



Rally Course POH

Crew Number: _____

Pilot ☐ Copilot ☐



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INTRODUCTION

Welcome to the Hayward – Redding – Bend Air Rally. This event will test your piloting skills and knowledge of your aircraft. By this time, your aircraft should be parked in the impound area, fueling completed, prohibited cockpit equipment disabled or covered, and your rally numbers affixed to the airplane. You should already be checked in at the registration table and have all your paperwork completed with the check-in volunteers.

A formal mandatory course briefing will be conducted on Thursday, June 11 at 4:00 PM. The briefing is held in the same hangar where the registration desk is located. A “quick brief” is conducted first for returning racers to highlight procedural changes from the previous year. **We recommend “first-time racers” sit towards the front of the briefing area so the briefer can more easily answer all your questions.**

For those staying overnight at the Hayward Airport La Quinta Inn, courtesy transportation is available – please ask any race official or ramp volunteer for directions. Please take everything from the airplane you might need overnight, as you will not be allowed to return to the airplane after impound until Friday morning.

In addition to your flight planning gear, you should bring the following charts to the briefing:

- ☐ San Francisco Sectional – **94th** edition, dated **03/05/15**
- ☐ San Francisco Terminal Area – **86nd** edition, dated **03/05/15**
- ☐ Klamath Falls Sectional – **92th** edition, dated **04/02/15**

Equivalent coverage World Aeronautical Charts may be used if desired.

- ☐ **CG-18** – **44nd** edition, dated **06/26/2014**
- ☐ **CF-16** – **44nd** edition, dated **01/08/2015**

INTRODUCTION

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HWD ACTIVITY SCHEDULE

All times are PDT.

Thursday, June 11

- ☐ **1200-1600** Impound and check-in.
1200-1500 Complimentary lunch available at registration.

- ☐ **1600** ***MANDATORY COURSE BRIEFING***

The briefing is held in the Airport Maintenance Hangar, in the same building and adjacent to the registration check-in desk. If you have already received your course POH, you may start your preflight planning prior to the briefing.

Friday, June 12

- ☐ **0700** Coffee and snacks in the briefing hangar.
- ☐ **0800** Crew photos – at planeside.
- ☐ **0900** First aircraft departs – weather permitting.

With the exception of crew photos, you must be at your aircraft 30 minutes before the first launch (0830) with your preflight estimates completed on the official race forms. A rally official will pick up your estimates at that time. You will be signaled to start your engine(s) shortly thereafter; the exact launch sequence and approximate times are discussed in Thursday's briefing.

Be ready to go on time or you will be penalized and started last. There is no penalty for engine starting difficulties or other maintenance-related problems, but you will be started after all the others.

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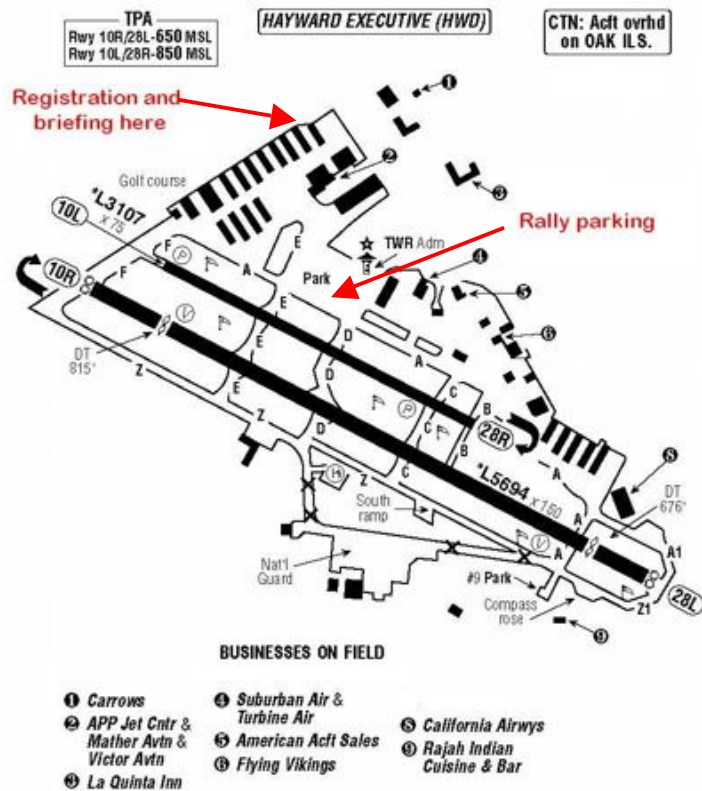
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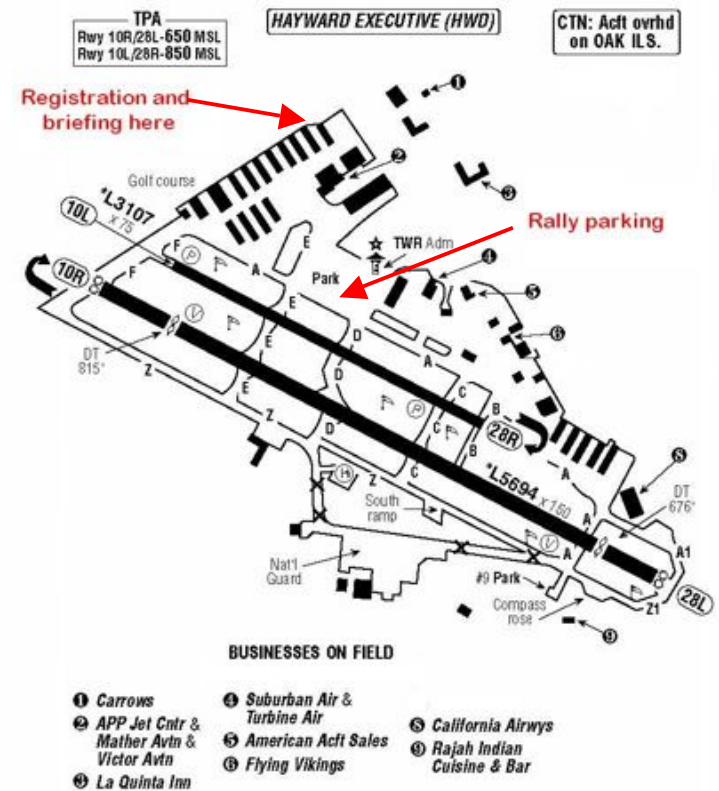
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HWD AIRPORT DIAGRAM



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COMMITTEE MEMBERS AND VOLUNTEERS

In order that you may easily recognize Committee Members and Rally Officials, they will be wearing red streamers with their nametag.

2015 Hayward Air Rally Committee

Co-Chairs:	Tom Neale Kim Purcell Sam Sun
Treasurer:	Tom Neale
Secretary:	Sam Sun
Registrar:	Chris Verbil
Publicity:	Mike Citro Gil Takemori
Sponsors:	Gil Takemori & Chris Verbil
Webmaster:	Tom Neale
99s Liaisons:	Lynne Allen Genny Solorio
EAA Liaison:	Tim Huckabay
Course Design:	Tom Neale
Hayward Ramp Operations:	Jenny Donnelly
Hayward Impound:	Kim Purcell
Redding Ramp Operations:	Mike Morgan
Airborne Timing Lines:	Jim Keaton & Jimmy Chambers Ray Hazel & Tony Flusche
Bend Ramp Operations:	Steve Verbil

Volunteers

Hayward Ramp and Impound:	Rob Kirkpatrick Chris Lea
Registration and Check-in:	Judy Barker Lynne Allen
Photographer:	Carl La Rue
Rally Artwork:	Tim Purcell
Ramp Start Official:	Tom Neale
Hayward Departure Timers:	Alameda County 99s
Scholarship Recipients and	Lexi Bradshaw
Honorary Flag Timers:	Mariha Brown Jeremy Brown

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Redding Ramp Crew: Mike Morgan (Ramp Boss)
Mark Anderson
Irwin Fust
Dick Wilkinson
Ray Fleming
Herb Zuidema
Redding Lunch (Mount Shasta 99s): Barbara Boot
Barbara Crooker
Sue Kerr
Rita Limmer
Donna Taylor
Andrea Williams
Redding Poker Dealer: Lynda Hattoom
Redding Departure Timers: Tucker Read
Eric Sawyer
Checkpoint ‘Goering’ Timers: Ray Hazel & Tony Flusche
Bend Ramp Crew: Steve Verbil (Ramp Boss)
Dale Anderson
Charles Brown
Andre Caughman
Jim Mateski
Thomas Phy
Jim Stone
Austin Woodrum
Shilo Inn Hospitality Room Set-up Amy Loomis

