



80 YEARS FLYING TOGETHER



LAN Corporate Safety Management System (SMS)

“Safety in times of crisis, our permanent challenge”

Corporate Safety Direction
November, 2009

This presentation may include forward-looking comments regarding the Company's business outlook and anticipated financial and operating results. These expectations are highly dependent on the economy, the airline industry, commodity prices, international markets and external events. Therefore, they are subject to change and we undertake no obligation to publicly update or revise any forward looking statements to reflect events or circumstances that may arise after the date of this presentation. More information on the risk factors that could affect our results are contained on our Form 20-F for the year ended December 31, 2008.

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“Safety in times of crisis, our permanent challenge”

6th Annual FAA International Aviation Forum

- **Chilean Economic and Aviation Policy.**
- **LAN Business Strategy**
- **LAN SMS Principles**
- **Future challenges**

“Safety in times of crisis, our permanent challenge”

➤ Chilean Economic and Aviation Policy

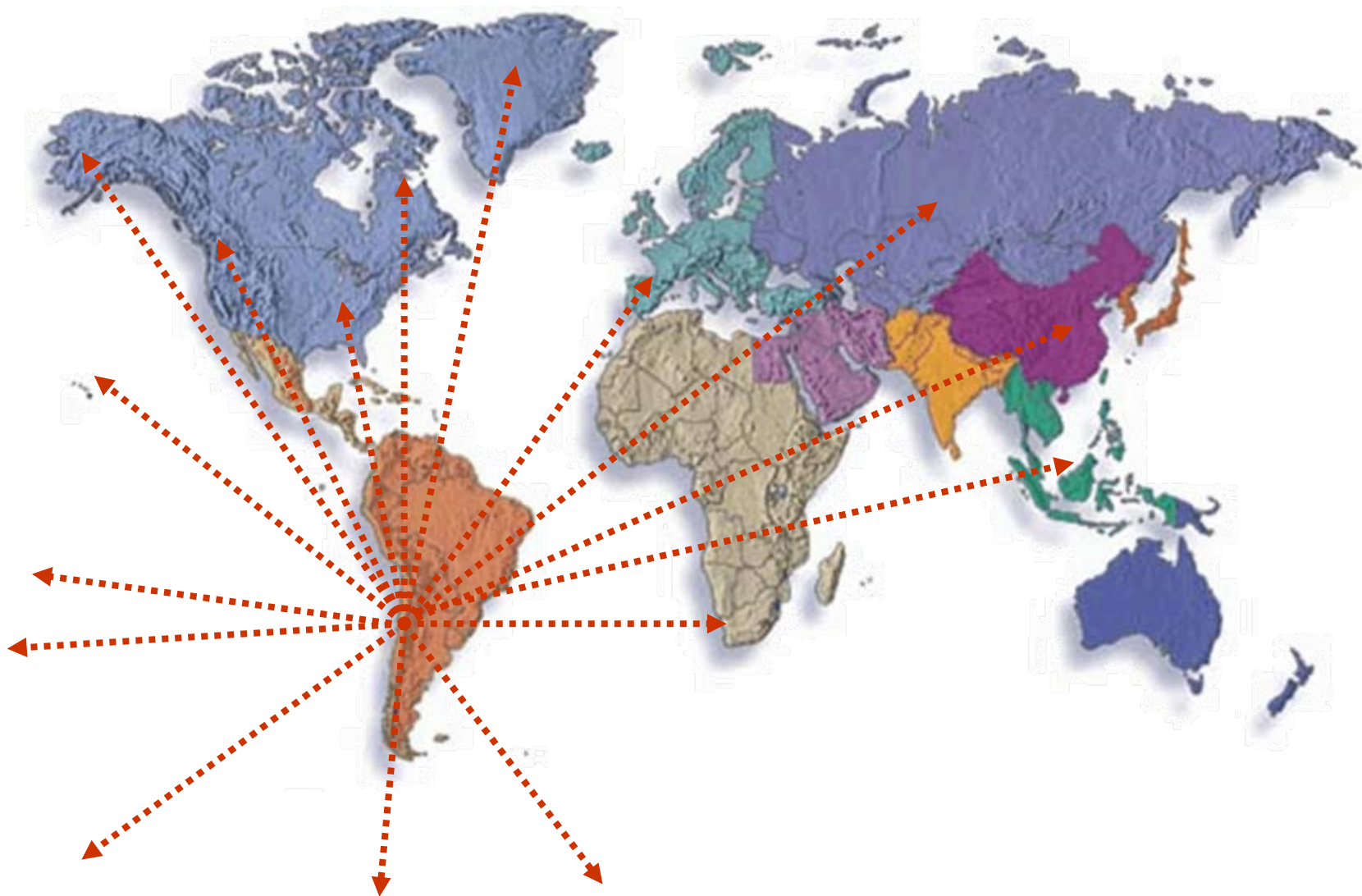
➤ LAN Business Strategy

➤ LAN SMS Principles

➤ Future challenges

The pillars of Chilean economic policy:

I. Open Economy to international trade & commerce...



The pillars of Chilean economic policy:

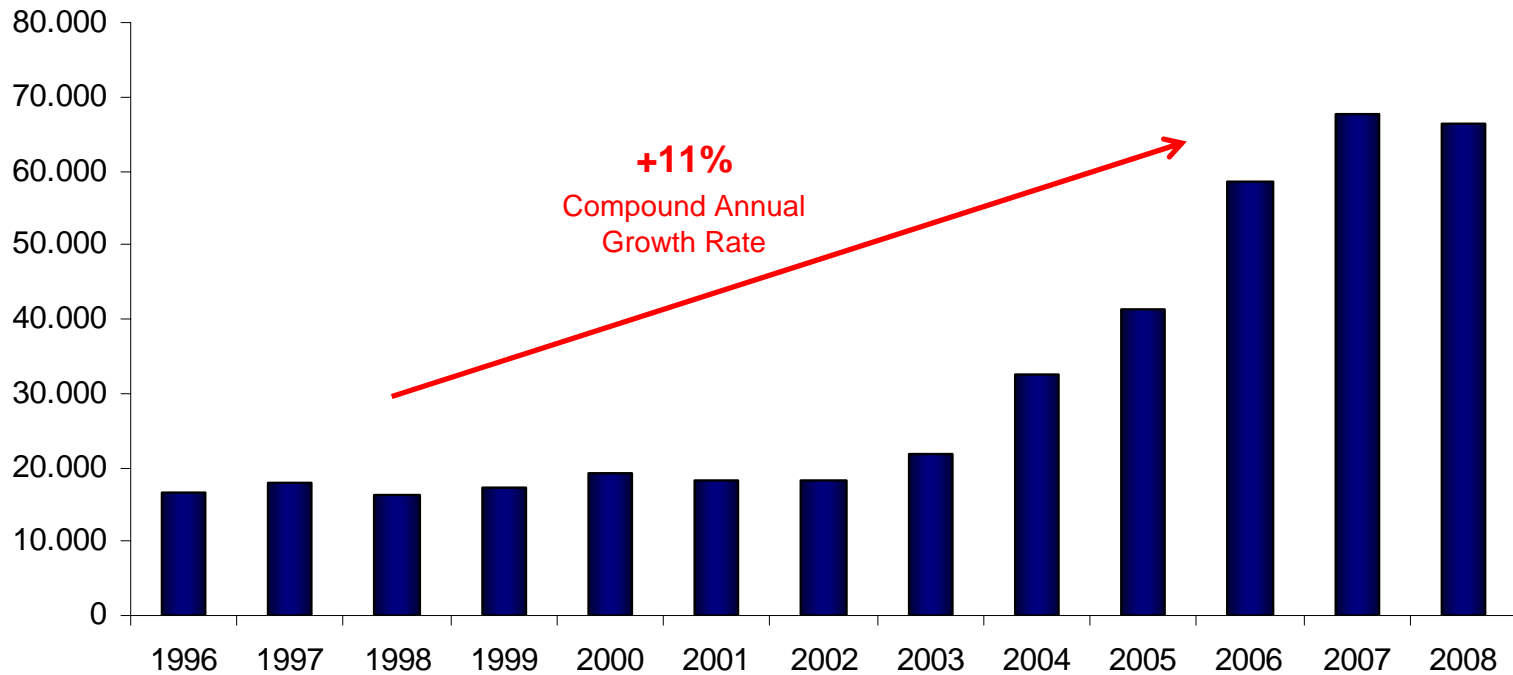
...Focused on becoming a goods and services distribution center & gateway for Asian imports into the region



