



SOUTH AMERICAN REGIONAL MEETING ON AIR ACCIDENT / INCIDENT INVESTIGATION (AIG)

Lima, Perú / 18 - 20 March 2014



18 mar 2014

AN OVERVIEW OF CENIPA

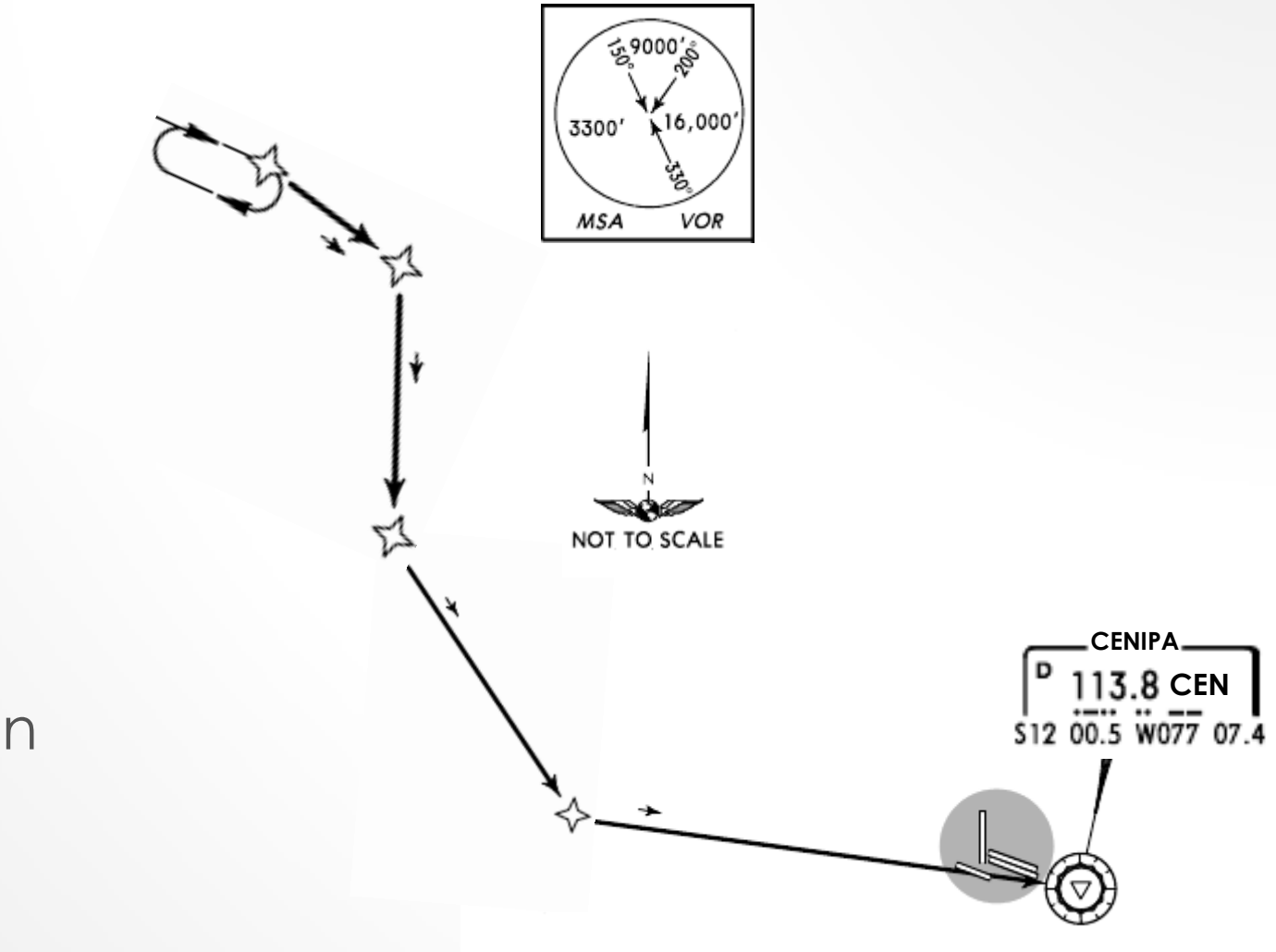
THE BRAZILIAN AERONAUTICAL
ACCIDENT INVESTIGATION AND
PREVENTION CENTER

Alexandre **Gomes da Silva** – Lt. Col.