Hayward Executive Airport Manager: Douglas McNeeley
Redding Municipal Airport Manager: Rod Dinger
Redding Jet Center, Aviation Services Manager: Doug Coble
Bend Municipal Airport Manager: Gary Judd
Professional Air, Director of Aircraft Services: Gabe Daniel
Shilo Inn Suites Bend, Director of Sales: Joelle Brown

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Shilo Inn Suites Bend, Director of Sales: Joelle Brown

EVENT CONTACT INFORMATION

Hayward Impound: Until 1600 only: (925) 518-3539
(530) 409-2357
After hours: (510) 385-1104
LaQuinta Inn HWD:(510) 732-6300
Event Chairman:(925) 209-8335
Prescott FSS:122.5 via Oakland RCO,
(800) WX-BRIEF
or (928) 583-6154
Rancho Radio:122.05 (South portion of Leg 1)
122.4 (Northern portion of Leg 1)
Redding Tower: (530) 221-4475
Redding Ramp Lead: (415) 515-5982
McMinnville Radio:122.6 in Southern Oregon
122.3 via Sun River RCO
122.5 via Redmond RCO
Seattle Center:128.15 on deck at Bend
Shilo Inn Suites:(541) 389-9600
Bend Ramp Lead:(203) 212-8718

FBO Information:

RDD Redding Jet Center (Epic, 530-224-2300, Unicom 122.95):
Accepts Visa, Mastercard, American Express, Multiservice, cash
and personal checks.

BDN Professional Air (Phillips 66, 541-388-0019, Unicom 123.0):
Accepts Visa, Mastercard, American Express, Discover,
Multiservice, Avcad, cash. No personal checks.

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RADIO PROCEDURES

During your flight while not monitoring ATC where required, please use the air-to-air frequency of **122.75**.

Use this frequency to let other rally pilots know your intentions, particularly in the vicinity of any checkpoint.

AIR-TO-AIR FREQUENCY ** 122.75 **

As detailed in the AIM, keep in mind that the use of air-to-air frequencies are for all authorized users. Other pilots, who are not in the rally, will be using the frequency on a shared basis much like Unicom.

Let other rally pilots know where you are and what you intend to do – position, altitude, and direction of turns are especially important.

Example "Race Two Zero is approaching Podunk at 3,500."

All turns around checkpoints should be made to the LEFT (counterclockwise). Be sure to announce on the air-to-air frequency that you are circling the checkpoint.

Example "Race Two Zero is over Hooterville checkpoint at 7,500, making left turns."

While communicating with Hayward Tower or Redding Tower, USE YOUR RACE NUMBER. This will alert controllers for special handling.

Example "Redding Tower, Race Two Zero inbound for landing."

If you call Approach, Center, FSS, Flight Watch, or any other agency while enroute use your "N" number. Only ATC facilities directly involved with the Air Rally will know anything about your race number.

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During your flight while not monitoring ATC where required, please use the air-to-air frequency of **122.75**.

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FLIGHT PLAN PROCEDURES

A standard VFR Flight Plan will be filed based on the information provided by you on your entry application. This Flight Plan has absolutely nothing to do with the rally scoring. It is simply a VFR Flight Plan that the committee files and opens on your behalf.

The rally committee will file and activate this Flight Plan for you upon departure from Hayward. **Your ETE is calculated by using your pre-flight estimate from your entry application, and adding a two-hour “pad”.** You will receive a copy of the group flight plan before departure – it is your responsibility to update FSS if you need more time than filed.

If your flight lasts longer than planned total enroute time, you must amend your plan through standard FSS procedures. Use your “N” number to discuss your flight plan with Flight Service.

Upon arrival in Bend, you should close your FAA VFR Flight Plan through normal methods.

FLIGHT PLAN TIME CALCULATOR

Hayward Takeoff Time	PDT
+ ETE from Group Flight Plan	+
= Your Flight Plan ETA	= PDT

Add +7 hours for UTC

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FLIGHT PLAN TIME CALCULATOR

Hayward Takeoff Time	PDT
+ ETE from Group Flight Plan	+
= Your Flight Plan ETA	= PDT

Add +7 hours for UTC

RALLY SCORING

HAYWARD - REDDING TIME ESTIMATE

This is your estimate of elapsed time from the start of the takeoff roll at Hayward, to overhead the “Howie” timing line south of Redding. This estimate will include your time necessary to fly to all the required checkpoints prior to crossing the timing line.

REDDING – BEND TIME ESTIMATE

This is your estimate of elapsed time from passing the timer’s table on the takeoff roll at Redding, to overhead the “Goering” timing line near Bend. This estimate will include your time necessary to fly to all the required checkpoints prior to crossing the timing line.

HAYWARD - REDDING FUEL ESTIMATE

This is your estimate of fuel that you will use on the first leg of the race. It should include the fuel you burn for engine start, taxi, run-up, take-off and climb, all the enroute portion, flight from “Howie” timing line to the Redding airport, VFR pattern, landing, taxi, and engine shut down at the race ramp. Runway 16/34 is the expected runway for arrival at RDD.

REDDING – BEND FUEL ESTIMATE

This is your estimate of fuel that you will use on the second leg of the race. It should include the fuel you burn for engine start, taxi, runup, take-off and climb, all the enroute portion, flight from “Goering” timing line to the Bend airport, VFR pattern, landing, taxi, and engine shut down at the race ramp. Runway 16 is the anticipated runway for landing at BDN if the surface wind is less than five knots.

ADJUSTMENTS

Adjustments to fuel estimates may be made if you are vectored or forced to deviate from your planned route by ATC, for safety reasons, or are forced to do a go-around at the arrival airport. Race officials refer to these optional fuel adjustments as a “fuel vector”.

If you require a fuel vector adjustment, you must notify a ramp official before you start to refuel, or the fuel vector will be disallowed.

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If you require a fuel vector adjustment, you must notify a ramp official before you start to refuel, or the fuel vector will be disallowed.

Scoring – Penalty Points

Time scoring:

- **Analog Class:** One (1) point per second penalty, deviation from estimated time.
- **Digital Class:** Three (3) points per second penalty, deviation from estimated time.

Fuel scoring:

- **Analog:** Penalty points accrue at the rate of three (3) points for each one tenth of one percent (0.1%) difference in actual fuel used, as compared to your pre-flight leg fuel estimate.
- **Digital:** Six (6) penalty points for each 0.1% fuel estimate error.

Additional penalty points are assigned for the following infractions:

Not ready for Hayward engine start at assigned time.....	100 points
Misidentification of a mandatory checkpoint.....	250 points
Orbiting within sight of airborne timing lines for any reason.....	300 points

Disqualification may occur for any of the following reasons:

Failure to cross any timing point.
Refueling without a rally official present.
Refueling without the truck fuel meter covered.
Wearing black socks with shorts..

In addition, an aircraft may be disqualified or penalty points may be assigned at the discretion of the Rally Committee for infractions such as violation of Class “B” or “C” airspace, TFRs, Restricted Areas, hazardous flight practices, or other known violations of FARs or disregard for the spirit of the rules.

All the penalty points for fuel, time, checkpoints, and any other infractions are totaled for each leg, then added together for a cumulative score. The lowest total score determines the rally winner and order of finish.

Please consult the official Air Rally rules, available on the web site (www.hwdairrally.org), for more information on how the race is scored.

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Disqualification may occur for any of the following reasons:

Failure to cross any timing point.
Refueling without a rally official present.
Refueling without the truck fuel meter covered.
Baseball caps worn backwards.

In addition, an aircraft may be disqualified or penalty points may be assigned at the discretion of the Rally Committee for infractions such as violation of Class “B” or “C” airspace, TFRs, Restricted Areas, hazardous flight practices, or other known violations of FARs or disregard for the spirit of the rules.

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Please consult the official Air Rally rules, available on the web site (www.hwdairrally.org), for more information on how the race is scored.

ABOUT THE RALLY SCORING FORM

Included in your crew kit is a three-part scoring form, titled “Fuel and Time Estimate Log”. This form is printed in triplicate. Please note, *starting at the bottom* of the form:

1. TIME AND FUEL ESTIMATES - complete this section with your estimates on Friday morning. This section of the form will be picked up by a ramp official just prior to your departure. The rally official will take the bottom segment of the top white copy only.

