SOME ORGANISATIONAL TRENDS - ARE THEY FOR THE BETTER?

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A NOSTALGIC AND SAD REFLECTION

- Last time I did this presentation was during 9/11, Huntsville, Alabama
- US Air-space closed
  - Keynote speaker couldn’t fly in from Canada
- I was asked at the last minute to fill in
- Given the circumstances - pleased to help out
BACKGROUND TO THE PRESENTATION

APPLICATION TO A TECHNICAL ORGANISATION

Personal Opinions
PURPOSE OF THE PRESENTATION

- Technical based organisations
  - To list some of the current trends that organisations appear to go through
  - To discuss whether they are for better ‘or worse’
  - What are the problems (side effects) that might arise?
  - How they relate to the ‘Law of Unintended Consequences’
  - What might be the Root Causes

*Their influence on safety*
TREATING THE SYMPTOM RATHER THAN ROOT CAUSE

- Lesson from the medical industry
  - Treat and tackle the root cause.

- Are we too focussed on treating the symptoms?
  - The urgency of the here and now
  - Configured to treat a series of symptom related problems – symptom paralysis!
  - Is this having an undue effect (detriment) on the configuration of the business.

- Shouldn’t we be more strategic and look towards eliminating the root cause rather than to be too focused on the symptoms?
  - Are the symptoms a consequence of earlier poor strategic technical decisions
  - If so what was the deficiency that led to this
  - What are we doing about it – to prevent re-occurrence

- Have we got the balance right – symptom response versus root cause assessment?
- Does our Review Learn and Improve processes really get to the root cause aspects – somewhat after the event – rather than before?

Very often the sequence of symptoms arises from earlier poor technical decisions. Was there a technical deficiency at the time.

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MANAGEMENT STYLE – TECHNICAL LEADERSHIP TO MORE CONVENTIONAL PROCESS LED MANAGEMENT

- Organisations appear to have moved somewhat from
  - A technical leadership style of management
  - To a more traditional style with a strong emphasis on project management and control through processes
  - Has it changed from - Management with the aid of processes to management being the prisoner of processes?
  - There can be damaging conflicts between the need for sound judgement and subservience to prescription.

*Which management style is suited to provide the best balance*
MANAGEMENT STYLE - RESPECTIVE CHARACTERISTICS

- Strong technical leadership is best placed to assess which aspects of prescription are necessary and what aspects are not
  - Better judgment on context
    - Based on expert knowledge, experience and technical confidence
  - Allows greater flexibility and agility in decision making
    - What is necessary and when
  - Aids in the avoidance of nugatory (and even wrong) compliance with unnecessary prescription - context

- A more traditional ‘process led’ management style may not be so well placed. Does follow the rigour of due process but:
  - More limited in flexibility in decision making
  - A compulsion to comply with full prescription –or else!
  - Can lead to less targeted effort
  - Less value for expended resource

A personal opinion
IS THERE A GROWING TREND – IMPACT!

- Does the prescriptive trend lead towards a dilution of the technical leadership position in management structures?
- Can technical leadership be relegated in importance as the trend to prescription increases?
- Is there a perception that a full set of company prescriptions can effectively substitute for technical leadership in company management structures?

*Might this be becoming a worrying trend?*
A strong technical leadership structure ensures the maintenance and development of knowledge and experience - as part of day to day activity at all levels of the structure.

- The knowledge, skills and experience are continually ‘active’ within the structure
- It maintains and encourages a strong technical edge
- There is a strong technical mentoring characteristic
- It minimised technical loss when key personnel leave
- This is key when the nature of the business is such that it is not readily available from ‘outside’.
- This lessens the need for the organisation to have an independent knowledge management (KM) process
  - Is such a KM process always effective?

On the other hand
A more process led organisation

- Is not so adept at sharing and developing technical knowledge and experience as part of normal day to day business
- The knowledge and experience can be more passive – more characterised by training and ‘in docs’
- Essential knowledge and experience can well be irretrievably lost when key personnel leave
- Such an organisation will require a strong knowledge management process
  - Will training and ‘reading about it’ ever be as effective?

*Are we losing something important as we drift away from technical leadership structures?* OFFICIAL
THE PROCESS STRUCTURE IS NOT ENOUGH!

- A structured process with rigor is an important strategy **but**
  - Is there a growing belief that following the company process structure will of itself lead to success?
  - Isn’t it the quality within the processes an important element to success?
  - Does over reliance in a structured process approach lead to false confidence in quality and unintended consequences.