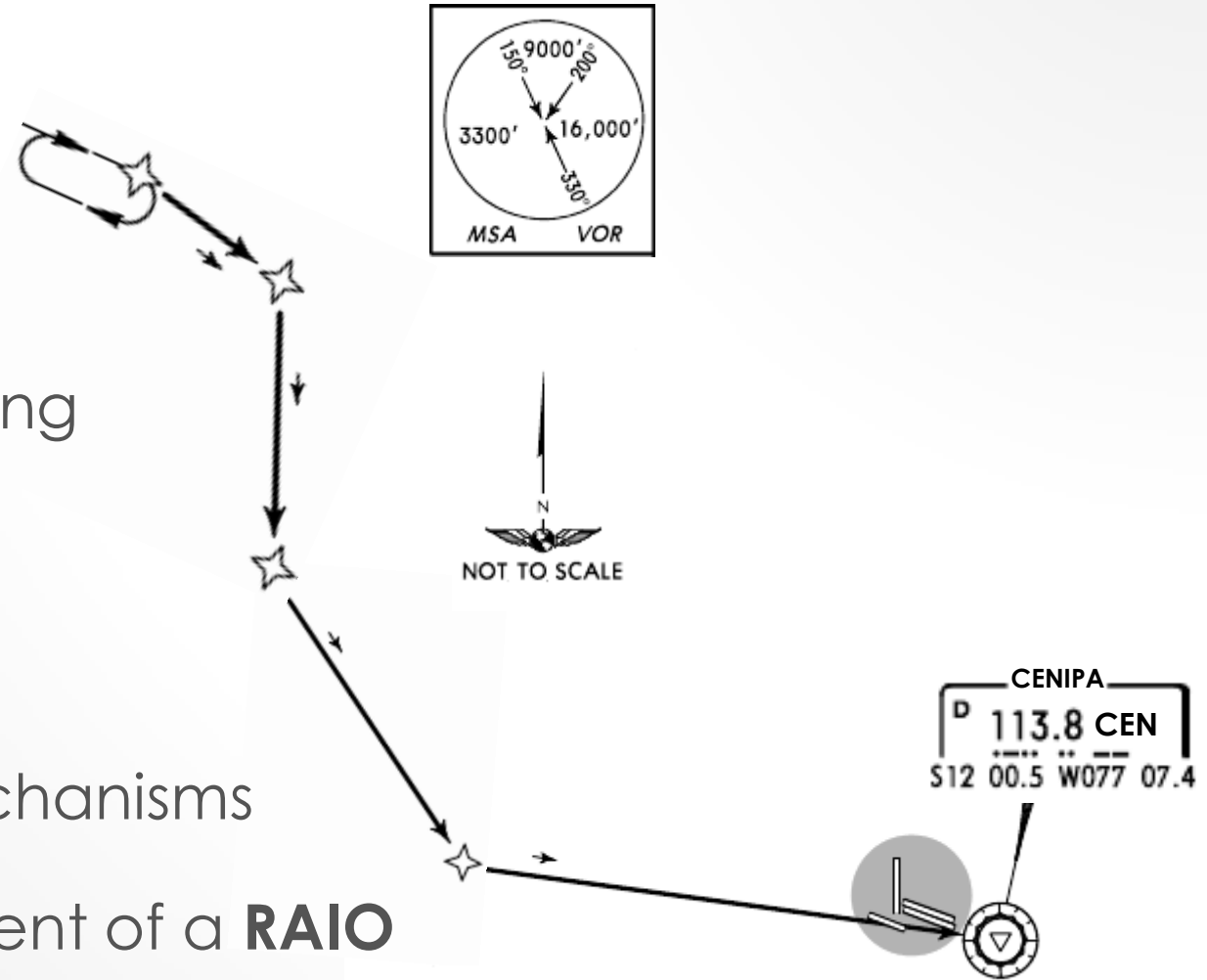
FLIGHT PATH

1. Introduction
2. Infrastructure
3. AIG Guidance Material
4. AIG equipment
5. How CENIPA is funded
6. Availability of Transportation
7. Communications



