



International Civil Aviation Organization

North American, Central American and Caribbean Office

**Second Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/2)**

Tegucigalpa, Honduras, 11 – 14 October 2005

NACC/DCA/2-WP/05

31/08/05

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**Agenda Item 2: Safety Oversight**  
2.2 Regional Safety Oversight Developments

**PAN AMERICAN AVIATION SAFETY TEAM (PAAST)**

(Presented by the PAAST Team Member/IATA)

**SUMMARY**

This Paper provides information on the Pan American Aviation Safety Team (*PAAST*), objectives, structure and activities. The Meeting is requested to support PAAST. A Power Point presentation is presented as **Appendix** to this working paper.

**1. Introduction**

1.1 The Pan American Aviation Safety Team (*PAAST*) was established under a joint effort by IATA, IFALPA and ICAO in 2000 in an attempt to bring together various safety related programmes and channel them into one effort. The PAAST became a regional initiative to achieve a global safety goal. The PAAST supports the activities of the ICAO Global Aviation Safety Plan (GASP) which bring together the entire aviation community with a view to reducing aviation accidents and incidents.

1.2 PAAST was born out of a regional need. Something had to be done about a poor safety record - poor safety culture. The available safety tools were not always reaching pilots, controllers, and airlines. There was a definite growth in traffic with the increase in new aircraft and new inexperienced crews. There were numerous safety programmes from the different International Organizations and aircraft manufacturers, all with the same safety goal but all going in different directions, wasting efforts. All in all, the Regions lacked a focused safety strategy.

## 2. Discussion

### Challenges of the Americas Regions

- States and Territories = 47
- Air Carriers = 138 (LAC = 68, NAM = 25, EUR = 38. ASPAC 5, AFI = 2)
- Languages = 5
- Pilots = 20,000 +
- Controllers = 4,500 +
- Environment = Varied... cold, hot, tropical, mountainous, jungle areas, maritime areas.
- Aviation Safety Culture.
- Active industry organizations, all with similar safety programmes and objectives and competing for scarce resources:  
IATA, ICAO, IFALPA, IFATCA, AITAL, IBAC, CAST, JSSI, Airbus, Boeing, and Embraer among others.

2.1 The solution, after much discussion between ICAO, IATA and IFALPA, became obvious and that was to join resources and develop a team concept; and the concept became reality in the Pan American Aviation Safety Team. The PAAST initiated its activities in August 2000 involving all the stakeholders and including the Flight Safety Foundation. The PAAST focuses its work with States, airlines, pilots, controllers, and regional organizations through an integrated aviation safety programme.

2.2 All of the resources used by PAAST have been contributed by its team members. Every effort has been made by PAAST to steer away from commercial and political aspects.

### First Project-Flight Safety Foundation Approach and Landing Accident Reduction Toolkit

2.3 The Flight Safety Foundation, being involved in PAAST and noting its strong potential for providing safety information to the CAR/SAM aviation community, selected PAAST as the distributor of its Approach and Landing Accident Reduction Tool Kit (ALAR) in the region. PAAST proceeded with the implementation of the FSF ALAR Tool Kit programme March 1, 2001 through the presentation of workshops and seminars by approximately 20 Action Team Leaders from across the CAR/SAM Region. Most of the material in the ALAR Toolkit has been translated by PAAST Team Members into both the Spanish and Portuguese languages.

### Highlights

- Over 10,500 pilots instructed including Russia, China and Spain.
- Mexico adopted ALAR Training as Mandatory requirements for license renewal in April 2002.
- Brazil and Cuba plan to adopt Tool Kit in their Regulations.
- *PAAST/ICAO* CAR/SAM ALAR/CFIT Seminar/workshops presented in 2001 Costa Rica, 2002 Lima Peru, 2003 Jamaica, 2004 in El Salvador. Seminars were alternatively presented in English and Spanish language. Next ALAR/CFIT seminar/workshop is scheduled tentatively to be held in November 2005 in Cayman Islands. ( Date TBA)

- The latest effort of the PAAST Group is to integrate a Special section to the ALAR/CFIT programme for the Air Traffic Controllers.