2. REDDING FUEL – Redding ramp officials will enter the amount of fuel as shown by the truck meter, any fuel vector adjustments declared, and a fuel truck calibration factor.

Every fuel truck used at Redding is calibrated to ensure the quantity dispensed is reliable and consistent across all trucks. The calibration factor is a numerical value obtained after a meter-measured amount of fuel is dispensed into a container of very precise, known volume. The fuel truck meter amount is multiplied by the calibration factor, which results in a fuel total for scoring. All fuel scores shown on the scoring form are subject to verification and adjustment during the final scoring process.

After you sign this section, the rally official will take just the Redding segment of the top white copy only.

3. BEND FUEL – Bend ramp officials will enter the amount of fuel as shown by the truck meter, fuel vector adjustments, and any fuel truck calibration factor. The same fuel truck calibration procedure is used at both Redding and Bend.

4. CHECKPOINTS - During the rally, you will be flying over the mandatory and bonus checkpoints listed in this Rally Course POH. At each checkpoint, you will select the correct

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After you sign this section, the rally official will take just the Redding segment of the top white copy only.

3. BEND FUEL – Bend ramp officials will enter the amount of fuel as shown by the truck meter, fuel vector adjustments, and any fuel truck calibration factor. The same fuel truck calibration procedure is used at both Redding and Bend.

4. CHECKPOINTS - During the rally, you will be flying over the mandatory and bonus checkpoints listed in this Rally Course POH. At each checkpoint, you will select the correct

answer for a question about that checkpoint. After you complete the checkpoint questions and sign this section, the official will check to see that any instruments disabled at Hayward impound are still in that condition.

Bonus checkpoints are *optional*. It is up to each team to determine whether the additional time and fuel is worth the effort to go to each Bonus checkpoint. Scoring for each Bonus checkpoint is based on answering the question correctly, not just logged GPS location. Each correctly answered Bonus checkpoint question will subtract 20 points from your score.

After all required entries and signatures are completed, the ramp official will then remove the remaining portions of the white and yellow copies.

You will have the complete last pink page of the scoring form for your records. **Please bring your copy to the hotel**, as it contains all the information pertinent to your score. In the event of incomplete records on the course, the official scorers may ask you for your copy after the rally is completed.

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GENERAL CHECKPOINT INFORMATION

All checkpoints have been visually previewed and photographed from the air at an altitude of at least 1,500 feet AGL.

Your crew kit contains a multi-part “Fuel and Time Estimate Log” that requires an answer for a question about each checkpoint. You should select what you believe is the correct response for each checkpoint question.

If you feel that none of the answers are correct, take written notes of what you do see from the air. If the rally scorers can determine from your answer that you were over the checkpoint, credit will be awarded. Sometimes checkpoints do change from the time the course is designed until the day the rally is flown; if a majority of pilots miss or challenge a checkpoint question it will be considered for removal from the scoring process.

CAUTION

Due to different cruise speeds of rally aircraft, ground tracks inbound to the checkpoints, and altitudes flown – traffic can be hazardous over checkpoints as aircraft converge. Monitor the air-to-air frequency of 122.75 particularly in the vicinity of checkpoints. Broadcast your position and altitude when approaching, over, and departing a checkpoint.

If for any reason you must leave the rally due to mechanical difficulties or other problems, close or modify your flight plan with the nearest FSS. Try to notify another rally aircraft of your intentions so that information can be relayed to the Rally Committee. Crews receiving information about an airplane dropping out of the rally should report it to the officials at the next timing point, and to the ramp officials at the next airport of landing.

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Checkpoint diagrams and information are placed in this Rally Course POH in the correct flight order.

Latitude and longitude coordinates are provided to assist you in locating each checkpoint on your aeronautical charts. **The coordinates provided are approximate and should not be relied on for navigation.**

Descriptions of certain area features are included where it may be beneficial for safety or to avoid possible confusion about checkpoint identity.

All features indicated on the checkpoint description are clearly visible from 1,500 feet AGL and above.

Within the limitations of the FARs and procedures specified in the AIM, *pilots may cross the mandatory visual checkpoints at an altitude and heading of their choosing*, but any suggested overflight altitudes and magnetic headings are stated for safety reasons. *For the airborne timing checkpoints “Howie” and “Goering”, a mandatory altitude is specified* so timing officials on the ground can easily identify your race aircraft.

Diagrams in this document are NOT TO SCALE.

Safety in the air is up to you – the pilot. If any checkpoint becomes, in your opinion, unsafe due to weather or other factors which may obscure terrain or an area where a checkpoint may be located, use your discretion. If you decide to bypass a checkpoint, note your reasons and submit it with your rally scoring sheet. The official scorers will decide the validity of your action by comparing it to the procedures used by other aircraft in the same vicinity at the same time.

USE EXTREME CAUTION IN THE VICINITY OF CHECKPOINTS. ANNOUNCE YOUR POSITION, ALTITUDE, AND INTENTIONS ON THE AIR-TO-AIR FREQUENCY OF 122.75.

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HWD DEPARTURE PROCEDURES

Check boxes ☒ are provided for your planning use if desired.

Crews should be at their airplanes by 0800 Friday morning. A rally official will collect your time and fuel estimates by 0830.

Prior to engine start:

- ☐ **Rally Score Sheet (“Fuel and Time Estimate Log”) inside cockpit.**
- ☐ **Review the departure diagram on page 19.**
- ☐ **Monitor and copy ATIS – 126.7.**
- ☐ Place this green start card in windscreen or out window so the ramp official can clear you for engine start.
- ☐ **GPS DATA LOGGER SWITCHED ON.**

A rally official will indicate when you should start the engine(s). You will also be given a signal to taxi to run-up. When directed to taxi:

- ☐ **Contact Hayward Ground – 121.4. Request taxi clearance with the ATIS.** Example *“Hayward Ground, Race Two Zero for taxi with information Alpha.”*

When you get to the run-up area, you will have plenty of time for a proper check – but be prepared to move along as we attempt to launch aircraft at one-minute intervals.

When you are “number one holding short”, a rally starting official will signal you to taxi into takeoff “position and hold”.

- ☐ **Switch to and monitor Hayward Tower – 120.2.** No call is necessary, simply monitor the tower frequency.

Continue to next page.

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When you are “number one holding short”, a rally starting official will signal you to taxi into takeoff “position and hold”.

- ☐ **Switch to and monitor Hayward Tower – 120.2.** No call is necessary, simply monitor the tower frequency.

Continue to next page.

- ☐ **Transponder on to 1203 with ALT.**
- ☐ The rally starting official will raise a flag ten (10) seconds before the start of your takeoff run, then raise another hand and count down the final five seconds with a finger count. At the drop of the flag the clock is running for your flight, and you should start your takeoff run.
- ☐ **Standard departure for 28L is a left 270 overhead departure.** No right turnouts from 28L due to noise abatement requirements.
- ☐ Takeoff time recorded in Flight Plan Calculator on page 10.
- ☐ **Cross over the airport below 1,000' MSL.**
- ☐ Continue to monitor the tower frequency 120.2 after takeoff.
- ☐ **Proceed direct to the Hayward Civic Center below 1,500' MSL.**

Oakland Class C airspace is 1,500' MSL and above – do not enter without establishing two-way communications with ATC.
NorCal Departure - 125.35

- ☐ Monitor Hayward Tower 120.2 until abeam Lake Chabot or Cal State Hayward.
- ☐ Proceed on course to overhead VPDUB (the I580/I680 freeway interchange). **Note the Livermore Class “D” airspace ahead – 2,900' MSL and below.**
- ☐ If you proceed to the LVK Class D, enter the LVK area above 2,900' unless clearance for lower altitude transit is received from ATC.
Livermore ATIS - 119.65 Tower - 118.1
- ☐ When clear of the LVK area, proceed on course to the first mandatory checkpoint at Isleton Bridge. Altitude and heading are at your discretion.

Procedure continues on page 21.

