



Making Sense of the Data

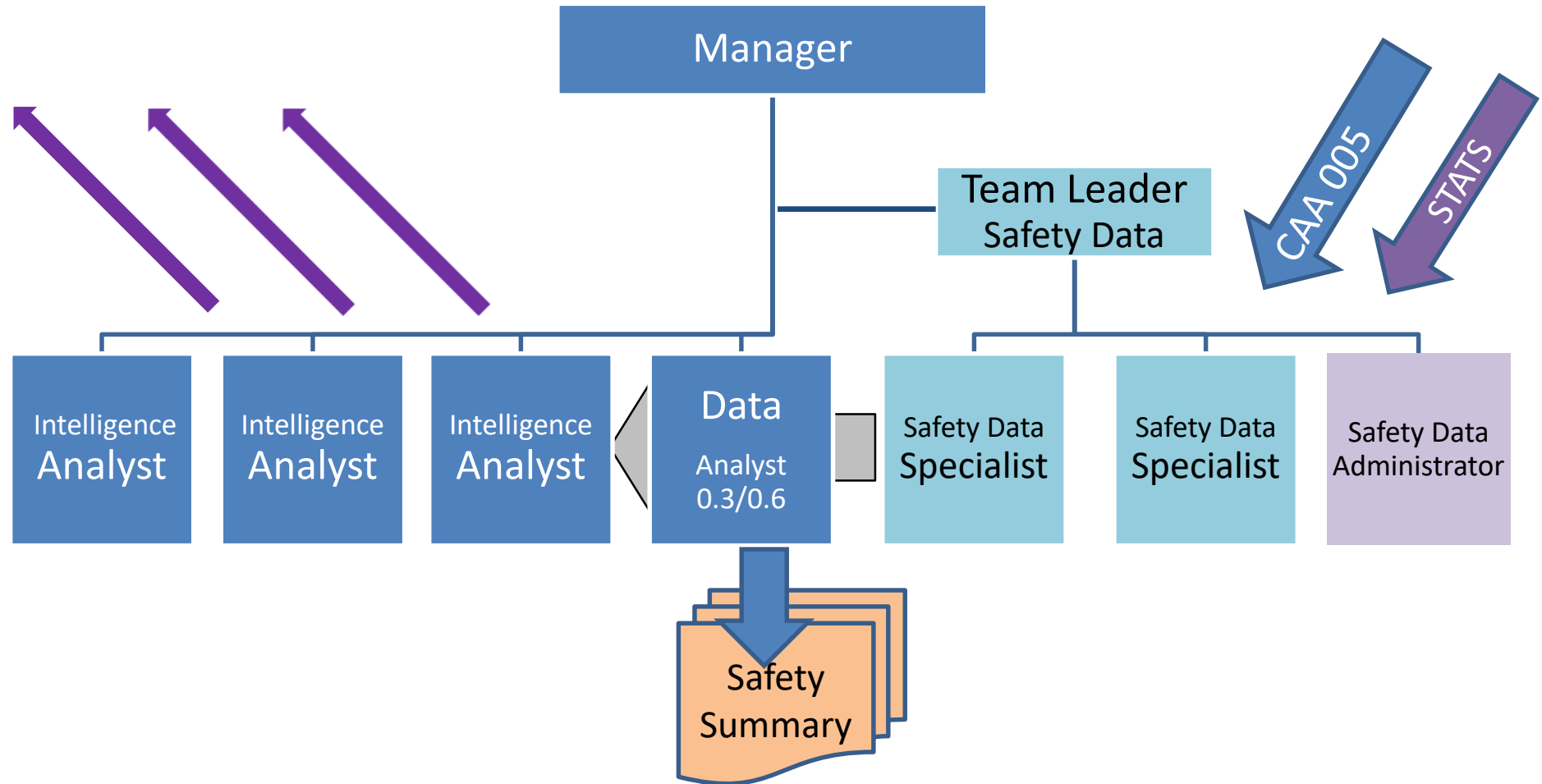
2017 Design Delegation Holders' Seminar

Jack Stanton

Manager Intelligence,
Safety and Risk Analysis

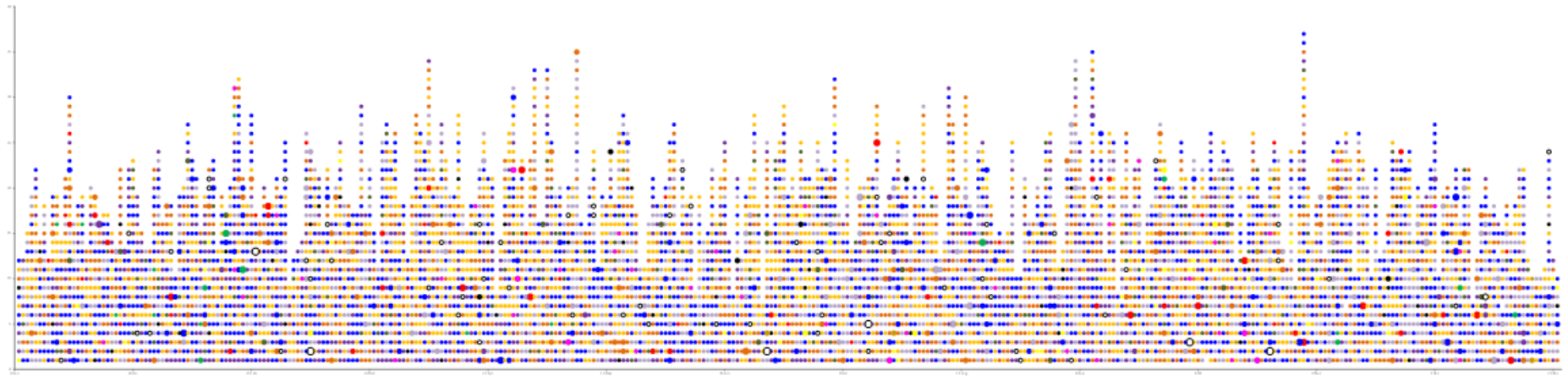
May 2017

Intelligence Safety & Risk Analysis



7271 Reported Occurrences

2016 calendar year

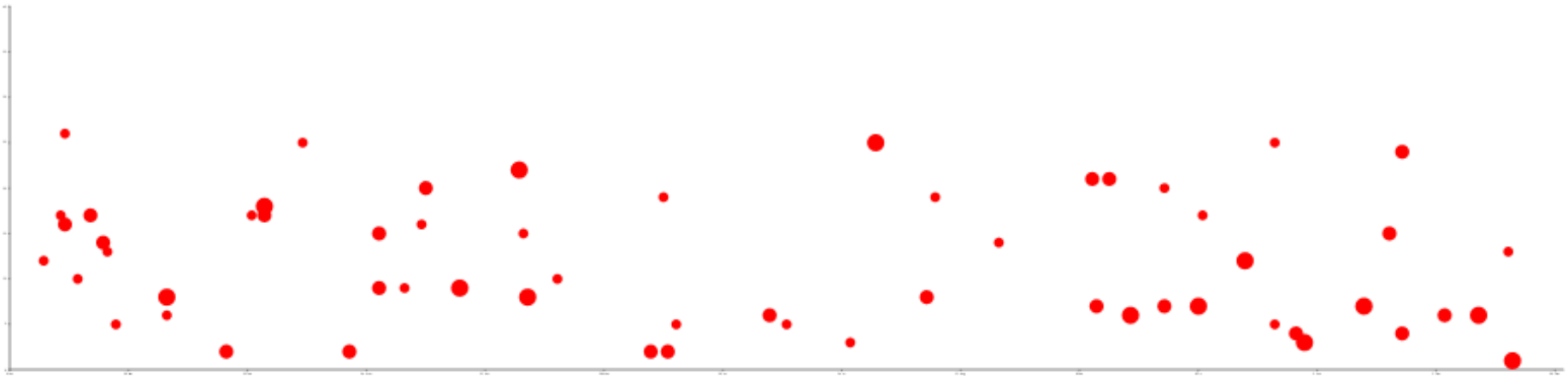


● Airspace	1669
● Bird	1543
● Incident	1247
● Accident	59

2011 : **5922**

