

**ATR**



**Flight Safety Conference**

29<sup>th</sup> – 30<sup>th</sup> November 2023

# UPRT Training Policy

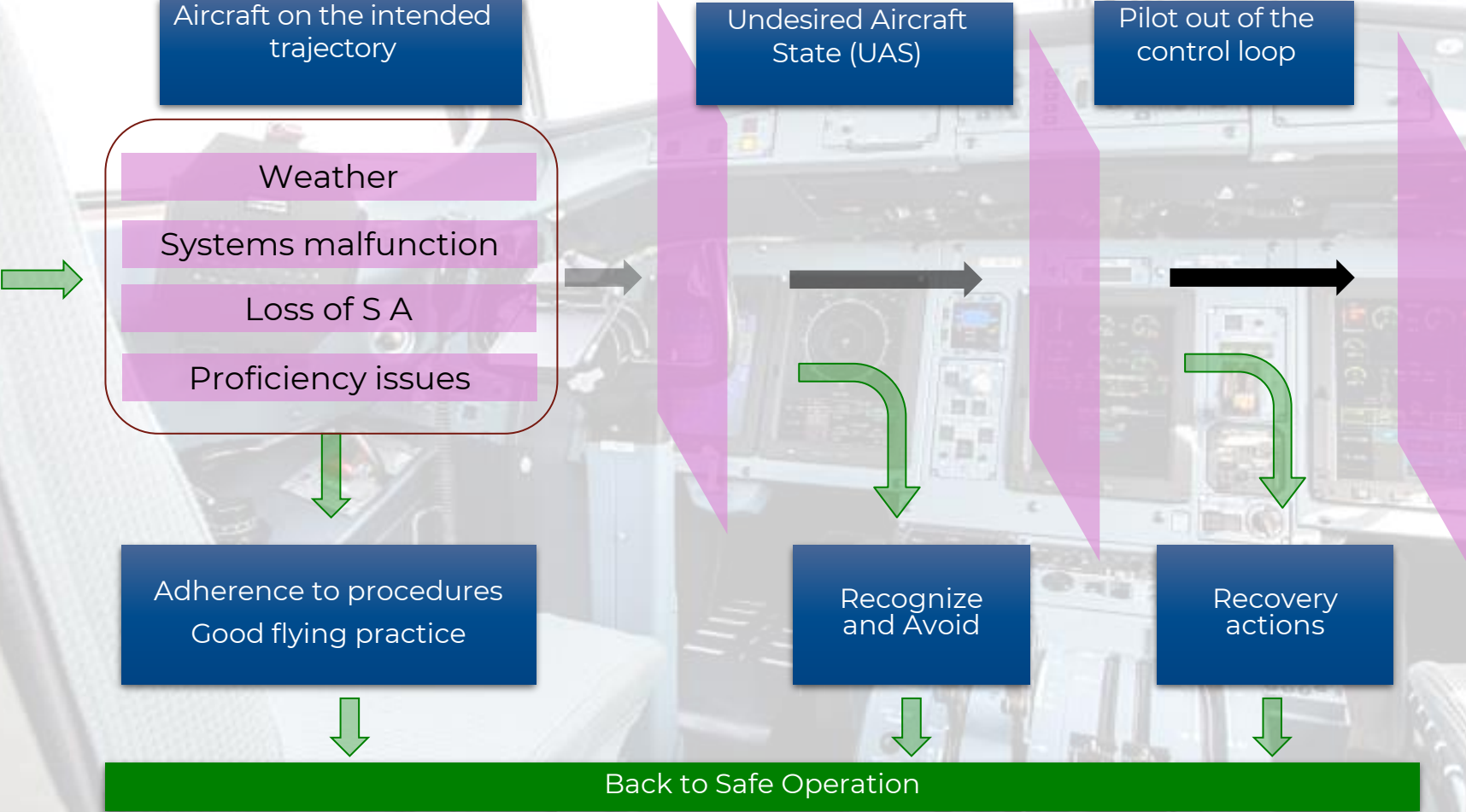
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**Herve BARTHE**

