



**Race Crew POH**

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## INTRODUCTION

Welcome to the Hayward – Bakersfield – Laughlin Proficiency Air Race. This event will test your piloting skills and knowledge of your aircraft, and also demonstrate the safety and efficiency of General Aviation. By this time, your aircraft should be parked in the impound area, fueling completed, prohibited cockpit equipment disabled, and your race number 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.

There are two formal mandatory course briefings on Thursday, May 19: the first is at 2:00 P.M., and the second is at 6:30 P.M. You must attend one of these briefings, although you can attend both if you wish. **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 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 – 74<sup>th</sup> edition dated 03/17/2005
- San Francisco Terminal Area – 66<sup>th</sup> edition dated 03/17/2005
- Los Angeles Sectional – 76<sup>th</sup> edition dated 12/23/2004
- Phoenix Sectional – 73<sup>rd</sup> edition dated 05/12/2005

*Equivalent coverage World Aeronautical Charts may be used if desired.*

## HWD ACTIVITY SCHEDULE

All times are local.

Thursday, May 19

- 0900-1800** Impound and check-in
- 1400**  
**-or- *MANDATORY RACE COURSE BRIEFINGS***
- 1830**

The race course briefing is held in the Airport Maintenance Hangar, in the same building and adjacent to the registration check-in desk.

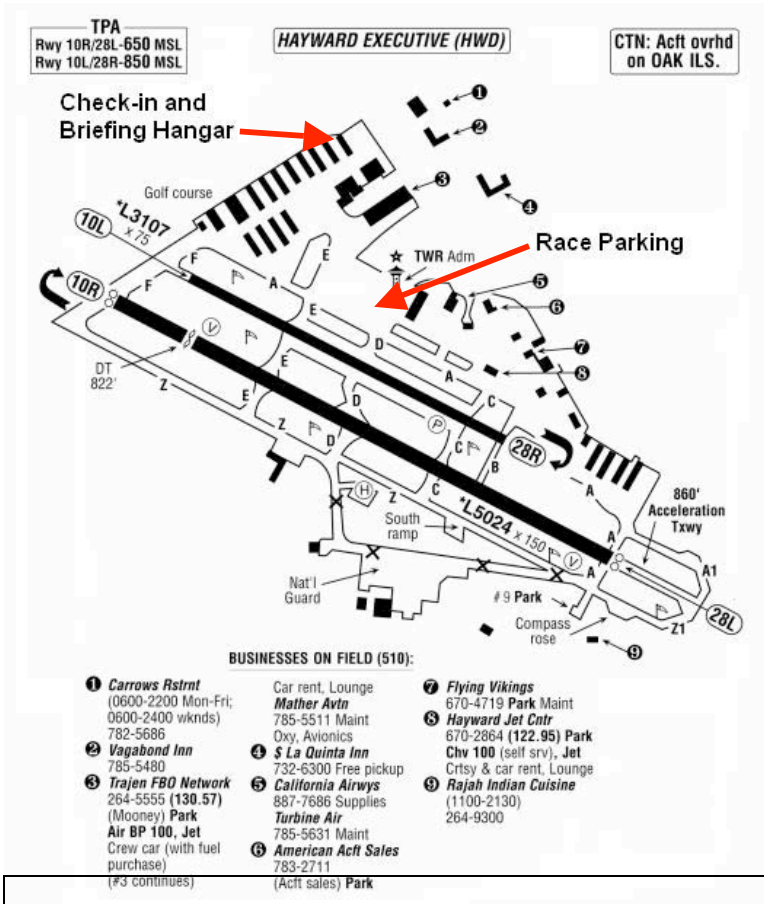
Friday, May 20

- 0700** Coffee and donuts in the briefing hangar.
- 0730** Live FSS weather briefing.
- 0800** Race crew photos – at planeside.
- 0900** First aircraft departs – weather permitting.

With the exception of crew photos, you must be at your aircraft 15 minutes before the first launch (0845) with your preflight estimates completed on the official race forms. A race 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.

# HWD AIRPORT DIAGRAM



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## **COMMITTEE MEMBERS and VOLUNTEERS**

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

### **2005 Hayward Air Race Committee**

<b>Chairman:</b>	Dennis Strout
<b>Treasurer:</b>	Bob Hecoeks/Tom Neale
<b>Secretary:</b>	Jenny Donnelley
<b>Registrar:</b>	<b>Vacant</b>
<b>Publicity:</b>	Eric Helms
<b>Sponsorships:</b>	Gary Waldeck
<b>Webmaster:</b>	Tom Neale
<b>Statisticians:</b>	Steve and Lynne Allen
<b>Course Design:</b>	Steve Allen
<b>Hayward Ramp Operations:</b>	Jenny Donnelly
<b>Bakersfield Ramp Operations:</b>	Naomi Witmer
<b>Special Projects:</b>	Chris Verbil
<b>Checkpoint Mike Timers:</b>	Del Hocker
<b>Checkpoint Bette Timers:</b>	Don Nisley
	Jeanie Moore
	Skip Stroobant
<b>Laughlin Hotel Operations</b>	Nan Tabualevu
	Diane Savage
	Annette Granger

### **Volunteers**

<b>Hayward Ramp:</b>	Kim Purcell
	“Frenchy” Laplante
	Noel Barker
	Ed Nelson
	Herb Schneider
	Bill Hayford
<b>Registration and Check-in:</b>	Ann Pescatello
	Mary Mastroieni
<b>Photographer:</b>	Eric Helms

**Hayward Arrival Barbecue:**  
**Hayward Departure Timers:**

Valerie Farnsworth  
Judy Barker  
Jenny Solorio  
Billie Sposeto  
Del Hocker

**Checkpoint Mike Arrival Timers:**

**TBD**

**Bakersfield Taxiway Flag Men:**

Bill Clauser  
Don McGowan

**Bakersfield Parking Directors:**

Norm Howard  
Bruce Murray

**Bakersfield Ramp Fuel Officials:**

Bonnie Bloeser  
Kathy Derck

**Bakersfield Ramp Drivers:**

Leonard Powell  
Donna Webster

**Bakersfield Poker Dealer:**

Al Green  
Sally Howard

**Bakersfield Lunch Staff:**

Margie Murray  
Joan Paynter

**Bakersfield Photographer:**

Jackie Clauser  
Barbara Green

**Bakersfield Departure Timers:**

Marianne Laxague  
Betty McGowan

**Checkpoint Bette Arrival Timers:**

(Doc) Norman Salisbury  
John Collum

**Laughlin Ramp:**

Naomi Witmer  
Don and Jeanie Nisley

Skip Stroobant  
Gus Telles

Hayward Airport Manager: Brent Shiner

Hayward Airport shuttle van provided courtesy of



Director of Kern County Airports: Ray Bishop

Bakersfield hangar facilities provided courtesy of Mel and Suzanne McGowan.