- Management is more comfortable in checking that due process has been adhered to rather than independently checking the technical quality within the processes – is this a weakness?
  - Is this a growing problem as technology and programmes become more complex.
  - A similar problem is arising in the context of independent peer review – see Nimrod next slide

*How do we ensure an adequate cadre of independent qualified technical experts at each level?*
EXAMPLES – WHERE VALUE MATTERED – BUT FAILED!

- The Nimrod tragedy in the UK – military A/C which caught fire and crashed
  - A sound structure of processes – a customer, a supplier and an independent assessor/adviser
  - But what happened to the quality within these independent processes
  - They were flawed
- The Minot ‘event’ in the US
  - A ‘sound process structure’ for independent checking that the wrong item could not slip through the net
    - But the quality within the process structure failed.
- The Haddon-Cave enquiry following the Nimrod tragedy noted that:
  
  “The safety case regime had led to: compliance-only exercises; audits of process only.”

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PROCESS/ROUTINE AND THE CHECKLIST MENTALITY 1

- Following naturally from the previous slide
- A process rich environment runs the danger of activities becoming ‘too routine/mechanical’.
  - Just slavishly following the process
  - What about the context - is the process appropriate
  - Dulls the mind
    - Not thinking outside the box
    - What about the ‘what ifs’
  - Impact on peer review
    - Which shouldn’t be trapped into this way of working

*Is there a risk that we may be generating a culture and cadre of personnel who fall into this way of operating?*
The checklist mentality

- Have all items in the list been considered?
  - But what might be missing?
  - But what does considered mean?
  - Is this really an assessment against the real requirements for each item in the checklist?
- Someone else has already done it – so it’s probably OK
  - Minot again
- Not thinking in the wider context within which the check list sits.
  - Its overall purpose
- Does this issue also apply to independent peer review?
  - Which shouldn’t be trapped into this way of working

Haddon - Cave notes the Nimrod tragedy became a paperwork ‘tickbox’ exercise.
“PROTECTIVE COMMENTS”!!!

- Views are my own and not those of AWE.
- Do they reflect on activities within AWE?
- You may well ask – I couldn’t possibly comment!

- The stock phrase by
  “Francis Eckhart
   In House of Cards
    a BBC TV Political drama”

  How to rise to the top by hinting but not admitting to anything

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OUTSOURCING

- A necessary process for all organizations – ‘Make or Buy’ decisions
  - Product/process cannot reasonably be undertaken internally.
- Outsourcing is not a simple ‘hand over’ process.
- The organization needs to maintain its credentials as a competent if not expert customer (especially for high consequence safety)
  - Ideally has all the knowledge and capability to do/produce it oneself if given the resources and budgets – but these are not normally available
- There are still risks if the customer employs an independent adviser
- As a competent customer
  - Could do but subject to resource and financial restraints
  - Absolutely clear about what is required and can competently specify
  - To ensure that supplier fully understands and can meet the specification
  - To be competent in ensuring that what is supplied fully meets the specification.
  - Customer consistently ‘Eyes on the Ball’
    - Following the agreed programme.
THE DANGERS AND AN EXAMPLE

- What are the dangers?
  - Overconfident trust that the ‘supplier knows best’
  - Relaxing and ‘Eyes off the Ball’
  - Drift away from competent customer status.
    - Suppliers are happy to give you what they want to give you!
    - External advisers are happy to give you the advice they want to give you!

- Again the Nimrod example
  - The customer
    - No longer fully competent in fully specifying what it wants and scrutinizing what is offered – and dependent on independent adviser - supplier knows best?
  - The supplier – design authority
    - Not confronted with competent customer and a challenging independent adviser – lacking pressure to comply with due diligence and quality
  - The independent adviser to the customer
    - Lack of true independence and scrutiny – not giving the due diligence required

Another example of what appears to be a sound process framework – but quality?
THE LOSS OF HANDS ON EXPERIENCE

- Hands on experience - or reading about it and being trained as a substitute – which is best – the most effective?
  - Have we got the balance right?
  - Are we developing a cadre of personnel without the true experience of ‘hands on’?
    - Only experienced to PowerPoint level
  - Does this ultimately lead to leadership with ‘something missing’.
    - Limited appreciation of the true nature of the technology for which they are responsible.
    - Unable to manage effectively?
    - Is there a danger of management losing effective understanding of what’s really going on below them?

