

“C2A” – COPA To AirVenture 2018



KJVL

Janesville, Wisconsin

Weekend Agenda

Friday 20th:

1000 - Leads Arrive

1100 - Lead Brief

1200 - Lead Practice Sortie

1400 - Wings Arrive

1500 - Vic Practice Flights

1700 - Vans to hotel

Saturday 21st:

0730 - Depart Hotel

0800 - Vic Practice Flights

1030 - Brief Mass Arrival Plan

1100 - Walk Thru Rehearsal

1200 - C2A Rehearsal Flight

1330 - Lunch

1430 - *Rehearsal #2 if Req'd*

1730 - Dinner

Sunday 22nd:

0500 - Vans to airport

0545 - Update Brief

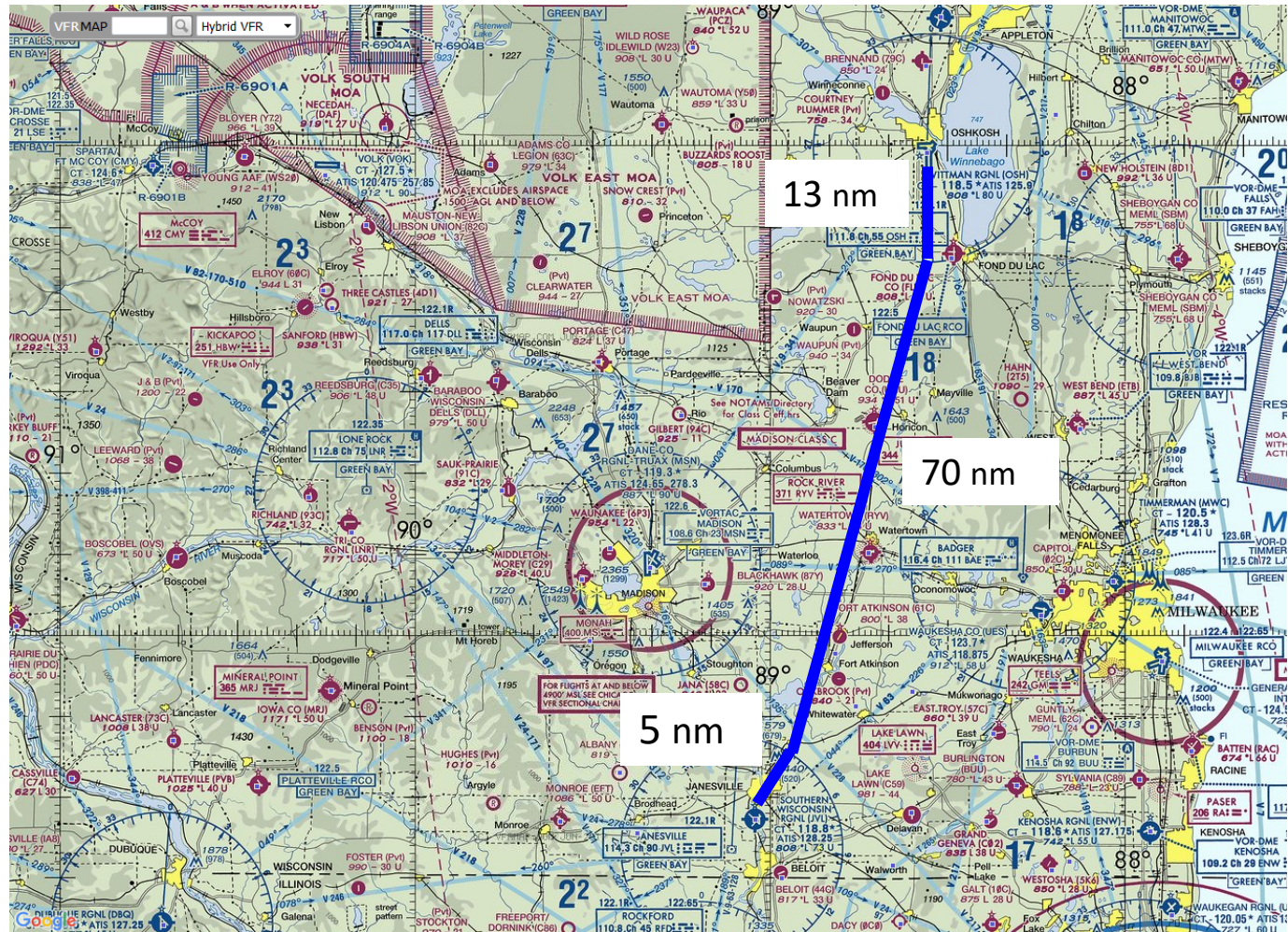
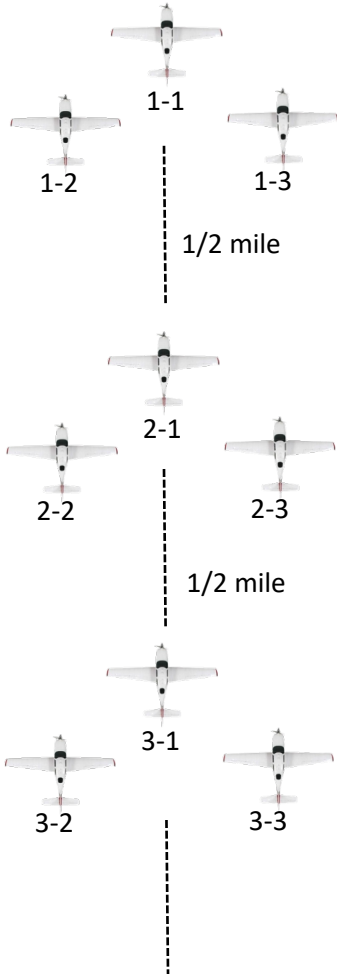
0620 - Engine Start