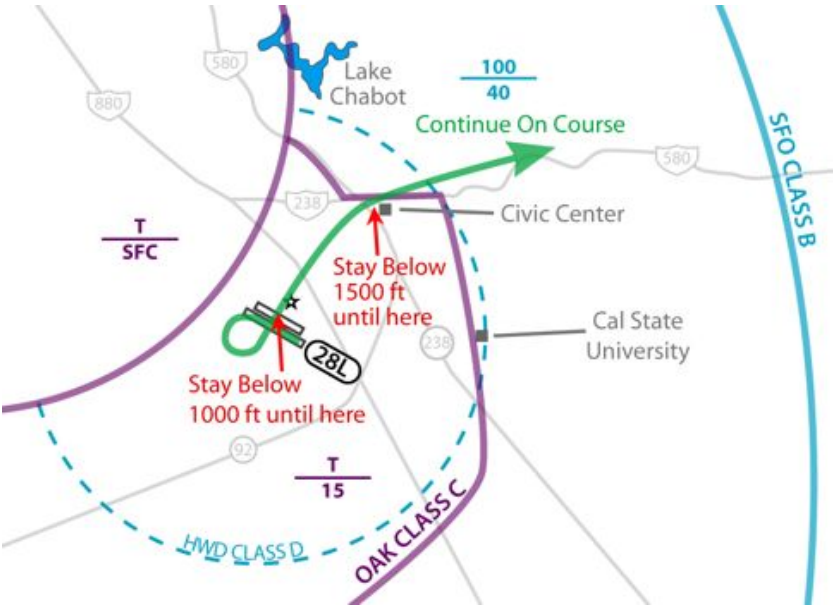
- ☐ **Transponder on to 1203 with ALT.**
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- ☐ **Standard departure for 28L is a left 270 overhead departure.** No right turnouts from 28L due to noise abatement requirements.
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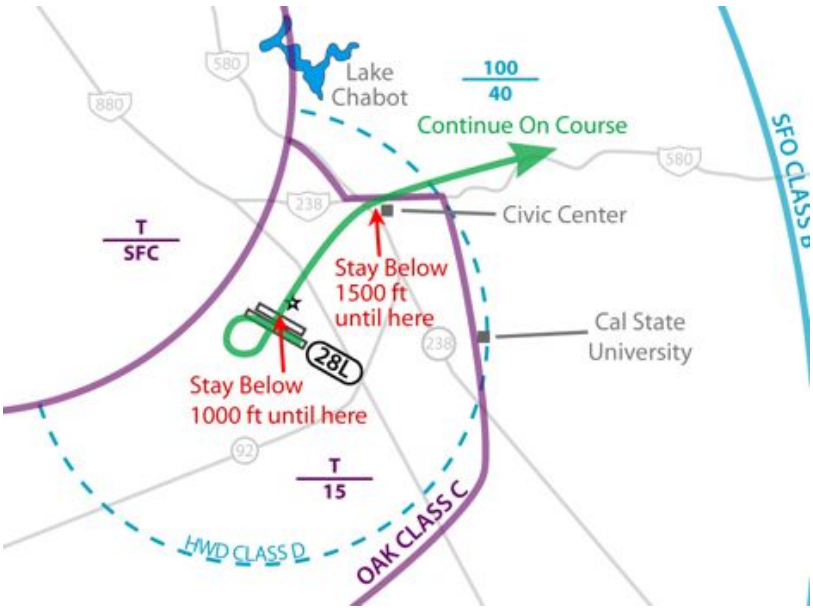
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- ☐ When clear of the LVK area, proceed on course to the first mandatory checkpoint at Isleton Bridge. Altitude and heading are at your discretion.

Procedure continues on page 21.

HWD DEPARTURE DIAGRAM



HWD DEPARTURE DIAGRAM



HWD – RDD CHECKPOINTS

☐ Checkpoint 1 Isleton Bridge

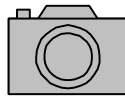
Elevation ~ 5' Lat N 38° 10.32'
Overfly Above 1500' Long W 121° 35.62'

What color is the longest part of the superstructure of the bridge (about 1nm NE of downtown)?

A. Yellow

B. Blue

C. Silver/Metal



☐ Checkpoint 2 Mystery

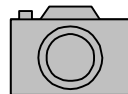
Elevation 975' Lat N 38° 46.22'
Overfly Above 3500' Long W 122° 34.25'

What is the dominant feature found at these coordinates?

D. A housing development

E. Uncharted grass runway and gliderport

F. A circular pond/lake



Continue to next page.

HWD – RDD CHECKPOINTS

☐ Checkpoint 1 Isleton Bridge

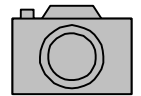
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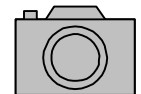
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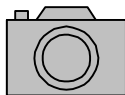
☐ **Checkpoint 3** **Gunnersfield Ranch (71CL)**
OPTIONAL BONUS

Elevation 62' Lat Unicomm: 122.8
Overfly Above 3500' Long N 39° 21.16'
W 122° 05.63'

At the north end of this runway is:

G. A newly constructed house

H. A large storage barn/building



I. Nothing, all the structures are at the south end of the runway.

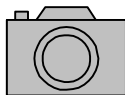
☐ **Checkpoint 4** **Paskenta**

Elevation 745' Lat N 39° 53.13'
Overfly Above 3500' Long W 122° 32.36'

At the northeast corner of town the sawmill is:

J. Full of logs and lumber

K. Empty/abandoned



L. Gone – replaced by a CDF helicopter base

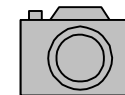
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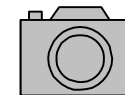
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- ☐ From Paskenta checkpoint, proceed to the area east of Red Bluff (RBL).
- ☐ Stay east of I-5 to remain clear of the RBL traffic pattern. **Remain above 2,000' until passing RBL.** RBL pattern altitude is 1,352' MSL.
- ☐ **Copy Redding ATIS 124.1 as soon as possible.**

Procedure continues on page 24

- ☐ From Paskenta checkpoint, proceed to the area east of Red Bluff (RBL).
- ☐ Stay east of I-5 to remain clear of the RBL traffic pattern. **Remain above 2,000' until passing RBL.** RBL pattern altitude is 1,352' MSL.
- ☐ **Copy Redding ATIS 124.1 as soon as possible.**

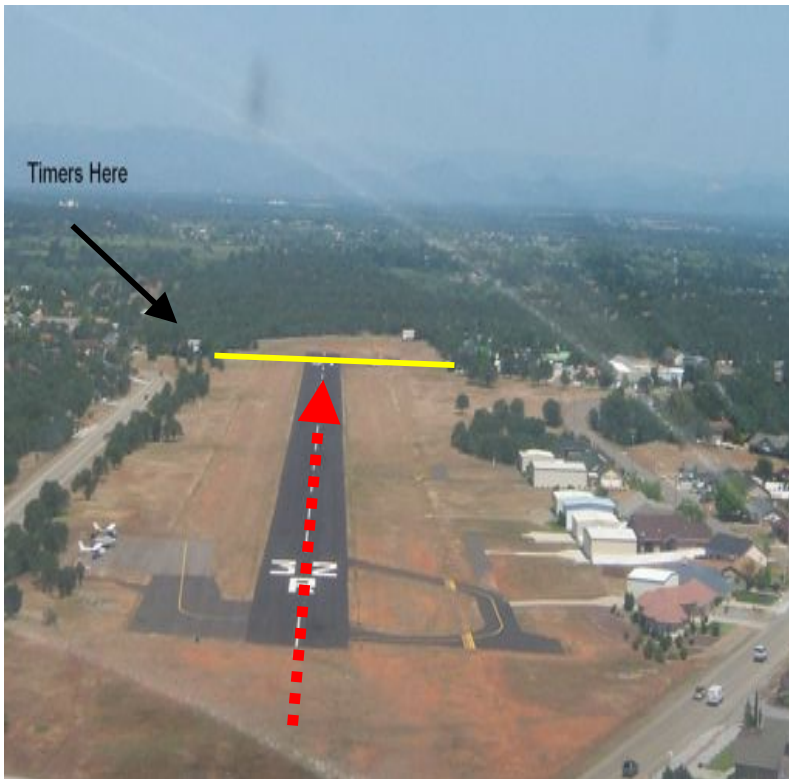
Procedure continues on page 24

REDDING ARRIVAL TIMING IDENTIFICATION

‘Howie’ **Frequency 122.9**
Lat 40° 21.893’ **Long 122° 13.042’**
Field Elevation **615’**

The timing line is on the runway at the Lake California airport (68CA). The line is directly in front of the only house on the west side of the field, at the north end. Fly a low pass over the runway, south to north. The timing line is approximately 10 nautical miles from Redding Municipal Airport.