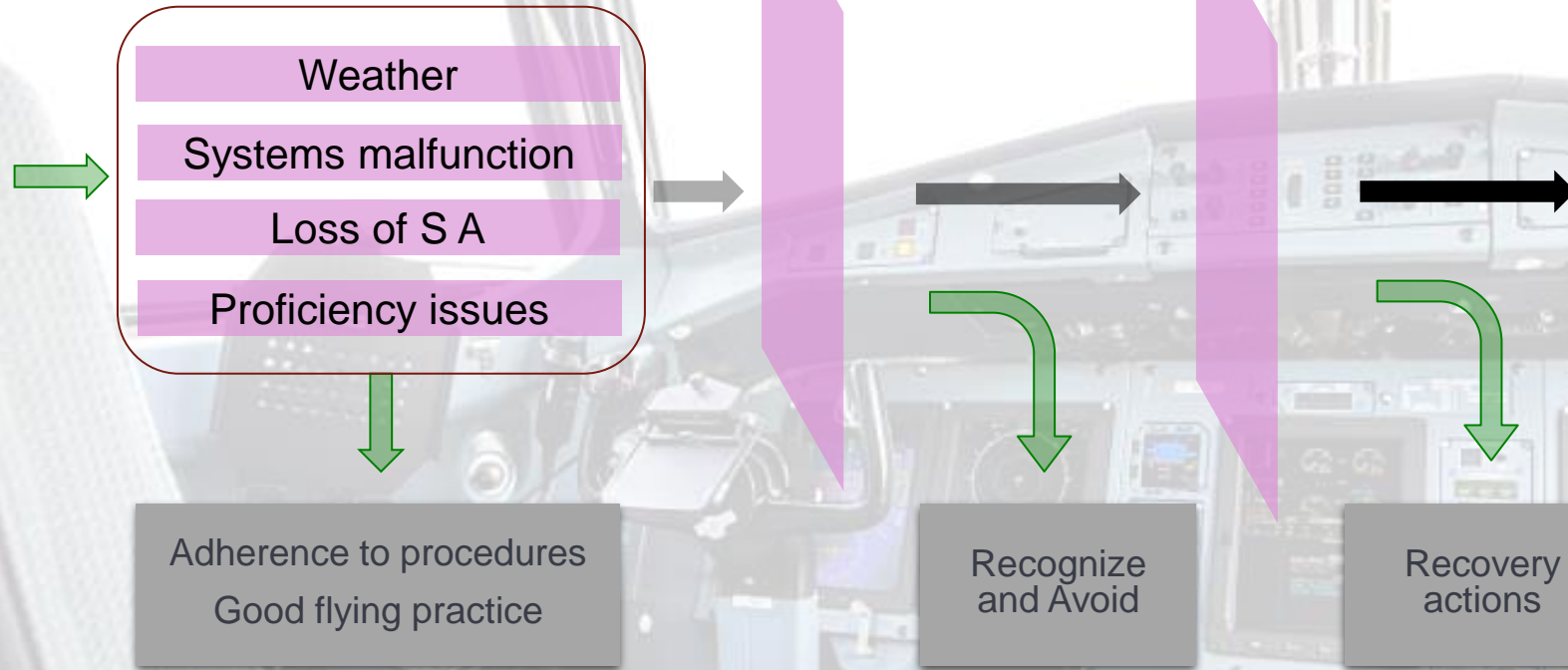
Head of Flight Training



# TEM Concept



# TEM Concept

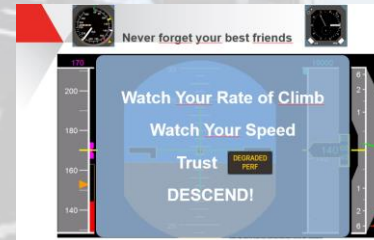


2016

2017

2018

2020



Flight Safety Conference 2023

# ATR UPRT Training Policy

FLIGHT TEST CAMPAIGN

Flight test VS Model  
(engineering station)

About 230 Maneuvers flown and analysed  
(42 + 72)

40 hours of tuning on FFS

Full stall / buffet  
Objective Datas

Evaluation by SMEs  
On FFS Level D  
(CAE platform)