0645 - Take Off

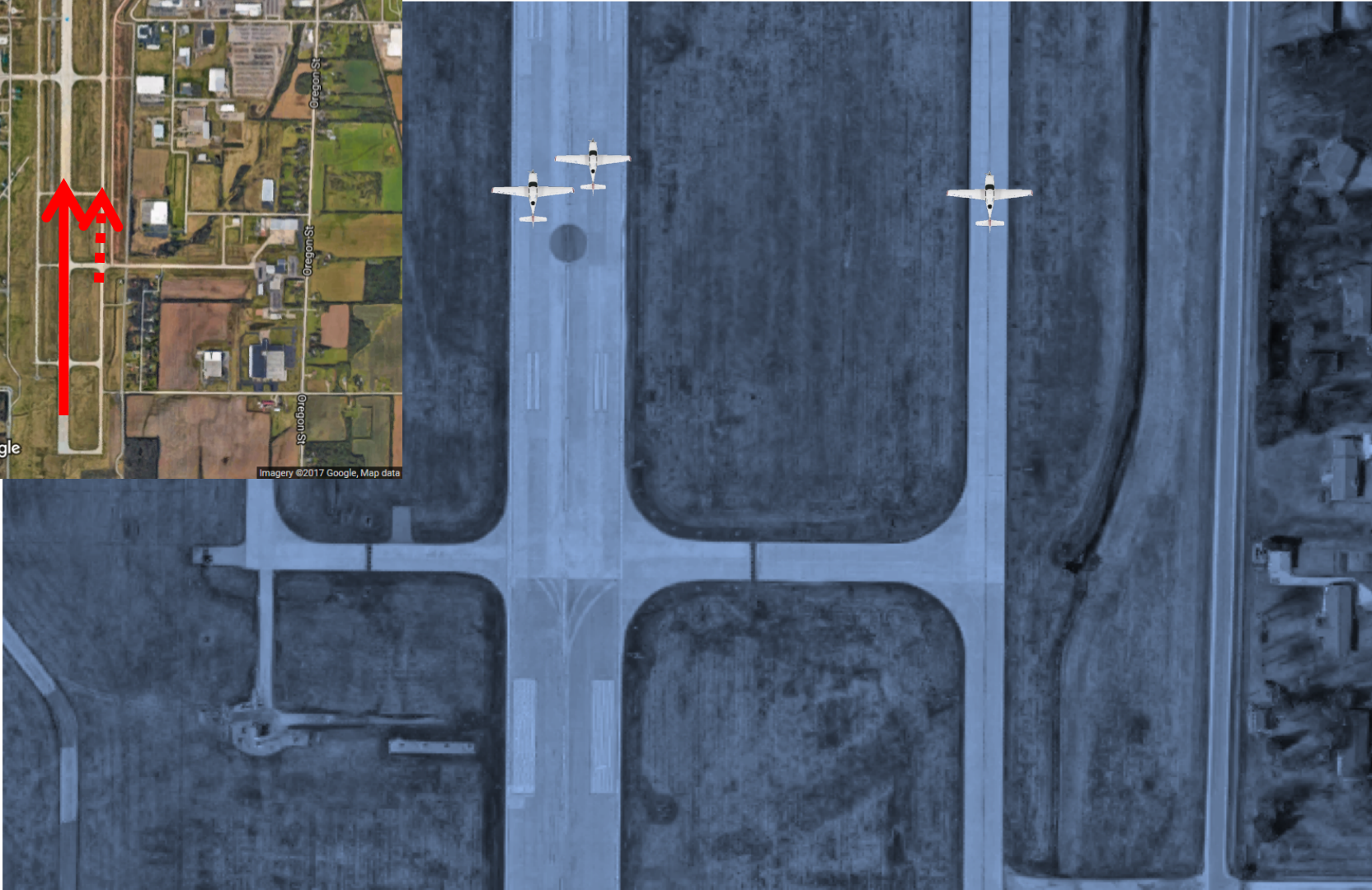
0730 - Arrive at OSH



Flight to KOSH ~40 minutes



Landing RWY 36 KOSH



Flight Assignments

Vic	Lead #1	Wing #2	Wing #3
1			
2			
3			
4			
5			
6			
7			
8			

Taxi out, Spontaneous Run-up Once in position
Trail: "Run-up Complete"
Lead: "Flight, Does anyone need more time?"
- Reply ONLY if you need more time



**RWY Line-Up, 150' spacing
10 sec Interval Departures
*Run-up when 2 Vics ahead of you
runs up (look for tail shake)***



Flight Data

- Flaps Up: 1,300' MSL (>80KIAS)
 - “Vic 1, Flaps up” (shorter than we normally call, need min talking on TAC)
 - “Vic 2, Flaps up” etc...
- Climb Out: 110 KIAS, 600 FPM
- Climb: 2,500' MSL (stack 10' above VIC ahead)
- Trail call “Sausage” when linked up with flight
