

# LOSA and CRM

...SEPARATE PARALLELS OR  
COMFORTABLE CO-EXISTENCE?

## *NOTECHS: (behavioural feedback)*

### *the positives:*

- **Trains skills**
- **Standardises what instructors are looking at - and for**
- **Serves as a training record that reflects on the training as much as the trainee**
- **Provides a format for 'objective' observation**
- **Protects against 'rogue' instructors**
- **Provides immediate individual feedback**

*NOTECHS: (behavioural markers)  
the negatives*

- **Financial cost of accrediting instructors**
- **Instructors don't necessarily 'buy into' HF principles**
- **Cannot 'capture' negative role models**
- **Current system of accreditation can consolidate old hierarchies**
- **Some instructors still feel under-qualified**
- **Proper debrief training not understood and difficult to obtain**
- **Do not necessarily transfer into line operations**

***LOSA:***  
***the positives***

- **Two dimensional slice in operational time which records how all respective influences interact (with) and affect the operation**
- **Captures good practice**
- **Reaches into ordinary line operations**
- **Includes the crews' perspectives**
- **Gives the management 'ownership' of findings and solutions**
- **Proactive rather than reactive**

*LOSA: the negatives*

*... part I*

- **The perception that LOSA is just another check-ride, (looks at same criteria)**
- **Trainers feel personally threatened**
- **Trainers feel they already have adequate sources of information, (ASRs, MORs, flight reports)**

*... part II*

- **Trainers would feel responsible for outcomes**
- **Trainers might not agree with changes**
- **LOSA “doesn’t cover year-round operations”**
- **“Doesn’t add to training”**
- **Trainers question “the qualifications and training of the observers”**
- **Very high cost relative to value**
- **Very American in concept**

*The problems:*

- **One philosophy is a JAR requirement**
- **The other philosophy is highly recommended by ICAO and IATA**
- **One philosophy is a people approach – aimed at modifying variances in human behaviour**
- **The other philosophy is a systems approach – aimed at providing empirical data to assist in affecting systemic/organisational change**

*The questions:*

- **Is this a transatlantic philosophical/intellectual/cultural debate that risks losing the small operators?**
- **Does LOSA translate culturally?**
- **Why can't we have either/or?**
- **Are we forcing a two tier safety system?**

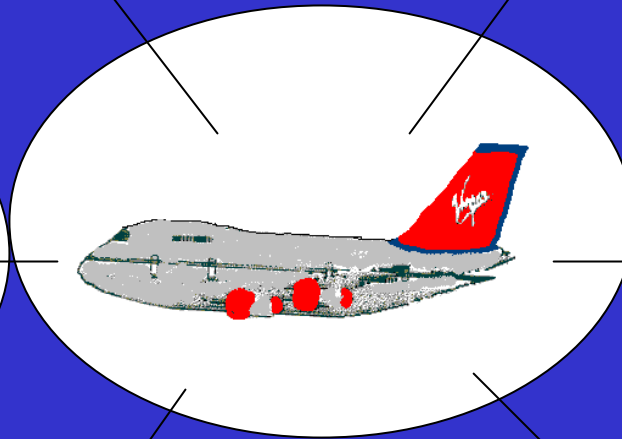
*The truths*

- 1. All operators raise their game under observation**
- 2. Crews 'do' what makes sense at the time, based on the circumstances surrounding them**
- 3. Once they are out on the line, we have few non-check means of auditing the operational environment, or crew response to the environment.**