## CONTACT INFORMATION

<b>Hayward Impound:</b>	.Until 1830 only: (510) 461-6453 After hours: (510) 385-1104
<b>Dennis Strout:</b>	.....(408) 646-1981
<b>Chris Verbil:</b>	.....(408) 757-3426
<b>Oakland FSS:</b>	.....122.5, (800) WX-BRIEF or (510) 273-6111
<b>Rancho Murieta FSS:</b>	..... 122.65 (N); 122.45 (S)
<b>Bakersfield Tower:</b>	.....(661) 861-4325
<b>Bakersfield Ramp:</b>	.....(661) 717-5185
<b>Riverside FSS:</b>	..... 122.2 (W); 122.3 (E)
<b>Bullhead Tower:</b>	.....(928) 754-2449
<b>Prescott FSS:</b>	..... 122.55 or 122.2
<b>Los Angeles Center:</b>	.....Remote via 118.25 when Bullhead Tower is closed.
<b>Bullhead Ramp Crew:</b>	.....(505) 544-5140
<b>Bullhead FBO:</b>	.....(928) 754-3922
<b>Ramada Express Hotel:</b>	.....(800) 243-6846 or (702) 298-4200

BFL Mercury Air Center (Chevron, 661-391-4900, ARINC 131.6): Accepts Visa, Mastercard, American Express, Chevron cards, or cash. No personal checks.

BFL Loyd's Aviation (Avfuel, 661-393-1334, Unicom 122.5): Accepts Visa, Mastercard, American Express, Avcard, Discover cards. No cash or personal checks.

IFP SunWestern Flyers (Chevron, 928-754-3922, Unicom 122.85): Accepts Visa, Mastercard, American Express, Discover, Chevron, Avcard, Multiservice cards. No cash or personal checks.





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## RADIO PROCEDURES

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

Use this frequency to let other racers 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 race, will be using the frequency on a shared basis much like Unicom.

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

*Example "Race Thirteen is approaching Tracy at 3,500."*

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

*Example "Race Thirteen is over Hooterville checkpoint at 7,500, making left turns."*

**While communicating with Hayward Tower, Bakersfield Tower, or Bullhead City Tower, USE YOUR RACE NUMBER.** This will alert controllers for special handling.

*Example "Bullhead Tower, Race Thirteen inbound for landing from checkpoint Bette."*

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

## 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 race scoring. It is simply a VFR Flight Plan that the committee files and opens on your behalf.

The race 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 race 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 you arrive at Bullhead City prior to 6:00 PM local time (0100Z), the Bullhead Tower staff will close your Flight Plan for you.

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.

**If you arrive at Bullhead City after the tower closes, you must close your Flight Plan manually.** If you cannot contact FSS through normal methods, Bullhead Ground frequency 118.25 is remote to Los Angeles Center after the tower closes. You could request Center to notify FSS for you.

### FLIGHT PLAN TIME CALCULATOR

Hayward Takeoff Time

+ ETE from Group Flight Plan

= Your Flight Plan ETA

	Z
+	
=	Z

*Hayward is PDT (UTC -7)      Bullhead City is MST (also UTC -7)*

## RACE SCORING

### **HAYWARD - BAKERSFIELD TIME ESTIMATE**

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

### **BAKERSFIELD – BULLHEAD CITY TIME ESTIMATE**

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

### **HAYWARD - BAKERSFIELD 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 “Mike” timing line to the Bakersfield airport, VFR pattern, landing, taxi, and engine shut down at the race ramp. Runway 30L is the usual runway in use for the race at BFL.

### **BAKERSFIELD – BULLHEAD CITY 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 “Bette” timing line to the Bullhead City airport, VFR pattern, landing, taxi, and engine shut down at the race ramp. Runway 16 is the usual runway in use for the race at IFP.

### **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 race official before you start to refuel, or the fuel vector will be disallowed.**

**All aircraft start with a score of zero (0) points.**

**Time penalty points** will accrue at the rate of one (1) point for each second your actual flight leg time differs from your pre-flight estimate time.

**Fuel penalty points** accrue at the rate of three (3) points for each one tenth of one percent (0.1%) difference in actual fuel burn, as compared to your pre-flight leg fuel estimate.

**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 “Mike” or “Bette” 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 race official present.
- Refueling without the truck fuel meter covered.

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

**Twenty (20) penalty points will be removed from your score for correctly answering a bonus checkpoint question. *These bonus checkpoints are not mandatory*** – you may choose to fly to them or not – but they are generally designed into the course to direct you around a problem of some sort. There is no additional penalty assigned if you miss a bonus checkpoint, you can only gain bonus points to reduce your score.

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 race winner and order of finish.

**Please consult the official race rules, mailed to you with your race entry confirmation letter, for more information on how the race is scored.**

## ABOUT THE RACE SCORING FORM

Included in your race 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.** It will be picked up just prior to your departure. The race official will take the bottom segment of the top white copy only.

**2. BAKERSFIELD FUEL** – Bakersfield 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 Bakersfield 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.

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

**3. BULLHEAD-LAUGHLIN FUEL** – Bullhead City 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 Bakersfield and Bullhead City.

**4. CHECKPOINTS** - During the race, you will be flying over the mandatory and bonus checkpoints listed in this Race 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.

After all required entries and signatures are complete, 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 race scorers may ask you for your copy after the race is completed.



## 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 race 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 race 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 race is flown; if a majority of racers miss or challenge a checkpoint question it will be considered for removal from the scoring process.

