

## REGISTRATION

PREREGISTRATION PRIOR TO JULY 1, 2009 IS STRONGLY RECOMMENDED TO BE ASSURED OF ACCOMMODATIONS, WALK-IN OR REGISTRATIONS AFTER AUGUST 20TH ARE \$2200.

### CLASS REGISTRATION FEE — US\$2000

*10% Discount for additional registrants from same organization.*

Check, money order, or purchase order accepted payable to WRK of Oklahoma in advance or at on-site registration.

### Pre-register by e-mailing your

Name, Address, Phone, & Organization to  
**rwwhitney@earthlink.net** or  
**dgardisser@wrkofar.com**  
Phones: (405) 714-0095 or (501) 676-1762

## LA JUNTA LODGING

**Holiday Inn Express** (Designated meeting hotel)  
27994 US Hwy 50 Frontage Road  
La Junta, Co 81050  
(719) 384-2900

Block of rooms reserved under name of R. W. Whitney  
Res# 67929603 @ \$81.99 + Tax  
Room block held until Aug 1, 2009, or until gone.  
Make your own reservations ASAP.

**Super 8 La Junta** (Alternate hotel)  
27882 Frontage Road  
La Junta, Co 81050-9707

**WRK**  
*The Application Technology Specialists*

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OKLAHOMA

**PAASS**

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# S.A.F.E. ANALYST TRAINING 2009

*S.A.F.E. Analyst Certification Training*



### Training 2009 Includes:

- S.A.F.E. Fly-In Reference Manual-2009 Edition
- Information-Packed digital storage device
- Hands-On practice and Classroom Instruction
- Actual fly-in, "real world" situations to practice skills

**September 21-24, 2009**  
**La Junta, Colorado USA**

Note: Dates are firm but some program content may vary.

SAFE ANALYST CERTIFICATION TRAINING

# ARRIVAL & REGISTRATION

MONDAY, SEPTEMBER 21, 2009

7:00 - 9:00 pm Pre-registration Holiday Inn Express

## DAY 1, TUESDAY, SEPTEMBER 22, 2009

- |          |   |  |
|----------|---|--|
| 6:00 am  | <b>Registration</b>   | <b>Training Hangar (SE of FBO)</b>   |
|          | Coffee and donuts   |  |
| 7:00 am  | <b>Introductions</b>  |  |
|          | <ul style="list-style-type: none"><li>• Staff, guests, hosts, and attendees</li><li>• Agenda review</li><li>• Notebook and Flash Drive content</li></ul>  |  |
| 8:00 am  | <b>Fly-In Preparation</b>   | <b>Hangar</b>  |
|          | <ul style="list-style-type: none"><li>• Preparations for a calibration workshop</li><li>• Safety</li><li>• Etiquette</li><li>• Analyst liabilities</li></ul>  | <ul style="list-style-type: none"><li>• Protocol</li><li>• String system components</li><li>• Setups PA, Drift, Swath displacement cards</li></ul>   |
| 9:30 am  | <b>Break</b>  | (Coffee, Sodas, Water provided)  |
| 10:00 am | <b>Field Equipment Layouts</b>  | <b>Airport grounds</b>   |
|          | <ul style="list-style-type: none"><li>• Field equipment setup review and layout</li><li>• Drift setups</li><li>• Pattern setups</li></ul>   |  |
| 11:30 am | <b>Morning Wrap &amp; Discussion</b>  | <b>Hangar</b>  |
|          | <ul style="list-style-type: none"><li>• Witness Cards, Novartis, Oil, Kromecote Samples</li><li>• Limitations</li><li>• Spread factors</li><li>• Image and paper quality</li><li>• Drop size</li><li>• Computer requirements</li><li>• Applications</li><li>• PA enhancements</li><li>• Drift</li></ul> | <ul style="list-style-type: none"><li>• Canopy deposition</li><li>• Swath displacement</li><li>• Output discussion</li><li>• Examples</li><li>• VMD, V.1, V.9</li><li>• Plot</li><li>• Histogram</li><li>• Est. GPA</li><li>• % Area covered</li></ul> |

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*Hope you can make it to...*

