Welcome to

SKYbrary

Safety Knowledge Initiative

Antonio Licu
EUROCONTROL
Head of Safety Unit (DNM Directorate)
antonio.licu@eurocontrol.int
www.eurocontrol.int/safety
www.skybrary.aero

"A safety improvement anywhere is a improvement of safety everywhere"

Adopted from International Atomic Energy Agency

In this presentation
in brief

Background

What SKYbrary brings to you

The users

Runway Safety on SKYbrary

EUROCONTROL Safety Alerts

EUROCONTROL

In this presentation
in brief

Background

What SKYbrary brings to you

The users

Runway Safety on SKYbrary

EUROCONTROL Safety Alerts

Accidents
Do we learn the lessons?

ANNUAL SAFETY REVIEW 2009

EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

easa.europa.eu

- SKYbrary quoted as "The most trustworthy source…"

- In 2009 the ESSI became a partner and a member of the editorial board of SKYbrary, the reference documentation and knowledge management centre developed by EUROCONTROL in cooperation with ICAO, Flight Safety Foundation, UK Flight Safety Committee (FSC), and the International Federation of Airworthiness (IFA)

EUROCONTROL

Accidents in 2010
Do we learn the lessons?

- **825** fatalities in total in commercial jet, commercial turboprops and corporate jets accidents

- **37** major accidents*

- Commercial jet **loss of control** accidents and commercial turboprop **CFIT**'s dominate the fatality numbers

* FSF definition of major accident

EUROCONTROL

Safety Knowledge
Satisfying a need

- **A great deal of safety knowledge is available on the Internet but...**
  - *what* **is out there?**
  - *where* **is it?**
  - **can I** *access* **it?**
  - **is it** *correct***?**

EUROCONTROL

- **The Origin of SKYbrary:**
  - **EUROCONTROL Safety Improvement Sub Group (SISG) desire for central repository - source of ATM best practice**
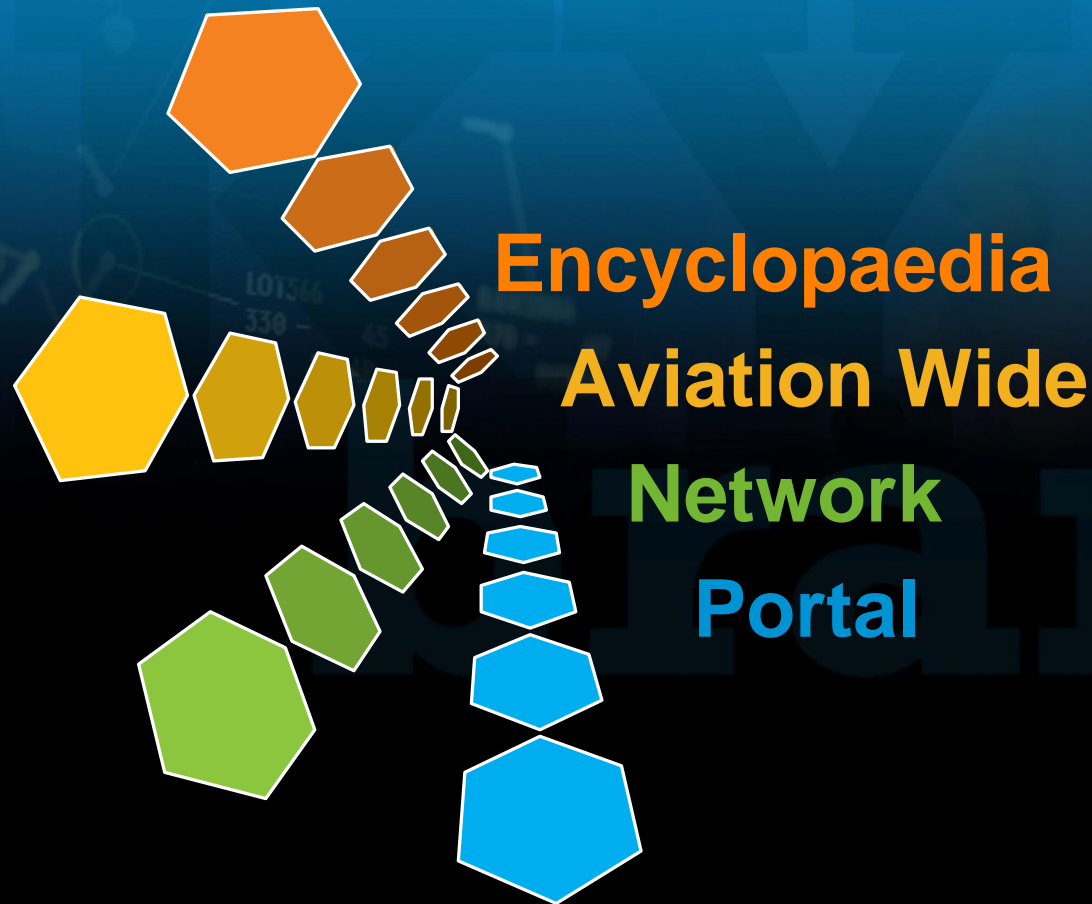 - **HindSight Magazine**

