

Day-to-Day Safety Observations (D2D)

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NATS

How Safe Are You?



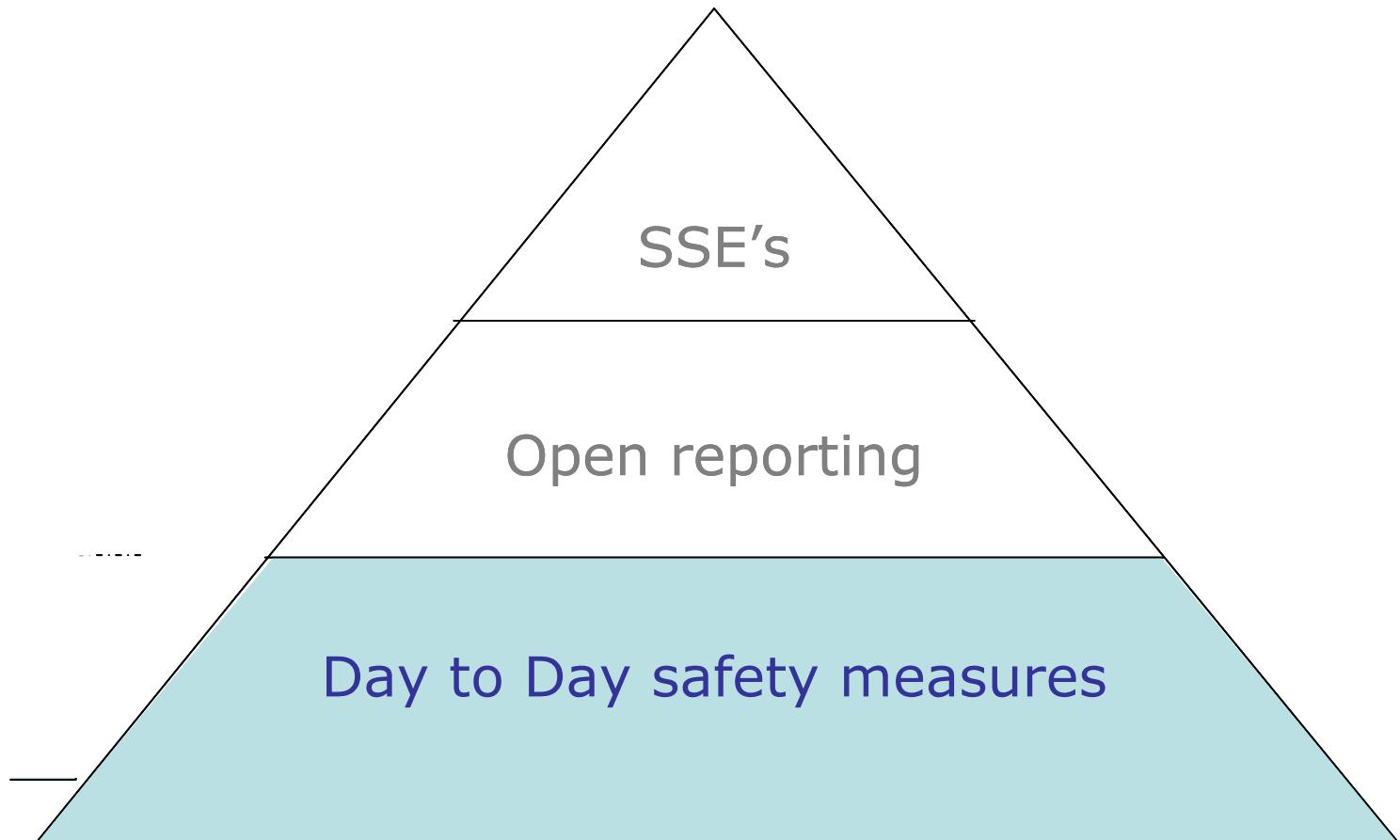
How Safe Are You?