- Cruise: 115 KIAS
- 1/2 mile separation between VICs
- Lead Calls approach flaps for entire flight
 - “COPA Flight, flaps 50 in 3,2,1..” 100 KIAS
 - “COPA Flight, flaps full in 3,2,1..” 90 KIAS
- Approach: 90 KIAS



Landing 36L and 36R

C2A Flight Card

Comm Plan

1	Pri Internal	123.25
2	Alt Internal	123.57
3	JVL ATIS	128.25
4	JVL Gnd	121.65
5	JVL Twr	118.8
6	OSH Twr	126.6
7	ALT OSH Twr	118.5
8	OSH ATIS	125.9
9	OSH GND	132.3

Timeline

0500	Vans to Airport
0545	Update (Wx Call)
0620	Engine Start
0640	Run up complete
0645	Take Off
0730	Arrive KOSH
0800	Taxi to Camping
Debrief : 30 min after shutdown	

Reference Speeds (KIAS)

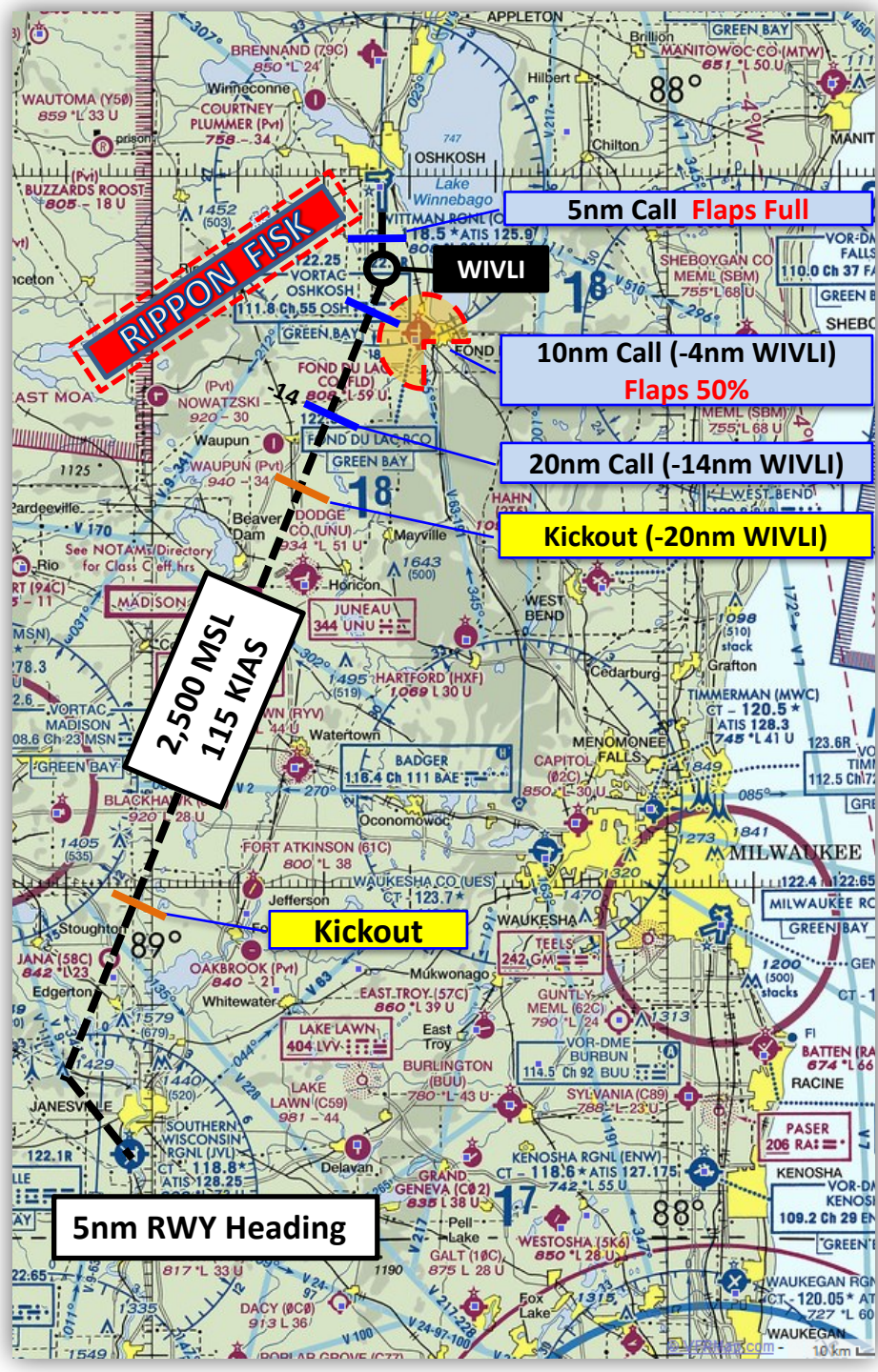
Vr	75	50% Flaps	100
Climb	110	Final (100% Flaps)	90
Cruise	115	T/O Interval	10 sec

