

Organised by:



**COURSE
AVIATION**



www.cconnection.org/AviationFuels

**A 3-Day Executive Course on
Specifications, Test Methods and Quality Assurance for**

AVIATION FUELS

Hotel Jen Tanglin Singapore • 21-23 January 2019

COURSE DIRECTOR:

FRED BARNES

*Aviation Fuels Consultant
& ASTM Instructor*

**SAVE UP TO US\$320
For Early Bird Or Team Fees**
(see back page for details)

WHO SHOULD ATTEND

This course will be relevant for airports, aviation companies, refiners & jet fuel procurement, and trading groups with professionals in these functions:

- Airline Fuel & Operation Personnel
- Aircraft, Helicopter & Business Jet Operators
- Fuel Farms & Fuel Handling Personnel / Operators
- Laboratory Operators / Inspectors / Managers
- Airport Service Personnel
- Into-plane Personnel / Operators
- Avgas Pipeline Operators / Refiners
- Jet Fuel Traders / Refiners
- Jet Fuel Specifications Managers / Supervisors
- Additive Organisations / Personnel
- Quality Control Managers / Supervisors
- Commercial / Purchasing Managers
- Government Agencies
- General Aviation Airfields & FBOs
- Private Pilots
- Military & Defense Fuel Organisations / Personnel
- Aircraft, Engine & Equipment Manufacturers / Suppliers

COURSE (3 DAYS)

- Background & Application of Technical Society Responsibility such as ASTM, MOD, IATA, Military, Energy Institute, JIG, etc
- Aviation Engines & Basic Operations
- Understanding Jet Fuel Specifications & Properties
- Consumption of Fuel by Airports
- Hydrocarbon Description
- Standard Bulk Properties
- Standard Trace Properties

KEY DRIVERS & TRENDS TO BE COVERED

- Jet Fuel Properties Not Controlled by Specification
- Aviation Fuel Sampling
- Aviation Gasoline Grades, Specifications & Properties
- Highlights of Jet Fuel & Aviation Gasoline Manufacture
- Alternatives for Jet Fuel
- Transportation & Quality Assurance
- Filter Separators & Monitors in the Jet Fuel

Plus!
**Course includes a
Laboratory Visit on
23 January 2019**



CERTIFICATE OF ATTENDANCE

All participants who successfully complete the course will receive a certificate of attendance

Official Laboratory:



Media Sponsors:



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[facebook.com/conferenceconnection](https://www.facebook.com/conferenceconnection)

REGISTER NOW! Tel: (65) 6338 0064 | Fax: (65) 6338 4090 | Email: info@cconnection.org

ABOUT THE COURSE

This comprehensive 3-day course will provide a framework of both commercial and technical issues on jet fuel and aviation gasoline, which covers an in-depth assessment of their different grades, engines, basic operations, properties, and specifications. It will also provide an understanding on basic principles and concepts for jet fuel and aviation gasoline manufacturing, transportation, quality assurance, and alternative fuels.

WHAT YOU WILL LEARN

- Determine how specifications are used to control the quality of aviation fuels, and why they affect product performance and availability.
- Explain methods of testing and manufacturing aviation fuels and transportation systems.
- Describe the interaction of aviation fuels with aircraft engines.
- Update on aviation gasoline fuels for general aviation.
- Use practical applications of ASTM test methods.
- Fundamentals of alternative jet fuels.
- How to deal with off-spec jet fuel properties, additives, quality assurance issues, and sampling.

COURSE DIRECTOR



Fred Barnes is an ASTM International instructor. He has 18 years of experience in teaching aviation fuel specifications and test methods and over 30 years experience in aviation fuels applications. Currently, Fred is the Manager of Aviation Fuels Consulting, LLC, a consulting company in Gig Harbor, Washington, USA. He provides consultation on aviation fuel technology including fuel specifications, test methods, quality control, terminal and aviation operations, technical services, training, contracts

and problem resolution with supply/distribution quality assurance and testing. He is also an expert witness in various litigation scenarios involving fuel quality, inspection of facilities, operational issues and filtration items. Previously, he was with Shell in R & D related to fuels and lubricants and later Manager, Aviation Operations with Chevron USA Products Company responsible for aviation fuel product quality, operations, specifications, and technologies. He is also active in ASTM, API, IATA, SAE, ATA, ENERGY INSTITUTE and CRC. Fred holds B. S. and M. S. degrees in Mechanical Engineering from University of Missouri.

ABOUT THE ORGANISER

Conference Connection's introductory and advanced two to four-day courses, executive briefings and country workshops, organised with industry specialists, leading consultants and advisers, think-tanks as well as professional and policy groups; provide intensive learning opportunities and practical solutions across key industry sectors, attracting a global audience. The

group has an extensive record of successful events since its inception in 1994 and has held more than 3,000 events, attended by nearly 30,000 participants from over 100 countries globally. For full list of courses, conferences and other activities, please email info@cconnection.org or visit www.cconnection.org

TESTIMONIALS

Detailed presentation on fuel specifications
(Chief Manager-Aviation, Hindustan Petroleum Corporation Limited)

The course has enhanced my product knowledge
(Deputy Laboratory Manager, Geo Chem Middle East)

It is a comprehensive course for Jet Fuel
(Laboratory Manager, Jordan Petroleum Refinery Co.)

