

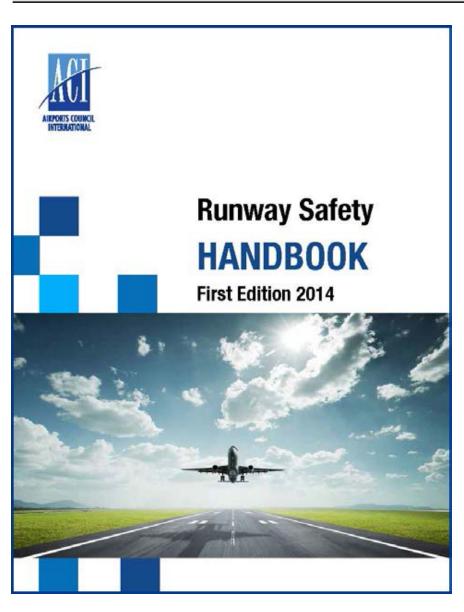
# Aerodrome Operator Perspective Runway Safety

2014.6

John Kim, ACI World

## **ACI Runway Safety Handbook**





#### **Runway Safety**

 Providing easy and simple approach for establishing LRST and implementing Runway Safety Porgramme;

#### **Planning and Design**

 Explaining how to prevent or mitigate infrastructural hazards for new aerodrome and existing one;

#### **Operations**

 Providing methodologies for runway inspection, dissemination procedures for AIP and NOTAM and, best practices of FOD management and obstacle control; and

# Maintenance, Temporary Restriction and Construction

 Introducing proactive measures to prevent or mitigate accidents or incidents during these activities.

# Planning and Design for New Infrastructure



#### **Mainly focus on Worst Practices**

• Key elements to eliminate incursion risk airport design are:



**Cross Runways** 



**Converging Runways** 



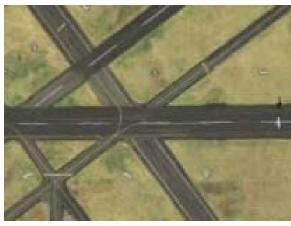
Close Spaced Parallel RWs



Y-Shape TW Intersection



TW Crossing a Rapid Exit TW And Wide Throated RW Entrance



Complicated TW Layout Connected with runways

# Planning and Design for New Infrastructure



#### **The Worst Case**

To prevent complicated aerodrome layout......



# Planning and Design for Existing Infrastructure



#### **Improvement Measures for existing aerodrome**

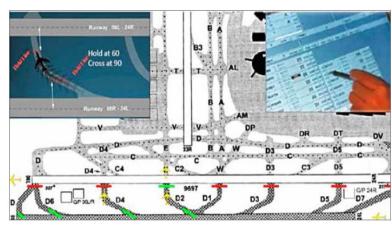




Perimeter Taxiway







24H Stop bar Operation at Closed Parallel Runways

# Planning and Design for Existing Infrastructure



#### **Introducing New Technologies**

Maximizing operational efficiency with enhancing safety

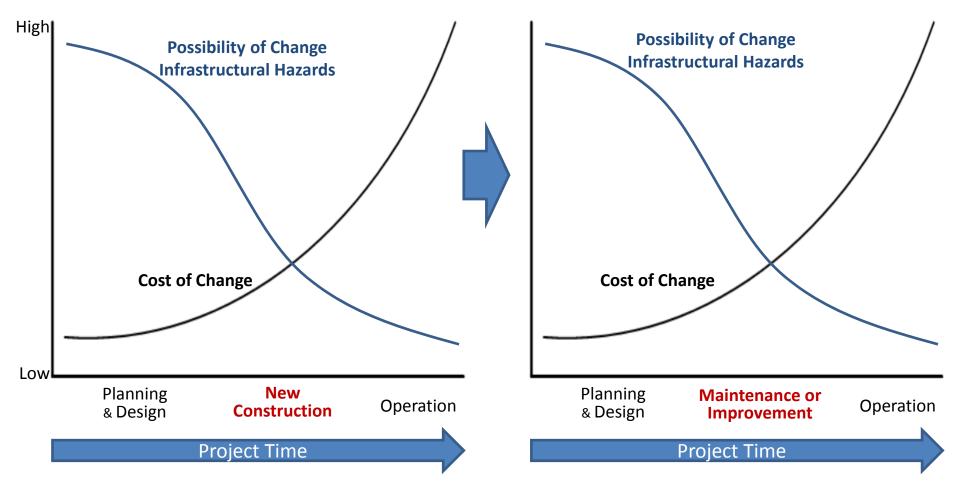


#### **Infrastructural Hazards**



#### **LRST Participation**

Beginning stage participation and providing operators' perspectives are essential



