



# STATE COMMISSION ON AIRCRAFT ACCIDENTS INVESTIGATION 2017

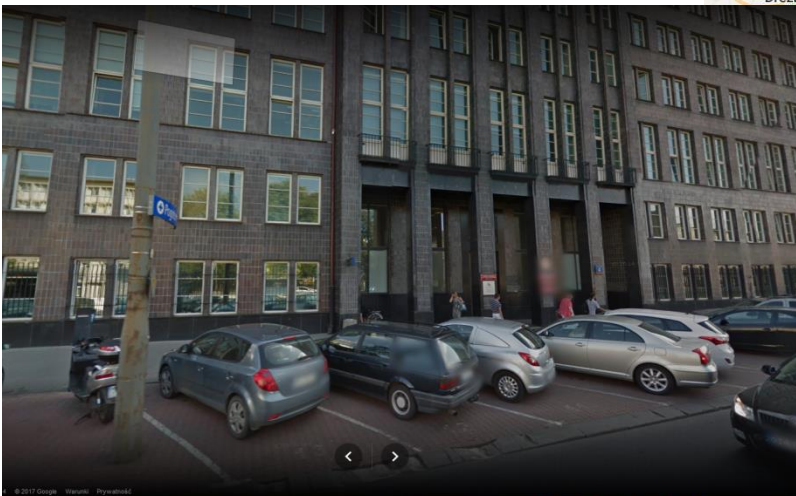
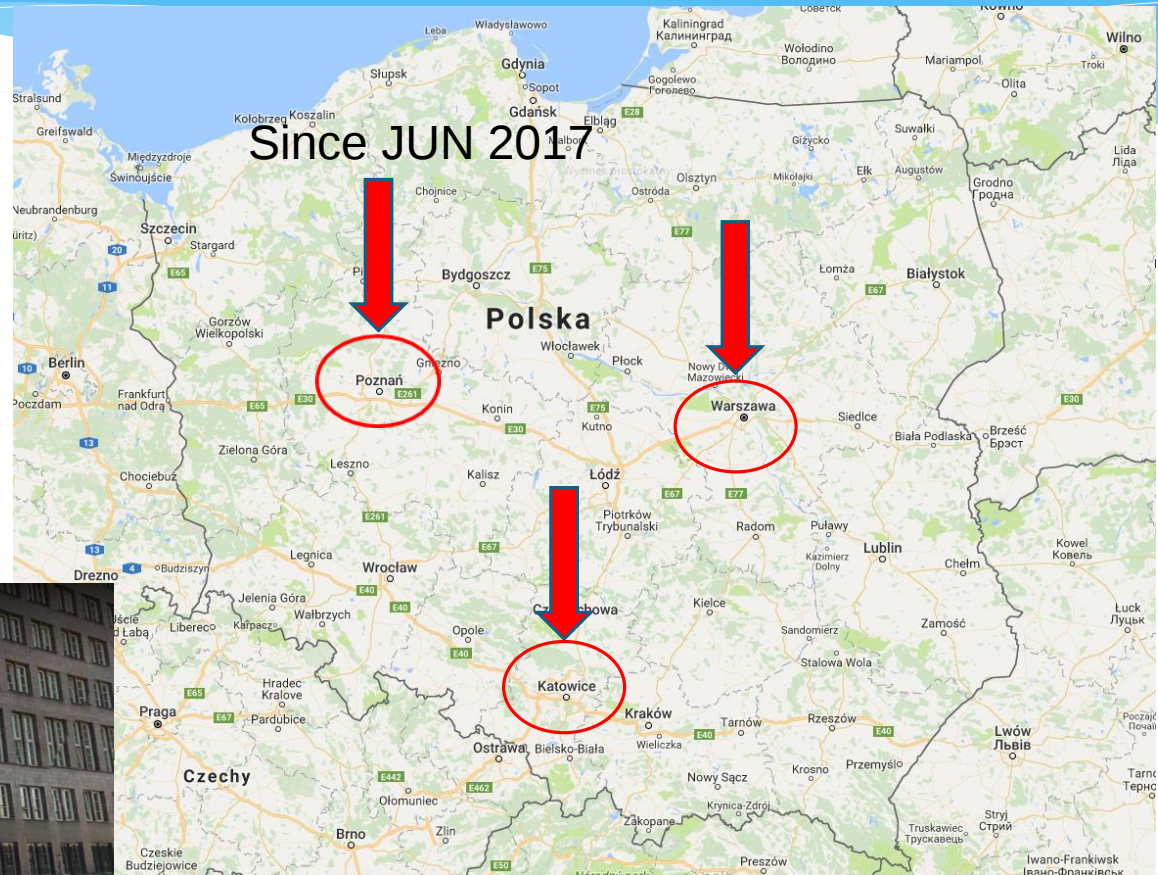
SCAAI Chairman  
Col dipl Andrzej LEWANDOWSKI

