

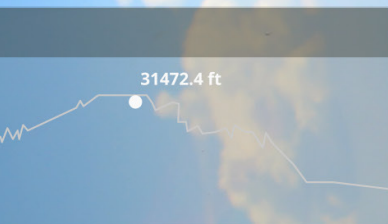


AVIATION  
PERFORMANCE  
SOLUTIONS

We Help Pilots Bring  
Everyone Home Safely

# LEADING UPSET TRAINING INTO THE FUTURE

OVERCOME YOUR #1 FATAL THREAT  
ON EVERY FLIGHT



232 kt

EVERY PILOT TRAINED - IN CONTROL - ALL THE TIME



Transform your operational in-flight safety! Despite measurable advances made by the aviation industry in recent years to establish the framework of effective Upset Prevention and Recovery Training (UPRT), both UPRT effectiveness and its applicability to most professional pilots are suffering. Moving the safety and effectiveness of UPRT forward to a new level of transformational value is straightforward and available to every operator by following six (6) implementation stages. The stages below give guidance on how pilots can take control of their personal and flight department training to overcome the **#1 fatal threat** on every flight: Loss of Control In-flight (LOC-I). A worksheet can be used to facilitate your analysis and decision making.

## STAGE 1: ASSESS YOUR RISK USING SAFETY MANAGEMENT SYSTEM (SMS) PRINCIPLES

- » Review Relevant Accident Statistics (Fatal Accidents and Fatalities)
- » Consider: Single Pilot vs Crew Operations, Proficiency, and Historical UPRT Activities

## STAGE 2: STUDY PROVEN-EFFECTIVE UPRT SOLUTION REQUIREMENTS

- » Eight (8) Critical Quantitative LOC-I Mitigation Criteria
- » Review Central Advantages of Each Training Platform (Academy, On-Aircraft, and Simulation)
- » Review ICAO Doc 10011 Specifying Integrated (academic, on-aircraft, and simulation) Training is Required for Effective Risk Mitigation

## STAGE 3: SEGMENT YOUR OPERATIONAL PROFILE (WHAT, HOW, AND WHERE YOU OPERATE)

- » Crew Complement: Single Pilot vs. Crewed Operations
- » VFR-Only vs Night/Weather Operations | Mission-Driven (Government, Law Enforcement)
- » Type of Airplane: Piston, Turboprop, and/or Turbofan/Turbojet
- » High Altitude Operations

## STAGE 4: POPULATE THE 'LOC-I UPRT EFFECTIVENESS' SOLUTIONS MATRIX (REFERENCE WORKSHEET)

## STAGE 5: AUDIT PROVIDER FOR ESSENTIAL IMPLEMENTATION PRINCIPLES TO ASSURE GRADUATE RESILIENCE

- » Core Principles Alignment: Every Pilot In Control Solution Standard™
- » Consistent and Transferable UPRT Strategy Must Be the Central Feature of Skills Development

## STAGE 6: THOUGHTFULLY DESIGN A LONG TERM 'LIFE PLAN' SOLUTIONS - FOCUS ON BEST TRAINING VALUE (REFER TO STAGE 4 MATRIX)

- » Initial Training: Ideally Fully-Integrated Solution (See Very High Risk Profile in Worksheet) with Required Intensity to Achieve Overlearning
- » Recurrent Training: Every Two Years Minimum (Online Academics in Off Years)
- » Touch All Integrated 'Very High Risk' Components Every 5 Years (Break Into 2-3 Year Groupings)





OPTIMUM UPRT SOLUTION TO OVERCOME LOSS OF CONTROL IN-FLIGHT (LOC-I)

STAGE 1: ASSESS YOUR RISK USING SAFETY MANAGEMENT SYSTEM (SMS) PRINCIPLES

Table with columns: Incident outcomes (Severity rating, Health effects, Property damage, Environment impact) and Likelihood of occurrence (1-5). Includes a risk scale at the bottom: Very high risk: 15 or greater, High risk: 9-14, Moderate risk: 5-8, Low risk: 1-4.



