Effective Upset Prevention and Recovery Training

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

To prevent or recover from any aircraft upset, Pilots need:

- Knowledge
- Manual Handling & 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 emphasized to consolidate the principles of airplane flight path and energy management skills.
UPRT – What is it?

**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**
Any pilot’s actions that return an airplane that is diverging to a safe desired airplane state
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
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
Pilot On-Aeroplane UPRT Training can be implemented into existing ab-initio, CPL, Type and recurrent training programs.

- Fits within your existing training framework
  - traditional, ATPL, AQP, ATQP, MPL
- Many successful programs exist worldwide
Industry guidance already exists for implementing effective UPRT training

- FAA AC 120-109, “Stall and Stick Pusher Training
- Industry Airplane Upset Recovery Training Aid (rev 2)
- ICAO UPRT Manual (Doc 10011)
Instructor Skills

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
Use appropriate training device for training specific skills

- Knowledge Training
- Aeroplane Requirements
- FSTD
Aeroplane Training -
What do pilots expect?

Minimum of on-aeroplane training at the CPL training level (Basic MPL phase)

- aerobatic aircraft
- all envelope/all attitude flying
Simulator Requirements

Use appropriate training device for training specific skills

- Qualified by CAA to provide UPRT
  - No grandfathering
- Provides proper cues
- FSTD only used within capabilities of aero model
- Avoid negative transfer of training
Crew procedures should be developed to aid pilots in effectively dealing with any Upset event.