**CONTINENTAL BREAKFAST - Sequoia Foyer** 7:00am - 8:00am, Thursday, 21 September 2017

**OPENING CEREMONIES - Sequoia Ballroom** 8:00am - 8:15am, Thursday, 21 September 2017

General Chairman: Rich Lee (F), K2 Aviation Symposium Chairman: CAPT Andrew McFarland, USN (AF)

SESSION I 8:15am - 12:00pm, Thursday, 21 September 2017 Chairman: Rick Silong, Boeing

> 8:15am - 8:45am "Phase 1 Testing of a Homebuilt" Brian Lee

8:45am - 9:15am *"T-38 Compressor Stall Mitigation - Propulsion Flight Test"* Lt Col Matt Russell, USAF (M)

9:15am - 9:45am **"Human Factors in Synthetic System Testing -** *A Practical Approach*" Capt Mark McCullins (M), Airbus Americas

9:45am - 10:15am - Coffee Break

10:15am - 10:45am *"In the Neck of Time"* Steve Roberts, Martin Baker Aircraft Company Dr. Kathryn Hughes, Martin Baker Aircraft Company

> 10:45am - 11:15am **"When Test & Tactics Disagree"** Maj Paul Fulkerson, USAF (M) Lt Col Zachary Probst, USAF (PAM)

11:15am - 11:30am "SETP President's State of the Society" Todd Ericson (AF), Virgin Galactic

11:30am - 12:00pm **"ATARI - MAGIC CARPET Goes Remote"** LT Christopher Montague, USN (PAM) Zachary McCarley (M), X Flight Test James Denham, NAVAIR

12:00pm - 1:30pm LUNCH - No formal luncheon

SESSION II 1:30pm - 5:00pm, Thursday, 21 September 2017 Chairman: Brian Sandberg (M), Lockheed Martin

1:30pm - 2:00pm **"Model Predictive Cueing for Flight Path Control"** Bill Gray (AF), USAF Test Pilot School

2:00pm - 2:30pm *"KC-30A Receiver Clearances: Progress in Joint RAAF-USAF Testing"* SqnLdr Jacques le Roux, RAAF

2:30pm - 3:00pm **"Better Flight Test Through On-Aircraft Simulation"** Chris Guarente (M), Scaled Composites Ken Baker, Scaled Composites

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

3:30pm - 4:00pm "Directional Control Margin Flight Test of The AH-64E Apache" CW5 Paul Steele, USA (AF)

4:00pm - 4:30pm "General Aviation/UAV Auto Collision Avoidance Testing on a Cozy Mk IV" Maj Raven LeClair, USAF (M) Maj Jameel Janjua, RCAF (M)

4:30pm - 5:00pm **"When The Impossible Happens, Will Your Test Team Be Ready?"** Kevin Gross (AF), Dept. of the Navy

THURSDAY NIGHT RECEPTION 6:30pm - 8:30pm - Dinner Reception at Paradise Garden Grill in California Adventure Attendees will have access to California Adventure beginning at 5pm.

CONTINENTAL BREAKFAST - Sequoia Foyer 7:00am - 7:45am, Friday, 22 September 2017 SESSION III 7:45am - 11:30am, Friday, 22 September 2017 Chairman: Tom Horne (AF), Gulfstream

8:00am - 8:30am *"Under Pressure -First Flight of the Citation Longitude"* Stuart Rogerson (AF), Textron Aviation

8:30am - 9:00am **"Stalling the Mitsubishi Regional Jet"** Steve Long (M), AeroTEC Yoshiyuki Yasumura, Mitsubishi Aircraft 9:00am - 9:30am *"Spin Recovery Parachute Trials"* Wg Cdr Pratyush Awasthi, Hindustan Aeronautics Ltd.

