The Diesel Engine that *Couldn't* More analogies for life

The radio crackled with static and went silent. Gordon Cooper had just heard the bad news. The gantry that connected the launch tower scaffolding to the Faith 7 capsule would not retract. After spending days in quarantine, hours getting examined and dressed, and finally lying prone in the custom recliner, where he had been conducting countless minutes of pre-launch checks, now he had to wait, and he didn't know how long.

It was May 14, 1963, the day *before* Cooper's Mercury 9 launch into space. A diesel engine failed, and it prevented retraction of the scaffolding arm designed to swing away from the capsule after engineers secured the astronaut and the spaceship door. Sometimes it's not complexity that gets us.

The same holds true for something we often overlook when we consider with wonder the remarkable engineering and events of the early space program. Today I want to draw your attention to scaffolding.

Rarely does anyone get inspired by the oft ignored infrastructure, and I cannot claim to know any hidden figures responsible for their design, manufacture, or troubleshooting.

Instead, I'd like to make the case that the ambition of the "moon shot" fails without someone on the team who daydreams about scaffolding.

We need more scaffolding daydreams.

It was there for Mercury 9 and Gordon Cooper. It was also there in the fourteenth century. Michelangelo oversaw the construction of—you guessed it—scaffolding. He may have designed but almost certainly directed the building of the platforms he would mount before he commenced work on the Sistine Chapel. Before he attempted the remarkable, beautiful, creative work of painting the ceiling, he applied himself to the engineering of a scaffold. Most of us have also overlooked the scaffolding used in modern day construction as well, whether it was thousands of pounds—literal miles—of lumber used to build frames for pouring concrete in bridges, road curbs and barriers, and countless other examples we drive by daily. But it was there. Like the literal utility of scaffolding for the Apollo mission or the supporting credit scaffolding gets for the beauty of the frescoes that adorn the Sistine Chapel, scaffolding is a good analogy for life.

We need more scaffolding daydreams, because without this infrastructure, we won't be able to support the weight of truly great ambition. We need to stop and see the scaffolding.

Most importantly, we need to ensure that we have scaffolding engineers on our team, figuratively speaking.

Armed with this idea, let's turn from inspiration to implementation. What are we building today as a prerequisite to the exciting parts of the missions we will undertake tomorrow?

I'm asking you to apply that question to yourself, your team, and to our Flight Test Safety Committee. The answer to the last question is, in part, the Annual Report edition of the Flight Test Safety Fact, where we point out the various members of the enterprise who are carrying their share of the weight, supporting the other parts, and otherwise laboring without the attention that usually accompanies the blast off of a mission to space.

***In this Edition…*The Annual Report**

The Annual Report Edition of the Flight Test Safety Fact

It was a dark and stormy night: "…cleared for takeoff runway 23L." Moments earlier, we'd heard the radio transmission from the control room: "Test, TM, cleared to maneuver." The pilot set 87.2% N1 with both thrust levers and released brakes. [Okay so maybe it wasn't a dark and stormy night for our field performance testing…] Fast forward ten years… It was a Friday, and I was briefing a subset of the test team, sharing a story about the time we didn't do CRM right during a high-risk test. In fact, it was May 1, the Friday before the Flight Test Safety Workshop. I should have known that the Workshop's tutorial topic was Flight Test CRM, but I didn't. It wasn't because the information wasn't available. It was simply because so much information is available, and I hadn't sifted through it yet. Thus, I found myself experiencing the delight of serendipity on Tuesday morning, May 5, when Eric stepped up to the podium to brief us on the FAA's approach to Flight Test CRM training.

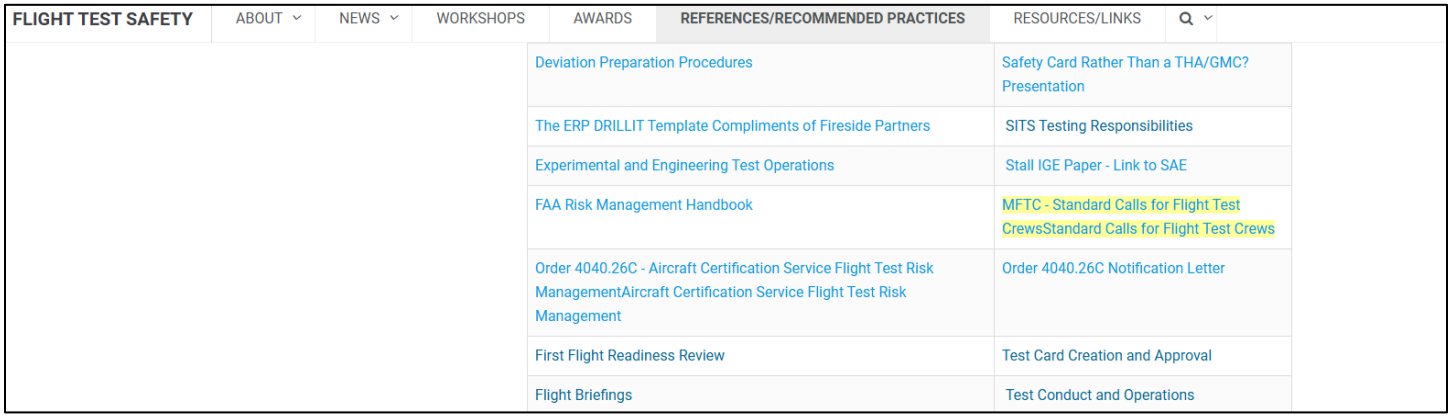
In this month's edition of the Flight Test Safety Fact, The Annual Report, we tackle the first and most important CRM task, communication. We want to communicate often about the many activities and accomplishments of the Flight Test Safety Committee and other members of the team, subcommittees, and volunteers. By putting it in writing, we attempt to streamline your efforts to communicate with your colleagues, test teams, and maybe even your friends. Print out this newsletter and put it in the lunch room, break room, or on the desk of someone who would benefit, or you can forward the email with the pdf attached. An annual report is like a debrief. In a past life "debrief" was one of the elements of CRM. So here we go…

