56th Annual Symposium of the Society of Experimental Test Pilots

(SETP 2012)

Anaheim, California, USA
26-29 September 2012

Some format issues inherent in the e-media version may also appear in this print version.
SESSION I
Chairman: Col Mike Tarlton, USAF (M)

CW4 Paul Steele, USA (M)

“Sofia - Flying the Telescope”
Troy Asher (M), NASA DFRC
Stephen Cumming, NASA DFRC
(Paper not available for publication)

“When Old School is Cool: Striving for Accurate and Efficient Safe Separation Testing in the F/A-18” .....11
LCDR Joshua Filbey, USN (M)

“Integrated Testing Efficiencies: Real or Imaginary? A Case Study From the F/A-18 Community” .....22
CAPT Brett Pierson, USN (M)
CDR A.J. McFarland, USN (AF)

“Using Manned Surrogates in the Testing of Unmanned Air Vehicles”
Roy Martin (F), Northrop Grumman
(Paper not available for publication)

SESSION II
Chairman: Michael Wallace (AF), The Boeing Company

“How to Destroy a Perfectly Good Fighter”
Steve Rainey (AF), Boeing
(Paper not available for publication)

“F-35B Initial Ship Trials”
Maj Richard Rusnok, USMC (M)
Peter Wilson (M), BAE Systems
(Paper not available for publication)

“Effective Test and Calibration of a Trailing Cone System on the Atmospheric Research Aircraft Halo” .....35
Dr. Andreas Giez, German Aerospace Center

“Development of a Flight Demonstration for Civil Certification Icing Flight Testing” .....47
Greg Lewis (F), National Test Pilot School
Maj Tim Spaulding, USAF (AM)
Capt James Pate, USAF

“Safety, Efficacy, and Efficiency: Design of Experiments in Flight Test” .....68
Lt Col Aaron Tucker, USAF (M)

SESSION III
Chairman: Maj Reagh Sherwood, CAF (M)

“CV-22 Engine Inlet & Scroll Time on Wing Improvement Test”
Lt Col Don Grove, USAF
Maj Garrett Knowlan, USAF
(Paper not available for publication)

“P-8A Poseidon Envelope Expansion Testing” .....85
LCDR Shannon Hoover, USN (M)
LT Matt Swartzwelder, USN (M)

“Envelope Expansion Dives: Refining Build-up Techniques” .....96
Aaron Tobias (M), Cessna Aircraft
Maurice Girard (AF), Cessna Aircraft

“Lessons Learned in Combined Development and Operational Test: Ten Years of F-15 Testing by the OFP CTF” .....111
Lt Col David Wright, USAF (M)

“Good Light-Off - Airstart Testing in the F-35” .....123
LtCol Matt Kelly, USMC (AF)
David Nelson (AF), Lockheed Martin

“Eustress and Distress in Pilots”
Louise Cullinan, ALPA
(Paper not available for publication)

Luncheon Address
CAPT Chesley B. “Sully” Sullenberger, III, US Airways
(Presentation not available for publication)
SESSION IV
Chairman: Brad McKeage (M), Embraer

“Closing the Degraded Visibility Environment Operations Gap While Solving the CFIT, Brownout/Whiteout, and Wire Strike Accident Chain” .....139
Todd Dellert, DAC
Jack Cross, Sierra Nevada Corporation
Pat Garman (AF), Sierra Nevada Corporation

“Innovation is as Innovation Does” .....162
Leland Shanle (M), Broken Wing LLC
David Kennedy (M), Broken Wing LLC
William Warlick (M), Broken Wing LLC
Morris Barnett, Broken Wing LLC

“Reimagining Value” .....171
Lt Col Scott Heritsch, USAF (M)
Tom Hill

“Offshore Helicopter Performance” .....183
Ron Doeppner (AF), Sikorsky Aircraft

“Displaying Aircraft - Lessons Learned from Flight Test Pilots” .....191
Dr. Dieter Reisinger (M), Austrian Airlines

SESSION V
Chairman: Tim Morey (AF), Wyle

“Rigging Highly Augmented Aircraft: OLD SCHOOL” .....207
Ricardo Traven (F), Boeing

“X-29 Program: Serious...Fun!”
Kurt Schroeder (F)
Rogers Smith (F)
(Paper not available for publication)

“The Journey From X to F: Prototype to Production of the F-35”
Col Art Tomassetti, USMC (AF)
(Paper not available for publication)

“Birds, Dinosaurs, and Aircraft: How the Past Informs Us About the Future”
Dr. Ken Dial Ph.D.
University of Montana Flight Laboratory
(Paper not available for publication)