

DES BARKER ANALYSIS

- Accidentologie 2017 (30 accidents)
- Accidentologie depuis 1908 (1320 accidents)

2 bases de données statistiques riches en enseignement

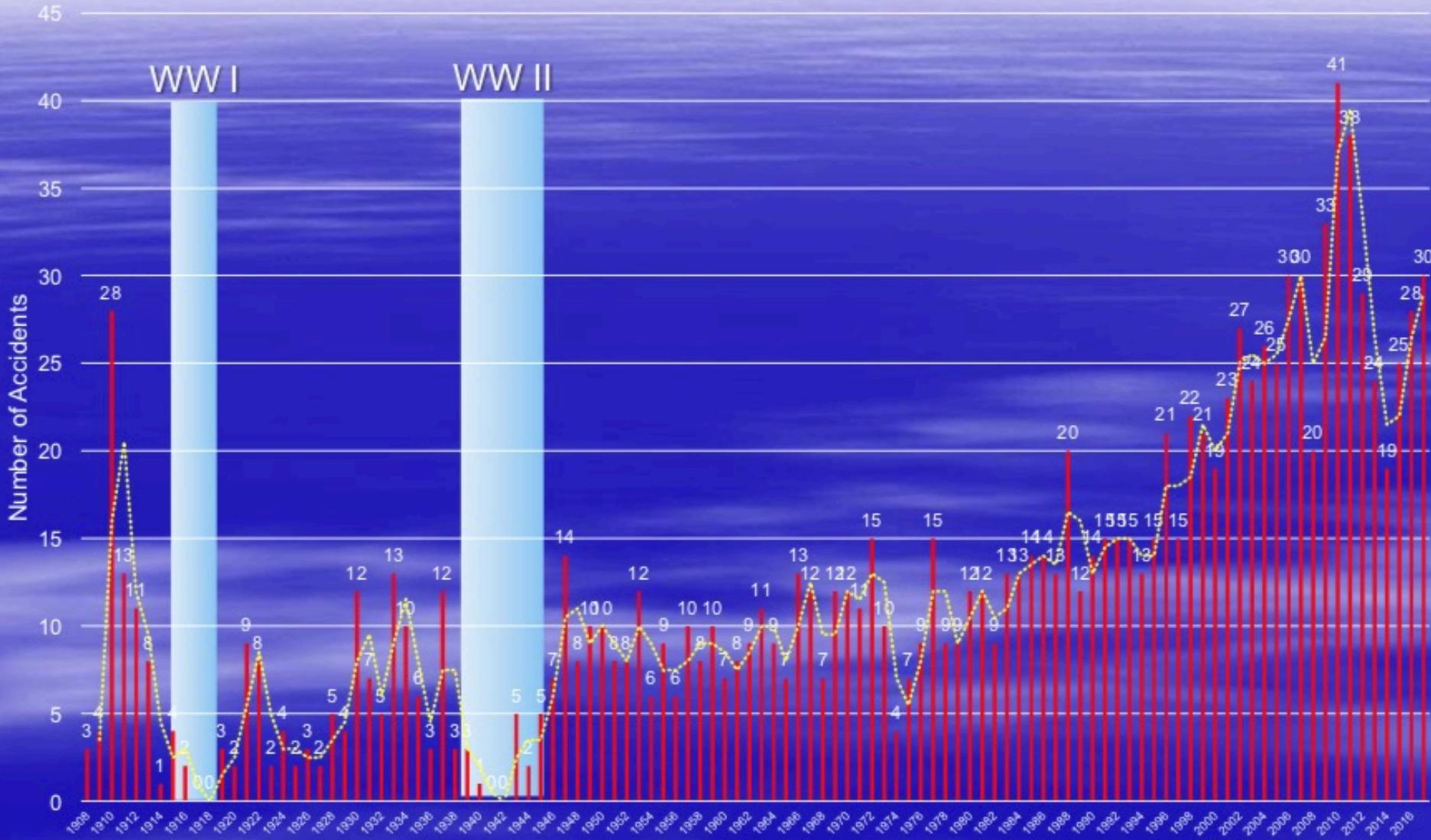


“Without data
you’re just
another person
with an opinion.”