**HUMAN ERROR AND  
RELIABILITY, ERROR  
CHAIN, ERROR PROVENTION  
AND DETECTION**

**INFORMATION  
ACQUISITION AND  
PROCESSING, SITUATION  
AWARENESS, WORKLOAD  
MANAGEMENT**

**STRESS, STRESS  
MANAGEMENT  
FATIGUE AND  
VIGILANCE**



**COMPANY SAFETY  
CULTURE, S.O.Ps  
ORGANISATIONAL  
FACTORS**

**DECISION MAKING**

**COMMUNICATION AND  
COORDINATION INSIDE  
AND OUTSIDE THE COCKPIT**



**ARE WE BEING SERVED?**

**...OR, ARE WE LEGISLATING A SPLIT IN**

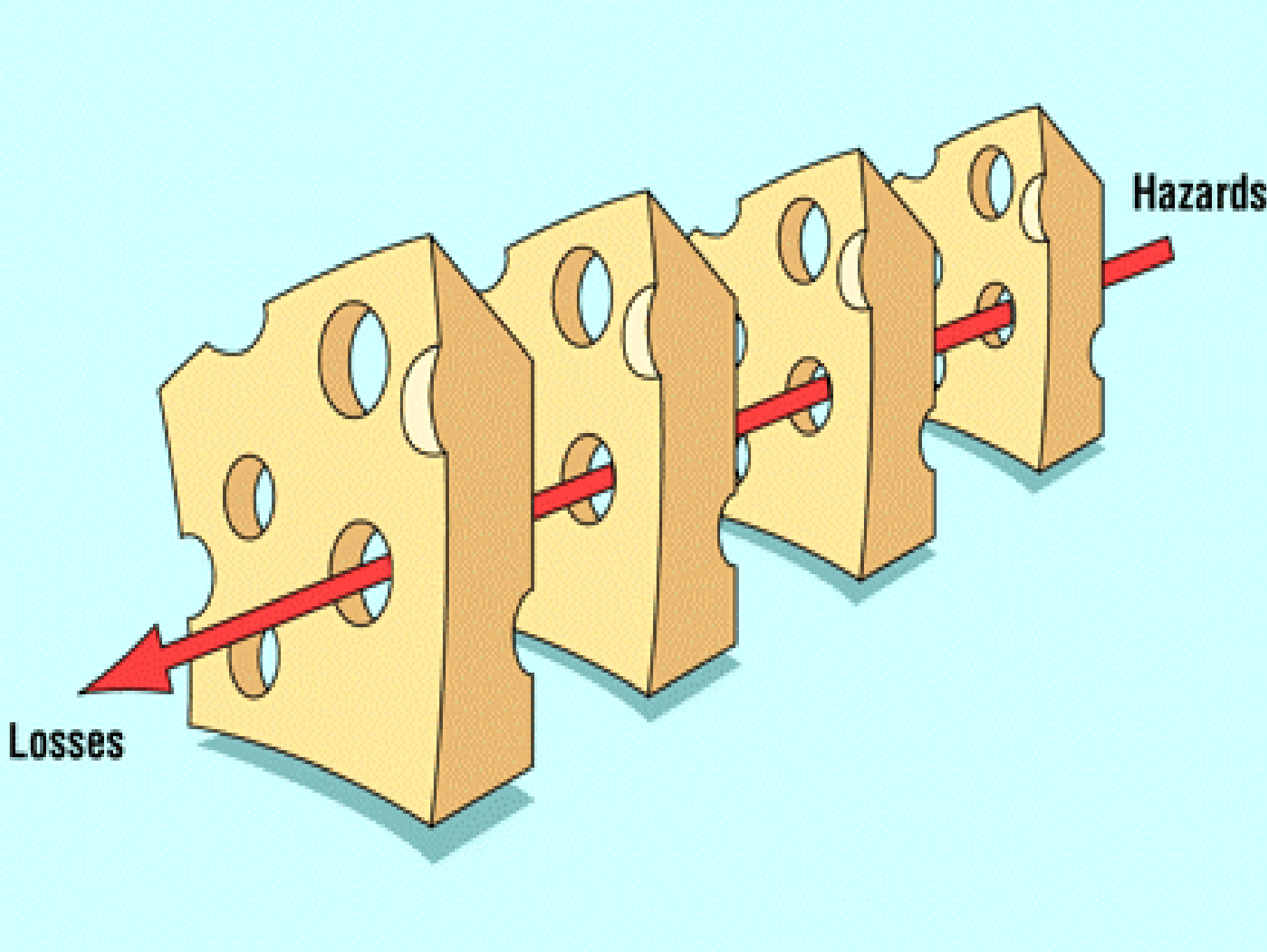
**(APPROACH AND UNDERSTANDING OF) HF**


**ISSUES THAT OCCURS AT 50W?**

**“Senior executives understand that their organisation’s measurement system strongly affects the behaviour of managers and employees”**