What We Did

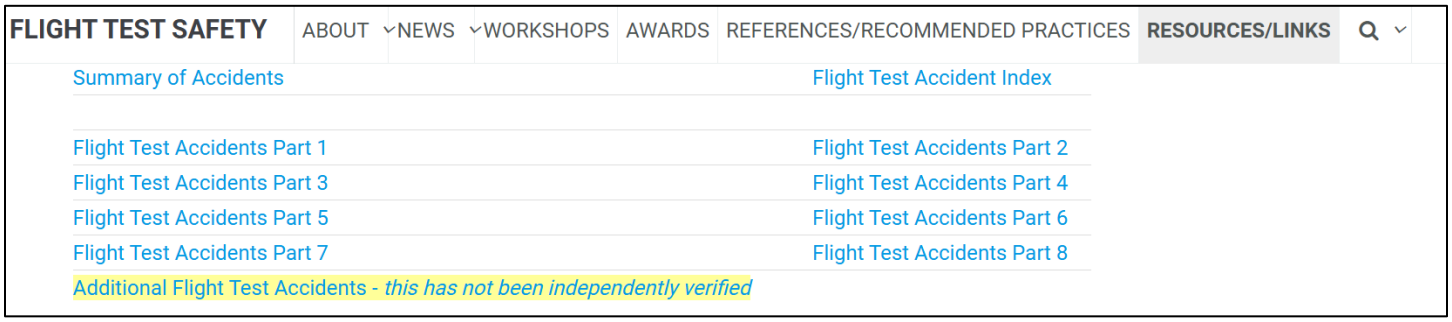
The best way to see what did is to click on the Workshop Program link here: https://flighttestsafety.org/2026-fort-worth-tx. It lists each event, speaker, topic, etc. The second best way is to scroll down to Appendix A which lists the entire program and speaker biographies. If you were AT the event, you received a handout of the biographies with email information. I really liked that feature. What I would really like is to hear back from some of the speakers—I emailed them after the event with questions and follow up.

Website gets new Stuff

References and Recommended Practices get added to the website year-round, but just in time for the Workshop and highly relevant to the Flight Test CRM discussion, "Standard Calls" has been added, as illustrated here. At least one of the recommended "standards" in the document has eliminated an argument in our office. I would also like to propose that we take "Jonesing" from the DoD BREVITY guidebook and adapt it for TM comms.
https://flighttestsafety.org/recommended-practices



One of the new additions to the Resources tab is something I had not noticed before: "Additional Flight Test Accidents." We actually had a discussion with Buck Joslin, the first presenter, about these test accident databases on the website. Check out his topic and bio in Appendix A below.
https://flighttestsafety.org/web-links



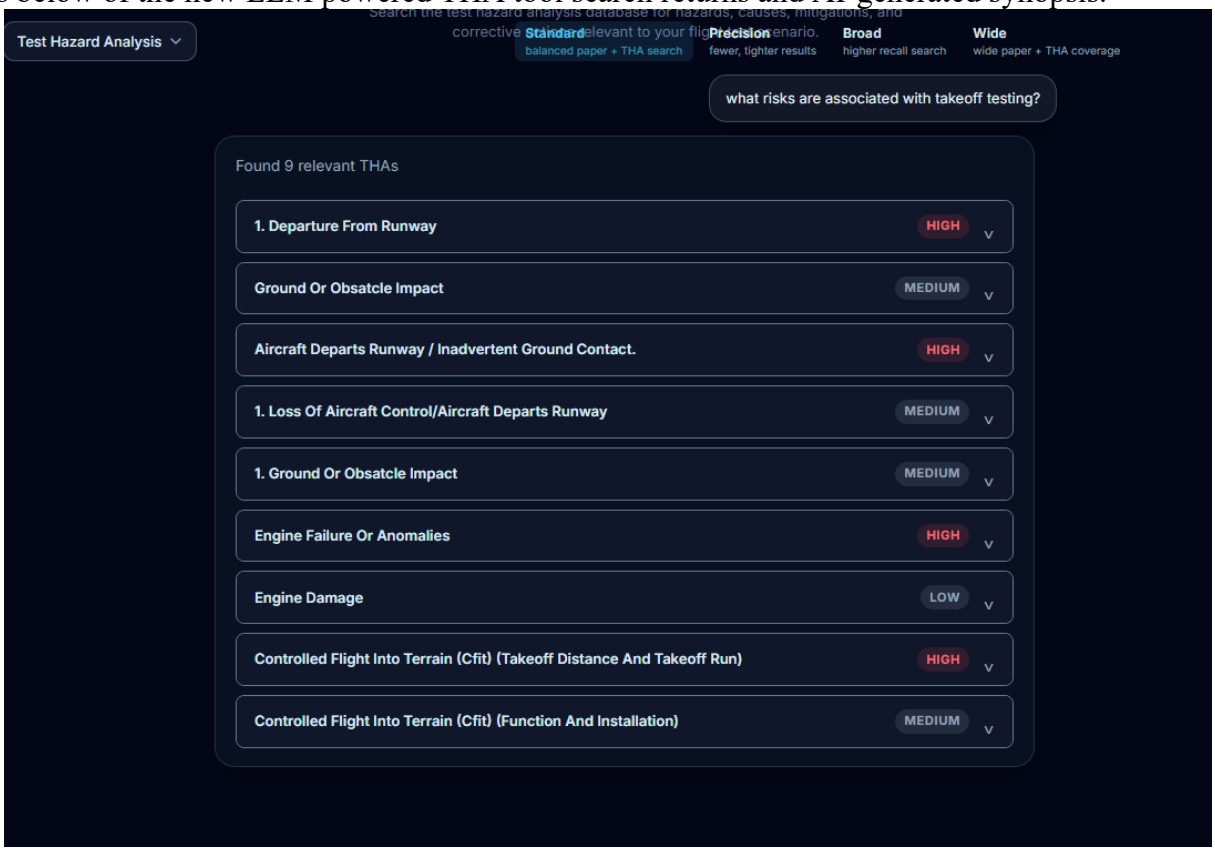
FTSC Announces THA Tool powered by… ~~SKYNET~~

One of the most entertaining parts of the FTSW was the dialogue between Chia and HAL 9000, *who* is seen here. The running conversation made up nearly half of his slides, but it also conveyed useful information in a memorable way. The FTSC Chairman used HAL to highlight the FTSC's investment in machine learning algorithms to enhance search functionality of the website. The video and paper search tool is already live, and the large language model, which is restricted to a specific domain of FTSC content, allows you to ask for information using conversational prompts. Finally, SAFETYNET is here, a less dramatic but probably more fun analog