Very informative on ASTM standard & testing procedures. Equipment also shown during the course
(Assistant Manager, Skytamers)

Course director is experienced in the field of Aviation Fuels as well as refinery
(Deputy Director, Petrolimex Aviation)

Very experienced as ASTM trainer
(Trader, China Aviation Oil (S) Corporation Ltd)

Professional instructor, he has experience and knowledge on mechanical which is related to Aviation Fuels
(Operations Coordinator, Star Petroleum Refining)

Fred has deep knowledge of all Jet Fuel aspects
(Corporate Planning Advisor, YASREF-ARAMCO Sinopec Refinery)

It is nice to show some equipment and video during the course
(Process Engineer, Star Petroleum Refining)

Fred can deliver and relate with experience
(Manager, Intertek)

- **INTRODUCTION**
- **ASTM AND OTHER TECHNICAL SOCIETY BACKGROUND AND INVOLVEMENT**
- **JET ENGINES AND BASIC OPERATIONS**
- **JET FUEL DEVELOPMENT HISTORY**
- **JET FUEL SPECIFICATIONS**
- **CRC FUEL MANUAL ON AVIATION FUELS**
- **AIRPORTS AND PASSENGERS - FUEL CONSUMPTION**
- **SPECIFICATION LIMITS**
- **EXPLANATION OF ASTM TEST METHOD TO ILLUSTRATE HOW THE METHODS ARE APPLIED**
- **BASIC HYDROCARBON DESCRIPTION**
- **STANDARD BULK PROPERTIES**
 - Viscosity
 - Low Temperature Operability
 - Combustion Properties
 - Density
 - Specific Energy
 - Sulfur
- **STANDARD TRACE PROPERTIES**
 - Oxidation Stability
 - Acidity
 - Water Separation
 - Cleanliness/Particulate Content
 - Compatibility with System Materials
 - Electrical Conductivity
- **FAME AS A CONTAMINANT**
- **JET FUEL PROPERTIES NOT CONTROLLED BY SPECIFICATION**
 - Visual - Bright and Clear
 - Water Content - Field Test Kits
 - Microorganisms
 - Saybolt Color
 - Lubricity
 - Flammability
 - Other Properties
- **SAMPLING**
- **AVIATION GASOLINE**
 - History
 - Grades including Some Low Lead and No Lead Versions
 - Specifications
 - Properties
- **MANUFACTURE OF JET FUEL AND AVGAS - BASIC PRINCIPLES**
 - Jet Fuel Manufacture
 - Distillation
 - Sweetening
 - Cleanup
 - Aviation Gasoline Manufacture
- **ADDITIVES**
- **ALTERNATIVE JET FUELS - BASIC**
- **TRANSPORTATION AND QUALITY ASSURANCE**
 - Static Electricity
 - Quality Assurance of Jet Fuel
 - Equipment
 - Procedures
 - Quality Assurance of Aviation Gasoline
 - Possible Contamination Effects
- **FILTER SEPARATORS AND MONITORS**
 - Filter/Separator Equipment
 - Surfactants in the Fuel
 - Monitors and Fuses

Guest Presentation on Day 1



The Civil Aviation Fuels Market: Asia in a Global Context

Dr. Tilak K. Doshi, Managing Consultant, Muse, Stancil & Co. (Asia) Pte Ltd, Singapore

Course concludes with a half-day laboratory visit on 23 January 2019

The course will be enhanced by a laboratory visit for all delegates. It will encompass understanding how jet fuel and aviation gasoline are prepared and tested. *(Transportation to and from the laboratory will be provided)*

Organised by:



5 EASY WAYS TO REGISTER

SPECIFICATIONS, TEST METHODS AND QUALITY ASSURANCE FOR AVIATION FUELS



MAIL
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135 Middle Road #05-01,
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EMAIL
info@cconnection.org



WEB
www.cconnection.org

This Contains Your Unique Registration Reference.
Please Do Not Remove Mailing Label.