Power

Run-up	#1:	#2,3:
T/O Pwr	#1:	As Req'd

ATIS:

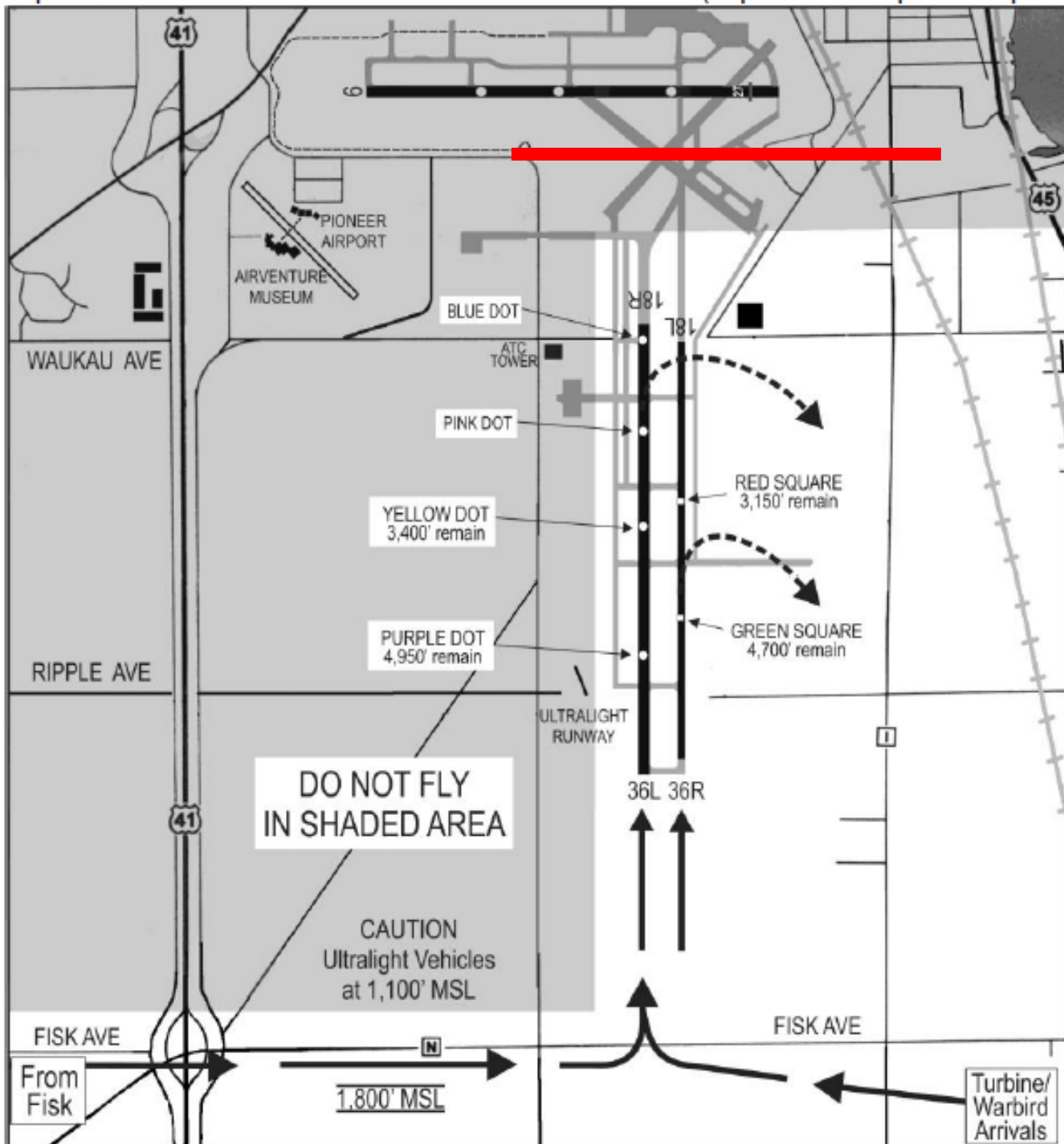
COPA Tail calls [5nm](#) and [Clear of Rwy](#) on tower Freq.



