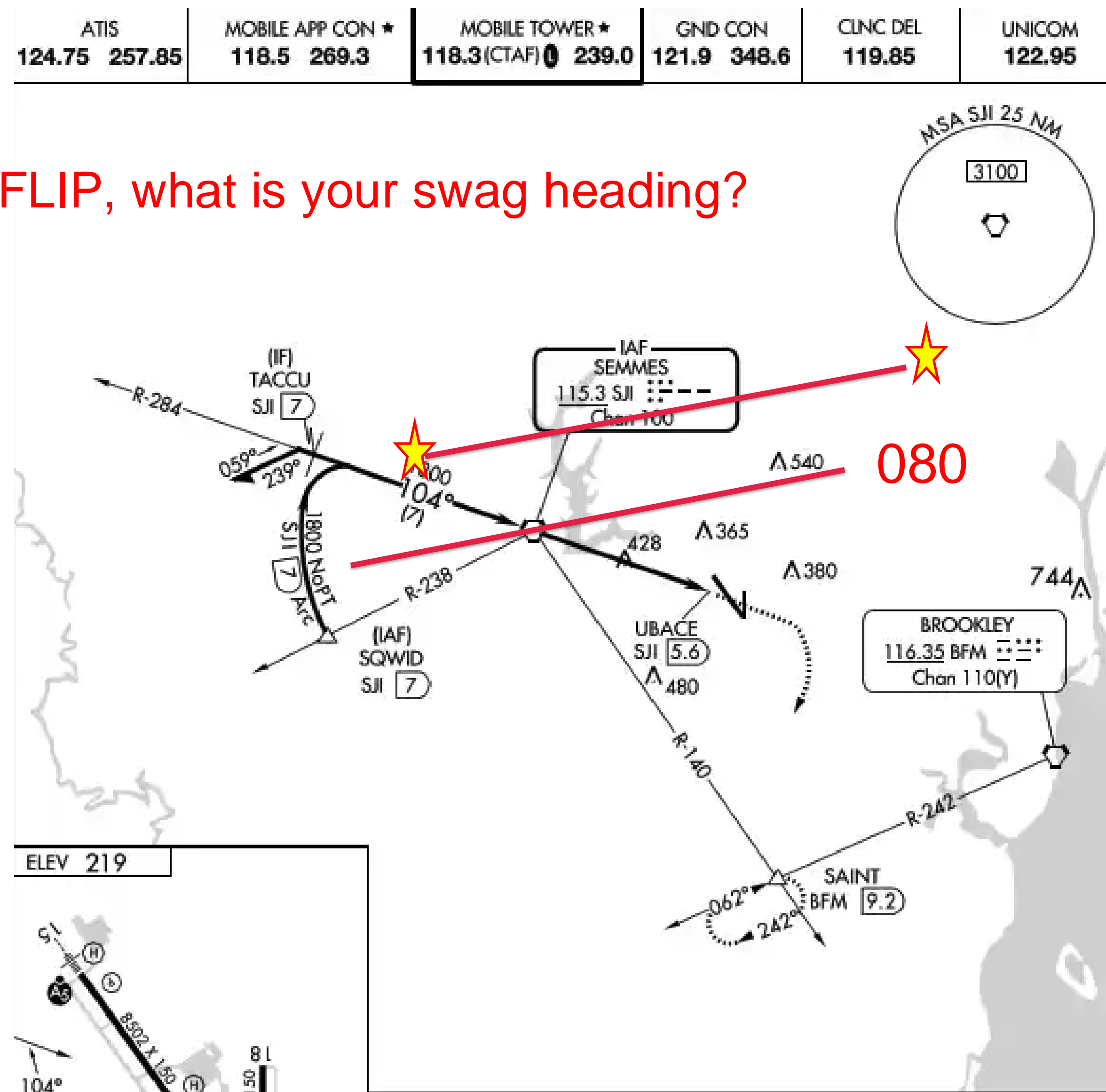
Point to Point Practice

Pencil Method

4.0 MI **310** RAD

Look at the FLIP, what is your swag heading?