FLIGHT PATH

8. Personnel
9. Training Programs
10. Availability to provide AIG training
11. Main difficulties
12. Needs
13. Availability of Cooperation Mechanisms
14. Vision regarding the establishment of a **RAIO**



INTRODUCTION



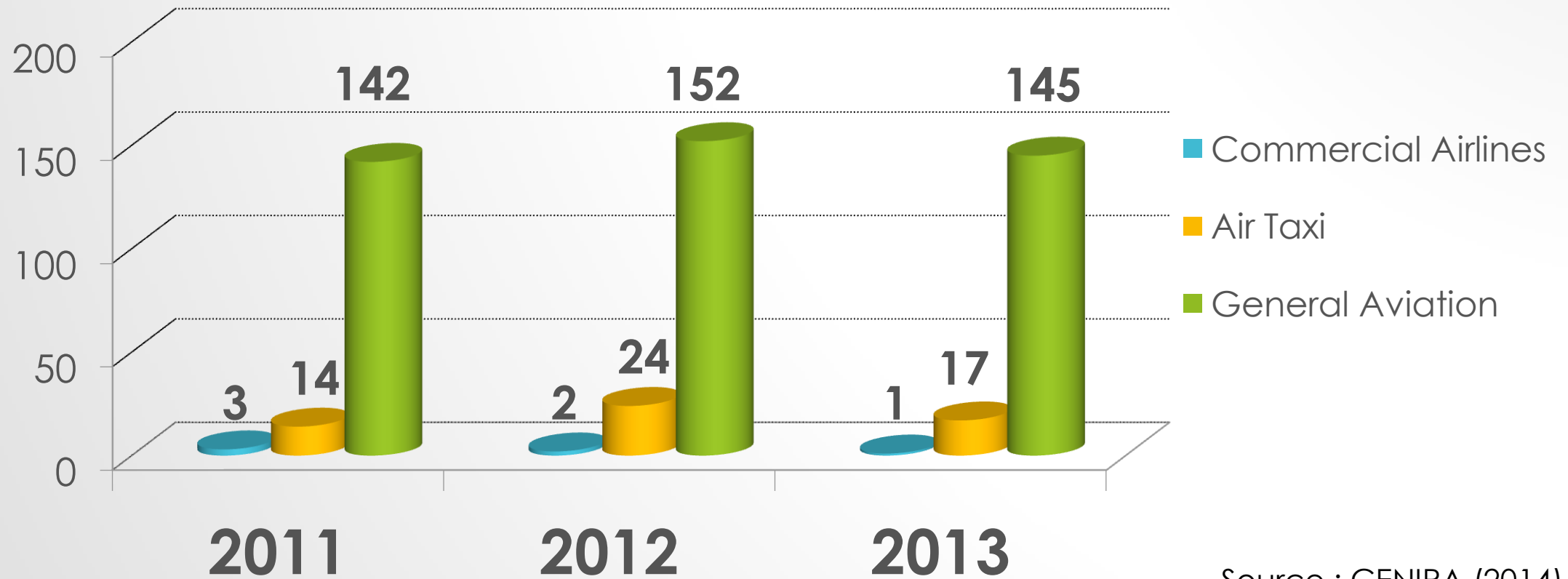
Our Aviation Numbers

Source: ANAC, 2013

- + 19,400 Aircraft
- + 50,000 Pilots
- + 10,000 Flight Attendants
- + 3,500 Aerodromes
- + 15 Commercial Airlines (FAR 121)
- + 200 Air Taxi companies (FAR 135)
- + 80 Million Passengers per year