RWY 36L/R Procedures (most likely)

- 3 ship formation with 2 ships landing on RWY 36L and 1 ship landing on RWY 36R (36R is normally a taxiway)
- Cirrus Lead will position the formation for a South straight-in arrival for RWY 36, announcing position at 20NM, 10NM and 5NM.
- All aircraft will do an expedited rollout to the end of the runway and then follow EAA flagman instructions.
- If a Go-Around is required, the affected aircraft must turn right to remain south of the intersection of Runway 13/31 and Runway 5/23. The affected pilot will announce “(call sign) **on the go**” on Tower frequency and depart the pattern on a right downwind and join with Cirrus Tail.





**DO NOT FLY
IN SHADED AREA**

CAUTION
Ultralight Vehicles
at 1,100' MSL

1,800' MSL

Turbine/
Warbird
Arrivals

NOT FOR NAVIGATION

Short Final and After Landing

- COPA Tail: Call “COPA Tail 5nm Final” on 126.6
- COPA Tail: Call “COPA Tail clear of RWY” 126.6
- Follow Flagman instructions to camping
- Shutdown individually upon arrival parking
- Debrief at Lead’s ACFT (N478SE) shutdown plus 30 min (bathroom breaks etc)

Camping!

Sunday 22

0730-0830: Parking in North 40
0900-0930: Formation Flight Debrief
1000-1100: Register for camping & set up
1100-1700: Go to the show!
1700-2000: Cirrus Party (Celebrity Way)



Monday 23

0700-0900: C2A Coffee & snacks
1800-2000: COPA Dinner (HGI Hotel)

Tuesday 24

0700-0900 C2A Coffee
1730-1930: C2A BBQ

Wednesday 25

0700-0900 C2A Coffee
2000-2200: Night Air show



COPA TO AIRVENTURE
FORMATION FLIGHT

C2A Reminders

- Headnod for 'brakes off' is fast
 - #3 may not be able to see, just watch wheels
- Brakes off...Lead waits 2 sec b/f adding power
 - Gives #3 and #2 time to adjust if T/O pwr is off
- Flaps Up Call for JVL Departure Truncated
 - “Vic 4, Flaps up” (execute immediately)
- Respond *by exception only* for Ops Check
 - Lead will ask, only respond if you have a problem
- Shutdown: As soon as you get to parking (on own)

Contingencies

&

Alternate Landing other
than 36

Contingencies

In General

- **Accept that they will happen, best to be prepared!**
- **Communicate precisely and quickly on Internal frequency:**
 - “Lead, 2-2 has issue...troubleshooting.” “Lead copies.”
 - In ~1 minute, give lead update, how much more time you need / issue resolved etc
 - Lead will determine if delay is acceptable or give guidance/final determination
 - “2-1, 2-3 breaking off formation and RTB KJVL for minor maintenance, no escort req’d”
- **We only have 1 Internal frequency. Primary us if for emergencies.**
 - Only use the freq for essential comms.
- **Know how to fly/land in each position - you may have to!**

“Slow is smooth...smooth is fast!”