**...”Cannot rely on one set of measures to the exclusion of the other**

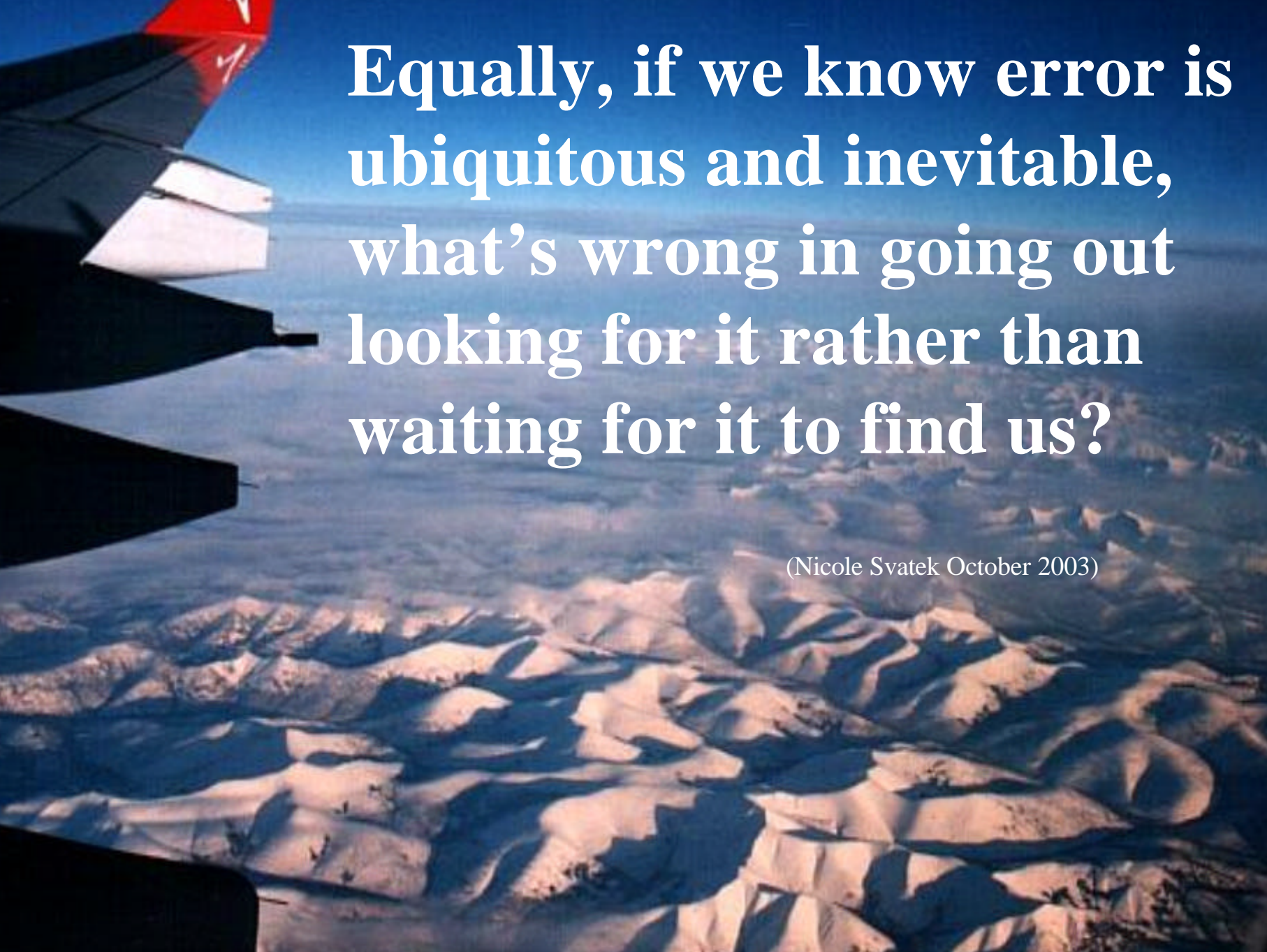
**SITUATION AWARENESS'** describes a dynamic state of (cognitive) awareness that integrates information and uses it to anticipate changes to the current environment



An aerial photograph of a vast desert landscape, likely the sand dunes of Sossusvlei in Namibia. The dunes are golden-brown and create a rhythmic pattern of light and shadow across the terrain. In the upper left corner, the black and red wing of an airplane is visible, suggesting the photo was taken from an aircraft. The sky is a clear, deep blue.

**“We cannot change the human condition. But we can change the conditions under which humans work”.**

*Prof. James Reason BMJ 2000*

An aerial photograph of a desert landscape, likely the Sand Dunes of Alcala de Henares in Spain. The dunes are golden-brown and have a distinct, repetitive pattern of ridges and valleys. In the upper left corner, the black and red wing of an airplane is visible, suggesting the photo was taken from an aircraft. The sky is a clear, deep blue.

**Equally, if we know error is ubiquitous and inevitable, what's wrong in going out looking for it rather than waiting for it to find us?**

(Nicole Svatek October 2003)

Thank you



Nicole.Svatek@fly.virgin.com