INTRODUCTION

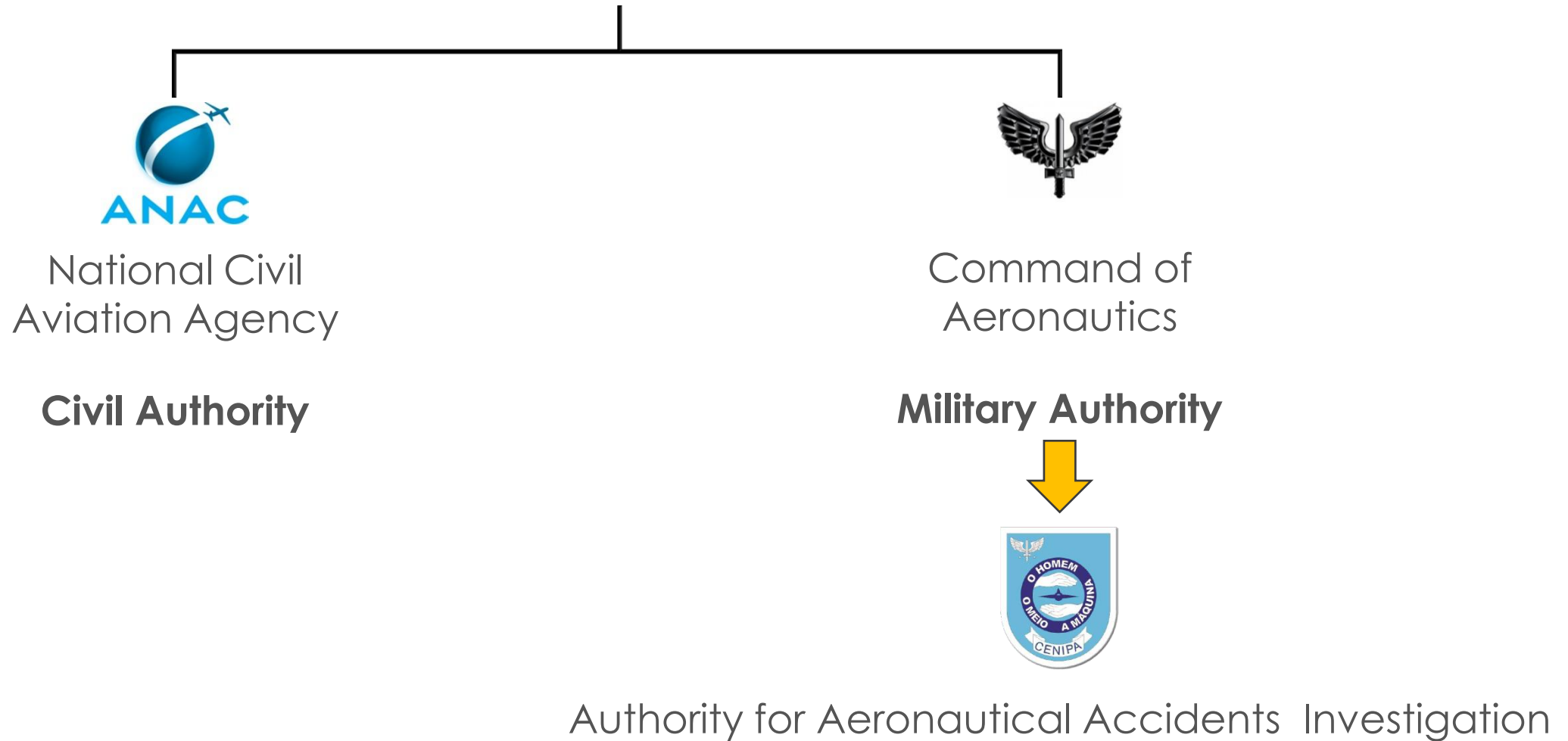
Aeronautical Accidents in Brazil



Source : CENIPA (2014)

