# FLY AWAY WITH COMPOSITES

# AUGUST 21 - 22 • DAVIS TECHNICAL COLLEGE • CLEARFIELD, UT

Fly Away with Composites is presented by Composites One and the Closed Mold Alliance in partnership with IACMI - The Composites Institute. The workshop will be held at Davis Technical College - Freeport West Campus in Clearfield, UT, on August 21 - 22, 2018.

# **Davis Technical College - Freeport West Campus**

D-5, Clearfield, UT 84015







# **Parking and Shuttles**

Shuttles will be provided to and from the workshop from the Hilton Garden Inn / Salt Lake City Layton and Davis Technical College Main Campus. Detailed shuttle information will be released soon.

# **Networking Reception:**

Join us for a networking reception at Davis Conference Center from 5:30 p.m. - 8:30 p.m. Here we will have an open bar and hors d'oeuvres. Network with Fly Away with Composites presenters and attendees and continue conversations from the workshop!

**Davis Conference Center** 

1651 N 700 W Layton, UT 84041

# Register online at www.flyawaywithcomposites.eventbrite.com



# AGENDA PREVIEW

# **Tuesday, August 21:** 8:00 a.m. - 5:00 p.m. **Wednesday, August 22:** 8:00 a.m. - 12:00 p.m.

# Keynote Address from Utah's Lieutenant Govenor, Spencer J. Cox

#### Keynote Address from Scott Nielson, VP of Engineering, ENVE Composites

High Temperature Tooling Demonstration: Building high temperature carbon and epoxy tooling with a vacuum infusion.

#### High TemperatureTooling (Prepreg)

Hi temperature carbon and epoxy prepreg tooling. Includes a demonstration of laying up prepreg.

#### Composites in Aerospace, Presented by Mike Hoke, Owner, Abaris Training Resources, Inc.

Any fiber-reinforced composite, regardless of whether it is fiberglass, carbon fiber, Kevlar, or perhaps other fibers, carries the structural loads primarily through the fibers themselves. In a structural load-carrying repair, it is important to align the repair ply orientations with the original structural ply orientations. It is also mandatory to ensure a good strong long-lasting bond between the repair plies and the underlying structure. This presentations will review several examples of various damage repair scenarios and techniques will be highlighted. In addition, there will be a brief description of what an MRO (Maintenance, Repair and Overhaul) facility is, along with a short discussion of how they work within the airline industry

#### **Bladder Molding Demonstration**

Demonstration on methods for making bladder molds for building hollow shapes.

#### **Sandwich Panel Construction**

Overview of honeycomb and foam core materials and ancillary products such as film adhesive, edge fill, and adhesives.

#### **Failure Analysis**

Root Cause Failure Analysis of Composites Across Industries.

#### **Fire Smoke Toxicity**

The need for halogen-free, flame retardant materials, mainly driven by European subway and tunnel fires, has led to the development of Polynt's FireBlock<sup>™</sup> technology for use in FRP Applications in the transportation and infrastructure markets that are required to meet FR standards such as: ASTM E84 (buildings); ASTM E162 and ASTM 662 (Buses); EN45545 (European Rail standards); or FAR 25.853 (Aircraft Interiors). Demo Will include vacuum bagging that will show the ease of fabricating a composite FireBlock<sup>™</sup> FR laminate while incorporating a balsa core for a train or aircraft floor application.

#### Foam Core Thermoforming

Presentation and demonstration on thermoforming methods

# **Adhesives for High Performance Applications**

Pro Set Epoxy pre-thickened adhesives provide high strength bonds to many substrates used in composite structures. This session will explain product selection, handling characteristics, properties and proper applications

# Additional Topics and Demonstrations to Include:

- Chomarat C-ply in Carbon Epoxy Laminates for UAVs
- · Fiber Reinforced Thermoplastic Production Presented by Oribi Manufacturing
- Thermoplastics Injection Molding Demonstration
- 3D Printing Demonstration
- Coal Fiber
- Edge Fill and Potting Compounds
- Workforce Development for the Composites Industry Talent competition across all industry sectors is causing companies to rethink talent management strategies. Two local composite industry leaders, Mandy Christiansen and Kent Kumura, will discuss what is being done in partnership with Davis Technical College to address critical shortages of career-ready talent and to increase the skills of the existing workforce.
- Student Only Tracks Special Breakout Sessions for High School Students Interested in the Composites Industry.



Fly Away with Composites will be held at Davis Technical College in Clearfield, UT, on August 21 - 22, 2018. Travel arrangements should be made to fly into Salt Lake City, UT (SLC).



Davis Technical College - Freeport West Campus

D-5, Clearfield, UT 84015



**Recommended Hotel Accommodations:** 

Hilton Garden Inn - Salt Lake City / Layton 762 West Heritage Park Blvd Layton, Utah, 84041

(801) 416-8899

# Home2 Suites by Hilton Salt Lake City/Layton

803 West Heritage Park Blvd Layton, UT 84041 (801) 820-9222 Hampton Inn Salt Lake City/Layton

1700 N Woodland Park Dr Layton, UT 84041 (801) 775-8800

# **Parking and Shuttles:**

Parking is limited at Davis Technical College - Freeport West Campus. Shuttles will be provided to and from the workshop from the Hilton Garden Inn / Salt Lake City Layton and Davis Technical College Main Campus. Detailed shuttle information will be released prior to the workshop.

# REGISTER

To register for the workshop visit www.flyawaywithcomposites.eventbrite.com or complete the form below and email to rachel.menges@compositesone.com. For additional information on registration, contact Rachel Menges at 847.437.0200.

Name:			
Title:			
Company:			
Address:			
City:	_ State:	_Zip:	_Country:
Email Address:			
Phone Number:			
Are you a U.S. Citizen? Yes No			
Do you have food related allergies? Yes	No	lf yes, please exp	lain:
Will you be traveling to this event? Yes	_No	Are you a studen	t? Yes No