# LA JUNTA

*"Where the Santa Fe Trail Divides"*



- ◇ Founded December, 1875
- ◇ Located on the historic Santa Fe Trail
- ◇ 182 miles from Denver, 63 miles E of Pueblo
- ◇ 4100 Ft elevation
- ◇ Population about 10,000
- ◇ Otero Junior College
- ◇ Koshare Indian Dancers & Museum
- ◇ Boggsville Historic Site
- ◇ Arkansas Valley Regional Medical Center
- ◇ Brent's Old Fort



*Bent's Old Fort*

*Otero Junior College*





**Richard W. Whitney, Ph.D., P.E.**  
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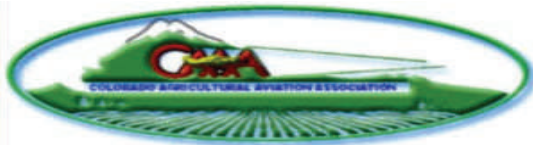


Thanks to John Garr,  
**GARRCO Products**

Special thanks to Carolyn Baecker, **CP Products, Inc.** for her continued assistance and generous support with the **NAAREF and S.A.F.E.** programs.



A special thanks to the **Colorado AAA** for making their Fly-in Workshop available for **S.A.F.E.** Analyst Training



- 12:00 pm **Lunch** (Lunch Provided) **La Junta Golf Club**
- 1:00 pm **DropletScan™ V2.4\_9** (Dr. D. R. Gardisser)
- 2:30 pm **Break** (Coffee, sodas, and water provided)
- 2:45 pm **Analysis Center Setup & Discussion** **Hangar**  
 Layout and functioning analysis center (Discussion)
  - Unpack analysis equipment (4 teams; 2 sets of string)
- Program Overview
  - System Setup
  - Test Data
  - String Analysis
- Swath Determination
  - Analyze Existing Files
  - Printed Reports
  - V33 USB Compatible
- 4:05 pm **WRK Granular Analysis Software V4.0**
  - Program Overview
  - System Setup
  - Test Data
  - Data Entry
  - Swath Determination
  - Analyze Existing Files
  - Printed Reports
- 4:30 **Hands-On Applications** **Hangar**  
 (2-4 teams, 2-4 equipment setups)
  - String analysis— (2 string analysis units)  
 2 teams will analyze strings from previous fly-ins. Obtain printouts (Passes, Average, Overlapped swaths)
  - Card analysis— (2 DropletScan™ units)  
 2 teams will analyze cards from previous fly-ins. Produce DropletScan™ report printouts
- 5:30 pm **Free Time**
- 6:30 pm **Dinner** (Dinner provided) **La Junta Golf Club**

DAY 2, WEDNESDAY, SEPTEMBER 23, 2009

6:00 am **Setup Equipment** (Students ) **Meet at Hangar**

- Flight-line Collector & Data Systems
- Drift Tower - Flight Path

7:30 am **Discussion of Aircraft Setup** **Airport (airplane)**

*Booms*

- Type
  - Location
  - Length
  - Nozzles attachments
  - Hangers
  - Half boom shut off
  - Tapered booms
  - Bleed lines
  - Nozzle Types*
  - Sheet
  - Straight stream
  - Hollow cone
  - Rotary
  - Check valves
  - Identification (type, size, etc.)
  - Aerodynamics*
  - Ground effect
  - Prop wash
  - Vortices
  - Obstruction
  - Wing tips
- Vortex generators
  - Fairings
  - Aircraft Review*
  - Spray system component review
  - Cockpit
  - Flow controllers (A & B styles)
  - GPS
    - Racetrack
    - Back and forth
    - Quick racetrack
    - Reverse racetrack
    - Expand
    - Squeeze
    - Calibration
  - Spreadsheet - ACCALIB
  - CP Products web site
  - CP Model worksheet
  - AgDrift

10:00 am **Break** (Coffee, sodas, and water provided) **Hangar**

10:20 am **Nozzle models for aircraft setups** (*Dr. Dennis Gardisser*)  
(Students bring laptops for interactive learning)

12:00 pm **Lunch** (Lunch provided) **La Junta Golf Club**

PROGRAM PRESENTERS



**Scott Bretthauer**  
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Pesticide Safety Education  
University of Illinois Extension  
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# DAY 4, FRIDAY, SEPTEMBER 25, 2009

**6:00 am Setup Flightline** (Students) **Meet at Hangar**

- Flight-line Collector System
- Flight Data System
- Drift Tower & Flight path

**7:30 am Colorado AAA Fly-in Resumes**  
Students will conduct the fly-in and operate all stations. Teams will rotate duty stations throughout the day, as determined by the Fly-in management.