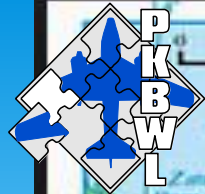




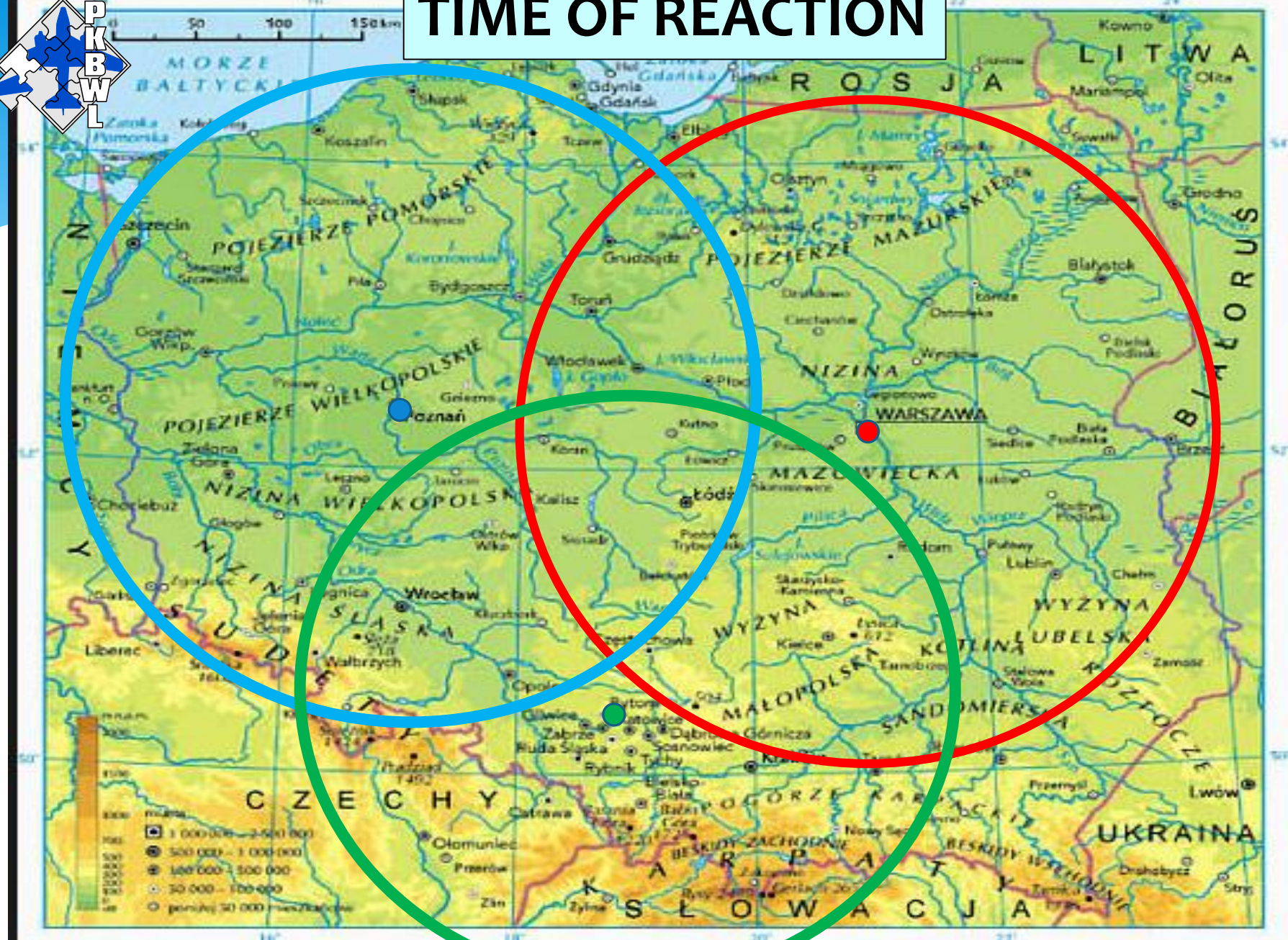
# Polish State Commission on Aircraft Accidents Investigation

- \* **Location :**
- \* **Warszawa - HQ**
- \* **Katowice - LO**
- \* **Poznań - LO**





