ADVANCED TURBINE TRAINING DELTA STATE

S.A.F.E. ANAYLST TRAINING 2024

S.A.F.E. Analyst Certification Training

DELTA STATE UNIVERSITY
COLLEGE OF BUSINESS AND AVIATION

TRAINING 2024 INCLUDES:

- S.A.F.E. Fly-In Reference Manual 2024 USB Edition
- Information-Packed digital storage device
- Hands-On practice and Classroom Instruction
- Actual Fly-In, "real world" situation to practice skills

International students encouraged to participate!

September 30 - October 4, 2024

Cleveland Municipal Airport-KRNV

1029 Airport Terminal Rd. | Cleveland, MS 38732

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

ADVANCED TURBINE TRAINING DELTA STATE
OPERATION S.A.F.E. ANALYST CERTIFICATION TRAINING

ARRIVAL & REGISTRATION

MONDAY SEPTEMBER 30, 2024

4:00-6:00pm **Pre-registration — come by the Cleveland Municipal Airport-KRNV to pick up packet and preliminary exam materials. Cleveland Municipal Airport-KRNV 1021 Airport Terminal Rd., Cleveland, MS 38732. If arriving late call George Moore +1 (281) 732-4254.**

All times/schedule may be adjusted as deemed necessary by class.

DAY 1, TUESDAY, OCTOBER 1, 2024

7:30am **Registration —** Cleveland Municipal Airport-KRNV DSU Hangar
Coffee and Breakfast sandwiches each day

8:00am **Introductions —** Staff, guests, hosts, and attendees

- Preparations for a calibration workshop
- Safety
- Etiquette
- Analyst liabilities
- Protocol
- String system components
- Setups PA, Drift, Swath displacement cards

- Agenda review
- Notebook and flashdrive content

8:30am **Fly-In Preparation —** Cleveland Municipal Airport-KRNV DSU Hangar

9:30am **Break —** Coffee, Sodas, Water Provided

10:00am **Field Equipment Layouts —** Airport Grounds

- Field equipment setup review and layout
- Drift setups
- Pattern setups

- Witness Cards, Novartis, Oils, Kromecote Samples
- Limitations
- Spread factors
- Image and paper quality
- Drop size
- Computer requirements
- Applications
- PA enhancements
- Drift

- Canopy deposition
- Swath displacement
- Output discussion
- Examples
- VMD, V. 1, V.9

- Plot
- Histogram
- Est. GPA
- % Area covered

11:30am **Morning Wrap & Discussion**

12:00pm **Lunch — Catered lunch**

1:00pm **Classroom discussion continues**

- Program Overview
- System Setup
- Test Data
- String Analysis
- Swath Determination

- Analyze Existing Files
- Printed Reports
- Spectrometer Compatible systems

2:05pm **Accupat Software**

- Program Overview
- System Setup
- Test Data
- Data Entry

- Swath Determination
- Analyze Existing Files
- Printed Reports

4:30pm **Hands-On Applications**

- String analysis - (2 string analysis units) 2 teams will analyze strings from previous fly-ins. Obtain printouts (Passes, Average, Overlapped Swaths)
- Card analysis - 2 teams will analyze cards from previous fly-ins

5:30pm **Free Time to practice and catch up**

6:30pm **Dinner —** *(Dinner will be provided)* LTBD Class will vote

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DAY 2, WEDNESDAY, OCTOBER 2, 2024

8:00am **Setup Equipment —** *(Students)* Meet at DSU Hangar

- Flight-line Collector and Data Systems
- Drift Tower - Flight Path discussion

8:30am **Discussion of Aircraft Setup**

Booms
- Type
- Location
- Length
- Nozzles attachments
- Hangers
- Half boom shut off
- Tapered booms
- Bleed lines
- 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
- Crockpit
- Flow controllers (A & B styles)
- GPS
  - Racertrack
  - Back and forth
  - Quick racetrack
  - Reverse racertrack
  - Expand
  - Squeeze
  - Calibration
- Spreadsheet - ACCALIB
- USDA/ARS Model(s) review
- AgDrift
- WRK Granular system equipment, setup, and software review