COPA TO AIRVENTURE
FORMATION FLIGHT

Contingencies

Start to Line Up

- **Maintenance Problem:**
 - Announce to lead with brief detail of problem
 - ~1 min, follow up with lead. Lead makes final decision (flight delay, RTB, FISKE)
 - If you believe you know the solution to the problem, do not jump in on the frequency to give advice! Advise Flight Lead, “Lead, 3-3 has a solution”. Lead may invite you to provide information.
- **Most likely time for reconfiguring elements:**
 - Lose 1 acft in Vic: become a 2 ship element
 - Lose 2 acft in Vic:
 - Choice A = lone acft goes to trail to trail element
 - Choice B = stay single ship (Lead will dictate)
- **Mx problem resolved just in time to rejoin flight prior to take off:**
 - Moved to trail, form 2 or 3 ship element
- **Maintenance issue taxiing or on runway after line up:**
 - Quickly move acft out of the way if able
 - If you have to perform an immediate shutdown, announce to lead, contact FBO for tug



Contingencies

Departure to Link Up

- **Do not to lose the element in front of you!**
 - If you do – announce on Internal: “Vic 6 lost visual on Vic 5”
- **If you do go “Blind” announce it:**
 - “3-2 is blind”
 - If you regain visual, announce it: “3-2 has visual on 3-1, *3-1 rock wings to confirm.*”



Contingencies

Flight to OSH

- **Ops check *abnormal*: announce to lead (by exception only)**
- **Aircraft incident/accident: (CAPS pull, touch wings, etc):**
 - Announce
 - If able, exit flight at 45 degree angle and descend 200' until clear
 - Trail assists with any/all emergencies (if it's trail, closest wing will assist)
 - Rest of the flight keep going
- **If you think you have an issue – ask for a kickout.**
- **Lost comms = stay in flight. If lead, relinquish lead to wingman with hand signals. Reform VIC as required.**



Contingencies

Flight to OSH

- **You become a single aircraft:**
 - Announce to Lead
 - Choice A = moved to trail and join
 - Choice B = stay in place as a single ship
- **Overtaking VIC/Element in front of you while en route:**
 - Announce
 - Maneuver element to right side of formation
 - Slowly adjust spacing
 - Avoid rapid changes
 - Rejoin flight in original spacing after Vic behind you clears “2-1, 3-1 has you visual clear to rejoin formation”
 - If unable to rejoin in position, move to trail (this may happen if everyone closes too quickly)
- **Spacing adjustments:**
 - Very slow (< 3kt adjustments)



Contingencies

Landing at OSH

- **Go around for any reason:**
 - Announce go around on OSH Tower freq – use your tail number
 - “N478SE on the go” 126.6
 - Accelerate to 100kts, positive climb, Lead call flaps, *then* execute turn
 - Follow NOTAM procedures
 - Fall in trail, trail aircraft will help identify his position as required (comms or visual wing rock)
 - If you are #3 and already took spacing for 36R (short final) and in position for single ship landing with no spacing issues, you may continue.
- **Deceleration below 80kts required for spacing on short final:**
 - Element go around!
- **You land short, or brake hard by accident:**
 - Exit to sod
- **Aircraft in front of you looks to be landing short or not rolling out:**
 - Go Around!



Most Likely Contingencies

1. Maintenance Problem during run-up or taxi
2. You are not flying the position you thought you would
3. Deceleration below 80kts required for spacing on short final
4. You lose the element in front of you (Blind)

Avoid the Slinky Effect...

“Slow is Smooth, Smooth is Fast!”



COPA TO AIRVENTURE
FORMATION FLIGHT

Runway change from 36 to any other while enroute

We will not reform in flight. Stay in 3 ship Vics and have #3 execute a go-around and land single ship.

If we are assigned Rwy 27/18 on the phone BEFORE departing JVL, we will reform on the ground into 2 ship elements



COPA TO AIRVENTURE
FORMATION FLIGHT

RWY 18R Procedures (2nd preference)

- 2 ship elements in groups of 12.
- Cirrus Lead will position the formation for a North straight-in arrival for 18R, announcing position at 20NM, 10NM and 5NM.
- All aircraft landing on 18R must land on or beyond the Blue Dot
- Maintain 1,500' MSL until past RWY 9/27.
- Aircraft landing on the right side of 18R will exit on the right on Taxiway P5. Aircraft landing on the left side of 18R will exit to the left on Taxiway A5.
- If a go around is required, the affected pilot will announce “(call sign) **on the go**” on Tower frequency, turn left at the departure end of 18R, depart the pattern on a left downwind and join with COPA Tail.



