Pan America – Regional Aviation Safety Team (PA-RAST) Report

RASG-PA ESC/29

Mexico City, Mexico 29-30 November 2017

David Zwegers, Industry Co-Chair

Daniel Vieira Soares, State Co-Chair

OVERVIEW

- Reports from PA-RAST/29 Ft. Lauderdale and PA-RAST/30 Port-of-Spain, Trinidad and Tobago
- Status of Detailed Implementation plans
- PA-RAST Deliverables to the ESC

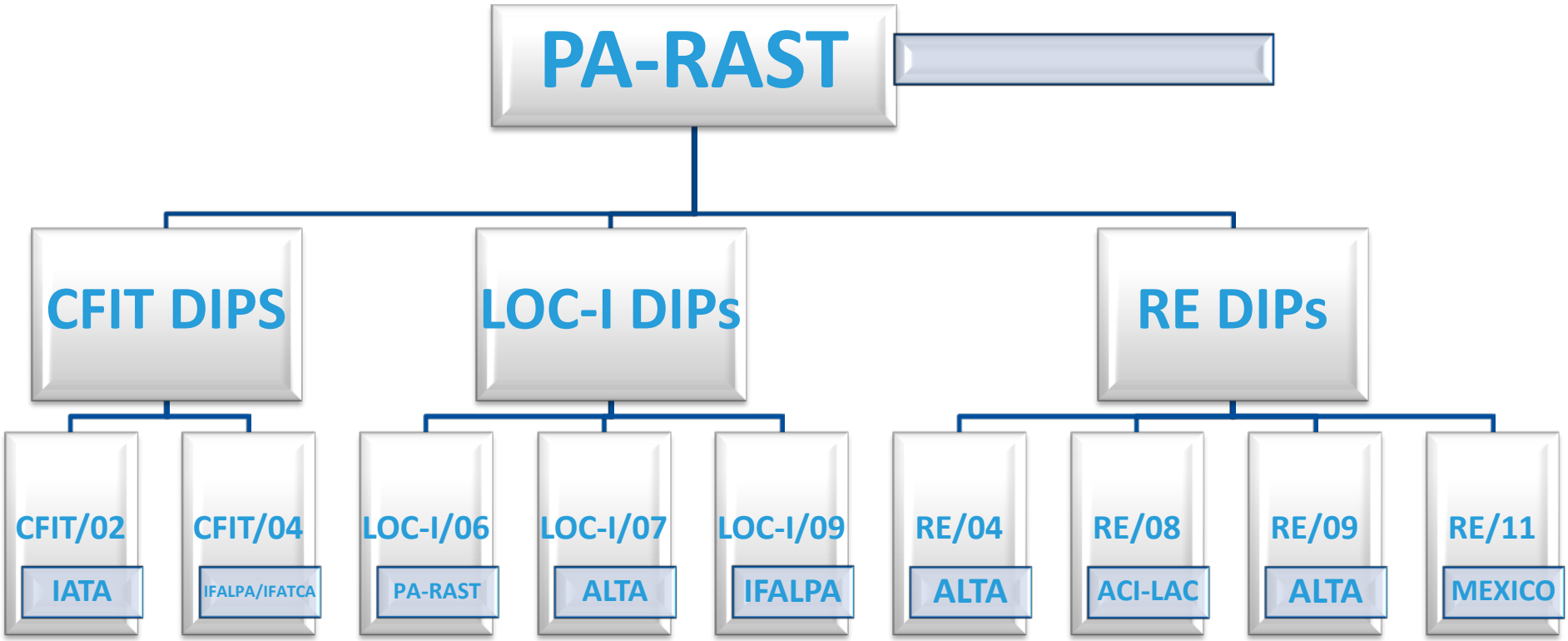
PA-RAST/29

- Meeting with the US Commercial Aviation Safety Team and GA Joint Steering Committee
- Ongoing work on Detailed Implementation Plans
- Discussions on ESC Deliverables

PA-RAST/30

- Meeting with Trinidad and Tobago Industry Stakeholders and Regulators
- Closeout of activities: LOC-I and CFIT DIPs
- Final Discussions on ESC Deliverables