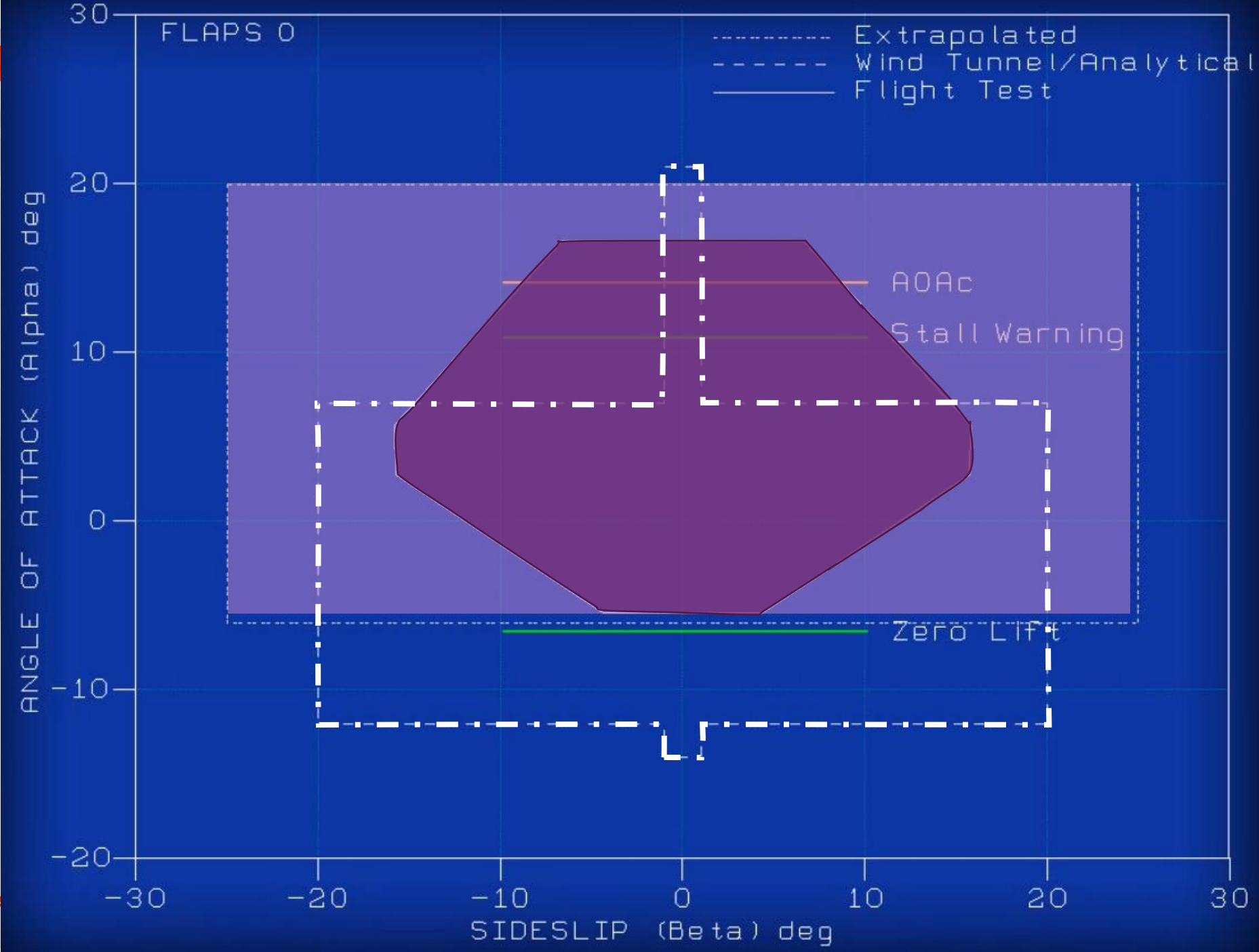
Aerodynamic  
identification

Datapackage  
Updated  
**Accurate up  
to post-stall**

Data Package  
available for  
ATR FFS  
Operators  
worldwide

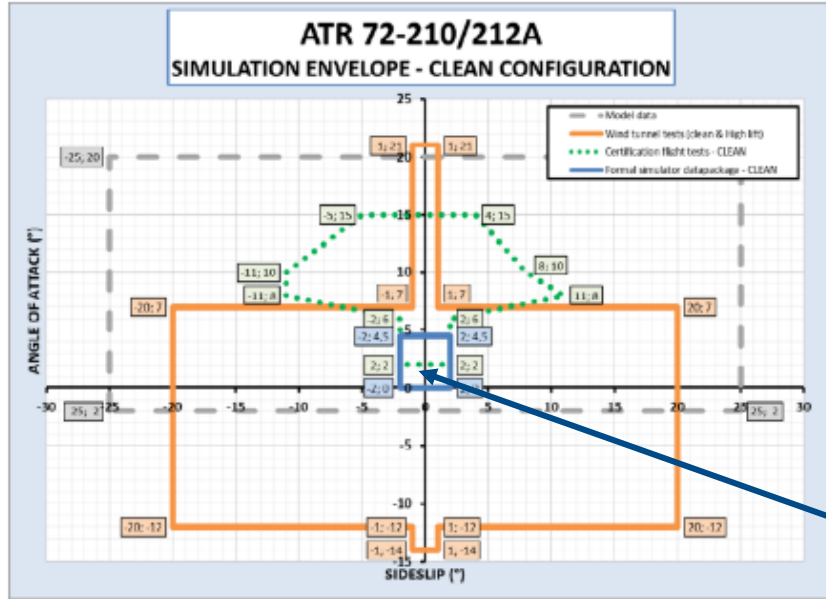
# ATR UPRT Training Policy

**VTE** stands for **V**ALIDATED **T**RAINING **E**NVELOPE

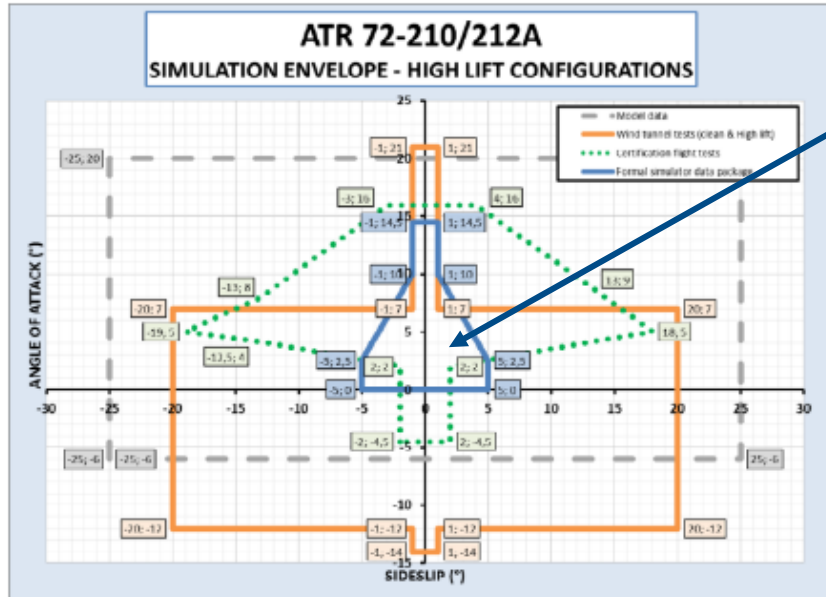


# VTE ATR 72-212A

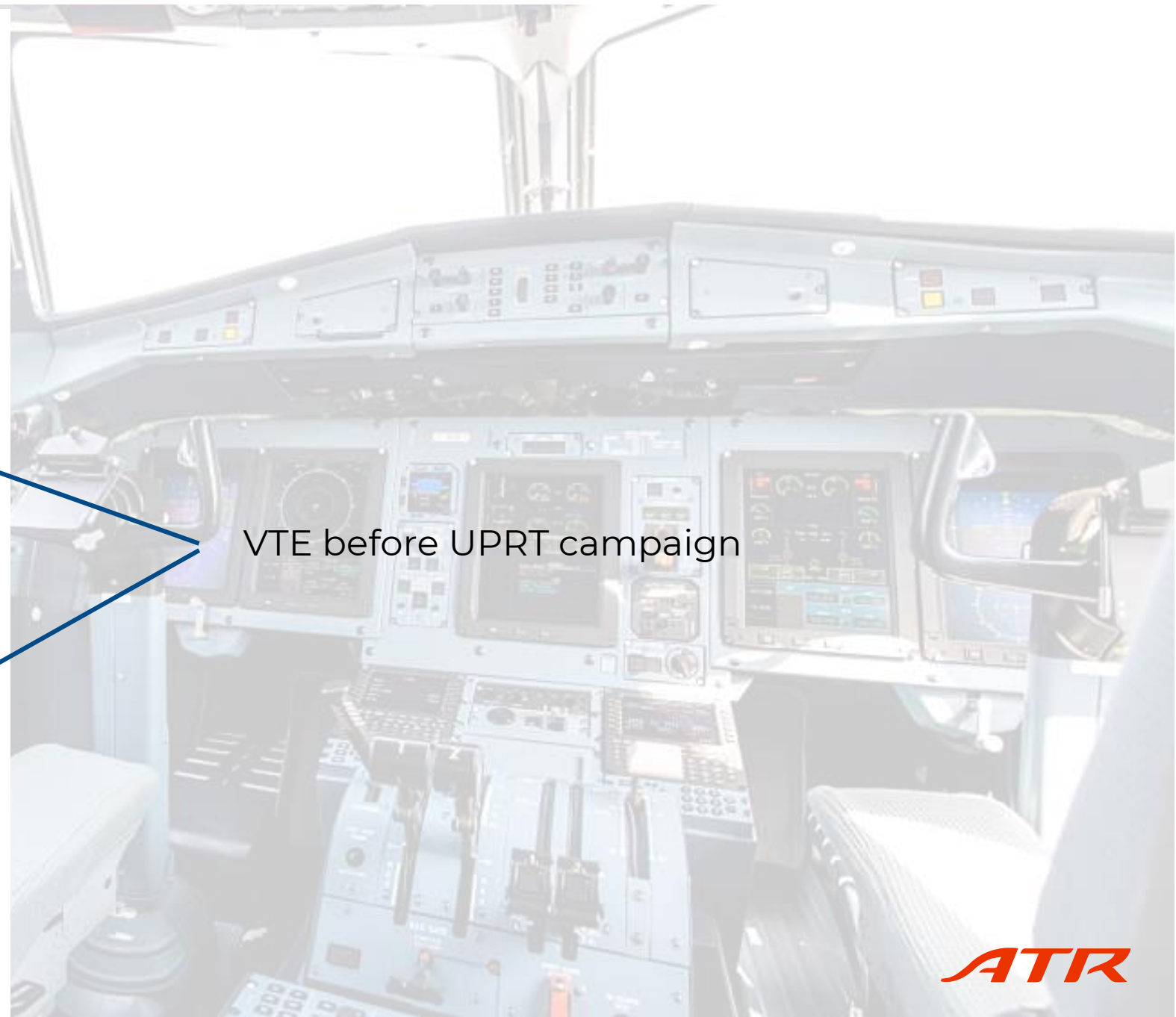
## 4.1. Clean configuration



## 4.2. High lift configurations

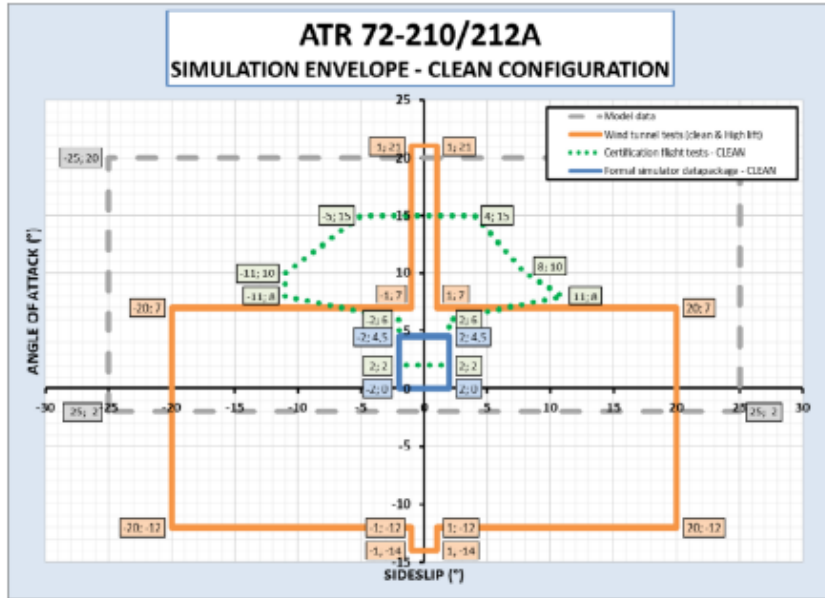


VTE before UPRT campaign

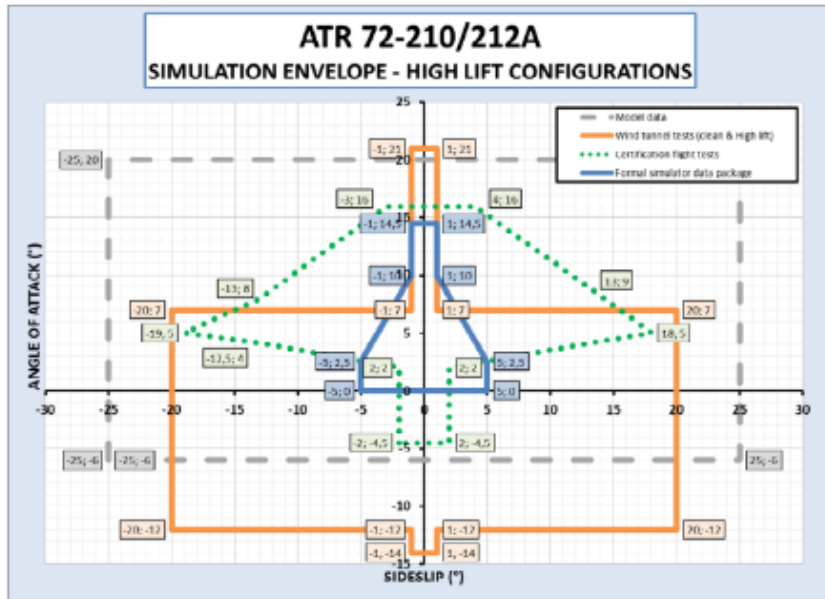


