



NSW Air Ambulance and Virgin Australia  
non-technical skills course:  
Aiming higher and reaching further  
through collaborative aviation partnerships.





## The course





|        |  |
|--------|--|
| Who?   | <ul style="list-style-type: none"><li>- Designed and delivered by: Virgin Australia, NSW Air Ambulance and aviation contractor operational staff</li><li>- Participants: Pilots, operations staff, engineers, flight nurses and all support staff</li></ul>  |
| What?  | <ul style="list-style-type: none"><li>- Two day NTS bridging course</li></ul>  |
| When?  | <ul style="list-style-type: none"><li>- Monthly face to face course</li></ul>  |
| Where? | <ul style="list-style-type: none"><li>- Virgin Australia training centre</li></ul>   |
| Why?   | <ul style="list-style-type: none"><li>- Bespoke and relevant to our operations.</li></ul>  |



Course content based on:  
CAAP SMS-3(1) and MAPP (Mavin and Dall'Alba, 2010)

Decision making

Situational awareness

Leadership  
and  
teamwork

Automation

Communi-  
cation

Conflict  
resolution

Fatigue  
mgmt

Stress, info  
processing  
and  
workload  
mgmt

Culture

Threat and  
error mgmt



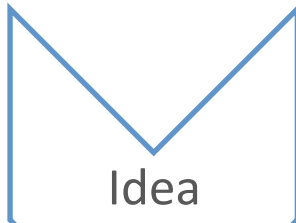


## The process



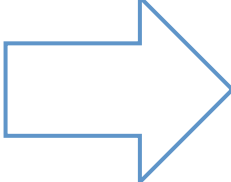


## Background



- PACDEFF 2013
- Witnessed VA course in action (no gorilla!)
- Epiphany! – Let's aim higher and reach further'



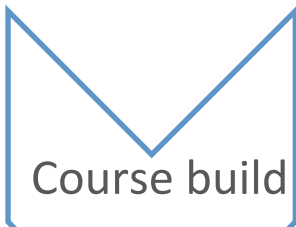
- Informal negotiation
  - Contractor negotiation
  - Virgin Australia negotiation
- 
- Contract



- Top level buy-in required by two organisations
- Negotiations with two safety departments
- Multidisciplinary, multi-organisation 'think tank.'



## Background



- Initial input from all disciplines
- Big group  $\implies$  smaller group
- Revisions by VA NTS learning design team



- EOI to all groups to select facilitators
- Facilitators chosen on merit - interest and passion
- Three day TTT course – VA and AA facilitated
- TTT focused on content and facilitation skills



- TTT feedback, final revision  $\implies$  course launch
- Course rolled out– managers represented in first course
- Course review, revisions and final version delivered.