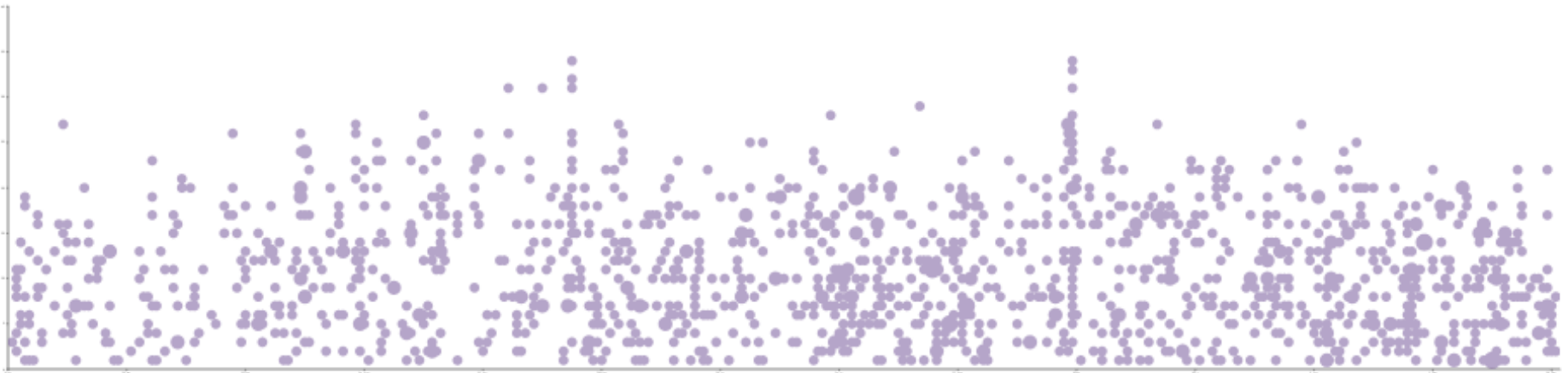
22% increase over 5 years

Aircraft Accidents - 2016



**59 Accidents,
Aeroplanes, Helicopters, Sport Aircraft**

Aircraft Incidents - 2016



1247 INCIDENTS

Landing Incident Investigation

Last 3 months of 2015

3 Landing Gear Not Down Incidents

2 Stick shaker in circuit

5 Events

Previous 5 years

2 Similar events

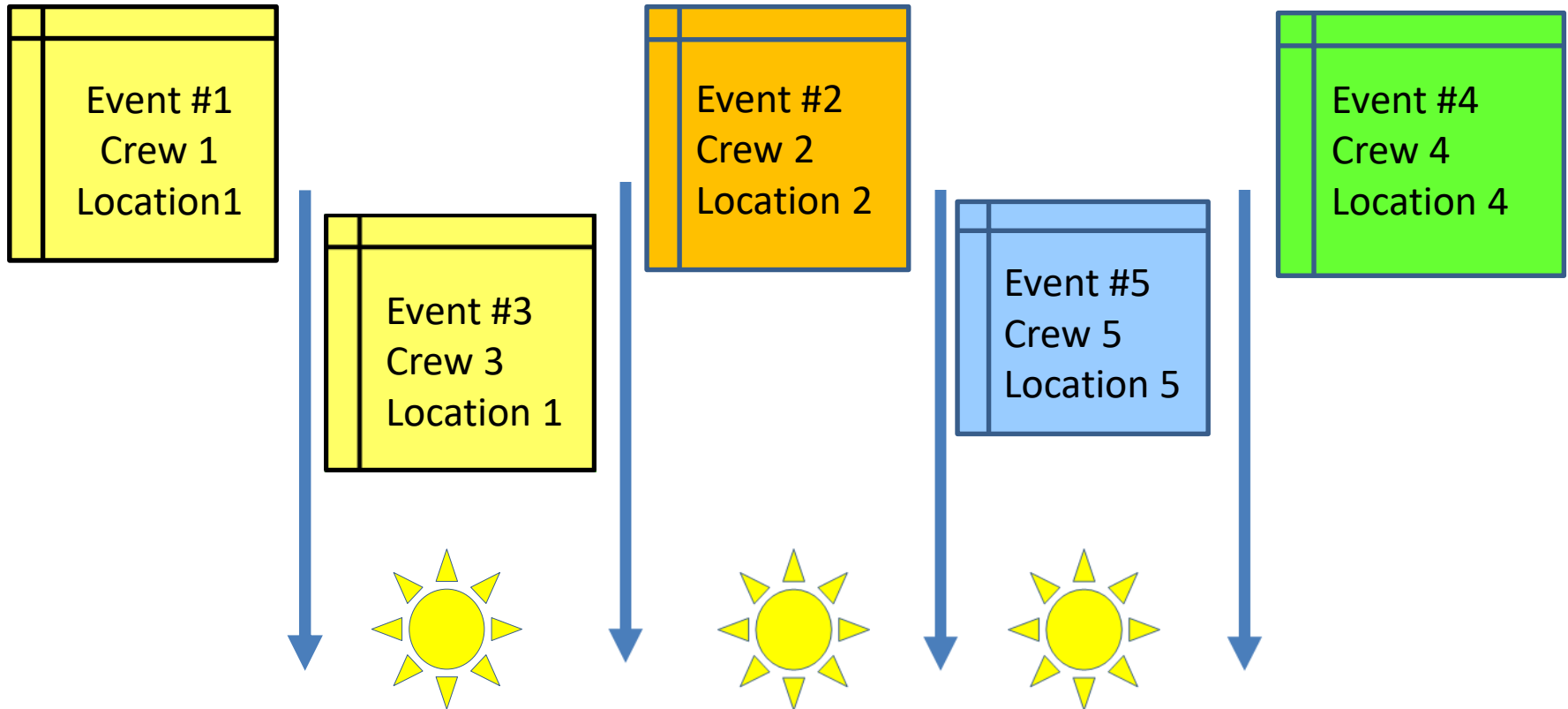
First two gear events investigated – Classic style

