

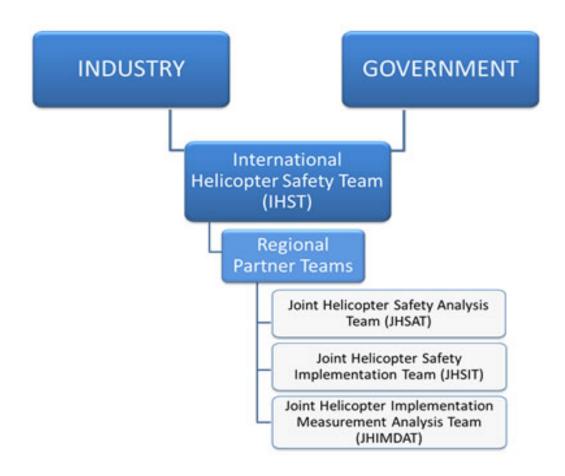
BHEST President: Antonio Modesto

Overview

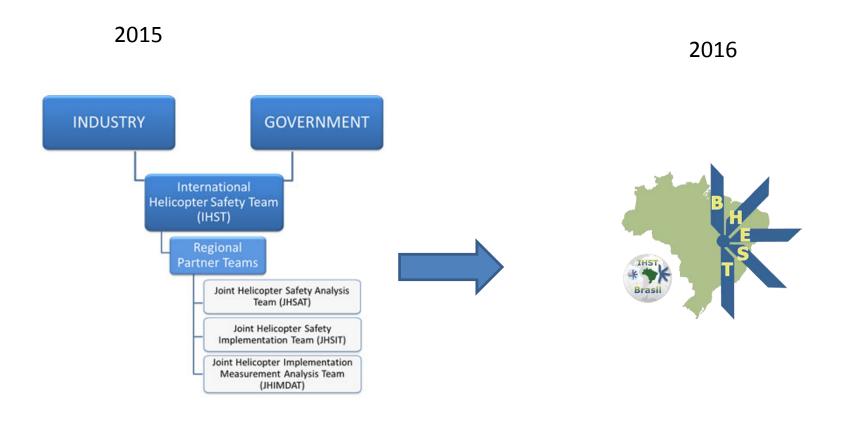
- ✓ IHST BHEST
- ✓ Accidents analyses
- ✓ Products
- ✓ Results
- ✓ Current focus
- ✓ Plans for promotion
- ✓ Support from stakeholders



IHST – International Helicopter Safety Team 2005 - 2017

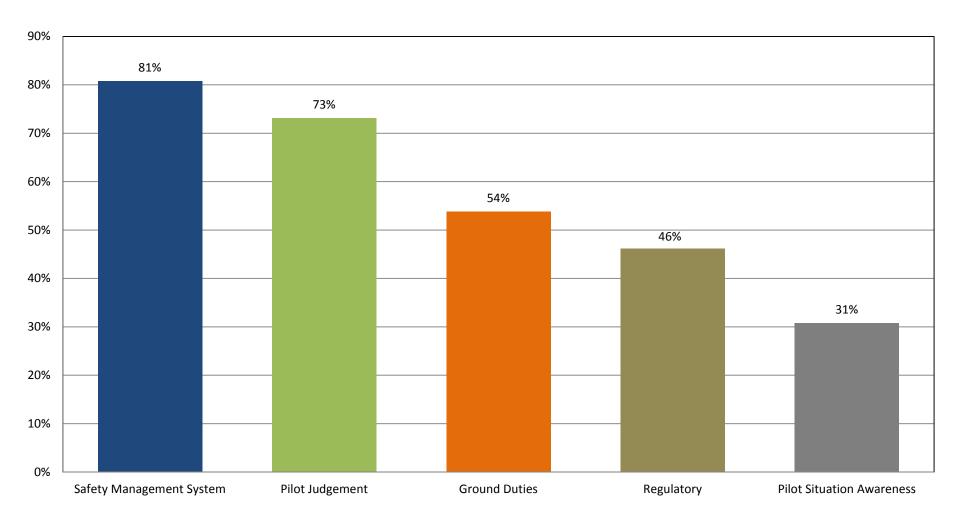


IHST – International Helicopter Safety Team 2005 - 2017





Analyses results - 2000, 2006 e 2007





Comparing among Continents

	Europe	USA	Brazil
Pilot Judgment & Actions	68%	84%	73%
Safety Management	52%	43%	81%
Ground Duties	40%	37%	54%
Data Issues	37%	73%	8%
Pilot Situation Awareness	34%	31%	31%
Mission Risk	28%	19%	27 %
Part / System Failure	22%	28%	15%
Maintenance	14%	20%	27%
Regulatory	8%	20%	41%