# VTE ATR 72-212A

## 4.1. Clean configuration

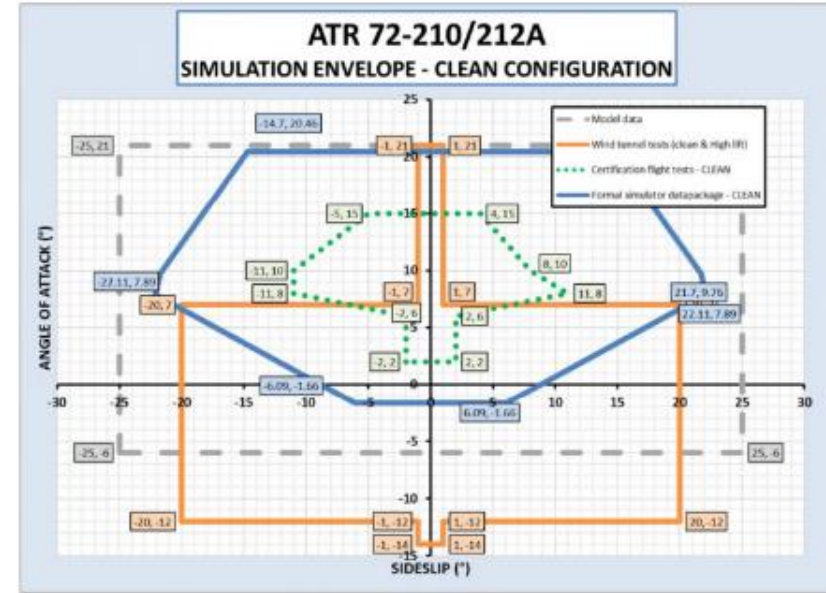


## 4.2. High lift configurations

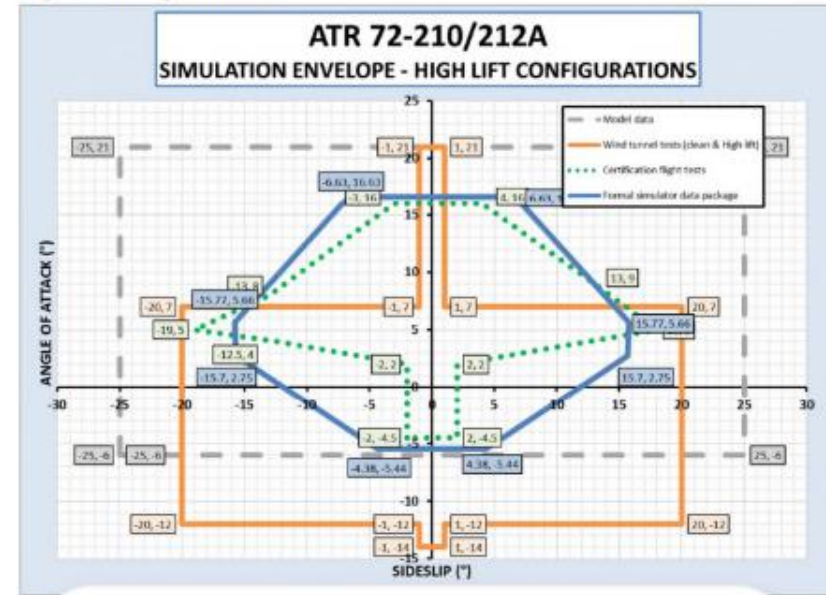


# VTE ATR 72-212A

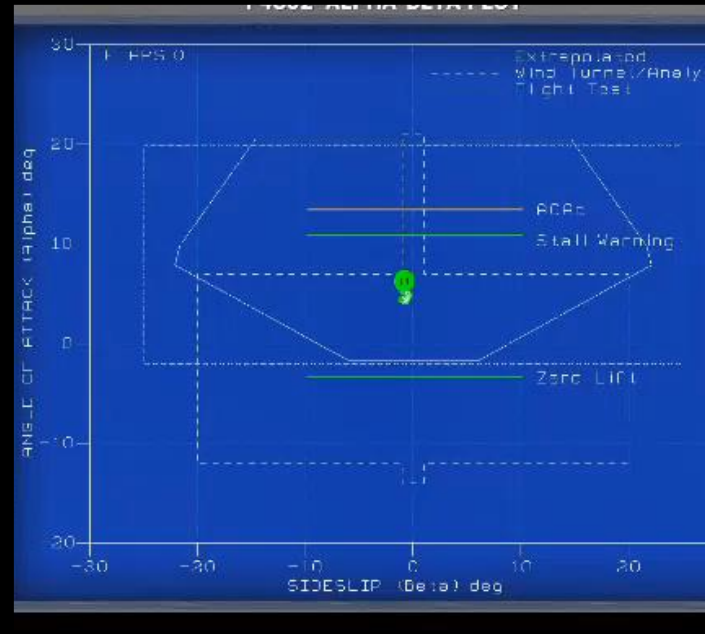
## 4.1. Clean configuration



## 4.2. High lift configurations

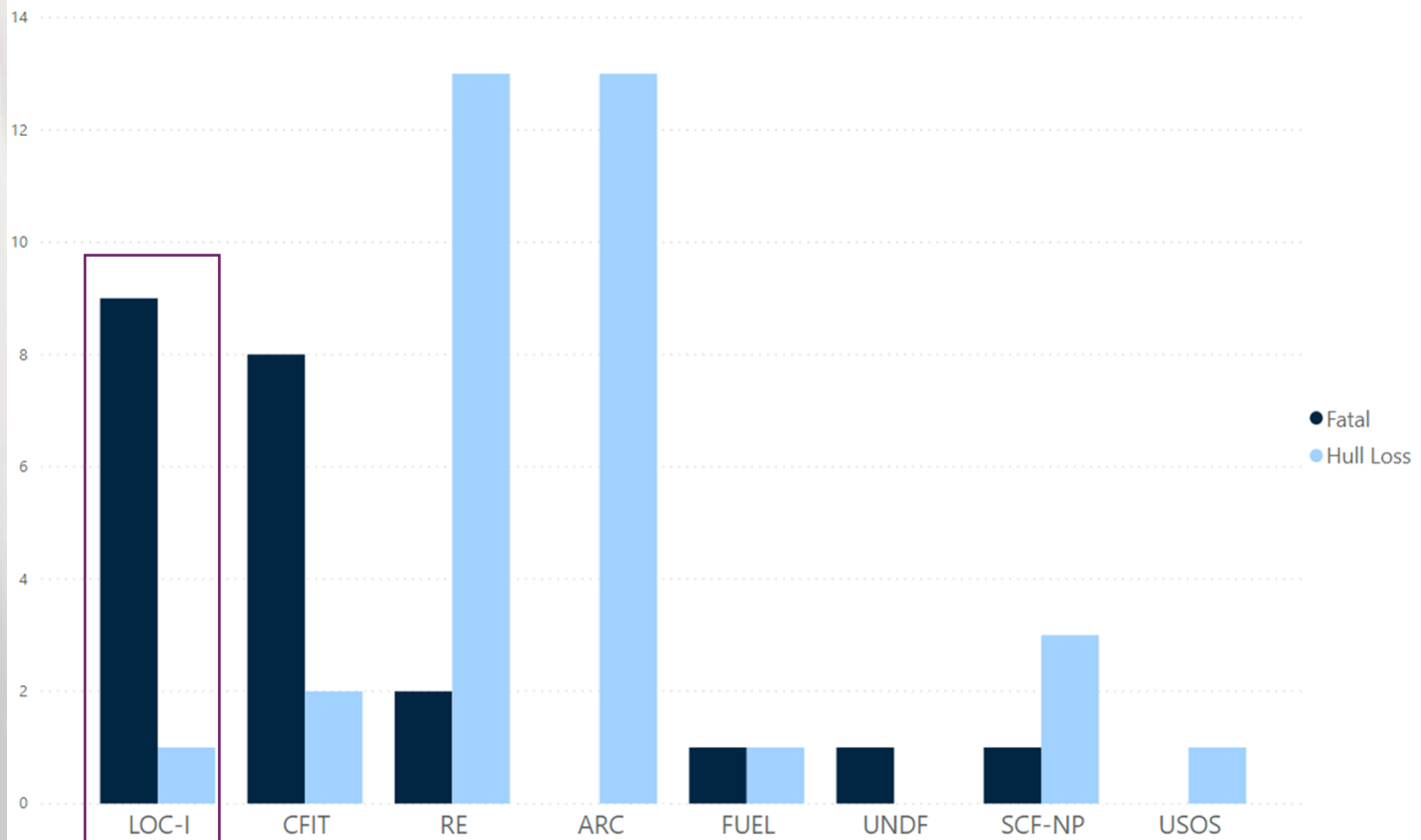


# ATR UPRT Tr



# ATR Accidents Involving Hull Loss or Fatalities

ATR Accidents Involving Hull Loss or Fatalities



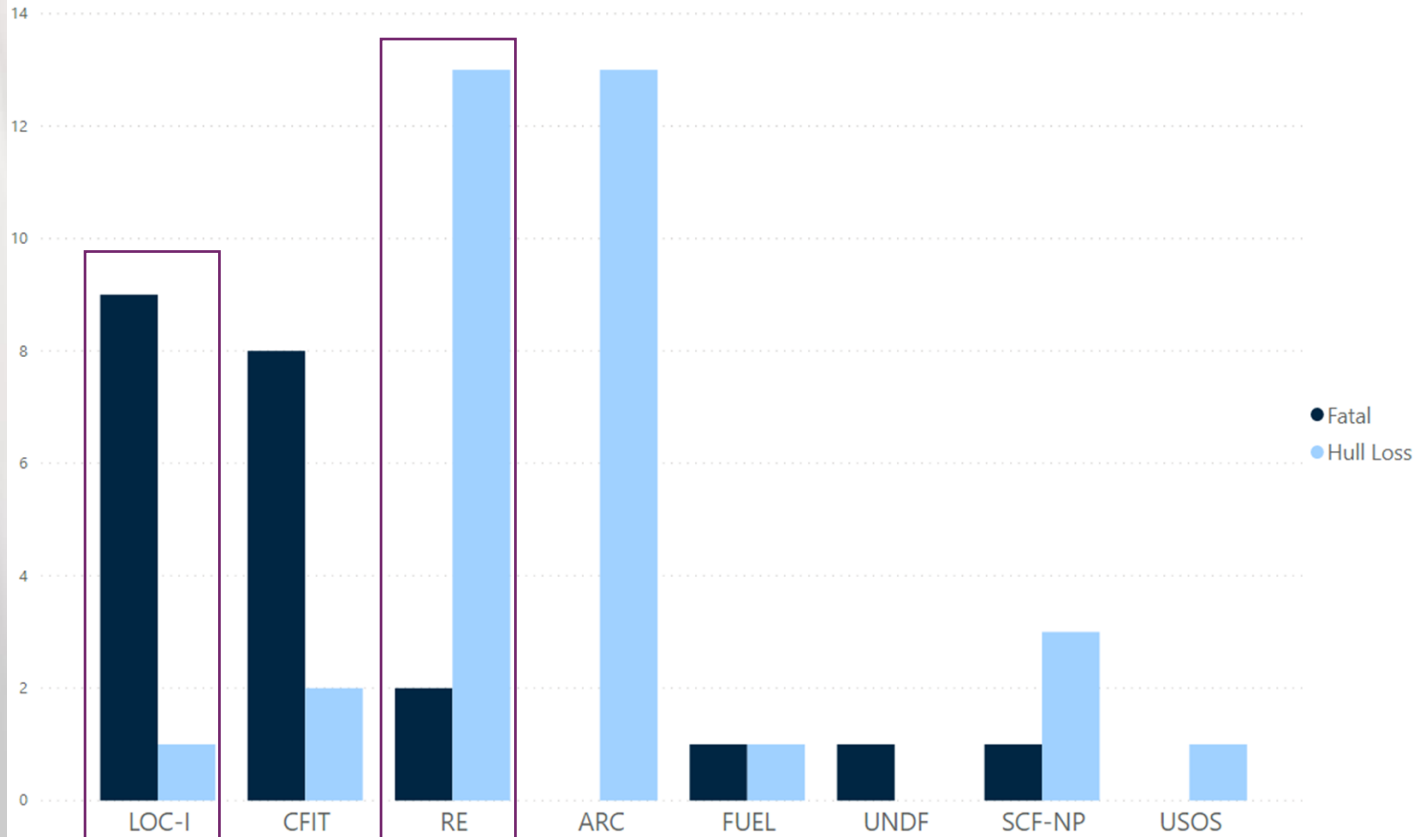
I. Full Stall

II. Unusual Attitudes

III. Icing

# ATR Accidents Involving Hull Loss or Fatalities

ATR Accidents Involving Hull Loss or Fatalities