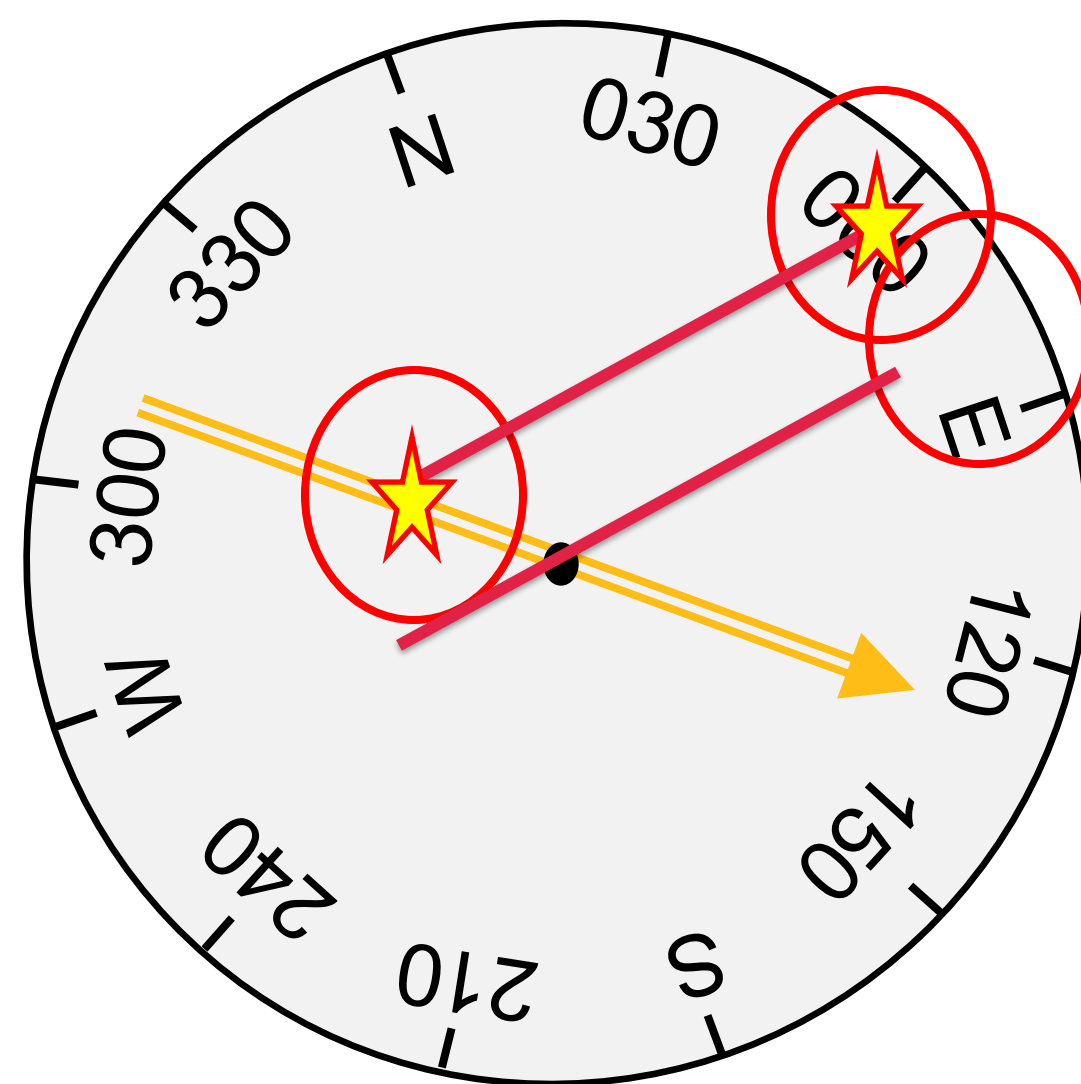
Point to intercept 12.0 / 060



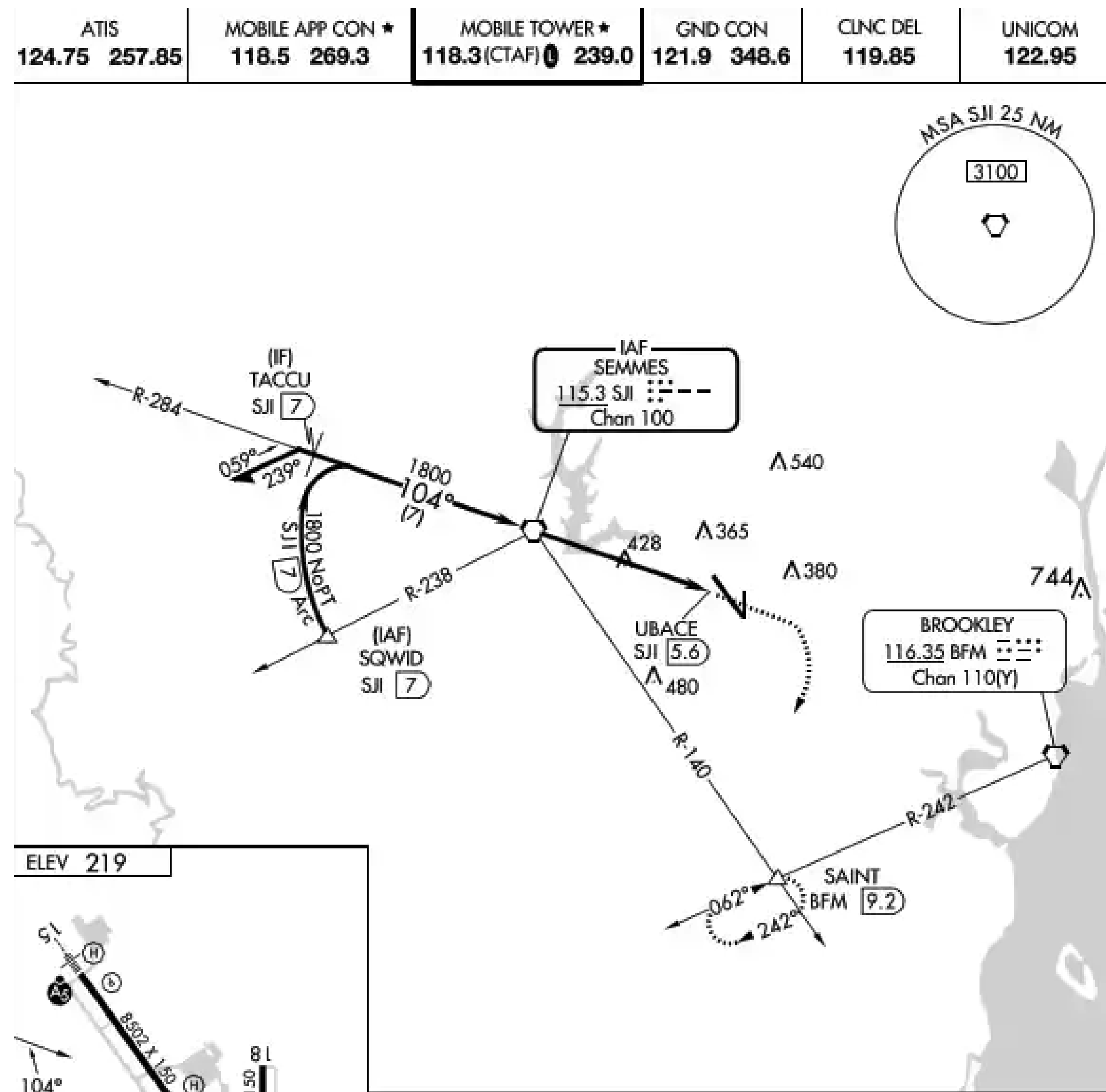
Point to Point Practice

Pencil Method

4.0 MI **310** RAD

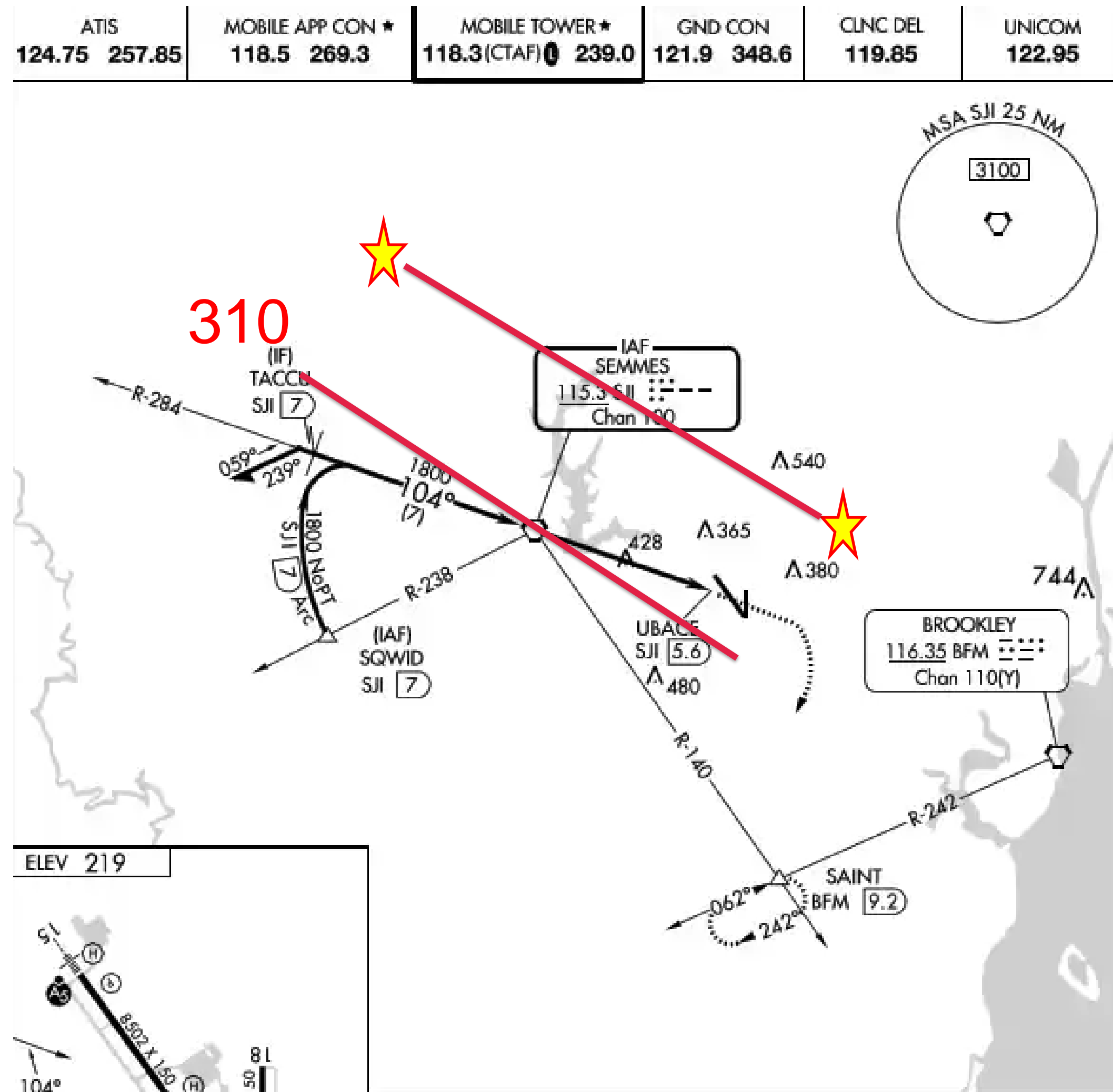