- W. Edwards Deming,
Data Scientist

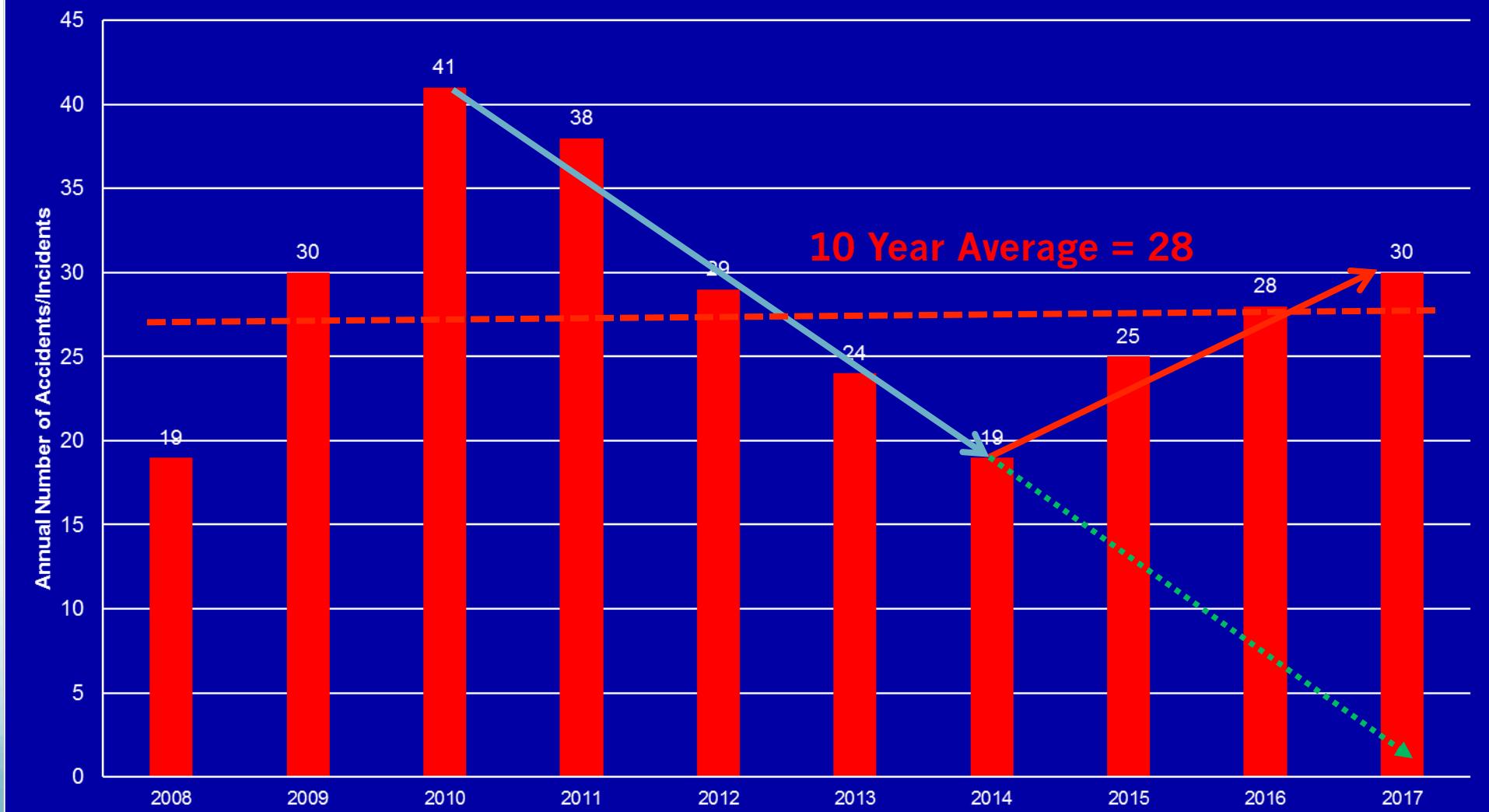


Annual Airshow Accidents/Incidents 1908 to 2017





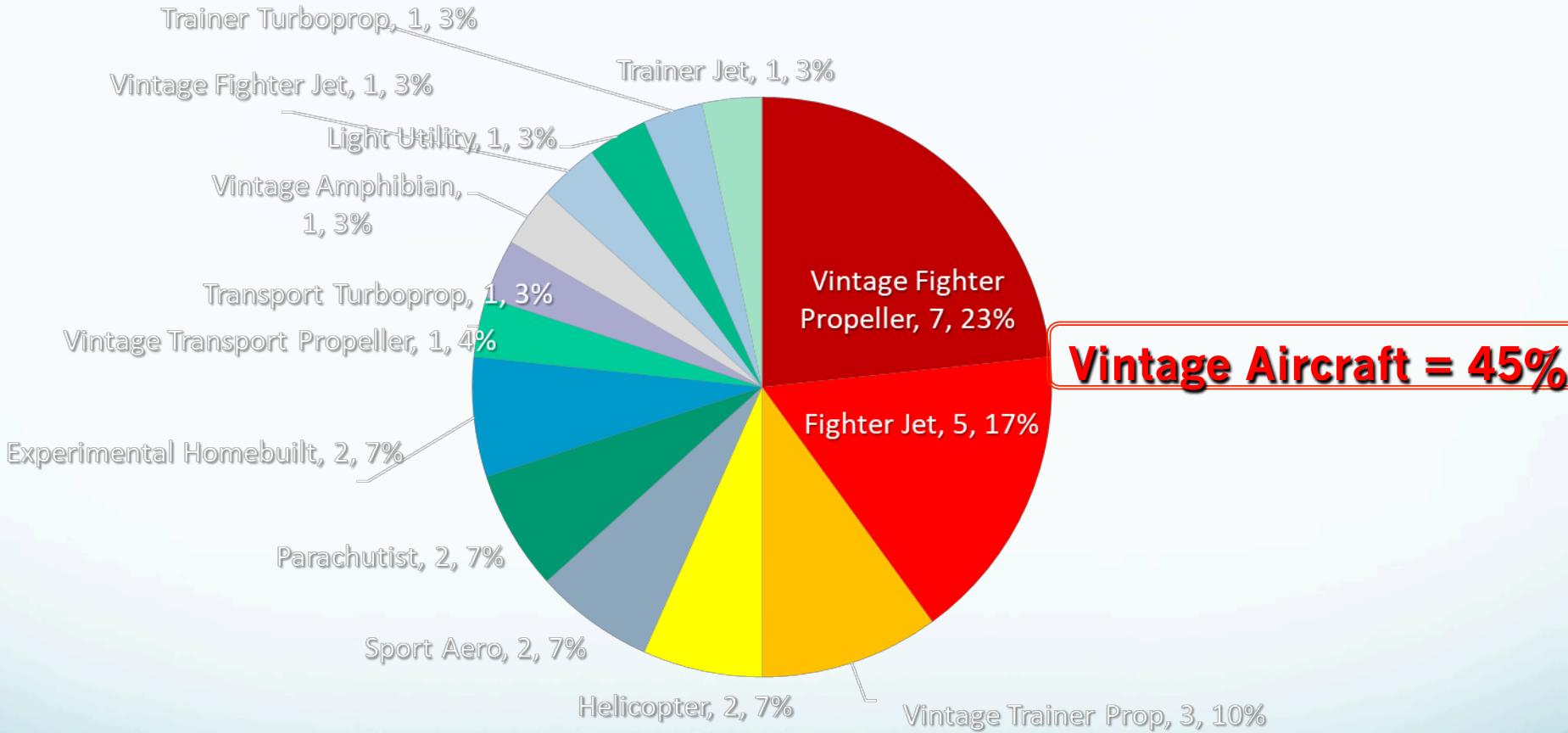
Statistical Analysis 2017



Airshow Accidents 10 Previous Years