I. Full Stall

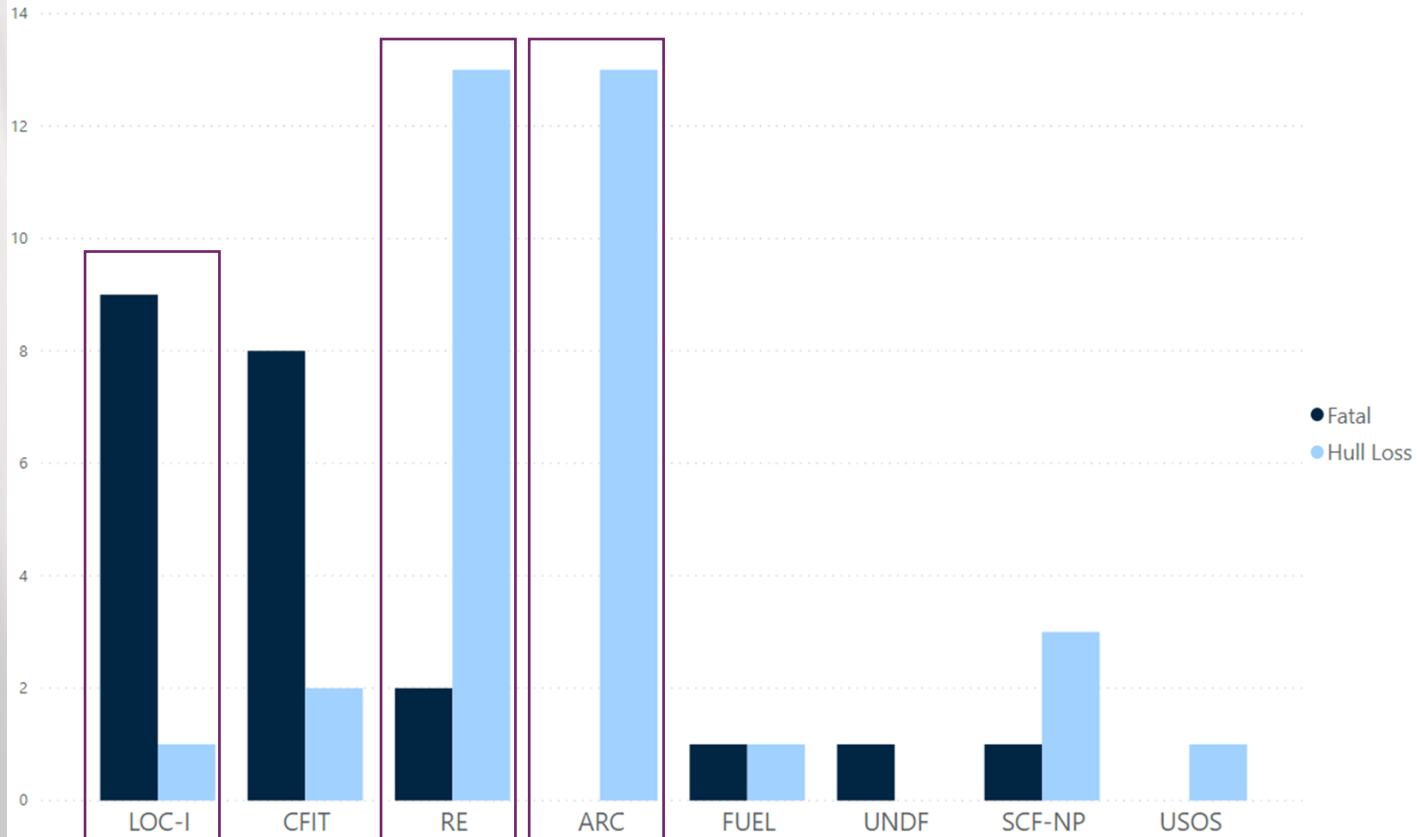
II. Unusual Attitudes

III. Icing

IV. Gusting Crosswind

# ATR Accidents Involving Hull Loss or Fatalities

ATR Accidents Involving Hull Loss or Fatalities



I. Full Stall

II. Unusual Attitudes

III. Icing

IV. Gusting Crosswind

V. Bounced Landing

# Practical example: Bounced landing



### BOUNCED LANDING

**P28 ENVIRONMENT SET**

Activation of Bounced landing

- Activation of a vertical gust during flare
- No need for the crew to perform a hard landing to lead to a bounced landing

To obtain a realistic scenario you can select a recorded Environment setup, through "Environment Save / recall" page