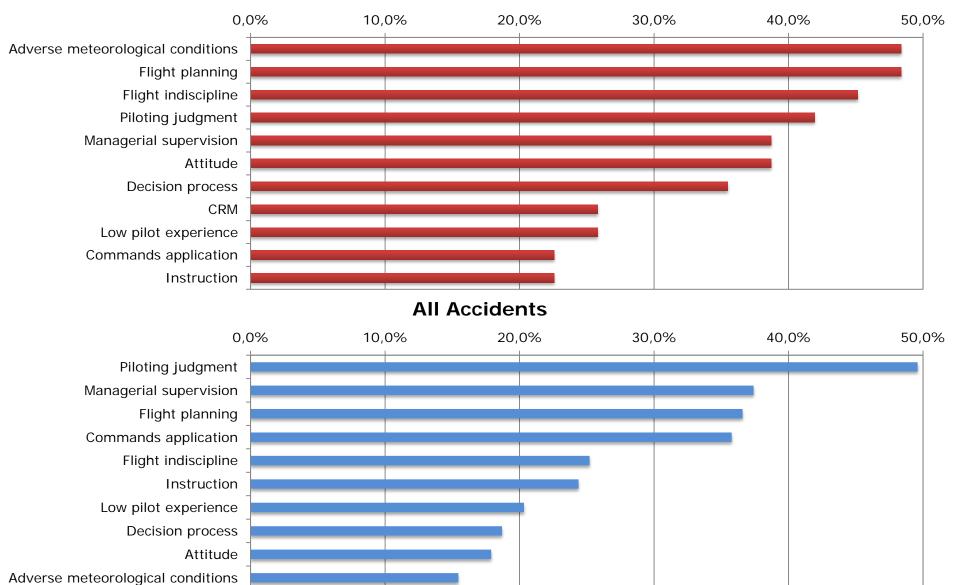
Fatal Accidents Analysis Results

Contributing Factor	Occurrences	% of accidents
Adverse meteorological conditions	15	48.4%
Flight planning	15	48.4%
Flight indiscipline	14	45.2%
Piloting judgment	13	41.9%
Managerial supervision	12	38.7%
Attitude	12	38.7%
Decision process	11	35.5%
CRM	8	25.8%
Low pilot experience	8	25.8%
Commands application	7	22.6%
Instruction	7	22.6%
High motivation	7	22.6%
Managerial planning	7	22.6%
Training and capacitation	6	19.4%
Organizational culture	5	16.1%
Judgment	4	12.9%
Disorientation	3	9.7%
Fatigue	3	9.7%
Aircraft maintenance	3	9.7%
Communication	3	9.7%
Emotional state	3	9.7%
Organizational processes	3	9.7%

49% of fatal accidents since 2004 analyzed.

Source: CENIPA

Fatal Accidents





Products

- ✓ Translations
 - ✓ EHEST Leaflets (10 out of 6 printed)
 - ✓ IHST USA HFDM Toolkit
 - ✓ IHST USA SMS Toolkit
 - ✓ HAI video subtitles (Autorotations and Wire Environment)
- ✓ 2 IHST Brazil Information Bulletins
 - ✓ Cargo Hook
 - ✓ Hoist
- ✓ Presentations in Seminars and Conferences
 ✓ IHST Brazil folders and banners
 - \checkmark 2012 5 events

 $\sqrt{2014}$ - 4 events

✓ 2013 – 4 events

- $\sqrt{2015}$ 3 events
- ✓ Helicopter Safety Symposium (HELIBRAS) 700+ attendees
- ✓ AIRBUS SMS Road Show



Current Focus



- ✓ Change regulations regarding check-rides
- ✓ Reach out to small operators and flight schools
- √ 4 Working Groups
 - **✓** JHSAT
 - ✓ Training
 - ✓ SMS
 - ✓ Regulations



Support from Stakeholders

- 1. OEM participation:
 - HELIBRAS (Airbus Helicopters) and Robinson more active
 - AgustaWestland and Sikorsky
 - Oil & Gas industry
- 2. Helibras also provides financial support
- 3. ABRAPHE has become a huge player
- 4. ANAC fully committed
- 5. Raising funds is problematic

Thank you !!!