Required altitude over the timing line is 1115’ MSL.



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REDDING AREA TIMING (Howie) APPROACH

From abeam and to the east of Red Bluff (RBL), track 360° true until the houses on Lake California are visible. Refer to the pictures on the next page.

- ☐ **Abeam Red Bluff, call the timers on 122.9.** *Example “Checkpoint Howie, Race Two Zero at Red Bluff, inbound for timing.”*
- ☐ **Transponder code to 1203** so Redding Tower will recognize you as a rally aircraft. You do not need to contact Redding Tower unless you are requesting their services.
- ☐ **Five (5) miles south of Howie by your estimate: Landing lights on, and report to timers.** *Example “Checkpoint Howie, Race Two Zero is five miles, lights on.”*
- ☐ Intercept the runway centerline as soon as it is visible.
- ☐ Plan a descent to 1115’ MSL prior to Howie. Caution for powerlines NW-SE, 3 nm south of Howie.
- ☐ **One (1) mile prior to Howie, passing Lake California “houses on the lake” on the right: Report to timers.** *Example “Checkpoint Howie, Race Two Zero, one mile final for timing.”*

DO NOT FLY OVER THE TIMERS! They are located west of Lake California’s 14-32 runway, at the only house on the northwest end. Please cross the timing line at 1115’ MSL, maintaining runway centerline.

When you cross the line, the timing officials should confirm on 122.9 that they have recorded your time. Your actual “clock time” will not be disclosed. **After crossing the timing line, climb immediately, continue straight out on runway heading, and contact Redding Tower.**

Procedure continues on page 26

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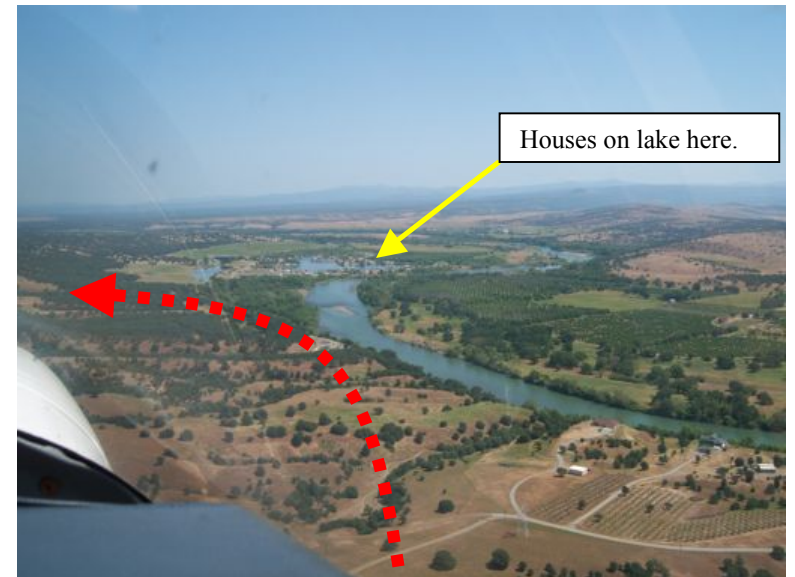
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Procedure continues on page 26

HOWIE APPROACH VIEWS



RDD AIRPORT ARRIVAL

- ☐ Copy Redding ATIS – 124.1, as soon as practical.
- ☐ **Departing Howie, start a climb to 1500' MSL, continue straight-out, and contact Redding Tower – 119.8.**
Advise the Tower that you are inbound for landing.
Example “Redding Tower, Race Two Zero, a Cessna Bugsmasher is departing Lake California, inbound with information Alpha for landing.”
- ☐ You can typically expect a landing on either runway 16 or 34 depending on wind. Note that Runway 30 may not be available on the date of the rally.

Note that any go-arounds, extended pattern entries, etc. will not be penalized. You have already been timed and you can request a fuel adjustment (vector) prior to fueling with a ramp official present.

After landing, exit at the first available taxiway, unless otherwise instructed by the Redding tower. Upon exiting the runway:

- ☐ **Contact Redding Ground – 121.7.** Ground will direct you to the rally parking area.
- ☐ **Follow the directions of rally flagmen as you approach the ramp.**

When you are parked, you will be met by a ramp official and a fuel truck. Fueling must be supervised by a ramp official – don't forget to declare any “fuel vector” requested if necessary.

RDD AIRPORT ARRIVAL

- ☐ Copy Redding ATIS – 124.1, as soon as practical.
- ☐ **Departing Howie, start a climb to 1500' MSL, continue straight-out, and contact Redding Tower – 119.8.**
Advise the Tower that you are inbound for landing.
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When you are parked, you will be met by a ramp official and a fuel truck. Fueling must be supervised by a ramp official – don't forget to declare any “fuel vector” requested if necessary.

☐ A rally official must be present during refueling, and the truck fuel meter must be covered prior to fueling.

☐ Verify that the truck fuel meter has been set to zero prior to covering.

☐ **GPS DATA LOGGER SWITCHED OFF.**

The pilot or copilot must remain with the aircraft until fueling is completed. When released by the ramp official, you may proceed to the Redding Jet Center FBO building.

Free bottled water is available, immediately outside the entrance door to the FBO by the vending machine. Pick it up as you go inside. Please be prepared to pay for your fuel at the FBO counter. See the contact information on page 8 for which payment methods will be accepted by the FBO.

In the second-floor conference room, the Mount Shasta 99s will have a deli box lunch available for a cost of \$10.

☐ If you are playing poker don't forget to draw two more cards.

☐ Free wireless internet access and a flight briefing room are available in the FBO for updating weather briefings and flight plans. (SSID = Redding Jet; Password = flight3775)

Procedure continues on page 29.