**VISUAL CONTROLS**

Visual Time of Day Down

**ATMOSPHERE (METRIC)**

WX Effects Microburst Bounced landing

# Practical example: Windshear

P9200 FAA AC120-41 WINDSHEARS

- FAA Wind Field 4
- FAA Wind Field 6
- FAA Wind Field 7
- FAA Wind Field 8
- FAA Wind Field 9
- FAA Wind Field 10

FAA SCENARIO

P388 PREDICTIVE WINDSHEAR

Windshear activates when the aircraft traverses the X-axis of the selected profile.

**TAKEOFF**

- T. Wind increasing to 0 kt
- T. Wind increasing to 0 kt, along with varying updrafts, downdrafts, and crosswind.
- T. Wind increasing to 0 kt, along with varying updrafts, downdrafts, and crosswind.

**LANDING**

- L. Wind increasing to 0 kt, along with varying updrafts, downdrafts, and crosswind.
- L. Wind increasing to 0 kt, along with varying updrafts, downdrafts, and crosswind.

**INTENSITY**

Light Moderate Severe

**ACTIVATE**

Activate

AIRPORT ENVIRONMENTS / WEATHER WIND SURFACE

DIRECTION	VELOCITY
000	0 kt
WINDSHEAR	MICROBURST
NONE	NONE

Customized windshear/microburst

8.5 PREDICTIVE WINDSHEAR

(WINDSHEAR VISUAL CUES ARE SET AUTOMATICALLY WITH THESE SELECTIONS)

Windshear activates when the aircraft traverses the X-axis of the selected position.

