



The Art of IFR: Instrument Flight



This clinic reviews the requisite IFR skills, procedures and situational awareness needed to successfully complete a challenging cross country flight in IMC. Two knowledge-based breakout sessions support a demanding flight simulation scenario that requires sound PIC decision making. Instrument rated pilots only.

Trainees will arrive at this breakout session at different points within the clinic schedule. Those who fly the scenario after participating in the breakout sessions will have the benefit of that current and relevant knowledge for the simulation mission. Some clinic trainees will start with the flight simulation component and can use the subsequent knowledge sessions as a vehicle for further understanding of their actions flying the scenario.

No matter the order of the sessions the aim of the clinic syllabus is to deliver a correlative experience with the knowledge breakouts supporting the flight simulation.



Keynote

Deconstructing Instrument Flight

The Practical Test Standards for the instrument instructor state "... the applicant shall select either the primary and supporting or the control and performance method of teaching..." But the fact of the matter is that the good instrument pilot uses both techniques at different phases of instrument flight, either individually or in various combinations thereof. This presentation will discuss both techniques and how, when and why we use them. Presenter: Doug Stewart

Breakout Sessions

Situational Awareness

What does it mean to be situationally aware and how can we improve our this critical skill set? We'll take at the numbers, weather risks, tools and variety of things to consider on an IFR flight. Presenter: Doug Stewart

Choosing & Briefing the Approach

As pilot in command (PIC) you are ultimately responsible for the instrument approach you fly. And flying that approach is more than just briefing the numbers on the approach plate. We'll look at the skillful way to brief an approach considering ceilings, visibility, winds, the runway environment and more. Presenter: Jason Archer

Debrief

A post-clinic group discussion that will tie together the keynote, breakout sessions and flight simulation scenarios. Presenters: Doug Stewart & Jason Archer



Scenario

Pilot in Command®



You're headed from Redding to Arcata, California for a business meeting. Leaving KRDD it's VFR, but the TAFs are calling for LIFR all along the Northern California coast. So you'll need to be on your game for the arrival. Your Cessna 172 is full of fuel and you're the only one on board. It's just you and your briefcase. Meet your CFI at the sim and arrive prepared. Remember, this mission is a scenario. The instructor will be there for you, but as a mentor, not a teacher. You've got all the information you need for this trip and everything is your call. Good luck. Today, you are Pilot in Command.

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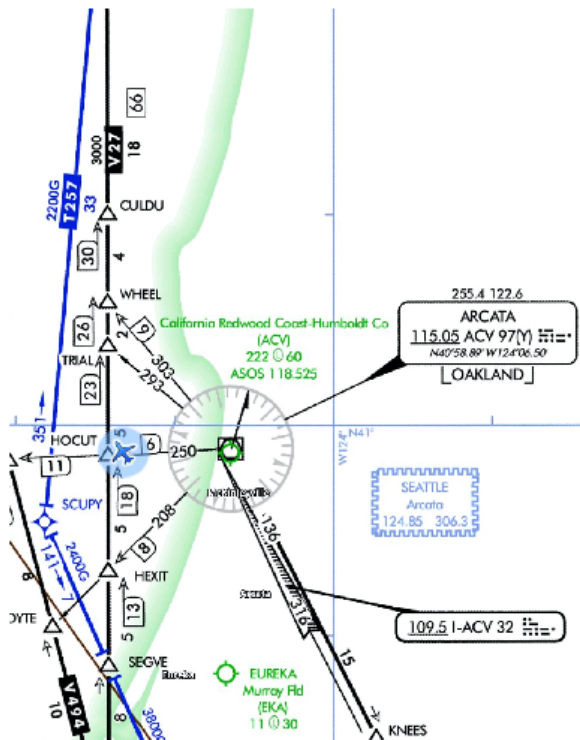
Situation: A - Rwy 14

Date/Time: September 12th, 2017 1256 PDT 1956 Zulu

Location: Five (5) miles W of KACV at 5,000' HDG 310°

ATIS: KACV 121956Z 3/4SM 15006 OVC003 24/24 A2992 XPDR: 3456

Clearance and Present Position: Five (5) miles west of KACV at 5,000' HDG 310°



Cleared: KACV

Route: KENDL4.KENDL > TO-MAD > V195 > FOT > V494 > SEVLY > Direct

Altitude: 10,000'