### **Second Project-Runway Incursion Prevention Programme**

2.4 In 2001 and in an effort to provide information to the CAR/SAM Regions on the very important airport safety topic of runway incursion, three PAAST members (IATA, ACI and FAA) put together the Runway Incursion Prevention Programme (RIPP). The RIPP served as the basis for the ICAO NAM/CAR/SAM Runway Safety/Runway Incursion Conference held in Mexico City in October 2002. Work has continued on the RIPP and it currently contains FAA, IATA, ACI, ICAO and Eurocontrol material. The CD has been fully translated into the Spanish language and will also be translated into Portuguese.

2.5 Based on support from States/Territories/International Organizations and the user community, other RIPP events are planned for early 2006.

### **3. Conclusions**

3.1 The Pan American Aviation Safety Team is an excellent example of what can be achieved with partnership among organizations contributing their time and hard work in order to focus on the regional safety needs and improve the CAR/SAM safety record. Proof of the concept is in the delivery of the goods and PAAST shows that safety progress is being made in Latin America and the Caribbean. Although the fact that no air carrier accidents occurred in the Region in 2004 cannot be scientifically attributed to PAAST activities, PAAST members certainly feel that their efforts have not been in vain.

3.2 PAAST will continue acting as the clearing house for flight safety products applicable in Latin America and the Caribbean, providing leadership in the promotion of flight safety programmes that provide the best results.

### **4. Action by the Meeting**

4.1 The Directors are invited to:

- a) note the information provided by this working paper;
- b) encourage safety personnel, air carrier, general aviation, and military pilots, airport operators, and air traffic controllers to actively participate in the *PAAST* programmes; and
- c) consider incorporating safety programmes, such as ALAR and RIPP, as regulatory elements for pilot and controller licensing.

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**Pan American  
Aviation Safety Team  
(PAAST):  
Regional Initiative to  
Achieve a Global Safety Goal**

Second Meeting of North American, Central American and Caribbean  
Directors of Civil Aviation  
(NACC/DCA/2)

Tegucigalpa, Honduras  
October 11-14 2005



PAAST Team Member / IATA



**.....To the Future !**

Pan American Aviation  
Safety Team  
"Regional Initiative to  
Achieve  
a Global Safety Goal "

## PAAST was born out of regional need



✈ We had to do something about:

- ✈ poor safety record - poor safety culture
- ✈ safety tools not reaching pilots, controllers, and airlines
- ✈ traffic growth, new aircraft, new crews
- ✈ too many safety programs going in different directions - wasted efforts
- ✈ lack of focused safety strategy



## LATIN AMERICA & THE CARIBBEAN



✈ .... A VERY LARGE REGION AND A CHALLENGING ENVIRONMENT

- ✈ STATES & TERRITORIES = 47
- ✈ AIR CARRIERS = 138 (LAC=68, NAM=25, EUR=38, ASPAC=5, AFI=2)
- ✈ LANGUAGES = 5
- ✈ PILOTS = IN EXCESS OF 20,000
- ✈ CONTROLLERS = IN EXCESS OF 4,500
- ✈ ENVIRONMENT = VARIED...COLD, HOT, TROPICAL, MOUNTAINS, JUNGLE AREAS, OCEANIC AREAS, POLAR AREAS, etc.
- ✈ ACTIVE INDUSTRY ORGANIZATIONS: IATA .. ICAO .. AITAL .. IFALPA .. IFATCA .. FSF .. IBAC .. BOEING .. AIRBUS .. EMBRAER .. IACL .. CAST .. JSSI

✈ ....all with SIMILAR safety programs & objectives

✈ The objective to lower accident rates was common to all the organizations

ICAO                      IATA                      FSF                      Airline Safety Departments



                                 IFATCA                      AITAL

AIRBUS                      IFALPA

                                 BOEING                      IBAC                      States and Regulators

                                 EMBRAER

✈ but everyone going in separate directions  
....and competing for scarce resources

**THE SOLUTION:**

✈ JOIN FORCES !!!