# TIME OF REACTION





4" INITIAL 12 H.P.  
160 lbs dry

LINE CODE

WING SEAM

FRONT SPAR IS JOINED  
AT THIS LINE AND CAN  
BE SEPERATED WHILE  
REAR SPAR IS HINGED  
ALONG SAME LINE

OUTRIGGERS  
UPPER  
LOWER

# SCAAI STRUCTURE

AIRFOIL



SCAAI consists of 13 Investigators,  
from 15 OCT 17 - 14 Investigators

SCAAI CHAIRMAN

Deputy Chairman  
Operation Issues

Deputy Chairman  
Technical Issues

Secretary  
Legal, Administrative  
Issues

INVESTIGATOR

INVESTIGATOR

ADMINISTRATIVE  
SUPPORT

Vacancies

SCAAI EXPERTS

1 2 METERS  
SCALE BARS



4" INITIAL 12 H.P.  
160 lbs dry

FRONT SPAR IS JOINED  
AT THIS LINE  
BE SEPARATE  
REAR SPARS JOINED  
ALONG SAME LINE

WING SEAM

SEWED SEAM LINE  
AT 45° TO SPAN

FABRIC LACING

OUTRIGGERS  
UPPER  
LOWER

POLISH SCAA

# MAJOR INVESTIGATION TEAM STRUCTURE

AIRFOIL TWIST



RUDDER BRACE  
WIRE

UPPER PROPELLER BRACE  
WIRE TO +2 REAR STRUT

WIRE TRAILING EDGE

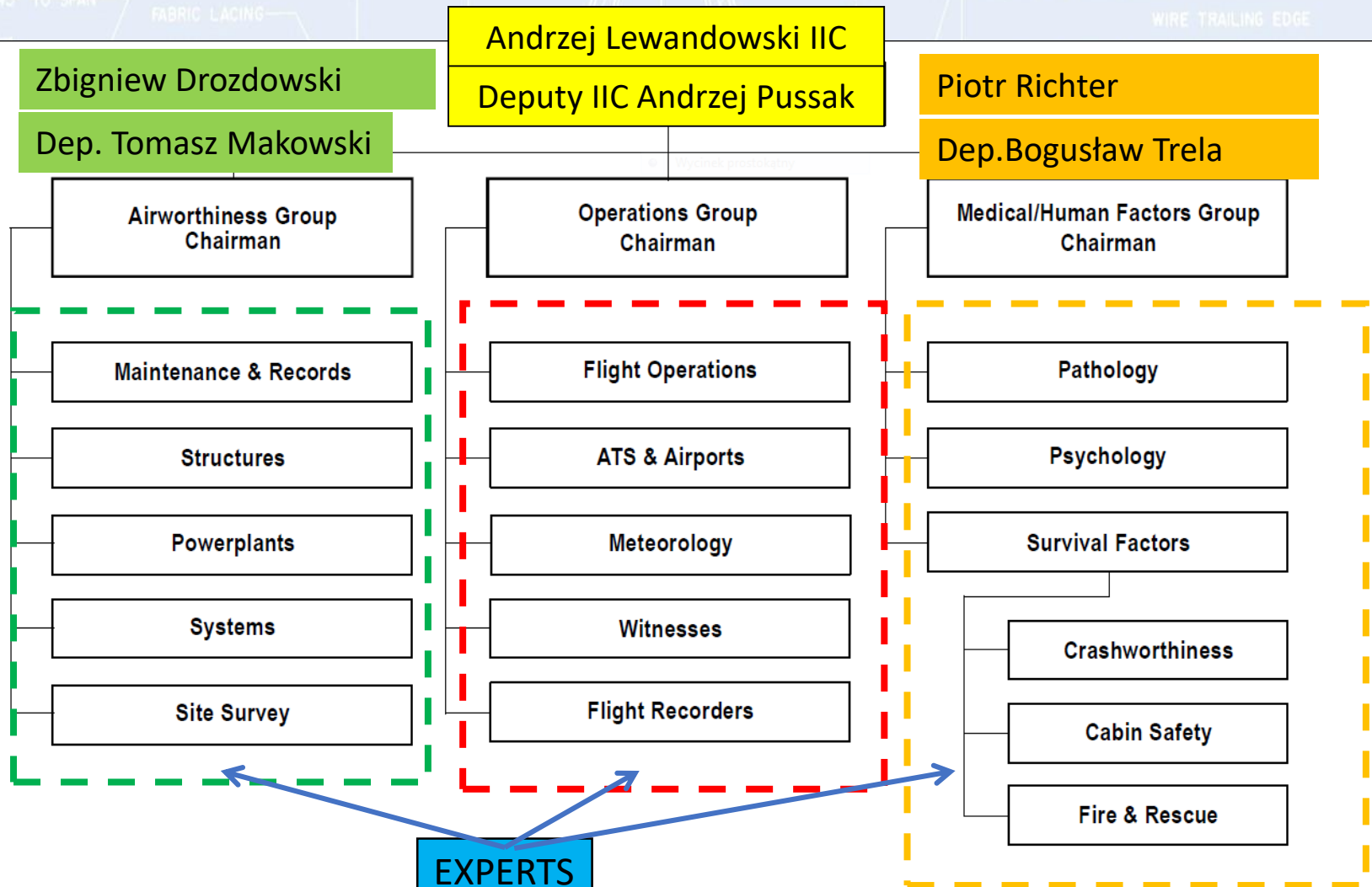
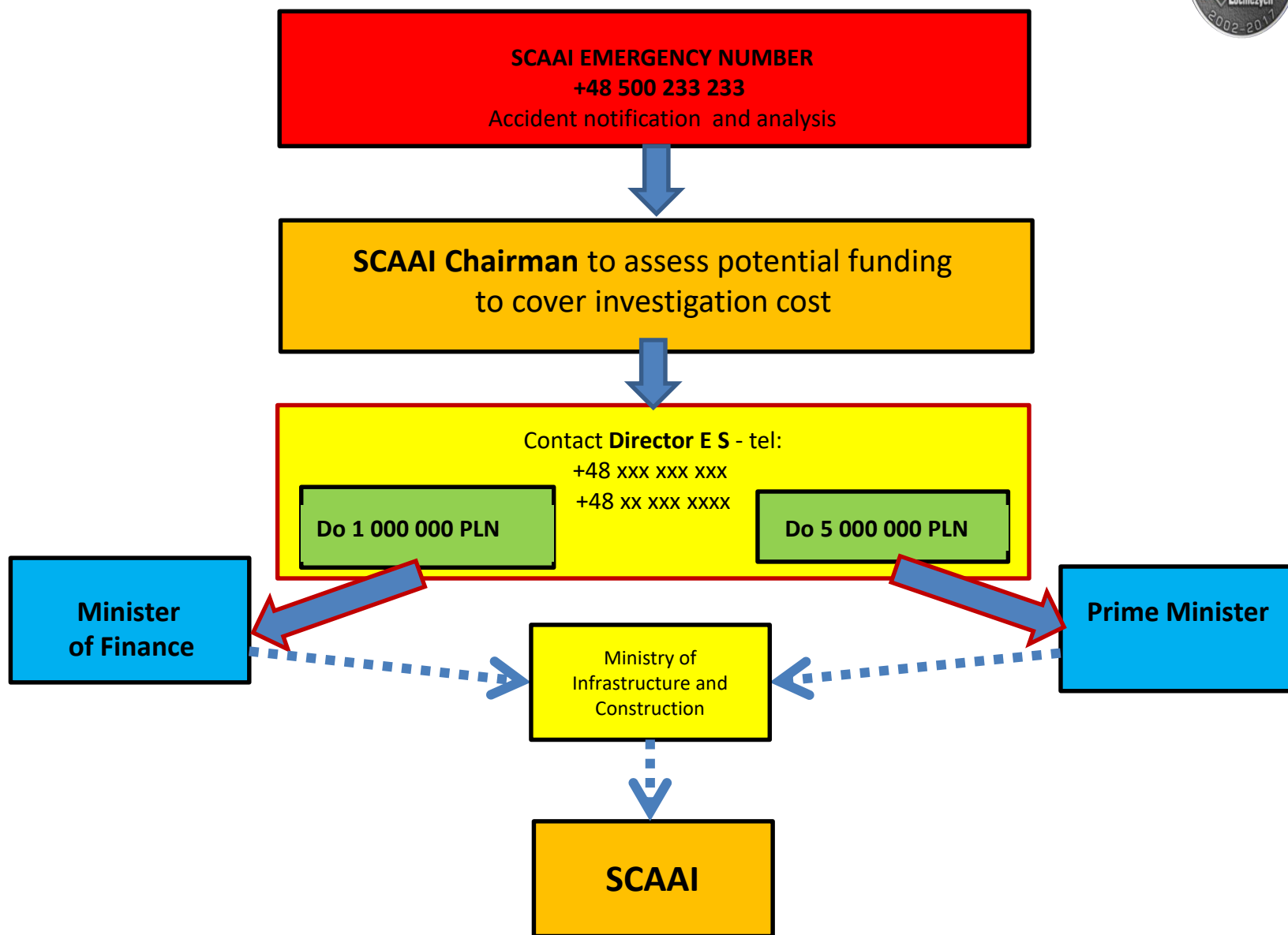


Figure A1-2. Major Investigation Team Organization — B



# How to receive money for big aircraft accident ?





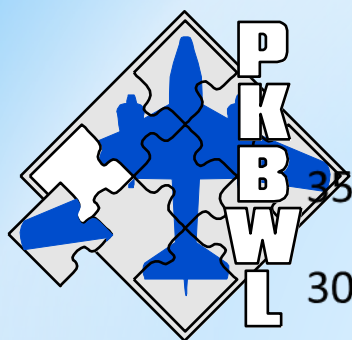
# SCAAI Members (Investigators)