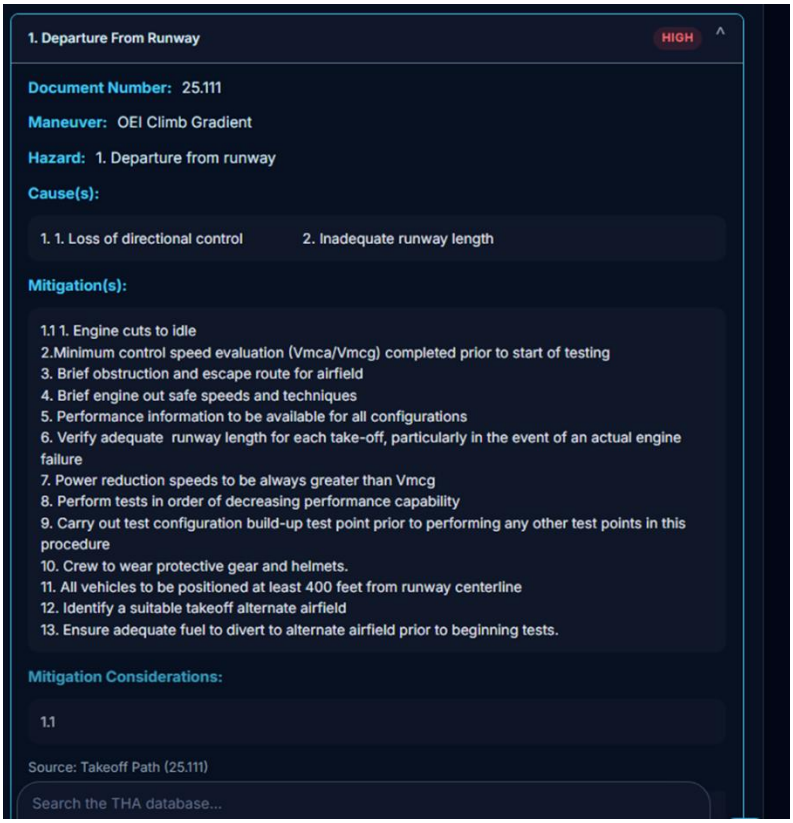
to SKYNET. We were all holding our breath waiting for the much acclaimed "naming" of the AI tool deployed by the FTSC, and those in attendance voted on a list of names presented by the FTSC by scanning a QR code with their phones, a sketchy practice which makes me question our cybersecurity standards. For those of you who don't know what SKYNET is, I offer this graphic that I stole from Chia's slides. Thence (an underrated word, one that I've borrowed from the FAA's textual description of departure procedures), he described the principles used to design and constrain the LLM tools behind the search functions of the FTSC website.

- Uses a technique called Retrieval-Augmented Generation (RAG), which uses a large language model (LLM) connected to a database of information.
- Technique to fine-tune an LLM to a specific database or use case without the need for retraining.
- Because the context only contains the most relevant content from the database, the LLM's response is tailored to your query and is less likely to be distracted by irrelevant content.
- Multi-message conversations: Each new message includes the previous conversation context, allowing for follow-up questions and coherent multi-turn discussions.
- Like other LLM-based chat tools (e.g. ChatGPT, Claude, Gemini), this tool uses a system prompt which your query is appended to. This prompt shapes the model's behavior, tone, and things it is allowed and not allowed to say in response to your query.

Chia announced an FTSC initiative to replace its obsolete THA database with the new tool and provided the two examples below of the new LLM powered THA tool search returns and AI-generated synopsis.



Returns from a THA database search



The LLM explains why it returned these particular THAs.

Awards of the FTSC and FTSW

The FTSC invited Christopher Seymour to speak at the event, and that's who Tom Bell introduced. But *Mongo* was the larger than life personality that took the stage and delivered the keynote, one that kept us laughing and thinking as he engaged the audience with advice and stories. After he finished speaking, the audience witnessed three award presentations, detailed below.

Wednesday – 6 May 2026
Keynote Dinner & Awards Ceremony
Inspire Ballroom

1800 Reception

1830 Dinner

♦

Keynote:
Christopher Seymour
Vice President Strategic Pursuits, Bell

♦

Announcement of the Dave Houle Award for Best Flight Test Safety Workshop Presentation
Sponsored by:
Bombardier

♦

Presentation of the Hugh Dryden Flight Test Safety Lifetime Achievement Award
Sponsored by:
Cessna Beechcraft BY TEXTRON AVIATION

♦

Presentation of the Tony LeVier Flight Test Safety Award
Sponsored by:
GENTEX CORPORATION

The Dave Houle Award for Best Fight Test Safety Workshop Presentation

"Custom Flight Test Display: Initial Deployments and Lessons Learned"
Christopher Caps, The Boeing Company, 777X Project Pilot
Dulnath Wijayratne, The Boeing Company, Flight Test Engineer

https://flighttestsafety.org/2026-fort-worth-tx/42-workshops/567-custom-flight-test-display-initial-deployments-and-lessons-learned.

The Hugh Dryden Flight Test Safety Lifetime Achievement Award

The Hugh Dryden Flight Test Safety Lifetime Achievement Award has been established by the Flight Test Safety Committee (FTSC) to formally recognize a single individual who, over the course of his or her career, has made significant contributions to flight test safety for the flight test community as a whole or for specific organization(s). This award is specific to flight test safety achievements and contributions and not safety in general. The factual basis of received nominations will be confirmed. Nominations for the Hugh Dryden Flight Test Safety Lifetime Achievement Award are reviewed by the Flight Test Safety Committee each year and the most deserving nominee is selected. The Trophy is officially presented by the corporate sponsor of the award (Textron Aviation) at the North American Flight Test Safety Workshop in the spring of each year.

Terry Pearce, Flight Safety Officer
Honda Aircraft Company

For more than three decades, Terry defined leadership in flight test safety. His career reflects not only technical excellence, but an unwavering commitment to building durable systems, disciplined processes, and resilient safety cultures that endure well beyond any single program or organization. Most recently at Honda Aircraft Company, Terry transformed flight test safety through the creation and implementation of a fully integrated Flight Operations Safety Management System. Under his leadership, flight safety was expanded beyond experimental operations to encompass corporate and production testing, incorporating programs such as ASAP, structured change management, operational hazard assessments, and standardized operating procedures. These efforts advanced Honda Aircraft to IS-BAO Stage 2 compliance and positioned the organization for the highest level of SMS maturity. Terry's impact extended far beyond systems and compliance. He has been a tireless advocate for training, professional development, and preparedness. His leadership in safety standdowns, drills, and recurring forums reinforced a culture where safety is not a function—but a shared responsibility. Equally significant has been Terry's service to the broader flight test community. He championed collaboration and transparency, including chairing the Flight Test Safety Workshop in 2025 hosted by Honda —bringing together professionals across disciplines to openly share lessons learned and emerging risks. Terry's distinguished career includes leadership roles at Boeing, Eclipse Aviation, and Bombardier Aerospace, where he served as Flight Test Safety Officer and established comprehensive safety risk management programs. In recognition of these efforts, he was awarded the Tony LeVier Flight Test Safety Award in 2018. Terry Pearce's career exemplifies what this award stands for: sustained leadership, meaningful innovation, mentorship, and an enduring commitment to protecting those who push the boundaries of flight. His legacy is one of professionalism, integrity, and safety excellence—and we are proud to recognize him with this Lifetime Achievement Award in Flight Test Safety.
https://flighttestsafety.org/awards/35-awards/information/477-flight-test-safety-lifetime-achievement-award