### CAUTION

**Due to different cruise speeds of race aircraft, ground tracks inbound to the checkpoint, and altitudes flown – traffic can be hazardous over the checkpoints as aircraft converge. Monitor the air-to-air race 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 race due to mechanical difficulties or other problems, close or modify your flight plan with the nearest FSS. Try to notify another race aircraft of your intentions so that information can be relayed to the Race Committee. Racers receiving information about an airplane dropping out of the race should report it to the officials at the next timing point, and to the ramp officials at the next airport of landing.



Checkpoint diagrams and information are placed in this 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 “Mike” and “Bette”, a mandatory altitude is specified* so timing officials on the ground can easily identify your race aircraft.

**Diagrams in this POH 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 race scoring sheet. The race 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 RACE FREQUENCY OF 122.75.**

## HWD DEPARTURE PROCEDURES

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

Crews should be at their airplanes by 0830 Friday morning. A race official will pick up your time and fuel estimates by 0845.

Prior to engine start:

- Race Score Sheet (“Fuel and Time Estimate Log”) inside cockpit.**
- Review the departure diagram on page 20.**
- 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.

A race 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. Advise you are proceeding with the ATIS.** Example *“Hayward Ground, Race Thirteen is taxiing 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 race timing 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 1200.**
- The race official will raise his flag ten (10) seconds before the start of your takeoff run, and raise his other hand and count down the final five seconds with his fingers. At the drop of the flag the clock is running for your flight, and you should start your takeoff roll.
- Continue to monitor the tower frequency 120.2 after takeoff.
- Takeoff time recorded in Flight Plan Calculator on page **Error! Bookmark not defined..**
- Standard departure for 28L is a left 270 overhead departure.** No right turnouts from 28L due to noise abatement requirements.
- Cross over the airport below 1,000' MSL.**
- 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 ATC communications.

- Monitor Hayward Tower 120.2 until abeam Lake Chabot or Cal State Hayward.
- Proceed on course to your first checkpoint. Altitude and heading are at your discretion.

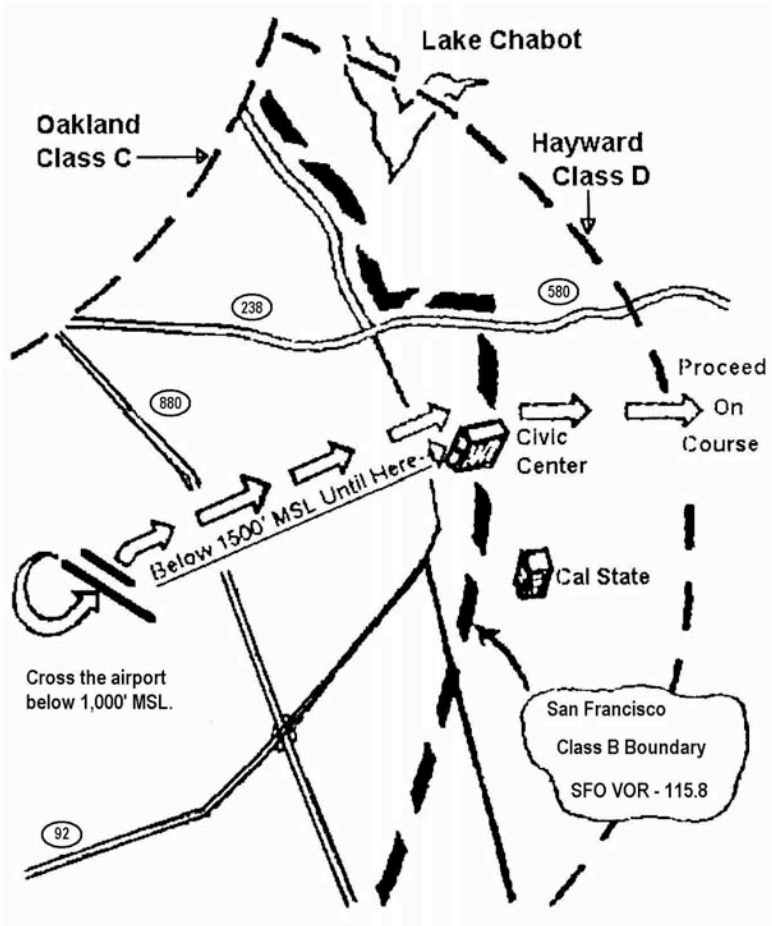
Please note the Livermore Class “D” area – 2,900 feet MSL and below; and Restricted Areas R-2531 – 4,000 feet MSL and below.

NorCal Departure - 135.4

Livermore ATIS - 119.65

Livermore Tower - 118.1

# HWD DEPARTURE DIAGRAM



## ZANETTE

Aircraft Insurance Center

1 (888) SAFE-FLT

## HWD – BFL CHECKPOINTS

---

<input type="checkbox"/>	<b>Checkpoint 1</b>	<b>Gustine</b>
	<b>Elevation 75'</b>	<b>(301)</b>
<b>Pattern Altitude 875'</b>	<b>Lat</b>	<b>37° 15.76'</b>
<b>Overfly Above 2000'</b>	<b>Long</b>	<b>120° 57.80'</b>

The markings on the runway at midfield are:

- A. GUSTINE elev 75.
- B. GUSTINE ctaf 122.9.
- C. a dashed stripe.

---

<input type="checkbox"/>	<b>Checkpoint 2</b>	<b>Chowchilla</b>
	<b>Elevation 242'</b>	<b>(206)</b>
<b>Pattern Altitude 1242'</b>	<b>Lat</b>	<b>37° 06.75'</b>
<b>Overfly Above 2300'</b>	<b>Long</b>	<b>120° 14.81'</b>

Locate the race track on the west side of the airport;  
across the street from the end of the race track is a:

- D. building under construction.
- E. car dealership with lots of cars visible in the lot.
- F. big McDonalds.