Sample Size =

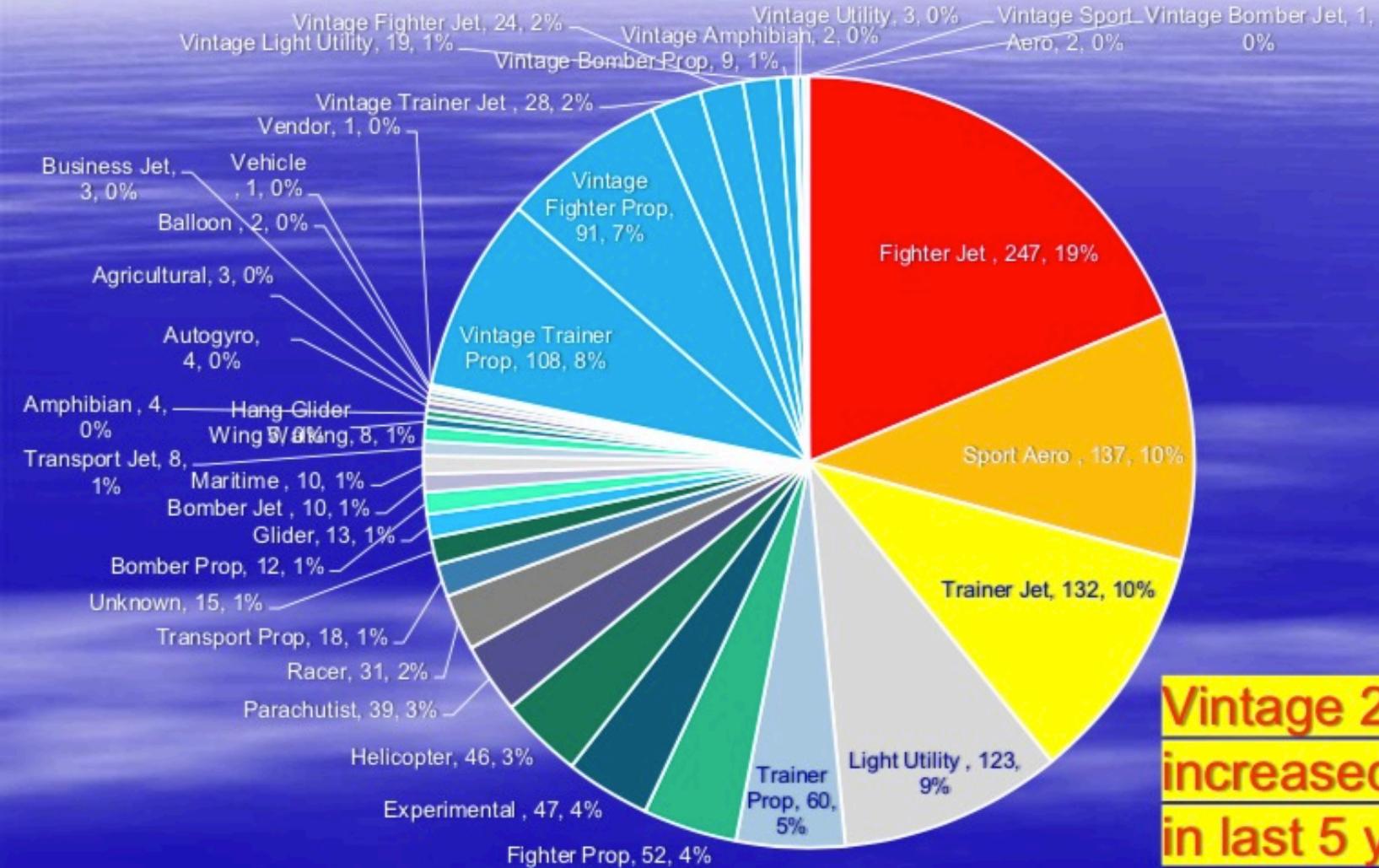
Statistical Analysis 2017



Sample Size =
30

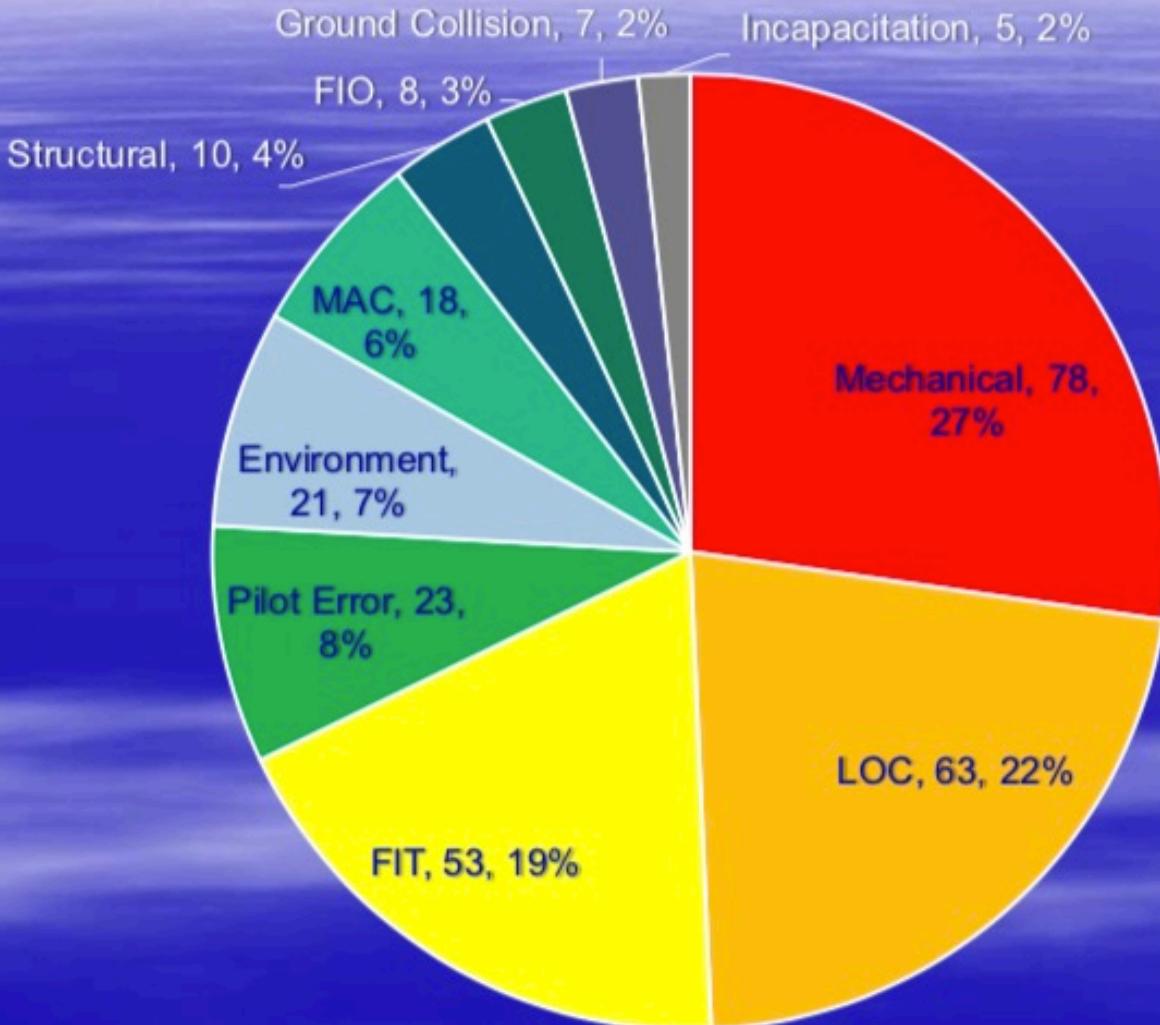


Aircraft Categories 1908 to 2017



Vintage 22% but
increased to 45%
in last 5 years