Point to intercept 12.0 / 060



Point to Point Practice

Pencil Method

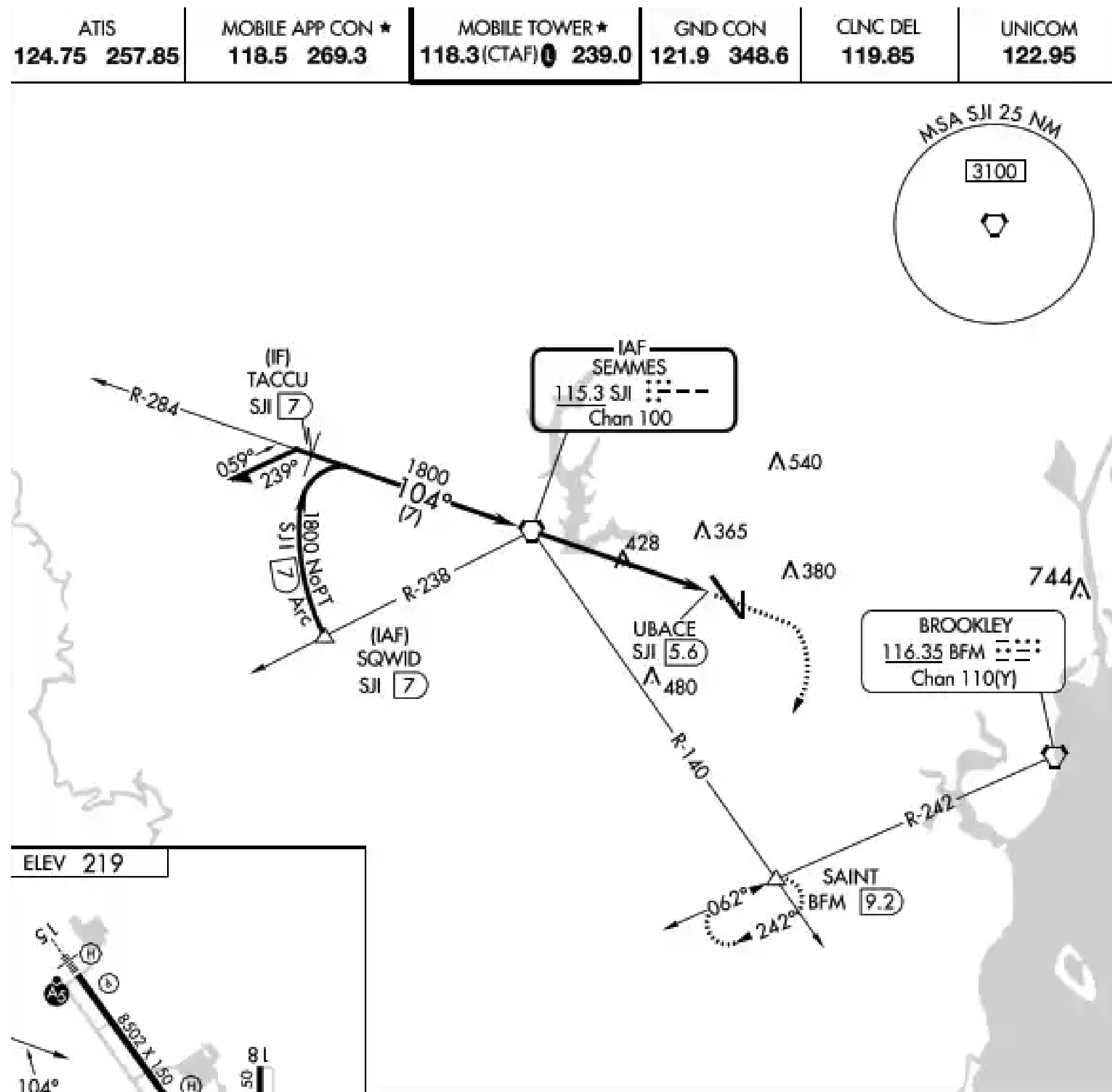


8.0_{MI} 090_{RAD}

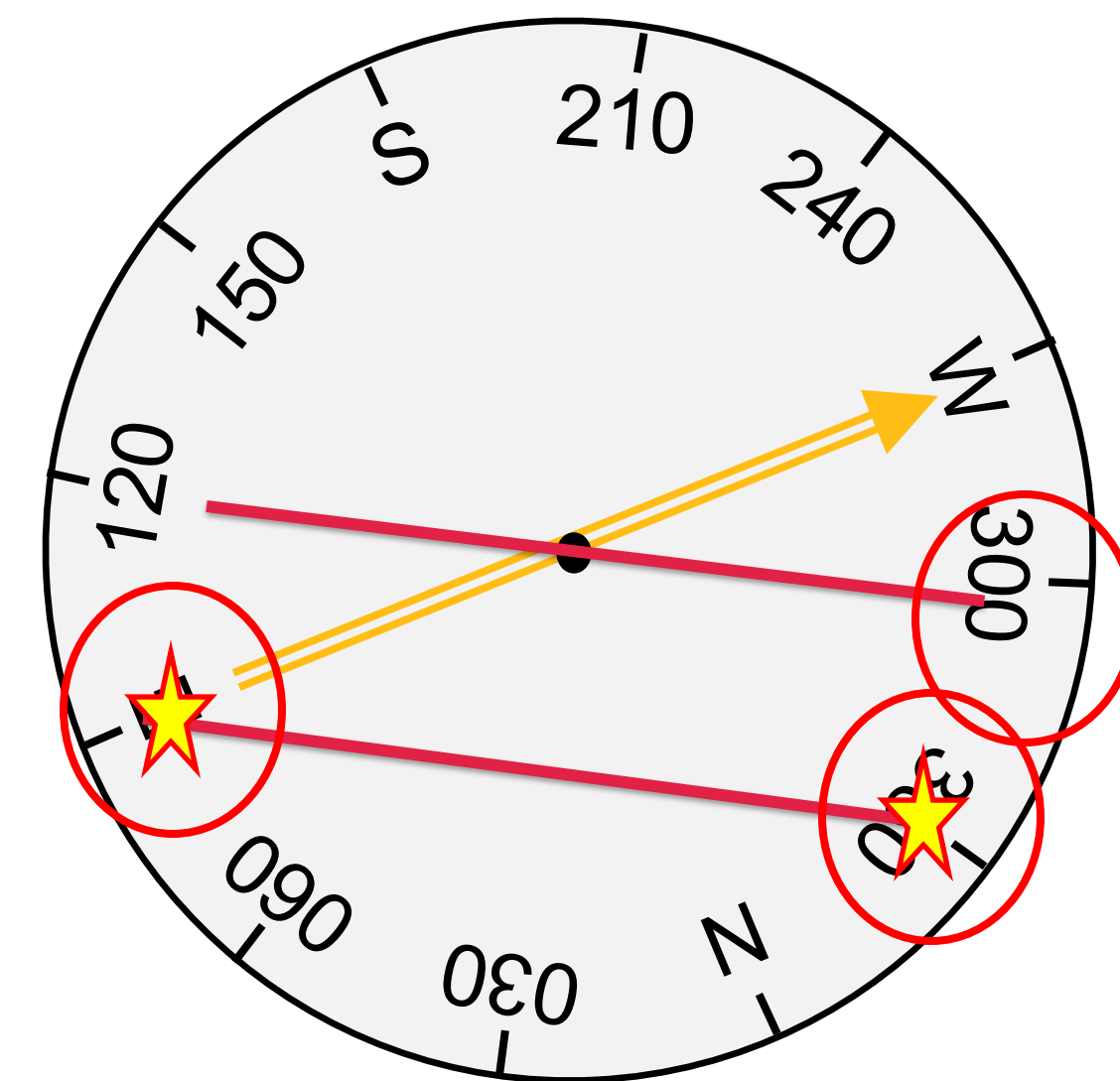
Point to intercept 8.0 / 330