In this presentation
in brief

Background

What SKYbrary brings to you

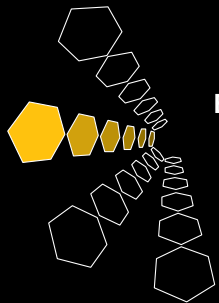The users

Runway Safety on SKYbrary

EUROCONTROL Safety Alerts

EUROCONTROL

The **value** SKYbrary brings to you
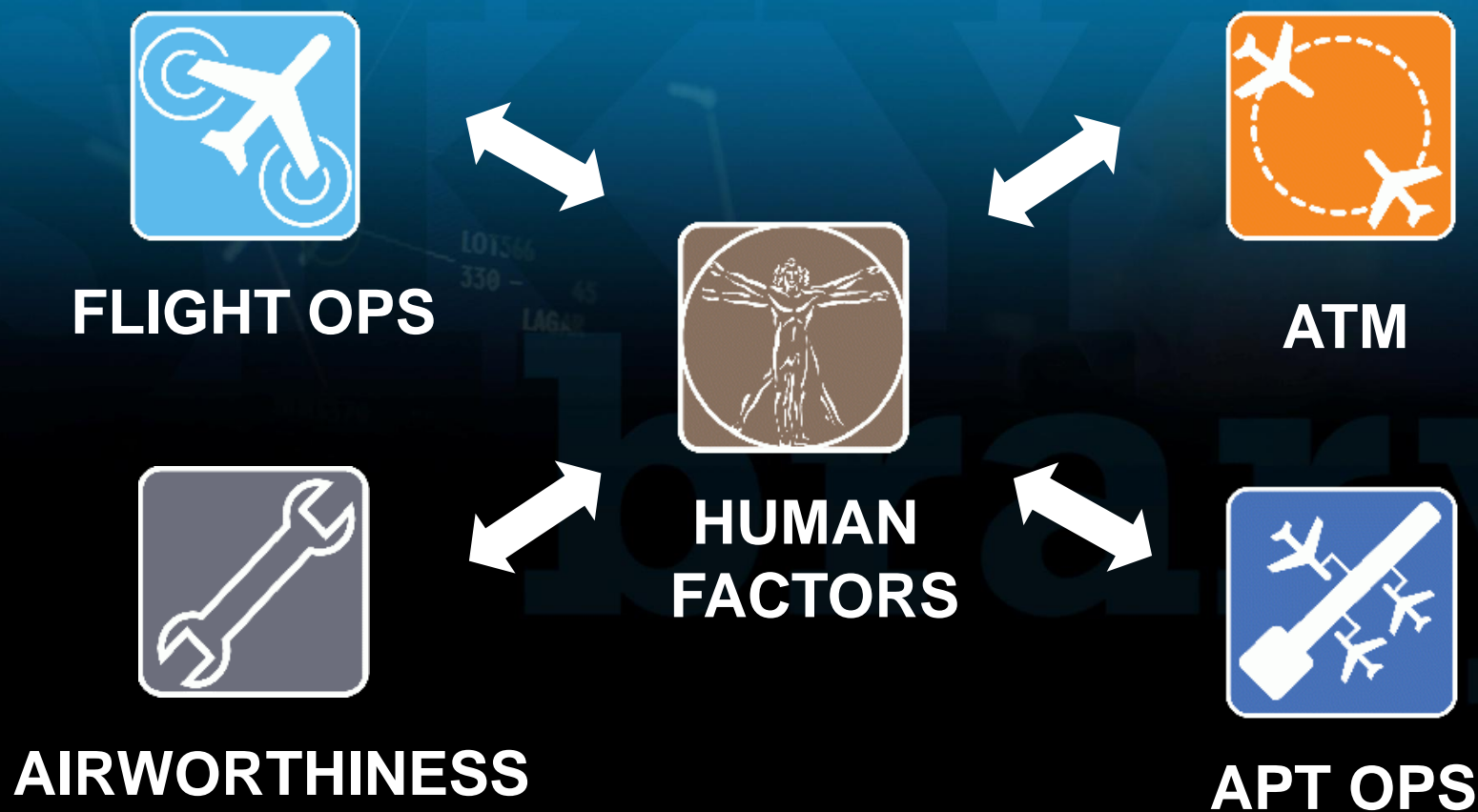

Encyclopaedia

Aviation Wide

Network

Portal

EUROCONTROL

Aviation Encyclopaedia
availability vs. accessibility

Encyclopaedia

Aviation wide source
availability vs. feasibility
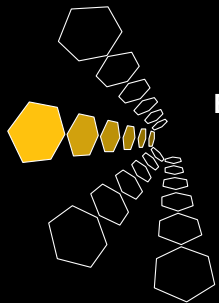
Encyclopaedia
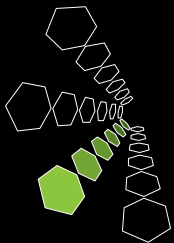Aviation Wide

FLIGHT OPS

HUMAN
FACTORS

ATM

AIRWORTHINESS

APT OPS

SKYbrary2011

EUROCONTROL

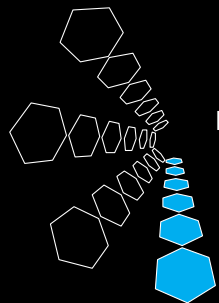**Encyclopaedia**
Aviation Wide
Network

organic growth vs. neatly organised

- **KNOLEDGE PERSPECTIVE**
    - Covering the entire safety improvement cycle
    - Network of articles
    - A wealth of documents on the bookshelf
    - Hyperlinks to credible sources/websites
- **PEOPLE PERSPECTIVE**
    - Partnerships
    - Users
    - Email campaigns
    - Discussion pages