Frequency: 124.85 Seattle Center

Transponder: 3456

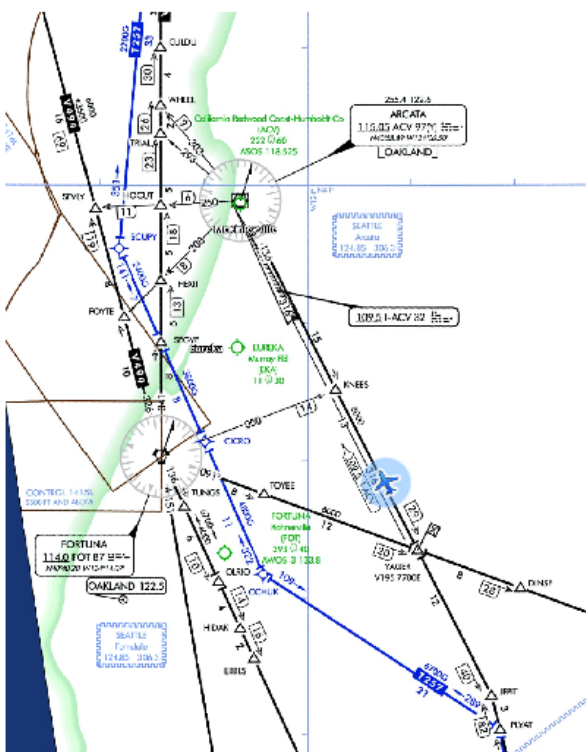
Brief, set up and then contact Seattle Center to request your approach into KACV.

Situation: B - Rwy 32

Date/Time: September 12th, 2017 1256 PDT 1956 Zulu

Location: Four (4) miles SE of VOMAC at 6,000' Direct VOMAC

ATIS: KACV 121956Z 3/4SM 15006 OVC003 24/24 A2992 XPDR: 3456



Original Clearance & Present Position: Four (4) miles southeast of VOMAC at 6,000' . Cleared Direct VOMAC.

Cleared: KACV

Route: KENDL4.KENDL > TO-MAD > V195 > FOT > V494 > SEVLY > Direct

Altitude: 10,000'

Frequency: 124.85 Seattle Center
Transponder: 3456

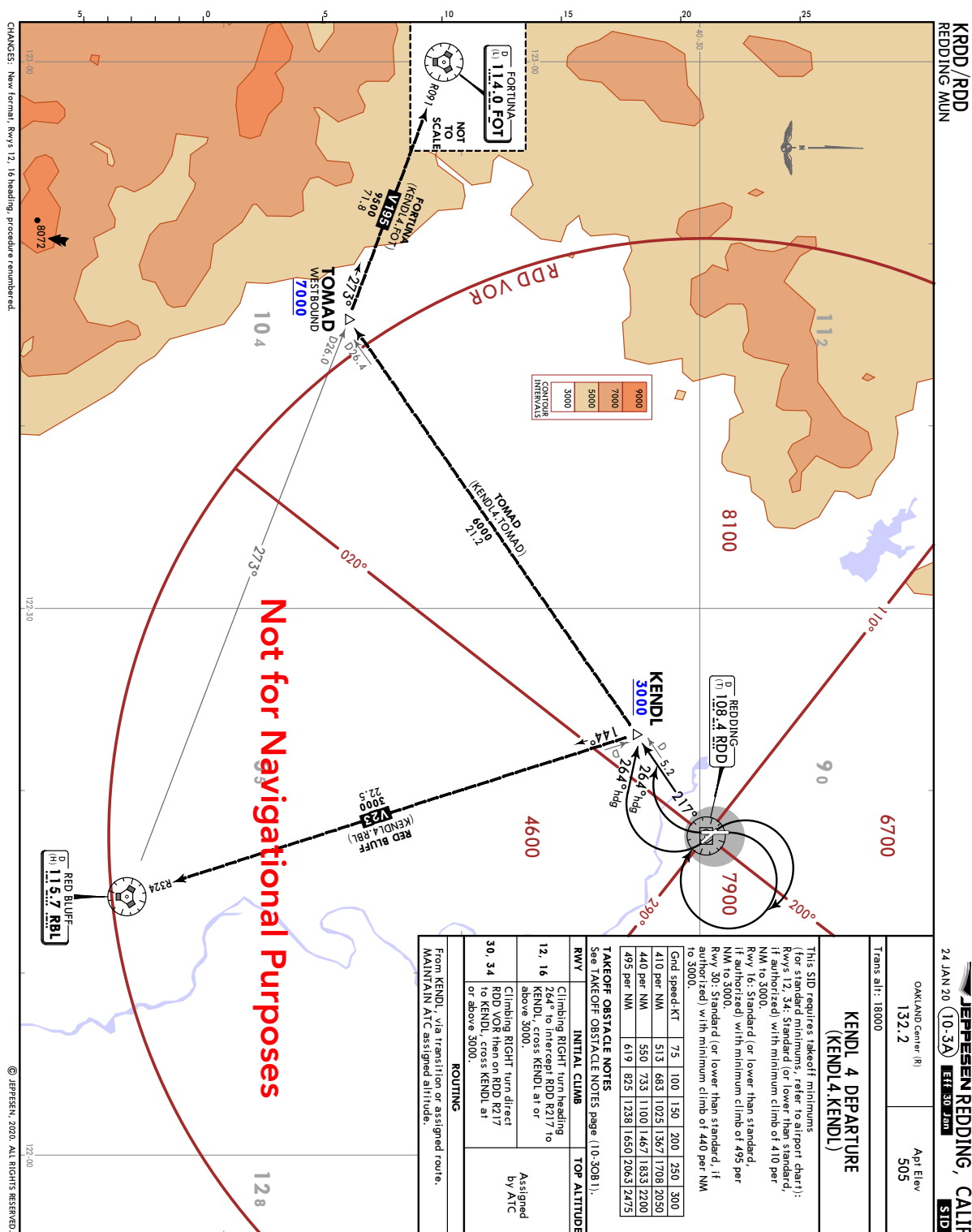
Brief, set up and then contact Seattle Center to request your approach into KACV.