## Instructional design and methodology





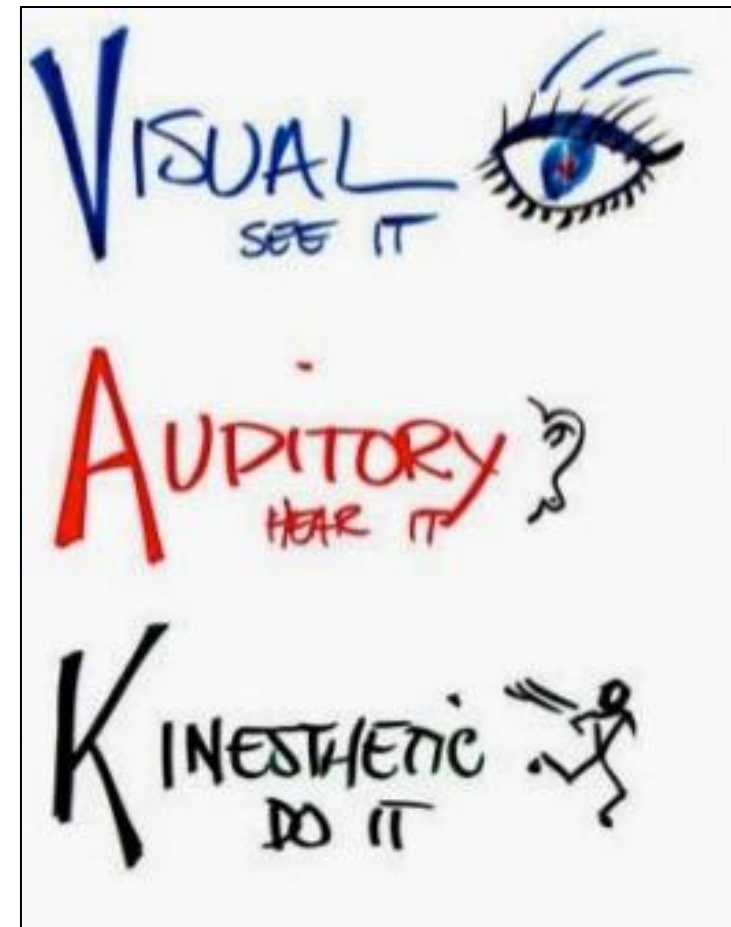


## ADDIE instructional design methodology

|                |   |
|----------------|---|
| Analysis       | <ul style="list-style-type: none"><li>- Multi-cultural - Pilots, Engineers, Flight Nurses, Midwives, Aeromedical Operations Officers, ground handlers, support and administration staff</li></ul> |
| Design         | <ul style="list-style-type: none"><li>- Constructively aligned – Learner centred</li><li>- Based on the VAK model</li></ul>   |
| Development    | <ul style="list-style-type: none"><li>- Multiple learning and teaching strategies</li><li>- Multiple learning materials</li></ul>   |