**TAKEOFF**

- T. Wind increasing to 0 kt.
- T. Wind increasing to 0 kt, along with varying updrafts, downdrafts, and crosswind.
- T. Wind increasing to 0 kt, along with varying updrafts, downdrafts, and crosswind.

**LANDING**

- L. Wind increasing to 0 kt, along with varying updrafts, downdrafts, and crosswind.
- L. Wind increasing to 0 kt, along with varying updrafts, downdrafts, and crosswind.

**INTENSITY**

Light Moderate Severe

**ACTIVATE**

Activate

Windshear activation

- Select TAKE OFF or LANDING Profile
- Select INTENSITY
- SET a new position if you don't want to keep the preset values.
- ACTIVATE

Piloting skill is required with SEVERE INTENSITY selection

# ATR Training and UPRT

## How UPRT is included in our training syllabus?

**DAY 16**

**FFS2 4:00**

**HANDLING**

STALLS Normal/Icing  
Turns no spoilers  
Steep turns  
UPRT  
LOC+Grndg Approach


Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
<p>WELCOME 1:00 DAILY PRES 2:00 GEN VEP LUNCH CFT 1:30 ACS FFTA 1:30 GEN/INSTR COACH/NAV/FMS</p>	<p>DAILY PRES 1:00 IMAV/FMS LUNCH CFT 2:00 ELOC/FPE FFTB 1:30 ELOC/FMS FUEL/FMS2</p>	<p>DAILY PRES 1:00 FUEL/POWER/PLANT/ICING LUNCH CFT 1:00 AIR FFTC 1:30 FUEL/POWER/PLANT LOG/ICING/FMS2</p>	<p>OPS + PERFORMANCE 5:00 LUNCH CING MODULE 1:00</p>	<p>CRM 5:00 LUNCH UNAV/VNAV COURSE 2:30</p>	<p>CFT 6:00 (pre-body) HYD 1:30 EMERGENCY EQUIPMENTS FLIGHT INSTRUMENTS 2:00</p>
<p>Day 7 FFTE 3:00 all normal procedures up to 10 min off Ground PER VNAV</p>	<p>Day 8 FFTE 3:00 Cockpit prep on GPU + ground ops + climb + cruise + ARCC + climb VNAV/PER</p>	<p>Day 9 FFTE 3:00 about to start local flight in icing UNAV/VNAV arrival IS with STAB IS repetition on final</p>	<p>Day 10 FFTE 3:00 VNAV in climb, cruise, descent, &amp; approach STAR/LS Mixed approach STAR/PER ARCH/APP STAR/APP SO Pref-study</p>	<p>Day 11 FFTS 3:00 PER Approaches Local Right Runway only Radar vector to ILS Mixed approaches Vector to PER/ARCH Descent Vector to ILS/APP Systems to Runway to Runway ILS/APP Climb/Descent</p>	
<p>Day 12 FFTE 3:00 Abnormals: ELOC/DCAC RWY FUEL</p>	<p>Day 13 FFTE 3:00 Abnormals: ENG PROB LOG GEAR FLT CTRL DE ICEING</p>	<p>Day 14 FFTE 3:00 Abnormals: AIR/COMM FUGIT INST NAV/FMS After landing procedures</p>	<p>Day 15 FFS 1:00 Cockpit inspection Abnormals: RWY-SC Taxi with RWY-SC Visual Return Runway ILS Ground level</p>	<p>Day 16 FFS 4:00 HANDLING STALLS Normal/Icing Turns no spoilers Steep turns UPRT LOC+Grndg Approach</p>	
<p>Day 17 FFS 3:00 FANAV/IGR 3:30 APP with Flap up/VECS with Abnormals: ELOC NAV/FMS FLT CTRL/ICING FLIGHT INST</p>	<p>Day 18 FFS 3:00 EATO STAR Single engine Engine Failure after V1 G/A Single engine IS Single engine FUEL</p>	<p>Day 19 FFS 3:00 Normal: G/MS, RADAR, TCAS Abnormals: SMOKE Inactivation RTO LOC+ Climb Approach</p>	<p>Day 20 FFS 3:00 ADVERSE WEATHER Concerned Take-offs &amp; Landings Raw Data ILS Wind Shear SEVERE ICING ADD EMER PROC soft study</p>	<p>Day 21 FFS 3:00 EATO EATO @ V1 Engine Failure after V1 Manual ILS single engine G/A single engine LOC Single engine</p>	
<p>Day 22 FFS 3:00 Abnormals: KING &amp; ENGINE FAILURES EATO @ V2 Take off Icing effects SEVERE Icing</p>	<p>Day 23 FFS 3:00 TECHNICAL EATO @ V1 Emergency Descent PLT/GA IC/PTG IS/PTG EMERGENCY Q/A Landing</p>	<p>Day 24 FFS 3:00 ICIT "Topical" SEVERE Icing TCAS</p>	<p>Day 25 SHU TEST 4:00</p>	<p>Day 26 Flight</p>	

ATR  
PROPELLING THE NEXT CONNECTION

FFS2 UPRT User Guide V1.0

# TRAIN THE TRAINER

UPRT Use Guide V1.0



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**ATR Flight Crew Training**  
ATR Training Centre

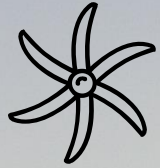


**ATR 600**  
Flight Crew Training  
**UPRT COURSE**  
Instructor Guide

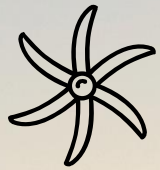
UPRT V01



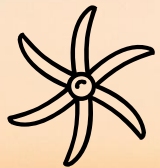
# Conclusion



**Take advantage of investment done**



**Use the proper Data Package**



**Train your Instructors**