SUCCESS PACK

apstraining.com/successpack

Assumptions in Stages 2 Through 6 Below:

- EPIC-S2™ Compliant UPRT Implementation
• Minimum of Four (4) Training Flights
• Jet Operators Include One (1) Jet Flight
• Ops > FL250 Requires High Alt Jet UPRT

STAGE 2: STUDY PROVEN-EFFECTIVE UPRT SOLUTION REQUIREMENTS

Eight (8) Vital Quantitative LOC-I Mitigation Criteria(TM) (QLMC(TM))

- Human Factors (Startle, Surprise, Fear)
• All-Attitude Environment Immersion
• Strategy Application - Resilience in Crisis

- G-Awareness (Unload and Load)
• Repetition to Proficiency

- Very Low Altitude & All-Weather Upsets
• Crew Resources Management (CRM) or SRM
• Representative Control Feel and Responses

Primary Platform Roles

- Academics: Awareness and Maximizes Practical Training
• On-Aircraft: Human Factors and Crisis Resilience
• Simulation: CRM, Feel & Response, Low Alt/IFR

Core Industry References: ICAO Manual on Aeroplane Upset Prevention and Recovery Training | FAA AC 120-111 (CHG 1) UPRT | FAA AC 120-109A (CHG 1) Stall Prevention and Recovery Training

STAGE 3: SEGMENT YOUR OPERATIONAL PROFILE

Circle WHAT You Operate (Used in Simulator Selection and On-Aircraft Platform Selection)

Type of PowerPlant: Piston Turboprop Turbjet/Turbofan
Number of Engines: One Two or More
Complex Airplane: No Yes

Circle HOW You Operate (Simulator Selection)

Crew Complement: Single Pilot Crewed Operation
Night and/or IFR: VFR Only Night and/or IFR
Maneuvering (Military, Law Enforcement, etc): Traditional Commercial Operations Military, Government, or Law Enforcement

Circle WHERE You Operate

High Altitude Operations? Below 25,000' Above 25,000'

Other Important Operational Notes: \_\_\_\_\_



## STAGE 4: POPULATE THE 'LOC-I UPRT EFFECTIVENESS' SOLUTIONS MATRIX

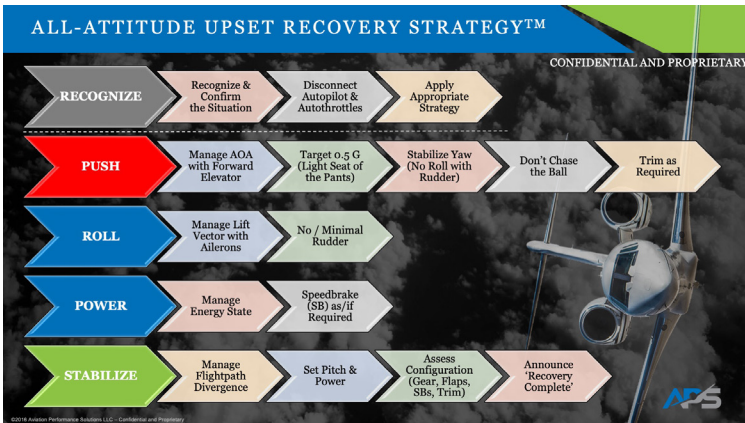
Effective UPRT Solutions for Your Self-Determined Risk Level