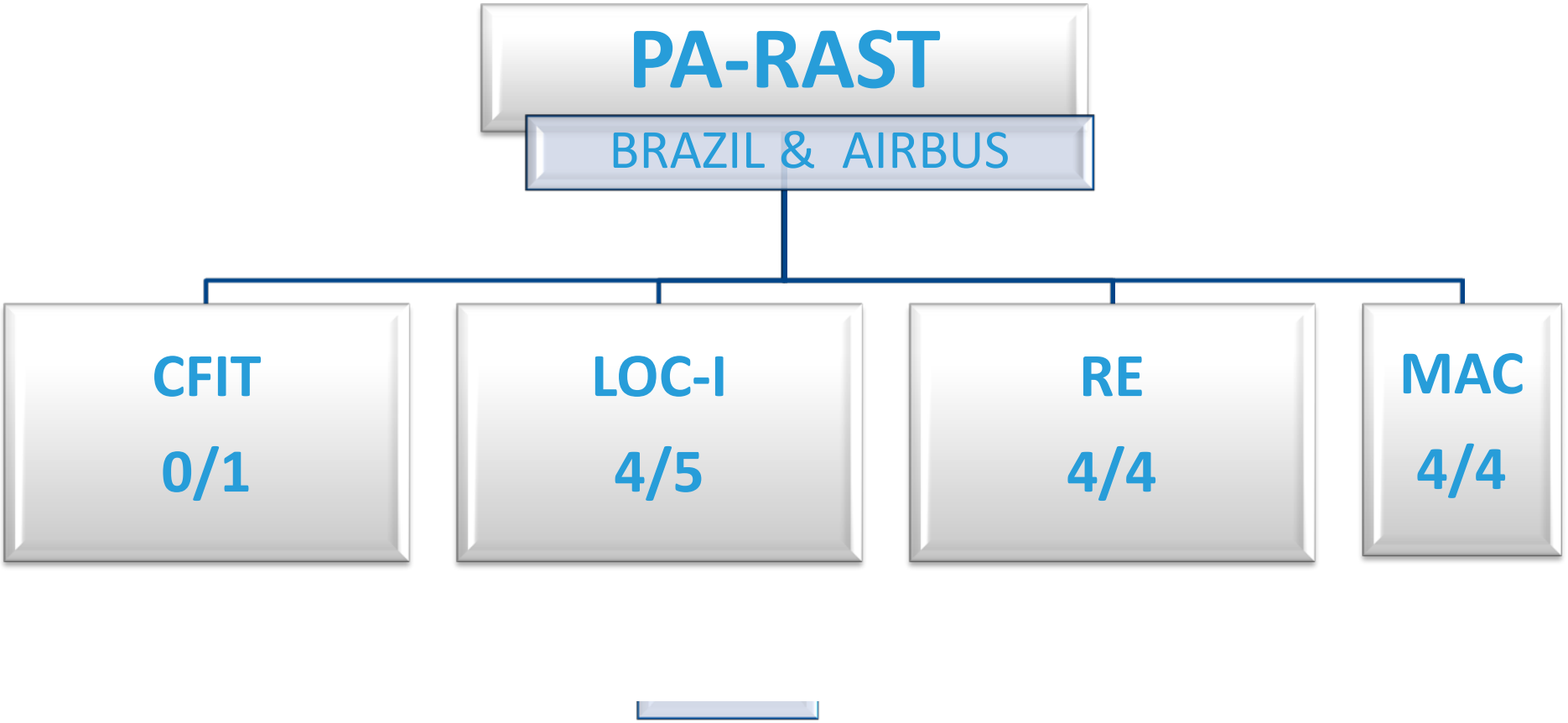
Pan America - Regional Aviation Safety Team
Completed DIPs 2008-2014