- Open Investigation
- Attribute cause
- Train the crew
- Close case



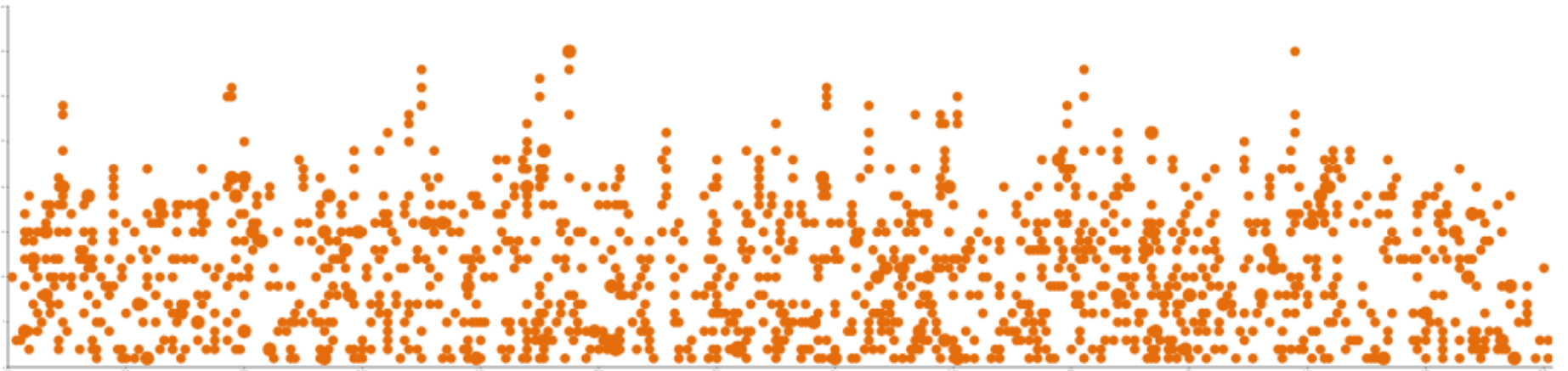
- Next Case

Thematic Investigation



Visual Arrivals at Regional Airports, Fine Weather, Low Traffic, Short Approach
Forgot to : Put Down Flaps, Gear, Control Speed

Defect Incidents -2016



1371 Defect Incidents

- Eurocopter AS 350 B3, En-route: While in the cruise a slight unusual shudder was felt, immediately the left rear passenger advised the external cargo pod had departed the aircraft. CAA safety investigation in progress.
(17/153)

- MDHC 600N, Hawkes Bay: While returning to the dam to refill the monsoon bucket, the empty bucket became detached from the cargo hook and fell approximately 250 ft to the ground. CAA safety investigation in progress.
(17/632)

- Eurocopter AS 350 B2, New Plymouth: Shortly after take-off had an uncommanded hook release of a sling load. The load landed well clear of all runways and movement areas. CAA safety investigation completed. (17/281)

- **Helicopter Engine Failures - 6 Events
Jan – Mar 2017**

AS355 Chip light 2 mins later by Eng Fail

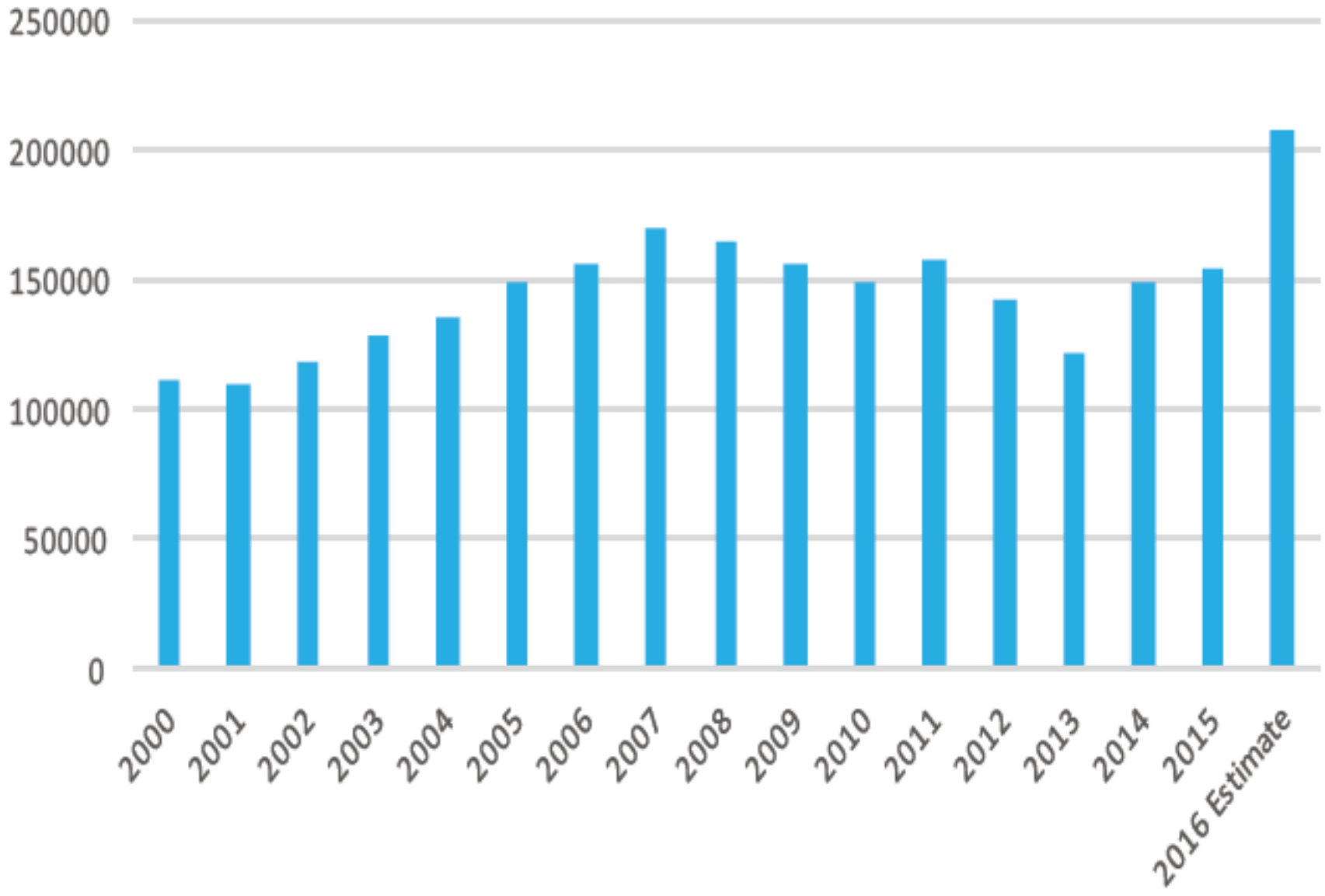
Hughes 369E : Low rpm audio – over mountains