INTRODUCTION

Brazilian Aviation Authorities



INFRASTRUCTURE



CENIPA headquarters in Brasília, DF



CENIPA

Aeronautical Accidents Investigation and Prevention Center

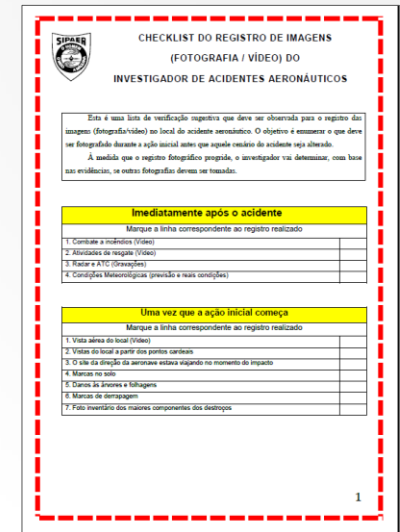
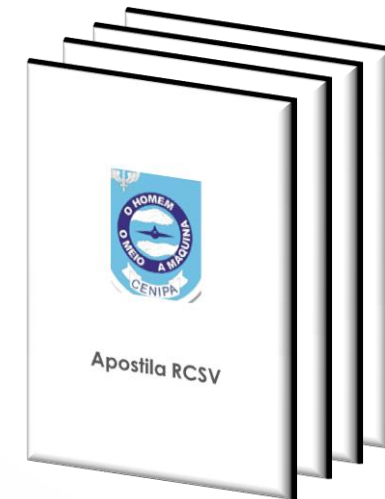
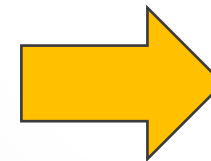
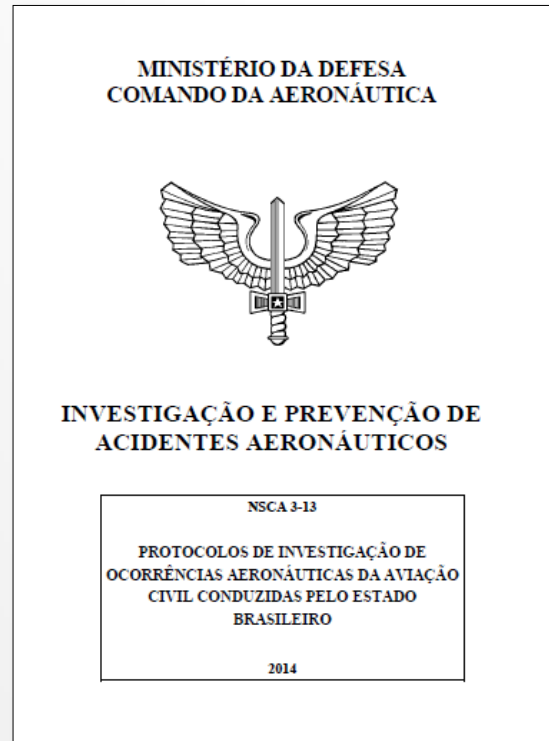
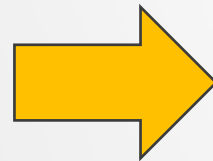
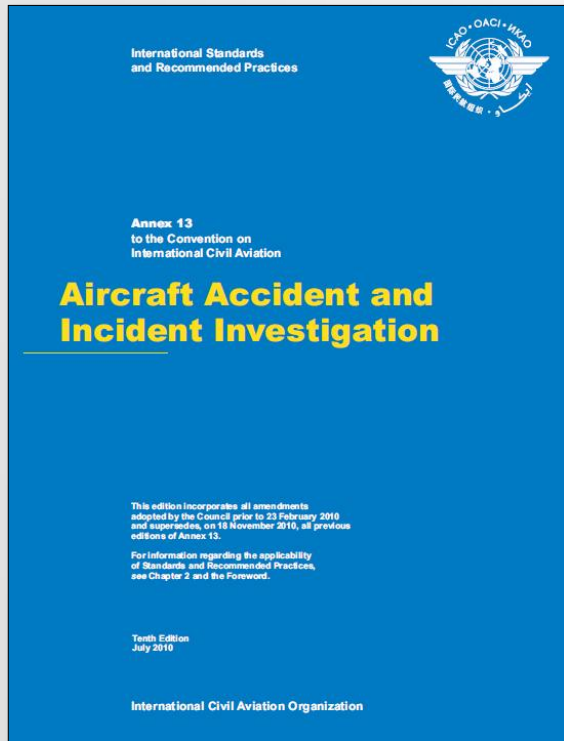