10:00am **Break —** Coffee, Sodas, Water Provided

10:20am **Homework exercise review**

12:00pm **Lunch — Catered lunch**

1:15pm **Pattern Anomalies**

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

3:00pm **Break —** Coffee, Sodas, Water Provided

2:05pm **Wrap Up**

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

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

6:30pm **Free Time and Dinner on your own**

DAY 3, THURSDAY, OCTOBER 3, 2024

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

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

7:00am **Aircraft Testing will begin**

Students will conduct the pattern testing and operate all stations. Teams will rotate duty stations throughout the day, as determined by the Fly-in management. Team approach may be modified to meet number of students.

Initial Duties will be:

Station 1 ***Team 1***

- Briefing pilots
- Overseeing loading operations

Station 2 ***Team 2***

- Flight-line duties
- Aircraft nozzle setup measurements

Station 3 ***Team 3***

- String analyses - Accupat
- DropletScan, Accupat, DropVision analyses
- Print outs and Pilot consultations

12:00pm **Lunch — Catered lunch**

1:00pm **Activities Resume**

- Practice on software

Our unless weather causes cessation of operations

??:00pm **Repack Flight-line Equipment** *(Students)*

- Dinner on your own

5:30pm **Group Discussion and Test Review**

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

TYPICAL S.A.F.E. CLASS ACTIVITIES

DAY 4, FRIDAY, OCTOBER 4, 2024

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

- Flight-line Collector System
- Flight Data System

7:00am **Operation S.A.F.E. Fly-in Commences**

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

- Briefing pilots
- Overseeing loading operations
- Flowbrator operations - flow checks discussion

Station 2 Team 2

- Flight-line duties
- Field Deposition
- Aircraft configuration measurements

Station 3 Team 3

- String analyses - Accupat
- Drop spectrum Scan analyses - DropletScan, Accupat, Dropflight
- Print outs and Pilot consultations

12:00pm **Lunch — Catered lunch**

1:00pm **Pattern Analysis —** Droplet Analysis / Countines

??:00pm **Fly-in Concludes**

Dismantle flight-line and repack equipment (Students)

??:00pm **School De-brief, Dinner**

LTBD (Location and timing to be determined.)

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PROGRAM PRESENTERS

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OPERATION S.A.F.E. ANALYST CERTIFICATION TRAINING

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REGISTRATION

Pre-registration prior to August 23, 2024 is strongly recommended to be assured of accommodations.

CLASS REGISTRATION FEE — US$3000 Pre-registration prior to August 23, 2024
10% Discount for additional registrants from same organization.

Check, money order, purchase order, or Credit Card accepted cash preferred payable to **Advanced Turbine Training** in advance or at on site registration.

PRE-REGISTER BY EMAILING YOUR
Name, Address, email, phone, and organization to
George Moore
george-moore@hotmail.com
+1 281-732-4254
or
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+1 501-676-1762

Send questions about class to one of the above email addresses.

If flying to Mississippi Arrival Airports
Memphis International Airport (MEM) or
Jackson-Medgar Wiley Evers International Airport (JAN)

ADVANCED TURBINE TRAINING DELTA STATE
OPERATION S.A.F.E. ANALYST CERTIFICATION TRAINING

CLEVELAND MISSISSIPPI LODGING

Lyric Hotel West End, Ascend Hotel Collection

1300 Highway 8 West, Cleveland, MS 38732 US
+1 844-202-3183

**Closest to the Airport*

Cotton House, Cleveland, a Tribute Portfolio Hotel

215 Cotton Row, Cleveland, MS 38732 US
+1 662-843-7733

Holiday Inn Express Hotel & Suites Cleveland

808 N Davis Ave, Cleveland, MS, 38732 US
+1 662-843-9300

Hampton Inn Cleveland

912 N Davis Ave, Cleveland, MS, 38732 US
+1 662-846-2915

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