| Implementation | <ul style="list-style-type: none"><li>- TTT – roll out – review</li><li>- Facilitated by multi-cultural staff</li></ul>   |
| Evaluation     | <ul style="list-style-type: none"><li>- Assessment - multiple choice exam</li><li>- Course feedback sheet.</li></ul>  |

## Delivery philosophy

- Adult education
- Facilitated not instructed
- Simple VAK model.



## Learning strategies

- Simulation/empathy game flagship activity
- Discussions
- Brainstorms
- Group activities
- Videos, multimedia
- Structured debrief
- Interactive lectures
- Case studies
- Crosswords/games
- Assessment.





## Learning resources

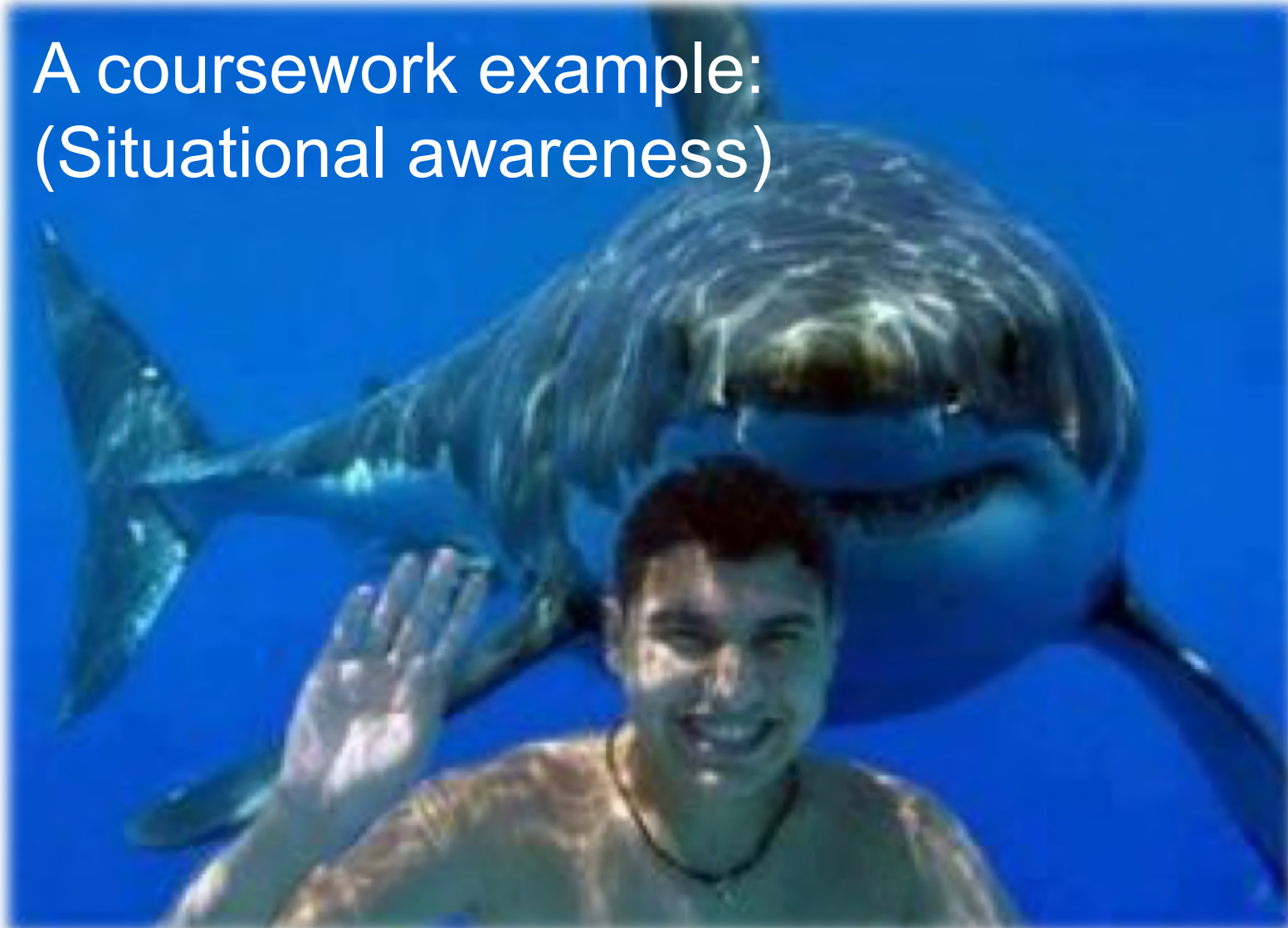
- Lesson plan
- Facilitator guide
- PowerPoint
- Activity folder
- Learner workbook
- Assessment.