✈ ..... the need was translated to a TEAM concept, and... the concept became reality in the

PAN AMERICAN AVIATION  
SAFETY TEAM

# PAAST



- ✈ PAAST AIMS TO WORK WITH STATES, AIRLINES, PILOTS, ATC CONTROLLERS, AND REGIONAL ORGANIZATIONS
- ✈ PAAST WILL PROVIDE ASSISTANCE THROUGH AN INTEGRATED FLIGHT SAFETY PROGRAM USING RESOURCES CONTRIBUTED BY THE TEAM MEMBERS
- ✈ PAAST DOES NOT BELONG TO, OR IS CONTROLLED BY ANY ONE SPECIFIC ORGANIZATION...IT IS MADE UP OF ALL THE ORGANIZATIONS ON THE TEAM
- ✈ PAAST IS NON-COMMERCIAL, AND NON- POLITICAL

*... AND WE GOT OUR FIRST PROJECT*



*PAAST Selected as Regional Team Leader to implement the Approach and Landing Accident Reduction Tool Kit in the region*

# ALAR CFIT Tool Kit CD



Acrobat Reader - [Title.pdf]

  
**Flight Safety Foundation**  
**ALAR**  
 Approach-and-landing Accident Reduction  
**Tool Kit**

Welcome to the Flight Safety Foundation *ALAR Tool Kit*. This compact disc contains video files in the .mpg and .avi formats. A video player application is required to view these files. The Apple QuickTime Player is included on this disc. If your system does not have a video player application, install QuickTime by clicking the appropriate operating system below this message.

© 2000, 2001 Flight Safety Foundation (official release v. 3.0)

**Install Macintosh® QuickTime Player**

**Minimum System Requirements**

- A PowerPC processor-based Macintosh computer
- At least 16 MB of RAM
- Mac OS 7.5.5 or later

**Install Windows® QuickTime Player**

**Minimum System Requirements**

- A Pentium-based PC or compatible computer
- At least 16 MB of RAM
- Windows 95, Windows 98, Windows 2000 or Windows NT 4.0 system software
- A Sound Blaster or compatible sound card and speakers
- DirectX version 3.0 or later recommended





