EMERGENCY MANEUVER TRAINING

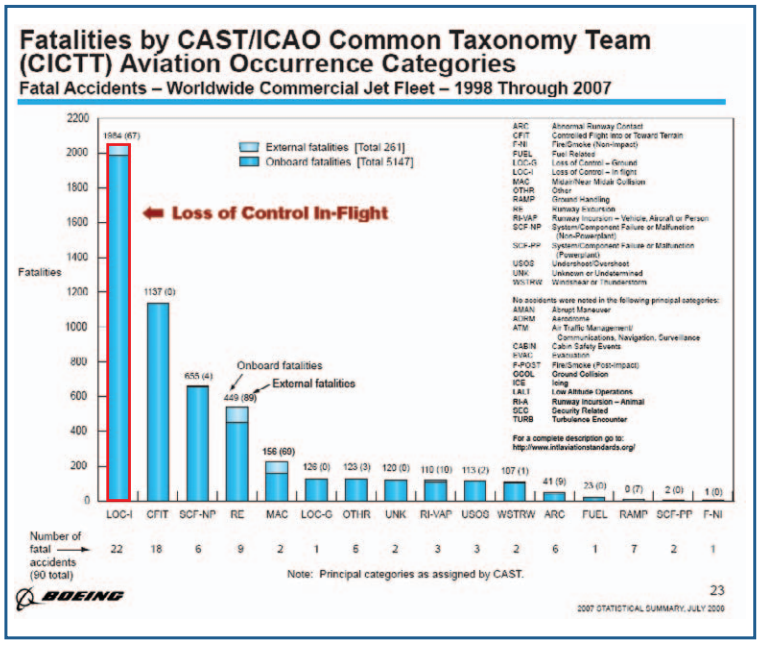
Upset Prevention & Recovery Training

Integrated Loss of Control In-Flight Solutions

www.apstraining.com

THE LOSS OF CONTROL IN-FLIGHT THREAT

For more than 50 years of statistically analyzed accident history in commercial aviation, Loss of Control In-Flight (LOC-I) is indisputably one of the leading causes of airplane crashes and crash-related fatalities worldwide[i]. Rivaled only by Controlled Flight Into Terrain (CFIT) in magnitude and persistence, LOC-I presents a unique challenge to professional aviation as it highlights a serious deficiency in the pilot's ability to deal with a variety of unusual flight attitudes and flight envelope excursions. Regrettably, current pilot training curricula, standards and certification requirements perpetuate this pilot-skill deficiency.



In a report issued by Boeing in July 2009[ii], LOC-I represents the most severe cause factor in commercial aviation over the past 10 years, resulting in the most crash-related fatalities from 1998 through 2007 – even more than CFIT.

Aviation safety organizations and legislating agencies continue to accurately identify the lethality and severity of LOC-I. Where CFIT can be economically addressed through the integration of ground proximity warning systems and synthetic vision instrumentation augmentation, technology does not currently offer a "quick fix" to LOC-I. Short of re-equipping commercial aircraft around the world with Fly-By-Wire flight control systems with all-attitude all-envelope flight control laws, an industry-wide technological solution to LOC-I is unlikely in the foreseeable future.

"Loss of Control In-Flight (LOC-I) is indisputably one of the leading causes of airplane crashes and crash-related fatalities worldwide."

WHY SELECT APS

APS has a diversity of turnkey solutions to mitigate the Loss of Control threat. Whether looking for an online Computer-Based Training (CBT) solution or a fully integrated full motion simulator curriculum complimented by real aircraft training, APS has the answer. Our team is committed to providing the highest quality upset recovery training available in the industry at the best value for the training dollar.

Each APS instructor has extensive experience which uniquely qualifies him/her as an ideal training provider including all-attitude all-envelope maneuvering in jet aircraft, military instruction, and technologically advanced aircraft and transport category flight operations. In addition to delivering training courses year-round at APS Training's modern corporate headquarters located at the Phoenix/Mesa Gateway Airport in Mesa, Arizona, our team is deployable worldwide. These capabilities, combined with 10s of thousands of flight hours dedicated to refining upset recovery training techniques common to all categories of fixed wing aircraft, make APS an unparalleled training resource. In addition to all training being in compliance with the Upset Recovery Training Aid, APS Emergency Maneuver Training is the only Part 141 Flight School certified in the delivery of upset recovery, spin and instrument recovery training courses in the nation.

