D2D Safety Surveys

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Overview

- Where did D2D come from?

- How do we observe?

- What are the benefits of D2D?

- What do the results look like?

- Recent Developments

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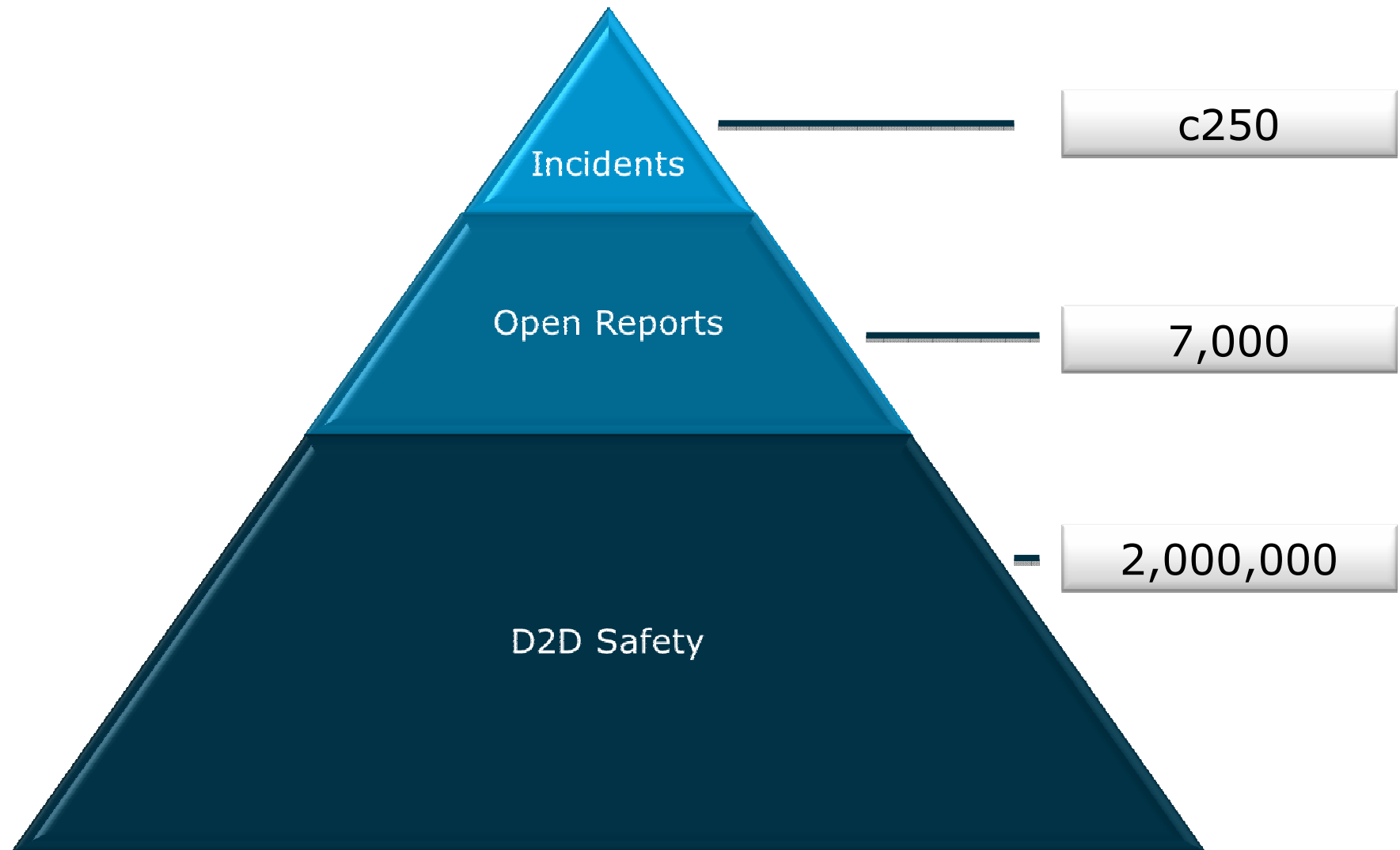
Where Did D2D Come From?

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D2D Safety Surveys

D2D Safety Surveys

Incidents	c250
Open Reports	7,000
D2D Safety	2,000,000

D2D Background

- What is D2D?

  - Observing - NOT assessing

  - It is about the technique, NOT the person being observed

  - Looking for good techniques only, NOT for any negative behaviours

  - Seeking data on how often good techniques are used

  - Improving ATCO safety through understanding the use of good techniques

Background: Identify What's Important

- NATS top six causal factors from SSE1-4s

- Contextual factors associated with them (next slide)

Causal Factor	Example
Not see	infringing aircraft on radar, aircraft on the runway, or strips in the strip bay
Incorrect decision/plan	assumptions relating to aircraft speed, accounting for the wind or making a plan entirely dependent on aircraft performance
Transmitting incorrect information	transmitting the wrong information, including the wrong flight level, callsign or frequency
Mis-perceive information	cleared flight level of aircraft based on assumptions
Mis-hear	incorrect readback of flight level by the pilot
Misjudge	climbing/descending and crossing aircraft tracks, or departure gaps

Background: Identify What's Important

+ Contextual information

Contextual Factor	Example
Training issues	monitoring of trainee
Hand-over issues	rushed or incomplete information
Interruptions	particularly from phone calls, or colleague questions
Workload	competing tasks, and restricting search for information
Airspace complexity	crossing tracks

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What do we observe?