---

*Continue to next page.*

---

<input type="checkbox"/>	<b>Bonus Checkpoint 1</b>		<b>Oil Camp</b>
	<b>Elevation 300'</b>	<b>Lat</b>	<b>36° 40.88'</b>
	<b>Overfly Above 2300'</b>	<b>Long</b>	<b>120° 30.69'</b>

**At Oil Camp I saw**

- T. a tall cement wall perimeter with guard towers at each corner, looks more like a prison.**
- U. many counter-weighted oil pumps hard at work.**
- V. a square compound with a perimeter marked mostly by trees.**

---

<input type="checkbox"/>	<b>Checkpoint 3</b>		<b>Woodlake (O42)</b>
	<b>Elevation 425'</b>		
	<b>Pattern Altitude 1225'</b>	<b>Lat</b>	<b>36° 23.93'</b>
	<b>Overfly Above 2500'</b>	<b>Long</b>	<b>119° 06.44'</b>

**A river parallels the runway**

- A. North of the airport.**
- B. South of the airport.**
- C. ?? What river, I didn't see a river?? !!**

---

Proceed to Delano (DLO) airport for start of timing line "Mike" approach, and copy Bakersfield ATIS as soon as possible.

## BFL AREA TIMING LINE IDENTIFICATION

---

**MIKE**

**Frequency 126.4**

**Lat 35° 36.12'**

**Long 119° 12.67'**

The timing line is the Hwy-99 overpass at Famoso. Cross the east-west road at a point between the timers and the freeway.

Required altitude over the timing line is 1500 feet MSL. The timing line is approximately 13 nautical miles from Bakersfield Meadows Airport.



## BFL AREA TIMING (MIKE) APPROACH

**From Woodlake, fly to Delano (DLO) then follow Hwy-99 south. Refer to the diagram on the next page.**

- ❑ **Ten (10) miles north of Mike (near DLO), call the timers on 126.4.** *Example “Checkpoint Mike, Race Thirteen over Delano, inbound for timing.”*
- ❑ **Transponder on to 0202** so Bakersfield Approach will recognize you as a race aircraft.

You do not need to contact Approach unless you are requesting their services.

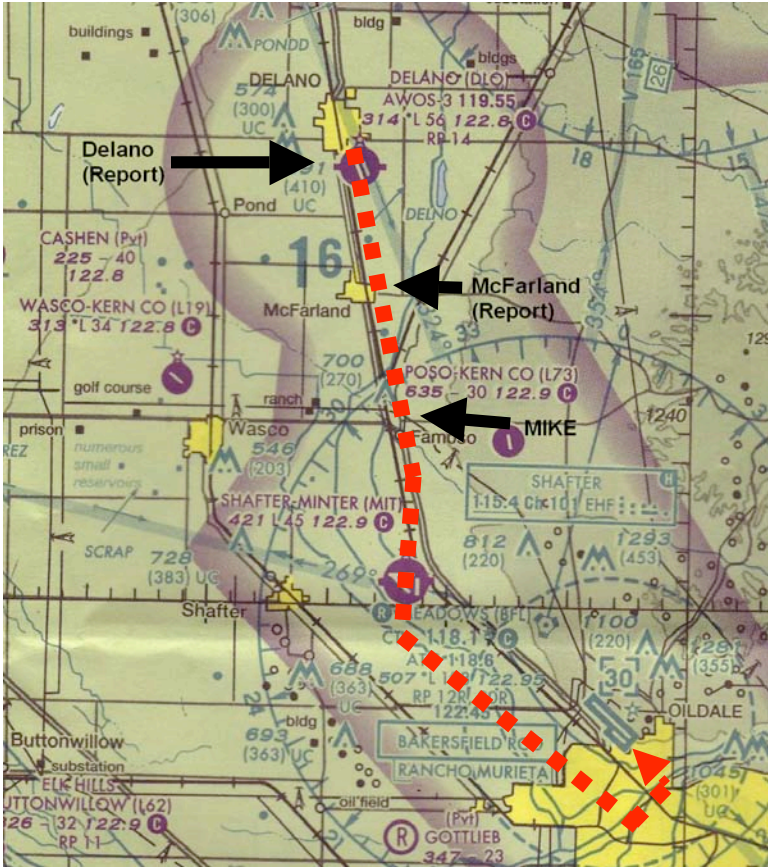
- ❑ **Five (5) miles north of Mike (over the town of McFarland): Landing lights on, and report to timers.** *Example “Checkpoint Mike, Race Thirteen is five miles, lights on.”*
- ❑ Traffic permitting, maintain 1500’ MSL to Mike.
- ❑ Remain over Hwy-99 or slightly to the west as you fly from Delano to Mike.
- ❑ **One (1) mile north of Mike: Report to timers.** *Example “Checkpoint Mike, Race Thirteen at one mile final for timing.”*

**DO NOT FLY OVER THE TIMERS!** They are located west of the highway at the Famoso overpass on Hwy-99. Please cross the timing line at 1500’ MSL.

When you cross the timing line, the timing officials should confirm on 126.4 that they have recorded your time. They will not report your actual clock time; only an acknowledgement that your time has been recorded is made.



# MIKE APPROACH CHART



## BFL AIRPORT ARRIVAL

- ❑ Copy Bakersfield ATIS – 118.6 – as soon as practical as requested by BFL ATCT/TRACON.
- ❑ **Departing Mike, contact Bakersfield Tower – 118.1.**  
Advise the Tower that you are inbound for landing.  
*Example “Bakersfield Tower, Race Thirteen is departing Checkpoint Mike, inbound with information Alpha for landing.”*
- ❑ Climb to 2000’ MSL and fly directly overhead the Shafter-Minter (MIT) airport.
- ❑ From MIT continue southeast towards BFL and expect a left downwind entry for landing on 30L.

**Please note that any go-arounds, extended downwinds, 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.**

Race parking is near the approach end of runway 30L. Upon exiting the runway, follow the directions of the ramp officials to parking.

- ❑ **Monitor Bakersfield Ground – 121.7.** No call is necessary unless directed by Tower.

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.

- A race 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 pilot or copilot must remain with the aircraft until fueling is completed. Please be prepared to pay for your fuel at the truck. See the contact information on page 8 for which payment methods will be accepted by each FBO.

When fueling is complete, you may proceed to the hangar for lunch. Courtesy transportation to and from the hangar is available; ask any ramp official for directions.

At the hangar, complimentary soft drinks and bottled water, fresh fruit, cookies, and other light snacks are available free of charge. The Bakersfield 99s will have sandwiches available for a nominal cost of \$5.