A coursework example:  
(Situational awareness)



## Rock the vote!

- Go to: <http://pingo.pb.de/>
- Just type in pingo and it should go to the site

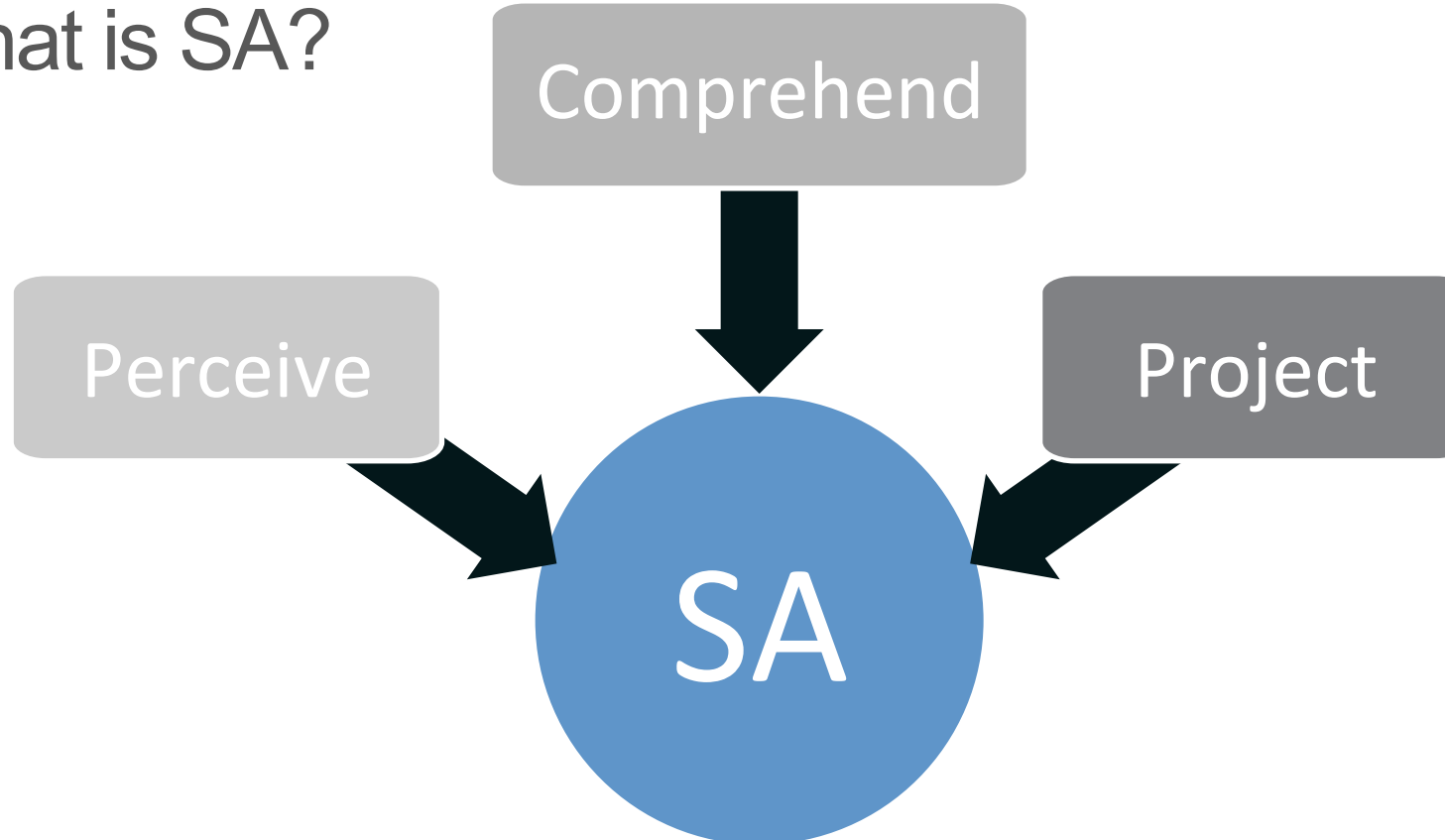
**Rock the vote!**

- Type in access code as directed – click 'Rock the vote'
- Wait for further instructions. 😊





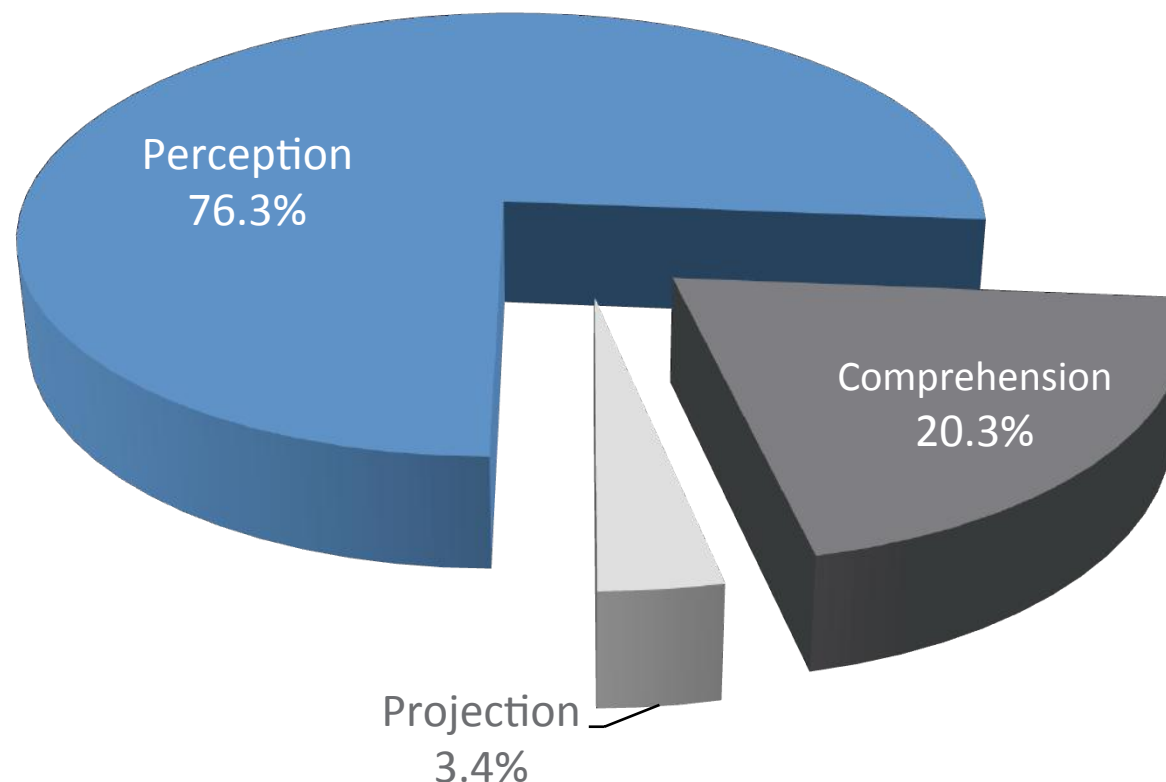
## What is SA?