Rest assured every APS client is in caring hands and treated as a professional aviator. Our staff excels in quality customer service and, as well as providing world-class training in leading-edge equipment, we put the customer first while simultaneously ensuring our training services are being delivered in strict adherence to contracted performance standards. Our business philosophy integrates quality training amidst an easy-going enjoyable atmosphere.

i Vahid Motevalli and Christian M. Salmon, Developing Greater Flexibility and Resolution in Aviation Accident Analyses, Aviation Institute - School of Engineering and Applied Sciences The George Washington University, http://www.gwu.edu/~aviation/research/Developing.pdf, 1, (Oct. 23, 2007)

ii Aviation Safety - Boeing Commercial Airplanes, Statistical Summary of Commercial Jet Airplane Accidents - Worldwide Operations 1959 - 2008, The Boeing Company, (July, 2009). [Original Source: CAST/ICAO Common Taxonomy Team (CICTT), http://www.intlaviationstandards.org/]

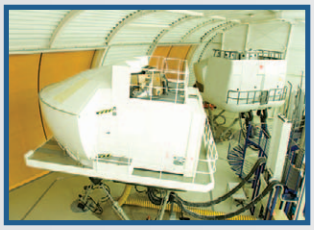
FLIGHT TRAINING SERVICES

Today's aviation training marketplace does not currently offer a tangible solution to LOC-I using readily available resources. This is primarily due to the perceived risk of upset recovery training, the limited accuracy of simulator fidelity in extreme flight conditions, and the stark absence of instructor knowledge to effectively teach all-attitude all-envelope recovery techniques and prevention strategies. However, after decades of experience instructing upset recovery techniques to thousands of professional pilots, we continue to find it is the total absence of fundamental all-attitude recovery skills, not simulator fidelity or aircraft type, that is the leading factor in industry-wide upset recovery piloting deficiency.

With just a few hours of dedicated all-attitude upset recovery training, pilots of every skill-level can be armed to effectively and efficiently deal with any recoverable in-flight upset. APS offers a variety of solutions to meet almost any flight department's budget and performance needs.

"The level of professionalism and teaching is beyond compare. The team's ability to effectively teach these [loss of control in-flight] skills using the classroom and the aircraft truly reinforces the skills and the ability to complete them. I have completed several other upset recovery courses over 25 years of military aviation and this is by far the most comprehensive and professional training I have attended. This is truly valuable training for every pilot, at any level of experience. " Tim Harper, 6200 Hrs, ATP/FW/RW, RC12/C12/C208

Upset Prevention & Recovery Training Programs Available



Academic-only Upset Recovery Training (Web-based):
- Self-paced Computer-Based Training (CBT) to Establish Threshold LOC-I Knowledge
- Core Training: Airplane Upset Recovery Training Aid
- Partial Mitigation of LOC-I

Simulator-based Upset Recovery Training:
- Comprehensive Scenario-based Training in a Full Flight Simulator
- 1-2 Day Courses Available
- Optional Self-paced CBT
- Comprehensive Mitigation of LOC-I

Real Aircraft-only Upset Recovery Training:
- Comprehensive Scenario-based Training in Safe Aerobatic Aircraft
- 1-4 Day Courses Available
- Optional Self-paced CBT
- More Comprehensive Mitigation of LOC-I

Integrated Simulator / Real Aircraft Upset Recovery Training:
- Comprehensive Scenario-based Training in a Full Flight Simulator and Safe Aerobatic Aircraft
- 2-4 Day Courses Available
- Optional Self-paced CBT
- Most Comprehensive Mitigation of LOC-I

"Having previously completed the 6 mission, in-aircraft, Enhanced Emergency Maneuver Training and more recently the Level D Full Motion Simulator Only - Jet Upset Recovery Training programs at APS Emergency Maneuver Training, I can describe the training experience as truly exceptional. As a current Fortune 200 Falcon 50/50EX business jet Captain and former U.S. Marine Corps KC-130 Aircraft Commander and Weapons Tactics Instructor, I was impressed with the quality and scope of training that was accomplished using the ERJ Level D Full Flight Simulator. The simulator work built on the previous lessons learned in the Extra 300L, highlighted swept-wing aerodynamics and high altitude/airspeed operations, and tied everything together in the glass cockpit, transport environment applicable to the type of flying we do in the Falcon. Clearly, the expertise of the APS instructor staff combined with the comprehensiveness of their proven training methods are the "secret ingredients" that place APS on the leading-edge of the aviation training industry. Having routinely completed FAA required simulator training in the Falcon 50 series aircraft for several years now, there is simply no comparison to the APS program in terms of stall/spin awareness and upset recovery/emergency maneuver training. In my opinion, the integrated aircraft/simulator approach to upset recovery training offered by APS is unparalleled. I highly recommend any of the upset recovery training programs offered at APS with the firm belief that APS is the very best solution currently available in the industry to address in-flight loss of control". LtCol. J.A. "Jim" Kazin U.S. Marine Corps (Ret.) • Corporate Pilot - Falcon 50/50EX Former Military Commander • KC-130 Aircraft Commander/WTI

STATISTICAL RESEARCH: EFFECTIVENESS RESULTS

Research Data:

Research Time Period: 3-Months (2007 – 2008)
Total Number Data Points (Pilots Trained at APS) Included in Research: 115 Pilots
Data Filtered Below Includes All Pilots Meeting the Following Criteria (total of 75 pilots):