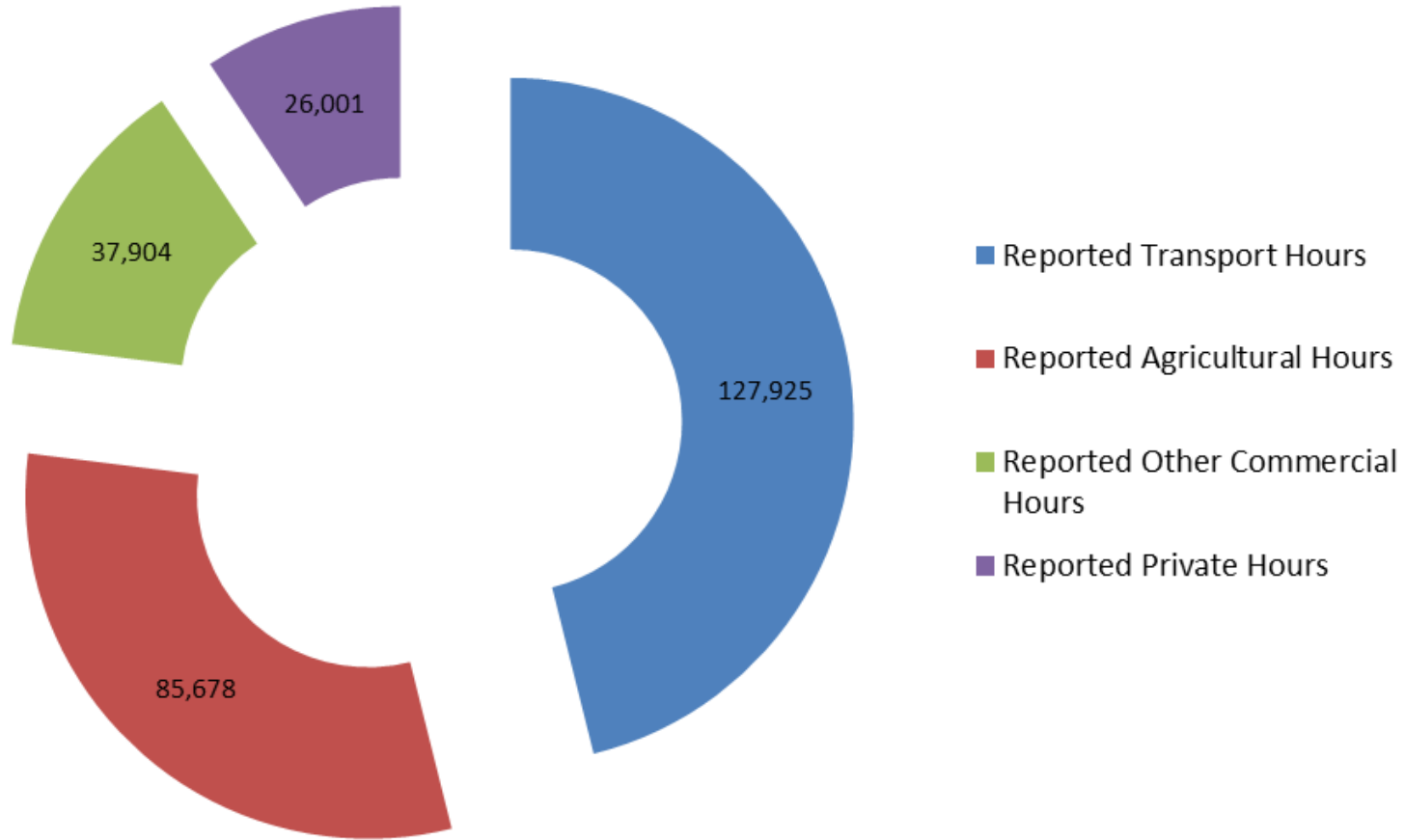
Hughes 369E : Oil pressure fluctuations and loss