INFRASTRUCTURE



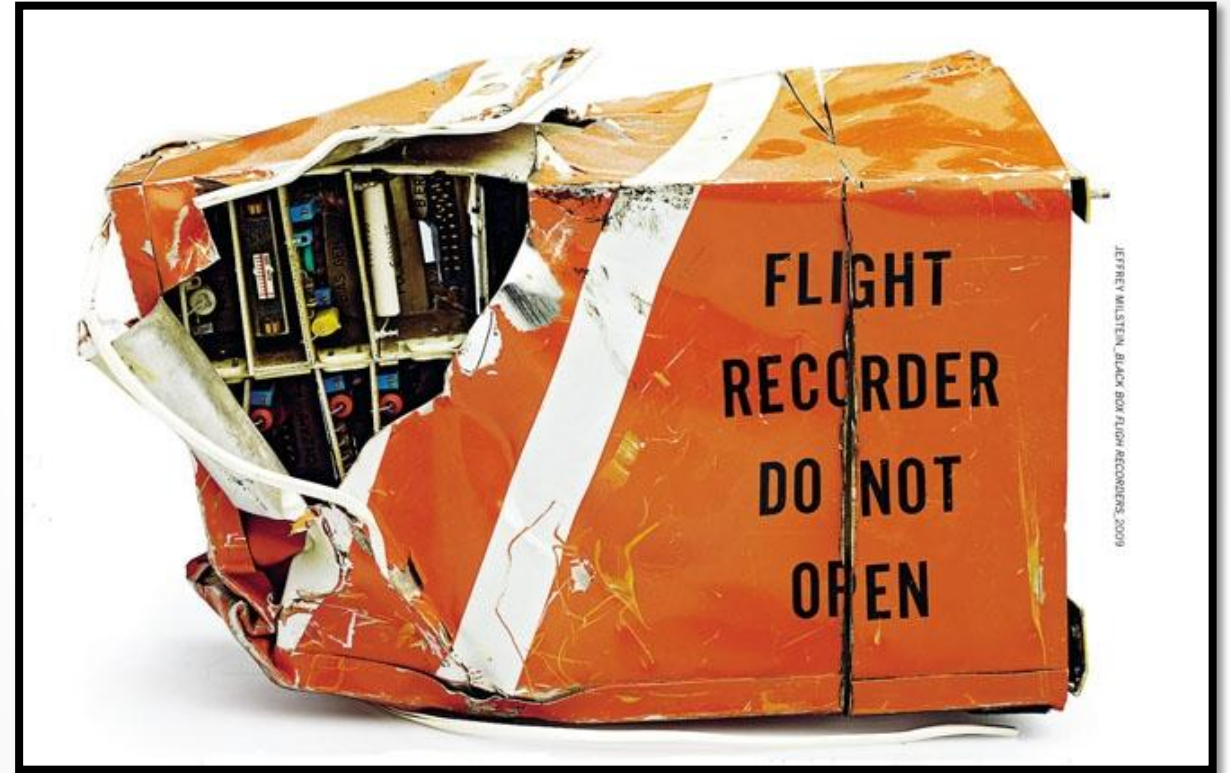
Regional Offices	City
SERIPA 1	Belém, PA
SERIPA 2	Recife, PE
SERIPA 3	Rio de Janeiro, RJ
SERIPA 4	São Paulo, SP
SERIPA 5	Porto Alegre, RS
SERIPA 6	Brasília, DF
SERIPA 7	Manaus, AM

AIG GUIDANCE MATERIAL



CENIPA Training Guidelines

AIG EQUIPMENT



The **CENIPA LABDATA** has modern equipment for flight data retrieval and readout. Several countries have already sent flight recorders to the CENIPA LABDATA and have had successful data readouts.

AIG EQUIPMENT



CENIPA LABDATA

HOW CENIPA IS FUNDED



Brazilian Federal Budget



**Command of
Aeronautics**



1) Average annual budget - **\$ USD 5.0 million**

2) *This amount* covers expenses for training, courses, trips, as well as all administrative costs such as electricity bill, purchase of equipment, services, etc.