The pillars of Chilean economic policy:

III. Export oriented economy

Chilean Exports (US\$ MM)



Source: Banco Central de Chile

Chilean Aviation Policy : Open Skies



OBJECTIVE:

To achieve the largest number of aviation services, with the best quality and efficiency, at the lowest cost

- No legal barriers for entry.
- No limits regarding property or control of the airline.
- No subsidies.

TWO CHILEAN AUTHORITIES: DGAC and JAC

“Safety in times of crisis, a permanent challenge”

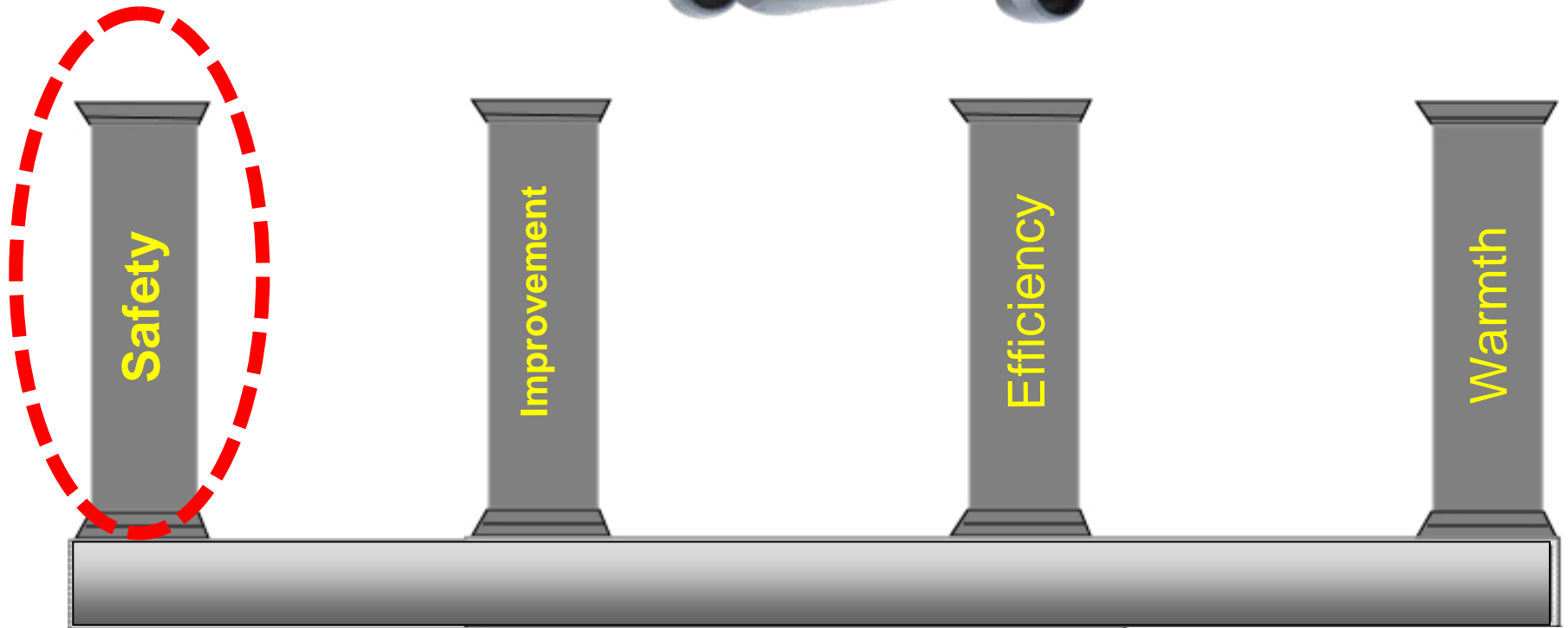
➤ Economic and Aviation Policy in Chile

➤ **LAN Business Strategy**

➤ LAN SMS Principles

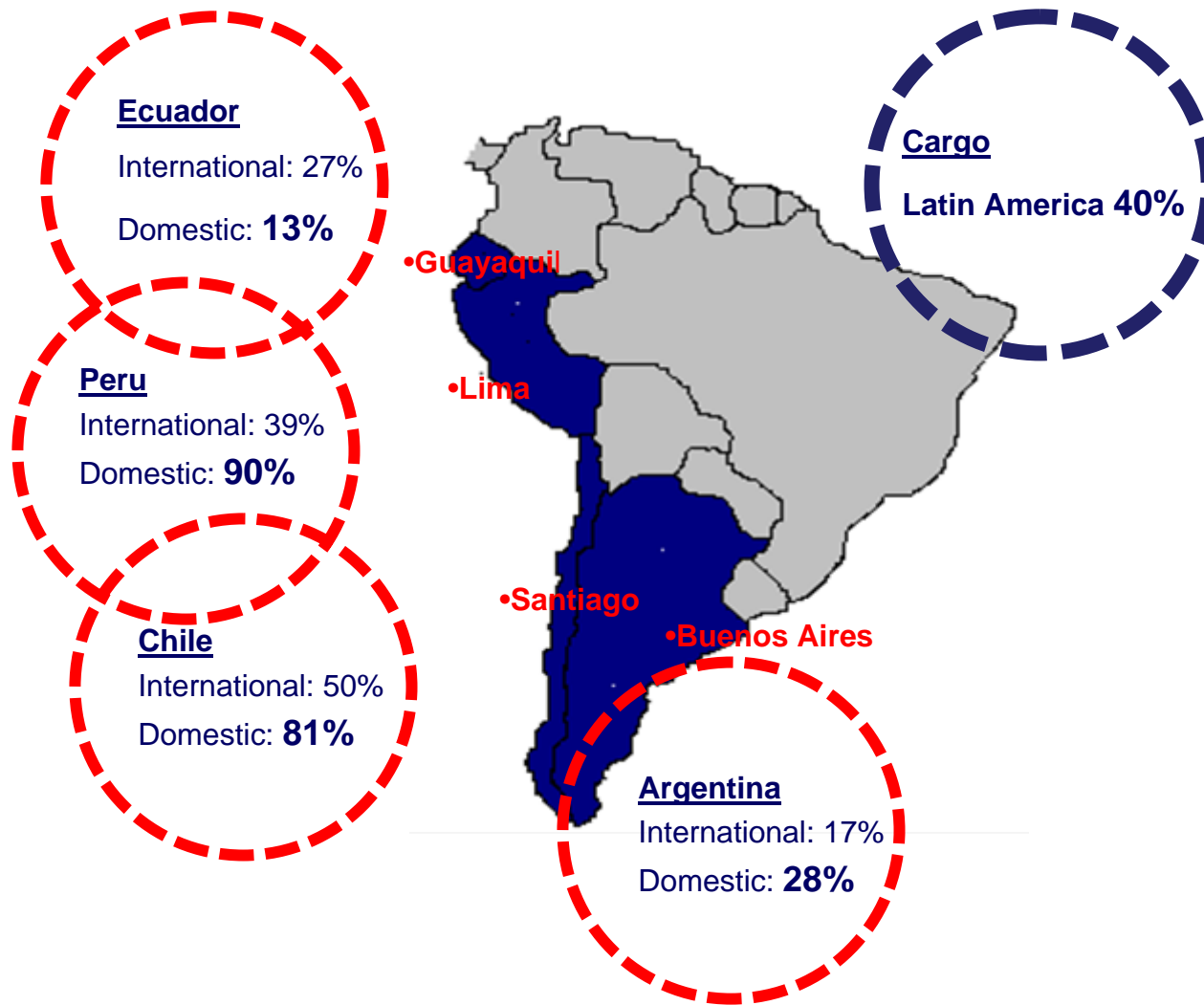
➤ Future challenges

LAN GROUP VALUES



SAFETY: AN ESSENTIAL AND NON NEGOTIABLE VALUE

Leading Presence in South American Markets



•Sources: DGAC Chile, DGAC Peru, Undersecretary of Transportation Argentina, DAC Ecuador, LAN Estimates.

•* International market shares for December 2008; Domestic market shares for June 2009.