Hughes 269C : Flywheel bolts lost with a bang

Hughes 269C : Power loss rough running

Robinson R22: Power loss – post 100hr check





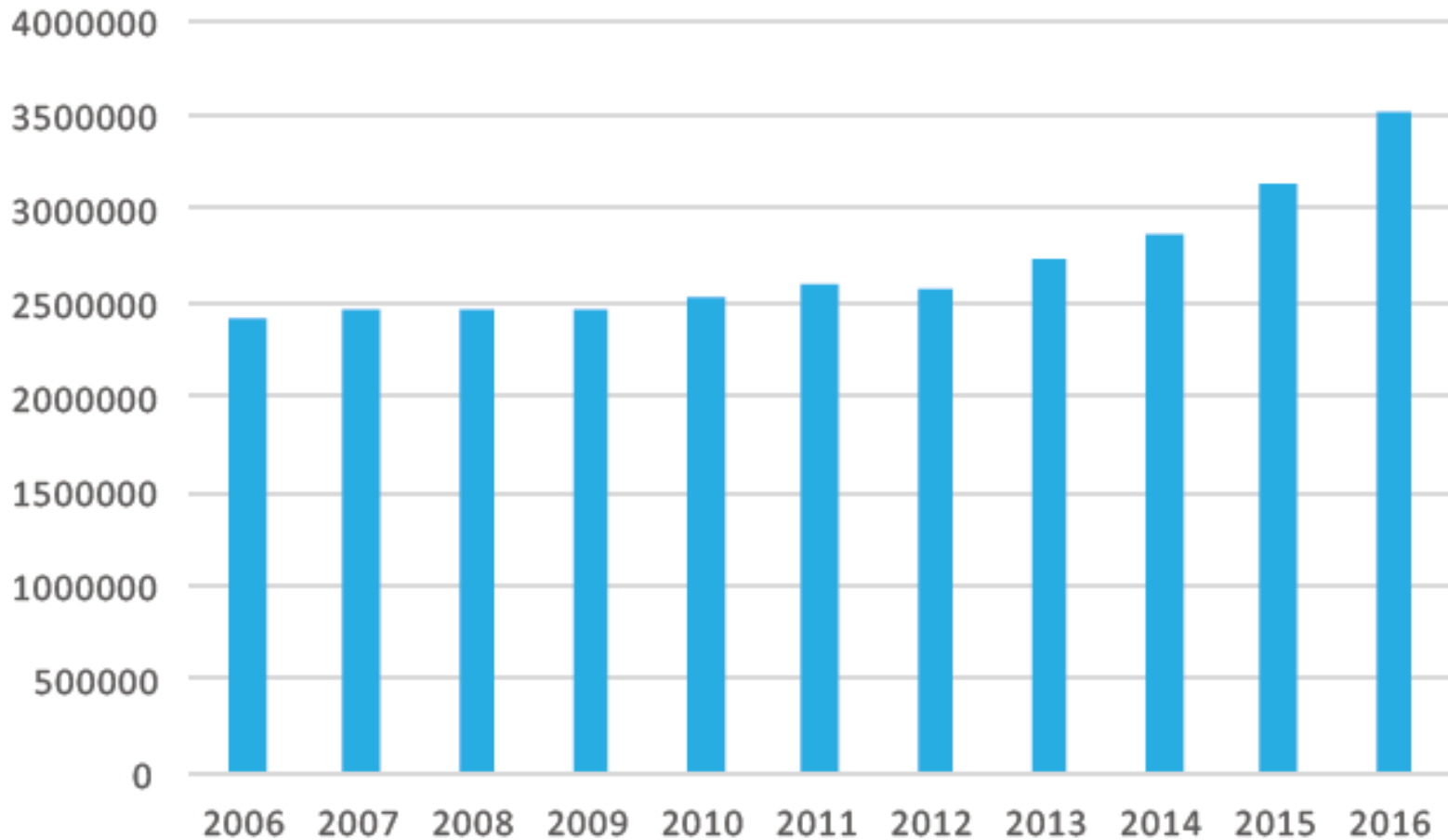


Chart: Number of international visitors annually 2006-2016

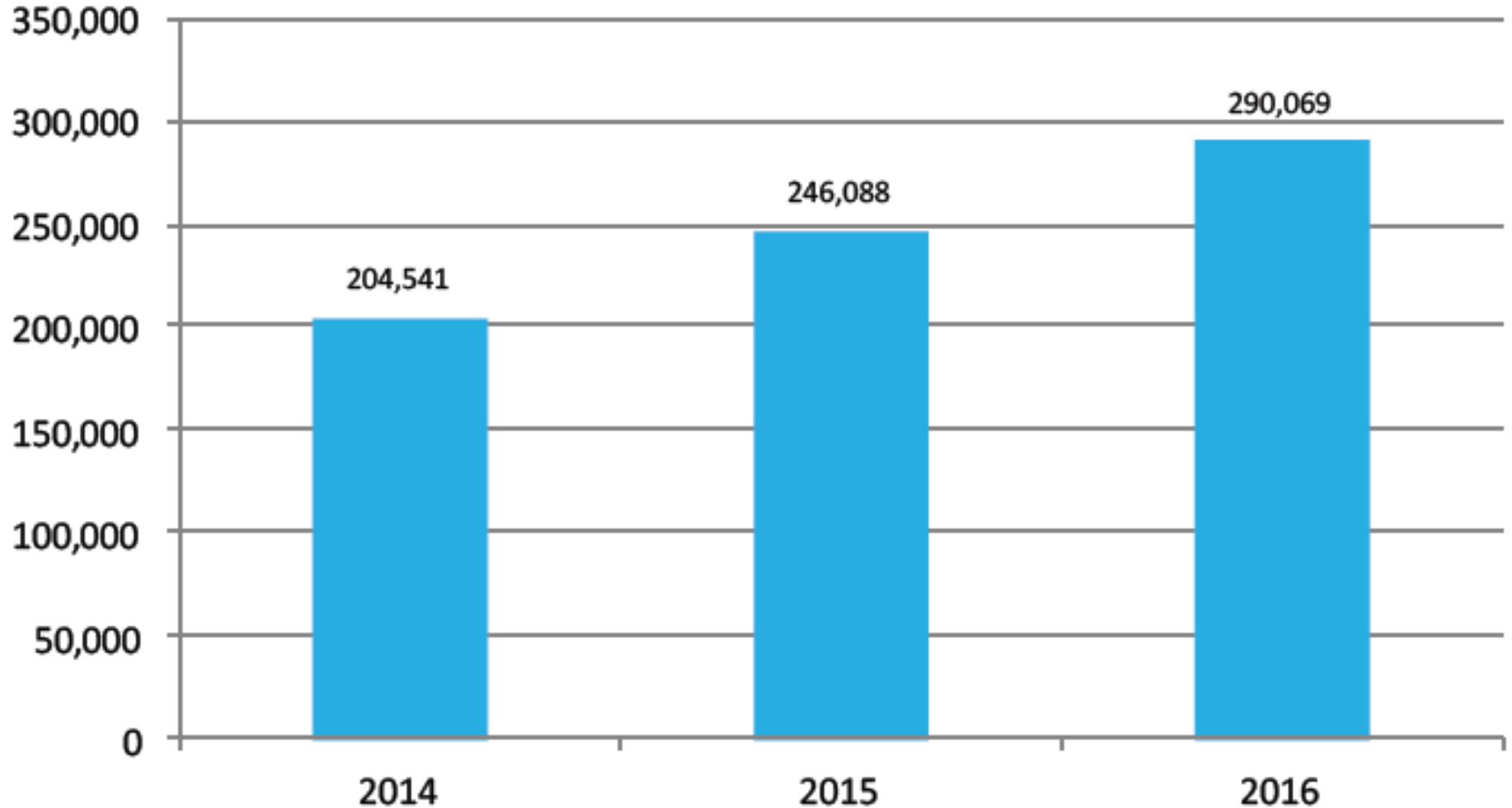


Chart: Estimated number of international visitors undertaking scenic flights (fixed wing and helicopter) during their stay, year to June annually