**Click to Continue**

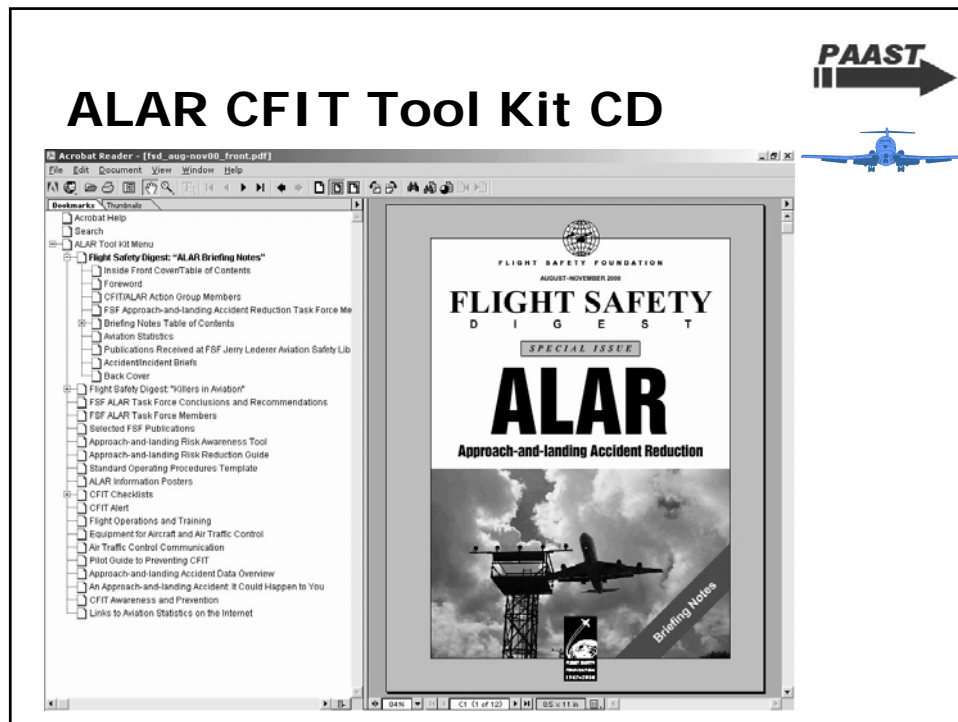
# ALAR CFIT Tool Kit CD




Acrobat Reader - [start.pdf]

- ▶ **Flight Safety Digest: "ALAR Briefing Notes"**  
A collection of 34 documents on a variety of topics to help prevent approach-and-landing accidents (ALAs), including those involving controlled flight into terrain (CFIT). (Adobe® Acrobat® Portable Document Format [PDF])
- ▶ **Flight Safety Digest: "Killers in Aviation: FSF Task Force Presents Facts About Approach-and-landing and Controlled-flight-into-terrain Accidents"**  
Findings of FSF ALAR Task Force studies and the accident/incident data from which they were derived. (Adobe® Acrobat® PDF)
- ▶ **FSF ALAR Task Force Conclusions and Recommendations**  
Eight data-driven conclusions about ALAs and numerous strategies for achieving ALA reduction. (Adobe® Acrobat® PDF)
- ▶ **FSF ALAR Task Force Members**  
Aviation safety specialists who volunteered for the fight against ALAs. (Adobe® Acrobat® PDF)
- ▶ **Selected FSF Publications**  
Related reading on ALAs and CFIT. (Adobe® Acrobat® PDF)
- ▶ **Approach-and-landing Risk Awareness Tool**  
A recommended supplement to the normal approach briefing for increasing flight crew awareness of hazards; includes elements of a stabilized approach. (Adobe® Acrobat® PDF)
- ▶ **Approach-and-landing Risk Reduction Guide**  
Guidelines to help chief pilots, line pilots and dispatchers evaluate training, standard operating procedures (SOPs) and equipment. (Adobe® Acrobat® PDF)
- ▶ **Standard Operating Procedures Template**  
Recommended elements for company SOPs and training procedures. (Adobe® Acrobat® PDF)
- ▶ **ALAR Information Posters**  
Four posters illustrate lessons learned about ALAs. (Adobe® Acrobat® PDF)
- ▶ **CFIT Checklist**  
Guidelines (in Arabic, Chinese, English, French, Russian and Spanish) for assessing CFIT risk. (Adobe® Acrobat® PDF)
- ▶ **CFIT Alert**  
Procedure for immediate response to a ground-proximity warning system/terrain awareness and warning system warning. (Adobe® Acrobat® PDF)
- ▶ **Flight Operations and Training**  
Data, procedures and recommendations for aircraft operators and pilots, presented on 32 slides with explanatory notes. (Microsoft PowerPoint)
- ▶ **Equipment for Aircraft and Air Traffic Control**  
Analysis of equipment and methods for optimum use of equipment, presented on 26 slides with explanatory notes. (Microsoft PowerPoint)
- ▶ **Air Traffic Control Communication**  
Improving pilot-controller communication and understanding of each other's operating environments, presented on 22 slides with explanatory notes. (Microsoft PowerPoint)
- ▶ **Pilot Guide to Preventing CFIT**  
CFIT accident data and lessons learned, plus a review of approach obstruction-protection criteria, presented on 43 slides with explanatory notes. (Microsoft PowerPoint)
- ▶ **Approach-and-landing Accident Data Overview**  
ALA data and lessons learned, presented on 23 slides with explanatory notes. (Microsoft PowerPoint)
- ▶ **An Approach and Landing Accident: It Could Happen to You**  
A 19-minute video presentation of specific data, findings and recommendations generated by FSF ALAR Task Force studies. (Apple Computer Inc. QuickTime)
- ▶ **CFIT Awareness and Prevention**  
A 32-minute video presentation of CFIT statistics, plus analyses of three representative CFIT accidents and how they might have been avoided. (Apple Computer Inc. QuickTime)
- ▶ **Links to Aviation Statistics on the Internet**  
A sampling of aviation statistical data sources on the Internet. (Adobe® Acrobat® PDF)