Control Performance Reference Table
Redbird Flight Simulations AATD - Cessna 172

Analog Panel					
Phase	Power	Pitch	Speed (KIAS)	Flaps	CLB / DES
VY	Full	15° UP	75	Clean	800 fpm ↑
Cruise Climb	Full	7.5° UP	85	Clean	500 fpm ↑
Cruise	2400 rpm	Level	105	Clean	-
Holding / Initial App	2100 rpm	2.5° UP	90	Clean	-
Non-Precession App	1600 rpm	5° DWN	90	Clean	800 fpm ↓
Precision App	1950 rpm	2.5° DWN	85	10°	500 fpm ↓
G1000 Panel					
Phase	Power	Pitch	Speed (KIAS)	Flaps	CLB / DES
VY	Full	10° UP	75	Clean	800 fpm ↑
Cruise Climb	Full	5° UP	90	Clean	600 fpm ↑
Cruise	2400 rpm	1 Bar Up	105	Clean	-
Holding / Initial App	2150 rpm	2° UP	90	Clean	-
Non-Precession App	1600 rpm	3° DWN	90	Clean	800 fpm ↓
Precision App	1900 rpm	1 Bar DWN	85	10°	500 fpm ↓

Doug Stewart 2017

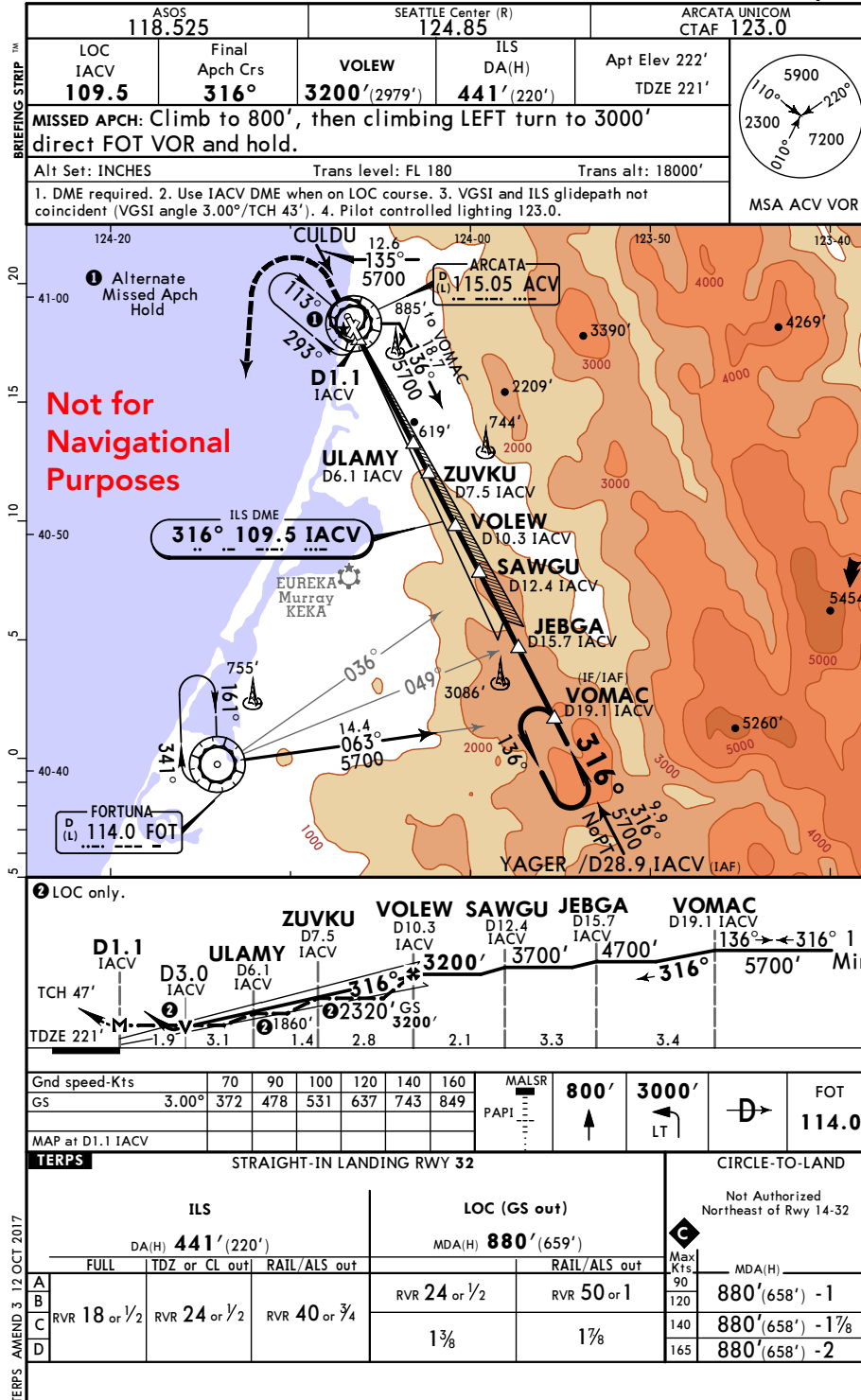




KACV/ACV
CALIFORNIA REDWOOD
COAST-HUMBOLDT CO

JEPPesen
17 SEP 21 (11-1)