The Tony LeVier Flight Test Safety Award

The Tony LeVier Flight Test Safety Award was established by the Flight Test Safety Committee (FTSC) to formally recognize a single individual, or small group of individuals, who, recently, has made a significant flight test safety contribution to the flight test community as a whole, an organization, a specific program or even a singular event. This award is specific to flight test safety achievements and contributions. This award is not meant for entire organizations or to recognize lifetime achievements more appropriately recognized by the Flight

Test Safety Lifetime Achievement Award or other organizational awards from SETP, SFTE, AIAA and EAA. The factual basis and appropriate time period validation of received nominations will be confirmed. Nominations for the Tony LeVier Flight Test Safety Award are reviewed by the Flight Test Safety Committee and the most deserving nominee from the past year is selected. The decision of the Board of Directors is final. The distinctive flight helmet trophy (pictured above) is officially presented by the corporate sponsor of the award (The Gentex Corporation) at the North American Flight Test Safety Workshop in the spring of each year.

Tarik Turkmen, Dornier Seawings GmbH, Chief Flight Test Engineer
Markus Scherdel, Dornier Seawings GmbH, Chief Test Pilot
Stepen Stepen, Dornier Seawings GmbH

For their outstanding contribution to flight test safety through the development of a new technique for investigating porpoising boundaries in flying boats. Operating in one of the most challenging and historically hazardous areas of flight test—water-based longitudinal stability and porpoising onset—this team developed an innovative methodology that allows porpoising characteristics to be systematically identified, bounded, and evaluated while significantly reducing risk to the aircraft and crew. This methodology provided clear safety margins, improved test efficiency, and delivered high-quality data while minimizing exposure during low-altitude, high-consequence test regimes. Equally important, it established a repeatable and transferable framework that can be applied to future amphibious aircraft programs. Their work exemplifies the highest standards of the flight test profession: deep technical understanding, sound judgment, and uncompromising commitment to safety in the pursuit of critical knowledge.

For these achievements, it is our honor to recognize Tarik Turkmen, Markus Scherdel, and Stepen Stepen for their exceptional impact on flight test safety.

https://flighttestsafety.org/awards/35-awards/information/54-tony-levier-flight-test-safety-award

Committees and Accomplishments of the FTSC

Currently the FTSC has four subcommittees. Anyone can volunteer to be part of a subcommittee.

Workshop Subcommittee Bruce Remick, Chair Stuart Rogerson	SMS Protocols Subcommittee Chair - Vacant *The FTSC intends to reinvigorate this subcommittee after the release of FAA Order 4040.26D.*
TPS Subcommittee Jonathan Knaul (NTPS), Chair	AI & LLM Subcommittee Stuart Rogerson (President), Chair Ryan Bowers Paul Smith Addison Tower Adam Sultan RJ Schreiner
Charter Subcommittee Pat Bearce, Chair John Hed	

Report from the TPS Subcommittee

Quarterly meetings that last up to 60 min. Q1 and Q2 are complete. Q3 meeting is planned for 3 Sep. Q4 meeting will likely be in early Dec - exact date TBD.

Normally the subcommittee discusses the latest batch of safety occurrences at each TPS and safety sensitive/critical points (e.g., how are safety stand downs going at your school? What are some common safety issues with students that you are seeing?).

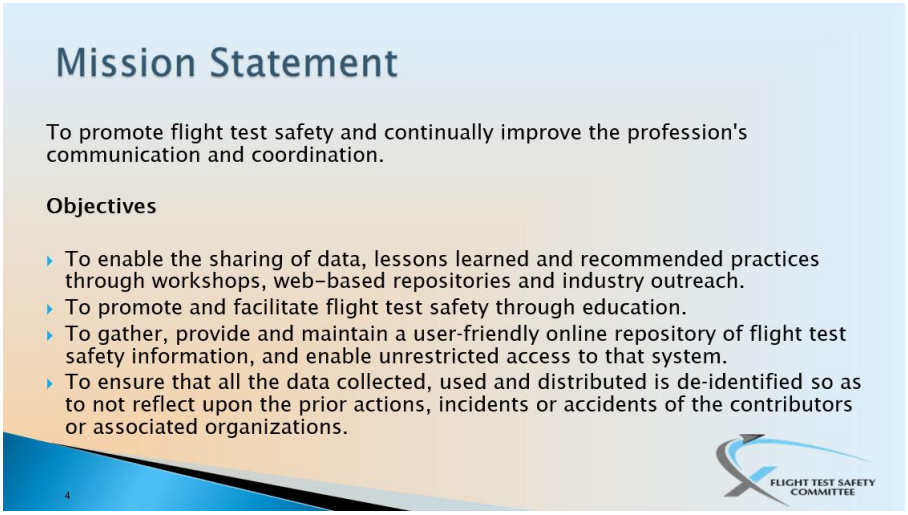
Current representation is as follows:

- NTPS Rep and Sub-committee chair: Jonathan Knaul, NTPS
- USAFTPS: Karl Major
- USNTPS: Barb Gordon
- ITPS: Stan Constantin
- EPNER: LCol Damian Hamoir
- Brazilian Air Force TPS: Jose Ricardo Drozdz
- ETPS: Ania Clarman (ETPS just joined the sub-committee as of May 2026)
- FTSC Chairman/President
- Indian Air Force TPS not yet represented - I will be reaching out to them in the coming month. Our constitution limits us to SETP recognized TPS membership only.