| Year/<br>Month | I  | II | III | IV | V  | VI | VII | VIII | IX | X     | XI   | XII |
|----------------|----|----|-----|----|----|----|-----|------|----|-------|------|-----|
| 2003           | 5  | 6  | 6   | 7  | 7  | 7  | 7   | 7    | 7  | 7     | 7    | 7   |
| 2004           | 7  | 7  | 7   | 8  | 8  | 8  | 8   | 8    | 11 | 11    | 11   | 11  |
| 2005           | 11 | 12 | 12  | 12 | 12 | 12 | 12  | 12   | 12 | 12    | 12   | 12  |
| 2006           | 13 | 13 | 13  | 13 | 13 | 13 | 13  | 14   | 14 | 14    | 14   | 14  |
| 2007           | 14 | 14 | 14  | 14 | 14 | 14 | 13  | 14   | 14 | 13    | 13   | 13  |
| 2008           | 13 | 13 | 13  | 14 | 14 | 14 | 14  | 14   | 14 | 14    | 14   | 14  |
| 2009           | 14 | 14 | 14  | 14 | 14 | 14 | 14  | 14   | 14 | 14    | 14   | 14  |
| 2010           | 14 | 14 | 15  | 15 | 15 | 15 | 15  | 15   | 15 | 15    | 15   | 15  |
| 2011           | 15 | 15 | 15  | 16 | 16 | 17 | 17  | 17   | 17 | 17    | 17   | 17  |
| 2012           | 17 | 17 | 17  | 17 | 17 | 17 | 17  | 16   | 17 | 17    | 17   | 17  |
| 2013           | 17 | 17 | 17  | 17 | 16 | 16 | 16  | 17   | 17 | 17    | 17   | 17  |
| 2014           | 17 | 17 | 17  | 17 | 17 | 17 | 17  | 17   | 17 | 17    | 17   | 16  |
| 2015           | 16 | 16 | 16  | 16 | 16 | 16 | 16  | 16   | 16 | 16    | 16   | 15  |
| 2016           | 15 | 15 | 15  | 15 | 15 | 15 | 15  | 15   | 15 | 15    | 15/6 | 7   |
| 2017           | 7  | 8  | 8   | 9  | 10 | 11 | 12  | 12   | 13 | 13/14 |      |     |

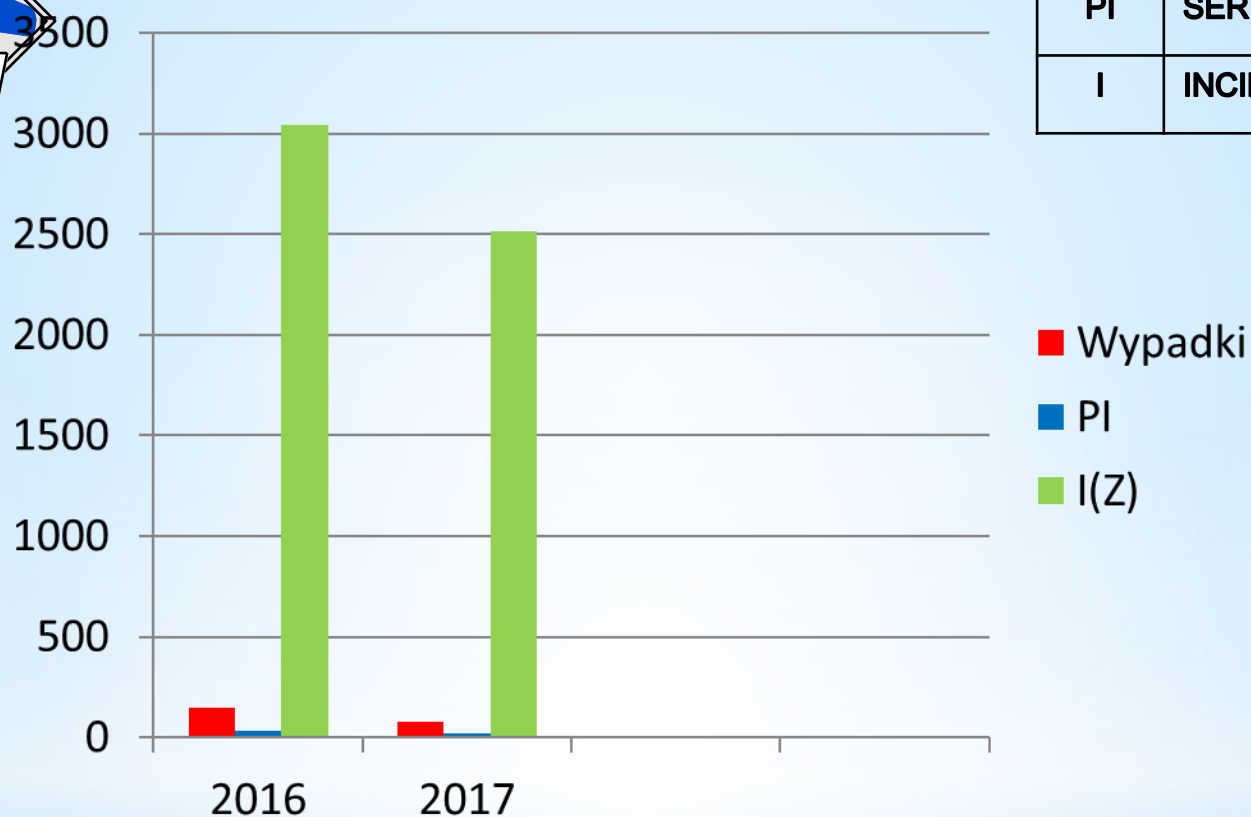


# ACCIDENTS/INCIDENTS

| Year        | Occurences | Types     |            |                   |           | Others |
|-------------|------------|-----------|------------|-------------------|-----------|--------|
|             |            | Accidents | Fatalities | Serious Incidents | Incidents |        |
| 2003        | 203        | 93        | 14         | 2                 | 108       | -      |
| 2004        | 314        | 98        | 16         | 15                | 201       | -      |
| 2005        | 297        | 75        | 10         | 37                | 185       | -      |
| 2006        | 378        | 100       | 16         | 16                | 262       | -      |
| 2007        | 764        | 85        | 19         | 16                | 419       | 244    |
| 2008        | 961        | 76        | 7          | 11                | 479       | 397    |
| 2009        | 1089       | 106       | 16         | 17                | 593       | 371    |
| 2010        | 1437       | 70        | 11         | 11                | 687       | 669    |
| 2011        | 1574       | 94        | 23         | 13                | 628       | 839    |
| 2012        | 1690       | 89        | 12         | 22                | 629       | 950    |
| 2013        | 1980       | 104       | 12         | 13                | 923       | 940    |
| 2014        | 2265       | 104       | 14         | 25                | 1266      | 859    |
| 2015        | 2688       | 151       | 16         | 41                | 1649      | 847    |
| 2016        | 3221       | 148       | 21         | 30                | 2208      | 834    |
| 2017 (I-IX) | 2617       | 78        | 8          | 23                | 1064      | 1452   |



|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |



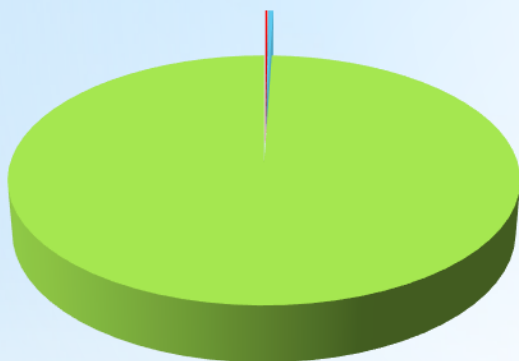
|             | W   | PI | I(Z) |
|-------------|-----|----|------|
| 2016        | 148 | 30 | 3042 |
| 2017 (I-IX) | 78  | 23 | 2516 |



