

Runway Incursion



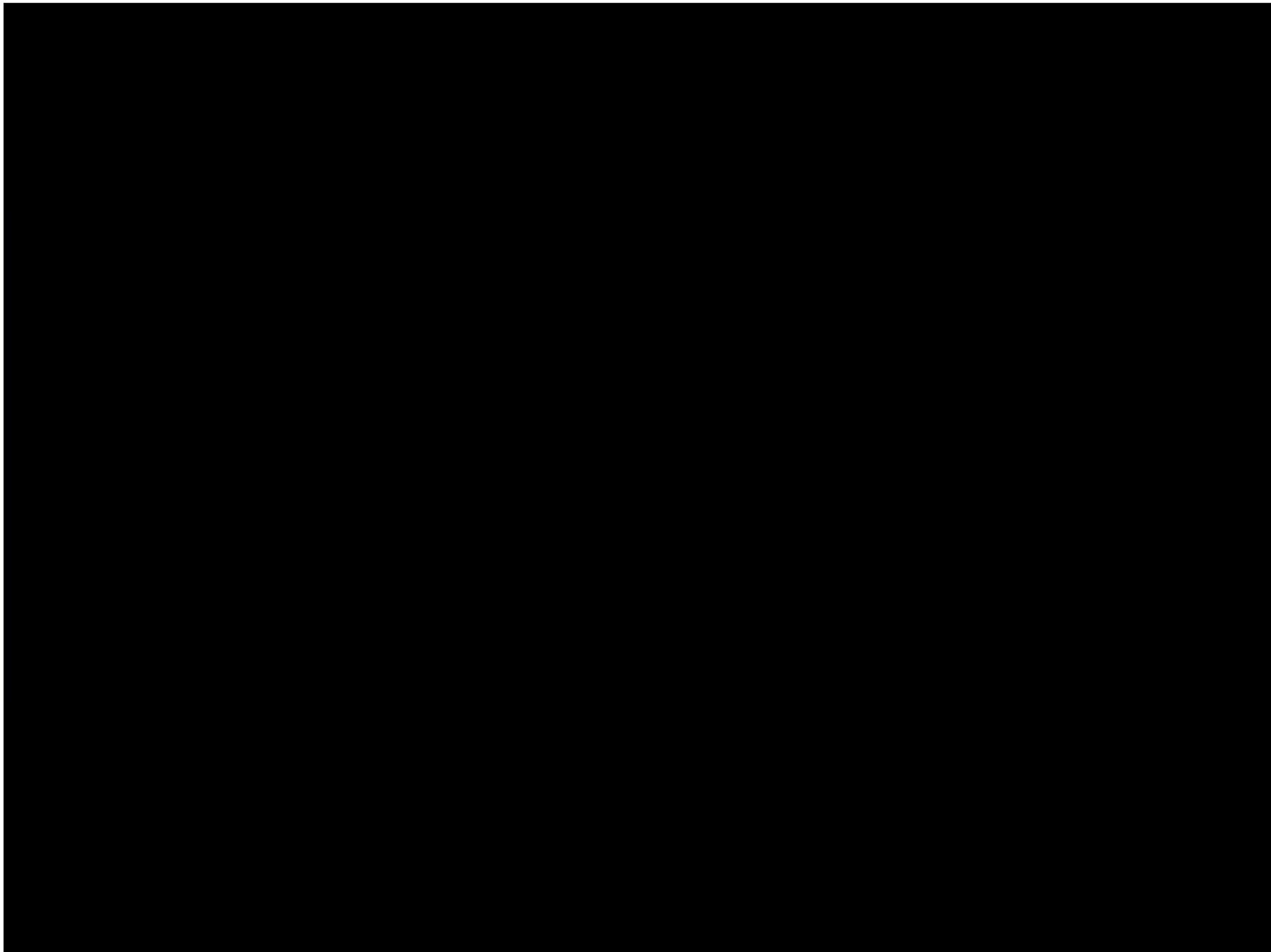
IFALPA

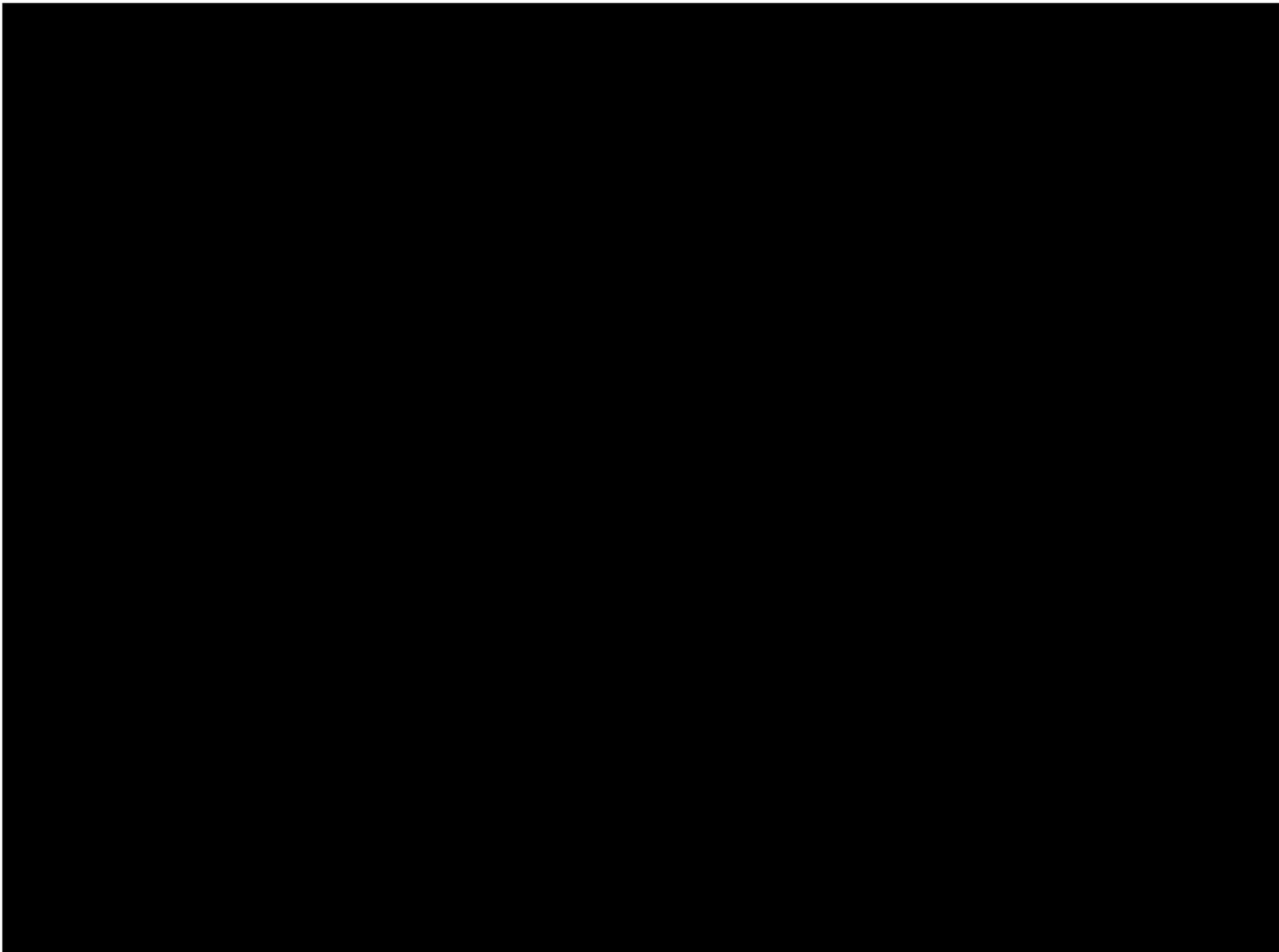


International Federation of
Air Line Pilots' Associations

Runway incursion

- Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.
- Doc 4444 Procedures for Air Navigation Services





Runway Safety

- ICAO document 9870, the Runway Incursion Prevention Manual, is based on the Eurocontrol action plan and FAA initiatives, focusing on short and medium term preventive actions. These might be the best achievable at present, but the real solutions lie in designing out the problem which requires a more systemic approach focusing on the future



Runway Safety

- IFALPA's preferred solution is to design airports in such a way that Taxiways crossing runways should be avoided whenever possible, by the construction of "end-around" or "perimeter" taxiways.
- When a crossing is unavoidable, it should be done at a **low energy point on the runway**, at either runway end, entrance Taxiways for a runway shall be restricted to those required for lining up, for take off and shall be perpendicular to that runway.