Differentiated Value Propositions in the Passenger Business

DOMESTIC OPERATIONS

- New A320 family aircraft
- Lower fares
- More direct flights

INTERNATIONAL OPERATIONS

- New Premium Business Class: first with full flat sleeper seats between Latin America and the United States
- State of the art on board entertainment system
- Complete retrofit of B767 fleet in 1H08 – US\$80 million investment
- Begin retrofit of A340 fleet in 2H08



LAN's Regional Strategy – Cargo Hubs



LAN's Fleet – September 2009
Average fleet age of 5.4 years

Standardized fleet

PASSENGER



Airbus **15**

318

Airbus **20**

319

Airbus **18**

320

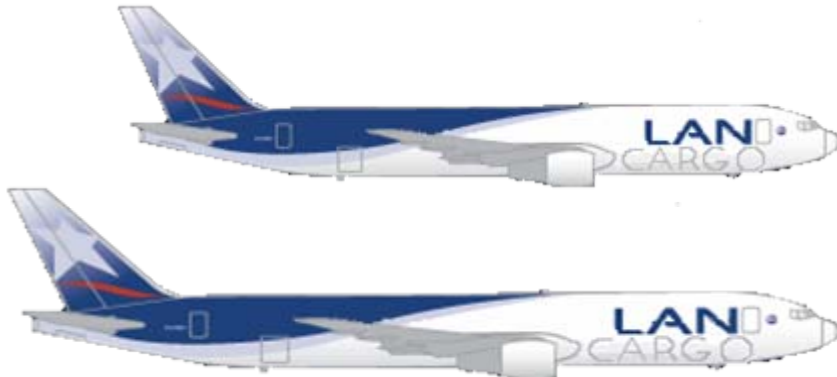
Boeing **26**

767

Airbus **5**

A340

CARGO



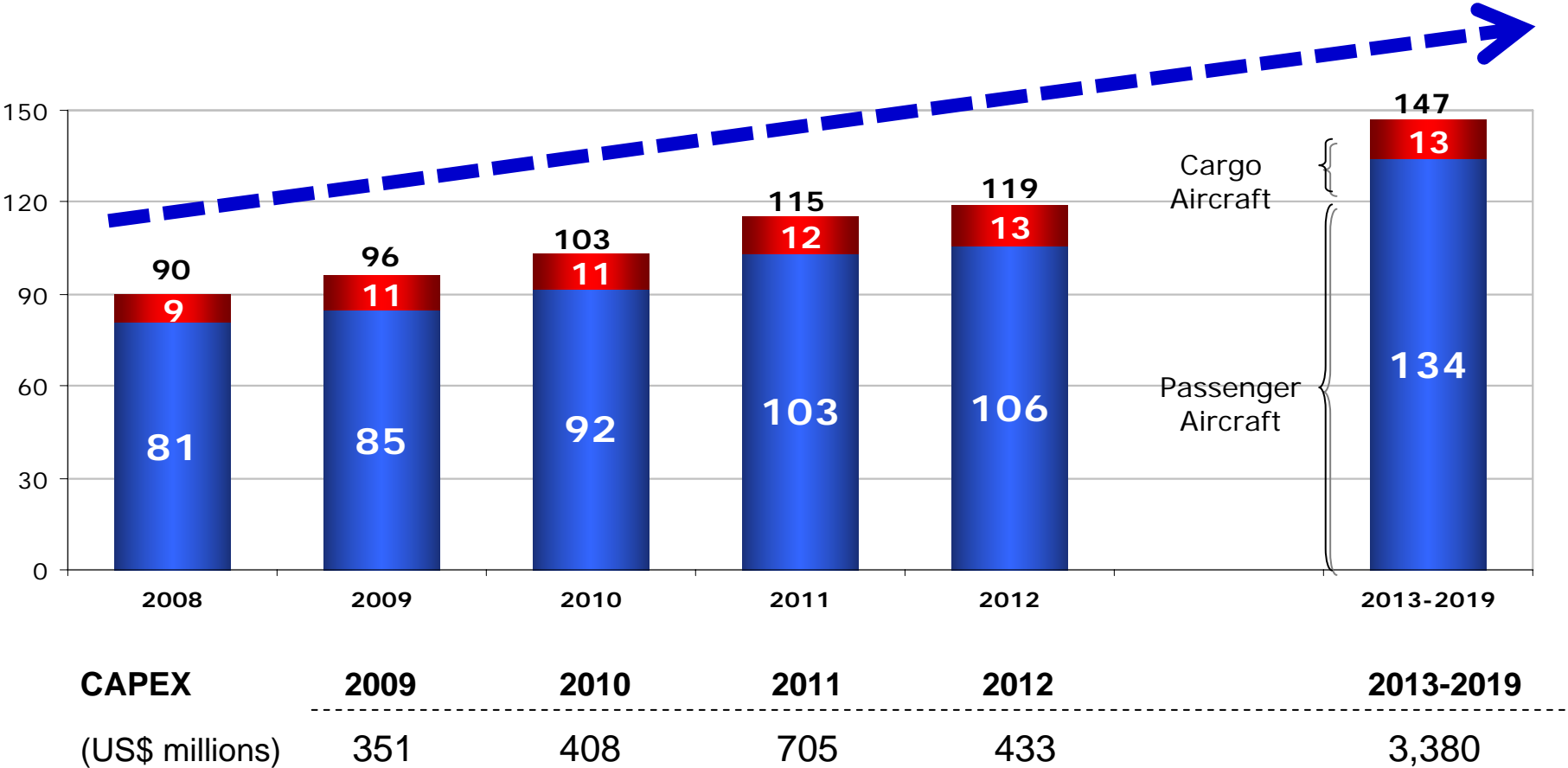
Boeing **9**

767-F

Boeing **2**

777-F

LAN Continues to Invest in Fleet Expansion and Renewal



Total Projected Investment of US\$5.3 Billion (2009-2019)

