## CONTINENTAL BREAKFAST

7:30am - 8:30am, Thursday, 25 September 2014 Sequoia Foyer

## **OPENING CEREMONIES**

Sequoia Ballroom 8:30am - 8:45am, Thursday, 25 September 2014

General Chairman: Colin Miller (AF), Gulfstream Aerospace

Symposium Chairman: Robert Rowe (AF), Lockheed Martin

## SESSION I

8:45am - 12:15pm, Thursday, 25 September 2014 Chairman: Troy Johnson (M), Northrop Grumman

8:45am - 9:15am

"AV-8B Speed Brake Loads and Vibration Test -Trust But Verify"

Maj Douglas Rosenstock, USMC (M) Capt Aaron Frey, USMC (PAM)

9:15am - 9:45am

"Contact! Risk Management Lessons Learned From the Navy AAR Program" David Culbertson (AF), Calspan Corporation

9:45am - 10:15am

"Boeing 787-9 Compliance Testing Results"

Mike Bryan (AF), The Boeing Company

Nikos Mills, The Boeing Company

10:15am - 10:25am
"Academic Bridge to the Aerospace Industry Update"
Bill Connor (AF), SETP Foundation

10:25am - 10:45am - Coffee Break

10:45am - 11:15am
"Who Hacked My Airplane?
Cyber-Vulnerability Testing For Aerospace Systems"
Lt Col Sean Borror, USAF (M)

11:15am - 11:45am

"Inclusion of Departure, Abort and Recovery Maneuvers During Instrumented Helicopter Aerobatic Display Envelope Expansion" Rich Lee (AF), Boeing (Ret)

11:45am - 12:15pm
"Flight Testing the Titanic:
The Loss of the R101 Airship"
Dr. Guy Gratton (M), Brunel University

12:15pm - 2:00pm LUNCH - No formal luncheon is scheduled

## **SESSION II**

2:00pm - 5:00pm, Thursday, 25 September 2014

2:00pm - 2:30pm "Valid Anthropometric Data for Aircraft Design" Dr. Robert Joslin (AF), FAA

2:30pm - 3:00pm
"An Analysis of Inadvertent Deep Stall
Encountered in ARJ21-700 Flight Tests"
Peng Zhao (M), Chinese Flight Test Establishment

3:00pm - 3:30pm "Surfing Aircraft Vortices for Energy (SAVE)" Maj Carl Beckey, USAF (M) Michael Sizoo (M), The Boeing Company Stefan Bieniawski, The Boeing Company

3:30pm - 4:00pm - Coffee Break

4:00pm - 4:30pm "CH-53E Advanced Threat Warner Live Fire Testing" Maj Robert Buck, USMC (PAM)

> 4:30pm - 5:00pm "Catching Fire: The Least of Four Evils" Maj James Hayes, USAF (PAM) Capt Drew Tullson, USAF

CONTINENTAL BREAKFAST - Sequoia Foyer 7:00am - 8:00am, Friday, 26 September 2014

## SESSION III

8:00am - 11:30am, Friday, 26 September 2014 Chairman: Nils Larson (AF), NASA

8:15am - 8:45am

"Analysis of the Variables Involved in Crosswind Campaigns with STAMP"

Maj Diogo Silva Castilho, Brazilian AF

8:45am - 9:15am
"AgustaWestland AW609 Civil Tiltrotor
All-Engines-Inoperative Flight Test Results"
Dan Wells (AF), AgustaWestland
Paul Edwards (M), AgustaWestland

9:15am - 9:45am

"Optimization of F-2 Flight Control Law
For Aerial Refuel"

Maj Kazuhiko Kakoi, JASDF (M)
Maj Satoshi Hiratsuka, JASDF (M)
Capt Koji Miyoshi, JASDF

9:45am - 10:00am - Coffee Break

10:00am - 10:30am
"Landings You Can Walk Away From:
Predicting F-16 Gear Fatigue Life"
Maj Matt Russell, USAF (M)
Steve Hall, Dept. of the Air Force

10:30am - 11:00am
"Scorpion Helmet Mounted Cueing System Using Flight Test To Provide More
Capability, Faster, For Less Cost"
Paul Mancini, Thales VISIONIX
Robert Atac, Thales VISIONIX

11:00am - 11:30am
"68 Years of Continuous Development"
Steve Roberts, Martin-Baker Aircraft Co. Ltd