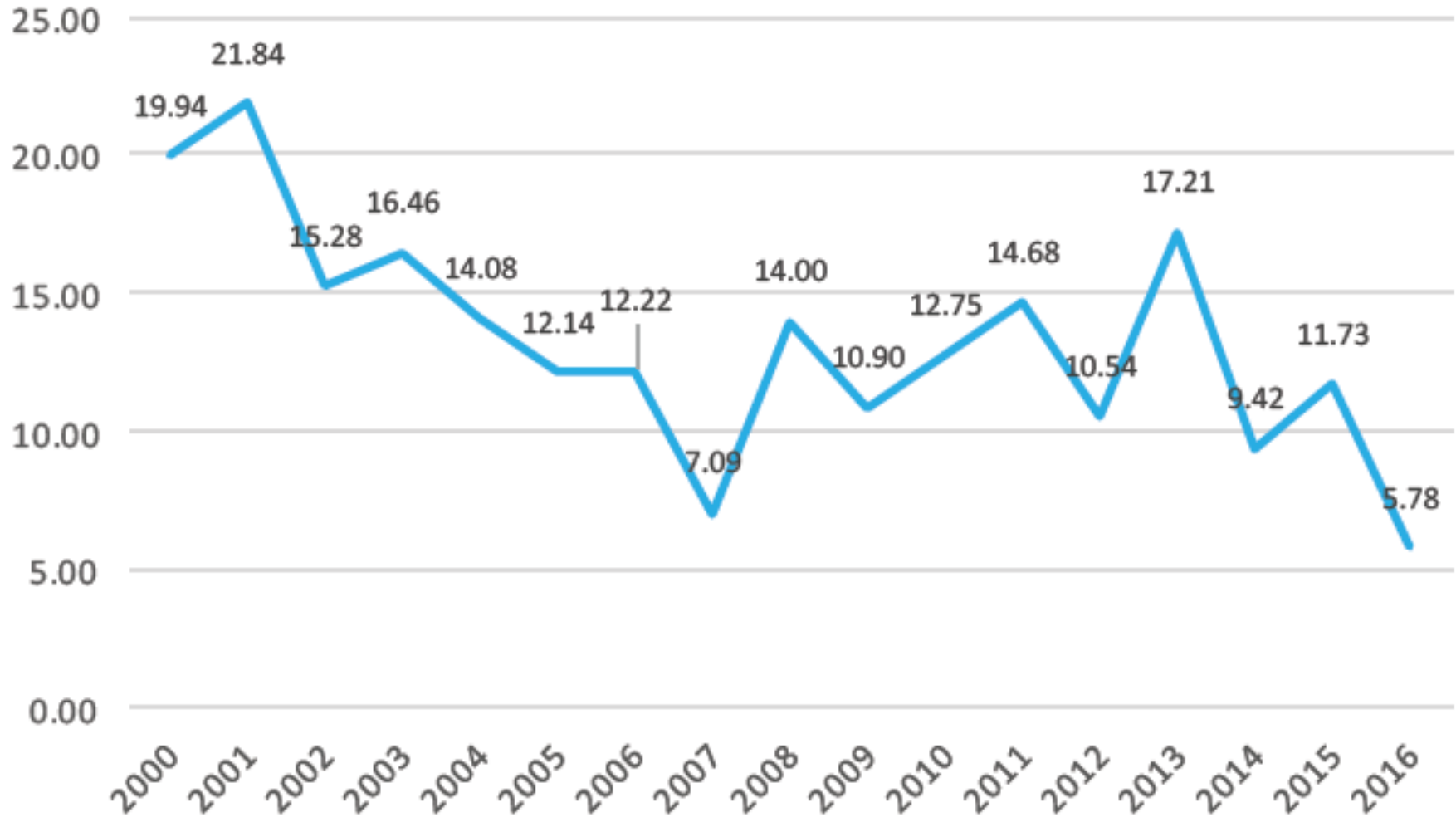


Chart: 12-monthly helicopter **total** accidents per 100,000 hours 2000-2016

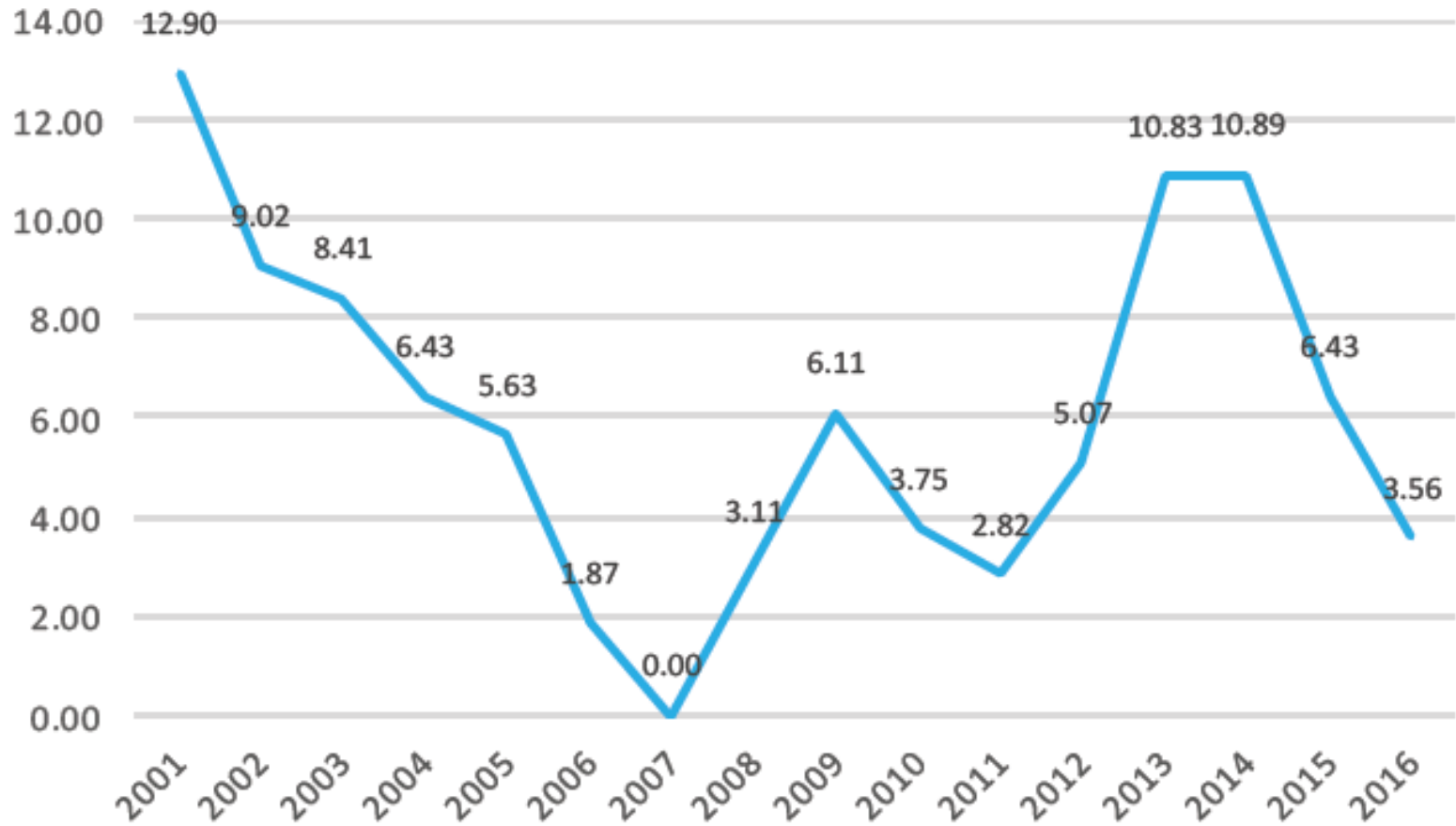


Chart: 2-yearly *air transport* helicopter accidents per 100,000 hours 2000-2016