## **Change Management (Construction)**



# **Planning Stage**

Construction Plan (or Long term maintenance plan) should be reported to LRST and LRST perform a safety assessment by reviewing the plans:

- Construction site protection plan (markings, signs and lighting);
- Construction site access plan (communication plan with ATC);
- Prescriptive traffic control plan (fence location, barricade placement and construction crossing);
- Aeronautical Information plan (AIP or NOTAM)

### **Initial Construction Stage**

LRST should check protection measures of the construction site through site inspection:

- Terminate electrical power or uninstall lighting, signs and markings leading to the construction site;
- Reconnect lighting circuits to maintain A/C operation
- Install new marking and signs to prevent incursion of the site;
- FOD and Hazardous material management;
- Procedures to access the construction site;
- Publishing AIP or NOTAM

# Closing Construction & Reopening Stage

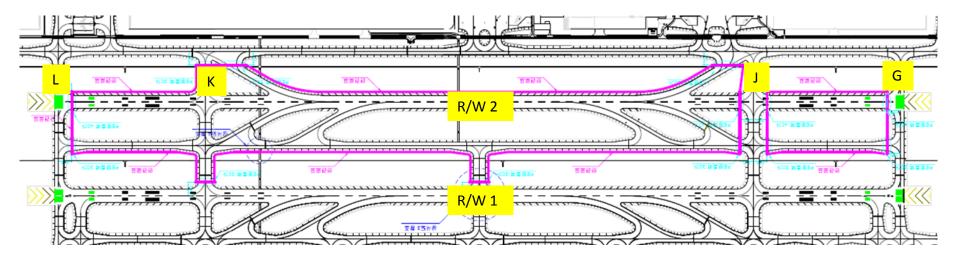
LRST should perform a safety assessment through a site inspection and document reviewing before reopening the site:

- Clearance of construction fencing, stationary equipment and vehicles from the site;
- Compliancy, consistency and operational ability of each lighting system, markings and signs
- No FOD has bee left on the working area
- Republished AIP or NOTAM

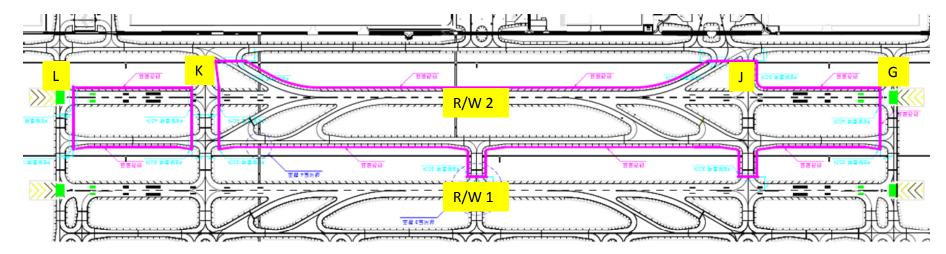


#### **Closing Area and Aircraft Movement Plan**

• 1<sup>ST</sup> Closing Area, Period : May. 31. 01:00 – Oct.18. 24:00



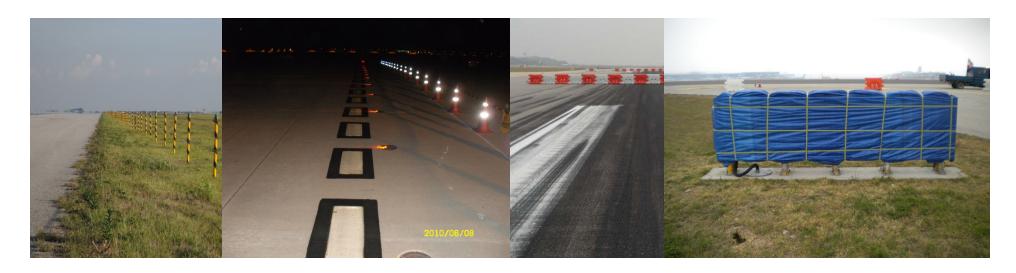
• 2<sup>nd</sup> Closing Area, Period: Oct.19.00:00 – Dec.13.01:00



## **Protection Measures**



# **Examples of Runway Protection**







# Thank your very much