Point to Point Practice

Pencil Method



8.0 MI **090** RAD



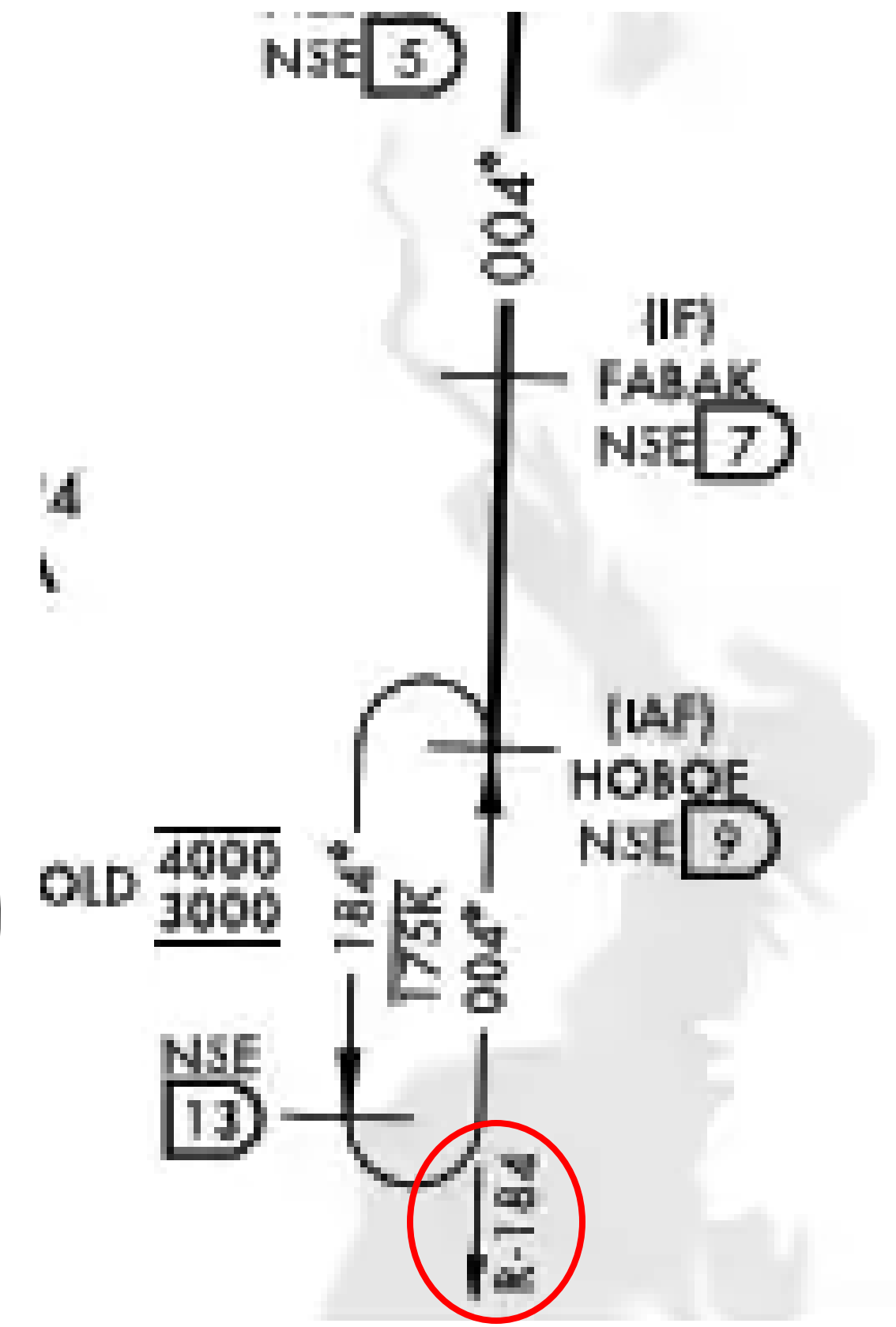
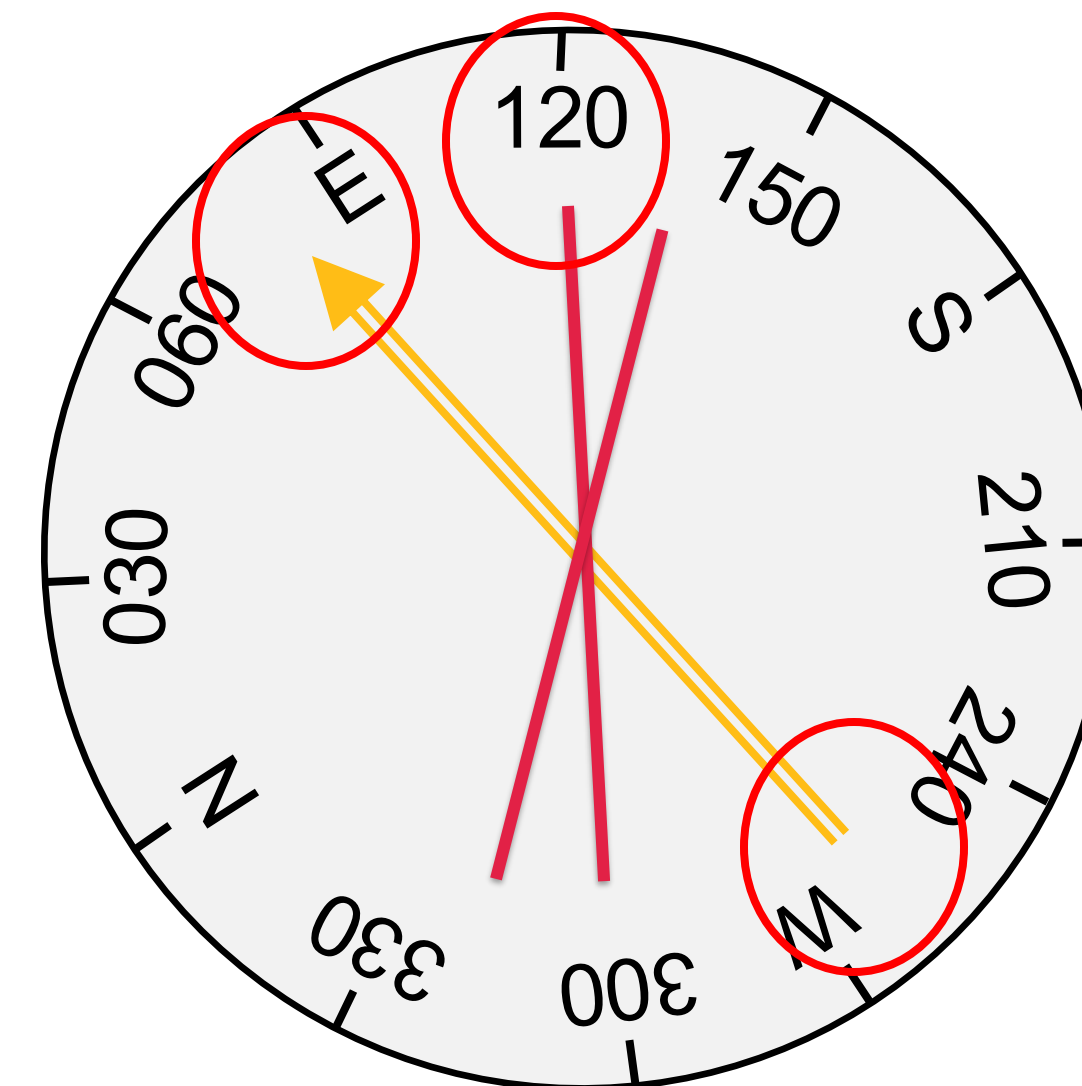
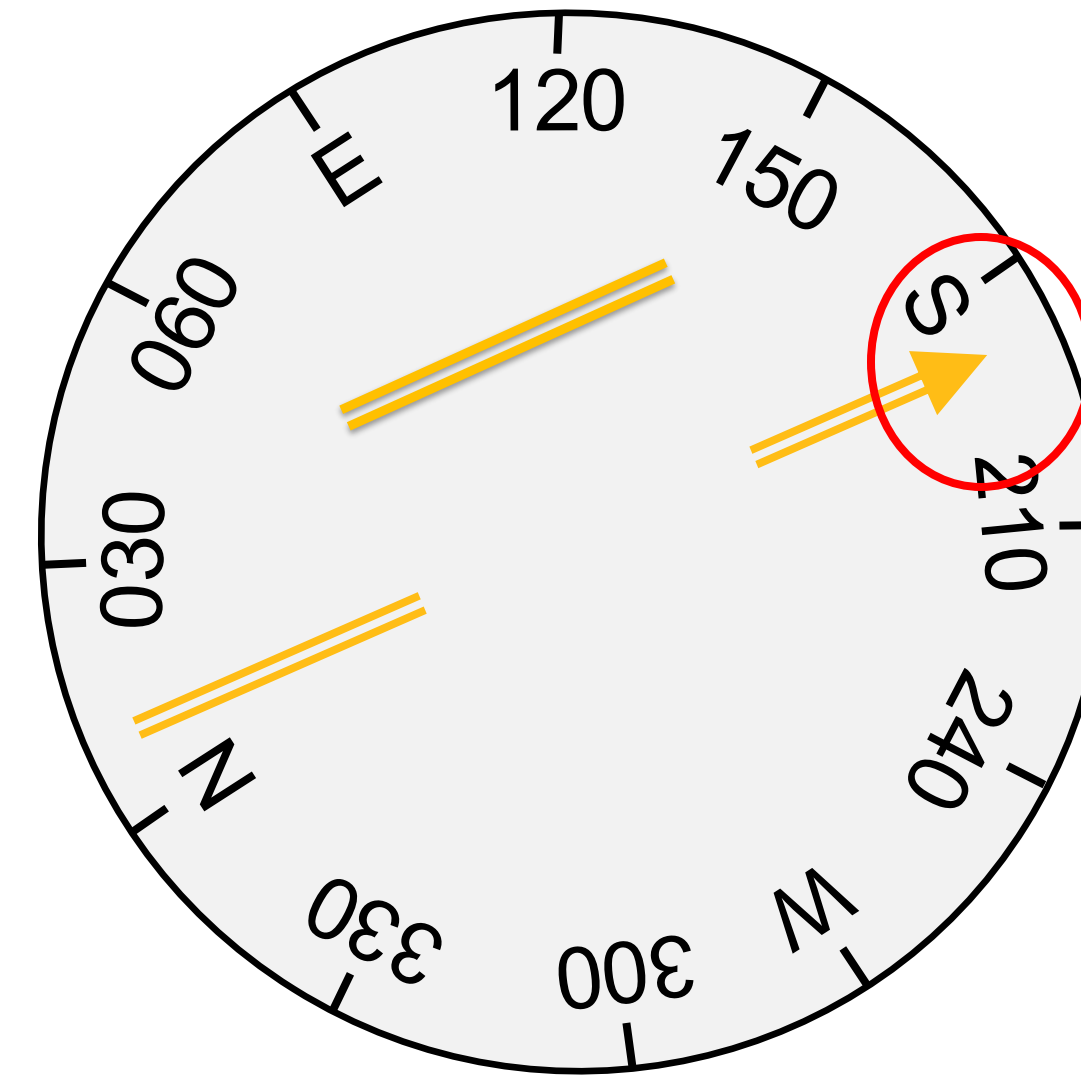
Point to intercept 8.0 / 330