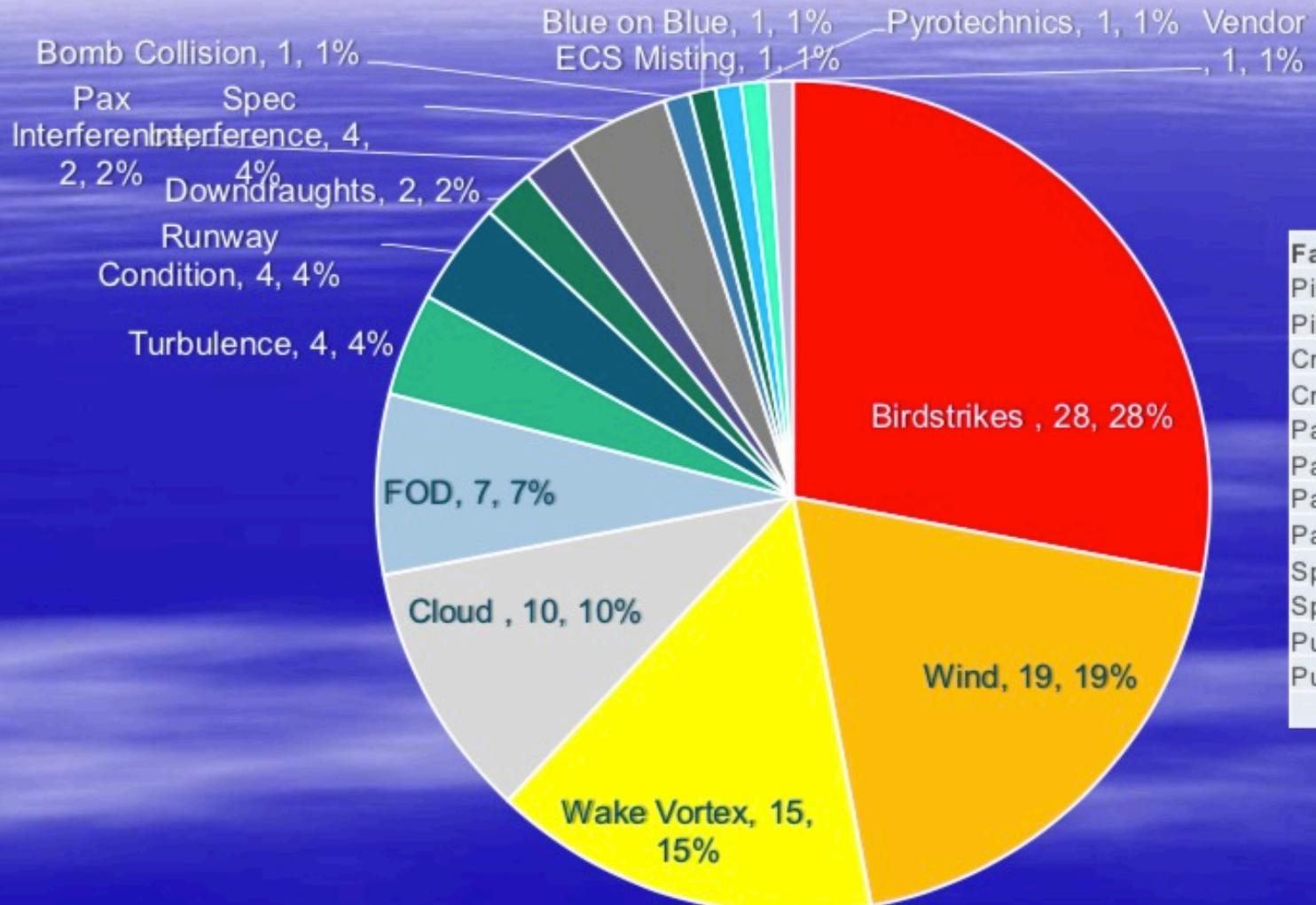
Vintage Aircraft



Casualties	
Pilot Killed	142
Pilot Injured	33
Crew Killed	9
Crew Injured	2
Pax Killed	26
Pax Injured	14
Spec Killed	30
Spec Injured	146
Public Killed	34
Public Injured	45
Wingwalker Killed	6
	487



