

ATR



Prevention of CFIT on Approach

Flight Safety Conference

29th – 30th November 2023

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CFIT Accidents and Serious Incidents



← *CFIT Industry accidents: 18 fatal →

**Source: CFIT Detailed Implementation Plan – IATA (2023)*

CFIT Prevention Strategy

Repeated absence or loss of acquisition of visual references below the MDA in investigation reports

We need to define our CFIT prevention strategy

CFIT Precursors & Latent Conditions

Absence or loss of acquisition of visual references below MDA

High rates of descent at low altitudes

Lack of CDFA / Unstabilized approach

Safety culture

Similar deviations identified through FDM

Data Survey - Context

14 operators

Operating
all
variants

241328
flights

In different
regions of
the world

CFIT Precursors – Visual references

**How to monitor:
Analyzing Flight path angle
exceedances in the data**

3.5% of flights
with FPA greater
than 4.5°

8411 flights



Challenge operational reasons
for flight path deviation

CFIT Precursors – Unstabilized approach

Lack of CDFA

Unstabilized approach

3° path

3° path

Distance from threshold in NM

10 8 6 4 2 0

6 4 2 0

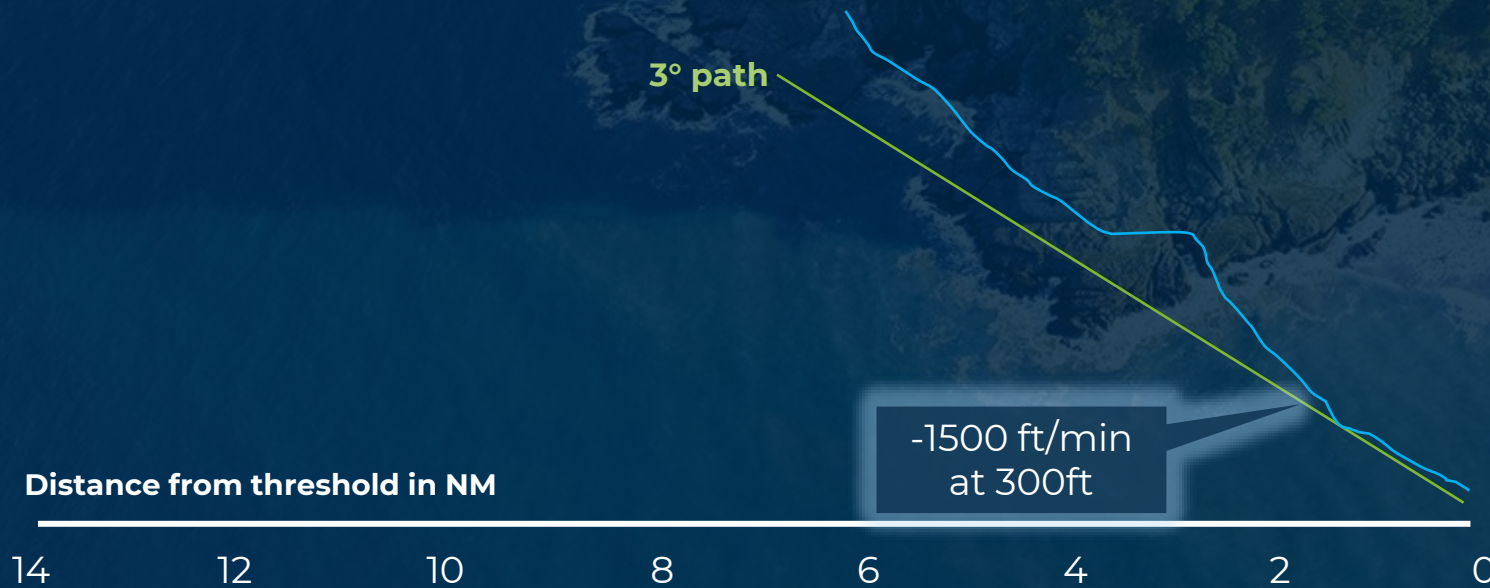
12% of flights
unstabilized
below 500ft

29499
flights

ATR

CFIT Precursors - High rates of descent

High rates of descent at low altitudes



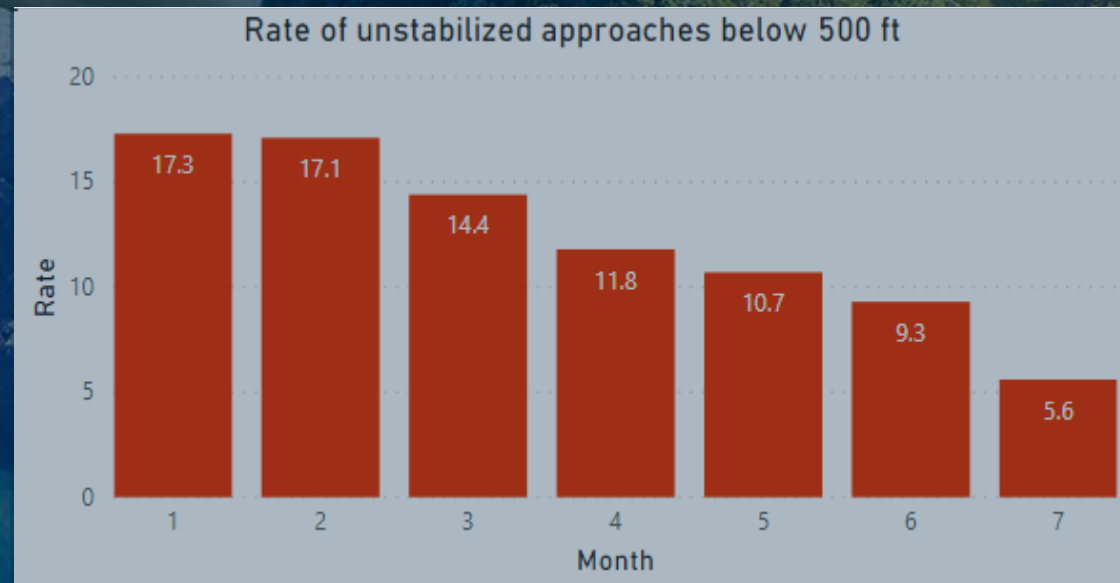
0.3% of flights with Rate of descent greater than -1200ft/min below 500ft

650 flights

Prevention – How can we help

17.3%

Rate of unstabilized approaches below 500ft at Month 1



5.6%

Rate of unstabilized approaches below 500ft as of today

7 months

Improvement enabled by monitoring / procedures review / crew communication / training

ATR pillars of CFIT prevention



Flight Data Monitoring

2016 Flight Safety Conference
FDM for regional operations



Managing every approach safely

2016 Flight Safety Conference
Performance Based Navigation

2021 Flight Safety Connection TV