DATES & VENUE 21-23 January 2019

Hotel Jen Tanglin Singapore
1A Cuscaden Road, Singapore 249716
T (65) 6738 2222 F (65) 6831 4314
E hjs@hoteljen.com

REGISTRATION FEES

Full Fee	US\$3,495 per person
Early Bird Fee	US\$3,195 per person (registration & payment by 7 December 2018)
Team Fee	US\$3,195 per person for the 2nd and subsequent delegate from the same company and billing address (only applies after 7 December 2018)

A 7% Goods & Services Tax (GST) is applicable to all Singapore based companies. (All discounts stated are mutually exclusive and on a per person basis)

Registration fees will include attendance at all sessions, daily luncheon and coffee breaks and one set of course documentation. **Travel and accommodation costs are not included.**

ENQUIRIES & REGISTRATIONS

Conference Connection Pte Ltd
135 Middle Road, #05-01 Bylands Building,
Singapore 188975
Tel: (65) 6338 0064 Fax: (65) 6338 4090
Email: info@cconnection.org

REGISTRATION CONDITIONS

- All registrations must be on the prescribed form or in writing and will be on a confirmed basis unless otherwise notified in writing. All paid registrations will receive written notification.
- The organisers reserve the right not to accept prior and on-site registrations without payment. Delegates whose payments are not received before the event are required to furnish proof of payment on-site. Staff at the event will request a credit card guarantee without proof of payment.
- The organisers reserve the right to impose conditions of entry for walk-in delegates.

PAYMENTS

- All payments must be made in US Dollars by Inter-Bank Transfers within 14 days of receipt of invoice (Bank details will be provided upon receipt of registration).
- Please quote event name, invoice number and delegate name for bank transfers. Please instruct your bank to remit the full amount, nett of bank charges.

CANCELLATION AND SUBSTITUTION POLICY

Venue	1st Cut Off	2nd Cut Off
Singapore	31 December 2018	7 January 2019

- Cancellations notified in writing received and acknowledged before the 1st cut-off date will be levied an administrative fee of 5% for paid cancellations and 10% for unpaid cancellations.
- Paid and unpaid cancellations notified between 1st and 2nd cut-off dates, will be charged 50% of the invoiced

fee and given one set of course materials (post-event).

- No refunds whatsoever will be given after the 2nd cut-off date but delegates can be substituted if the organisers receive prior notification.
- For registrations invoiced and unpaid but subsequently cancelled after the 2nd cut-off date, 50% of the invoiced will be charged and one set of course materials will be provided (post-event).

HOTEL ACCOMMODATION

Delegates qualify for specially discounted rates at the host hotel. Please request for a hotel/visa form when registering. Delegates will be responsible for their own hotel and visa arrangements.

VISA APPLICATION & PROCEDURES

Please check with your travel agents or with the relevant embassy in your country of residence. If required, delegates may request for a letter of invitation for their visa application. Please do not send visa applications to the organisers.

DATA PROTECTION

Any client information (name, address and contact details) obtained during your registration/order will be added to our database and may be used by Conference Connection to provide you with further information on its products and services. Conference Connection may make this information available to associated partners for marketing purposes. To restrict or update your particulars please contact database@cconnection.org

DISCLAIMER - The organisers will not accept liability for non-approval of visas, individual transport delays and transport disruption, and in such circumstances, our normal cancellation rules and penalties apply. Where matters beyond the reasonable control of the organisers impair or prevent the organisers from being able to perform their obligation under this event, the client releases the organisers from any liability, incidental or consequential, to such matters.

REGISTRATION FORM

Yes! Please register me for

SPECIFICATIONS, TEST METHODS & QUALITY ASSURANCE FOR

AVIATION FUELS

Singapore, 21-23 January 2019

Please Tick (✓) Accordingly:

1. REGISTRATION FEES

Full Fee	<input type="checkbox"/> US\$3,495 per person
Early Bird Fee*	<input type="checkbox"/> US\$3,195 per person
Team Fee^	<input type="checkbox"/> US\$3,195 per person

A 7% Goods & Services Tax (GST) is applicable to all Singapore based companies. (All discounts stated are mutually exclusive and on a per person basis)

***Team Fee:** Apply for second and subsequent delegate from the same company and billing address. Registrations must be received at the same time to qualify. **Not valid with other discounts** i.e. full fee applicable for first delegate.

2. PAYMENT

- I am sending payment by telegraphic transfer. Please send full details.
- I will need an original invoice.

3. ACCOMMODATION

- Please send me a hotel/visa form.

4. IN-HOUSE TRAINING

- Please send me further information on in-house training programmes.

Payment must be received before course dates.

ALL REGISTRATIONS MUST BE ACCOMPANIED BY PAYMENT (For more than one delegate, please photocopy the registration form)

Please print in block letters and return to:

Conference Connection Pte Ltd

135 Middle Road #05-01, Bylands Building, Singapore 188975.

Tel: (65) 6338 0064 Fax: (65) 6338 4090

Email: info@cconnection.org Website: www.cconnection.org

CA/408/19 WB

First Name (Mr/Ms/Dr) _____

Surname _____

Job Title _____

Nationality _____

Company _____

Address _____

Country _____ Postal/Zip Code _____

Tel _____ Fax _____

Email _____

Name & Title of Approving Manager _____

Email of Approving Manager _____

Special Dietary Requirements (if any) _____

Main Business Activity _____