LOW RISK	MODERATE RISK	HIGH RISK	VERY HIGH RISK	RECURRENT <small>(All Very High Risk Every 5 Years)</small>
Online Preparatory Academic UPRT	Online Preparatory Academic UPRT	Online Preparatory Academic UPRT	Online Preparatory Academic UPRT <input checked="" type="checkbox"/>	Online Preparatory Academic UPRT <input type="checkbox"/>
Live Instructor-Led Academic UPRT	Live Instructor-Led Academic UPRT	Live Instructor-Led Academic UPRT	Live Instructor-Led Academic UPRT <input checked="" type="checkbox"/>	Live Instructor-Led Academic UPRT <input type="checkbox"/>
On-Aircraft All-Attitude Piston UPRT	On-Aircraft All-Attitude Piston UPRT	On-Aircraft All-Attitude Piston UPRT	On-Aircraft All-Attitude Piston UPRT <input checked="" type="checkbox"/>	On-Aircraft All-Attitude Piston UPRT <input type="checkbox"/>
On-Aircraft All-Attitude Jet UPRT*	On-Aircraft All-Attitude Jet UPRT*	On-Aircraft All-Attitude Jet UPRT*	On-Aircraft All-Attitude Jet UPRT* <input type="checkbox"/>	On-Aircraft All-Attitude Jet UPRT* <input type="checkbox"/>
In-Class Advanced Simulator UPRT	In-Class Advanced Simulator UPRT	In-Class Advanced Simulator UPRT	In-Class Advanced Simulator UPRT <input checked="" type="checkbox"/>	In-Class Advanced Simulator UPRT <input type="checkbox"/>
High Altitude On-Aircraft Jet UPRT**	High Altitude On-Aircraft Jet UPRT**	High Altitude On-Aircraft Jet UPRT**	High Altitude On-Aircraft Jet UPRT** <input type="checkbox"/>	High Altitude On-Aircraft Jet UPRT** <input type="checkbox"/>
Type-Specific Virtual Reality UPRT***	Type-Specific Virtual Reality UPRT***	Type-Specific Virtual Reality UPRT***	Type-Specific Virtual Reality UPRT*** <input checked="" type="checkbox"/>	Type-Specific Virtual Reality UPRT*** <input type="checkbox"/>
Normal Category Piston UPRT****	Normal Category Piston UPRT****	Normal Category Piston UPRT****	Normal Category Piston UPRT****	Normal Category Piston UPRT****
Normal Category Jet UPRT****	Normal Category Jet UPRT****	Normal Category Jet UPRT****	Normal Category Jet UPRT****	Normal Category Jet UPRT****
Rotational G-Device****	Rotational G-Device****	Rotational G-Device****	Rotational G-Device****	Rotational G-Device****

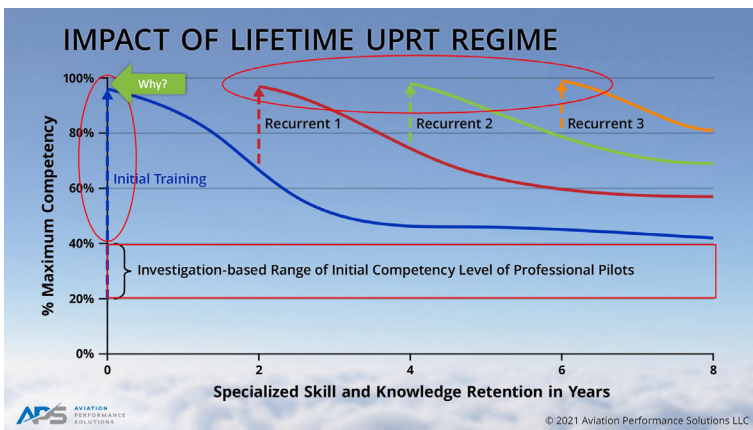
- \* If operating a turbojet, turbofan, or turboprop airplane
- \*\* If operating above FL250
- \*\*\* Only effective in conjunction with comprehensive on-aircraft UPRT (min 4 flights)
- \*\*\*\* Largely ineffective LOCI-mitigating training platforms (not recommended)



## STAGE 5: AUDIT PROVIDER FOR ESSENTIAL IMPLEMENTATION PRINCIPLES (ASSURE RESILIENCE)



## STAGE 6: THOUGHTFULLY DESIGN A LONG TERM 'LIFE PLAN' SOLUTIONS - FOCUS ON BEST TRAINING VALUE



### LOC-I UPRT EFFECTIVENESS ANALYST

Name: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Fleet-Types: \_\_\_\_\_  
 # of Pilots to Train: \_\_\_\_\_  
 Date Completed: \_\_\_\_\_  
 Evaluation Date: \_\_\_\_\_