NATS Safety Managers were asked exactly this question
- they couldn't answer



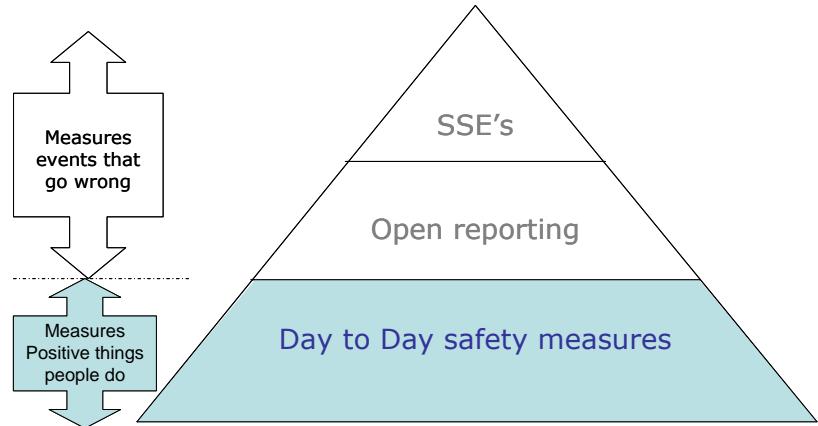
Safety Data Pyramid



Background



- » 2.5m movements in 2008/9
- » c.250 'serious' incidents
- » c.7000 open reports
- » Investigators tell us what went 'wrong' on >7500 occasions
- » What went 'right' the remaining times (2.4m+)?
- » We developed D2D to give us a measure of 'good' safety performance



What we did next...



- » Examined 5 years of incident data
- » Identified known good techniques to mitigate
- » Developed observable criteria to demonstrate these

What did we observe?



5 techniques:

- » **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 (A,S,N,N/A) and contextual comments.

Human Performance observation form.

Unit:	Date:	Observer:
AM / PM: AM / PM	Position:	Position Type:
Traffic: H / M-H / M / M-L / L	Complexity: H / M-H / M / M-L / L	Configuration Change? Yes / No
Other Information:		



Visual scanning cycle	Frequency	Comments
Memory aids are used as a prompt during the scanning cycle.		
Scanning cycles are completed.		
Memory aids are removed when no longer needed.		
Relevant information is actively monitored and checked.		

Active listening	Frequency	Comments
Phone calls are deferred when RT is being used.		
One party is signaled to stand by whilst paying attention to other information.		

What we did next...



- » **Enrolled managers & Unions**
- » **Trained observers through a central programme**
- » **Gave feedback to units once observations were complete**
- » **Conducted workshops**
- » **Developed action plans**
- » **Executed plans**
- » **Used D2D to measure improvement**

The Ethos of D2D



- » A new way to measure how safe we are
- » Proactive, not reactive
- » It looks at the positive things people do to keep us safe
- » A way of knowing if improvement actions are effective and successful
- » They facilitate a higher awareness of risks
- » An indication of whether we are getting safer
- » **THEY DO NOT ASSESS INDIVIDUAL COMPETENCY**

What have we done so far....?



- » D2D in use at all Centres and Airports
- » 50+ training courses
- » Over 150 operational staff trained as observers

.....over 590 observations carried out across NATS units.

- » Over 30 reports detailing findings
- » Action plans developed based on findings



What does D2D change?

EYE MOVEMENT TRACKING IN OCEANIC



Visual Scanning in Shanwick Oceanic

ACID Search Results Auto Probe Queue 0549

RCL/Alert: [003/007]