EUROCONTROL

**Encyclopaedia
Aviation Wide
Network
Portal**

- **How to shape behavior: know => learn to do => habit**

ALL CLEAR ?
The path to clear communications

Welcome Guest

| Introduction | Communications | Risk of Breakdown | Summary & Links |

Air Ground Communications
Introduction to this module

**Interactive applications!
Video tutorials**

EUROCONTROL

Encyclopaedia Aviation Wide Network
Portal

Entry point to global safety knowledge

- SKYBrary can serve as a fast knowledge locator tool

- SKYBrary is a 'wiki' of organisations, not of individuals

- Current partners: FSF, ICAO, ESSI, CAST, UK FSC, IFA and SM ICG

SKYbrary ICAO Search   SKYbrary Wiki Search

EUROCONTROL

In this presentation
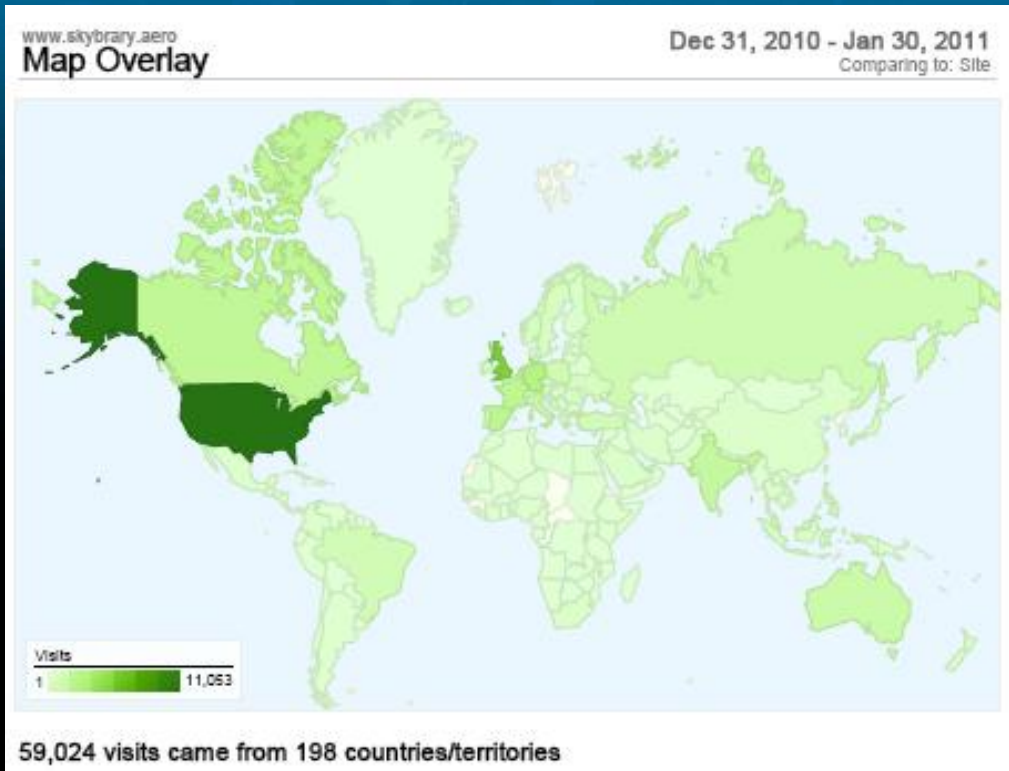## *in brief*

Background

What SKYbrary brings to you

The users

Runway Safety on SKYbrary
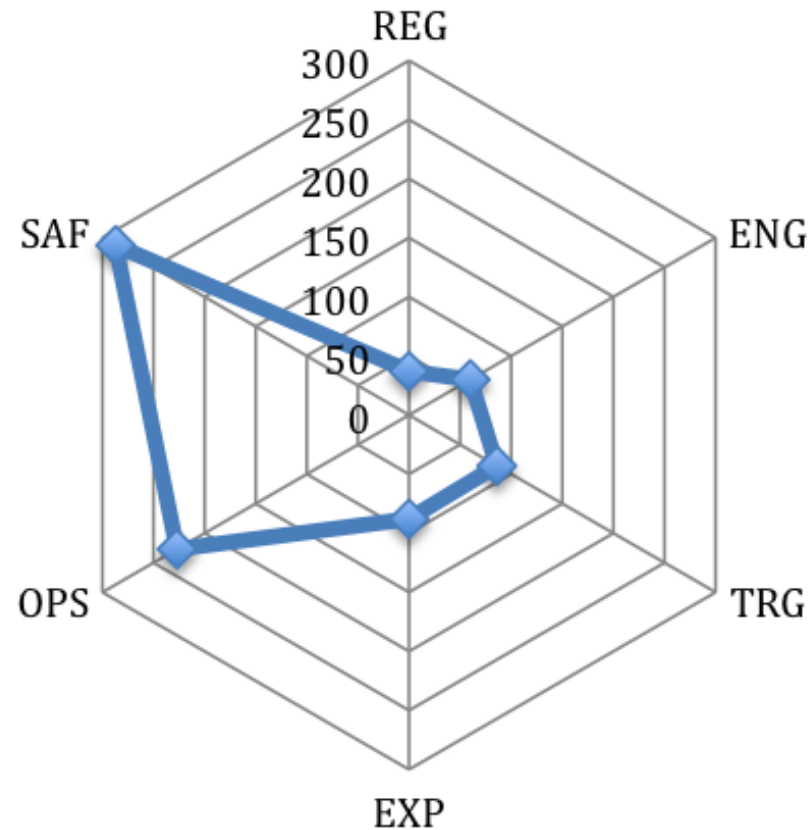
EUROCONTROL Safety Alerts

SKYbrary Users
Google Analytics

www.skybrary.aero
Map Overlay

Dec 31, 2010 - Jan 30, 2011
Comparing to: Site

Visits
1 — 11,063

59,024 visits came from 198 countries/territories

- Over **2000 users per day**;
- **17 000 registered** aviation safety professionals;
- **1 051 520 visits** in 2010;
- **Visitors from** all countries of the world.