Situational awareness is the perception of the elements in the environment, the comprehension of their meaning, and the projection of their status in the near future.



## Percentage of SA errors



Loss of situational awareness is identified in approximately 85% of incident reports.  
(Australian Transportation Safety Board)





## Situational awareness activity

- Pay attention to the video
- No talking or comments
- There will be a short quiz on the completion of the video
- There are no tricks
- There are two columns on the quiz page
- Fill in 'Your answer' column
- Please don't guess - this is not a test.



# NSW Ambulance

excellence in care



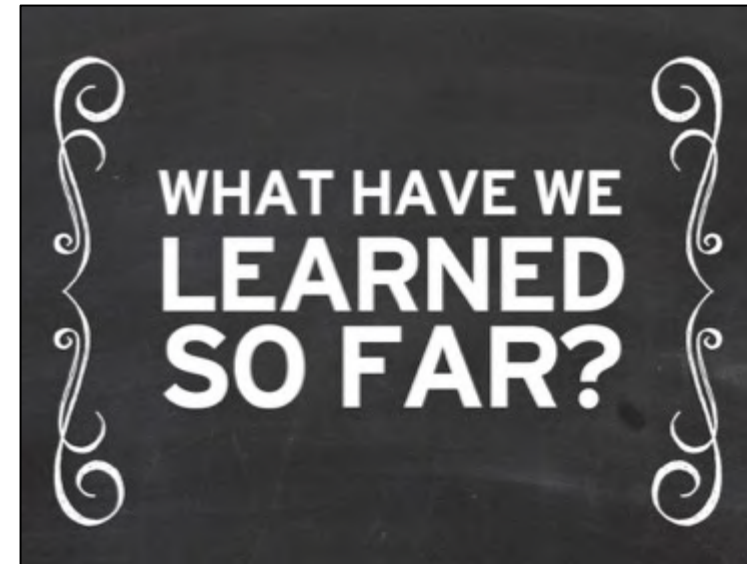


| QUESTION |   | ANSWER              |
|----------|---|---------------------|
| 1.       | What was the date of the incident?  | 05/08/13            |
| 2.       | How many cars do you see respond initially?                                     | Two                 |
| 3.       | What was the name of the TV station reporting the incident?                     | Euronews            |
| 4.       | Is the landing gear up or down?   | Up                  |
| 5.       | Which wing impacts the ground first?  | Left                |
| 6.       | How many people (passengers, pilots) exit the aircraft?                         | None                |
| 7.       | Is there fire, fire and smoke or just smoke at the scene?                       | Fire and smoke      |
| 8.       | What colour/s make up the tail portion of the aircraft?                         | Red, white and blue |
| 9.       | How many people wearing safety vests run towards the wreckage?                  | Four                |
| 10       | What colour are the safety vests?   | Yellow fluoro       |
| 11       | How many additional people are at the crash site (on the grass near the plane)? | Two.                |



## Outcomes and lessons

- MASSIVE thank you to VA/Belinda Warner for entertaining a crazy idea!
- Top level 'buy in' is essential
- Challenges of negotiating in a multi-cultural, multi-organisational system
- Limiting number in course build
- Considerable administration required – workload
- Neutral venue
- Chatham House Rules.







## Course feedback

*'Upbeat, lively, lots of interaction, extremely varied'*

*'Thank you all very much – will be able to use lots of what I have learnt with this course'*

*'Much improved over previous CRM'*

*'Great to mix with co-workers we usually don't get to meet'*

*'An education I wish I'd received earlier in my years. Very conducive to further growth as a person and employee'*

*'Relevant to aeromedical'*



## Questions and contacts



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