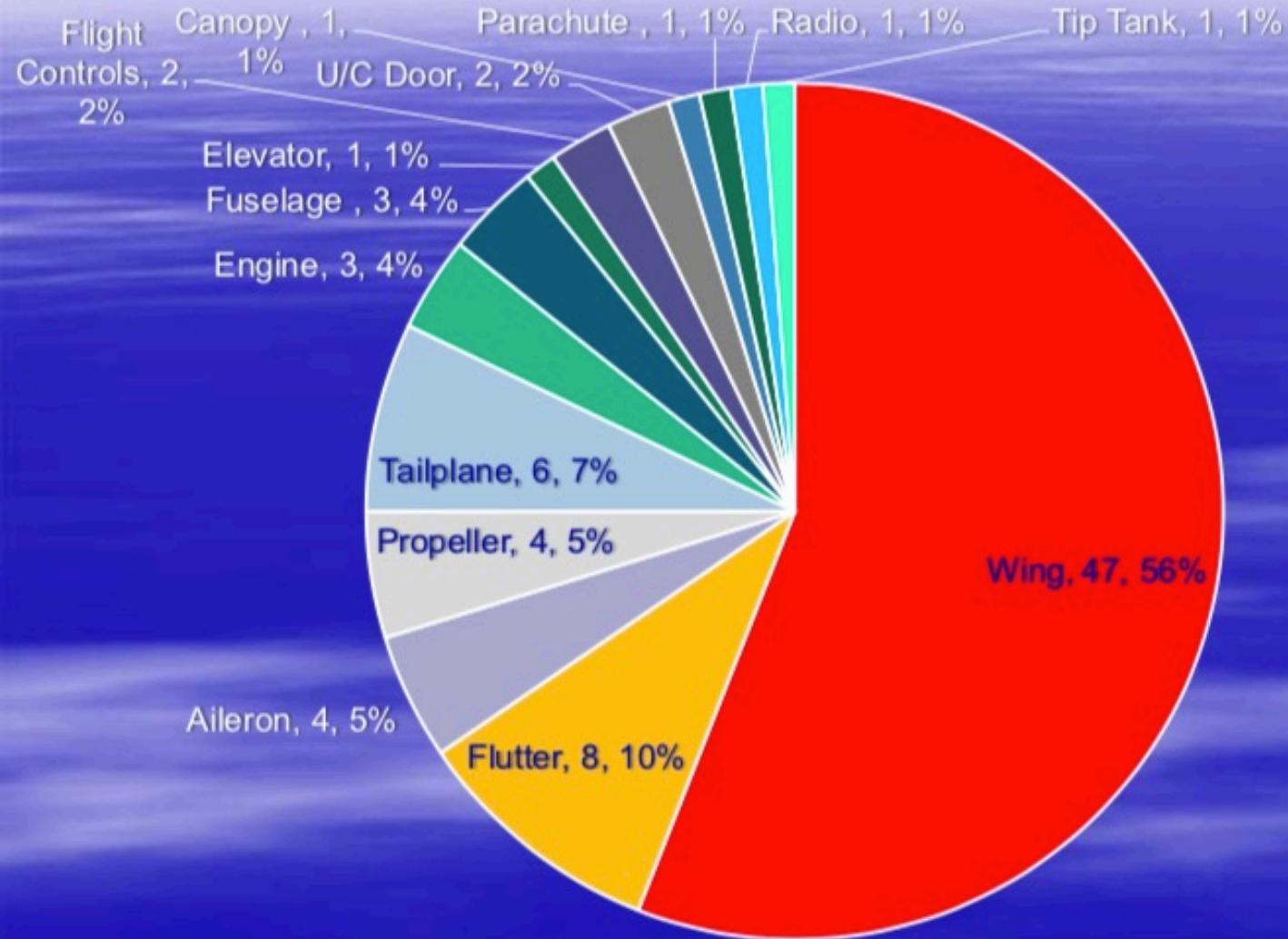
Environmental Factors 1908 to 2017



Fatalities	
Pilot Killed	44
Pilot Injured	13
Crew Killed	9
Crew Injured	0
Para Killed	15
Para Injured	15
Pax Killed	6
Pax Injured	12
Spec Killed	5
Spec Injured	68
Public Killed	2
Public Injured	15
	204



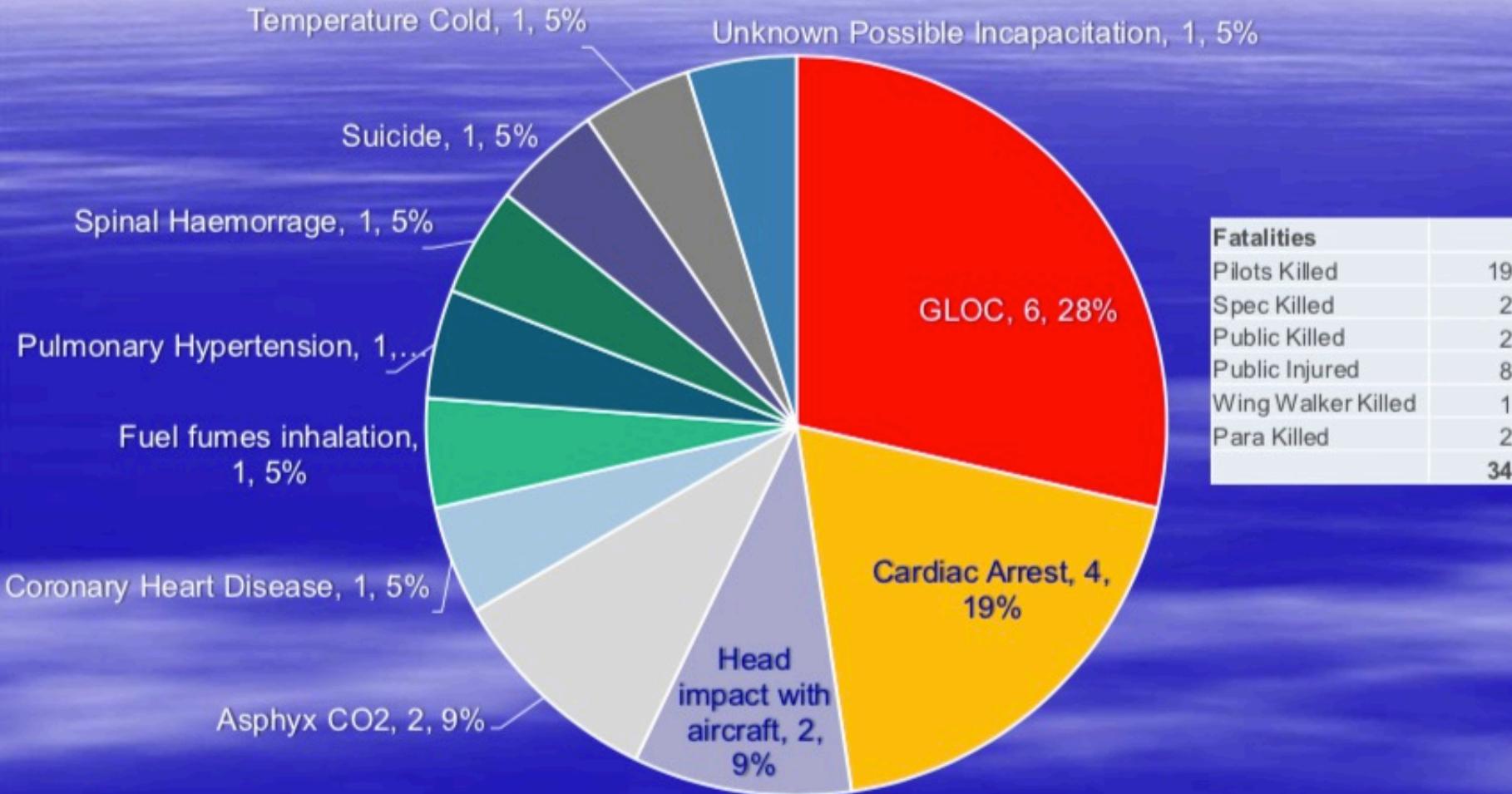
Structural Factors 1908 to 2017



Fatalities	
Pilots Killed	63
Pilots Injured	7
Crew Killed	8
Crew Injured	1
Para Injured	1
Pax Killed	16
Spec Killed	40
Spec Injured	139
Public Killed	1
Public Injured	11
	287