- If you are playing poker don't forget to draw two more cards.
- Internet access and a voice telephone line will be available in the hangar office for updating weather briefings and flight plans.

# BFL AIRPORT DIAGRAM

**BAKERSFIELD: MEADOWS (BFL) 507' 3NW [IAP]. 35°26.02'N 119°03.41'W. (661) 393-7990. Att 24 hrs. KPMC 1560. →Bcn. \*PCL (when Twr clsd): Rwys, VASI, PAPI, apch 30R, txwy (3x, 5x, 7x).**

ATIS	TWR/CTAF	GRND	APC	DEP	ASOS	VDT	RIU	FSS	ILS	30R	LOM
118.6	Bakersfield	121.7	Bakersfield		—	111.2	RCO	111.9D	385BF		
399-9425	118.1		126.45	126.45	393-3766		122.45	301*			6.0
	0600-2300		118.9N					IBFL			
			118.8S								
			0600-2300								
			L.A. Cntr®								
			127.1—2300-0600								

**TPA**  
1500 MSL  
Turbo-prop-2000 MSL  
Jet-2500 MSL

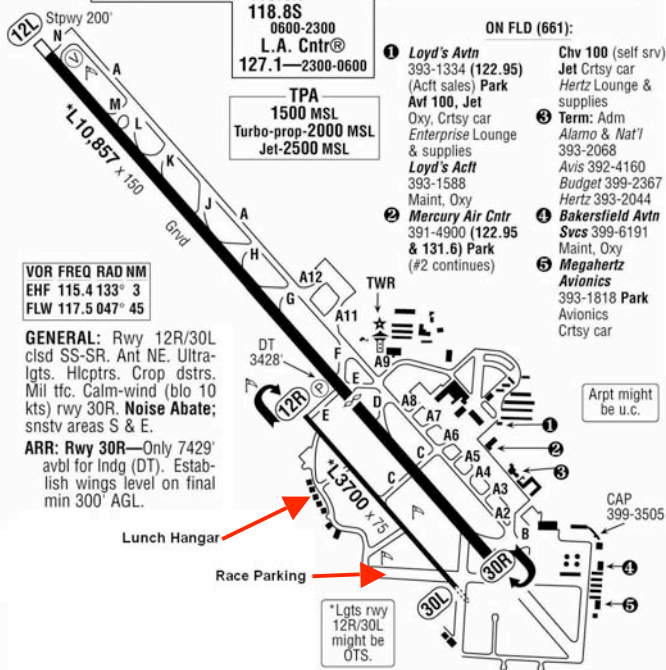
**ON FLD (661):**

- ① **Loyd's Avtn**  
393-1334 (122.95)  
(Acft sales) **Park**  
**Avl 100, Jet**  
Oxy, Crtsy car  
**Enterprise Lounge**  
& supplies  
**Loyd's Acft**  
393-1588  
Maint, Oxy
- ② **Mercury Air Cntr**  
391-4900 (122.95  
& 131.6) **Park**  
(#2 continues)
- ③ **Chv 100** (self srv)  
**Jet Crtsy car**  
**Hertz Lounge & supplies**
- ④ **Term: Adm**  
**Alamo & Nat'l**  
393-2068  
**Avis** 392-4160  
**Budget** 399-2367  
**Hertz** 393-2044
- ⑤ **Bakersfield Avtn Svcs** 399-6191  
Maint, Oxy
- ⑥ **Megahertz Avionics**  
393-1818 **Park**  
Avionics  
Crtsy car

**VOR FREQ RAD NM**  
EHF 115.4 133° 3  
FLW 117.5 047° 45

**GENERAL:** Rwy 12R/30L clsd SS-SR. Ant NE. Ultra-lgts. Hlcptrs. Crop dstrs. Mil tfc. Calm-wind (blo 10 kts) rwy 30R. **Noise Abate;** snstv areas S & E.

**ARR:** Rwy 30R—Only 7429' avbl for Indg (DT). Establish wings level on final min 300' AGL.



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## BFL DEPARTURE PROCEDURES

- Copy ATIS on 118.6 before engine start.
- Race Score Sheet (“Fuel and Time Estimate Log”) inside cockpit.**
- Review the departure diagram on the next page.**
- Place this green start card in windscreen or out window so the ramp official can clear you for engine start.
- Monitor Ground Control on 121.7 as you taxi.** No call is necessary, simply monitor the ground frequency.

After completing your run-up:

- Switch to Bakersfield Tower on 118.1.** No call is necessary until you are number one to go.
- Transponder on to 5207.**

Standard departure is a right crosswind from Runway 30L.

- Taxi up to and HOLD SHORT of 30L. When you are number one for takeoff, call the Tower on 118.1.** Advise them you are ready for takeoff with a right crosswind departure. *Example “Bakersfield Tower, Race Thirteen ready at 30 left for right crosswind departure.”*
- TOWER WILL CLEAR YOU FOR TAKEOFF.**

There may be a short delay while Tower sequences your takeoff to coordinate the right turn-out between 30R arrivals and departures.

Your timing for the second leg of the race will begin when you pass the timers at the timing line. They are located on the left shoulder near the beginning of 30L.

*Continue to next page.*

**DO NOT START YOUR RIGHT CROSSWIND TURN UNTIL INSTRUCTED BY THE TOWER.**

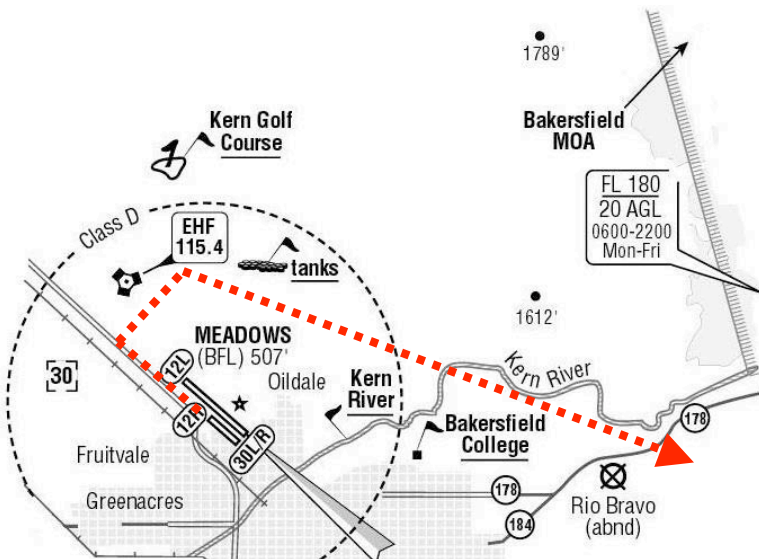
For an orderly transition out of the area, proceed on an extended right crosswind departure until well clear of both arrival and departure corridors for BFL.