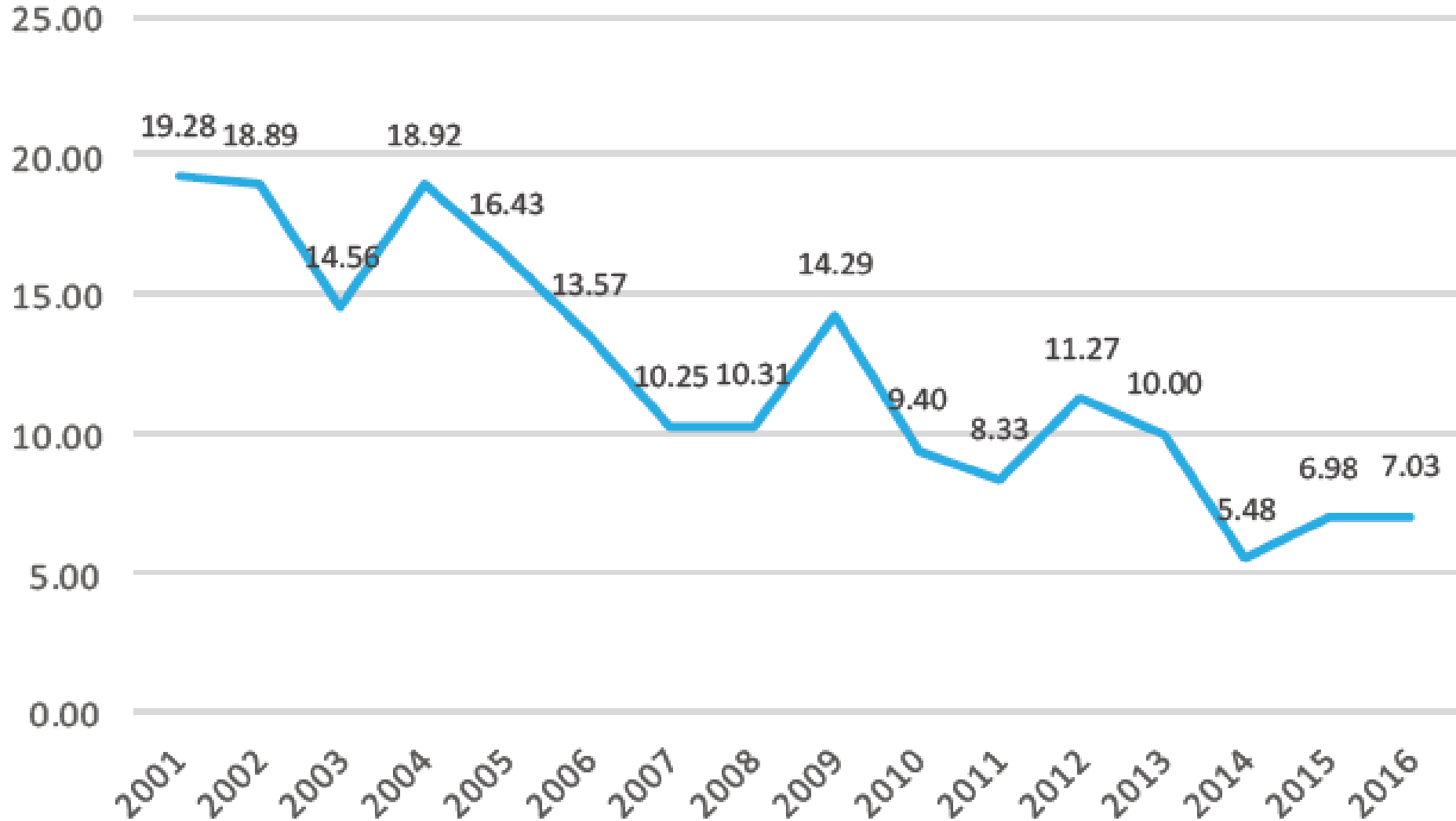


Chart: 2-yearly *agricultural* helicopter accidents per 100,000 hours 2000-2016

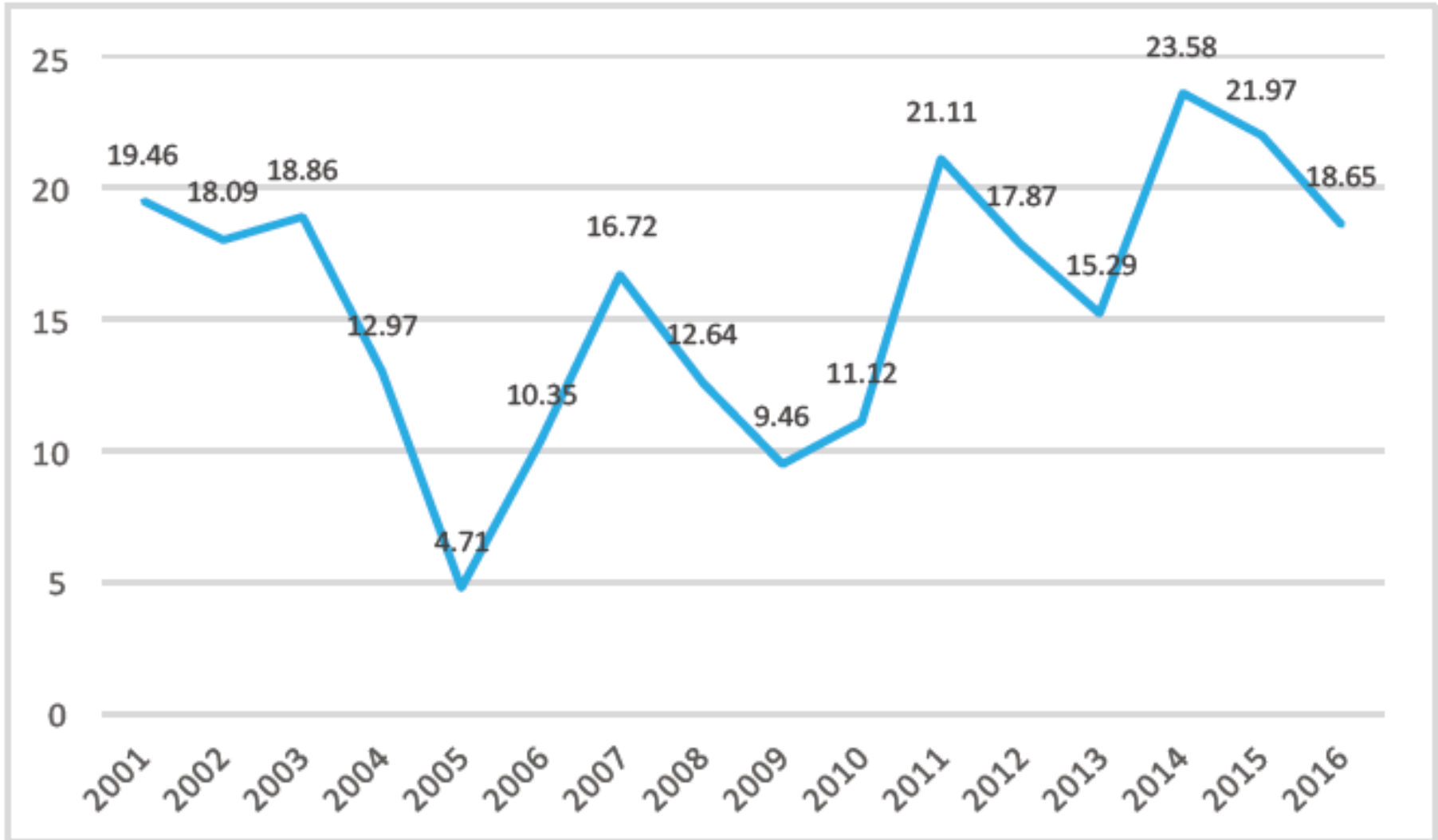
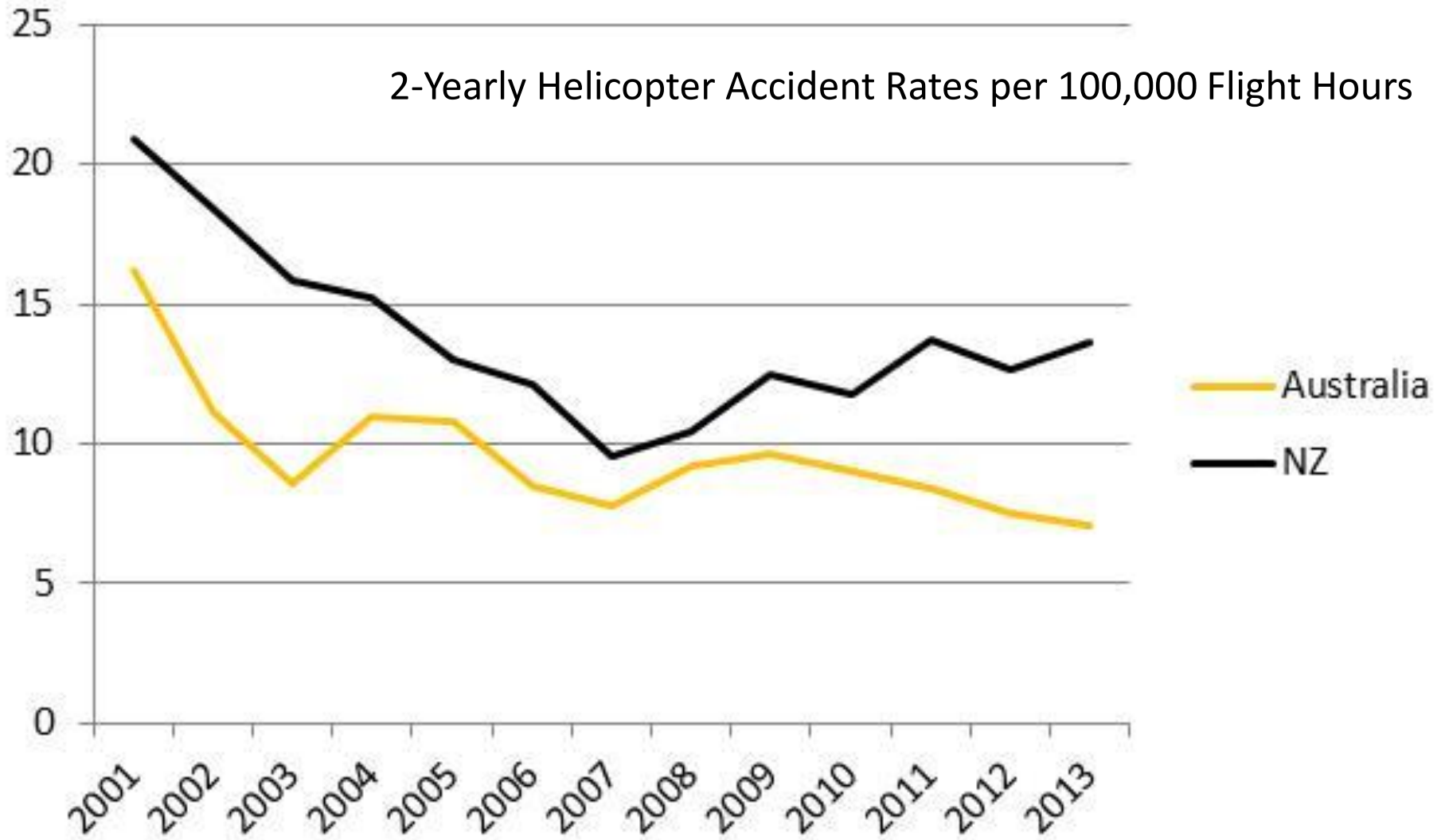