Report from the AI Subcommittee

It has been a busy year for the AI Subcommittee, and I think most of the accomplishments have already been communicated with the flight test community as we rolled out new capabilities on the flight test safety committee website. As a short summary of this year, the most significant accomplishments have all been centered on our new LLM based search tool called *SAFETY NET*. SAFETY NET uses a curated set of data (papers, videocasts, documents and THAs) for the search using a prompt-based interaction with the user. Under SAFETY NET, we have two tools, one for papers and related resources and the other specifically for THAs. Replacement of the obsolete Flight Test Safety Database has been a high priority for this committee, and I am excited to say we have implemented Phase 1 which was to restore basic functionality with the pre-existing THA library. Future improvements will include allowing new THAs to be added to the library. Based on recent beta testing on the tools, SAFETY NET also has a newly added feedback button. The responses provided by the LLM are controlled through behind the scenes prompting which gives a fair amount of flexibility in the results provided to the user. Getting feedback, both positive and negative, can help the team adjust that prompting to improve the results. We need your help. **Please take the time to help out by providing feedback.**

Other Important Stuff: Mission of the FTSC



Board Members of the FTSC

- **Chairman**: Stuart Rogerson
- **Vice Chairman**: Pat Bearce
- **Executive Advisor**: Art Tomassetti

Directors:

Tom Fields	John Hed	Darren McDonald
Paul Smith	Bob Stoney	Ray "RJ" Schreiner
Martin Shubert	Rick Simmons	Perkin "Prat" Karunakaran
Shawn Kern	John Rudzis	Serdar Dogan

Liaisons

- AIAA Rep: Vacant
- SFTE Reps: Keith Gittemeier
- FAA Rep: Addison Tower
- NASA Shawn Kern

Chia Chat

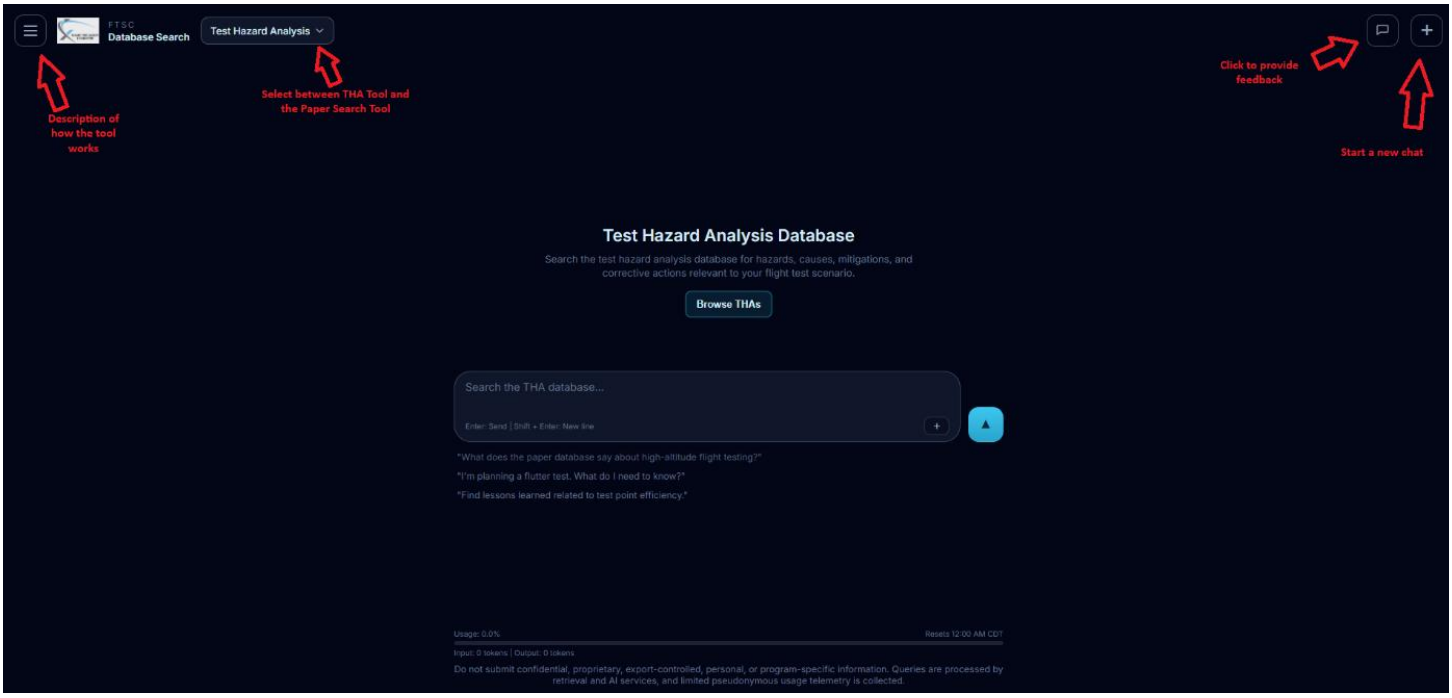
I hope you enjoyed this Flight Test Safety Fact that gave a great summary of the recent Workshop as well as what the Flight Test Safety Committee has been doing for the greater flight test community this past year. Workshops are key deliverable for the committee, and the Fort Worth event did not disappoint. Many thanks to Tom Currie for volunteering to be the Chairman this year and for Bell hosting an excellent technical tour of their flight test facilities. For those that were unable to attend the Flight Test Safety Workshop, the videocasts are now available to view at flighttestsafety.org/2026-fort-worth-tx. Please find a way to use those videocasts back in your own organizations and share the lessons learned. We had a fantastic tutorial Tuesday morning with Eric Kinney doing a deep dive into Flight Test CRM and how the FAA is training their flight test team. There are so many great takeaways and best practices on how to make your CRM training more effective. Well worth the watch. In addition, we had excellent papers throughout the day on Wednesday. You should check out the Dave Houle Best Paper Award winners Christopher Caps and Dulnath Wijayratne, from Boeing Company with their presentation titled Custom Flight Test Display: Initial Deployments and Lessons Learned. I also want to thank all of our presenters who committed the time and effort to put together outstanding papers.

Please remember, the FTSC requests that you handle these presentations as background material, and not as a corporate release. If you wish to use this information in a story or any other form of presentation, you must contact the presenters to ensure that the presentation material can be viewed in the proper programmatic context. The FTSC expressly forbids the use of this presented material in connection with any press release or article without the written consent of the authors.