EUROCONTROL

In this presentation
in brief

Background

What SKYbrary brings to you

The users

Runway Safety on SKYbrary

EUROCONTROL Safety Alerts

SKYbrary

The single point
reference for aviation safety knowledge

Local runway safety teams | Sear

If you wish to contribute or participate in the discussions about articles you are invited to **join** *SKYbrary as a registered user*

Operational Issues	Human Performance	Enhancing Safety	Safety Regulations

Air Ground Communication

Airspace Infringement

Bird Strike

Controlled Flight Into Terrain

Fire Smoke & Fumes

Ground Operations

Airworthiness

Level Bust

Loss of Control

Loss of Separation

Runway Excursion

Runway Incursion

Wake Vortex Turbulence

Weather

Emergency & Contingency

Highlighted Article

Hot Spots at Aerodromes

posted 26 April 2011 | in Category:Runway Incursion

Locations on an aerodrome movement area, with history or potential risk of collision or runway incursion, deserve heightened attention by pilots/drivers. **More...**

Follow us...

Safety Alert

ANSP Preparation for Emergency, Degraded modes of Operation and Unusual Situations

posted 24 February 2011 | in Category:Safety Reminder Message

A number of short-term, catastrophic failures of ATC system components e.g. Voice Communication Systems (VCS) and Flight Data Processing (FDP) at various European area cont centres have occurred during recent months. In each case the ATC staffs have responded promp

SKYbrary

Google™ Custom Search   [Search]

If you wish to contribute or participate in the discussions about articles you are invited to join SKYbrary as a registered user

Local Runway Safety Teams (LRST)

Categories: Runway Incursion | Operational Issues

Local Runway Safety Team (LRST)

Article Information		
Category:	Runway Incursion	
Content source:	SKYbrary	
Content control:	EUROCONTROL	

Description

The European Action Plan for the Prevention of Runway Incursions, revised in 2003, included the following recommendation:

"At individual aerodromes, as designated by the National Aviation Safety Authorities, a Runway Safety Team should be established and maintained to lead action on local runway safety issues."

Although many aerodromes already have cross-discipline teams working to improve safety, the establishment of Local Runway Safety Teams (LRSTs) has proven to be an effective and practical way of reducing runway incursions.

Comprising representatives from the aerodrome operator, ANSP, and aircraft operators, the LRST's role is to advise on runway safety issues and to recommend solutions. Local awareness campaigns are designed by the LRSTs to inform the users and those responsible for the safety of the manoeuvring area about the factors contributing to runway incursions with a view to eliminating or mitigating them in the short term.

Related Articles

- Runway Incursion

Further Reading

- ICAO Doc 9870 📄, Chapter 3
- Appendix C to The European Action Plan for the Prevention of Runway Incursions 📄 provides guidelines for LRSTs.
- Runway Safety Newsletter February 2007 📄 includes some of the issues presented at the EUROCONTROL Local Runway Safety Team