Runway Safety

- Many airports were constructed more than 30 years ago, during these years aviation traffic has grown exponentially. Many airports around the world still have the original signs and markings, and they are no longer ICAO compliant. Leaving a pilot to interpret the meaning of these non standard signs and markings is an unnecessary hazard that may lead to a significant safety event. IFALPA considers the use of non standard signs and markings a threat for its pilots and is requesting their standardization around the globe.

Runway Safety



History

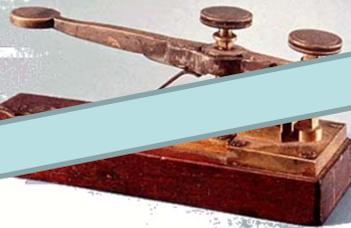
HOY



1850'



1830'



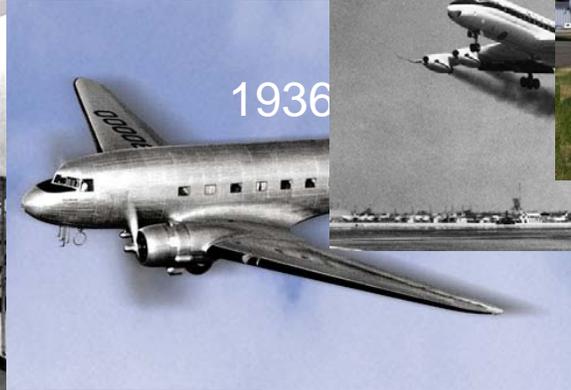
HOY



19



1936



1900'

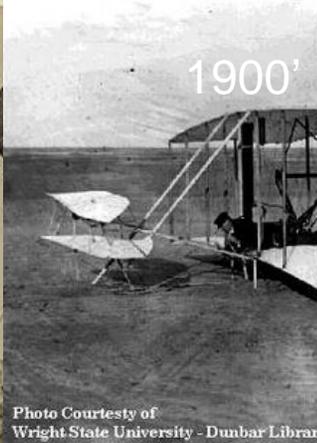
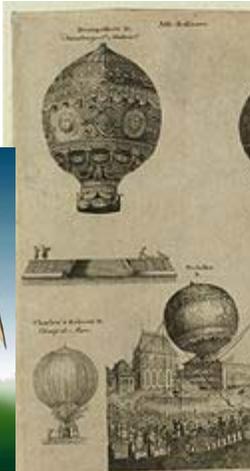


Photo Courtesy of Wright State University - Dunbar Library

1709-1783





AIRPORTS

1947



Legacy Airports or DC 6 Airports

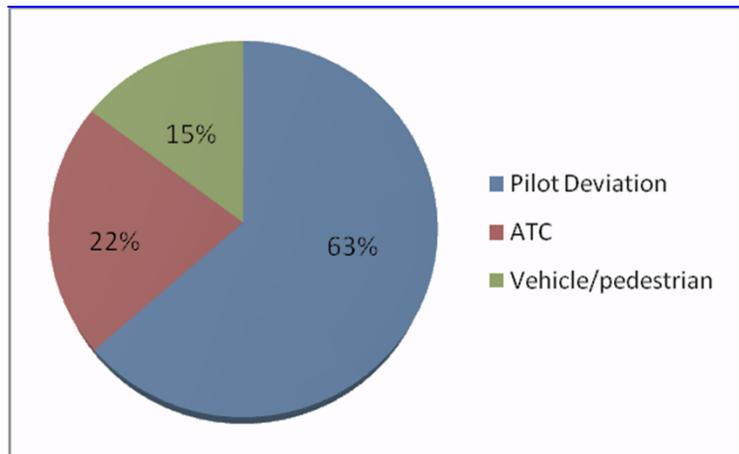


LRST

CARSAM AIRPORTS

- LIMA 1965
 - Quito 1960
 - El Dorado 1959
 - Caracas 1945
 - Panamá 1947
 - Guatemala 1966*
 - Montevideo 1947
 - Santo Domingo 1959
 - RIO 1952
 - San José 1958
- 

