

NTSB PRESENTATIONS

(Various Locations)

MONDAY

0830-0945 (Forum #7)

Teterboro Lear 35 Loss of Control Accident (Sathya Silva)

This presentation will discuss the Part 135 safety issues identified in this accident including flight data monitoring, safety management systems, leadership training, crew resource management training guidance, operational oversight and FAA oversight of operator compliance.

Silva is a Senior Human Performance Investigator at the National Transportation Safety Board in the Office of Aviation Safety. She holds a Ph.D. in Aeronautics and Astronautics from MIT with a focus in human factors. She has worked with various aerospace organizations throughout her career including NASA, Boeing, and the FAA. She is also a pilot and flight instructor.

0930-1030 (Drone Zone)

Drone Collisions: Myths and Reality (Bill English)

With thousands of unmanned aircraft (drones) now part of the airspace, the risk of a midair collision is a major discussion. You may have seen studies and heard stories about what might happen or what could have been a drone—but what really has happened? The NTSB investigates all reports of midair collisions, and this presentation reviews case studies of those reports and how they actually turned out: confirmed as a collision, plausible that a drone could have been involved, or busted as something else altogether. Get the facts straight from the investigators.

English is an investigator-in-charge in the Major Investigations Division of the Office of Aviation Safety and has been with the NTSB for 20 years. He is the NTSB's unmanned aircraft program lead, which includes both investigations of unmanned aircraft system (UAS) mishaps and flight operations using UAS to support all NTSB investigations. He holds degrees in Aeronautical Science from Embry-Riddle Aeronautical University and in Geospatial Intelligence from Penn State, and graduated from the USAF Mishap Investigation Course.



1130–1245 (Forum # 6)

SPECIAL EVENT! Patty Wagstaff: Raise the Bar of Your Safety Culture with Challenging Training

All pilots need ongoing training, both recurrent and additional, to stay challenged, focused and sharp. When faced with an unusual attitude, too often pilots are unable to cope with a situation which they have rarely or never faced. Wagstaff will explain the differences between upset training and aerobatics and give suggestions as to what to look for when seeking this kind of training.

Wagstaff is an American aerobatic national champion aviator. She earned the Rolly Cole Memorial Award for her contributions to aerobatic sports, and in 1991, she won her first of three US National Aerobatic Championships, becoming the first woman to win that competition. She continues working in the aviation field as an airshow pilot, stunt pilot for films, consultant, and flight instructor of upset recovery and aerobatic training.

1630-1700 (Federal Pavilion)

Common Accident Causes (Zoë Keliher)

Do you think that the NTSB always points to pilot error? Join an NTSB investigator to take a short dive into the statistics of cited accident probable causes and what she thinks Dunning-Kruger may be able to tell you about your susceptibility of being that accident pilot that makes an error.

Keliher has been an investigator with the NTSB for more than 15 years and has completed more than 500 accident investigations. She holds pilot certificates for rotorcraft-helicopter, commercial multi-engine airplane, single-engine sea, and an instrument rating; she is also an A&P mechanic. She currently lives in Portland, Oregon, and dreams of owning a rose-gold Cobalt Valkyrie.

TUESDAY

0900-0950 (Vintage Hangar)

Drone Collisions: Myths and Reality (Bill English)

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0945-1030 (Federal Pavilion)

Go/No-Go Decision Making - Lessons from Accident Case Studies (Dennis Diaz)

Embarking on any flight usually involves some amount of risk. As aviators, it is our job to mitigate that risk and make go/no-go judgments based on the information available to us. Join us as we review several accident investigations and discuss the decisions that can make or break the accident chain.

Diaz is a supervisory air safety investigator and the chief of the NTSB's Eastern Region who has been investigating accidents with the NTSB since 2003. He is a lifelong aviation enthusiast and a commercial pilot/flight instructor. He holds degrees in Aviation Management from Southern Illinois University and Aeronautical Science from Embry-Riddle Aeronautical University.

1000-1115 (Forum # 6)

SPECIAL EVENT! Surviving an In-Flight Loss of Consciousness due to Carbon Monoxide (Dan Bass)

In February of 2017, flight instructor Dan Bass had a harrowing experience with carbon monoxide (CO) in the cockpit. He lost consciousness in flight and survived only due to dumb luck. Dan recounts that day and the lessons learned, so that other pilots don't rely on their luck to prevent a CO accident.