- 5 key techniques to mitigate the top causal factors:

  - Visual Scanning

  - Active Listening

  - Defensive Controlling

  - WAYSRAYL (Write As You Speak Read As You Listen)

  - Strip Management

> A series of positive safety behaviours are observed for each technique with their frequency noted
> (Always ,Sometimes ,Never ,N/A) and contextual comments.

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How Do We Observe?

Observations

- Observations are not about the person
  - They are not judgemental
  - They do not question competency
  - They do not criticise individual skills, techniques
  - They do not score individuals

- Observers are taught how to carry out objective observations

- Trained observers carry out observations looking for the GOOD techniques – identified by ATCOs - that are used EVERY DAY.

- Observe the sector in operation and take notes on how often the technique was observed happening.

- Comments are added to provide context

- Results sent to central team for analysis and reports

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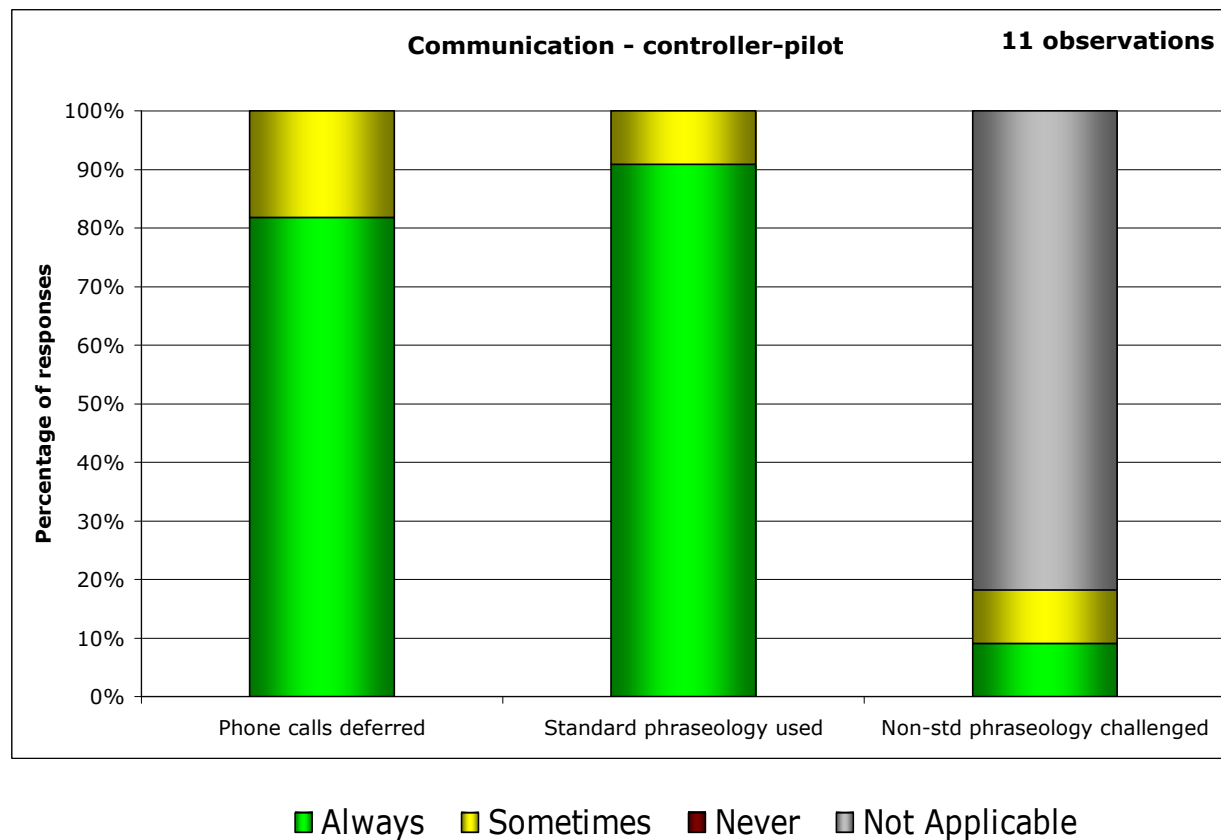# What are the Benefits of D2D?

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Benefit

What does D2D give us that other SMS procedures don't?

+ Investigations can only provide a historic picture of what's already gone wrong

+ Competence monitoring is artificial – people don't control 'naturally'

+ Safety audits give a historical statistical account of the safety picture

+ D2D is a forward-looking predictive indicator which is gathered 'live' as it happens. People behave much more naturally when D2D is taking place

+ We have a leading indicator of safety

+ It provides the operation with a picture of risk BEFORE any incident takes place

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What do the results look like?

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Example Results

What has Happened as a result?

» **Prestwick**

  » **Visual scanning:**

    » "Watch out for the gorilla" campaign

    » Visual scanning experiments

    » Bespoke Visual Scanning observations

  » **Active listening**

    » Quiz for operational staff

  » **Defensive controlling**

    » Guides produced (ScACC)

    » Simulations run (MACC)

    » Avoiding Action phraseology as part of TRUCE (MACC)

  » **OJT**

    » Poster campaign

    » Bespoke OJTI observations

  » **Supervisors**

» Bespoke supervisory observations

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Recent Developments

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Recent developments

+ The observations have been tailored at units to capture additional relevant information.

+ The programme has now been extended to capture information on a variety of different aspects of the operation, including:

  + On the Job Training

  + Communication within and beyond the ops room

  + Co-ordination between civil and military operations

  + Interfaces between adjacent units

  + Team-working

  + Sector specific controlling techniques

  + Flight deck observations

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Questions?

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