# CAT Operations

|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

2017 - 2043



■ W  
■ PI  
■ I

2016-2270



■ W  
■ PI  
■ I

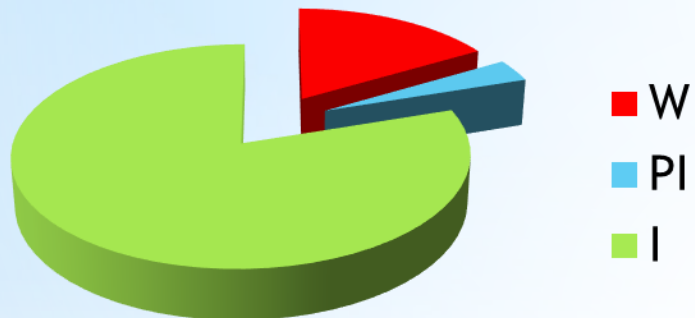
|             | W  | PI | I    |
|-------------|----|----|------|
| 2016        | 25 | 20 | 2225 |
| 2017 (I-IX) | 3  | 8  | 2032 |



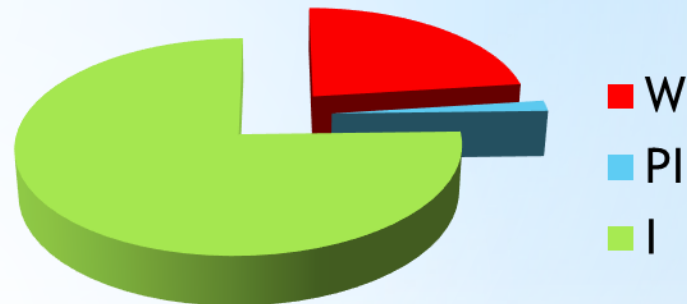
## GA Operations

|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

**2017 - 446**



**2016 - 494**



|             | W   | PI | I   |
|-------------|-----|----|-----|
| 2016        | 113 | 8  | 371 |
| 2017 (I-IX) | 74  | 15 | 357 |



## Aircraft

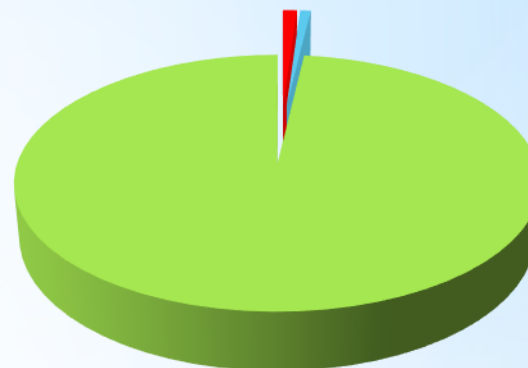
|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

2017 - 2200



■ W  
■ PI  
■ I

2016 - 2254



■ W  
■ PI  
■ I

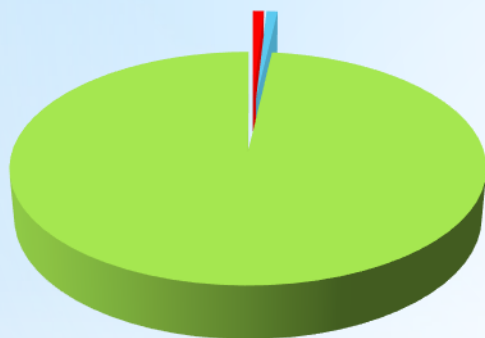
|             | W  | PI | I    |
|-------------|----|----|------|
| 2016        | 24 | 18 | 2212 |
| 2017 (I-IX) | 16 | 14 | 2170 |



# Helicopters

|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

2017 - 110



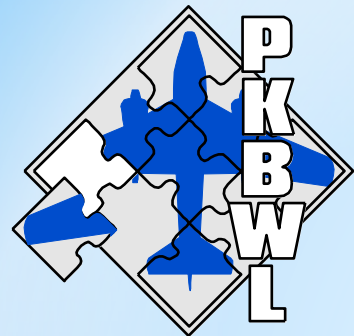
W  
PI  
I

2016 - 119



W  
PI  
I

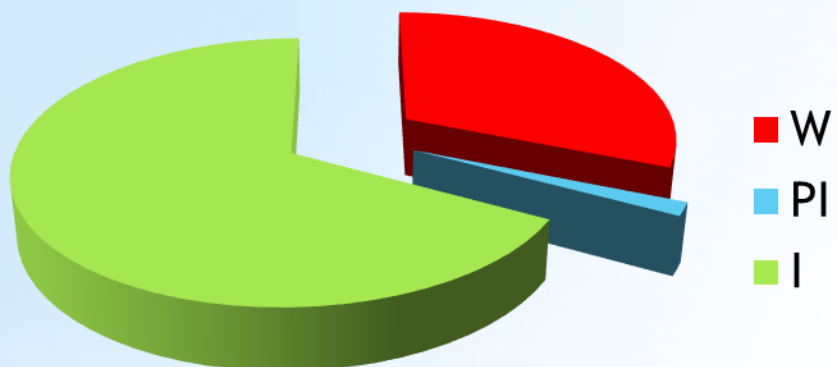
|             | W | PI | I   |
|-------------|---|----|-----|
| 2016        | 4 | 0  | 115 |
| 2017 (I-IX) | 1 | 1  | 108 |