Rwy 27 Procedures (rarely assigned)

- 2 ship elements in groups of 12. Each group will be separated by 1NM.
- Cirrus Lead will position the formation for a East straight-in arrival for Rwy 27, announcing position at 20NM, 10NM and 5NM.
- All aircraft landing on Rwy 27 must land on or beyond the Orange Dot.
- Aircraft landing on the right side of Rwy 27 will exit on the right. Aircraft landing on the left side of Rwy 27 will exit to the left.
- If a go around is required, the affected pilot will announce “(call sign) **on the go**”, turn right, depart the pattern on a right downwind and join with COPA Tail.

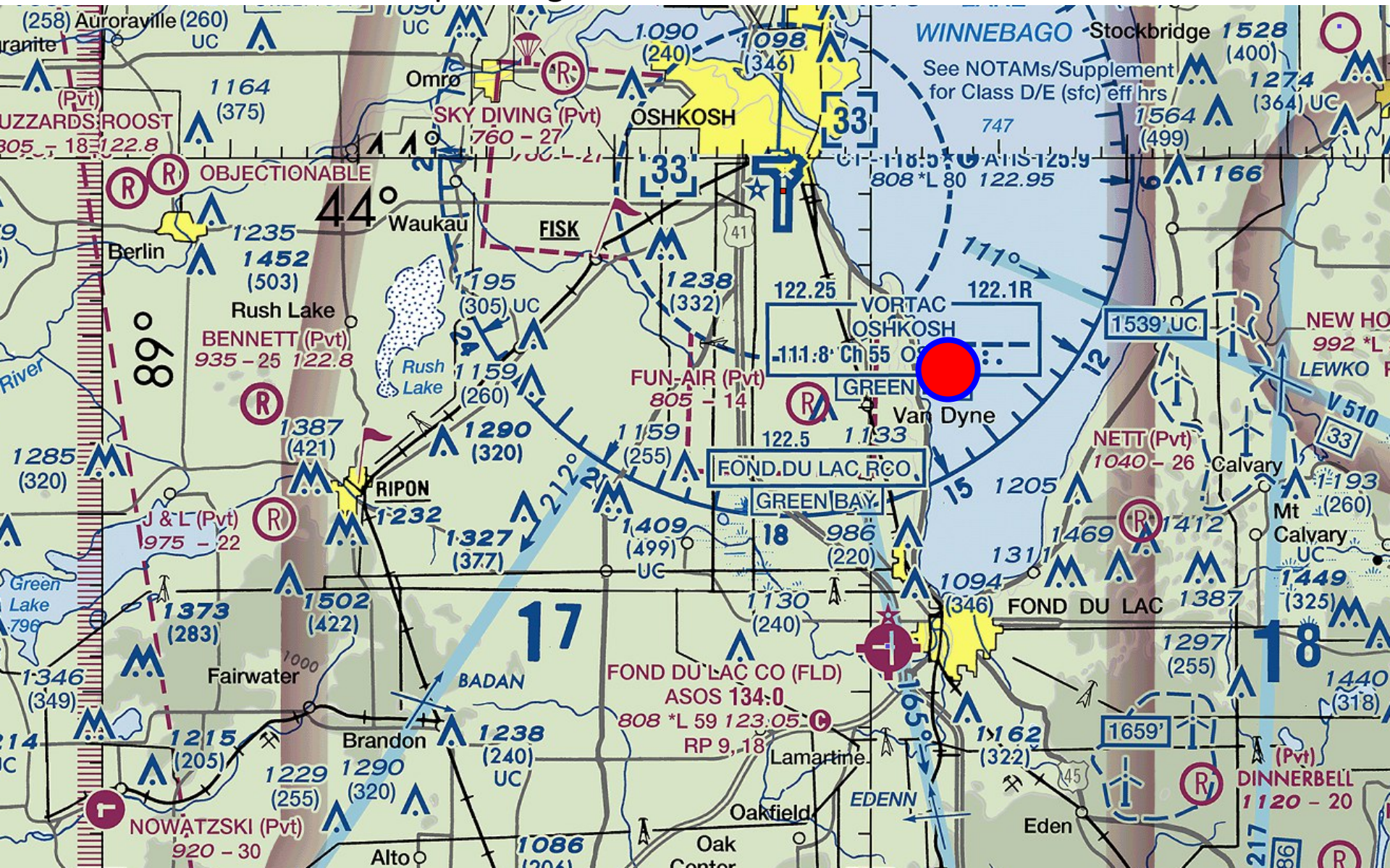
Rwy 9 Procedures (rarely assigned)

- 2 ship elements in groups of 12. Each group will be separated by 1NM.
- Cirrus Lead will position the formation for a West straight-in arrival for Rwy 9, announcing position at 20NM, 10NM and 5NM.
- Aircraft landing on the right side of Rwy 9 will exit on the right. Aircraft landing on the left side of Rwy 9 will exit to the left.
- If a go around is required, the affected pilot will announce “(call sign) **on the go**” on Tower frequency, turn left, depart the pattern on a left downwind and join with COPA Tail.