Runway Safety



- The design of an airport can make a significant difference to the number of Runway Incursions experienced. The statistics show that airport configurations where a runway has to be crossed as part of normal operations are more vulnerable to runway incursions. Accident statistics also show that risk increases when there are sudden changes to traffic throughput e.g. Tenerife 1977, or unusual local circumstances.

Runway Safety

- While appropriate operational procedures are essential, airport design that eliminates runway crossings are what IFALPA is asking from airport operators around the world



The use of ICAO Annex 14 standard Signs and Markings

- Signs and Markings are the body language of an airport and are as important as the use of standard ICAO phraseology, local words or signage are only meaningful to local pilots. IFALPA requests that only ICAO Annex 14 compliant signs and markings are used at all airports.



Markings

Pop quiz?



**The three most important
things about painted
markings are?**

Markings

Contrast



Contrast

***Uncontrasted Rwy Holding
Position Marking
Look Hard it's Here!***





This is much better!

STOP BARS

- Use of STOP BARS operated 24 hours per day in all weather conditions are considered a significant safety benefit by Pilots and Drivers working on the manoeuvring area and therefore Air Traffic Controllers. Controller workload is considered acceptable given an appropriate procedure and co-location of the stop bar switches with the Controller working position. IFALPA requests that Stop Bars are used 24 hours per day to protect the runway.

STOP BARS



A stop Bar shall be provided at every runway-holding position serving a runway when it is intended that the runway will be used in runway visual range conditions less than a value between 350m and 550 m

5.3.19.2

Taxiway Nomenclature,

- Complex taxiway environments, with illogical naming conventions applied, e.g. taxiways with similar, or the same designations, as another part of the same airport, lead to pilot and driver confusion and a loss of situational awareness by all. The misunderstanding of taxiway clearances leads to navigation errors on the ground, runway incursions daily and occasionally to accidents. To reduce such incidents and accidents all taxiways and especially taxiways that enter and exit the runway should be instinctive and logical to the pilots, air traffic controllers and vehicle drivers. That requires logical routings with logical nomenclature. To do this IFALPA has developed a policy to help airport administrators to do this. ICAO is requested to update Annex 14 accordingly.



IFALPA

- Working papers in the different ICAO working groups:

- VAWG

- **Runway Approach Area Holding Position Sign**

- **05R APCH**

- AP
 - Excessive Taxiway Widths
 - Taxi Side Stripe Marking
 - ADWG
 - Taxiway Signage Naming Nomenclature
- 

INSIDE IFALPA

- RST giddiness course





IFALPA

The Global Voice of Pilots



IFALPA RST GUIDE

1. Introduction

2. ICAO Annex 14 & IFALPA Annex 14

1. IFALPA Guidance

1. Exercise

2. Reference

Aircraft lights;

- The use of aircraft lights serve two basic goals, SEE and BE SEEN. As a direct effect, the aircraft will be more conspicuous and that is essential for other aircraft, ground crew, vehicle drivers and ATC to aid visual detection. Navigation (position), anti collision, strobe, logo, taxi, turnoff and landing lights are useful aids to make aircraft more conspicuous and show intention of movement. Adherence to IFALPA Policy is strongly recommended to aircraft operators and aircraft manufacturers to help standardize operating procedures.

A decorative graphic featuring a stylized globe in the center, surrounded by several horizontal, slightly overlapping lines that create a sense of motion or wings. The globe is light gray with a grid pattern. The lines are a darker gray and extend outwards from the globe.

• Thank you

• Questions??