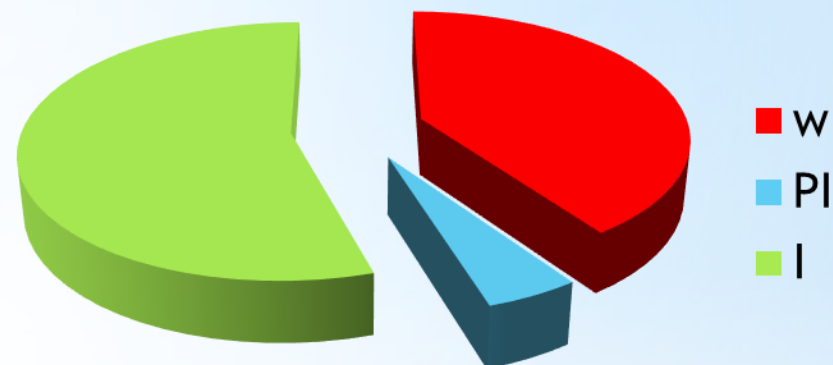
## Gliders

|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

2017 - 61



2016 - 62



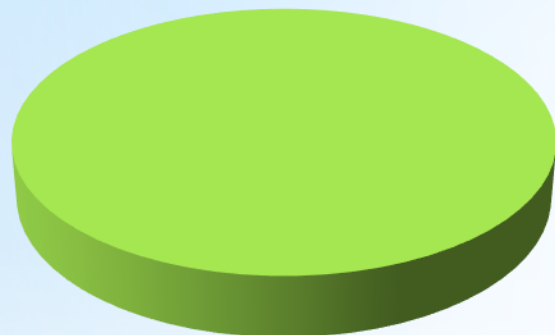
|             | W  | PI | I  |
|-------------|----|----|----|
| 2016        | 25 | 3  | 34 |
| 2017 (I-IX) | 19 | 1  | 41 |



# Balloons

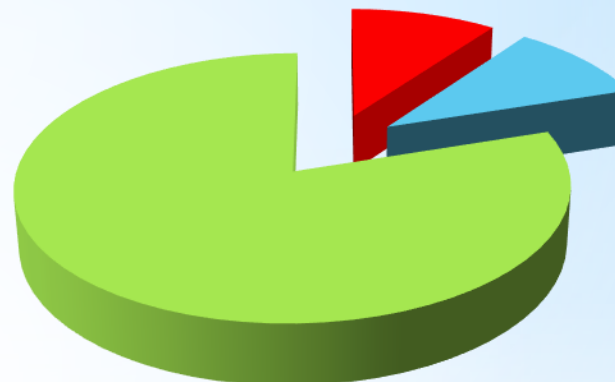
|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

2017 - 4



■ W  
■ PI  
■ I

2016 - 10



■ W  
■ PI  
■ I

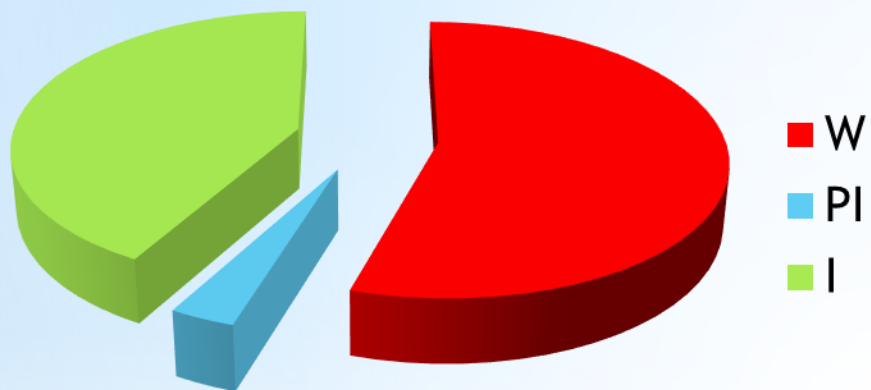
|             | W | PI | I |
|-------------|---|----|---|
| 2016        | 1 | 1  | 8 |
| 2017 (I-IX) | 0 | 0  | 4 |



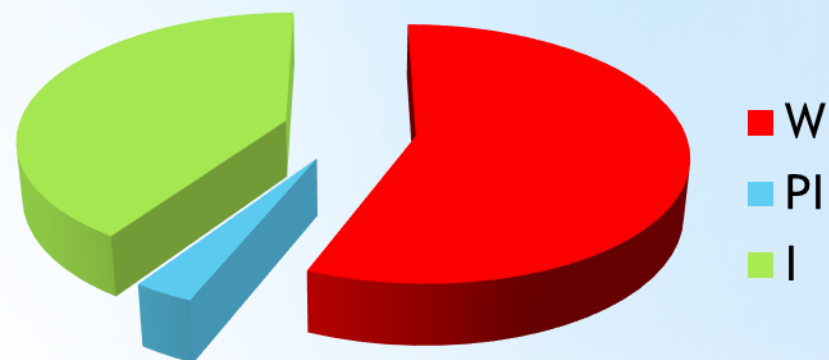
## Paragliders

|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

2017 - 31



2016 - 32



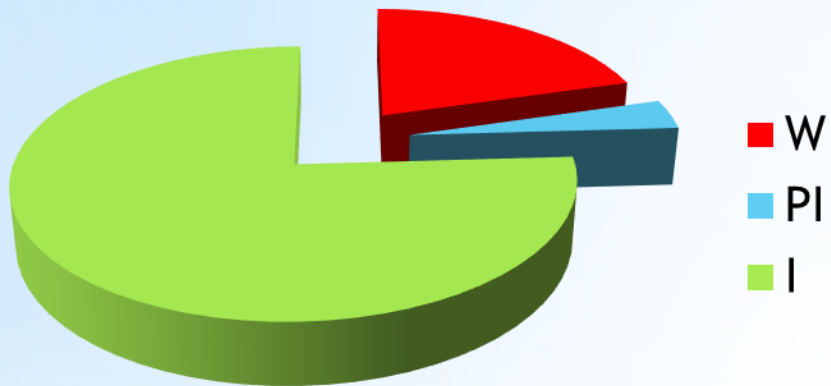
|             | W  | PI | I  |
|-------------|----|----|----|
| 2016        | 18 | 1  | 13 |
| 2017 (I-IX) | 17 | 1  | 13 |



