

COURSE OVERVIEW

UPRT EASA

Phased Training Program

Elevate your training experience.

As of May 2016, EASA requires all operators to incorporate upset awareness, prevention and recovery (UPRT) into their pilot training programs. This document outlines the specific UPRT topics and elements necessary to be incorporated into the existing phased recurrent training footprint imposed by ED Decision 2015/12/R.

Your worldwide training partner of choice



High Altitude UPRT Training

PHASE A (2017/2020/2023)

Course overview

Ground school (3 hours)

Aerodynamics

- General aerodynamic characteristics
- Aeroplane certification and limitations
- Aerodynamics
- Aeroplane performance
- Angle of attack (AOA) and stall awareness
- Stick shaker or other stall-warning device activation (as applicable)
- Mach effects (if applicable to the aeroplane type)
- Aeroplane stability
- Control surface fundamentals

Causes of and contributing factors to upsets

- Environmental
- Pilot-induced
- Mechanical (aeroplane systems)

Safety review of accidents and incidents

- Safety review of accidents and incidents relating to aeroplane upsets

G-load awareness and management

- Positive/negative/increasing/decreasing G-loads
- G-load management

Energy management

- Kinetic energy vs. potential energy vs. chemical energy (power)

Flight path management

- Relationship between pitch, power and performance
- Performance and effects of differing power plants (if applicable)
- Manual and automation inputs for guidance and control
- Automation management
- Proper use of rudder

Recognition

- Type-specific examples of physiological, visual and instrument clues during upsets
- Pitch/power/roll/yaw
- Effective scanning (effective monitoring)
- Type-specific stall protection systems and cues
- Criteria for identifying stalls and upsets

System malfunction

- Flight control defects
- Engine failure (partial or full)
- Loss of reliable airspeed
- Fly-by-wire protection degradations
- Stall protection system failures including icing alerting systems

SIM session (2 hours)

High altitude UPRT handling

- Climb techniques
- Manual flight at high altitude (without flight director)
- Mach tuck (if applicable)
- Dutch roll (if applicable)
- Immediate descent required due to temperature increase
- High altitude approach to stall and recovery
- Engine failure during cruise
- Oceanic diversion procedures or emergency descent

Low Altitude UPRT Training

PHASE B (2018/2021/2024)

Course overview

Ground school (3 hours)

Aerodynamics

- General aerodynamic characteristics
- Aeroplane certification and limitations
- Aerodynamics
- Aeroplane performance
- Angle of attack (AOA) and stall awareness
- Stick shaker or other stall-warning device activation (as applicable)
- Stick pusher (as applicable)
- Aeroplane stability
- Icing and contamination effects

Causes of and contributing factors to upsets

- Environmental
- Pilot-induced

Safety review of accidents and incidents

- Safety review of accidents and incidents relating to aeroplane upsets

G-load awareness and management

- Positive/negative/increasing/decreasing G-loads
- Lateral G awareness (sideslip)
- G-load management

Energy management

- Kinetic energy vs. potential energy vs. chemical energy (power)

Flight path management

- Relationship between pitch, power and performance
- Manual and automation inputs for guidance and control
- Type-specific characteristics
- Management of go-arounds from various stages during the approach

Recognition

- Type-specific examples of physiological, visual and instrument clues during upsets
- Pitch/power/roll/yaw
- Effective scanning (effective monitoring)
- Type-specific stall protection systems and cues
- Criteria for identifying stalls and upsets

System malfunction

- Fly-by-wire protection degradations
- Stall protection system failures including icing alerting systems

SIM session (2 hours)

Low altitude uprt handling

- Takeoff and departure
- Steep turns
- Slow flight below VMD
- Approaches to stall in clean, take-off and landing configuration
- Stick pusher demo (if applicable)
- Unusual attitude recoveries
- Hold using heading/time method
- Non-precision approach to a go-around at 1000 feet AGL
- ILS to a full-stop landing

Performance Limited UPRT Training

PHASE C (2016/2019/2022)

Course overview

Ground school (3 hours)

Aerodynamics

- General aerodynamic characteristics
- Aeroplane certification and limitations
- Aerodynamics
- Aeroplane performance
- Angle of attack (AOA) and stall awareness
- Stick shaker or other stall-warning device activation (as applicable)
- Stick pusher (as applicable)
- Mach effects (if applicable to the aeroplane type)
- Aeroplane stability
- Control surface fundamentals
- Use of trims
- Icing and contamination effects
- Propeller slipstream (as applicable)

Causes of and contributing factors to upsets

- Environmental
- Pilot-induced
- Mechanical (aeroplane systems)

Safety review of accidents and incidents

- Safety review of accidents and incidents relating to aeroplane upsets

G-load awareness and management

- Positive/negative/increasing/decreasing G-loads
- Lateral G awareness (sideslip)
- G-load management

Energy management

- Kinetic energy vs. potential energy vs. chemical energy (power)

Flight path management

- Relationship between pitch, power and performance
- Performance and effects of differing power plants (if applicable)
- Manual and automation inputs for guidance and control
- Type-specific characteristics
- Management of go-arounds from various stages during the approach
- Automation management
- Proper use of rudder

Recognition

- Type-specific examples of physiological, visual and instrument clues during upsets
- Pitch/power/roll/yaw
- Effective scanning (effective monitoring)
- Type-specific stall protection systems and cues
- Criteria for identifying stalls and upsets

System malfunction

- Flight control defects
- Engine failure (partial or full)
- Instrument failures
- Loss of reliable airspeed
- Automation failures
- Stall protection system failures including icing alerting systems

SIM session (2 hours)

Performance limited UPRT handling

- RTO on limiting length runway
- EFATO on limiting TOD runway
- EFATO obstacle limited with emergency turn procedure in VMC
- Fuel dumping (if applicable)
- Asymmetric handling – manual no FD
- Engine relight
- Handling at maximum takeoff mass
- ILS to a bailed landing below 50 feet AGL
- Approach with go-around prior to FAF
- Visual circuit