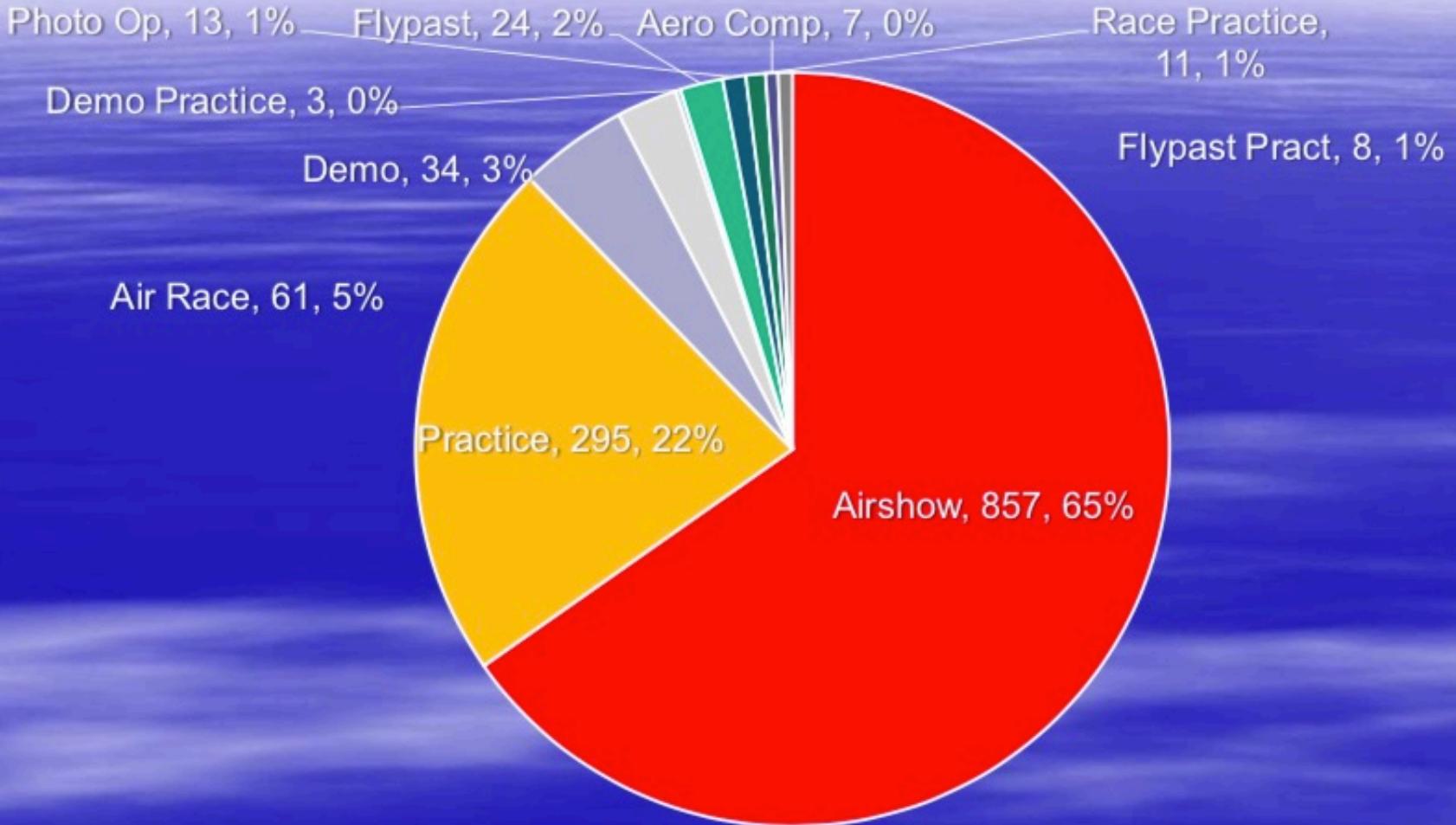


Incapacitation Factors 1908 to 2017

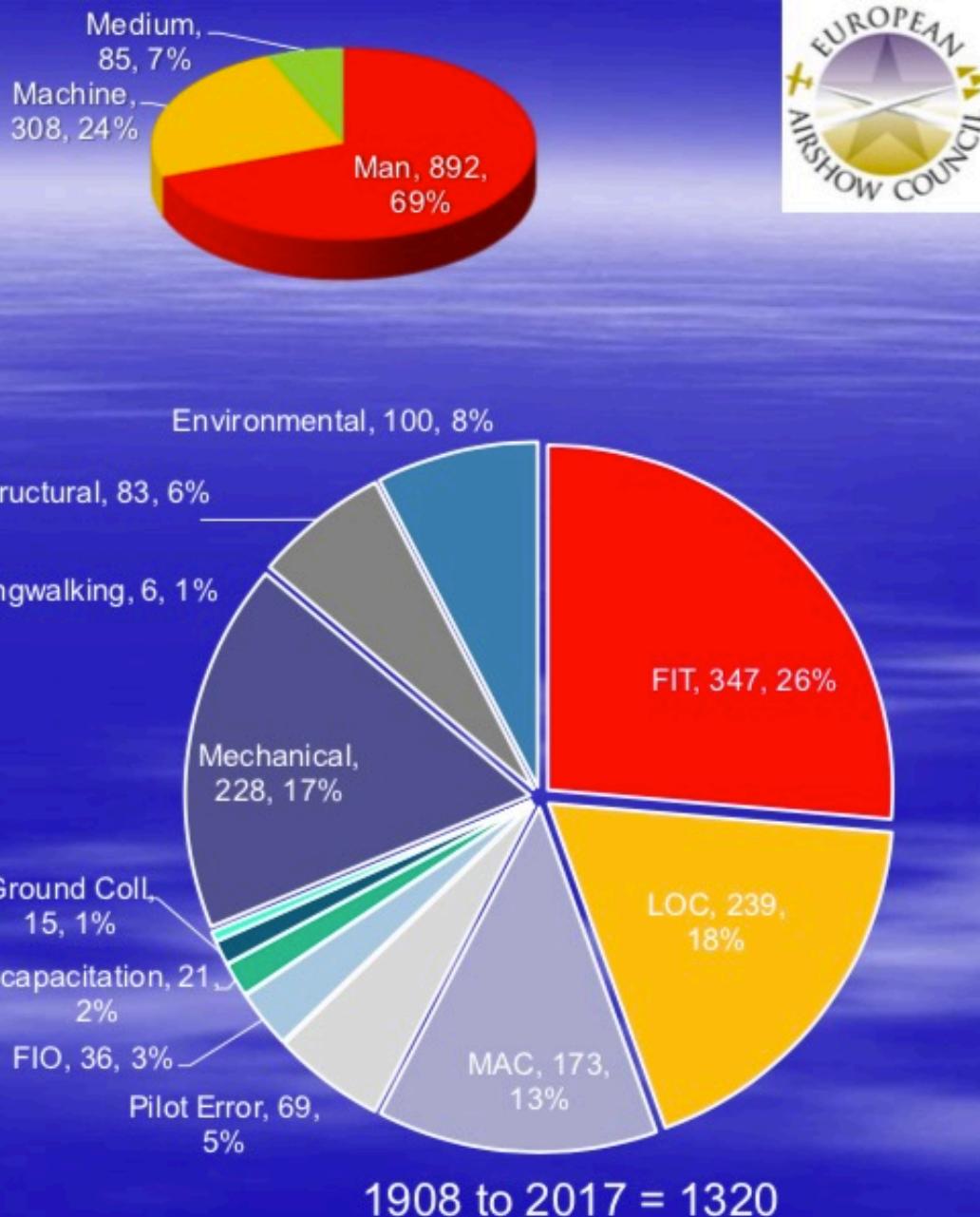
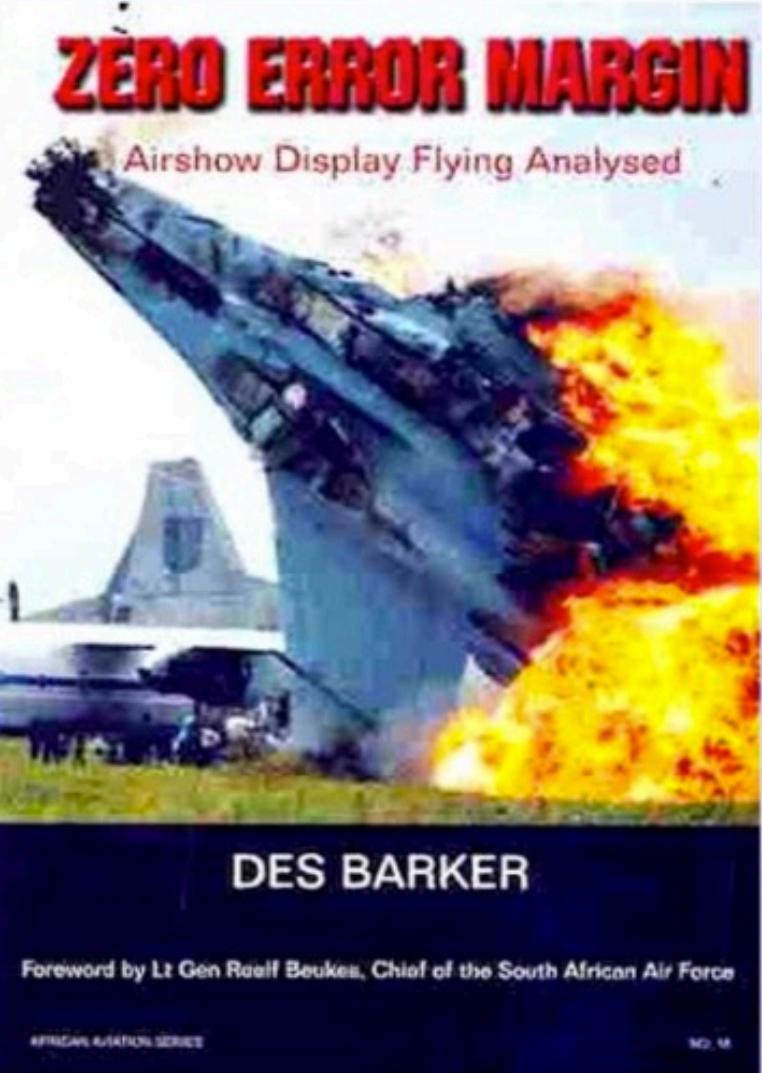