9:30am - 10:00am - Coffee Break

10:00am - 10:30am **"Bombardier Cseries Steep-Approach Development Program"** Chuck Ellis (AF), Bombardier Aerospace Robert Reichert, Bombardier Aerospace

10:30am - 11:00am "SF50 Cirrus Vision Jet, Anatomy of a VLJ Project" Mike Stevens (M), Cirrus Aircraft

11:00am - 11:30am **"I Wish I Knew Then:** Lessons From F-35 Envelope Expansion" Lt Col Charles Trickey, USAF (M) Maj Corey Florendo, USAF (M)

LUNCHEON ~ 12:30pm – 2:00pm - Sequoia Ballroom Guest Speaker: Dr. Kathy Abbott, FAA

"Will A Computer Fly You On Your Vacation In The Future? - Artificial Intelligence, Automation And Autonomy In Aviation"

SESSION IV 2:30pm - 5:30pm, Friday, 22 September 2017 Chairman: CAPT Kyle Turco, USN (M)

2:30pm - 3:00pm *"UNTOUCHED: F-15 Lessons Learned and Re-Learned"* Lt Col Justin Elliott, USAF (PAM)

3:00pm - 3:30pm *"XC-2 Development Overview: A Novel Test Technique With SCAS"* Maj Haruhiko Naganawa, JASDF Maj Naoki Morimoto, JASDF

3:30pm - 4:00pm **"VMUs: How To Improve Their Safety and Quality"** Etienne de Malleray (F), Airbus Fabrice Butin, Airbus

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

4:30pm - 5:00pm *"FTT Based on Maximum Brake Kinetic Energy Accelerate-stop Distance"* Yongguan Guo, Chinese Flight Test Establishment Liu Jing, Chinese Flight Test Establishment

5:00pm - 5:30pm **"Testing Effects of New MR-T Radomes on E-6B"** Aaron Reed (M), KBRwyle LCDR Mitchell Hays, USN (M) CONTINENTAL BREAKFAST - Sequoia Foyer 7:15am - 8:15am, Saturday, 23 September 2017 SESSION V 8:15am - 11:45am, Saturday, 23 September 2017 Chairman: CDR Victor Glover, USN (M)

8:30am - 9:00am "*MiG-21 and MiG-23 Qualitative Evaluations*" James Brown (F), National Test Pilot School

9:00am - 9:20am **"A Wing is Enough: An Improved Flying Wing Based On A Bell-Shaped Lift Distribution"** Ivo Zell, 2017 Intel ISEF Best of Show Winner

9:20am - 9:50am **"RefleXions: 30th Anniversary of the Record-Breaking Flight of the Ugly Quickling"** Norman Howell (AF), Boeing

9:50am - 10:15am - Coffee Break

10:15am - 10:45am **"Pilot Closed Loop Dynamic Instability Testing For Transport Aircraft Certification"** Kirk Vining (AF), Boeing Brian Lee, Boeing

10:45am - 11:15am **"Shifting Paradigms: Prepping for Novel Designs"** Robert Niewoehner (F), US Naval Academy John O'Connor (M), USN Test Pilot School Ricardo Traven (F), Boeing

> 11:15am - 11:45am "The Boeing 314 Clipper Flight Test Program (1938-1939)" Chad Lundy (M), Boeing Leon Robert (AF)

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 wishes to thank Boeing for their continuous audiovisual support each year



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



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

Wednesday	20 September, 10:00am - 8:00pm
Thursday	21 September, 7:00am - 5:00pm
Friday	22 September, 7:00am - 5:30pm
Saturday	23 September, 7:00am - 12:30pm

Registration desk will reopen Saturday at 5:30pm

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### 61ST SYMPOSIUM AND AWARDS BANQUET

# **20-23 SEPTEMBER 2017**

# GRAND CALIFORNIAN HOTEL ANAHEIM, CALIFORNIA

# WELCOME

Welcome to The Society of Experimental Test Pilots' 61st International "Report to the Aerospace Profession". CAPT Andrew "Face" McFarland, USN 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.

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Todd "Leif" Ericson President, 2016-2017