LUNCHEON Sequoia Ballroom 12:30pm – 2:00pm Guest Speaker Dr. Mark Lewis

"Flight Test in the Hypersonic Regime: Relearning What We Once Knew"

## **SESSION IV**

2:30pm - 5:15pm, Friday, 26 September 2014

2:30pm - 3:00pm

"Lessons Learned From Automatic Air Collision
Avoidance System Flight Testing"

Maj Casey Richardson, USAF (M)

Capt Michael Pacini, USAF (M)

P. Travis Millet, Dept. of the Air Force

3:00pm - 3:30pm
"Degraded Visual Environment Solution for TACHEL (DVEST) - A Case for Safety"
Maj Brad Steels, CAF (AM)
Capt Michael Jordan, RCAF (M)
Maj Rob Sceviour, RCAF

3:30pm - 4:00pm "Reduction of Flat Spin in Free-Fall From Near Space" Art Thompson, Sage Cheshire

4:00pm - 4:15pm - Coffee Break

4:15pm - 4:45pm
"Testing the Navy's EA-18G Growler:
No Glamour and No Glory"
LCDR Matthew Menza, USN (AM)

4:45pm - 5:15pm

"Risk, Relevance and Reporting:
Things That Keep Us Up At Night"
Art Tomassetti (F), Lockheed Martin

## FRIDAY NIGHT RECEPTION

6:30pm - 9:30pm - Dinner Reception on
The Magic Kingdom Lawn at the Disneyland Hotel
(continuous transportation to the event will be located at the
SETP Registration Desk)

CONTINENTAL BREAKFAST - Sequoia Foyer 7:45am - 8:45am, Saturday, 27 September 2014

## **SESSION V**

8:45am - 12:00pm, Saturday, 27 September 2014 Chairman: Jim Brown (F), Lockheed Martin

9:00am - 10:00am
"Truth, Lies and O-Rings:
Inside the Space Shuttle Challenger Disaster"
Allan McDonald, Former Director of the Space Shuttle
Solid Rocket Motor Project

10:00am - 10:30am
"Countless Memorable Moments From
38 Years of FAA Test Piloting"
James Plackis (M), FAA (Ret)

10:30am - 11:00am - Coffee Break

11:00am - 11:30am
"The Development and Combat Evaluation
of the AC-47 Gunship"
Ralph Kimberlin (AF), Aviation Consultants, Inc.

11:30am - 12:00pm
"Twenty Five Years of Flight Test on the B2"
Rick Reinert, Northrop Grumman
Troy Johnson (M), Northrop Grumman
Don Weiss (M), Northrop Grumman

THE ANNUAL BUSINESS MEETING WILL BEGIN UPON ADJOURNMENT OF THE SYMPOSIUM

BANQUET RECEPTION SEQUOIA FOYER 5:30pm – 6:30pm

AWARDS BANQUET SEQUOIA BALLROOM 6:30pm

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The Society thanks the National Test Pilot School for podcasting the Technical Program.



The SETP Headquarters and registration will be in the Sequoia Registration Booth and will be open:

Wednesday	24 September, 10:00am - 8:00pm
Thursday	25 September, 7:00am - 5:00pm
Friday	26 September, 7:00am - 5:30pm
Saturday	27 September, 7:00am - 1:00pm

Registration desk will reopen Saturday at 5:30pm

## SYMPOSIUM AND BANQUET COMMITTEE

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General Chairman	COLIN MILLER
Symposium Chairman	ROB ROWE
Luncheon Chairman	TROY FONTAINE
Friday Night Reception Chairman	GIDEON SINGER
New Member Reception Chairman	TIM BELOW
Banquet Chairman	
Displays Chairman	DAN VANDERHORST
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## **PROGRAM**

# THE SOCIETY OF EXPERIMENTAL TEST PILOTS



## 58TH SYMPOSIUM AND AWARDS BANQUET

## **24-27 SEPTEMBER 2014**

# GRAND CALIFORNIAN HOTEL ANAHEIM, CALIFORNIA

**WELCOME** 

Welcome to The Society of Experimental Test Pilots' 58th International "Report to the Aerospace Profession". Colin Miller (AF), Gulfstream Aerospace, and his Symposium Team have developed an exceptional program with both formal and informal venues to allow a formal exchange of information, as well as facilitate networking and renew personal and professional friendships. Our goal is for you to enjoy this gathering and, most importantly, that you can gain some fresh perspectives to allow you to conduct flight tests more effectively and especially, more safely.

Kevin E. Prosser President, 2013-2014