Split the Heads

13.0 MI

260 RAD

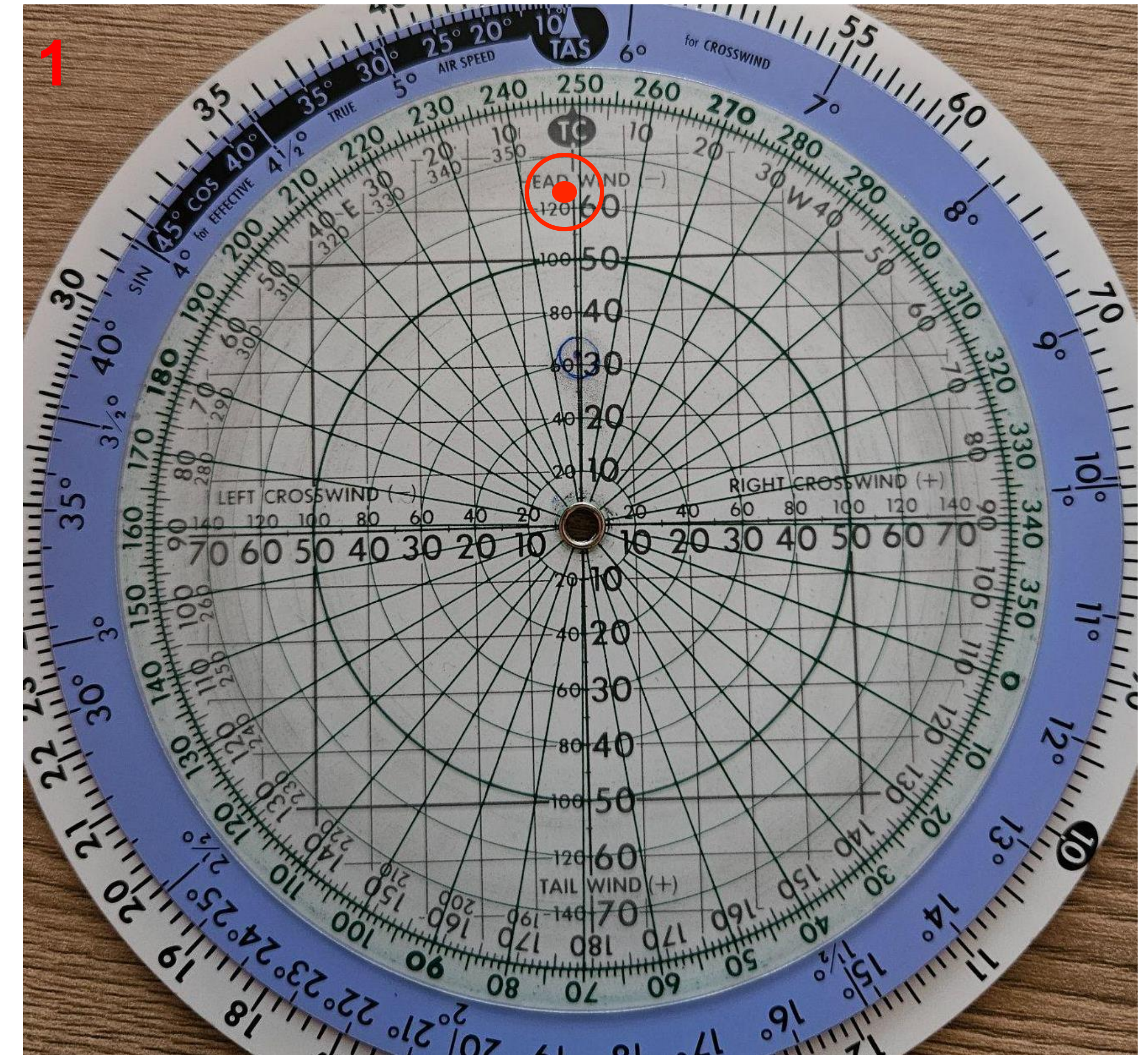
- On the RMI locate yourself on the tail of the double needle.
- On the HSI twist in the radial you are intercepting
- Split the heads. If not at the same distance, favor the needle that is furthest away.



Point to Point

Whiz Wheel Method

- Pass controls to your instructor- tell them heading, altitude, and airspeed
- Break out the whiz wheel and flip to winds side
- First plot where you want to go (as a target):
 - WABEN: CEW R-249 at 31 DME



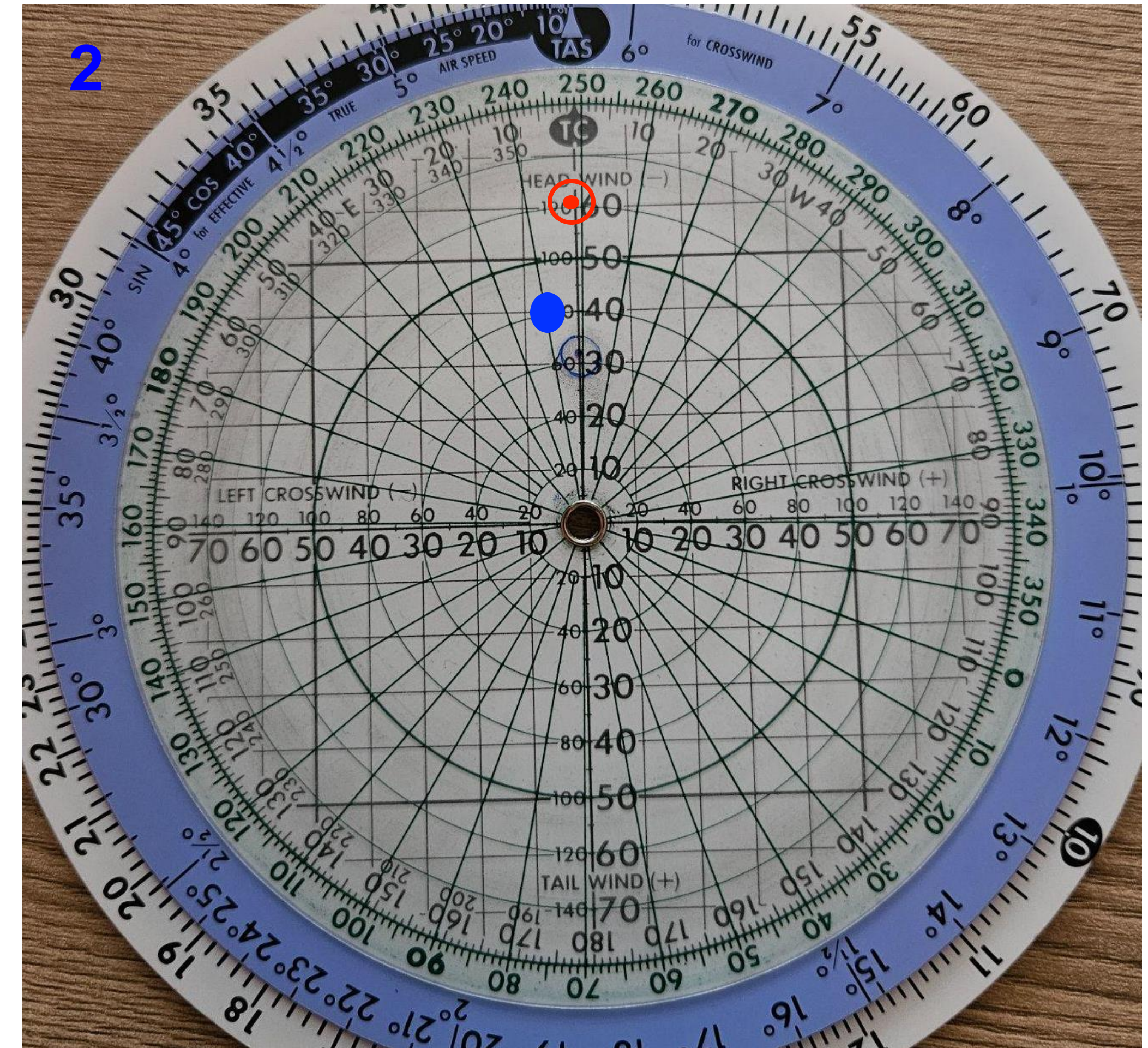
Point to Point

Whiz Wheel Method

20.0 MI

235 RAD

- Pass controls to your instructor- tell them heading, altitude, and airspeed
- Break out the whiz wheel and flip to winds side
- First plot where you want to go (as a target):
 - WABEN: CEW R-249 at 31 DME
- CEW should be tuned up for the departure.
- Plot where you currently are based on the digital readout (as a dot):
- CEW R-235 at 20 DME