After leaving tower frequency:

- Monitor Bakersfield Departure on 126.45.** No call is necessary unless you are requesting ATC assistance.

When safely clear of the BFL corridors, you may proceed to the Tehachapi Pass area, staying to the east of the city of Bakersfield and the abandoned Rio Bravo airport.

- Monitor the race air-to-air frequency 122.75.**
- Proceed on course to your first checkpoint.



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*Continue to next page.*

## BFL – IFP CHECKPOINTS

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<input type="checkbox"/>	<b>Checkpoint 4</b>	<b>Barstow-Daggett</b>
	<b>Elevation 1927'</b>	<b>(DAG)</b>
	<b>Pattern Altitude 2927'</b>	<b>Lat 34° 51.22'</b>
	<b>Overfly Above 4500'</b>	<b>Long 116° 47.20'</b>

**A circular field with a notch out of it (looks like Pacman) is located at which airport boundary?**

**J. West**

**K. East**

**L. North**

## **CHANGE TO SQUAWK 1200 at THIS CHECKPOINT**

---

<input type="checkbox"/>	<b>Checkpoint 5</b>	<b>Kelso</b>
	<b>Elevation 2000'</b>	<b>Lat 35° 01.00'</b>
	<b>Overfly Above 3500'</b>	<b>Long 115° 38.90'</b>

**Next to the railroad tracks are two tall**

**M. silver cylinders.**

**N. red and white radio towers.**

**O. smokestacks.**

---

*Continue to next page.*

---

<input type="checkbox"/>	<b>Checkpoint 6</b>	<b>Golf Course</b>
<b>Elevation 2800'</b>	<b>Lat</b>	<b>35° 33.30'</b>
<b>Overfly Above 4000'</b>	<b>Long</b>	<b>115° 25.10'</b>

**Although charted on the WEST side of the freeway, the golf course**

- J. is on the EAST side of the freeway.**
- R. straddles the freeway, both EAST and WEST sides are green.**
- S. is actually on the WEST side of the freeway only.**

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<input type="checkbox"/>	<b>Bonus Checkpoint 2</b>	<b>Corral</b>
<b>Elevation 4100'</b>	<b>Lat</b>	<b>35° 13.80'</b>
<b>Overfly Above 6100'</b>	<b>Long</b>	<b>115° 08.50'</b>

**At this checkpoint I saw a**

- W. windmill.**
- X. circular water tank.**
- Y. large American flag.**

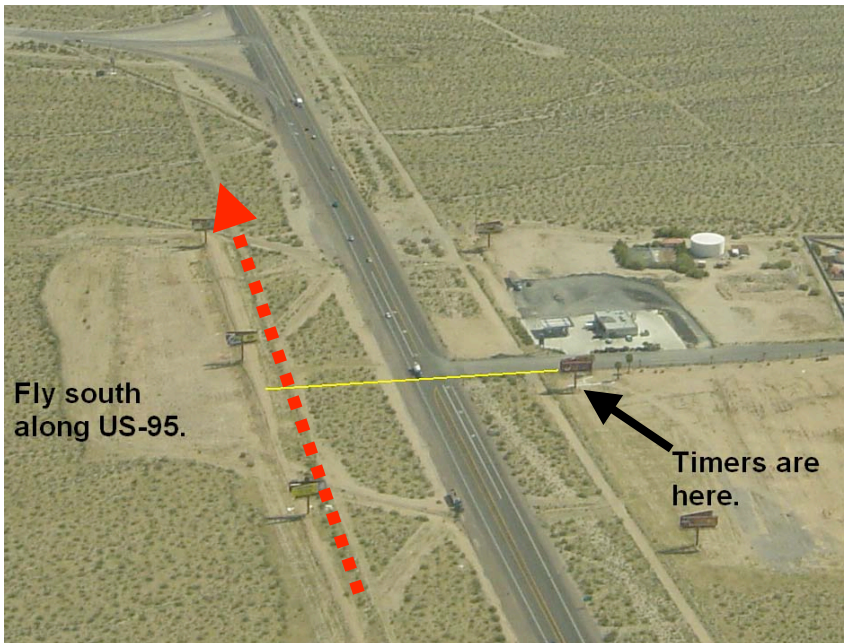
- 
- Proceed to Searchlight (1L3) airport then south via US-95 for timing line “Bette” approach.



**BETTE**                      **Frequency 126.4**  
**Lat 35° 11.83'**            **Long 114° 51.30'**

The timers are located at the convenience store and gas station approximately .2 nautical miles north of the SR-163 and US-95 intersection. Fly south along US-95, between the highway and the billboards to the east.

Required altitude over the timing line is 3500 feet MSL. The timing line is approximately 14.5 nautical miles from Laughlin-Bullhead International Airport.



## IFP AREA TIMING (BETTE) APPROACH

**From “Corral” fly to the Searchlight (1L3) airport. At Searchlight, you are approximately 15 miles from the timing line. Refer to the diagram on the next page.**

- Overhead Searchlight: Call the timers on 126.4.**  
Example “Checkpoint Bette, Race Thirteen over Searchlight, inbound for timing.”

The Bette timing officials will not reply until you are much closer to their location.

- Turn south to follow the highway towards Laughlin.

Approximately eight (8) miles south of Searchlight you will see Kidwell Airport (1L4) just west of the highway.