# PAAST



- ✦ PAAST proceeded with regional implementation of FSF/CFIT ALAR Tool Kit program
  - ✦ There are now over 20 Action Team Leaders
    - ✦ Started with just 8
  - ✦ Action Team Guidelines, Questionnaires, and Checklists
    - ✦ Spanish, Portuguese, and English
  - ✦ Tool Kit presentations and videos translated to Spanish and Portuguese (in progress)
  - ✦ ALAR Tool Kit distribution began March 1, 2001

## SOME HIGHLIGHTS:



- ✈ OVER 10500 PILOTS INSTRUCTED ON THE ALAR TOOL KIT INCLUDING RUSSIA, CUBA AND SPAIN
- ✈ 26 REGIONAL AIRLINES BRIEFED
- ✈ PRESENTATIONS TO IATA & AITAL REGIONAL AIRLINE GROUPS
- ✈ FACILITATORS AND INSTRUCTORS TRAINED IN SEVERAL COUNTRIES

## SOME HIGHLIGHTS:



- ✈ MEXICO ADOPTED ALAR TRAINING AS MANDATORY APRIL 2002
- ✈ BRAZIL, CUBA PLAN TO ADOPT TOOL KIT IN REGULATIONS
- ✈ PAAST-ICAO CAR/SAM ALAR WORKSHOP IN SAN JOSE - JUNE 01, LIMA - MAY 02, JAMAICA – NOV 03, EL SALVADOR – 2004, TBD DEC 2005
- ✈ POSSIBLE SUPPORT FROM GEASA/WHTI FOR ADDITIONAL CFIT/ALAR WORKSHOPS

## SOME HIGHLIGHTS:



- ✈ SEVERAL MAJOR AIRLINES IN THE REGION HAVE NOW INCORPORATED ALAR TRAINING BASED ON CFIT/ALAR TOOL KIT
- ✈ BWIA IN THE E/CAR REPORTS 50% OF PILOTS ALAR TRAINED (REQUIRES CONFIRMATION)

## SOME HIGHLIGHTS:



- ✈ TACA PROVIDED ACCIDENT PREVENTION COURSE INCLUDING CFIT/ALAR TOOL KIT FOR APPROX. 400 PILOTS IN 2003
- ✈ MEXICO ACTAM (ATC ASSN) INCLUDES ALAR IN ANNUAL TRAINING PROGRAM, MORE THAN 230 ATC TO DATE (REQUEST TO DCA TO REQUIRE FOR ATC LICENSE)