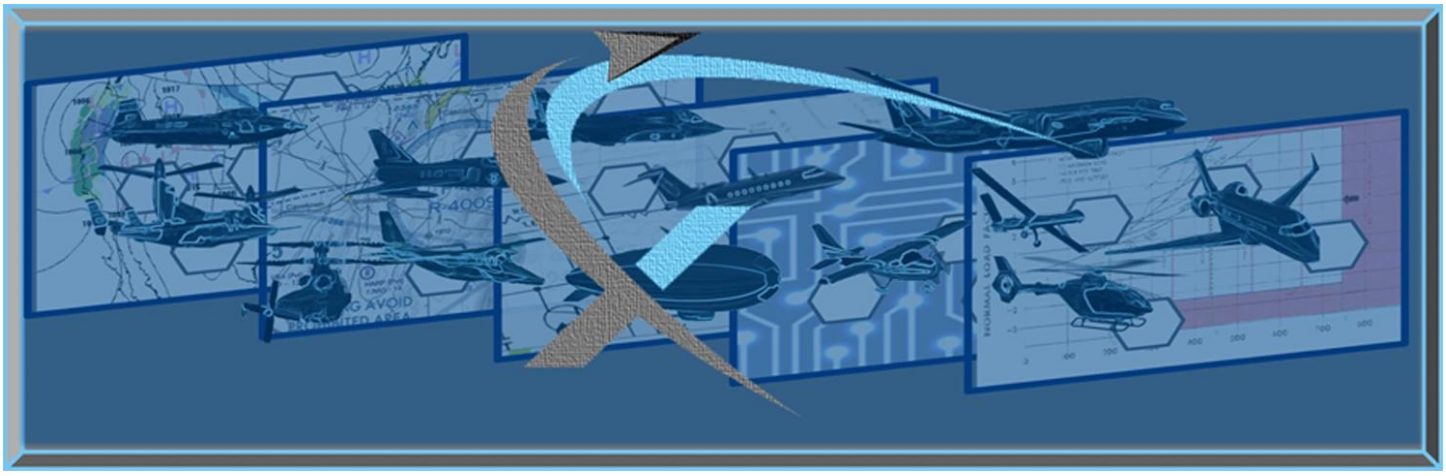
We also announced the dates and time for the 2027 workshop. Save the date for May 4th and 5th at the DoubleTree by Hilton at Denver Tech Center in Greenwood Village, Colorado. You can already go online and make your hotel reservation!

The other big news that came out of the Workshop is the return of the Flight Test Safety Database (FTSDB), under our LLM enabled tool SAFETY NET. As Mark mentioned earlier, we had a naming contest for the new tool at the workshop and SAFETY NET was the clear winner. In case you are wondering, SAFETY NET is an acronym for Systematic Analysis of Failure, Errors & Test Lessons Yielding New Effective Tactics. I know, it's a lot to say, but SAFETY NET does sound cool and maybe a bit like SKYNET. What could go wrong? Getting the FTSDB replacement has been a high priority for the board, and I am delighted to say the initial rollout has occurred. If you visit our home page flighttestsafety.org and click on search in the top right corner, you will see an option for the Paper Database Search Tool. Select that and it will take you to our two search tools. The tools are selectable by the drop-down menu in the top left corner. (See image below.) The first is the previously released FTSC Paper search tool that will look through our resources and videocasts to try and answer your query. The second is the new Test Hazard Analysis tool. As part of the initial rollout, the THAs are only the ones that were previously available in the FTSDB, but we have plans to add a process to submit and add more THAs to the database in the future. Another critical element is the feedback option in the top right corner. Please provide feedback on either tool so we can continue to tweak the LLM prompting and make it more useful to our community. Getting a FTSDB replacement up and running is long overdue and I appreciate your patience as we worked through the technical challenges. I am excited about how these two tools will grow and expand in the future, helping to capture those previous lessons learned we might have otherwise missed. As always, feel free to reach out to me at chairman@flighttestsafety.org if you have any questions or comments.

Stuart "Chia" Rogerson — Chairman, Flight Test Safety Committee



Annotated guide to the THA user interface



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https://ftscchannel.podbean.com/

Connect with us by joining the LinkedIn Group: "Flight Test Safety Committee."

Contact Flight Test Safety Committee

Stuart "Chia" Rogerson, Chairman chairman@flighttestsafety.org
Susan Bennett, FTSC Administrator susan@setp.org
Society of Flight Test Engineers edir@sfte.org
Society of Experimental Test Pilots setp@setp.org
AIAA Flight Test Group derek.spear@gmail.com

Contact *Flight Test Safety Fact*
Mark Jones Jr, Editor mark@flighttestfact.com

Appendix A – The 2026 FTSW Program and Participant Biographies

2026 Flight Test Safety Workshop
Fort Worth, TX

TUTORIAL – Tuesday, 5 May 2026

"Flight Test Crew Resource Management – A Dedicated, Deliberate Approach to Standardization and Education"

Eric Kinney, Federal Aviation Administration
Flight Test Pilot and Acting Manager, Flight Test & Human Factors Branch
UNDERGRADUATE EDUCATION: B.S. Aerospace Engineering from Embry Riddle Aeronautical University
GRADUATE EDUCATION: M.S Aeronautical Science from Embry Riddle Aeronautical University

I started with Cessna as a Flight Test Performance Engineer and progressed in their training program up to pilot in command working on 4 initial TC programs. I then served as a test pilot at Sino Sweringen Aircraft Company and helped achieve their initial TC. Lastly arriving at the FAA in 2006, starting as a Flight Test Pilot and have also served in front line supervisory roles, local and national safety officer, Technical Advisor and now acting Branch Manager while still an active test pilot. I have conducted certification flight testing on 18 initial TC programs and several amended and supplemental TC programs ranging over
30 different models.

2026 Flight Test Safety Workshop Chairman

Tom Currie, Bell Flight
Vice President, Flight Operations

Tom Currie is the Vice President Flight Operations, Bell Textron. His responsibilities included oversight of Bell's experimental, developmental, and production flight test activities, leading the flight test risk management process, as well as developing and sustaining flight test infrastructure.

"FTSC Update and Chair Comments"

Stuart Rogerson, Textron Aviation
Flight Test Safety Committee Chairman
Chairman@flighttestsafety.org

Graduating from Royal Roads Military College with a BSc and then the University of Toronto with a MASc in Aerospace, Stuart spent 20 years in the RCAF. Stuart attended USNTPS Class 127 and worked at AETE testing the CF-18. Stuart then served at the 416 FLTS, Edwards AFB flying the F-16. In 2011, Stuart started at Textron Aviation and worked on the Citation 680+, 750+ and the 680A. Stuart was then assigned to the Citation Longitude where he was both the lead Flight Test Pilot Unit Member and PIC for the first flight of the prototype aircraft and completed all initial stall, stability and control and envelope expansion testing for that program. Following that, he was a demonstration and mission systems development pilot for the Scorpion. Currently Stuart serves as the company's Chief Pilot, Safety, Standardization and

Training for Engineering and Defense Flight Test and is a company designated flight test instructor. Stuart remains a test pilot on all Part 23, Part 25 and Defense programs at TxtAv. Stuart, a Fellow in SETP, is an active member having presented numerous papers locally, at the FTSW and at the SETP Annual Symposium as well as serving the local sections and national board in numerous positions. In 2024, Stuart assumed the role of Chairman of the Flight Test Safety Committee.