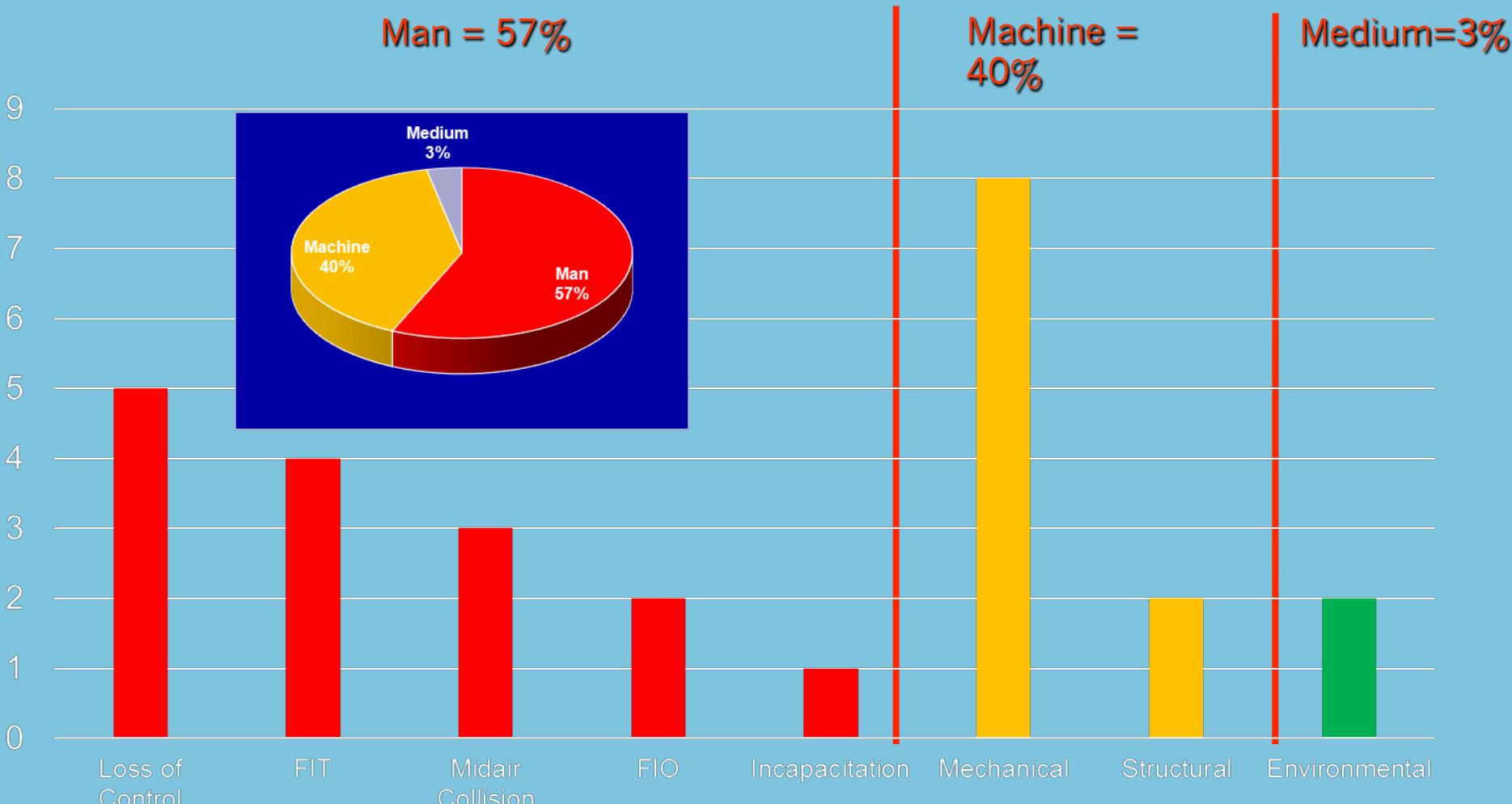
Display vs Practice



We do not “train like we fly and fly like we train!!!!