ARCATA/EUREKA, CALIF
ILS or LOC Rwy 32

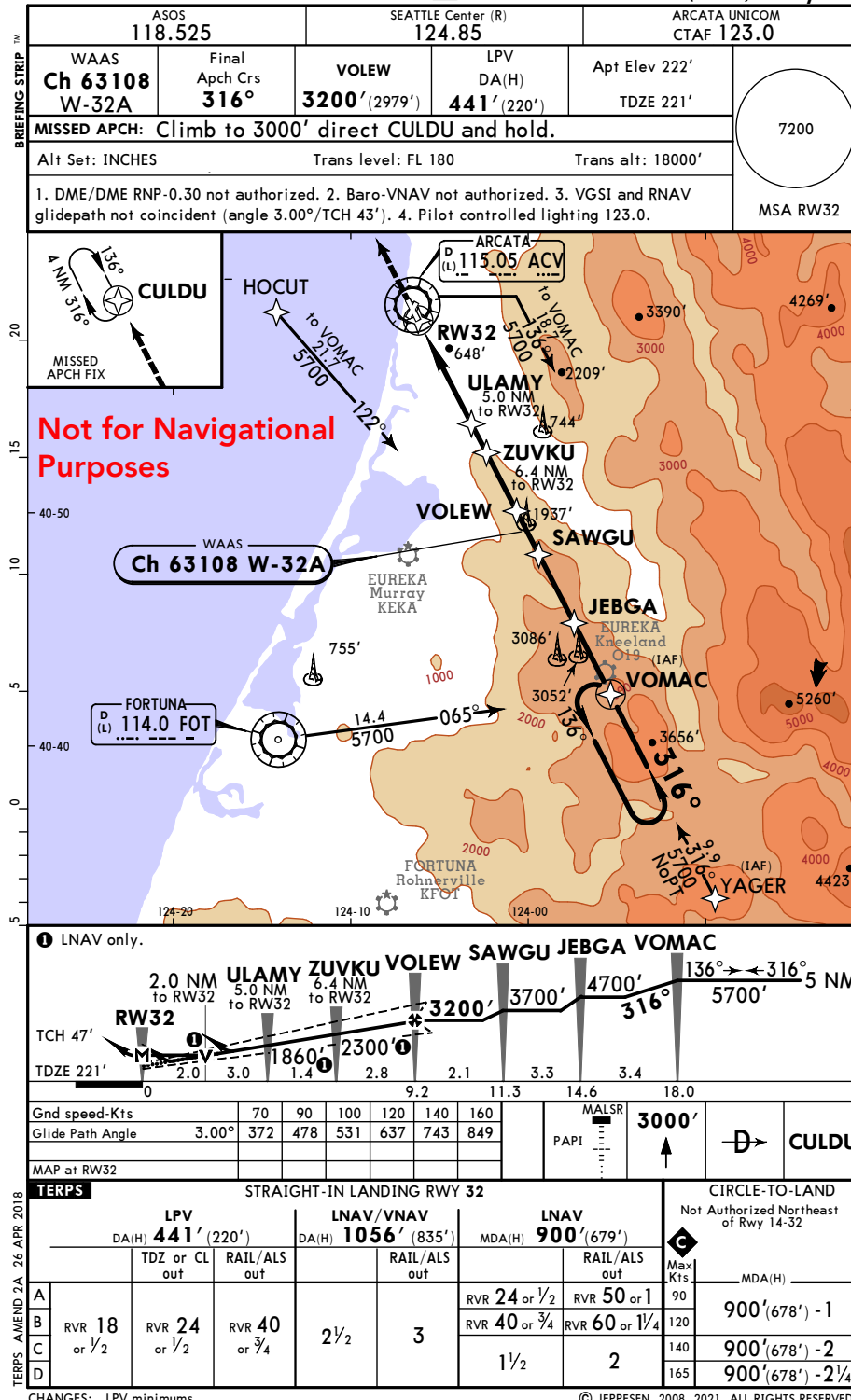




KACV/ACV
CALIFORNIA REDWOOD
COAST-HUMBOLDT CO

JEPPESEN
17 SEP 21 (12-3)