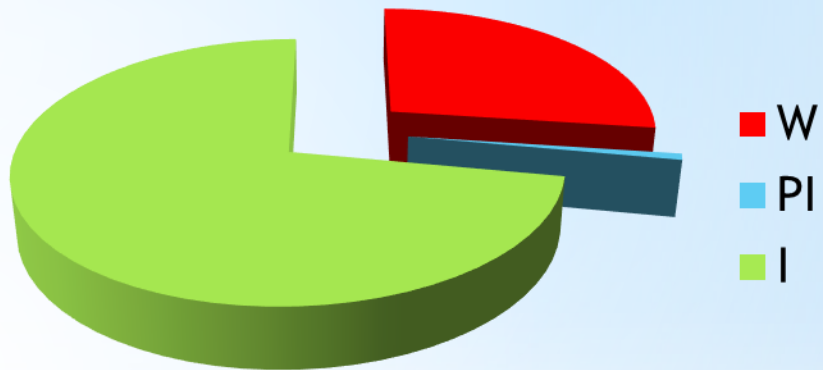
## Parachutes

|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

2017 - 83



2016 - 129



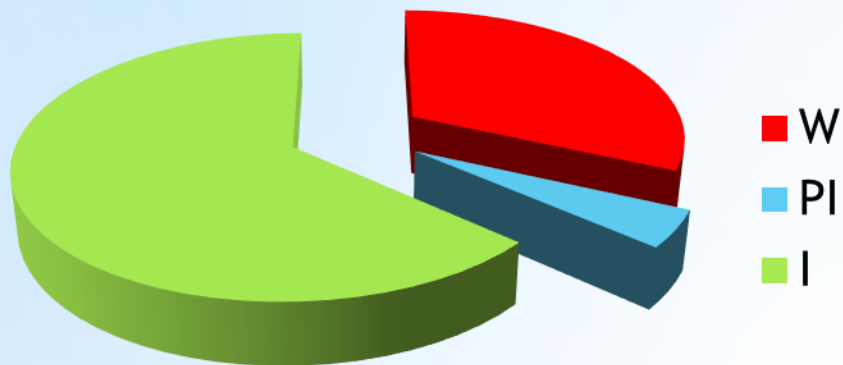
|             | W  | PI | I  |
|-------------|----|----|----|
| 2016        | 35 | 1  | 93 |
| 2017 (I-IX) | 17 | 3  | 63 |



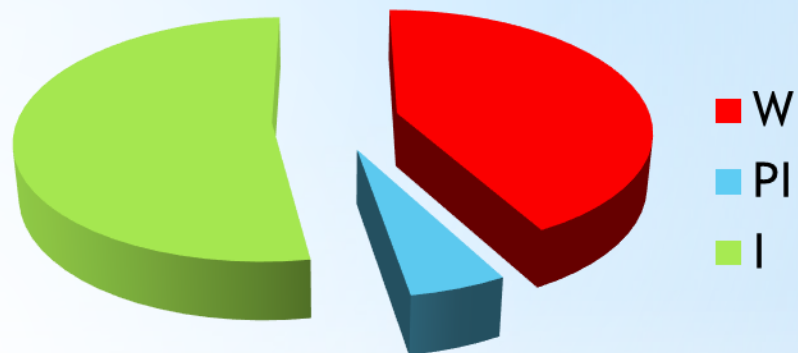
## Ultralights

|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

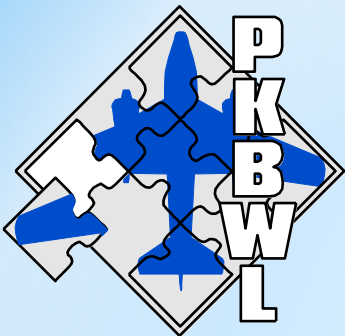
2017 - 22



2016 - 38



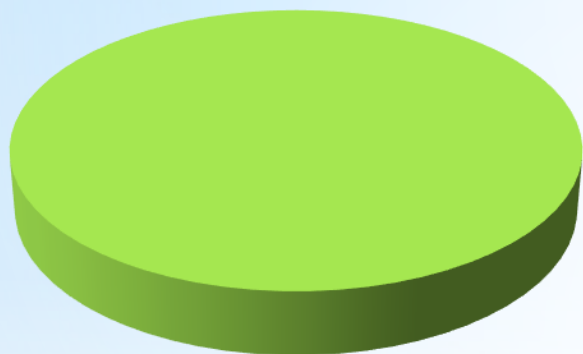
|             | W  | PI | I  |
|-------------|----|----|----|
| 2016        | 16 | 2  | 20 |
| 2017 (I-IX) | 7  | 1  | 14 |



## DRONES

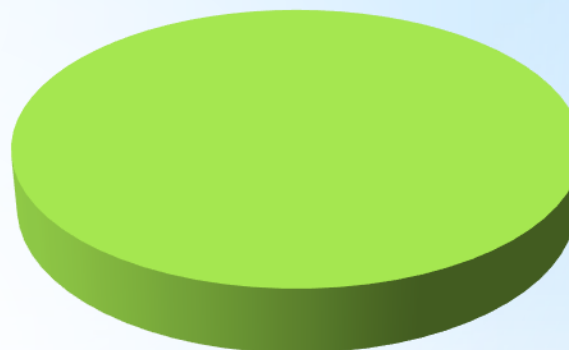
|    |                  |
|----|------------------|
| W  | ACCIDENT         |
| PI | SERIOUS INCIDENT |
| I  | INCIDENT         |