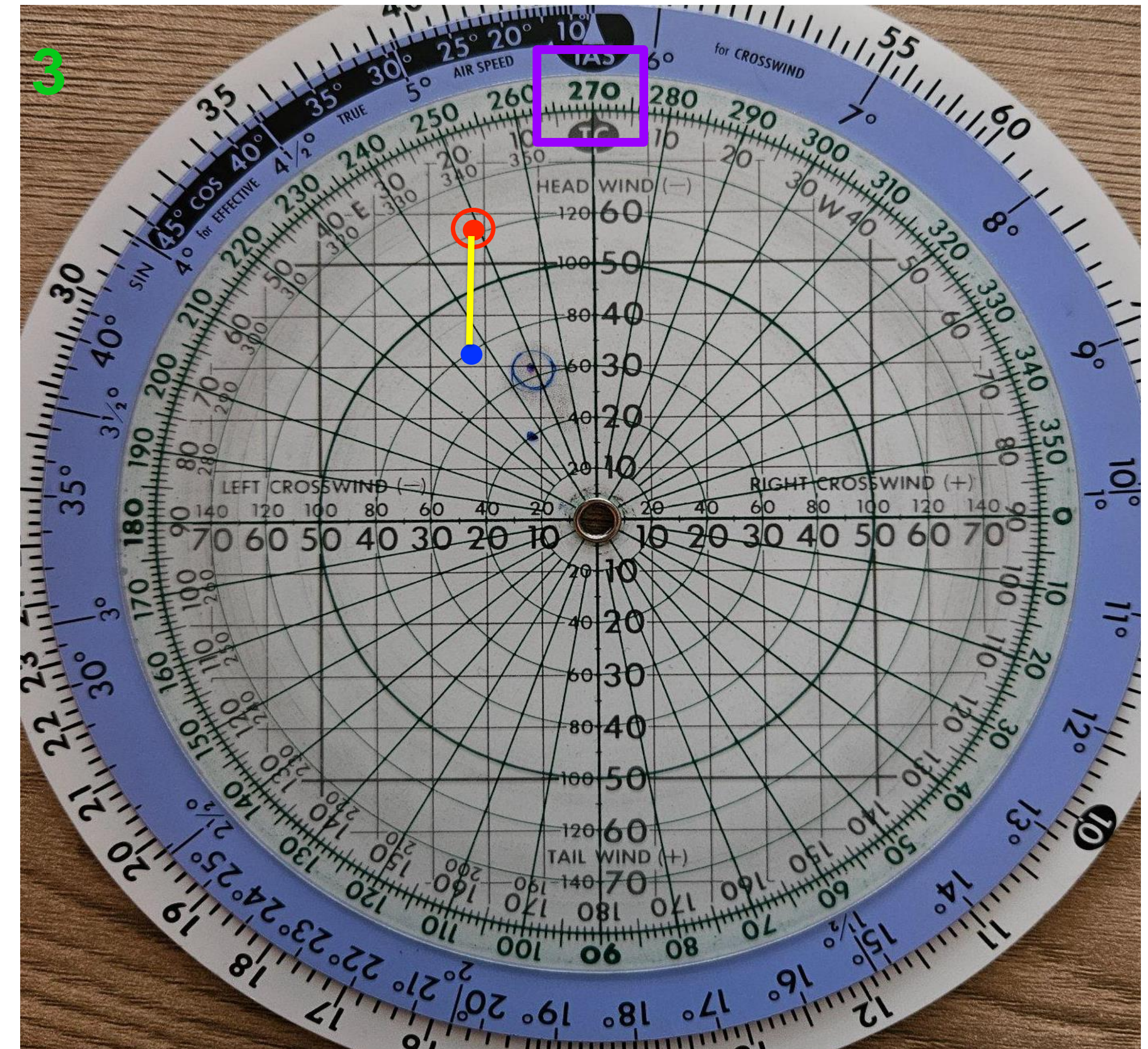


Point to Point

Whiz Wheel Method

- Pass controls to your instructor- tell them heading, altitude, and airspeed
- Break out the whiz wheel and flip to winds side
- First plot where you want to go (as a target):
 - WABEN: CEW R-249 at 31 DME
- CEW should be tuned up for the departure.
- Plot where you currently are based on the digital readout (as a dot):
 - CEW R-235 at 20 DME
- Make the lollipop → stack the target on top and dot on bottom
- Read the heading and fly it!

Note: this is not a wind corrected heading, but is very accurate when done correctly and quickly



How to Conduct an Approach

WRNTB

We Really Need To Brief

- Transfer the controls, give the IP a heading and altitude to fly. Look at instruments between steps to back up IPs BAW.
- **Weather**
 - Monitor ATIS if for some reason you are already with Approach “Request off freq for 3 mikes for ATIS” if it is a VHF freq, otherwise tune ATIS in Channel 1 UHF.
 - Confirm that the weather conditions are suitable for the approach and runway you are using.
- **Request**
 - If working the western op area, fly in the vicinity of Navie at 1200 ft MSL contact Pcola Approach on 118.6 “Pcola Approach Navy 7E131, vicinity Navie, 1200 ft with information X and request”.
 - If working the eastern op area, remain clear of C airspace, contact Pcola Approach on 124.85 “Pcola Approach, Navy 7E131 on the 240 radial, 20 DME off CEW Vortac, at xxxx ft with information x”.
- **NAVAID**
 - Execute TINTS (Tune, Identify, Needles, Twist, Select) or confirm RAIM functionality if using RNAV.