3) This value **does not include** payment of staff

AVAILABILITY OF TRANSPORTATION



✓ CENIPA and SERIPAS have their own fleet of cars and pickups (4WD);



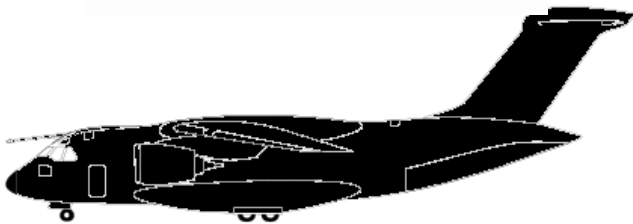
✓ When necessary, CENIPA resorts to Cooperation Agreements made with Brazilian Airline Companies (Priority boarding);



✓ Also car rental contracts, especially for occurrences in small towns;



✓ In special cases, such as when the crash-site is hard to reach, the Brazilian Air Force (FAB) provides us with air transportation and support.



COMMUNICATIONS



COMMUNICATIONS

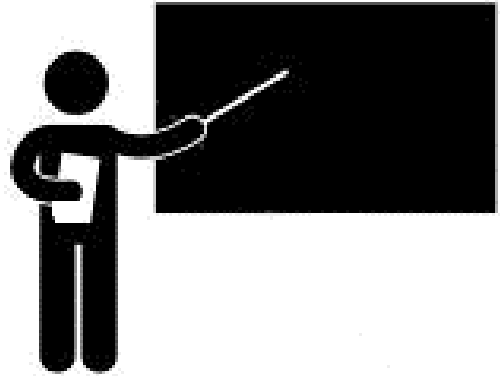
www.cenipa.aer.mil.br

The image shows a screenshot of the CENIPA website. At the top left is the CENIPA logo, which includes a shield with the text 'O HOMEM O BEM A MÁQUINA' and 'CENIPA'. To the right of the logo is the word 'CENIPA' in large blue letters, followed by the full name 'CENTRO DE INVESTIGAÇÃO E PREVENÇÃO DE ACIDENTES AERONÁUTICOS'. Below this is a navigation bar with several menu items: 'Comunicação de Ocorrências', 'RCSV', 'Estatísticas', 'Risco Aviário', 'Raio Laser', and 'Risco Baloeiro'. The 'Comunicação de Ocorrências' item is circled in red. A dropdown menu is open under this item, showing two main categories: 'Aeronave Civil' and 'Aeronave Militar', both also circled in red. Under 'Aeronave Civil', there are three sub-items: 'Formulário Online - Aeronave Civil', 'Telefone de Sobreaviso', and 'Cartão de Comunicação de Ocorrências'. Under 'Aeronave Militar', there are three sub-items: 'Formulário Online - Aeronave Militar', 'Baixar Formulário', and 'Telefone de Sobreaviso'. To the right of the navigation bar is a search box labeled 'Pesquisar...'. Below the navigation bar, the main content area is partially visible, showing the text 'de Ocorrência' and 'no Sistema de Gerenciamento Integrado da Prevenção de Acidentes'. On the right side of the page, there is a 'Campanha de Prevenção' section with a poster that reads 'Apontar laser para aviões pode matar centenas de pessoas!' and 'é crime'.

PERSONNEL

	City	Personnel	Qualified Personnel (Investigators and experts)
CENIPA	Brasília, DF	125	41
SERIPA 1	Belém, PA	17	9
SERIPA 2	Recife, PE	20	14
SERIPA 3	Rio de Janeiro, RJ	31	15
SERIPA 4	São Paulo, SP	26	18
SERIPA 5	Porto Alegre, RS	14	10
SERIPA 6	Brasília, DF	15	9
SERIPA 7	Manaus, AM	17	7
TOTAL		265	123

TRAINING PROGRAMS



- ✓ The CENIPA has its **own training center** also called “*Prevention Institute*” with a wide variety of courses;
- ✓ Since 1970, the CENIPA has trained over **10,000** people, including citizens from 20 other countries;
- ✓ The Aircraft Accident Investigation Course is our flagship, through which over **3,700 investigators** have already been trained.