SESSION I – Wednesday, 6 May 2026

"Pilot Intervention Rating Scale for Identifying and Categorizing Pilot Contributions to Aviation Safety"

Dr. Robert "Buck" Joslin, Embry-Riddle Aeronautical University
Associate Professor/Ph.D./Colonel, USMC (Ret)
UNDERGRADUATE EDUCATION: B.S. Mechanical Engineering
GRADUATE EDUCATION: M.S. Aeronautical Engineering
Ph.D. Aviation

Dr. Robert Joslin is an Associate Professor with Embry-Riddle Aeronautical University and was formerly the FAA's Chief Scientific Technical Advisor for Flight Deck Technology, an FAA Aircraft Certification Test Pilot, and an ICAP Federal Aviation Safety Officer. Prior to joining the FAA, he was a Colonel in the U.S. Marine Corps and military test pilot conducting OT&E, PAT&E, and RDT&E for all types aircraft and aircraft systems. He also was an Assistant Professor of Aerodynamics and Aviation Safety at the Naval Postgraduate School in Monterey California and is a SETP Associate Fellow and a full member of ISASI and HFES.

"Custom Flight Test Display: Initial Deployments and Lessons Learned"

Christopher Caps, The Boeing Company
777X Project Pilot
UNDERGRADUATE EDUCATION: B.S. Mechanical Engineering, University of North Florida
GRADUATE EDUCATION: M.S. Mechanical Engineering, University of Washington
M.A. Organizational Leadership, Gonzaga University

Chris is the test pilot visionary driving Boeing Test & Evaluation's modernization of flight test aids. He serves as a project pilot for the 777X and 787 test programs. With 20 years of flight test experience and over 5,200 hours in 30 aircraft types, Chris joined Boeing in 2006 as a flight test engineer. He supported the 787's development as Engineering Systems Operator focal and later led production flight test for the 777 and 787. Chris holds a B.S. and M.S. in Mechanical Engineering and an M.A. in Organizational Leadership. He is a member of SETP.

Dulnath Wijayratne, The Boeing Company
Flight Test Engineer
UNDERGRADUATE EDUCATION: B.S. Mechanical Engineering, Michigan Technological University
GRADUATE EDUCATION: M.S Aerospace Engineering, George Washington University

Dulnath “Dunes” Wijayratne is a flight test engineer and technical focal in Loads, Flutter, and Vibration testing with 22 years at The Boeing Company. He has supported every commercial and commercial derivative certification program since 2009. In his current role he is the project lead for a generational advancement of flight test pilot displays. This is one of a suite of next generation flight test aids that Dunes champions with his colleagues. He is also an advocate of applying Systems Theoretic Process Analysis (STPA) to tool development. Dunes is a member of SFTE and enjoys presenting at symposia amongst his esteemed flight test peers.

“Modernized Flight Test Technique for Porpoising Boundary Investigation”

Tarik Turkmen, Dornier Seawings GmbH
Chief Flight Test Engineer
UNDERGRADUATE EDUCATION: Istanbul Technical University, Türkiye

Tarik is a graduate of the Istanbul Technical University Aeronautical Engineering. He began his flight test career at Turkish Aerospace Industries as Flight Test Engineer for Hurkus Advanced Turboprop Trainer and Mission Aircraft Program. In 2022, he joined Dornier Seastar CD2-200 Program.

Tarik has around 1000hrs of experimental flight test experience as Flight Test Engineer and Telemetry Test Conductor covering trainers, fighters, mission aircraft and flying boat. He performed several high risk flight test campaigns such as first flights, flutter, weapons testing and water testing as LFTE.

Currently he works as Chief Flight Test Engineer for Dornier Seawings.

Markus Scherdel, Dornier Seawings GmbH
Chief Test Pilot
UNDERGRADUATE EDUCATION: Jean-Paul Gymnasium Hof, Germany
GRADUATE EDUCATION: Technical University of Munich, Germany, ETPS Boscombe Down, United Kingdom

Markus is a graduate of the Technical University of Munich and the ETPS Long Course. He began his flight test career at DLR Oberpfaffenhofen, eventually serving as Chief Pilot before moving into industry roles with Fairchild Dornier, 328 Design, Solar Impulse, H55 and Lilium.

Markus performed first flights of both Solar Impulse airplanes, S10 and S2, the H55 Electric Trainer, Lilium L4 Phoenix and the Dornier Seastar CD2-200.

Currently he works as Chief Test Pilot for Dornier Seawings.

Markus is an SETP Fellow and a recipient of the Ivan C. Kincheloe Award with more the 11.000 hours flown on 153 types.

“***Safety Lessons from Test Pilot Experience in MALE and Jet UCAV Flight Testing”***

Ahmet Yilmaz, Turkish Aerospace Industries

TEST PILOT/UAV
GRADUATE EDUCATION: Turkish Air Force Academy-Aeronautical Engineering Yıldırım Beyazıt University (MSc) Defense Technologies

Ahmet Emre YILMZ served in Turkish Air Force for 12 years, contributing as a project officer and pilot to the induction of Türkiye's first UAVs into service and their operational deployment, as well as to the development of indigenous Turkish UAV platforms.

YILMAZ resigned from the armed forces with the rank of Captain and has been working as a test pilot at Turkish Aerospace Industries for over ten years, currently conducting test flights for the ANKA, AKSUNGUR, and ANKA-3 UAVs.

YILMAZ completed formal test pilot training at ITPS, further strengthening his expertise in flight testing, evaluation, and advanced aerospace operations.

Dinçer Doğukan Göle, Turkish Aerospace Industries
Chief Test Pilot/UAV
GRADUATE EDUCATION: Turkish Air Force Academy - Electronic Engineering

Dinçer Doğukan Göle is working in the field of unmanned aerial systems and flight testing. With 12 years of service as an officer, he played a pivotal role in integrating UAV's into the Turkish Air Force.

Currently, Göle serves as the **Chief UAV Test Pilot** at **Turkish Aerospace Industries**. In this capacity, he leads efforts in testing and evaluating unmanned aerial vehicles, ensuring their performance and safety standards.

