



IFALPA

The Global Voice of Pilots



Upset Prevention and Recovery Training

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Aim



- **The primary aim is to prevent LOC-I situations in airline operations.**
- **The secondary aim is to provide the pilot with knowledge and skills to recover the aircraft from an unusual attitude.**

Scope

- **UPRT Core Principles.**
- **Pilot Skill Development.**
- **Training Considerations.**
- **Industry Developed Guidance.**
- **Instructor Skills.**
- **Simulator Requirements.**
- **Aircraft Requirements.**

“YOU ARE AS GOOD AS YOU ARE TRAINED”

**“IF YOU THINK THAT TRAINING IS EXPENSIVE,
TRY PAYING FOR AN ACCIDENT”**

Managing the Flight Path of the Aircraft is a basic pilot skill

Requirement to prevent or recover from any aircraft upset, a pilot needs:

- **Knowledge.**
- **Manual Handling and Operational Skills.**
- **Recency of Experience.**

Required Pilot Skills



Upset Prevention, Recognition, and Recovery are required Pilot Skills to mitigate LOC-I events

Manual Flight Operations training should be emphasised to consolidate the principles of airplane flight path and energy management skills

Required Pilot Skills



UPRT should not be used to replace training requirements for basic flying skills training

UPRT is training and not checking

UPRT – Core Principles



Prevention:

Pilot actions to avoid any divergence from a desired airplane state.

Recognition:

Pilot's recognition of conditions of an impending divergence, a developing or developed upset.

Recovery:

Pilot actions that return an airplane that is diverging to a safe desired airplane state.

Pilot Skills are developed by “Repetition over time”

- **Requires more than just a single exposure**
- **On-aeroplane training needs to be trained over several flights, not just one**
- **UPRT Training is continuous – not a one-time course**
- **Periodic Refresher Training – provides recency and practice of UPR Skills**

UPRT provided throughout all stages of a Pilots Career



- **Primary/ab-initio flight training.**
- **CPL (include on-aeroplane training).**
- **MPL (include on-aeroplane training).**
- **ATPL (type rating, FSTD training).**
- **Refresher training at defined intervals.**

Training Considerations



The main challenge is to provide realistic training.

- **Academic Knowledge.**
- **Awareness and Prevention.**
- **Availability of Visual References.**
- **Pilot Monitoring.**
- **Startle or Surprise.**

Industry Developed Guidance



- **FAA AC 120-109, “Stall and Stick Pusher Training**
- **Industry Airplane Upset Recovery Training Aid (rev 2)**
- **RAeS paper – “Aeroplane Upset Recovery Training, History, Core Concepts & Mitigation”**
- **ICAO UPRT Manual (Doc 10011)**

UPRT Instructors need specialized skills and training in order to conduct UPRT

- **Qualified by CAA to conduct UPRT.**
- **UPRT specialized Instructor training.**
- **Certificate and rating in the category, class, type.**
- **Operational experience on type.**
- **Understand capabilities and limitations of FSTD.**

Aircraft Requirements

- **Aerobatic aircraft.**
- **All-attitude / all-envelope capability.**

Simulator Requirements



- **Qualified by CAA to provide UPRT.**
- **Provide proper cues.**
- **Only used within capabilities of aero model.**

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IPITS

IFALPA Pilot Training Standards
Guide for Best Practices

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