SUMMARY OF OUTPUTS

- Distributed RERR Toolkit to Operators and States
- Conducted Surveys on Go-around policies and unstable approach mitigation
- Provided advanced maneuvers manual to all operators
- Developed RASG-PA Aviation Safety Workshop´s
- Developed and delivered Pilot Monitoring Toolkit
- Guidance for Runway Maintenance IAW Annex 14
- Compiled and Published aviation safety tools and materials
- Standardized CFIT Training across operators
- Developed Safety Recommendation (RSR) Process
- RSR on Mode Awareness and Energy State Management
- Runway Safety Team in Mexico City, MX

Pan America - Regional Aviation Safety Team
Active/total DIPs 2014 - Present



Detailed Implementation Status

LOSS OF CONTROL IN FLIGHT

LOC-I

Detailed Implementation Plan Status

DIP 196: Effective Upset Prevention and Recovery Training (UPRT), Including Approach-to-Stall.

Deliverable: Air Carriers conduct effective UPRT in realistic scenarios, and using qualified flight simulator training devices.

Status: Checklist developed and distributed.

Detailed Implementation Plan Status

DIP 197: Flight Crew Training for Non-Normal Situations

Deliverable: Air carriers clearly emphasize in policy and standard operating procedures (SOPs) and reinforce in training, the importance of establishing controlled and stabilized flight as the primary consideration during non-normal situations, prior to troubleshooting or execution of checklists

Status: Checklist completed and delivered

Detailed Implementation Plan Status

DIP 198: ASA-Training Scenario-Based Training for Go-Around Maneuvers

Deliverable: Air Carriers conduct effective, scenario-based go-around training that matches realistic situations

Status: Implementation checklist complete and delivered

Detailed Implementation Plan Status

DIP 199: Flight Crew Training ECRM

Deliverable: Air carriers and other training providers as well as regulators enhance
acceptance, utilization and effectiveness of crew resource management (CRM) principles on the flight deck by revising curriculum content and delivery. These principles should provide clear, unambiguous roles for the pilot flying (PF) and pilot monitoring (PM) in normal and non-normal operations.

Status: Implementation Checklist complete and delivered

Detailed Implementation Status

Controlled Flight

Into Terrain

(CFIT)

Detailed Implementation Plan Status

DIP: Survey States to know if GPWS is a Regulatory Requirement

Deliverable:

Sistema de advertencia de la

proximidad del terreno (GPWS)

(a) Todos los aviones con motores de turbina deben estar equipados con un sistema deadvertencia de la proximidad del terreno que tenga una función de predicción de riesgos del terreno (EGPWS/TAWS).

Status:LAR 121 .850, LAR 135.450, 100% implemented

Detailed Implementation Plan Status

DIP: Produce a Checklist for CAA Inspectors to make sure Airlines comply with CFIT Regulations, training, SOPs and software and database updates

Deliverable:

3.8 Cuando sea aplicable, los programas de mantenimiento deben incorporar las inspecciones de mantenimiento para los equipos instalados que permiten las operaciones especiales como es el caso de la mínima separación vertical reducida (RVSM), navegación basada en la performance (PBN), operación con tiempo de desviación extendido (EDTO), especificaciones de performance mínima de navegación (MNPS), operaciones todo tiempo CAT II y CAT III, entre otras. Asimismo, el programa de mantenimiento debe incluir las inspecciones a los equipos de aproximación, como por ejemplo el sistema de advertencia de la proximidad del terreno (GPWS o EGPWS) establecido en el LAR 121.850, sistema anticolisión de a bordo (ACAS II/TCAS II) establecido en el LAR 121.855, entre otros y todo sistema instalado en el avión que haya sido incorporado con un certificado de tipo suplementario (STC) de acuerdo a los datos para la inspección en los equipos que se estipulen en dicho documento, incluidas las verificaciones de actualización del software.