Background

What SKYbrary brings to you
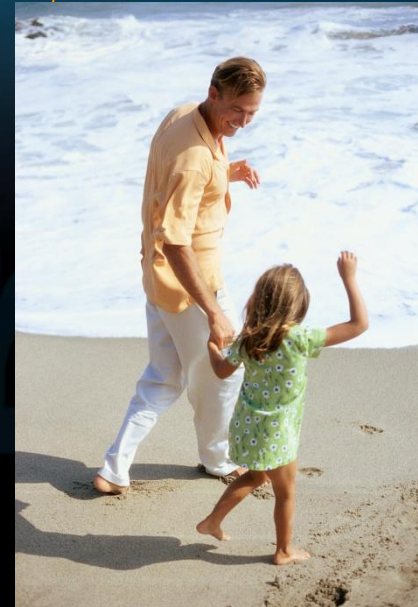
The users

Runway Safety on SKYbrary

EUROCONTROL Safety Alerts

EUROCONTROL SAFETY Alerts

An Agency Service

- Aiming to notify identified risks.
- Delivered through 3 types of messages:
  - **Safety Warning**
  - **Safety Reminder**
  - **Request For Support**
- Distribution +4500 aviation professional subscribers
- Runway incursion prevention

EUROCONTROL

Safety Warning Message – Jan 2006

If you wish to contribute or participate in the discussions about articles you are invited to join SKYbrary as a registered user

Runway Incursion, Taxi to Holding Position

Categories: Operational Issues | Safety Alert | Safety Warning Message

Safety Warning Message

Runway Incursion, Taxi to Holding Position

Date: 11 January 2005

Article Information	
Category:	Safety Alerts
Content source:	EUROCONTROL Safety Alerts
Content control:	EUROCONTROL

What We Experienced

- Recent SISG discussions have identified that Runway Incursion continues to be a key risk area. Two specific concerns have been raised regarding the misinterpretation of communications:
  1. mis-interpretation of the "HOLD SHORT" instruction, and
  2. mis-interpretation of the "TAXI TO HOLDING POSITION" instruction.

An ANSP provided a voice communications record from a recent incident illustrating the second example.

ICAO Procedure

The European Action Plan for the Prevention of Runway Incursions provides: "The most common phraseology problem for non European based flight crew, is the fundamental difference between:

- the North American phraseology: "TAXI INTO POSITION AND HOLD" (which has the same meaning as the ICAO standard phrase "LINE UP [AND WAIT]"), and
- the standard ICAO phraseology: "TAXI TO HOLDING POSITION" (which means taxi to, and hold at, a point clear of the runway - ILS Cat 1, 2/3 etc).

Listen carefully to the instruction. If unsure - ASK.

Disclaimer

© **European Organisation for Safety of Air Navigation (EUROCONTROL)** January 2005. This alert is published by EUROCONTROL for information purposes. It may be copied in whole or in part, provided that EUROCONTROL is mentioned as the source and to the extent justified by the non-commercial use (not for sale). The information in this document may not be modified without prior written permission from EUROCONTROL. The use of the document is at the user's sole risk and responsibility. EUROCONTROL expressly disclaim any and all warranties with respect to any content within the alert, express or implied.

Categories: Operational Issues | Safety Alert | Safety Warning Message

Safety Reminder Message – Nov 2006

If you wish to contribute or participate in the discussions about articles you are invited to join SKYbrary as a registered user

Holding Position at Runway/Runway Intersection

Categories: Operational Issues | Safety Alert | Safety Reminder Message

Safety Reminder Message

Holding Position at Runway/Runway Intersection

Date: 29 November 2006

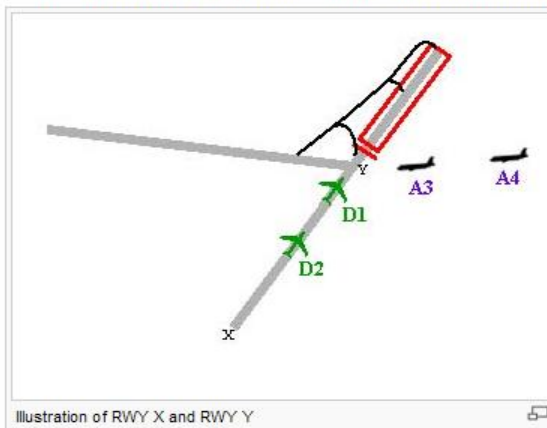| Article Information		
Category:	Safety Alerts	
Content source:	EUROCONTROL Safety Alerts	
Content control:	EUROCONTROL	

Purpose

- Awareness pertaining to the requirement for the consistent application of the ICAO Annex 14 Standards for the marking of Runway Holding Positions.
- Additional awareness that, where a runway which includes at least one runway/runway intersection is used for taxiing purposes, the standards for the marking of that runway to indicate runway holding positions(s) with respect to the other runway, are described in Annex 14. Where such markings are not applied, ATC must be made fully aware that aircraft/vehicles may not be instructed to hold short of the runway in question.