**Station 1 Team 3** (*Whitney*) **Airport**

- Briefing pilots
- Overseeing loading operations
- Flowbrator operations

**Station 2 Team 1** (*Gardisser, Whitney*) **Airport**

- Flight-line duties
- Drift Tower operation

**Station 3 Team 2** (*Gardisser, Bretthauer*) **Hangar**

- String analyses
- DropletScan analyses
- Print outs & Pilot consultations

**12:00 pm Lunch** | Courtesy of CAAA | **Hangar**  
**Bob Wolf—Low volume fungicide applications**  
**Scott Bretthauer—Utilization of additives to help reduce drift potential**

**1:00 pm Fly-in Resumes**

**7:00 pm Fly-in Concludes**  
Dismantle flight-line and repack equipment (Students)

**7:00 pm Dinner and Graduation Ceremonies**  
**Hogs Breath Saloon, La Junta**  
 Meal provided (*Cash Bar*)



**1:15 pm Pattern Anomalies** (*Dr. D. R. Gardisser*) **Hangar**  
 Fixing aerodynamic pattern problems on fixed and rotary wing aircraft

- Prop wash
- Hangars /obstructions
- Vortices
- Speed
- Height
- Wind direction
- Leaks
- Unexplained pattern problems ?  
Don't always look for the obvious!
- Flowbrator
- Volume/drop size – what rate to check if operator is doing several tests.?

**3:00 pm Break** (Coffee, sodas, and water provided)

**3:20 pm Wrap Up** **Hangar**

- Review of course material
- Review of procedure for analyst certification by NAAA

**4:30 pm Final Exam and Course Evaluation**  
 (Passing grade will be mandatory for those wanting to be certified or recertified.)

**5:30 pm Free time & Dinner on your own**  
 (Suggest rendezvous at the Hog's Breath Saloon)

DAY 3, THURSDAY, SEPTEMBER 24, 2009

6:00 am **Setup Flightline** (Students) **Meet at Hangar**

- Flight-line System
- Flight Data System
- Drift Tower & Flight path

7:30 am **Colorado AAA Fly-in Begins**

Students will conduct the fly-in and operate all stations. Teams will rotate duty stations throughout the day, as determined by the Fly-in management.  
Initial duties will be:

**Station 1 Team 1** (*Bretthauer, Whitney*)  
**Airport**

- Briefing pilots
- Overseeing loading operations
- Flowbrator operations

**Station 2 Team 2** (*Bretthauer*) **Airport**

- Flight-line duties
- Drift Tower operation

**Station 3 Team 3** (*Whitney, Gardisser*) **Hangar**

- String analyses
- DropletScan analyses
- Print outs & Pilot consultations

12:00 pm **Lunch** |Courtesy of CAAA| **Hangar**

(Educational presentation for pilots and operators (CEU's available) (*Dr. D. R. Gardisser*)

*Dennis Gardisser—Engineering application technology update*  
*Richard Whitney—Nozzle body-check valve and boom dynamics*

1:00 pm **Fly-in Resumes Until** - one of the following: **Airport**

- Dark
- No aircraft
- Weather causes cessation of operations

7? :00 pm **Repack Flight-line Equipment** (Students)  
Dinner on your own

7:30 pm **Group Discussion & Test Review** **Holiday Inn Express**

- Questions regarding day's operations
- Problems experienced
- Aircraft problems observed and suggested solutions
- General discussion of Analyst needs
- Review of pictures on CD
- Wrap up



PREVIOUS CLASS ACTIVITIES