ARCATA/EUREKA, CALIF
RNAV (GPS) Rwy 32

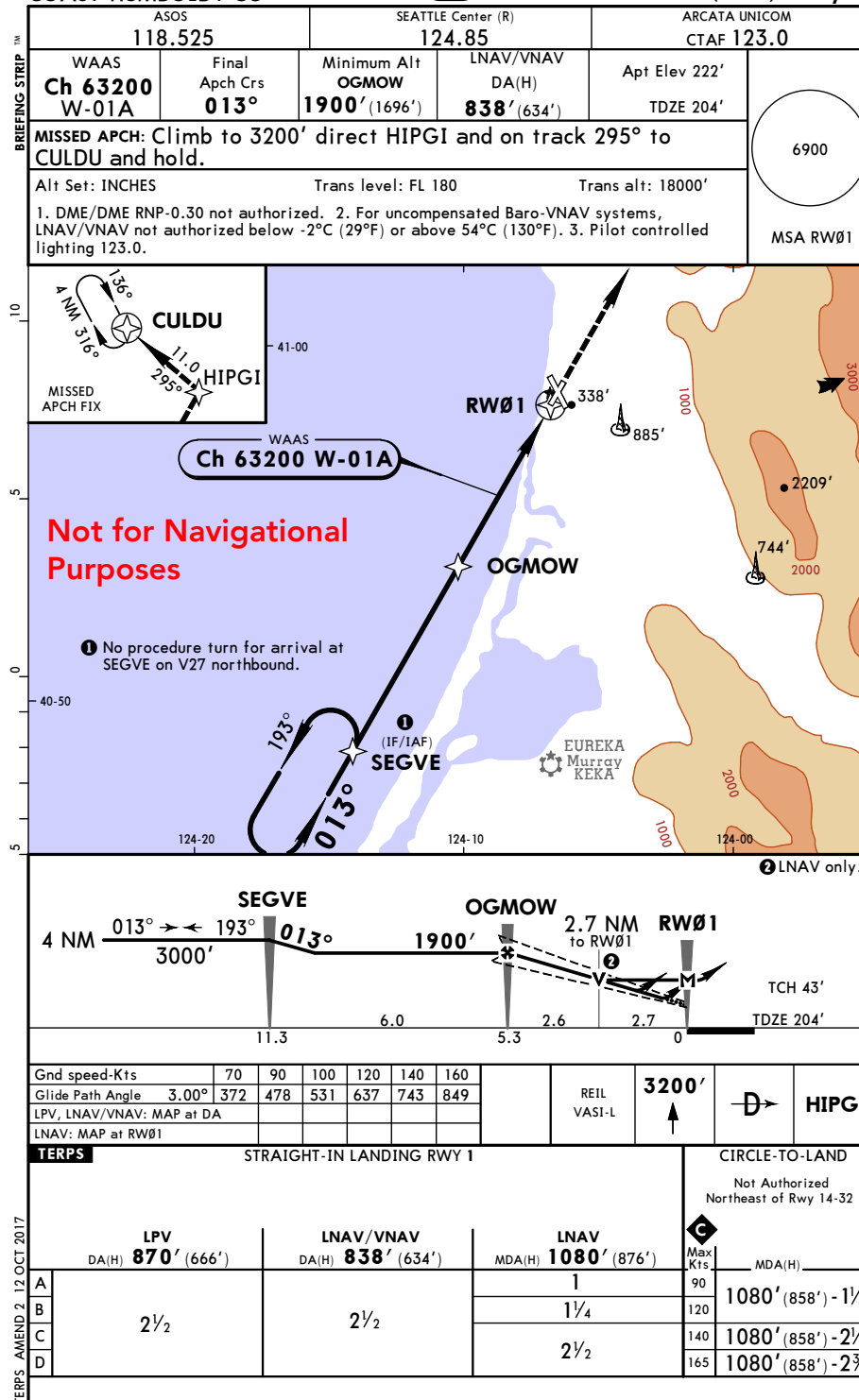




KACV/ACV
CALIFORNIA REDWOOD
COAST-HUMBOLDT CO

27 JUL 18 (12-1)