Some International Recognitions



Airline Business Strategy Awards – Executive Leadership 2009



Best South American Airline - 2009



Best Latin American Airline - 2008



Best Airline in South America, Central America and Caribbean - 2006



Best South American Airline - 2005



Best Latin American Airline - 2004



“Safety in times of crisis, a permanent challenge”

➤ Economic and Aviation Policy in Chile

➤ LAN Business Strategy

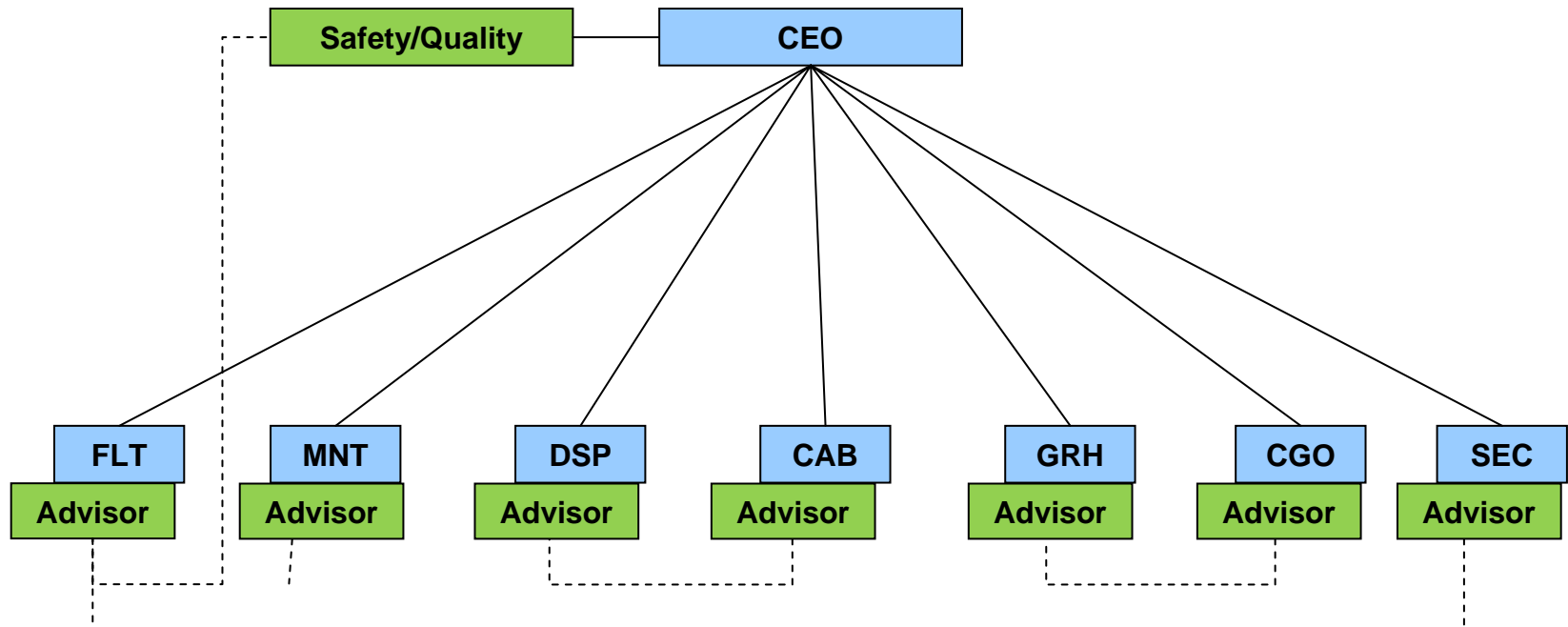
➤ **LAN SMS Principles**

➤ Future challenges

Our Corporate Operational Safety, Quality and Environment Policy:

1. Motivates and requires compliance with safety standards.
2. Safety is everyone's responsibility, and starts with the CEO.
3. Encourages safety reports.
4. Mistakes are an opportunity for improvement.
5. Operational safety goals and objectives are well defined, measured and rewarded.

Our Safety Management System Organization:



Accountable Manager

- Resources allocation and responds for safety results

Safety Advisor

- Support to Operational Manager and uses the tools of the SMS for risk management

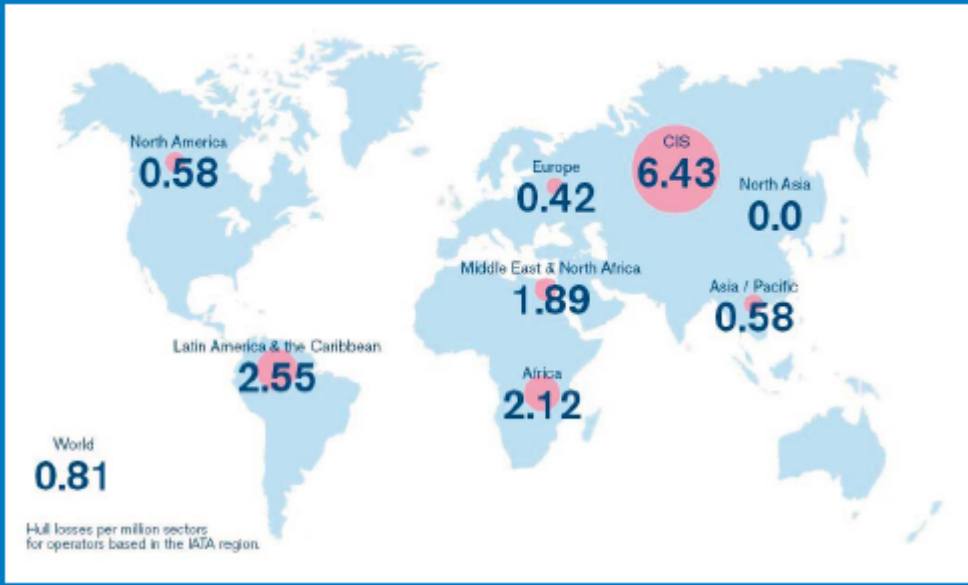
Our Corporate Safety Management System Tools:

Proactive

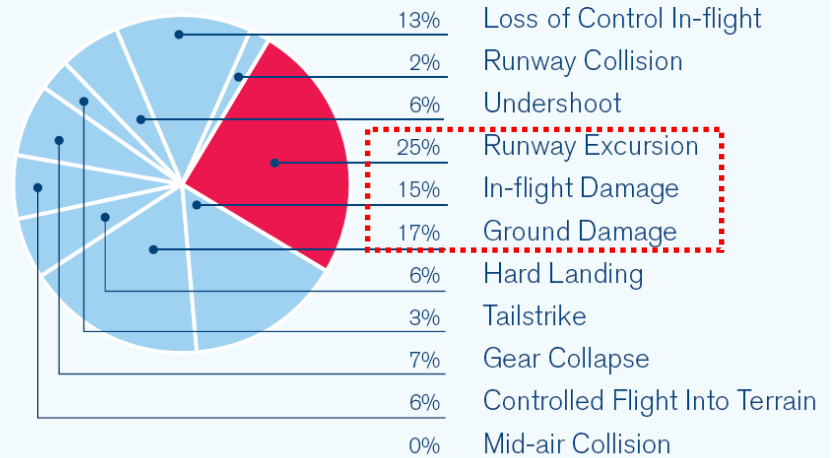
- Industry and Internal Analysis
- Risk Management System
- LOSA (Line Operations Safety Audit)
- Safety Audits (IOSA,ISAGO and Internal Audits)
- A & D Program