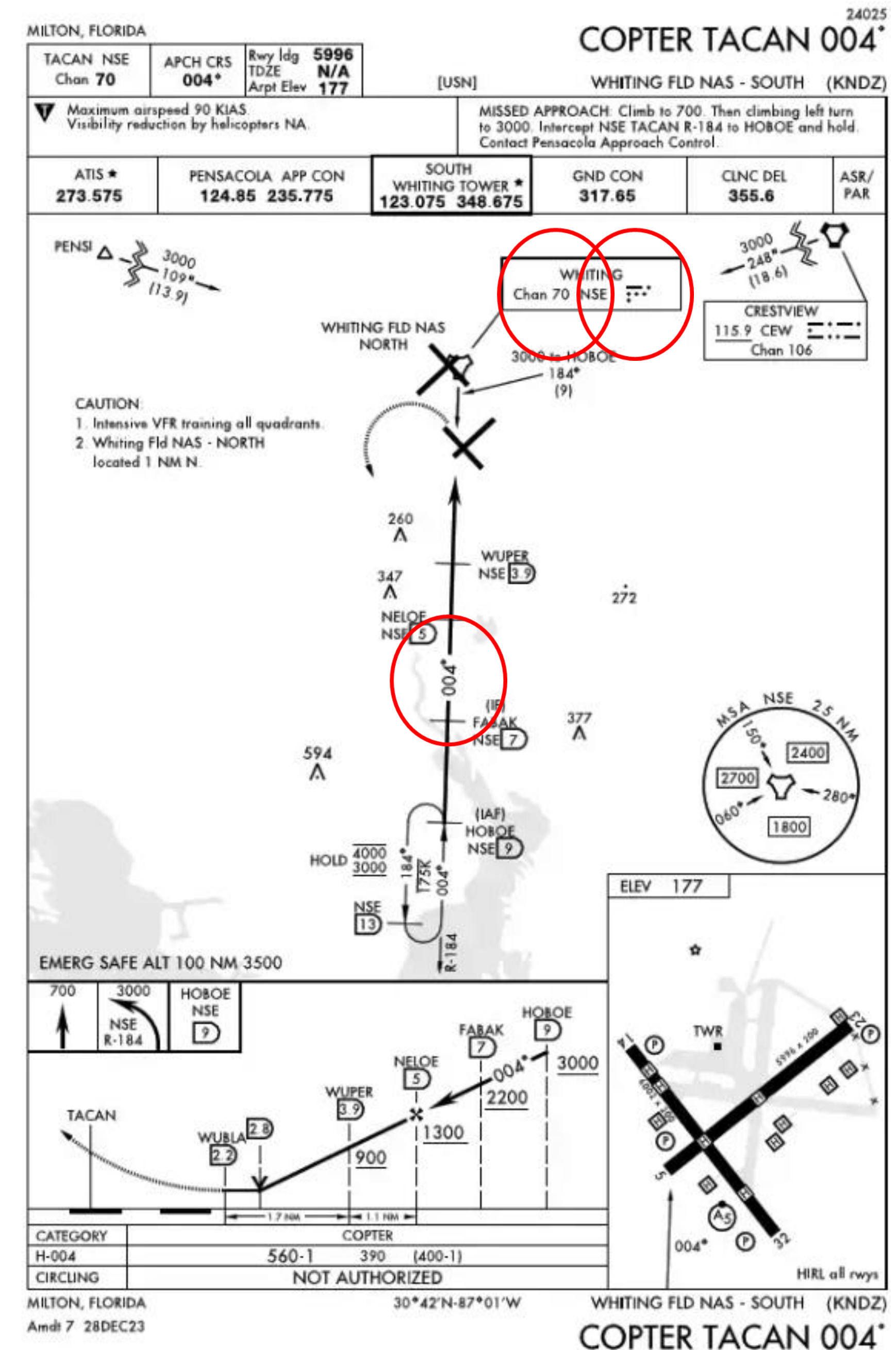
Nav aids – TINTS

Approach Setup

Nav aids

Copter Tacan 004

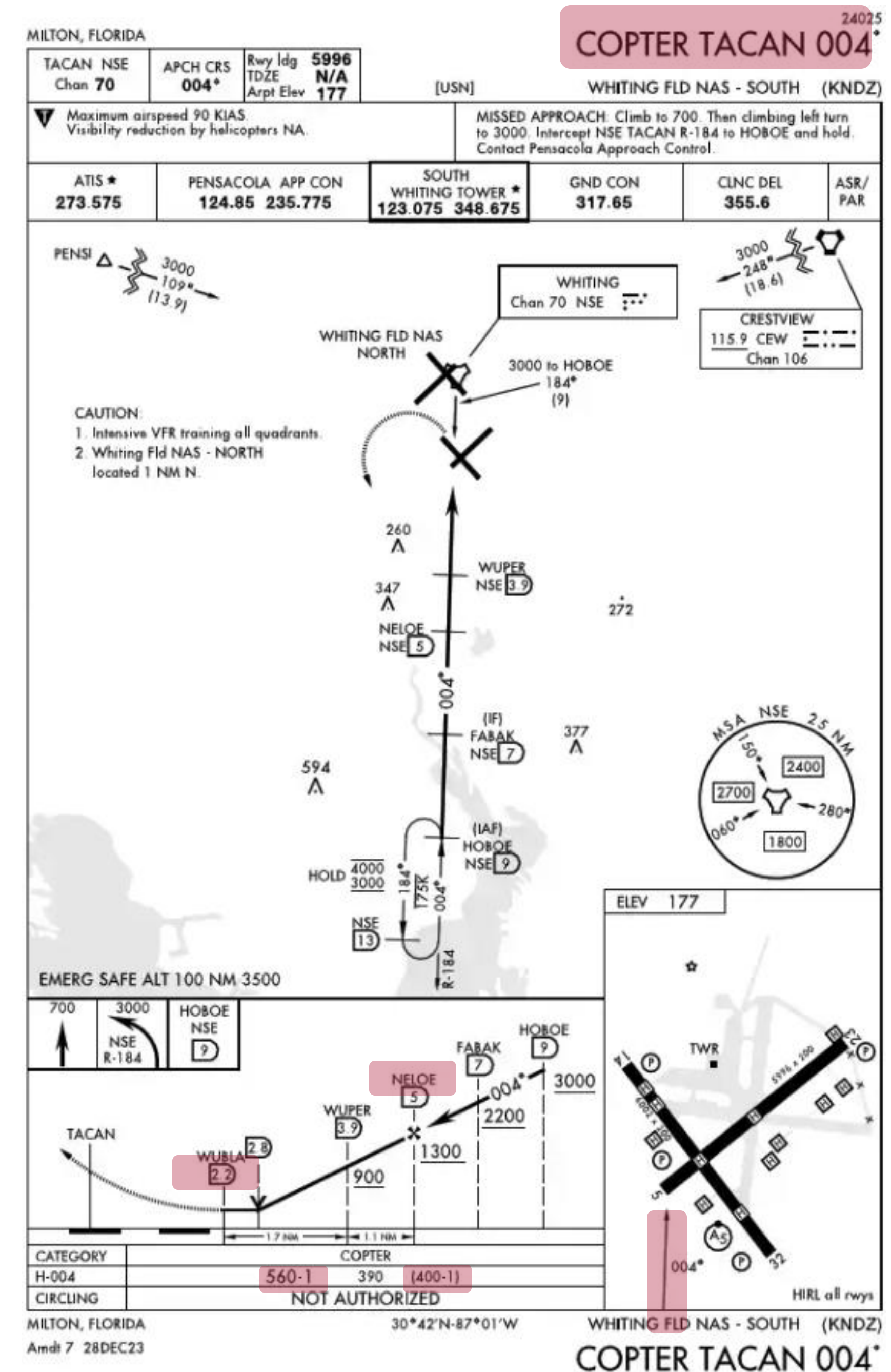
- Tune
- 70X
- ID
- Listen to the morse code.
- Needles - Nav
- Twist
- Inbound course in HSI, bug the next heading if required
- Select – Nav 2



WRNTB

We Really Need To Brief

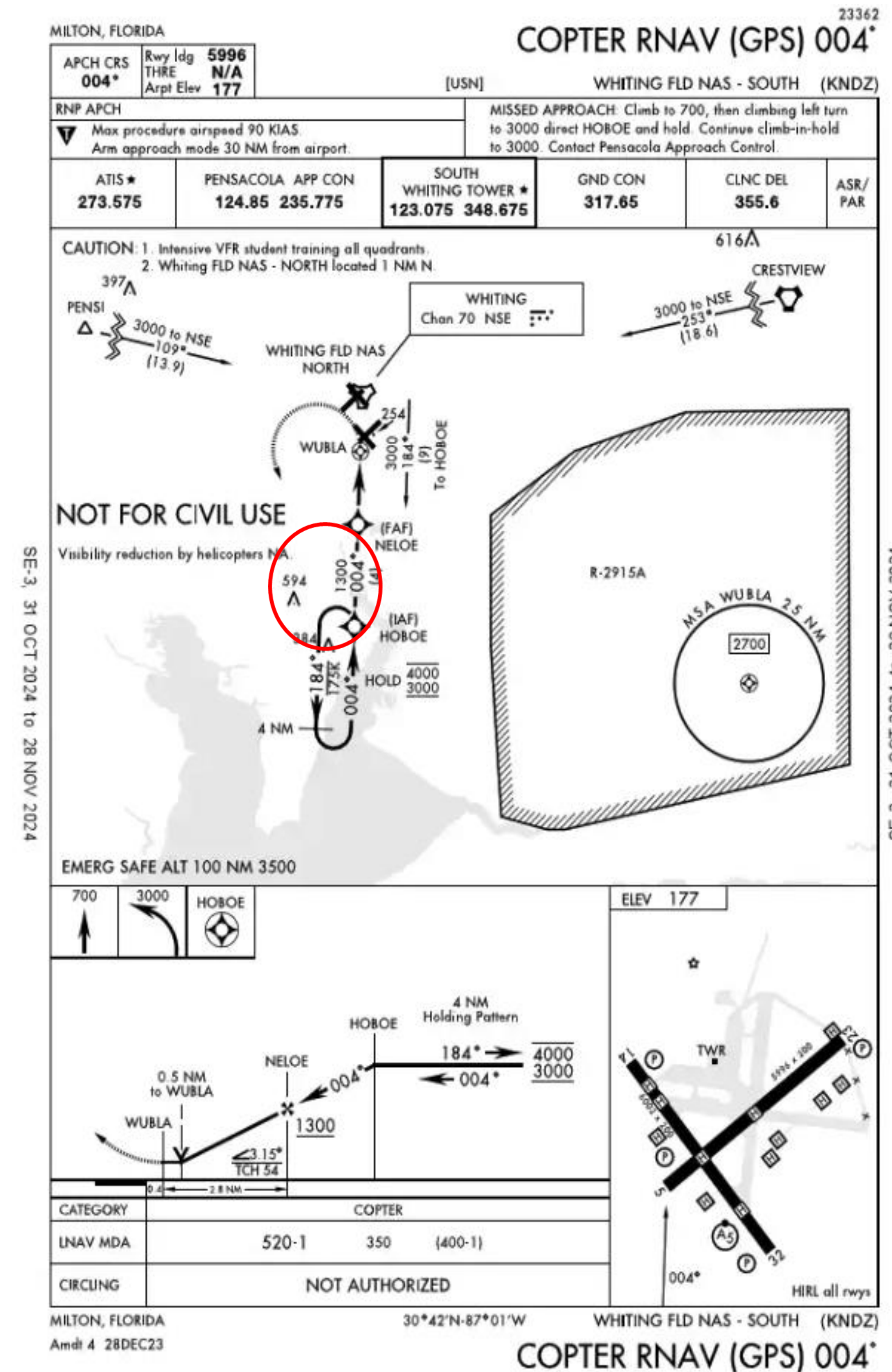
- Weather
- Request
- NAVAIDs
- Timing
 - Task (delegate) to the back seater or IP to spin the winds and pass the corrected timing for the approach. If applicable.
- Brief
 - Approach Name
 - Wx Mins (Do we have the wx to shoot the approach)
 - FAF and Timing
 - MDA/DH
 - MAP
 - Terminal Procedures to include Approach Lighting – how to maneuver a/c to land “After we terminate the approach, we will make a right turn to get into left traffic for Spot 1, there are PAPI on Rwy 5 and MALSR and PAPIs on Rwy 32 and HIRL on all runways”