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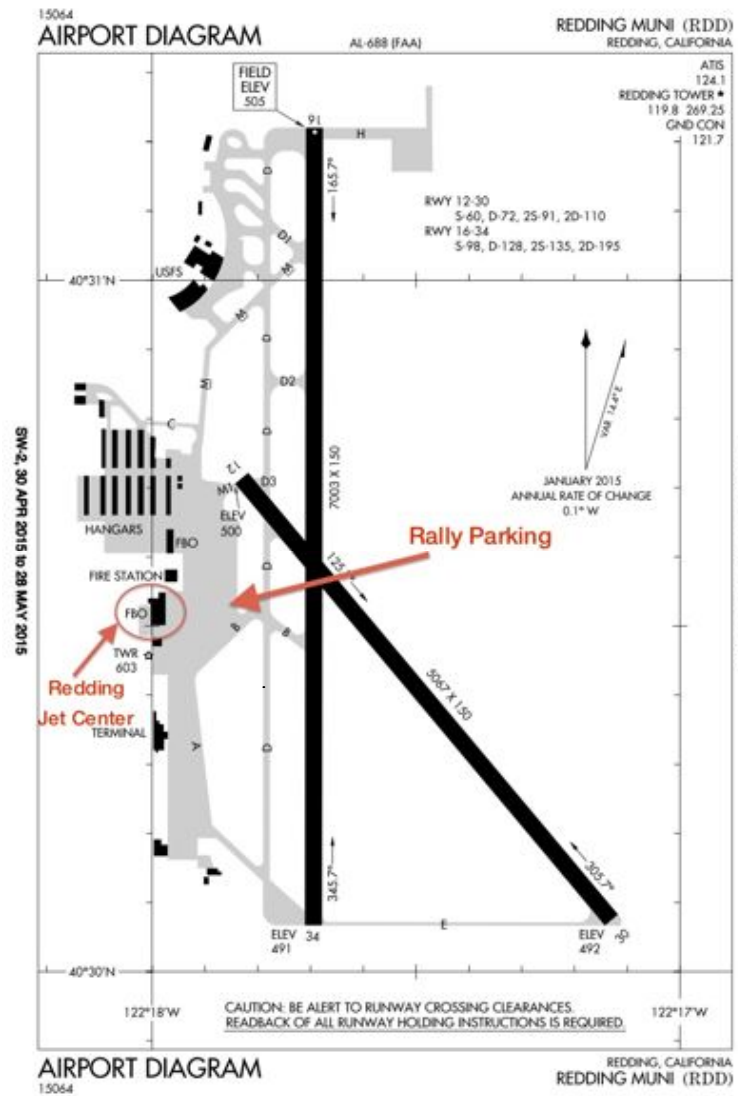
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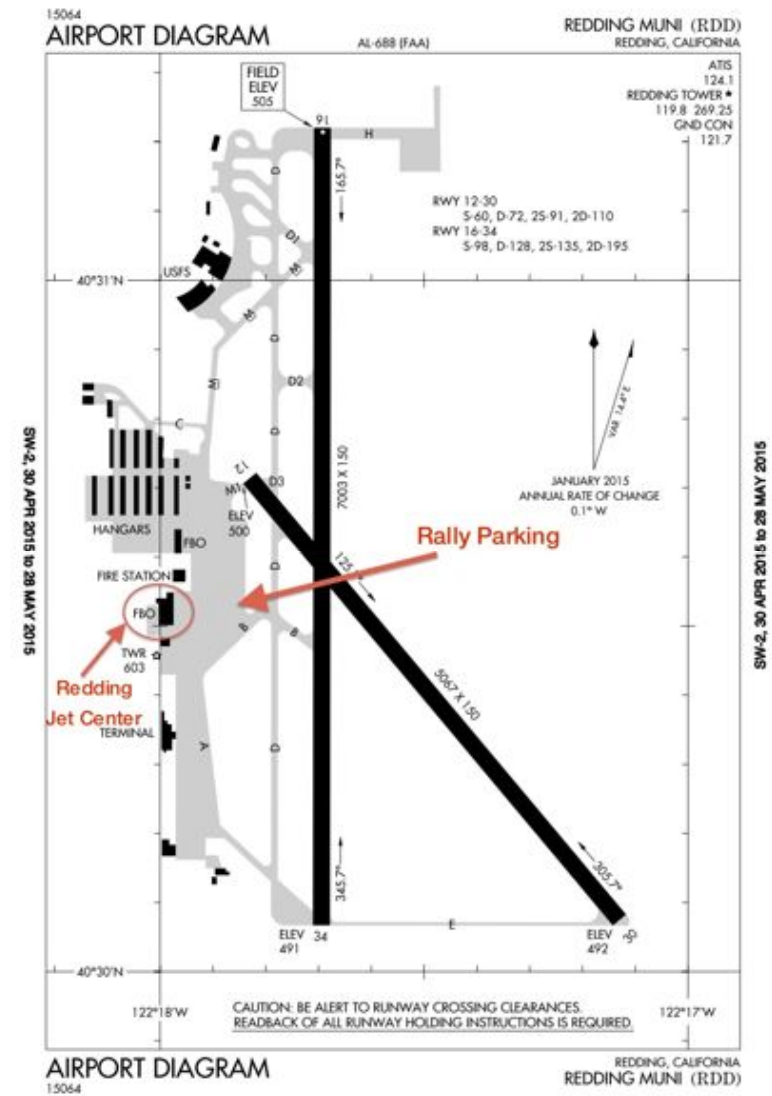
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Procedure continues on page 29.

RDD AIRPORT DIAGRAM



RDD AIRPORT DIAGRAM



RDD DEPARTURE PROCEDURES

- ☐ Copy ATIS on 124.1 before engine start.
- ☐ Rally Score Sheet (“Fuel and Time Estimate Log”) inside cockpit.
- ☐ Review the departure diagram on the next page.
- ☐ **GPS DATA LOGGER SWITCHED ON.**
- ☐ Call Ground Control on 121.7 for taxi clearance. Expect Runway 34 in use for departures.

After completing your run-up:

- ☐ Switch to Redding Tower on 119.8. No call is necessary until you are number one to go.
- ☐ Transponder on to 1203 with ALT.

Standard departures are straight out from Runway 34, or left downwind from Runway 16.

- ☐ Taxi up to and HOLD SHORT of 34. When you are number one for takeoff, call the Tower on 119.8. Advise them you are ready for takeoff with a straight-out departure. Example “Redding Tower, Race Two Zero ready at 34 for straight-out.”
- ☐ **TOWER WILL CLEAR YOU FOR TAKEOFF.**

The rally timers are located on the left shoulder near the beginning of 34, and are monitoring tower frequency. **When tower says “cleared for takeoff”, taxi into position and hold (aka line up and wait). Look at the timers to give you a countdown to go: 10 seconds, 5 seconds, then a drop of the flag. Start your takeoff roll at the flag drop. Your timing for the second leg of the rally will begin when the timers drop the flag.**

Continue to next page.

RDD DEPARTURE PROCEDURES

- ☐ Copy ATIS on 124.1 before engine start.
- ☐ Rally Score Sheet (“Fuel and Time Estimate Log”) inside cockpit.
- ☐ Review the departure diagram on the next page.
- ☐ **GPS DATA LOGGER SWITCHED ON.**
- ☐ Call Ground Control on 121.7 for taxi clearance. Expect Runway 34 in use for departures.

After completing your run-up:

- ☐ Switch to Redding Tower on 119.8. No call is necessary until you are number one to go.
- ☐ Transponder on to 1203 with ALT.

Standard departures are straight out from Runway 34, or left downwind from Runway 16.

- ☐ Taxi up to and HOLD SHORT of 34. When you are number one for takeoff, call the Tower on 119.8. Advise them you are ready for takeoff with a straight-out departure. Example “Redding Tower, Race Two Zero ready at 34 for straight-out.”
- ☐ **TOWER WILL CLEAR YOU FOR TAKEOFF.**

The rally timers are located on the left shoulder near the beginning of 34, and are monitoring tower frequency. **When tower says “cleared for takeoff”, taxi into position and hold(aka line up and wait). Look at the timers to give you a countdown to go: 10 seconds, 5 seconds, then a drop of the flag. Start your takeoff roll at the flag drop. Your timing for the second leg of the rally will begin when the timers drop the flag.**

Continue to next page.

For an orderly transition out of the area, proceed northwest until well clear of the RDD traffic pattern and Class D airspace.

- ☐ **Monitor Redding Tower on 119.8.** No further call is necessary unless you are requesting ATC assistance.

When safely clear of the Class D to the north, there is no further need to monitor RDD Tower, and you may leave the frequency without asking Tower for a frequency change.

- ☐ **Monitor the air-to-air frequency 122.75.**
- ☐ Proceed on course to your first checkpoint.
- ☐ **Review your ETA to Bend on page 10, and update your Flight Plan with FSS as necessary.**



Continue to next page.

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Continue to next page.

RDD – BDN CHECKPOINTS

☐ Checkpoint 5 Adin (A26)
OPTIONAL BONUS

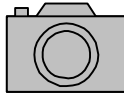
Pattern Altitude 5029' Lat CTAF: 122.9
Overfly Above 6100' Long N 41° 11.20'
W 120° 57.30'

Runway 09/27

M. Has no hangars or services visible

N. Has two (2) hangars

P. Has a parallel taxiway on the south side



☐ Checkpoint 6 Tullake (O81)
CTAF: 122.9

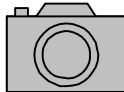
Elevation 4980'
Pattern Altitude 4844' Lat N 41° 53.44'
Overfly Above 5850' Long W 121° 21.64'

What do you see at this airport?

R. An oval race track on the southwest side.

S. A closed "X" dirt runway crossing 11/29

T. Several blue-roofed buildings



Continue to next page.

RDD – BDN CHECKPOINTS

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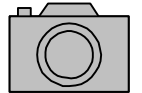
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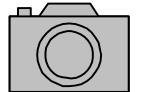
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Continue to next page.

☐ Checkpoint 7 (Town of) Bonanza

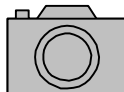
Elevation 4150' Lat N 42° 12.15'
Overfly Above 5500' Long W 121° 24.53'

At the northwest corner of town is a high school track. At the northeast edge of the track is a building/barn with a silver metal roof. The *sides* of this building are this color:

U. Blue

V. Green

W. Red



☐ Checkpoint 8 (Town of) Silverlake

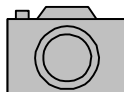
Elevation 4390 Lat N 43° 07.41'
Overfly Above 5400' Long W 121° 03.74'

There seem to be two pieces to this town. The smaller part, ~0.5 mile to the *west* of the street grid and next to the creek has a:

X. Water tower shaped like a golf ball on a tee

Y. A helipad

Z. A sawmill



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Z. A sawmill



- ☐ From Silverlake, proceed to Millican (N43°52.75' W121°55.13.') for start of Timing Line 'Goering' approach.
- ☐ Copy the Bend AWOS 134.425 as soon as possible.