Industry and Self Analysis:

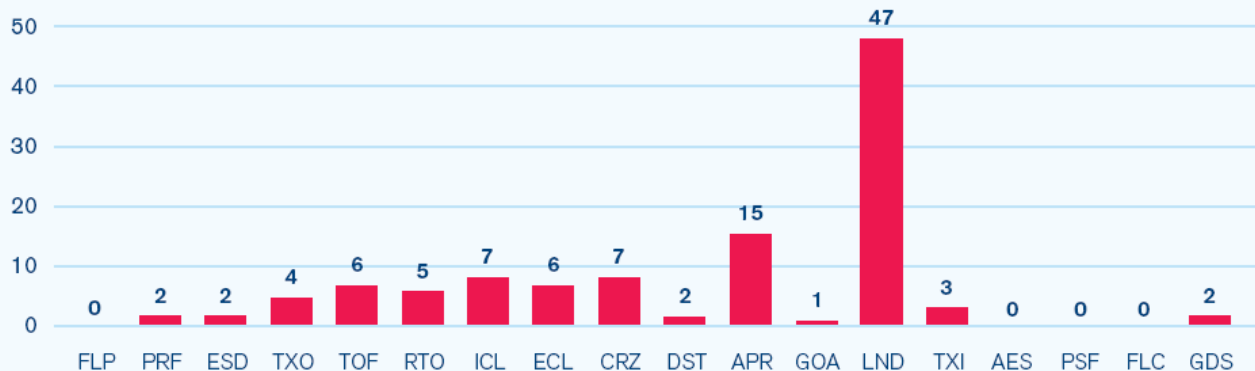
Western-built Jet Aircraft Hull Loss Rate per Operator Region (2008)



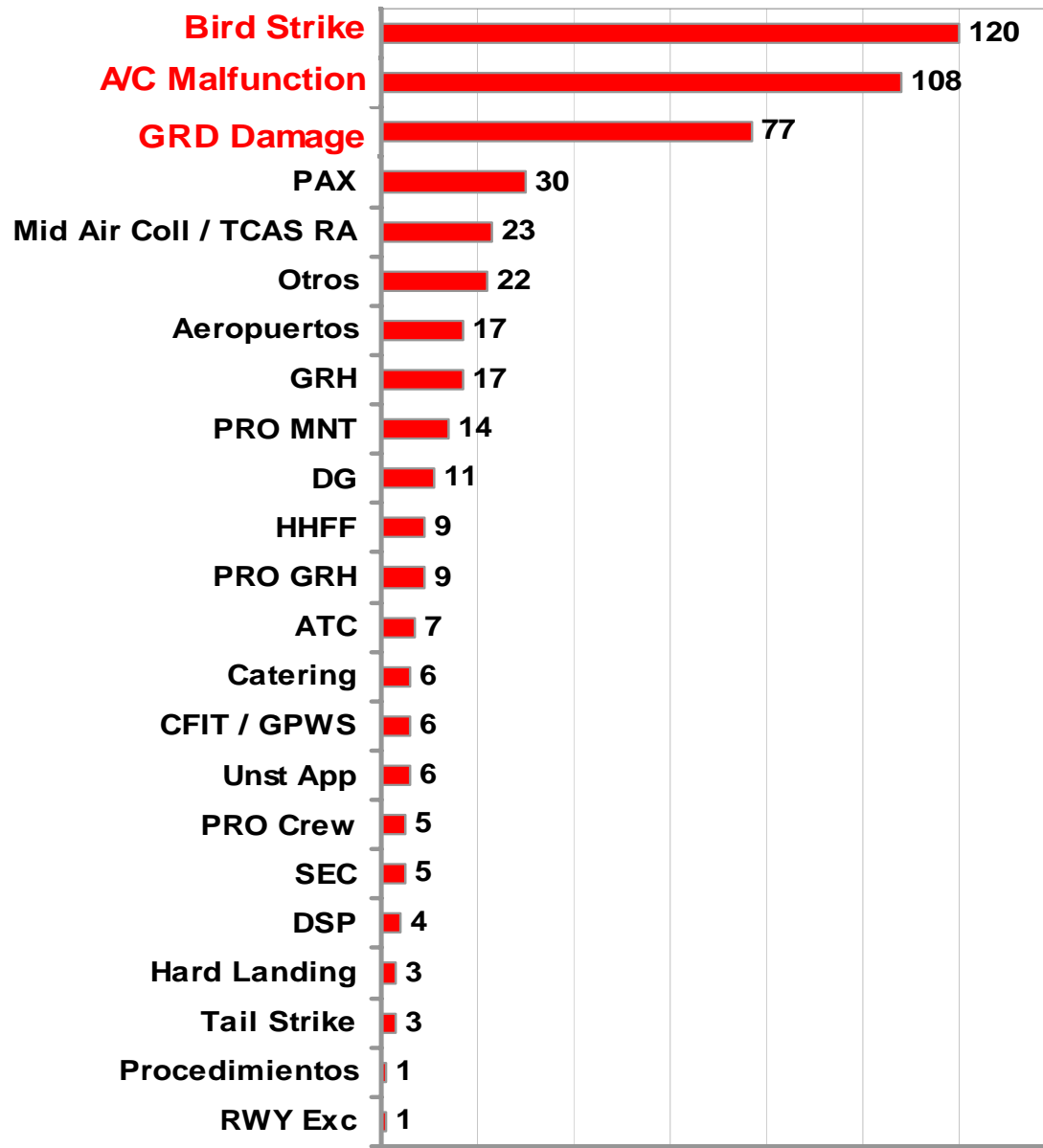
Breakdown per Accident Category



Accidents by Phase of Flight*



Industry and Self Analysis:





> **IOSA - Intro**

> Registry

> Schedule an IOSA Audit

> Endorsed Training Organisation (ETO)

> IOSA Audit Reports

> IOSA Audit Organisations

IOSA IATA OPERATIONAL SAFETY AUDIT



[Home](#) » [Services & Solutions](#) » [Accreditation & Auditing](#) » [IOSA](#) » [Registry](#)

IOSA Registry

The IATA Operational Safety Audit (IOSA) is the benchmark for global safety management in airlines. By 2007, all IATA Members will need to have successfully undergone the IOSA audit in order to achieve or maintain IATA Membership. This demonstrates the commitment of IATA's Members to safety and makes IATA membership a mark of quality.