Chart: 2-yearly *other commercial* helicopter accidents per 100,000 hours 2000-2016



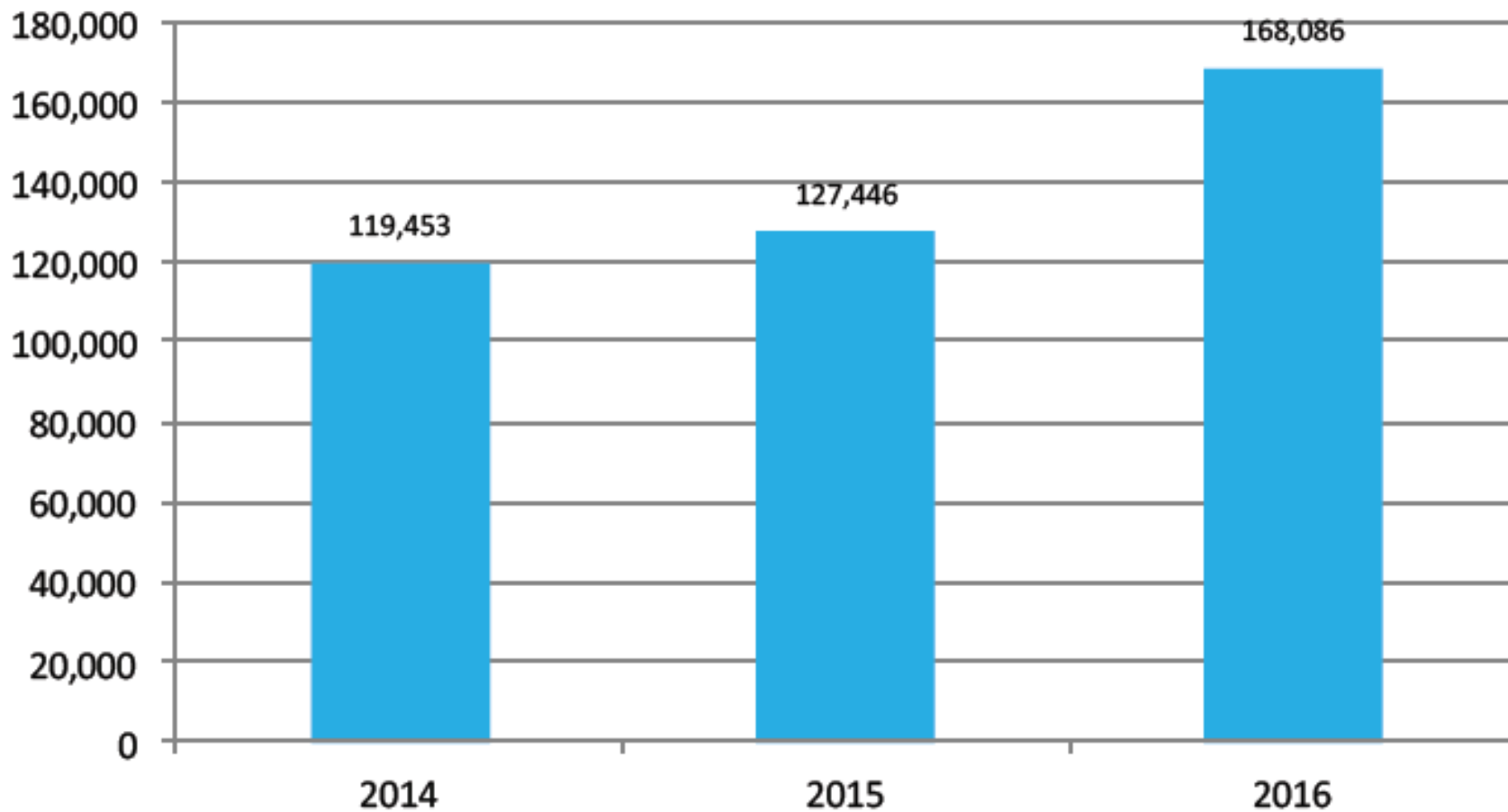


Chart: Estimated number of international visitors undertaking adventure aviation activities during their stay, year to June annually

- Pacific Aerospace 750XL: Parachute Operation. The load of skydivers included a group of 11 skydivers who wished to exit together. As skydivers moved to the rear, the nose pitched up, couldn't be corrected with **full elevator** deflection. The pilot rolled the aircraft to the left (as per his emergency procedures training). As the skydivers exited the aircraft the pilot felt a bump. Impact damage on LH side of the horizontal stabiliser. (17/513)

Questions ?