FROM: BG 0549 NA086

*** CONFORMANCE ALERT ***

Unexpected route and/or level data

Reported: 60/20/0546 340 59/30/0625 59/40

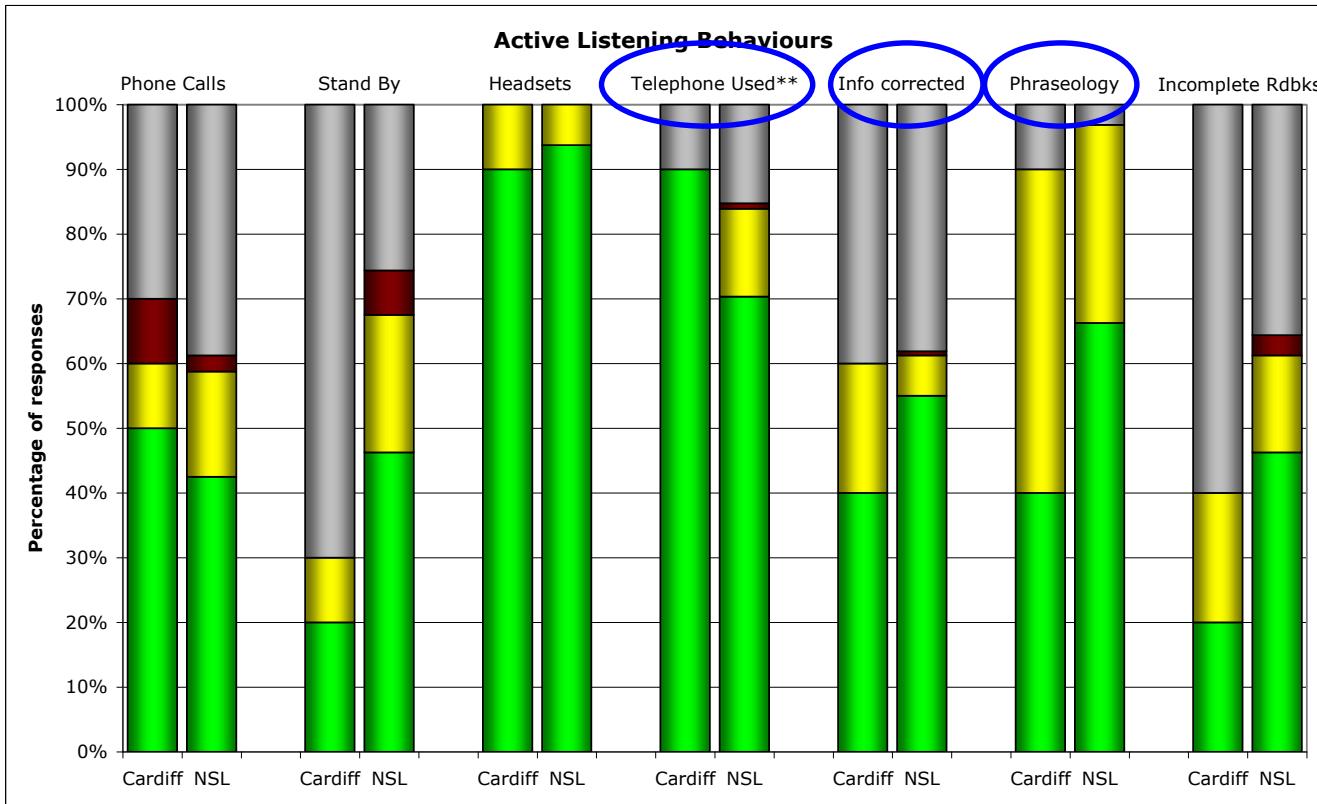
Expected: 59/20/0546 340 59/30/0625 58/40

(POSB0186-NA086-60N020W/0546 F340 59N030W/0625 NEXT 59N040W)