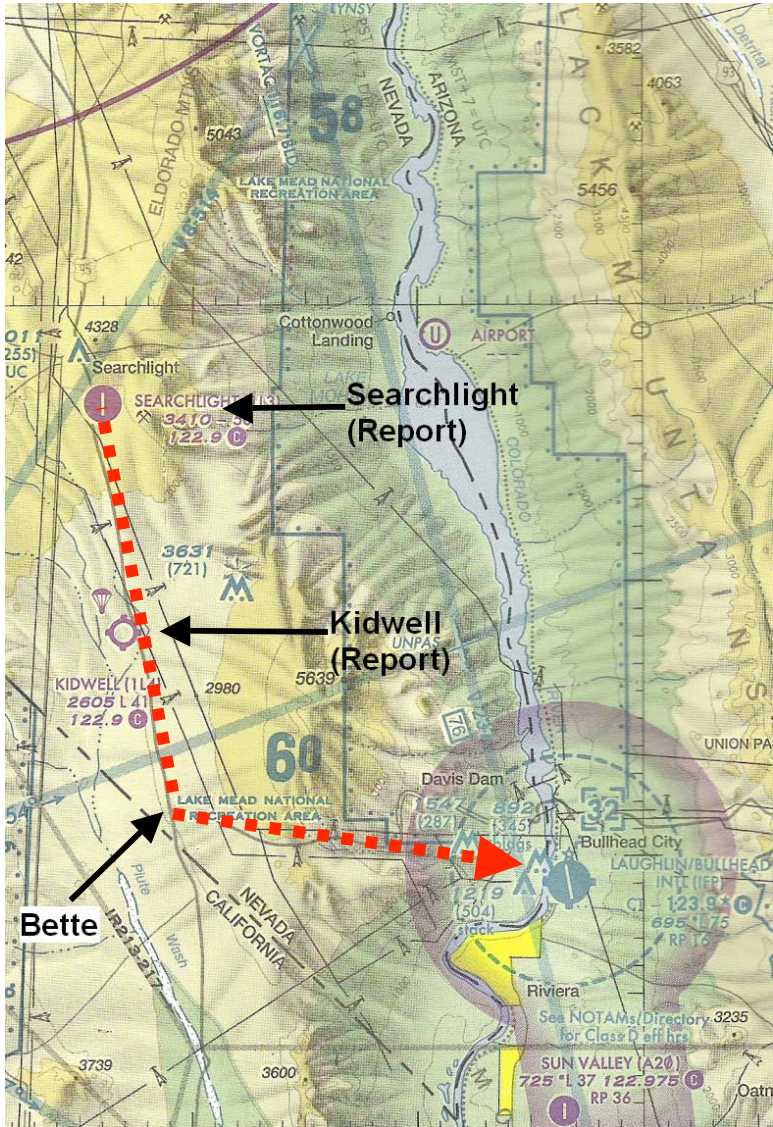
- Abeam Kidwell Airport: Landing lights on, and report to timers.** *Example “Checkpoint Bette, Race Thirteen at Kidwell, lights on.”*
- Traffic permitting, maintain 3500’ MSL to Bette.
- One (1) mile north of Bette: Report to timers.** *Example “Checkpoint Bette, Race Thirteen is one mile final for timing.”*

The timing line is at the junction of the highway and entrance road to the convenience store and subdivision. Fly south between the highway and the billboards to the east.

**DO NOT OVERFLY THE TIMERS!** The timers will be on the west side of the highway. Please cross the timing line at 3500’ MSL.

When you cross the timing line, the timing officials should confirm on 126.4 that they have recorded your time. They will not report your actual clock time; only an acknowledgement that your time has been recorded is made.

# BETTE APPROACH CHART

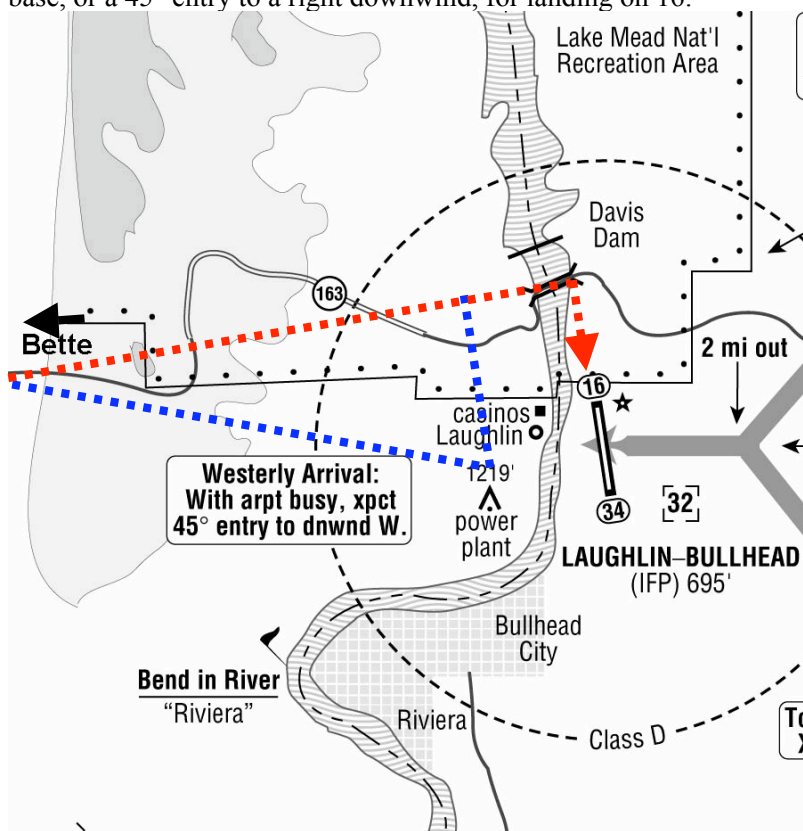


## IFP AIRPORT ARRIVAL

At the timing line you are approximately fourteen (14) miles from Laughlin-Bullhead International Airport.

- ❑ **Departing Bette, contact Bullhead Tower on 123.9.** Advise the Tower that you are at Checkpoint Mike for landing. Example “Bullhead Tower, Race Thirteen is departing Mike for landing.”

Continue eastward toward the airport and expect either a right base, or a 45° entry to a right downwind, for landing on 16.