TRAINING PROGRAMS



2014 Courses

Basic Course in Aeronautical Accident Prevention (Distance Learning)	CBPAA-EAD
Course in Aeronautical Accident Prevention	CPAA
Course in Aeronautical Accident Prevention (Spanish Language)	CPAA-LE
Course in Aeronautical Accident Prevention – Aircraft Maintenance	CPAA – FM
Course in Aeronautical Accident Prevention – Air Traffic Control	CPAA - CEA
Safety Management System (SMS) Training	SGSO
Human Factors in Aviation Safety	HFAS
Aircraft Accident Investigation Course	CIAA



CENIPA Wreckage Lab



CENIPA Classroom

AVAILABILITY TO PROVIDE AIG TRAINING



- ✓ All courses are free of charge. Accommodation is not included, and must be booked separately.
- ✓ All courses used to be taught **only in Portuguese**. However, in **2013**, for the first time, an Accident Prevention Course was delivered in **Spanish**.
- ✓ The Aircraft Accident Investigation Course is limited to **80 participants**.
- ✓ The CENIPA **does not offer** Advanced Courses on Aircraft Accident Investigation;

MAIN DIFFICULTIES

CENIPA can not meet the demand of the Brazilian Society for training people in Aviation Safety activities.

NEEDS

In Brazil, there still aren't Universities or Training Centers specialized or dedicated to teaching accident investigation matters.

AVAILABILITY OF COOPERATION MECHANISMS

- ✓ Brazil is a country with a cooperation policy.
- ✓ The Brazilian Ministry of Foreign Affairs has a Cooperation Agency specialized in these subjects.

AVAILABILITY OF COOPERATION MECHANISMS

www.abc.gov.br

The screenshot displays the website for the Agência Brasileira de Cooperação (ABC). The header features the logo of the Ministério das Relações Exteriores and the ABC logo. A navigation menu includes 'Sobre a ABC', 'Cooperação Técnica', 'Apresentação de Projetos', 'Projetos', 'Imprensa', and 'Links'. The main content area is titled 'Apresentação de Projetos de Cooperação Técnica Multilateral' and includes a sub-section 'Orientação para Apresentação de Projetos' with links to 'Diretrizes para o Desenvolvimento da Cooperação Técnica Internacional Multilateral e Bilateral' and 'Manual de Orientação para Formulação de Projetos de Cooperação Técnica Internacional (PCT)'. A disclaimer notes that the manuals are in PDF format and require Adobe Acrobat Reader. A 'voltar' button is located at the bottom right.

Ministério das Relações Exteriores

Destaques do Governo

BRASIL

Home Mapa do site Contato

ABC Agência Brasileira de Cooperação
MINISTÉRIO DAS RELAÇÕES EXTERIORES

Sobre a ABC Cooperação Técnica Apresentação de Projetos Projetos Imprensa Links

Apresentação de Projetos

Cooperação Técnica entre Países em Desenvolvimento

Cooperação Técnica Bilateral

Cooperação Técnica Multilateral

Apresentação de Projetos de Cooperação Técnica Multilateral

Orientação para Apresentação de Projetos

- › Diretrizes para o Desenvolvimento da Cooperação Técnica Internacional Multilateral e Bilateral
- › Manual de Orientação para Formulação de Projetos de Cooperação Técnica Internacional (PCT)

* Estes manuais estão em formato PDF. É necessário possuir o software Adobe Acrobat Reader para visualizá-lo. Este software pode ser baixado gratuitamente pela internet, no seguinte endereço.

voltar

VISION REGARDING THE ESTABLISHMENT OF A **RAIO**

- ✓ The establishment and management of a Regional Accident and Incident Investigation Organization (RAIO) is an **important step** towards **enhancing Aviation Safety** in the **SAM**;
- ✓ A decision concerning the setting up of a RAIO does not directly interfere with the interests of the Brazilian State since **CENIPA** is **self-sufficient** in the activity of Air Accident Investigation.
- ✓ CENIPA is willing to assist in the establishment of a RAIO, but **our staff and budget limitations** should be taken into account.





18 mar 2014

AN OVERVIEW OF CENIPA

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