ARCATA/EUREKA, CALIF
RNAV (GPS) Rwy 1

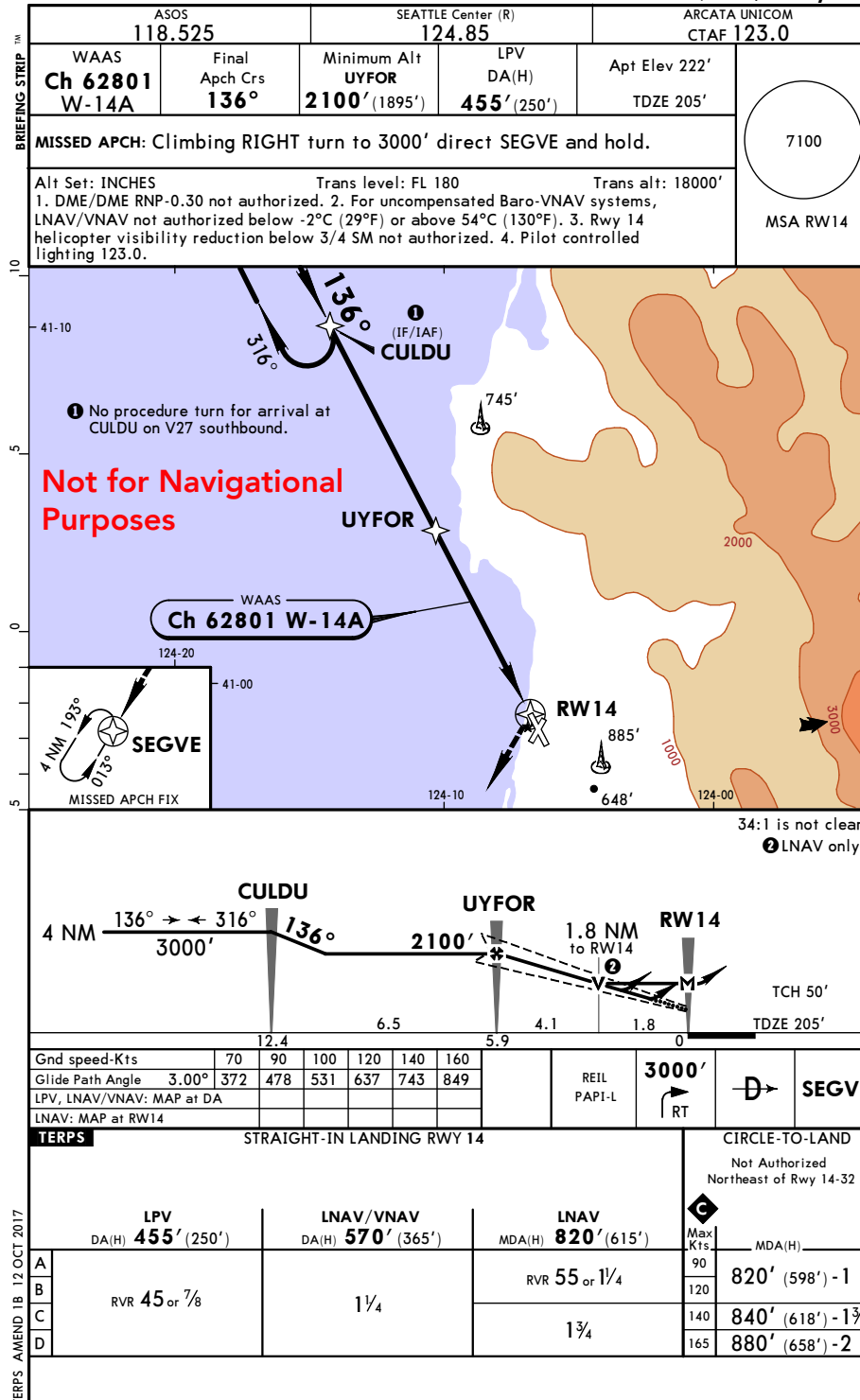




KACV/ACV
CALIFORNIA REDWOOD
COAST-HUMBOLDT CO

JEPPesen
27 JUL 18 (12-2)