Current list of IOSA Registered airlines:

01 Region



02 Name

A B C D E F G H I J K L M N O P Q
R S T U V W X Y Z

L

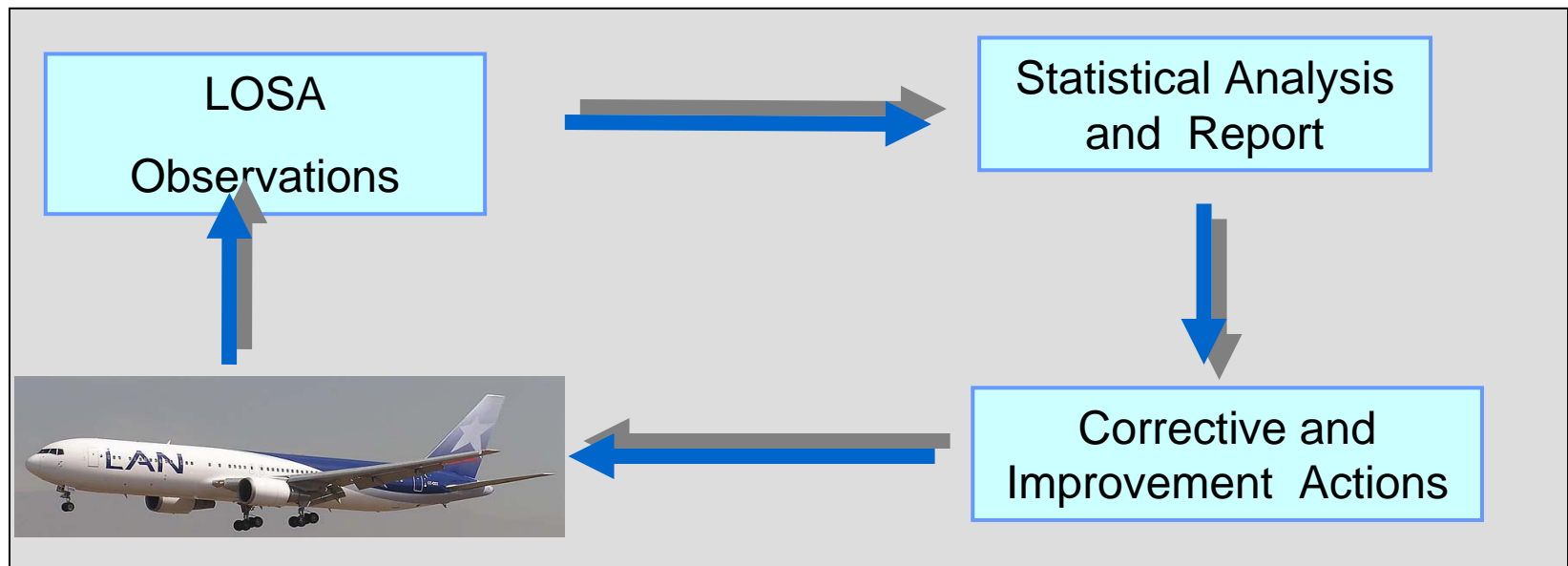
- [LAM - Linhas Aéreas Moçambique](#)
- [LAN Airlines S.A.](#)
- [Lan Argentina S.A.](#)
- [Lan Ecuador @](#)
- [LAN Express](#)
- [LAN Perú](#)

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3 3 2 > **IOSA**
REGISTERED OPERATORS

LOSA (Line Operations Safety Audits)

- **AVSIS, FDM, Audits and Investigations** allow us to know **what** is happening in daily operations.
- LOSA allows us to know **why** it is happening.
- Through inflight cockpit monitoring.
- Supplies information to the Crew Training Program.



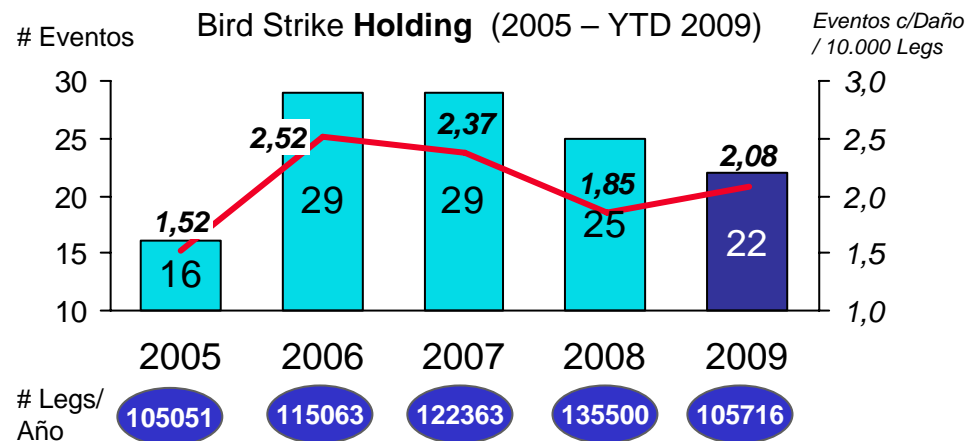
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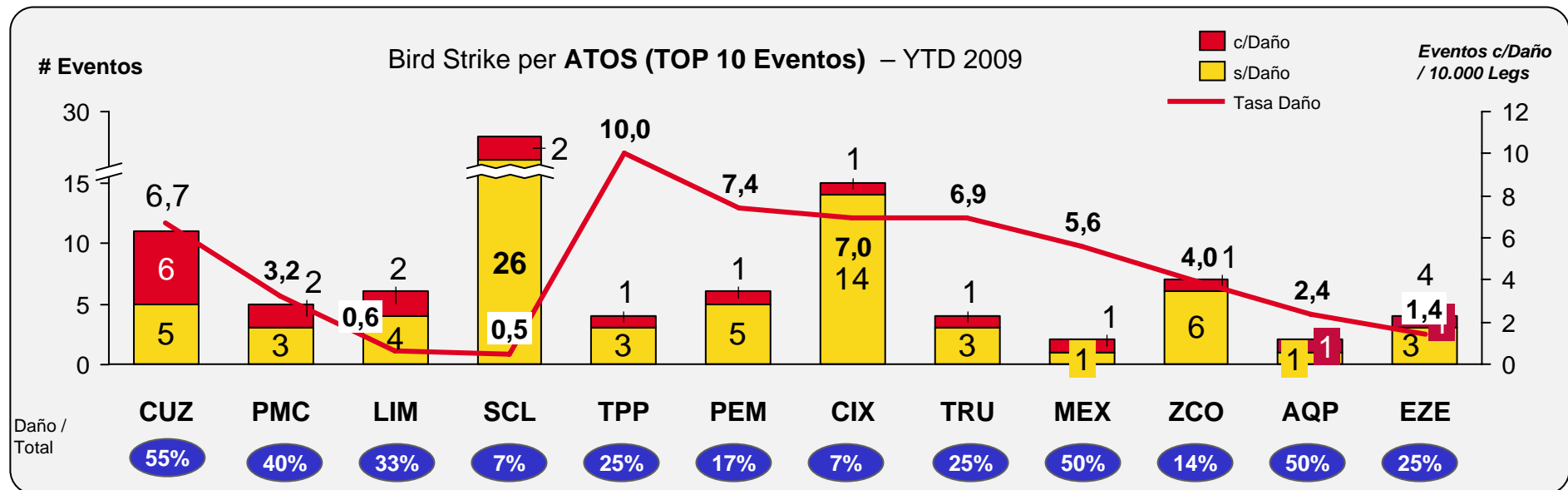
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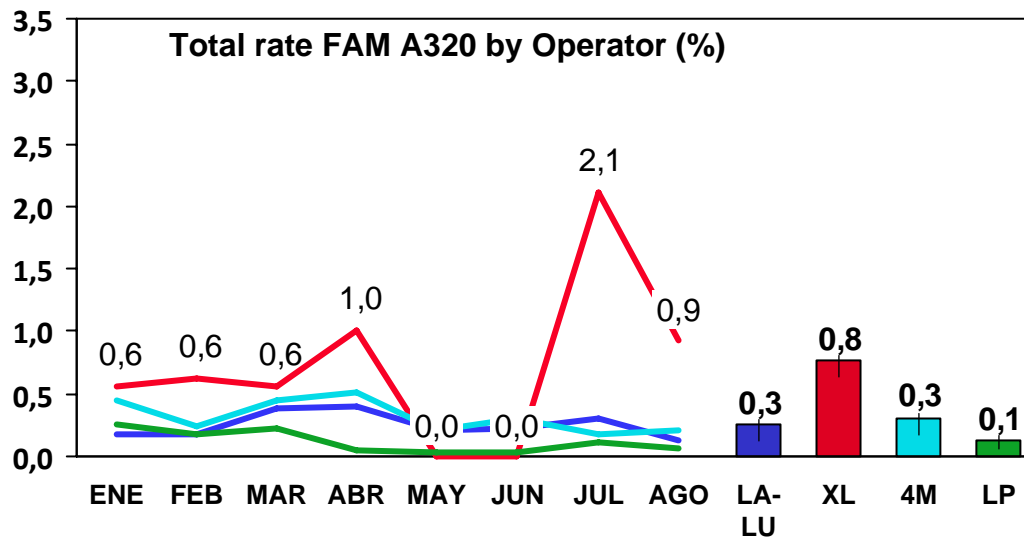
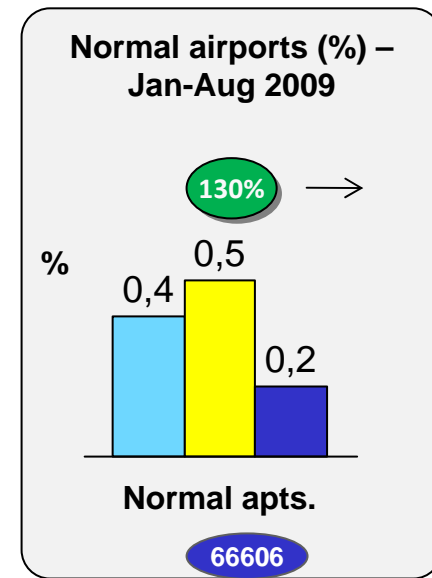
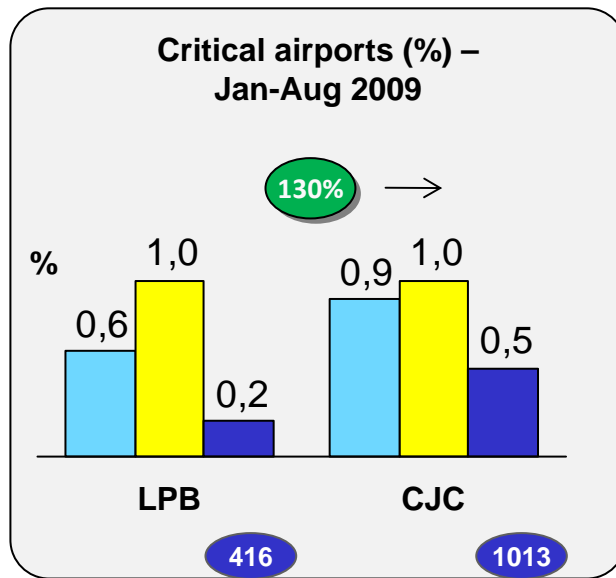
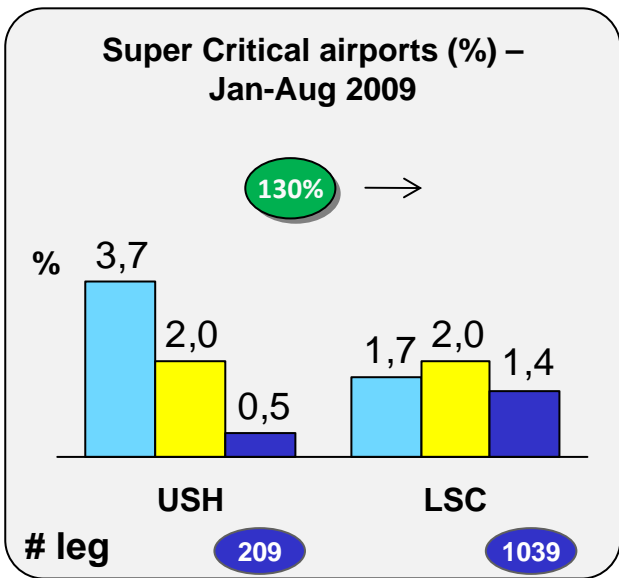
Reactive