Managing Every Approach Safely



Decision making during approach

2021 Flight Safety Website
Decision Making During Approach Article



Enhance active pilot monitoring skills

2020 Flight Safety Website
Active Monitoring Article



TEM focus during crew briefing

2021 Flight Safety Connection TV
Flight Crew Training



CFIT Precursors



Similar deviations identified through FDM



Absence of acquisition of visual references below MDA



High rates of descent at low altitudes



Lack of CDFA / Unstabilized approach



Loss of situational awareness / insufficient active monitoring



Safety culture

ATR pillars of CFIT prevention



Flight Data Monitoring



Managing every approach safely



TEM focus during crew briefing



2023 ATR Flight Safety conference in Rome a 360° Safety Perspective



Agenda



On Ground

- * Customer Support for safety
- * Ground Operations for safety
- * Fuel starvation
Managing your fuel policy
- * Propulsion Update



En Route

- * Flight Operations for safety
QNH setting, OEBs reduction
- * Prevention of LOC-I
- * UPRT Best practices



Approach and Landing

- * Investigation feedback # 1
- * Adapt your briefing to the threat
- * Investigation feedback # 2
- * Securing VFR operations
- * Prevention of CFIT on approach
- * Prevention of Runway Excursion



Aviation System

- * Flight safety enhancements
- * Wandering further into the goldmine
- * SMS addresses your operational challenges
- * Regional Aviation Safety focus

Nov 28th

Nov 29th

Nov 30th



Welcome reception



On Ground



En Route



Networking event



Approach and Landing



Aviation System

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Safety culture

CFIT Precursors



Similar deviations identified through FDM

Conclusion



The CFIT precursors are repetitive

Do you have the precursors within your operation?



Please use FDM, to monitor your operations



**Please develop, implement and monitor your CFIT prevention strategy
ATR can support**