## OTHER PAAST PROJECTS:



✈ ASSESSMENT MISSIONS FOR 3 COUNTRIES

✈ ASSISTANCE TO FIX SAFETY PROBLEMS IN 5 CARIBBEAN AIRPORTS

✈ IATA OPERATIONAL SAFETY AUDIT (IOSA) REGIONAL AIRLINE SAFETY SELF EVALUATION CHECKLIST

✈ DONE, DISTRIBUTION PLANNED 2006




## *RIPP*



CD-ROM



PROVIDE A  
STANDARDIZED  
TRAINING AID  
BASED IN THE  
"SAFETY GATE  
TO GATE"  
TRAINING &  
EVALUATION  
CONCEPT

**Runway Incursions Prevention Program**  
**FAA - IATA RIPP**

<p>1. INSTRUCTIONS</p> <p>2. INTRODUCTION</p> <p>3. RUNWAY INCURSIONS</p> <p>4. AERODROMES &amp; GROUND AIDS</p> <p>5. AIR TRAFFIC MANAGEMENT</p> <p>6. FLIGHT OPS</p> <p>7. HUMAN FACTORS</p>	      <p>EXIT</p>	<p>8. ICAO PROVISIONS</p> <p>9. CASES</p> <p>10. REFERENCES</p> <p>11. LINKS</p> <p>12. VIDEOS &amp; POSTERS</p> <p>13. TECH. SOLUTIONS</p> <p>14. TEST</p>
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FAA-IATA RIPP version 4.1 AUGUST 2004 MENU 1

## RUNWAY INCURSION TRAINING PACKAGE

- ✈ UPDATE, REPRODUCTION AND SPANISH TRANSLATION IN PROGRESS
- ✈ ICAO NACC OFFICE AIRPORT SAFETY CONFERENCE A SUCCESS
- ✈ TACA PILOTS RECEIVED RUNWAY INCURSION TRAINING IN 2002
- ✈ POSSIBLE SUPPORT FROM GEASA/WHTI FOR RUNWAY INCURSION EVENTS

## ...PAAST IS AN EXAMPLE OF WHAT CAN BE ACHIEVED WITH:



✈ PARTNERSHIP AMONG ORGANIZATIONS

✈ VOLUNTEER ACTION TEAMS

✈ FOCUS ON REGIONAL SAFETY NEEDS

✈ ...PAAST WORKS CLOSELY WITH THE GREPECAS AVIATION SAFETY BOARD TO IDENTIFY WHERE HELP IS NEEDED

## Other PAAST Projects




✈ GREPECAS Aviation Safety Board deals with Urgent Air Navigation Deficiencies

✈ Improper use of ICAO approved Phraseology

✈ Factor in the increase of ATS incidents in CAR/SAM Regions

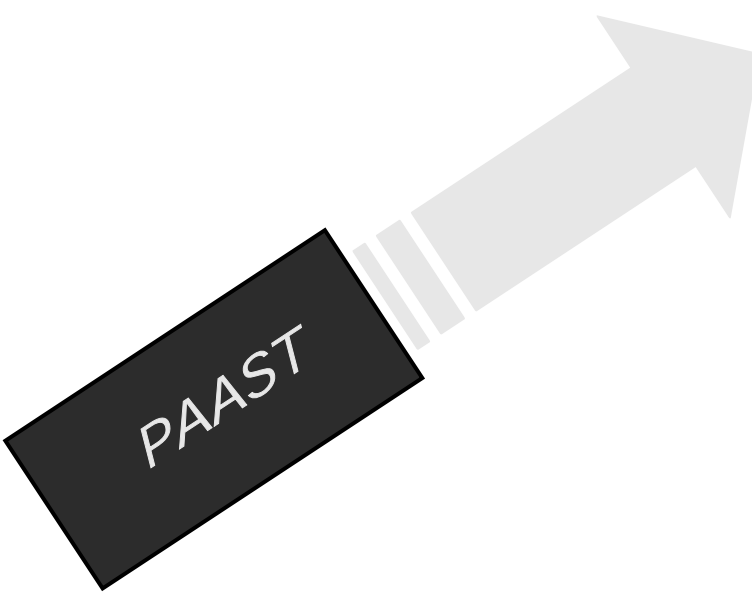

✈ Mitigate through establishment of ATS Quality Assurance Programs



✈️ Proof of the concept is in the delivery of the goods !!!

✈️ PAAST IS A SUCCESSFUL REGIONAL INITIATIVE WHICH FULLY DELIVERS THE AVIATION COMMUNITY SAFETY STRATEGY

✈️ PAAST SHOWS THAT SAFETY PROGRESS IS BEING MADE IN LATIN AMERICA AND THE CARIBBEAN



Thank you