Procedure continues on page 35.

- ☐ From Silverlake, proceed to Millican (N43°52.75' W121°55.13.') for start of Timing Line 'Goering' approach
- ☐ Copy the Bend AWOS 134.425 as soon as possible.

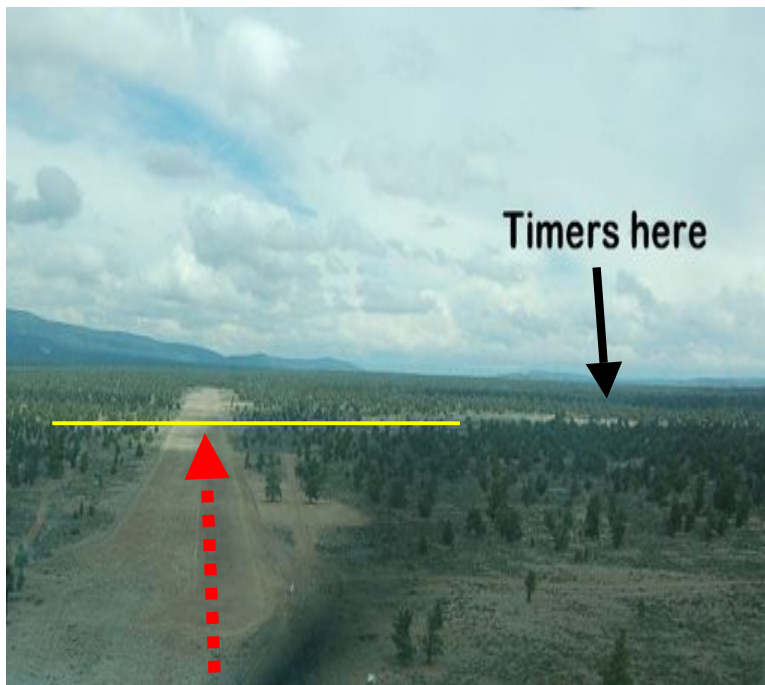
Procedure continues on page 35.

BEND ARRIVAL TIMING IDENTIFICATION

GOERING **Frequency 122.75**
Lat 44° 05.751' Long 120° 56.834'
Field Elevation **3450'**

The timers are located at the Goering Ranches airfield (50OR), at the hangar located mid-field on the east side of the runway. Fly directly over the runway, from south to north, maintaining runway centerline. The timing line is approximately 11 nautical miles from Bend Municipal Airport.

Required altitude over the timing line is 3950' MSL.

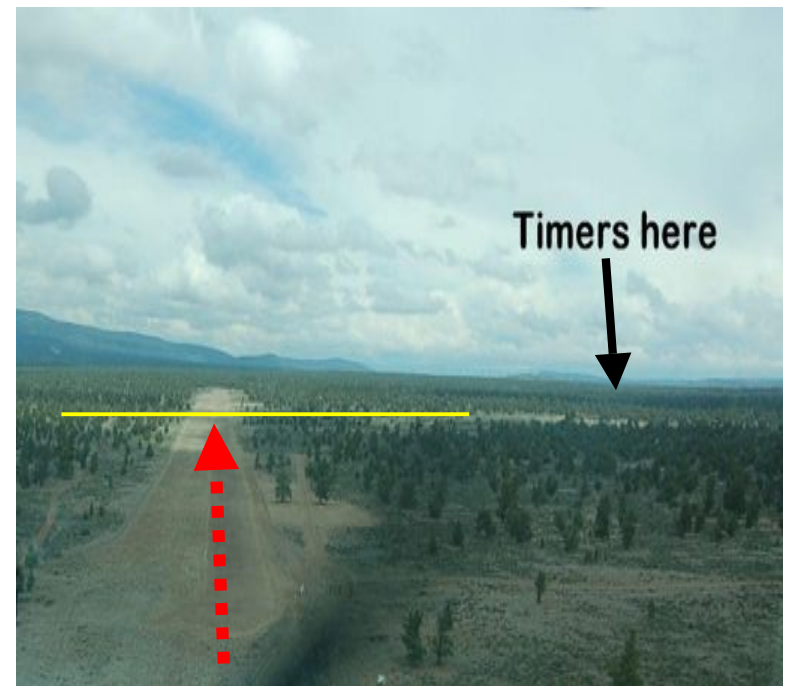


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BEND AREA TIMING (GOERING) APPROACH

At Millican, you are approximately 12 miles from the timing line. Refer to the diagram on the next page.

- ☐ **Overhead Millican: Call the timers on 122.75.** *Example “Checkpoint Goering, Race Two Zero at Millican, inbound for timing.”*

The Goering timing officials might not reply until you are much closer to their location.

- ☐ From Millican, fly northwesterly, following the clearly visible powerlines towards Goering.
- ☐ **Seven (7) miles out, at the bend in the powerlines: Landing lights on, and report to timers.** *Example “Checkpoint Goering, Race Two Zero is at the powerline bend, lights on.”*
- ☐ Plan your descent to 3,950’ MSL prior to Goering.
- ☐ **Two (2) miles south of Goering, at a double jog in the E-W road: Report to timers.** *Example “Checkpoint Goering, Race Two Zero is two miles for timing.”*

The Goering timing line is the intersection of the runway and perpendicular taxiway, located mid-field.

DO NOT OVERFLY THE TIMERS! The timers will be to the east of the runway, adjacent to the hangar. Please cross the timing line at 3,950’ MSL.

When you cross the timing line, the timing officials should confirm on 122.75 that they have recorded your time. They will not report your actual clock time; only an acknowledgement that your time has been recorded will be made.

Procedure continues on page 37

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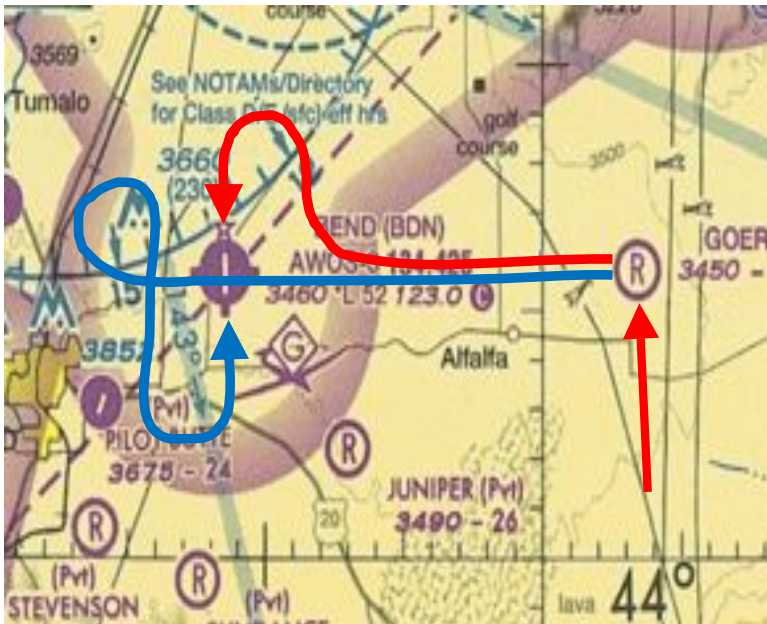
BDN AIRPORT ARRIVAL

At the timing line you are approximately eleven (11) miles from Bend Municipal Airport.

- ❑ **Departing Goering, start a climb to 4,500' first, then turn west towards BDN, copy the AWOS on 134.425 and contact Bend Unicom on 123.0.** Advise airport users that you are inbound for landing. *Example "Bend Traffic, Race Two Zero, a Cessna 172, ten east requesting airport advisory."*

**Do not extend your approach to Bend much to the north.
The RDM Class D airspace extends to within 5 nm of BDN.**

If runway 16 is in use, make a right 45 entry at 4500' to left downwind (red). For runway 34, cross over midfield at 5000', extend west, then descend in a right turn to enter on a 45 to left downwind (blue).