Status:Manual del Inspector de Aeronavegabilidad Parte 4, Volumen I , Cap 8 .3.8 (Certificacion); y Volumen II Cap 8 .3.5 (Vigilancia)

100% Implementado

LAR 121.850 LAR 135.450	21-7-17. ¿Está equipada la aeronave con un sistema de advertencia de la proximidad del terreno (GPWS)?	❑ Si ❑ No	Verificar que todos los aviones con motores de turbina y los aviones con un peso (masa) certificada de despegue superior a 15,000 kg o autorizados a transportar más de treinta (30) pasajeros, estén equipados con un sistema de advertencia de la proximidad del terreno que tengan una función de predicción de riesgos del terreno (EGPWS/TWAS).	❑ Satisfactorio ❑ No satisfactorio ❑ No aplicable	

LAR 121.1115 (c) LAR 135.1415 (c)	121/135-I-8-9. Cuando sea aplicable, ¿han sido incluidas las inspeciones a los equipos de ayudas a la navegación y aproximación de las aeronaves?	❑ Sí ❑ No	Verificar que si la aeronave realiza operaciones especiales (RVSM, RNAV/RNP, MNPS, EDTO, entre otras) y adiconalmente cuenta con equipos de ayuda a la aproximación como el GPWS/EGPWS, ACAS II/TCAS II, estos hayan sido incluidos en el programa de mantenimiento, incluidas las verificaciones de actualización del software, para que sean inspeccionados en intervalos regulares de acuerdo a lo establecido por el fabricante del equipo.	❑ Satisfactorio ❑ No satisfactorio ❑ No aplicable	

Detailed Implementation Plan Status

DIP: Vertical Guidance to replace circle to land approaches

SAM-IG: Objetivo al 2016 100% APV por pista IFR (99 aeropuertos internacionales)

Total international airports	Total SIDs/STARs	Total PBN SIDs/STARs	Indicator: % of PBN SIDs/STARs at international airports	Indicator: % of PBN SIDs/STARs at international airports
			12 October 2017	Goal 2016
99	1680	1218	72.5%	60%

Total international airports	Total runway thresholds	Total APV or RNP AR or LNAV IAPs	A37-11 ICAO indicator % APV by IFR runways	
			12 October 2017	Goal 2016
99	175	139	79 %	100 %

Detailed Implementation Plan Status

DIP: Update Airport Obstacle Charts in accordance with WGS-84

Deliverable:

- LAR 154 Apendice 2, Capitulo 2: Requisitos de Calidad de los datos aeronauticos
- LAR 204 Cartas aeronauticas, 185 Sistemas de referencia communes

Detailed Implementation Plan Status

DIP: Survey States to know Obstacle and Terrain Implementation Area 1, 3 and 4 Status

Deliverable:

Status:

Detailed Implementation Status

Runway

Excursion

(RE)

Detailed Implementation Plan Status

DIP: RE Programme Session

Deliverable: A facilitated training session between Pilots and Controllers, simulated flight execution

Status: On-going activity for 2018

Detailed Implementation Status

Mid Air

Collision

(MAC)

Detailed Implementation Plan Status

DIP: Incorporate Eurocontrol's Level Bust Toolkit

Deliverable: Incorporate into flight crew and ATCO training programs

Status: Translated to Portuguese and need for validation/translation to Spanish. Publish to RASG-PA Web site and work on marketing strategy

Detailed Implementation Plan Status

DIP: Call Sign Designation Rules

Deliverable: Update designation rules according to regional best practices to prevent communication flaws

Status: On-going. Working to secure data on state level procedures for call sign designations

Detailed Implementation Plan Status

DIP: FAA AC-980-48D

Deliverable: Incorporate into the flight crew training programs

Status: Review of survey to assess regional situation. Work with IATA to “spread the word”. Initiate studies of mitigation strategies and analyze data.