What we have been Informed by European ANSP

- "Runway X crosses the threshold of runway Y. The last 1500 metres of runway X was closed for work in progress. The end of the available runway length of runway X, a few metres north of the threshold of runway Y, was marked with red obstacle lights. Runway Y was used for both landings and departures. It was after dawn.

Illustration of RWY X and RWY Y

Safety Reminder Message – Feb 2011

Google™ Custom Search   Search

If you wish to contribute or participate in the discussions about articles you are invited to join SKYbrary as a registered user

Runway Incursion Prevention - Runway-holding Position, Stop Bars and ATC Clearance

Categories: Operational Issues | Safety Alert | Safety Reminder Message

Safety Reminder Message

Runway Incursion Prevention - Runway-holding Position, Stop Bars and ATC Clearance

Date: 03 February 2011

Article Information		
Category:	Safety Alerts	
Content source:	EUROCONTROL Safety Alerts	
Content control:	EUROCONTROL	

Synopsis

EUROCONTROL has been notified of incidents of aircraft crossing runway-holding positions and associated stop bars, which had been switched off, and then entering the runway **without** a valid ATC clearance. In some instances pilots report of inconsistent local policies on the use of stop bars (e.g. low visibility ops only, H24 operation on some runways, at some airports, in some States), which, in their opinion, contributed to confusion or to an assumed ATC clearance to proceed.

ICAO PROVISIONS

- **ICAO Annex 2, Rules of the Air**,
  - **3.2.2.7.2:** *"An aircraft taxiing on the manoeuvring area shall stop and hold at all runway-holding positions unless otherwise authorized by the aerodrome control tower."*
  - **3.2.2.7.3:** *"An aircraft taxiing on the manoeuvring area shall stop and hold at all lighted stop bars and may proceed further when the lights are switched off."*
- **ICAO Annex 14, Aerodromes:**
  - **5.3.19.3 (Note 1):** *"A stop bar is switched on to indicate that traffic stop and switched off to indicate that traffic proceed."*
- **ICAO Doc 4444, PANS ATM:**
  - Definitions - Runway-holding position: *"A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorised by the aerodrome control tower."*
  - **7.15.6 Taxiway lighting:** *"Note: Taxiway lighting includes such lights as edge lights, centre line lights, stop bars and clearance bars. Where required to provide taxi guidance, taxiway lighting shall be turned on in such order that a continuous indication of the taxi path is presented to taxiing aircraft. Taxiway lighting or any portion thereof may be turned off when no longer needed."*
  - **7.15.7 Stop bars:** *"Stop bars shall be switched on to indicate that all traffic shall stop and switched off to indicate that traffic may proceed."*
- **ICAO Doc 9870**, Manual on the Prevention of Runway Incursions
  - **Rec 4.3.2 (Aircraft Operators):** *"A requirement to obtain an explicit clearance to cross any runway should be included in the flight deck procedures. This includes runways not in use."*
  - **Rec 4.5.6 (ANSP):** *"It should be ensured that ATC procedures contain a requirement to issue an explicit clearance including the runway designator when authorising a runway crossing or to hold short of any runway. This includes runways not in use."*
  - **(Best Practice for Taxi) 6.3.7:** *"When a clearance to taxi to a point beyond a runway is received, it must include the authorization to cross that runway. A runway should never be crossed unless an explicit ATC clearance has been received."*

Contact us…

SKYbrary

www.skybrary.aero

http://www.skybrary.aero/index.php/Contact_editor

SKYbrary – Safety Alerts

http://www.skybrary.aero/index.php/Portal:EUROCONTROL_Safety_Alerts

Overall safety management aspects

antonio.licu@eurocontrol.int

www.eurocontrol.int/safety

www.eurocontrol.int/esp

The End

Thank you very much for your attention and patience!

EUROCONTROL