Göle received **test pilot training** from the **ITPS** in Canada. This training has further enhanced his ability to conduct rigorous flight tests and contribute to the development of advanced aviation technologies.

SESSION II – Wednesday, 6 May 2026

"***Flight Test Ethics – Practical Tips for Preventing a Mishap Due to PM Pressure"***

Kevin Switick, AVIAN | Sapphire Solutions
CEO
UNDERGRADUATE EDUCATION: Bachelors of Mechanical Engineering, Villanova University
GRADUATE EDUCATION: Master of Science in Aviation Systems, University of Tennessee Space Institute
United States Naval Test Pilot School, Class 101

CEO of AVIAN Holdings and its three subsidiaries: AVIAN, a test and engineering services company; Level Up, a technical data analysis company, and Sapphire Solutions, a technical consulting and training firm. A graduate of the USNTPS, Switick served as a member of the DoD's Acquisition Professional Community, U.S. Navy's Space Cadre, and U.S. Navy's Aerospace Engineering Duty Officer Corp from 1986 to 2006. His 36-years of test experience includes being an experimental (Category D) test pilot, a USNTPS instructor, Chief Test Director at VX-1, testing of space systems, and co-creating NAVAIR and NAVSEA's College of Test & Evaluation (CT&E).

"ITPS Modern Recovery From the Tower of Babel Effect: Safe Integration of Cultures"

Amit Alfia, ITPS Canada
Flight Test Pilot and Instructor - Rotary Wing
UNDERGRADUATE EDUCATION: B.Sc in Physics (Magna Cum Laude) and Philosophy (Magna Cum Laude)
GRADUATE EDUCATION: USNTPS 'Outstanding Student award' graduate

A full time job husband and father of four kids and a retired IAF (Israeli Air Force) utility, heavy lift, rotary wing pilot after 27.5 years of service, with nearly half of them as a senior RW test pilot in the IAF Flight Test Center (FTC). A US Naval Test Pilot School (USNTPS) Patuxent River 2010 (138A) 'Outstanding Student award' graduate, currently work at ITPS Canada for the last four years as a senior RW Flight Test Instructor.

"Making the Invisible Threats Visible: A Practical Guide to Enhancing Safety/Situational Awareness Individually and Interpersonally"

Dr. Martin Smith, Presage Group Inc.
CEO
UNDERGRADUATE EDUCATION: B.A.
GRADUATE EDUCATION: M.A., Ph.D.

Martin is a 5-decade pilot, who holds a Ph.D. in Psychology. Marty is the CEO of Presage, a company dedicated to developing technologies to better understand and mitigate the psychology of non-compliance in flight operations.

"Implementation of Safety Management System"

Lütfi Cihan, Turkish Aerospace Industries
Chief, Safety Management System
UNDERGRADUATE EDUCATION: Mechanical Engineering

Lütfi Cihan is a Mechanical Engineer with 21 years of experience in aviation. Currently serving as a Safety Manager and Post Holder. Suat has spent the last three years at TUSAŞ leading a transformative journey in safety culture. His strategic promotion efforts have been instrumental in driving a significant shift toward a proactive safety mindset within the organization.

With expertise in AS9100 Quality Management Systems, he specializes in assembly inspections, supply chain quality, and supplier performance management. Beyond his technical roles, Suat is an avid long-distance runner—a passion that mirrors his professional approach: persistent, disciplined, and focused on the long-term goal.

"Manufacturers Flight Test Council – Working Together to Improve Flight Test Safety"

Keith Gittemeier, Textron
Manufacturers Flight Test Council
Flight Test Engineer Senior Specialist, ODA UM
UNDERGRADUATE EDUCATION: B.S. in Aerospace Engineering (University of Missouri – Rolla)
GRADUATE EDUCATION: M.S. in Aerospace Engineering (University of Alabama – Huntsville)

Keith Gittemeier is a Flight Test Engineer and UM for Airplane Performance, Flight Characteristics, and Auto Control Systems for both FAA Part 23 and 25. Keith started at Textron Aviation in 2005 and worked airplane performance for numerous programs including as lead for the Citation Latitude. After working flight characteristics for serveral programs, he became the lead flight characteristics UM for the Cessna SkyCourier. Keith serves on the Test Hazard Assessment Standardization Committee; helps represent Textron Aviation on the ASTM F3120 Icing Committee and the Manufacturers' Flight Test Council; and is currently serving as the Safety Committee Chair for SFTE.

Terry Lutz, TLZ Aerospace
Manufacturers Flight Test Council
Experimental Test Pilot
UNDERGRADUATE EDUCATION: University of Michigan
GRADUATE EDUCATION: University of Dayton/USAFTPS Class 80B

Terry was a USAF fighter pilot having flown the F-4 Phantom II, A-10, and F-16 operationally. He has a degree in Aero Engineering from the University of Michigan, and used that expertise while assigned to the F-16 Program Office during Full Scale Development. He attended the USAF Test Pilot School and served there as an instructor pilot. Prior to becoming an airline pilot, he instructed in the Calspan variable-stability Learjet and NT-33A. Terry evaluated new FBW aircraft coming into commercial service, which led to becoming an experimental test pilot for Airbus in Toulouse, France. He has extensive experimental, developmental, and production flight test experience with all Airbus models, including the A-380 and A-400M. Testing included flight controls, stalls, braking, natural icing, sharklets, and numerous other tests required for certification. Terry was Captain for first flight of the Trent XWB-79 rated at 78,900 lbs thrust mounted on the No. 2 pylon of an A-380 configured as a flying test bed. The first flight took the engine to full A380 flight envelope limits, including testing at the Vmo/Mmo intersection. Terry is a Fellow in the Society of Experimental Test Pilots and Member in the Society of Flight Test Engineers.

Dave Lewandowski, Bombardier
Manufacturers Flight Test Council
Chief Test Pilot
UNDERGRADUATE EDUCATION: Mechanical Engineering University of Missouri – Columbia

Forty years working in the aviation industry Design Engineer/Flight Test Engineer/Test Pilot. In 1998, joined Cessna as a Flight Test Engineer moving up to Test Pilot and Senior Test Pilot (DER) – thirteen years extensively involved in CJ2, Citation 500 Series, Citation Sovereign, XLS+ and CJ4 Business Jet aircraft development and certification flight test programs. Joined Bombardier in July 2011 - Senior Engineering Test Pilot (DER/DAD) on the CRJ, Challenger 350, Learjet 70/75, C Series/A220 and Global 7500/8000 aircraft. 6,500+ hours – 45+ aircraft.