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THE BURDEN OF PAPERWORK

- As technologies and programmes become more complex so does the paperwork and its size!
- Obviously there is a need for a comprehensive document/information management system
  - All working to the latest formally agreed text etc.
  - Application of latest computer and proprietary information tools
  - Different media – converting to digital
  - Capturing legacy data - converting to digital

Two emerging problems
EMERGING PROBLEMS 1

(1) As one moves up (down) the information Processing tree ideally we should have

- Data – vast amount
- Information – condensed
- More targeted information – condensed further
- Appropriate for top level decision making – condensed further still

- The paperwork burden (document size) should reduce
- But this is not always so
  - Giving rise to problems for management clarity and ultimately decision making
  - Not seeing the ‘wood for the trees’?

*Can this be one reason for erroneous decisions which can affect safety?*
EMERGING PROBLEMS 2

- The conflict between positive safety action and documentation
  - It becomes more and more difficult to make the safety enhancement because of the burden associated with all the document changes necessary to cater for it.
  - *Haddon-Cave – notes*
    - “The exponential growth of the ‘Safety Case Industry’ has led to a culture of ‘paper safety’ at the expense of real safety. It is easy to produce vast quantities of paper; it is more difficult to focus on the key hazards and think about them”
    - “The safety case regime had led to a culture of ‘paper safety’ at the expense of real safety and did not represent value for money. Its shortcomings included bureaucratic length; obscure language, failure to see the wood for the trees”
EFFECTIVE OVERSIGHT AND INTERFACES

- General management systems – for instance matrix management – has the tendency to give rise to more and smaller administrative blocks.
- Like-w1se programmes/ projects seem to be broken into more and smaller blocks and this is likely to continue as programmes become larger and more complex.
- One may well ask – is this right way to go – is there a growing problem? - what is the best balance?
- It is historically known that interfaces give rise to major integration problems
  - The more and smaller – the more interfaces and potential problems
  - More problems of effective communication between elements - integration
  - Isolation/silos – only interested in my small section
  - Effective management oversight of interacting elements can become more complex and challenging
WHAT IS CORPORATE (EFFECTIVE) MEMORY?

- Do we really understand what corporate memory really is and its impact on safety?
- Organisations make mistakes learn from them and hopefully get better.
  - Review Learn and Improve – stored in corporate memory?
  - Suggest there are two forms of corporate memory
    - **Active** - learned the hard way and very much still sits in the minds of those affected
    - **Passive Documented** – not necessarily complete – stored – hopefully remembered and can be effectively located and extracted when the occasion demands – correct context?.
- If active memory is the more important, then Corporate Memory may be a transient item which is impaired when key individuals lose power or leave the organisation

*Perhaps an Example*
EXAMPLE

- Challenger to Columbia
- Was there a loss of **active** corporate memory by the time of the latter?
- How might this have influenced the focus on safety in the period leading up to Columbia.
- Note the conflicting driving forces in play during phases 5 to 7 in the Normal Accident Cycle with the potential loss of active ‘Corporate Memory’.

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The Normal Accident Cycle

Stage 1: Occurrence of a detrimental event

Stage 2: Identification of shortfalls and recrimination

Stage 3: Spotlight firmly on safety both from within and without

Stage 4: Strongly supported campaign for major safety improvements and implementation

Stage 5: A growing history of safety success, and (false?) comfort.

Stage 6: Attention slowly being focused elsewhere

Stage 7: Safety concerns raised but judged as not sufficiently important (or welcomed) in the overall scheme of things

Stage 4a: Close down and decommission

Figure 1. The Normal Accident Cycle.
MORE FOR LESS AND ORGANISATIONAL STABILITY

- Budget and resource constraints – **do more for less**
- Shouldn’t it be achieve **more value for less**?
- Requires the need for a clear understanding of the difference between **more value** and **simply more**
- Ironically we sometimes end up achieving **less value with more effort** – does it apply to real safety?
- Are these problems linked with the stability of organisations – constant structural changes?

**Haddon – Cave notes for Nimrod**

“There is a large element of continuously trying to get ‘a quart out of a pint pot’, with all the attendant hazards that such a scenario presents to safe aircraft operations.”

“Very often the requirement to do more comes from a situation of organisational lack of stability where a significant effort has to be directed towards re-alignment to the changes in organisation as opposed to the core activity”. **One may ask do you suffer from this?**

“We tried hard, but it seemed that every time we were beginning to form up into teams, we would be reorganised. I was to learn later in life that we tend to meet any new situation by reorganising: and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency and demoralization (Gaius Petronius Arbiter, 210BC)”.

**Are we still trying to learn this lesson after more than 2000 years**

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PRODUCT WARNING

Just a personal views
One among many
Apply with caution