- AVSIS (Aviation Safety Information System)
- Safety Investigations



ATO	C/Daño	S/Daño	Tasa	Razon
CUZ	6	5	6,71	55%
PMC	2	3	3,24	40%
LIM	2	4	0,61	33%
SCL	2	26	0,50	7%
TPP	1	3	10,00	25%
PEM	1	5	7,40	17%
CIX	1	14	6,96	7%
TRU	1	3	6,91	25%
MEX	1	1	5,61	50%
ZCO	1	6	3,98	14%
AQP	1	1	2,36	50%
EZE	1	3	1,40	25%





Safety Investigations

Based on HFACS

I.e.: MEDA

- A maintenance-related event can be caused by an error or an error/violation combination.
- Maintenance errors are not made on purpose and result from a series of contributing factors.
- Most of the contributing factors to errors and/or violations are under management control.
- Therefore, improvements can be made so that these factors do not contribute to future events.

Our Corporate Safety Management System Tools:

Proactive

- Industry and Internal Analysis
- Risk Management System
- LOSA (Line Operations Safety Audit)
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- A & D Program

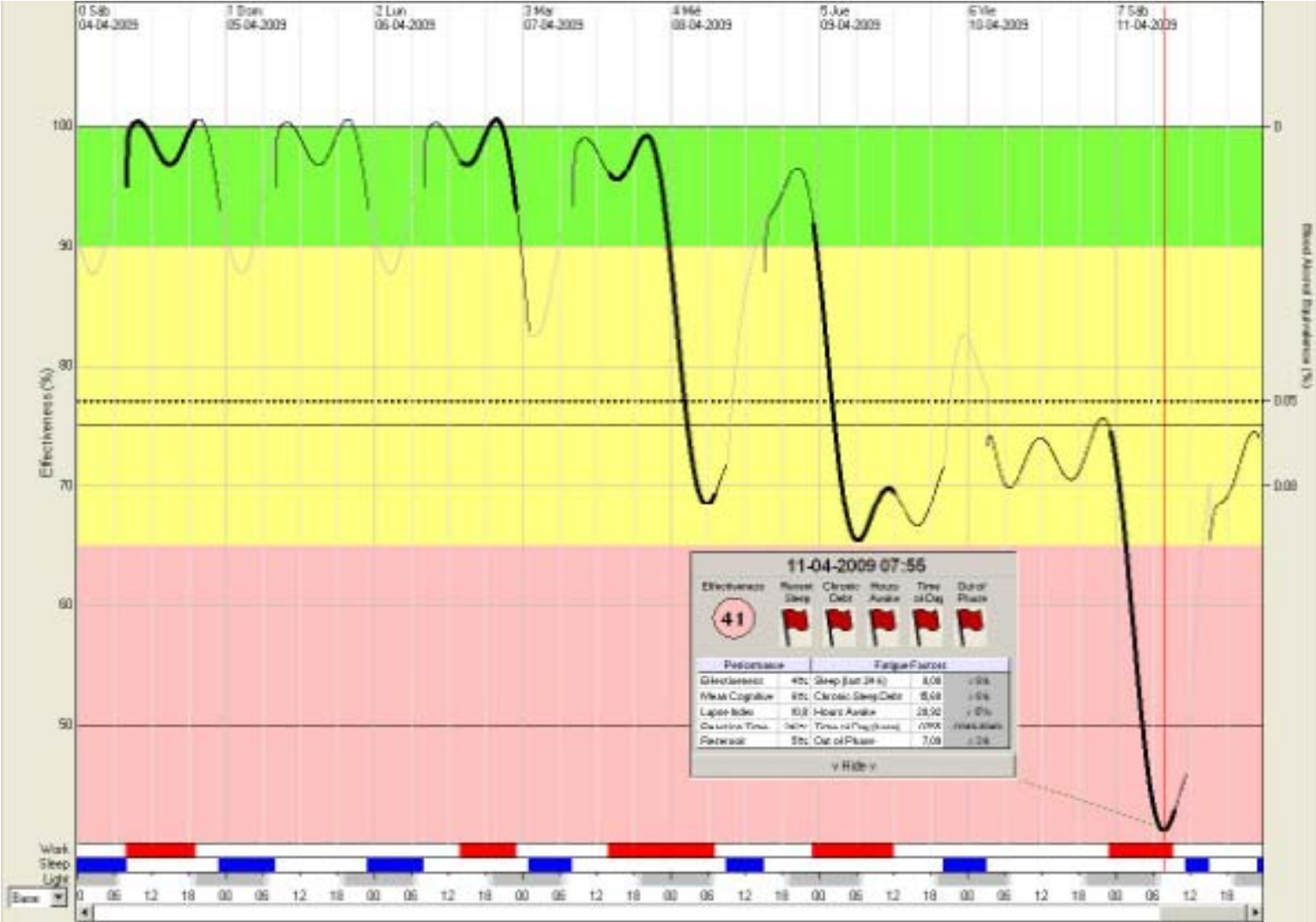
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Predictive