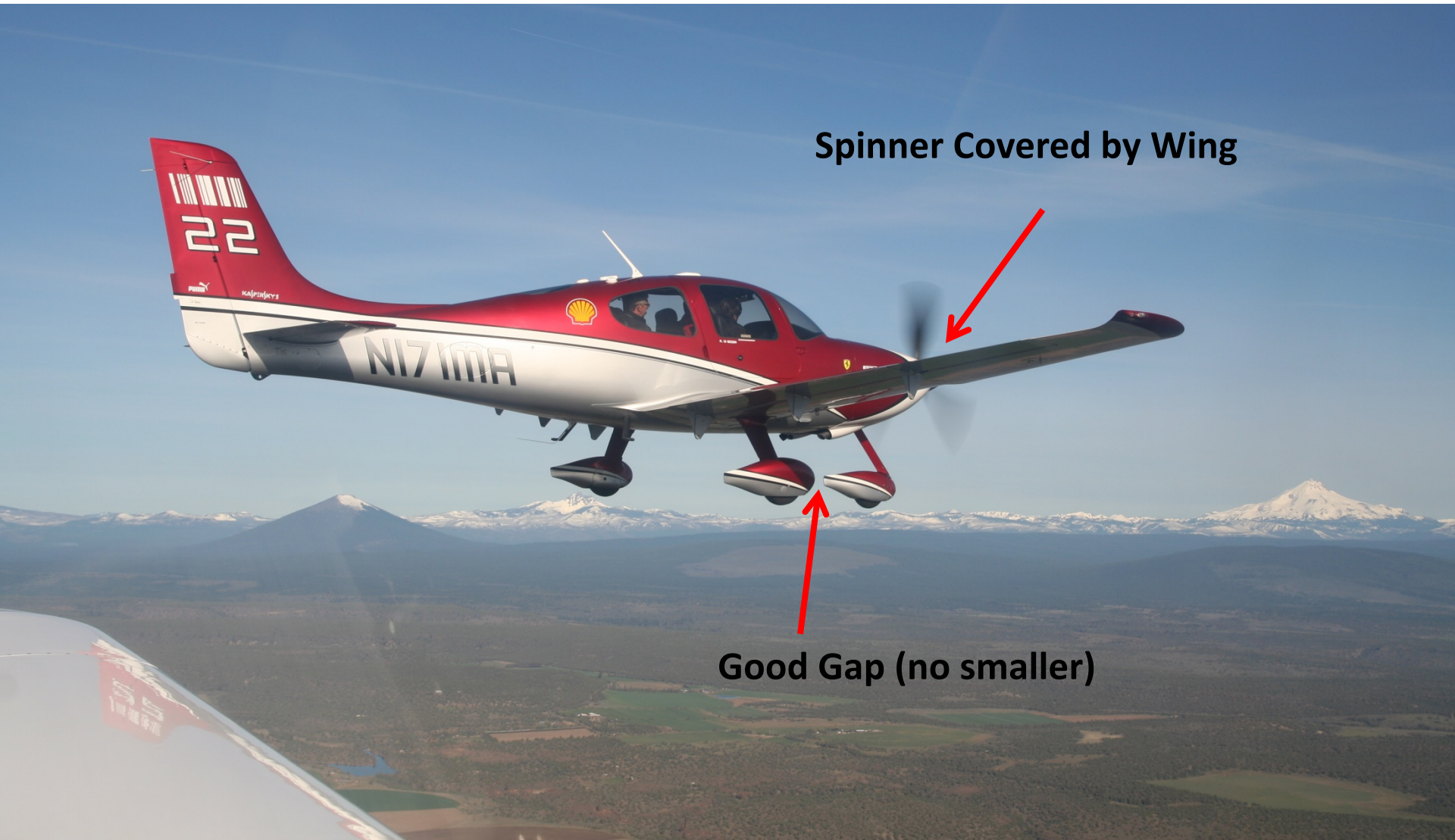


Warbird Island

Be alert for high performance turbojets, twin turboprops and Warbirds operating about 5 NM north of KFDL



Cruise Position



Landing Position



Not as low as cruise

Wing Lined up with Tail

Big Gap

Hand/Visual signals



OK



Run It Up



Understood or NOW

Hand/Visual signals



Cross Under #2



Can't Receive



Can't Transmit



Flight	Lead #1	Wing #2
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		

2 Ship Elements: TBD