Remove Done Close Requeue Respond Forward

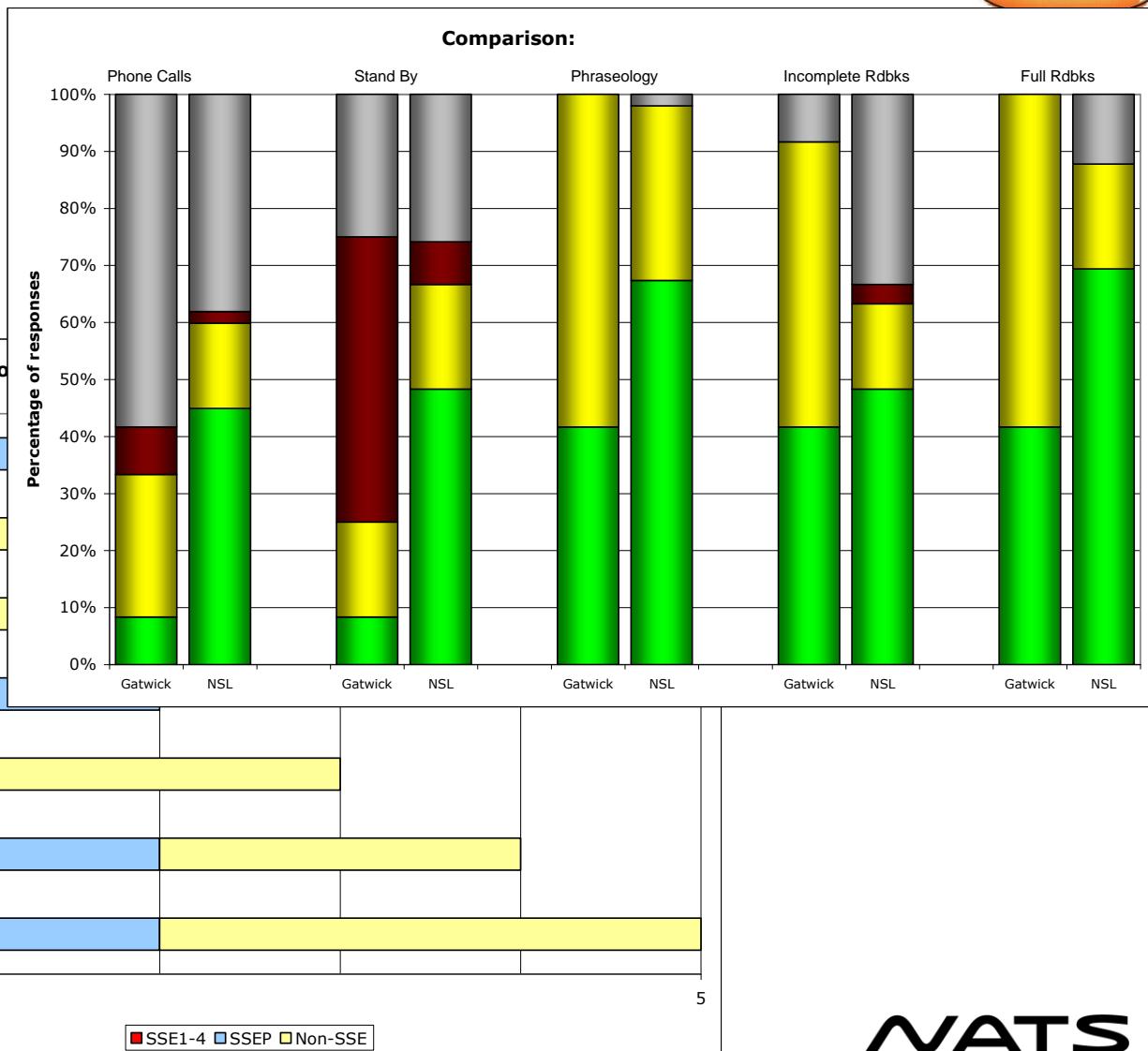
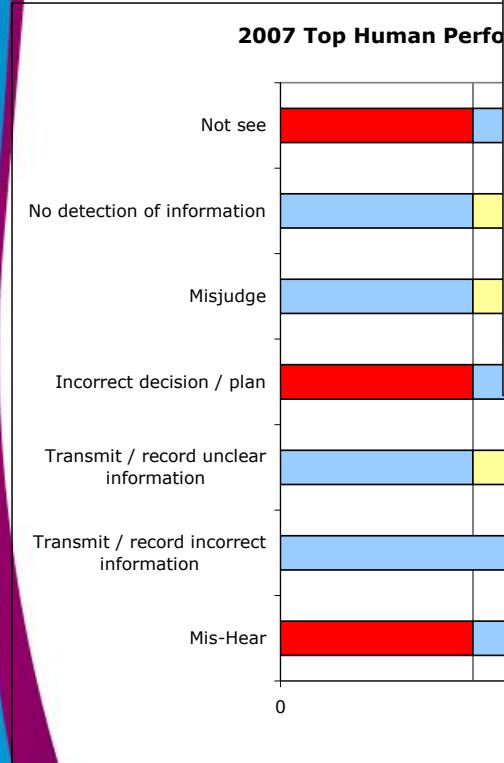
Flight Plan - NA086

Active Listening



Interpretation	
	Using intercom or telephone
	Correcting incorrect aural info
	Using standard phraseology

Comparison of Causal Factors and D2D



What we use it for now...



- » Unit-specific criteria
- » Sector-specific criteria
- » Defensive Controlling simulations
- » Flow managers
- » Civil-Military Co-ordination
- » ATC Interfaces (Airport-ACC: FAB)
- » College Instructors
- » College students
- » Non-operational managers
- » Airlines 'in the cockpit'

What does it give you...?



- » Just Culture
- » Positive Messages
- » Positive Learning
- » Operational Ownership
- » Early warning of future problems
- » A way to identify & measure safety improvement

Summary....



**Observe & Measure
Identify Weak Areas
Workshop
Plan
Execute
Observe & Measure**

Summary....



D2D is an **Early Warning Tool**

D2D is a vital tool in measuring what is actually happening at your unit and will help you to **identify** areas for safety improvement and **measure** safety improvement...

...BEFORE YOU HAVE AN INCIDENT



**With D2D you will have an answer
for the question...**

HOW SAFE ARE YOU?