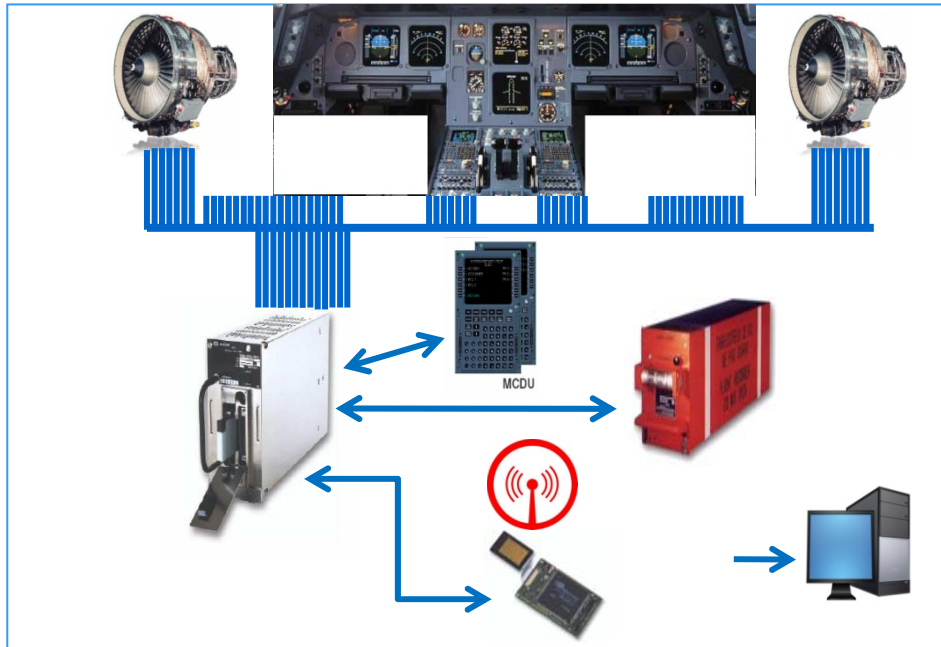
- FRMS (Fatigue Risk Management System)
- FDM (Flight Data Management)

Fatigue Risk Management System

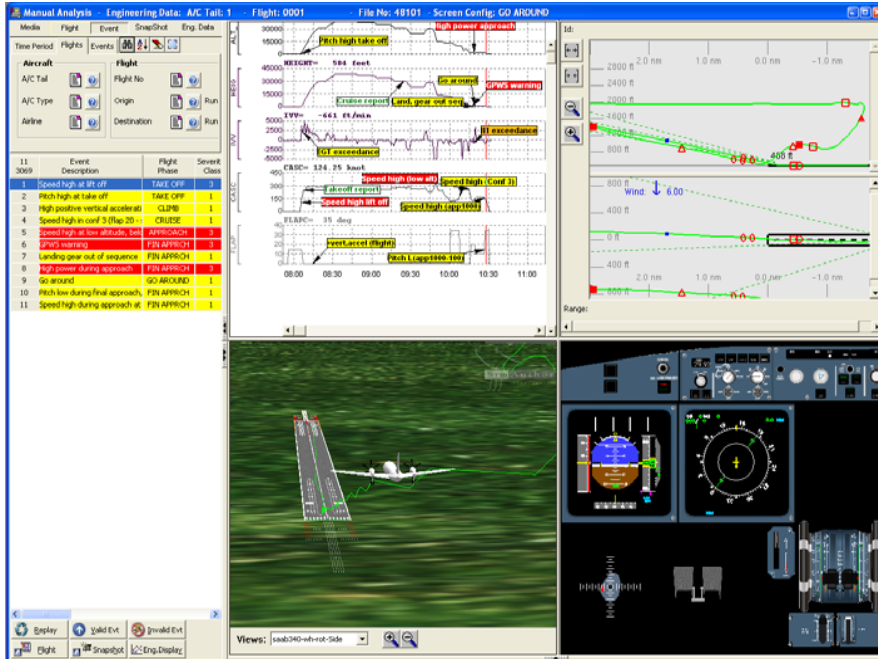


Our Flight Data Management:

Investment in Technology to monitor our flights since 2003



Flight Data Management: Statistics



- **Safety**

Unstabilized Approach, GPWS , Tail Strike

- **Exceedance**

EGT exceed TO – Speed high, etc.

- **Fuel**

Fuel flow – Taxi In/out – Fuel TOC/TOD.

- **Aircraft Performance Monitoring (APM)**

Jumping in...

Difficulties

- Lack of standardized regulations
- Regulations don't encourage reporting
- Poor Safety Culture in the region
- Lack of familiarization and standardization of the Quality Management
- Big effort to sensitize and train all levels in operational areas
- Investments in new technologies: FDM and LOSA
- Re-definition of the organization towards SMS functions

Contributors

- IOSA adoption
- Alliances/CodeShare requisites
- ICAO SMS Manual and Implementation Guide, IATA SMS, and other
- Prior training of SMS facilitators (DGAC/LAN)
- SMS concepts included in training program of operational areas
- Operational areas with certificated QA Systems
- Safety Audits Programme
- Alliances Benchmarking

“Safety in times of crisis, our permanent challenge”

- Economic and Aviation Policy in Chile
- LAN’s Business Strategy
- LAN SMS Principles
- **Future challenges**

Our Corporate future challenges

To continue growing as a Safe, Standardized, Creative and Innovator Operator

To work in cooperation with Industry, Manufacturers, other Operators and Authorities

Conclusion

- **Safety of our operations is a shared responsibility by everyone in LAN.**
- **Our Safety Culture is based on determined value. It is fair, well informed and encourages permanent improvement.**
- **We carry out OACI's Safety Standards and Recommended Practices (SARPs). We keep one of the best safety records and practices in the industry.**
- **Our SMS has the structure and technology to understand, manage and control the risks in our operations.**

THANK YOU



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