ARCATA/EUREKA, CALIF
RNAV (GPS) Rwy 14





KACV/ACV

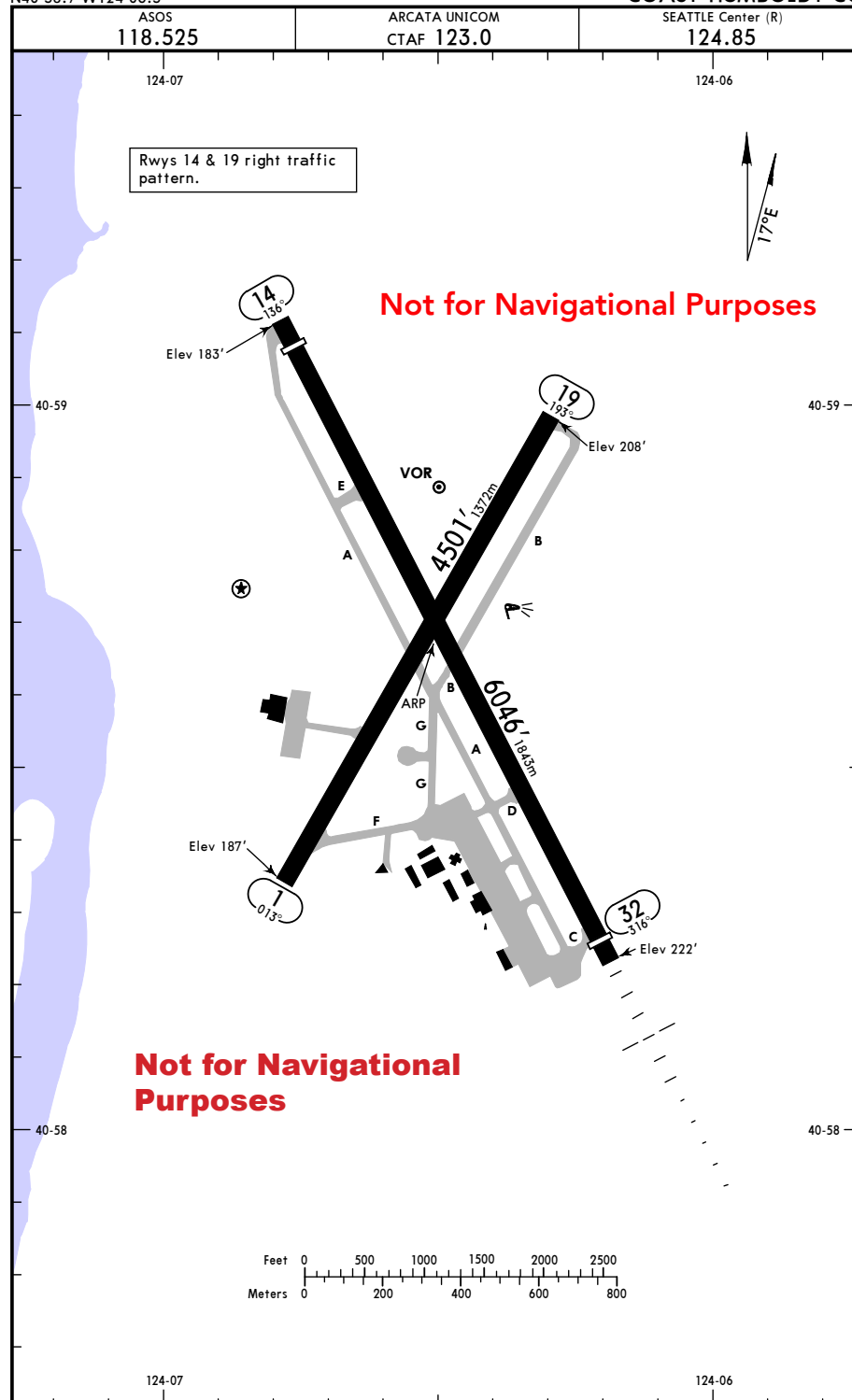
Apt Elev **222'**
N40 58.7 W124 06.5



23 JUL 21 (10-9)

ARCATA/EUREKA, CALIF

CALIFORNIA REDWOOD
COAST-HUMBOLDT CO



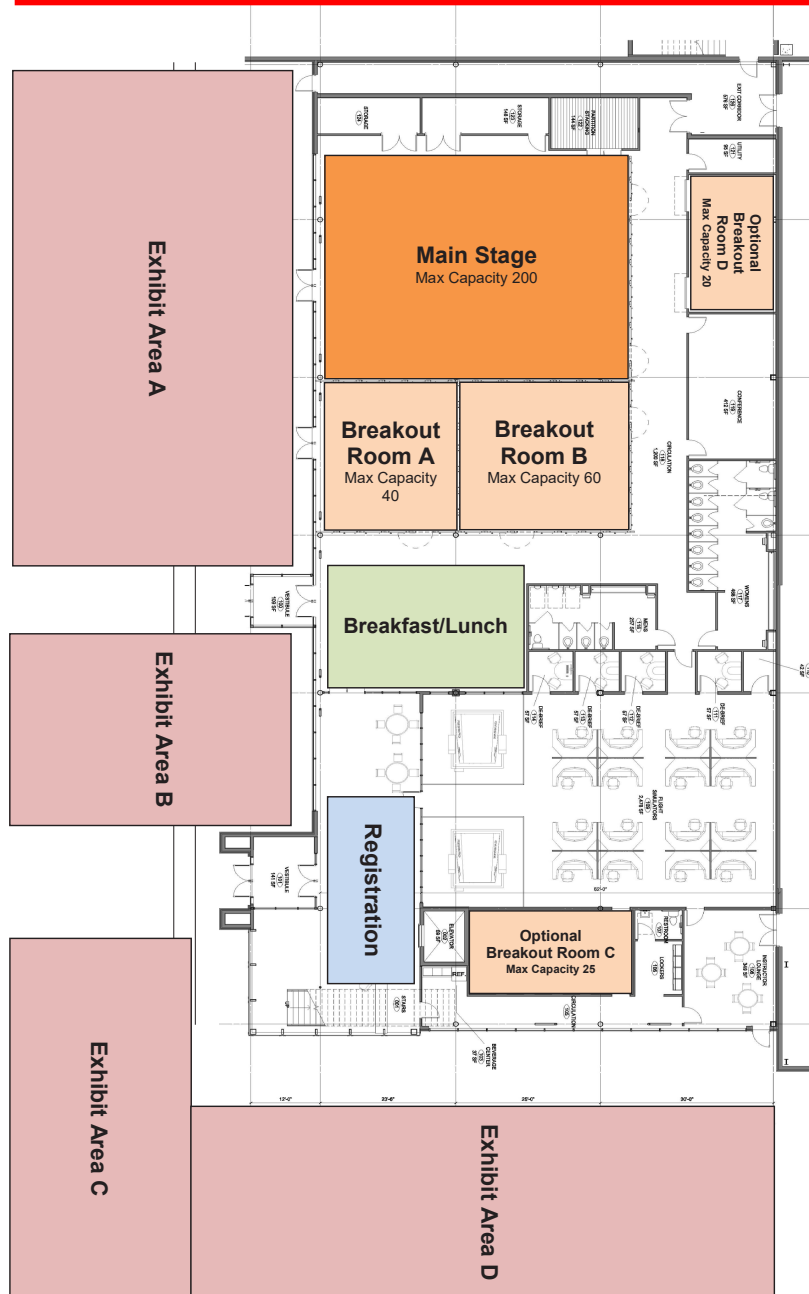
CHANGES: Windcones updated.

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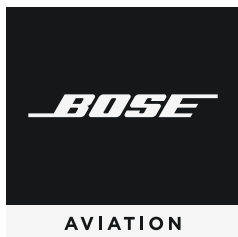
PPC Map

Notional PPC AV22 Layout

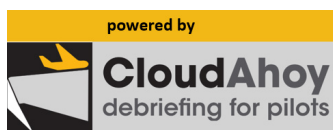




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Supported by:





Notes