2017 - 4



■ W  
■ PI  
■ I

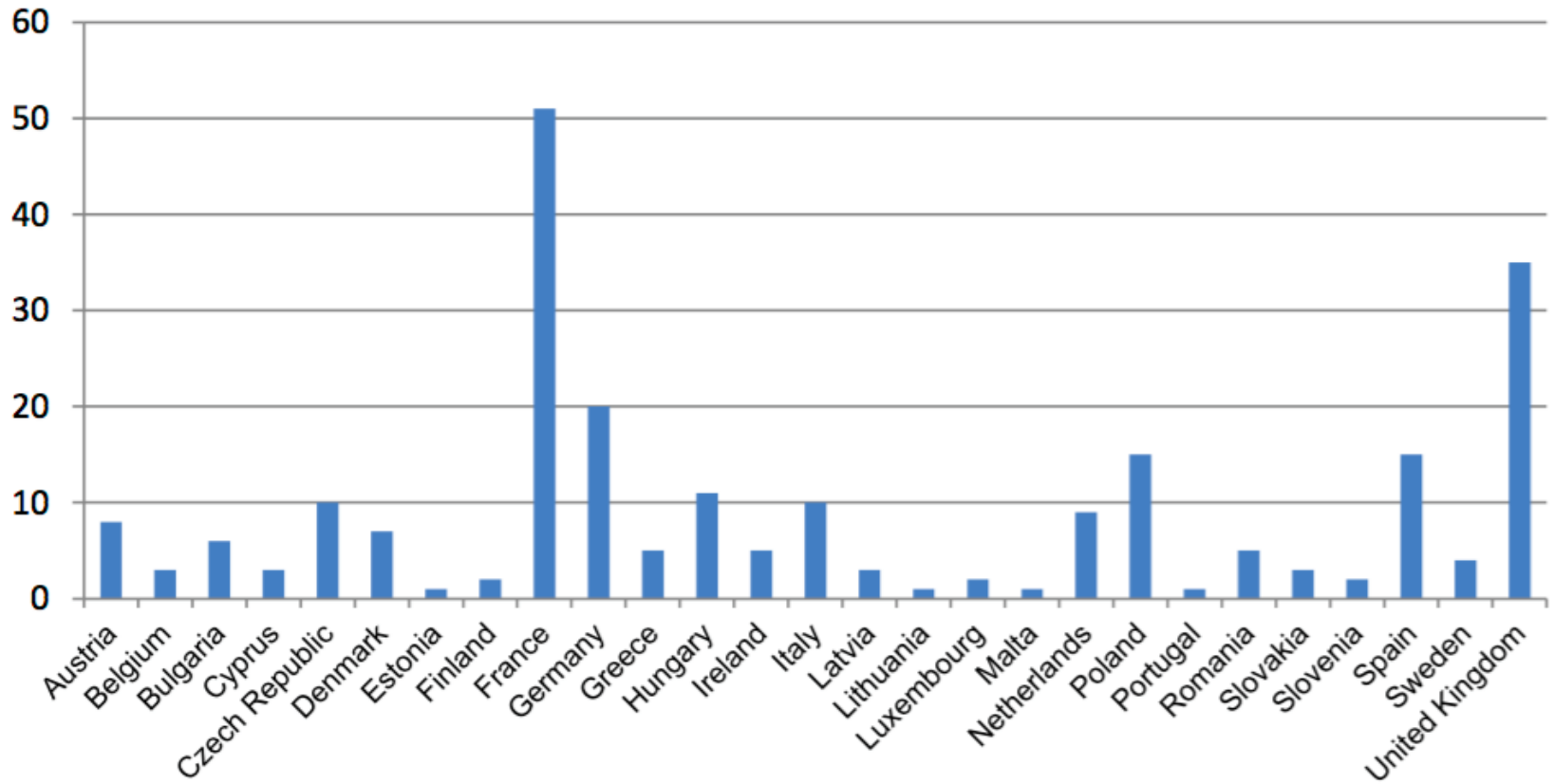
2016 - 10



■ W  
■ PI  
■ I

|             | W | PI | I  |
|-------------|---|----|----|
| 2016        | 0 | 0  | 10 |
| 2017 (I-IX) | 0 | 0  | 4  |

## Safety Investigators in Europe (FTE)



# ENCASIA



European Network of Civil  
Aviation Safety  
Investigation Authorities

## Word of the Chairman

**Rémi Jouty, Chairman ENCASIA**



Dear visitor,  
Dear network colleagues,

Welcome to the ENCASIA website, designed to provide you with information on the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA) and our role.

ENCASIA was established in January 2011 thanks to the entry into force of Regulation (EU) No 996/2010 on the investigation and prevention of accidents and incidents in civil aviation.

ENCASIA constitutes an independent grouping of the 28 civil aviation safety investigation authorities (SIAs) of the EU Member States.

# ENCASIA





# ENCASIA

## PEER REVIEW IDEA

Is the SIA able to conduct a major investigation in an efficient way and timely manner?

The evaluation by WG 5 for the time being:

- A certain number of SIAs is well prepared for a major investigation
  - Resources and experience are available
- A certain number of SIAs is prepared for major investigation
  - Limited resources and/or experience
  - Experience in GA accident investigations
- A certain number of SIAs do not have the necessary resource and experience to conduct an investigation into a major accident
  - Low number (or zero) of accidents with commercial aircraft

# ENCASIA MUTUAL SUPPORT SYSTEM (EMSS)

## Objectives of EMSS

To understand:

- **The need of mutual assistance** between SIAs, in particular for small SIAs.
- **The Framework document** of the ENCASIA Mutual Support System (EMSS).
- **The national responsibilities** and the role of the Assistant IIC
- **The management objectives** (strategic, tactical, operational) of the major investigation.
- - To provide guidance on the development of **an Investigation Management Plan (IMP)**.

**The main objective is:**

**Each state is able to lead a major aviation accident investigation with the support from other states**

**NIMP**

**National Investigation Management Plan**



4" INITIAL 12 H.P.  
160 lbs dry

WING CODE  
WING SEAM

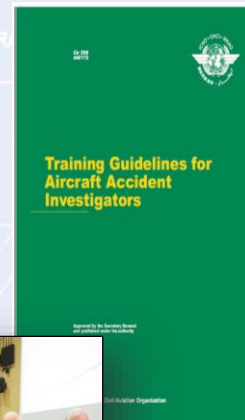
FRONT SPAR IS JOINED  
AT THIS LINE AND CAN  
BE SEPARATED WHILE  
REAR SPAR IS HINGED  
ALONG SAME LINE

# 15 YEARS OF SCAA



Training Centre for Aircraft  
Accidents Investigators and  
Experts

ICAO Cir 298 - Training  
Guidelines for Aircraft  
Accident Investigator

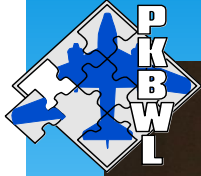




# TRANSPORT



# Training Centre for Aircraft Accidents Investigators and Experts



OŚRODEK SZKOLENIA CZŁONKÓW I EKSPERTÓW  
KOMISJI BADANIA WYPADKÓW LOTNICZYCH



ORGANIZATORZY:



## *Ustalenie okoliczności zdarzenia lotniczego*

ptk rez. dr inż. pil. Antoni Milkiewicz

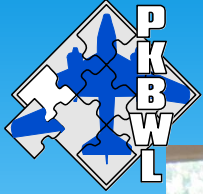
WSPÓŁPRACA:



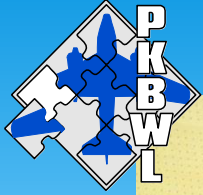
# Training Centre for Aircraft Accidents Investigators and Experts



# Training Centre for Aircraft Accidents Investigators and Experts



# Training Centre for Aircraft Accidents Investigators and Experts



## Polish SCAAI Cooperation with Police and Prosecutors



# Polish SCAA Cooperation with Police and Prosecutors



## Polish SCAAI Cooperation with Police and Prosecutors





# Agenda

Questions?