PA-RAST Deliverables to the ESC

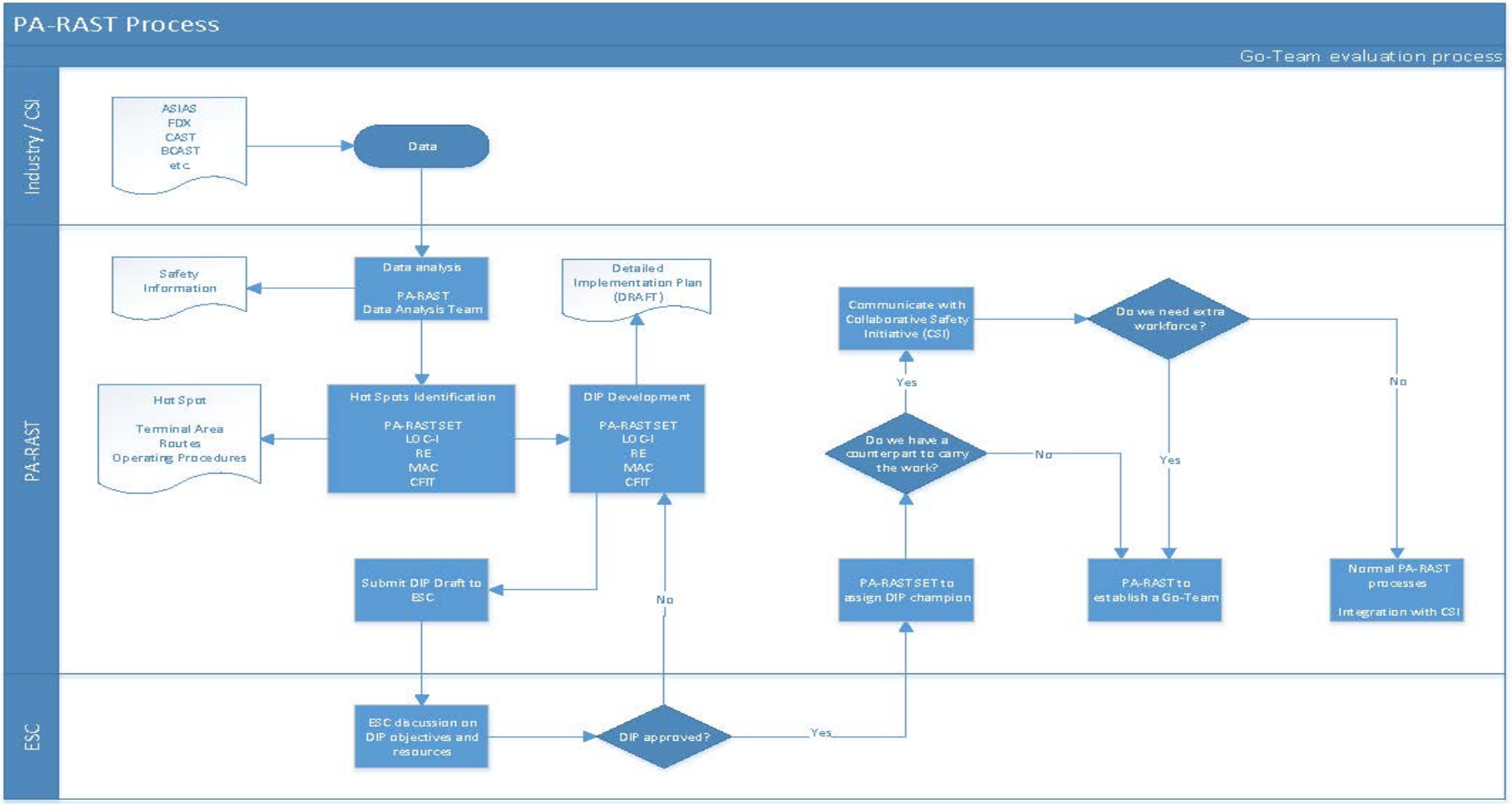
1. RASG-PA Tactical Go-Team Concept
2. Analyze Global and Regional Safety Targets
3. Coordination of RE Activity with the SRVSOP
4. Evaluation of Flight Safety Foundation Go-Around Decision Making and Execution Project

PA-RAST Deliverables to the ESC

1. Tactical Go-Team Concept

- Should be strongly considered for implementation
- Need for funding sources/deployment methods
- RASG-PA Support for National Safety Teams

Flow/Design of Teams



PA-RAST Deliverables to the ESC

2. Global and Regional Safety Targets

- Can assist but PA-RAST not a implementing authority
- Need to retain strict analysis function
- Possibly expand use of the ARST for analysis on safety performance and included in future editions of the ASR
- IATA analyzing GASP-RASG programmes