Nav aids

Copter RNAV 004

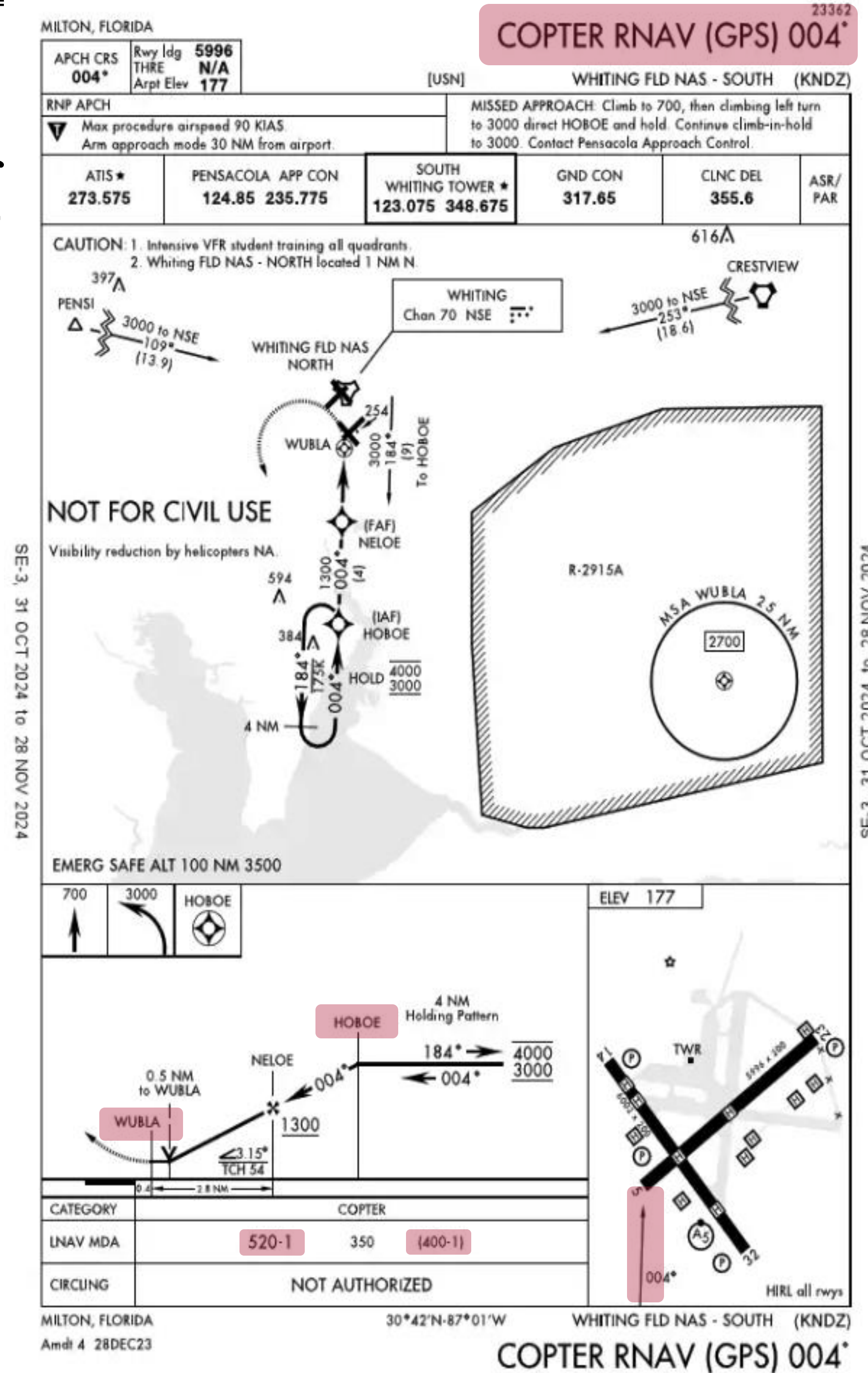
- Tune
- Multiple ways to load in GTN. Two easiest
 - IF you loaded a flight plan. Home – Flt Plan: KNDZ. Load procedure – Approach: GPS 004. Vectors: Hoboe for IAF. Preview: activate approach.
 - No flight plan. Home – Procedures – Approach – Airport: KNDZ. Approach: GPS 004. Vectors: Hoboe for IAF. Preview: activate approach.
- ID
- Needles - Nav
- Twist
- Inbound course in HSI, bug the next heading if required
- Select – Nav 1



WRNTB

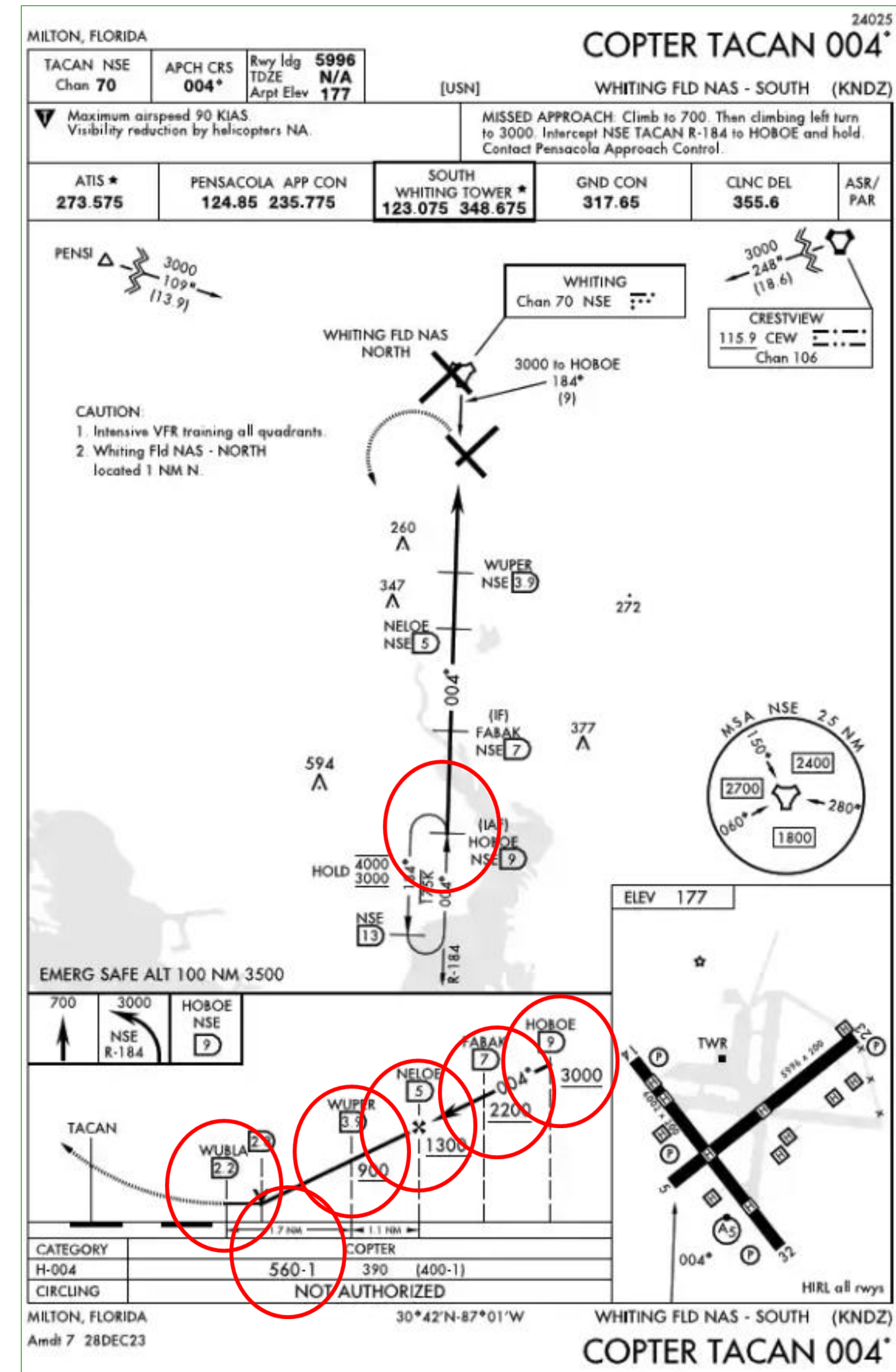
We Really Need To Brief

- Weather
- Request
- NAVAIDs
- **Timing**
 - Task (delegate) to the back seater or IP to spin the winds and pass the corrected timing for the approach. If applicable (no timing with RNAVs).
- **Brief**
 - Approach Name
 - Wx Mins (Do we have the wx to shoot the approach)
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 - Terminal Procedures to include Approach Lighting – how to maneuver a/c to land “After we terminate the approach, we will make a right turn to get into left traffic for Spot 1, there are PAPI on Rwy 5 and MALSR and PAPIs on Rwy 32. and HIRL on all runways”



Fly It!

- FTI says 6Ts at IAF and FAF, but it is a good technique to execute 6T's at every fix or when something changes
 - When in doubt, 6T it out
- Put your approach plate away and use your IP for CRM
- 6Ts
 - Time (Task IP to note if required)
 - Turn (if required)
 - Time (Task IP to start clock at VOR FAF)
 - Transition (slow down, go down & landing checks)
 - You will need a good 700-800' descent to reach stepdowns on the Copter Tacan and Copter Rnav 004, just don't break stepdown altitudes.
 - “Sir/Ma'am what is my next stepdown and DME”
- Twist (Task IP to twist new course if needed)
- Talk (Task IP to swith freq and comm source when switched from Approach to Tower) “South Tower, N7E131 established on the Copter Tacan 004”



Tips

- Stay ahead of your aircraft, think about what is happening next, but don't get too far ahead.
- Cleared for the Approach or switched to Final Controller (PAR/ASR): RWOP says you can complete Landing checks and slow to 90 kias. Get this done.
- Task your IP to call you 100' prior on all headings, 10 deg prior to rollouts and anything else you would like that is more than what is covered in the instrument portion of the crew brief.
- Practice your terminal directions for all the runways directions and landing spots. i.e. Copter Tacan 004, landing Rwy 14, going to Spot 3.

Radio Calls

- “South Clearance, Navy 7E131, NDZ 203/206, 3 Souls”. Be ready to write down your clearance. (pre-printed kneeboard or paper)
- Clearance “Navy 7E131 cleared for the Waben/Bawdi Departure, climb to 1700, expect 2200 five min after, Departure Freq 124.85, Squawk 0302”. You will read this back.
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- “South Tower, Navy 7E131 holding short Spot 1 Waben/Bawdi departure request ITO.”
- Tower “Navy 7E131 cleared to take off Spot 1, ITO approved” or “Hold for separation”
- KNDZ Tower: “Navy7E131 switch Pensacola Departure 124.85”
- Navy 7E131: “Pensacola Departure, Navy 7E131 off South Whiting, leaving 1100 to 1700 or level 1700 on the Waben Departure off South Whiting or level 900 on the Bawdi Departure”.
- Pensacola Departure: “Navy 7E131 radar contact, continue your climb to 2200 on WABEN departure”
- At Waben “Navy 7E131 Waben clear to the west or clear to the east”. Squawk 4777 in the western working area and 4677 in the eastern working area.