- Pilots Flying Turbo Prop and/or Turbo Jet Aircraft Group Demographic (Including Initial and Recurrent Participants):
- 88.0 % had greater than 1500 hours of flight experience
- 91.6 % were between 25 and 59 years of age
- 51.4 % were certified flight instructors
- 81.3 % had less than 10 hours of aerobatic experience

Participant Recovery Performance Evaluation for Initial Courses

(Before Training versus After Training):

TRAINEE PERFORMANCE EVALUATION	TRAINEE'S ABILITY TO RECOVER	
Upset Scenario Assessed*	**Before Training**	**After Training**
Over-Bank Nose Low Upset	34.8%	97.9%
Cross-Controlled Stall to Over-Bank	41.9%	100.0%
Severe Wake Turbulence Encounter	42.9%	97.8%
Nose High Upset / Pitch Mis-Trim	47.8%	100.0%
Control Failure: Rudder Hard-Over	40.6%	92.3%

*Scenarios are designed to reflect challenging, yet realistic upset situations; typically flight attitudes beyond 60 degrees angle of bank and/or 30 degrees of pitch. (Note: Many more scenarios than those listed in this chart are taught during the course. These particular maneuvers are evaluated to give representative indications of training effectiveness)

Retention of Skill:

Important Note: Of the overall test group of 115 pilots, 35 pilots were repeat customers attending a recurrent upset recovery course at APS. Recurrent participants demonstrated 76.4% retention of skill returning after an average of 19 months between Initial and Recurrent Training programs. Skills are expected to atrophy at a greater rate the longer pilots delay time between Recurrent training courses.

Post-Training Participant Evaluation Summary

Course Components Evaluated as Follows:

• Ground Training	90.7% Excellent	9.3% Above Average
• Flight Training	97.3% Excellent	2.7% Above Average
• Recovery Technique Effectiveness	98.7% Excellent	1.3% Above Average
• Quality of Instructors	100.0 % Excellent	

- **Value To Pilots:** 100% of the participants indicated that LOC-I training as provided by APS was valuable to all pilots with 64.0 % of those votes indicating that APS LOC-I training should be mandatory in pilot certification.
- **Skill & Knowledge:** 100% indicated they learned quite a bit and developed life-saving skills with 76.0% of those votes indicating their understanding and pilot skill-set related to upset recovery training had grown dramatically
- **Facility:** 73.3% evaluated the APS facility as EXCELLENT with an additional 25.0% assessing the APS Facility as ABOVE AVERAGE
- **Overall Experience:** 96.0% of the participants evaluated the overall experience as EXCELLENT with the remainder indicating it was ABOVE AVERAGE
- **Manual:** 68.0% of participants rated the APS Training Manual as EXCELLENT with an additional 26.7% ranking the manual as ABOVE AVERAGE

Our mandate at APS Emergency Maneuver Training is to provide a variety of affordable turnkey solutions to mitigate the Loss of Control In-Flight threat to operators worldwide. Throughout each of our programs, key learning concepts are frequently re-enforced using our proven building-block training methodology developed over the course of a decade. As a specialized Part 141 Flight School with thousands of instructional flight hours dedicated exclusively to upset recovery and emergency maneuver training, we are recognized experts in the production of safer, more educated, experienced and capable pilot graduates. Our clients can expect personalized customer service, safety-first operations, expert instruction and top-notch corporate facilities.

Paul BJ Ransbury, President
Master CFI-Aerobatic, CFI, CFII, MEI, AGI
Fighter Weapons Instructor Graduate
Memberships: NBAA, NAFI, IAC, CUATE, AOPA, SAFE
A320 Airline Pilot, F/A-18 Hornet Pilot

After thirty years of flying tail draggers, military fighters, and airliners, I am truly privileged to be part of an unmatched professional team dedicated to saving lives. In all my years of schooling and training, no organization rivals this company's ability to develop and enhance a pilot's safety skills and efficiency in practical, easy-to-understand ways. It is my job to ensure you receive nothing short of personalized, safe, and expert instruction tailored to your specific operational needs. I guarantee you will return to the cockpit with confidence and the necessary skills to be prepared to deal with the unexpected upset. I look forward to meeting you!

J. Clarke McNeace, Director of Operations and Training Standards
Master CFI-Aerobatic, CFI, CFII, MEI, AGI
Fighter Weapons Instructor Graduate
Memberships: NAFI, IAC, CUATE, AOPA, SAFE
B737 Airline Captain, F/A-18 Hornet Pilot

APS
EMERGENCY MANEUVER TRAINING

APS EMERGENCY MANEUVER TRAINING
A Division of Aviation Performance Solutions LLC

Phoenix-Mesa Gateway Airport (KIWA)
5865 S. Sossaman Rd., Mesa, Arizona 85212
TOLL FREE: 866-359-4273
TEL: 480-279-1881 FAX: 480-279-1882
Email: info@apstraining.com www.apstraining.com