Statistical Analysis 2017

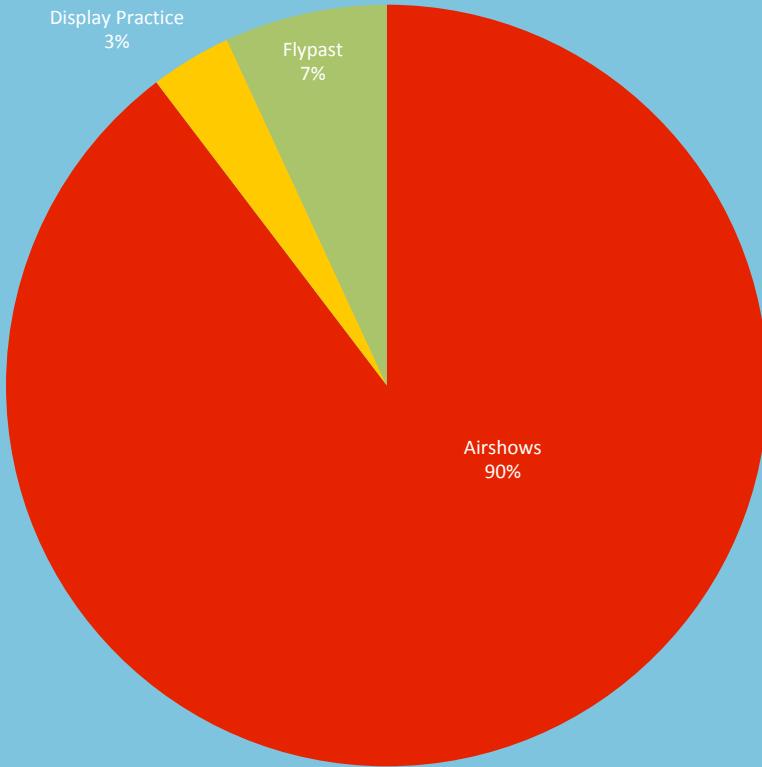


Airshow Accident/incident Analysis Man/Machine/
Medium

Sample Size =



Statistical Analysis 2017

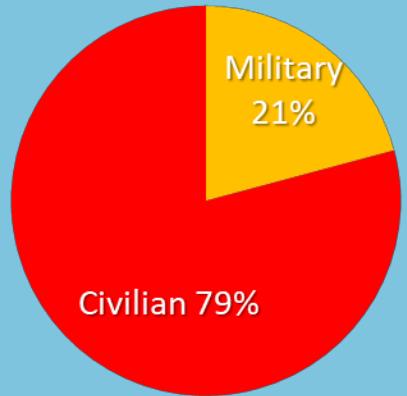


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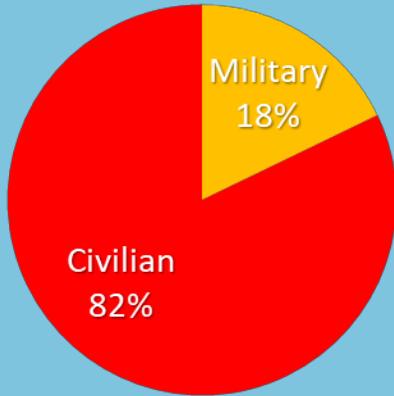
Sample Size = 30

Airshow Accident/incident Analysis Display vs Practice

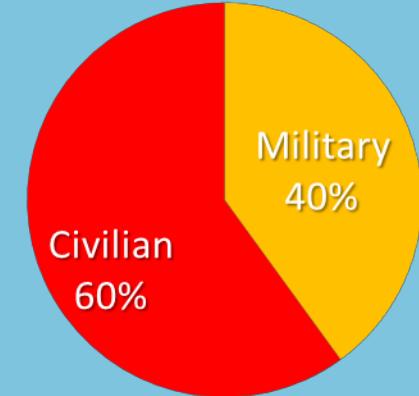
Statistical Analysis 2017



2015



2016



2017

Comparative Airshow Accident/incident Analysis – Military vs Civilian

Lowlights 2017

1. Average 28.2 accidents/annum untenable!!!!
2. 7 pilot lives lost compared to average of 13/ annum.
3. 2 Pilots injured.
4. Vintage aircraft at 45% inordinately high.
 - a. Vintage aircraft trend continuing.
 - b. Mechanical failure inordinately high at 30% - engine and structural failure.
5. Possible suicide/Agusta 109.
6. AN-2 regulation transgression killed 2.
 - a. No Certificate of Airworthiness.
 - b. Passenger carriage in low level aerobatics.
 - c. Pilot not type rated.



The Inconvenient Truth!

"A Few Good Men"

with Tom Cruise, Demi Moore, Jack Nicholson, Kiefer Sutherland, Kevin Bacon.
(1991)

Nicholson: "You want answers?!"

Cruise: "I want the truth!!"

Nicholson: "You can't HANDLE
the truth!!"



Nous donnons nous les
moyens d'une culture de
sécurité ?

28 accidents/an (13 morts), c'est 2 à 3 fois plus d'accidents que l'aviation commerciale mondiale pour un nombre total de vols concernés infimes en comparaison...

Les performances de l'aviation commerciale et ses progrès sont le résultat de la mise en place d'une « culture de sécurité » rigoureuse

TUTELLE REGLEMENTAIRE / MAINTENANCE / ENTRAINEMENT /
PROGRES TECHNOLOGIQUES

Facteurs humains : - connaissances des notions d'erreur, faute, violation.

Assurance : - l'avion est-il bien assuré manifestations aériennes ?

Débriefing : - personnel ou coaching

Analyse trajectoires : - sécurité du public (EU / US) / What if ?

Extraction card

Protections : - Combinaison de vol, gants, sous vêtements, casque, visière

NE PAS S'INSTALLER DANS LE DENI « les règles, les accidents c'est pour les autres »

Il n'existe pas de nouvelle manière de se tuer, on ne fait que reproduire les mêmes erreurs encore et encore...

BOB HOOVER