Bass learned to love aviation while flying with his Dad. He flew solo on his 16th birthday and received his pilot's certificate on his 17th birthday. He is a flight instructor and owner of an Ercoupe and a Mooney



231. His biggest claim to fame is surviving his unconscious landing in his M20C Mooney due to carbon monoxide poisoning in 2017. In his spare time, he is President of Mec-Pro Manufacturing Inc. in Winona, Minnesota and is husband to Deanna and father to their two daughters, Lilla (age 6) and Maia (age 5).

1100-1200 (Drone Zone)

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1130-1245 (Forum # 6)

Beech 36 Loss of Control Accident (Timothy Burtch)

You're flying VFR in controlled airspace and talking to ATC. You take comfort in knowing that ATC is looking out for you. Should you? We will examine the circumstances surrounding a fatal wake turbulence encounter between a Beechcraft A-36 Bonanza and a Boeing 757 in Reno, Nevada.

Burtch has been an airplane performance investigator with the NTSB for 14 years. Before joining the NTSB, he worked for McDonnell Douglas, Lockheed Martin, and Rockwell Collins on a variety of commercial and military flight test programs. He holds degrees in Aeronautical Engineering from Georgia Tech and Embry-Riddle Aeronautical University and is an instrument-rated aircraft owner.



1545-1630 (Federal Pavilion)

Midair Collision Avoidance: Logic vs. Luck (John O'Callaghan)

Tragically, several midair collisions investigated by the NTSB indicate that the mantra of "see and avoid" is easier said than done. The good news is that cockpit displays of traffic based on ADS-B technology can greatly increase pilots' awareness of potential conflicts.

O'Callaghan has worked at the NTSB for more than 22 years and currently serves as the NTSB's technical expert in the aerodynamics and physics of flight vehicles. He has served as aircraft performance group chairman on several aviation accident investigations, including American Airlines flight 587 (2001), US Airways flight 1549 (2009), the Gulfstream G650 flight test accident (2011), and the Virgin Galactic SpaceShipTwo flight test accident (2014).

WEDNESDAY

0830-0945 (Forum # 11)

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0930-1030 (Drone Zone)

Drone Collisions: Myths and Reality (Bill English)

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1000-1050 (Vintage Hangar)

Maintenance-Related Accidents (Kristi Dunks)

While maintenance keeps aircraft operating, sometimes errors happen. By understanding these errors, you will be better equipped to detect them before an accident occurs.

Dunks joined the NTSB in 2003 and is currently a transportation safety analyst in the Office of Aviation Safety. As an analyst, she manages the aviation safety actions program, conducts research, and works as an advocate for the identification and resolution of safety issues identified during investigations. She is a commercial pilot for helicopters and airplanes and is a flight instructor; she also holds an A&P. She owns a 1955 Super Cub.

1000–1115 (Forum # 7)

SPECIAL EVENT! Loss of Control Accident: A Survivor's Story (Trent Palmer/Nikk Audenried)
(More information to come)

1030-1115 (Federal Pavilion)

Distractions in the Age of Mobile Devices - Case Studies (Craig Hatch)

It has been reported that driving while using a cell phone is equivalent to operating under the influence. Smart phones, iPads, tablets, and other mobile devices have moved into the cockpit. This presentation



reviews the good and bad and provides a case study on the consequences of portable electronic devices in the cockpit.

Hatch has been an aerospace engineer/regional air safety investigator with the NTSB since 2005. Before joining the NTSB, he worked for Boeing and has spent more than 24 years on active and reserve duty with the US Air Force. He holds commercial and flight instructor certificates, with ratings for airplanes, helicopters, and gliders, as well as an A&P rating. He is also active in the homebuilt community, having built an RV-8a and presently building a Bearhawk Patrol.

1500-1545 (Federal Pavilion)

Drone Collisions: Myths and Reality (Bill English)

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THURSDAY

1000–1115 (Forum # 1)

Weather - Lessons Learned and Tools to Mitigate (Don Eick)

Environmental factors or weather continues to have a significant impact on aviation safety, with about 23% of general aviation accidents attributed to weather. Weather-related accidents also have one of the highest



fatality rates, accounting for 30% of all fatalities. This presentation reviews several weather-related accidents and discusses actions the pilots could have taken to avoid the accidents. Topics include obtaining weather, receiving updates, getting weather in the cockpit, and making good weather decisions.

Eick is the NTSB's senior meteorologist, with more than 20 years in the Office of Aviation Safety. He has assisted more than 1,000 investigations. Before joining the NTSB, he was the head of meteorology for a major airline. He holds degrees in Aeronautics from Embry–Riddle Aeronautical University and Meteorology from Florida State University, as well as private pilot, aircraft dispatcher, and weather observer certificates.