PA-RAST Deliverables to the ESC

3. RE Activity with the SRVSOP

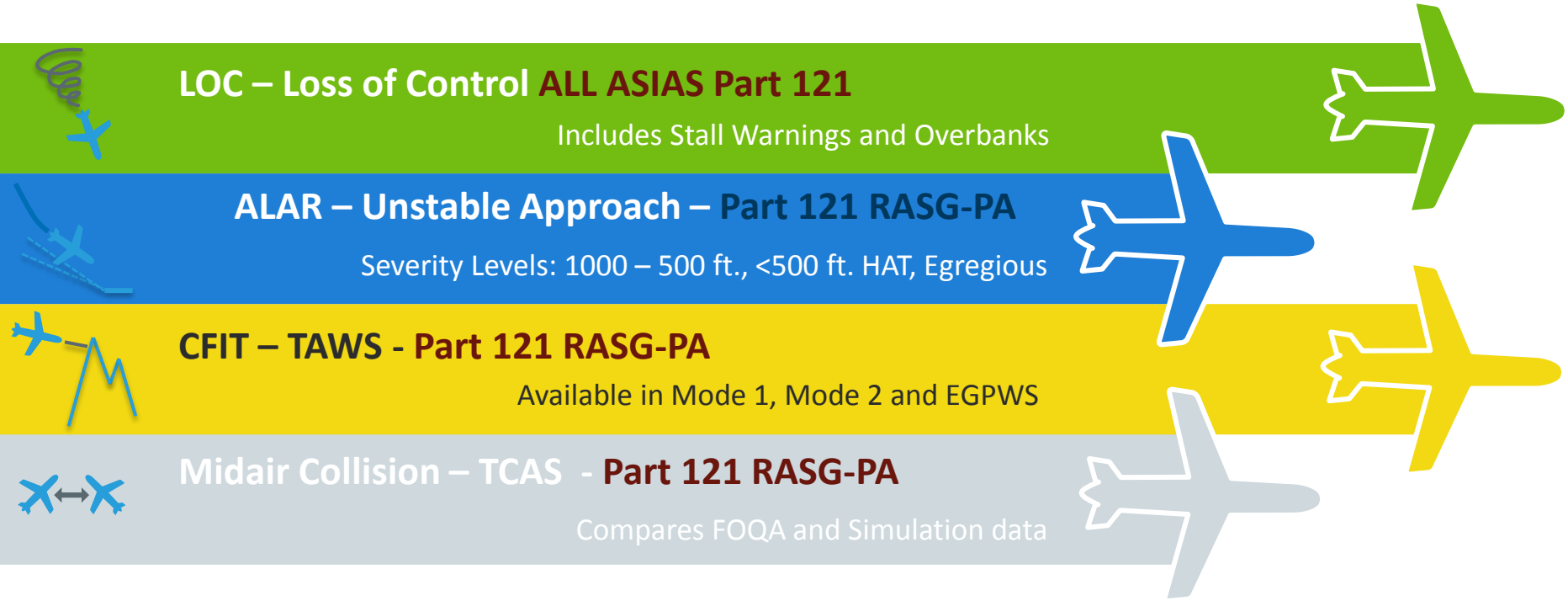
- On-going activity with between RE Team and the SRVSOP
- Work currently focused on…….

PA-RAST Deliverables to the ESC

4. FSF Go-Around Project

- Noted that many organizations providing separate input
- A timely project and raised interesting questions
- Outcomes and conclusions raised in the report may not be acceptable to industry and operators

New Framework for ASIAS and FDX Data



PA-RAST Plan

2018-2019

- Assist RASG-PA to align work programme with GASP
- Continue work on LOC-I, CFIT, MAC and RE
- Monitor/proactive to Regional safety issues
- Coordinate work with RSOOs
- Increase participation of States and Stakeholders
- Collect safety information for ICAO

Summary

- Committed to improving aviation safety and enabling seamless Technical co-operation and communication between States and Stakeholders
- The PA-RAST shall continue to expand its collaboration with safety organizations to expand its data analysis reach, in order to promote aviation safety and support activities necessary to address emerging safety issues

RASG-PA

Thank you!