*Not true scale
Procedure continues on page 39*

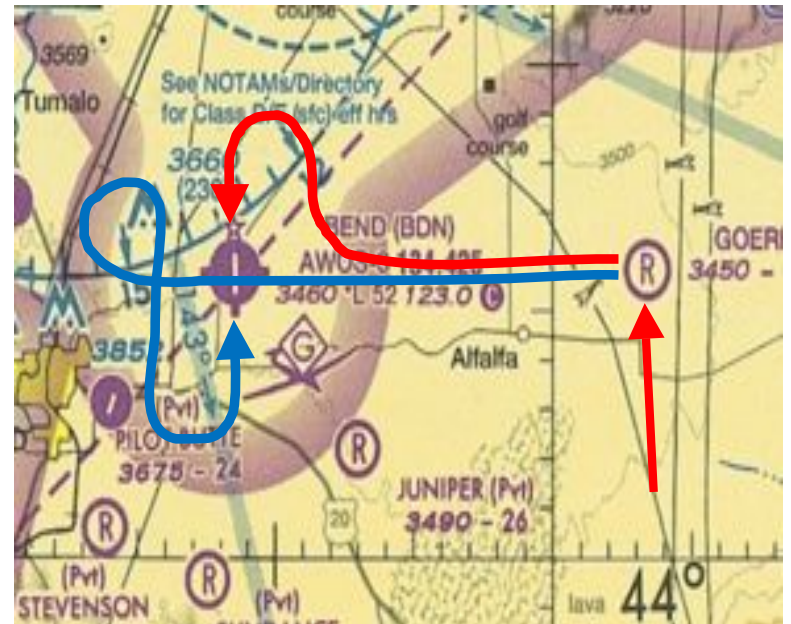
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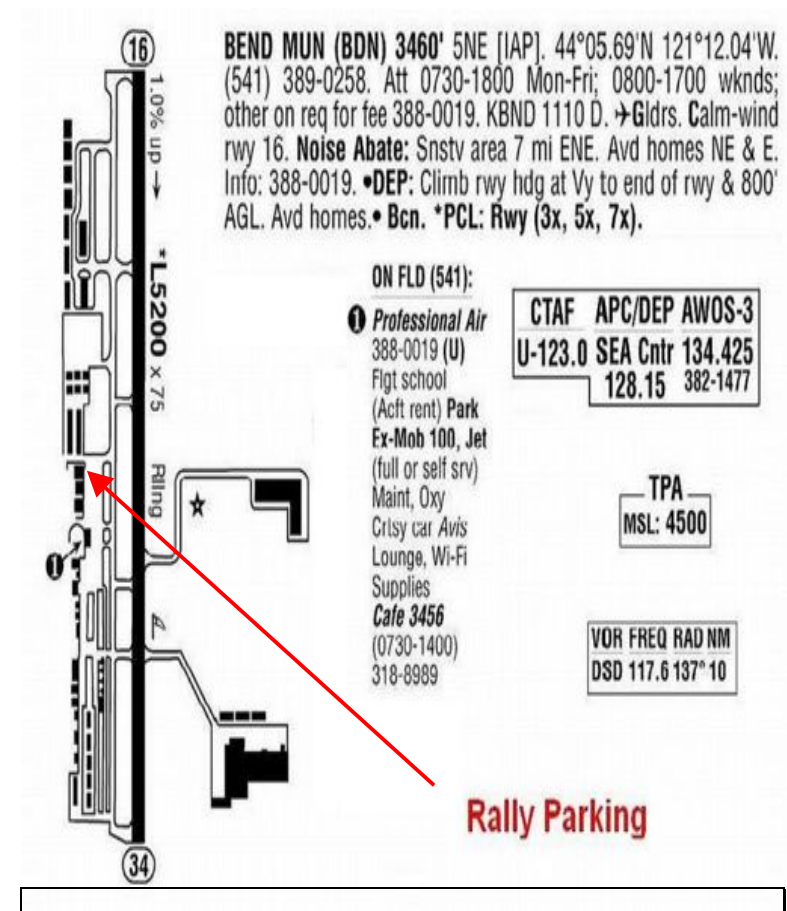
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BDN AIRPORT DIAGRAM



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Any number of go-arounds, extended patterns due to traffic, etc., will not be penalized. You have already been timed and you can request a fuel vector adjustment prior to fueling with a ramp official present.

Rally parking is on the main ramp, west of the runway. Upon exiting the runway, look for rally officials to guide you to parking.

When you are parked and out of the airplane, you will be met by a ramp official and a fuel truck. Fueling must be supervised by a ramp official – don't forget to declare any "fuel vector" requested if necessary.

- ☐ **"Prohibited cockpit equipment" status will be verified on ramp arrival.**
- ☐ **A rally official must be present during refueling, and the truck fuel meter must be covered prior to fueling.**
- ☐ **Verify that the truck fuel meter has been set to zero prior to covering.**
- ☐ **The rally official will verify that the as-fueled fuel tank configuration matches the scoring form**

The pilot or copilot must remain with the aircraft until fueling is completed. When fueling is complete, you will be expected to complete your rally scoring form including all your checkpoint answers. The ramp official will then collect the GPS logging device and the final scoring copy, leaving you with a pink copy for your records.

Please be prepared to pay for your fuel at the FBO office. Payment methods accepted by this FBO are listed on page 8.

Continue to next page

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- ☐ **Is your Flight Plan closed?** You must close your flight plan with FSS prior to landing at BDN, or using normal procedures after landing. *The airport and FBO staff do not close rally flight plans on arrival.*

☐ **GPS DATA LOGGER SWITCHED OFF.**

- ☐ **Remove your race numbers, if tape has been used.** The high-desert sun could damage your paint if tape-applied numbers are left on the airplane.

Courtesy transportation to the hotel is available; ask any ramp volunteer for directions. If you reserved a rental car in advance, it should be available at the FBO.

Please take everything you will need at the hotel at this time, including your remaining pink copy of the rally scoring form.

The parking ramp at BDN is accessible 24 hours daily. The FBO at Bend has normal operating hours of 0730-1800 (Fri) and 0800-1700 (Sat-Sun). *A fee may be charged by the FBO for callout, outside of normal business hours.*

Shilo Inn Suites Hotel: The shuttles can drop you at the front desk or the “600 Building” where you can leave your bags in the Hospitality Suite. The hotel staff will be able to check you into your room at the front desk. Almost all crews will have rooms in the 600 Building.

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HOTEL ACTIVITY INFORMATION

HOSPITALITY SUITE

Rooms 609-610, Shilo Inn Suites
3105 O.B. Riley Road
Bend, OR 97701

Friday: ~1400 – 2300

Saturday: 0800 – 1630 & 2000 – 2300

AWARDS DINNER - SATURDAY

Ballroom, Shilo Inn Suites

No-Host Cocktails start at 1730

Dinner and Presentations 1800 – 2100

SUNDAY DEPARTURE

Shuttles will be available at the front of the hotel. Please check-out of the hotel at the front desk before going to the airport. Our rally committee van will be running continuously from 0700 to 1030. The hotel van will be available starting at 1100.

Thank you for participating in this year's Air Rally. We sincerely hope you had an enjoyable time. Please e-mail us with your comments: info@hwdairrally.org

HELP WANTED

Get in on the gargantuan planning effort for the 2016 Hayward Air Rally. Here is a prime opportunity to pad your resume with non-profit organization expertise. Yes, we even pay you .. well, sort of. Contact Tom Neale for more details.

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The Hayward Air Rally is only possible through the generous help of all our friends in the community.

As you can see from the Committee and Volunteers list earlier in this document, it takes almost as many people (dozens!) to organize and run this event as compete in it!

In addition to our many volunteers, we ask many companies and other organizations for financial support and product donations to enhance the event and sweeten the pot for our competitors.

We rely on the City of Hayward for their continued support and guidance, and we depend on the pilot community at large to continue to grow the Rally in size and also expand our youth EAA camp scholarship program. A portion of your entry fees are considered a tax-deductible contribution to our scholarship fund.

Not all donors and sponsors get mentioned in this POH due to our printing deadline. The known donors and sponsors *at the time of printing* are listed below.

The Hayward Air Rally Committee says **THANK YOU!** to all of our volunteers and sponsors. This event would not be possible without the support and effort of this terrific group of hard working people.

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AvPlan EFB



Alameda County 99s &
Mount Shasta 99s



APP Jet Center - Hayward



California Sun Dry Foods



David Clark



Fly Ties



Professional Air



QUALCOMM



Redding Jet Center



Shilo Inn and Suites



Straw Propeller Gourmet Foods



Suburban Air Corporation



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