1030-1115 (Federal Pavilion)

Combating the Startle Effect - Accident Case Studies (Mike Folkerts)

How do we, as pilots, train and prepare ourselves to minimize the effects of being startled, since unexpected events are inherent to aviation? Learn lessons from several accident case studies and how to "win the battle" of maintaining your situational awareness after unanticipated in-flight events.

Folkerts is a regional air safety investigator with the NTSB who has investigated more than 200 civilian aircraft accidents. Before joining the NTSB, he served in the US Air Force for 25 years, including as an investigator at the Air Force Safety Center. He is an airline transport pilot and flight instructor with more than 7,000 flight hours in a variety of civilian and military aircraft. He has extensive expertise in aviation safety program management and has taught safety courses for Embry-Riddle Aeronautical University.

1415-1500 (Federal Pavilion)

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FRIDAY

0830-0945 (Forum # 2)

Update on Experimental Amateur-built Aircraft Safety Initiatives (Loren Groff)

In 2012, the NTSB released a comprehensive study of experimental amateur-built aircraft safety that included several safety recommendations. The EAA and builder community responded, and the NTSB recently closed several of those recommendations. Hear about those actions and the resulting improvements to the experimental amateur-built aircraft safety record.

Groff is the NTSB's chief data scientist and the agency's senior technical expert for transportation safety data systems and data analyses supporting accident investigations and safety research. He has a PhD in Human Factors Psychology and, before joining the NTSB, was a flight instructor and regional airline pilot. He is (slowly) building a Pietenpol Air Camper.

0900-0950 (Vintage Hangar)

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1000-1115 (FAA Center)

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1130-1230 (Drone Zone)

Drone Collisions: Myths and Reality (Mike Bauer)

With thousands of unmanned aircraft (drones) now part of the airspace, the risk of a midair collision is a major discussion. You may have seen studies and heard stories about what might happen or what could have been a drone—but what really has happened? The NTSB investigates all reports of midair collisions, and this presentation reviews case studies of those reports and how they actually turned out: confirmed as a collision, plausible that a drone could have been involved, or busted as something else altogether. Get the facts straight from the investigators.

Bauer has been an aircraft systems investigator in the NTSB's Office of Aviation Safety since 2012, having worked previously in the agency's Vehicle Recorders Division for 4 years. He is also one of the NTSB's UAS operators. He holds a degree in Aerospace Engineering from Embry–Riddle Aeronautical University and is a private pilot and remote pilot.

1200-1245 (Federal Pavilion)

General Aviation Safety Trends - Analyzing NTSB Safety Data (Loren Groff)

How much do you know about general aviation safety? Learn the latest general aviation accident trends and how to do your own safety research, find the information most relevant to your flying, and reduce your safety risk.



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1500-1545 (Federal Pavilion)

NTSB Vehicle Recorder Lab & Use of Non-Volatile Memory in Accident Investigations (Chris Babcock)

Even with the low cost of non-volatile memory storage, you may be surprised to see some of the ways that investigators use electronic data in accident investigations. This presentation will discuss the history of flight recording technology, how data is recovered from damaged electronic devices, and how that data is used in NTSB accident investigations.

Babcock joined the NTSB Vehicle Recorder Division in 2007 as an aerospace engineer and is an expert in the analysis of cockpit voice recorders, flight data recorders, and other types of electronic data. Before joining the NTSB, he worked at Gulfstream Aerospace in the Flight Sciences Division as an acoustics and vibration engineer. He has a degree in Aerospace Engineering from Georgia Tech and is a private pilot.

SATURDAY

0900-0945 (Federal Pavilion)

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0930-1030 (Drone Zone)

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1130–1245 (Forum # 10)

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1415-1500 (Federal Pavilion)

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SUNDAY

0945-1030 (Federal Pavilion)

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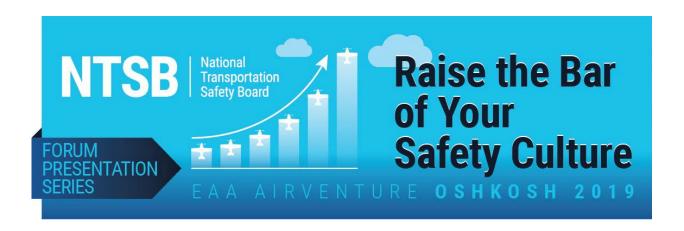
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1115-1200 (Federal Pavilion)

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