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# IFP AIRPORT DIAGRAM

**BULLHEAD CITY—LAUGHLIN (NV)—BULLHEAD INT'L (IFP) 695' 1N [IAP]. 35°09.44'N 114°33.57'W. (928) 754-2134. Att 24 hrs. Fee. KSFE 1340. →Bcn. \*PCL: 123.9 - Rwy, PAPI, txwy (3x).**

TWR/CTAF	GRND	APC/DEP	DEL
Bullhead	118.25	L.A. Cntr	L.A. Cntr
123.9		134.65 <sup>Ⓢ</sup>	118.25—
0800-1800			When Twr clsd

**TPA**  
Sngl-1700 MSL  
Hi-perf-2200 MSL

**ON FLD (928):**

- ① Term: Office  
Avis 754-4686  
Enterprise 754-2700  
Hertz 754-4111
- ② GA Term:  
SunWestern Flyers  
754-3922/-3020  
(122.85) Park  
Chv 100, Jet  
Lounge & supplies

**FSS: PRESCOTT**  
122.55 122.2  
122.1 115.2

**VOR FREQ RAD NM**  
EED 115.2 335° 24  
GFS 114.4 072° 30

**GENERAL:** Mtns NW-SE. Min alt 2000' (enforced) over Lake Mead Rec Area adj N. Avd power plant 2 mi W (trblnc poss). Mil tfc. Hlcptrs. Calm-wind (blo 10 kts) rwy 16.

**ARR:** With arpt busy (e.g. wknds), xpct—  
From S-NW, enter a 45° leg 3 mi W; From NE-SE enter a midfld X-wind 2 mi E. Fly dwnwnd btwn power plant (smoke stack) & casinos W.

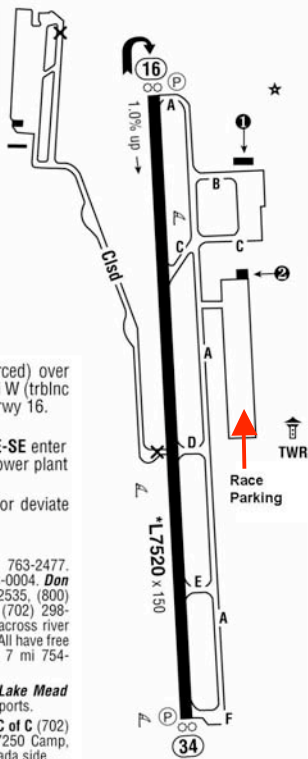
**DEP:** Rwy 34—Cross dam N at or abv 3500' or deviate NW or NE to avd Rec Area.

Pole rwy 16.

**F.T.L. (928):** *Black Bear Diner* (0600-2200), 2 mi 763-2477. *Colorado Belle Hotel & Casino*, across river (800) 858-0004. *Don Laughlin's Riverside Resort*, across river (702) 298-2535, (800) 227-3849. *Edgewater Hotel & Casino*, across river (702) 298-2453, (800) 677-4837. *River Palms Hotel & Casino*, across river (702) 298-2242. *River Queen Resort*, ½ mi 754-3214. All have free pickup. *Lake Mohave Resort (Katherine's Landing)*, 7 mi 754-3245, (800) 752-9669.

★FLY-IN RESORT & REC AREA: *Colorado River* adj. *Lake Mead Nat'l Rec Area* 1 mi & *Lake Mojave* 3 mi Fish, water sports.

**REC INFO (928):** Bullhead C of C 754-4121. Laughlin C of C (702) 298-2214, (800) 227-5245. *Davis Camp*, 1 mi 754-7250 Camp, fish, jet ski, swim. **Water taxi** to hotels/casinos on Nevada side.



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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.

Race parking is on the ramp east of the runway. Upon exiting the runway:

- Switch to Bullhead Ground – 118.25.** Ground will direct you to race 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 race 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 pilot or copilot must remain with the aircraft until fueling is completed. Please be prepared to pay for your fuel at the truck. Payment methods accepted by this FBO are listed on page 8.

When fueling is complete, you will be expected to complete your race scoring form including all your checkpoint answers. The ramp official will then collect the final scoring copy, leaving you with a pink copy for your records.

*Continue to next page.*

- ❑ **Is your Flight Plan closed?** If you arrived during tower operating hours, your flight plan has been closed on arrival. If you land after tower hours, you must close it manually.
- ❑ **Remove your race numbers, if tape has been used.** The 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.

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

The parking ramp at IFP is accessed through the FBO, whose normal operating hours are 0600 – 2200. If you need to return to your airplane outside of those hours, you must coordinate your request in advance with the FBO – refer to the contact numbers on page 8.

Upon arrival at the hotel, you can pick up your room keys at the Air Race reception desk, in the area of the West Tower entrance. Some arrivals before 1500 may find that their room has not yet been cleaned; you can drop your bags at the room and it should be cleaned shortly. Please be patient with the hotel staff as several racers may get to their rooms before hotel “regular check-in” time.

If you require room charge privileges, credit card deposits for room telephone use, or other special needs at the hotel, you can proceed at your leisure to the “Express Check-in” area of the front desk to make arrangements.

The final card draw for Poker and your entry for the optional Keno tournament can be completed at the Air Race reception desk near the hotel West Tower entrance.

## HOTEL ACTIVITY INFORMATION

### HOSPITALITY SUITE

Friday: Coronado Room – 1400 to 2300

Saturday: West Tower 284 – 0800 to 1530, and  
2000 to 2300

### AWARDS DINNER

Saturday – Pavilion Room

No-Host Cocktails start at 1630

Dinner and Presentations 1730 – 1930

### 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.

The dedicated race-only van will have trips at 0700, 0800, and 0900.

The hotel van will have runs on the hour starting at 0900, with the last airport trip scheduled for 1300.

Thank you for participating in this year's Air Race. We sincerely hope you had an enjoyable time. Please e-mail us with your comments: [info@hwdairrace.org](mailto:info@hwdairrace.org)

### HELP WANTED

Get in on the year-round planning effort for the 2006 Hayward Air Race! Great pay, wonderful office view, fantastic benefits. OK, so maybe there is no pay at all but we do offer a very liberal time-off policy. Contact Dennis Strout for more details. EOE B/P/TD/UYC