

A photograph of the Singapore Aviation Academy building, a large white structure with a red-tiled roof and multiple windows, set against a clear blue sky. The building is partially obscured by trees in the foreground.

SAA
Introduction

Singapore Aviation Safety Seminar 2018

Flight Safety Foundation – Singapore Aviation Academy

Panel – Lessons learned from Accident and Incident Investigations

Presented by Caj Frostell

Formal (Annex 13) Accident Investigations by an Aircraft Accident Investigation Agency

- The investigations usually determine the safety deficiencies and hazards (quite well)
- The formulation of safety recommendations (could be improved, to improve implementation)
 - ✓ Requires cooperation (separation, not isolation)
- Implementation of recommendations (could be improved)
 - ✓ “Nobody was fatally injured, why do we need to implement something that costs 2 million ?“

Safety improvements

- A number of significant improvements have been made over the years
 - ✓ Some improvements have been quick and timely
 - ✓ Some improvements take a long time to implement
 - ✓ (Examples: security, unruly pax, drones, fire resistant material, non-toxic materials, dangerous goods – hazardous cargo, 16 g seats; how about restraint systems and child restraints ?

Serious incident investigations

- Now a requirement in Annex 13
- Not particularly well implemented, on a systematic basis
 - ✓ Lack of *notification*
 - ✓ Lack of *resources* (safety studies, GA events?)
 - ✓ Lack of perceived *importance*
 - ✓ “Subjectivity” in the *classifications of “serious incident”* (considerable differences from country to country)

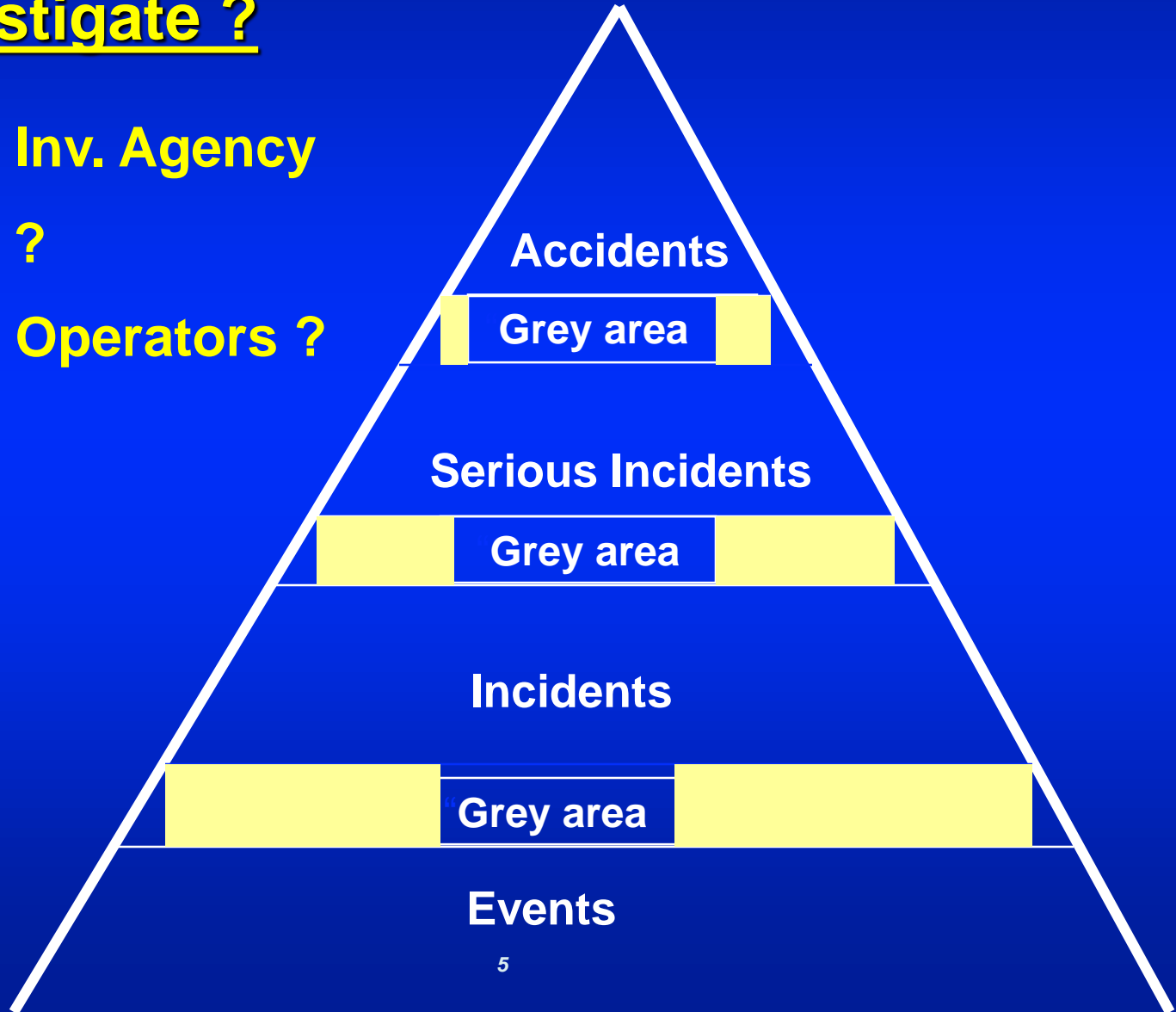
Note.- With fewer major accidents, could serious incidents be more widely investigated ?

Who should investigate ?

Acc. Inv. Agency

CAA ?

SMS Operators ?



SMS operator investigations

- All accidents, serious incidents, incidents and events
 - ✓ If A13 investigation, operator SMS investigation should be important as a basis for participation
 - ✓ Safety department resources, perceived importance
 - ✓ Fine line between safety investigations and enforcement actions (just culture)
 - ✓ “Nobody was injured, why do we need to implement something that costs 2 million ?“
- Internal reporting system – does it work? (protection?)
 - ✓ Airline - 30 aircraft 700 - 800 reports per year
 - ✓ Airline - 16 aircraft same numbers
 - ✓ Does the reporters report on themselves?



SAA

Introduction

Thank you