DEMO TORC GAME
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CONTENT

- Resilient capability
- Training format
- Mock up TORC (serious) game
- Gaming elements

- And try out the game
- After action review/evaluation
RESILIENCE RECONCILES WITH COMPLIANCE
RESILIENT CAPABILITY

The ability to perform or achieve certain actions or outcomes through a set of controllable and measurable faculties, features, functions, processes, or services and encompasses:

- competences
  - resources
    - a strategy

To enable a sustainable adaptive response to demands due to e.g. disturbances, disruptions and change.

- A capability can be found at individual, team and organizational levels.
TRAINING AIMS

- Experience resilience in action by simulated practices in real company cases
- Learn about resilience as an operational capability to cope with sudden or unexpected demands in work
- Explore and decide on strategies to work with unexpected situations in the operation
- Explore and decide on resources to be deployed to support and back up your adaptive action
- Experience how your team and company network is of great value to support resilience activities
- Reflect on applied capabilities and review on experience build up as well as positive and negative outcomes

Demo TORC game
TORC TRAINING
SERIOUS GAME

- Resilience in compliance context
- Accommodate heavy rail, high speed infrastructure and oil & gas exploration
- Making shifting realities happen: “game changers”
- Simulate operations
- Close to reality
- Build on experience and imagination
- Team effort: wisdom of the team
- Resilience in action and resilience (repository) after action
WHEN TO ADAPT TO SUDDEN DEMANDS?
Demo TORC game
ADAPTATION IN/AFTER ACTION

Demo TORC game
TORC TRIAIDE

- Training format
  - Fieldstaff...
    - 2 trainers...
    - 6 players...
    - 2 observers...
  - Managers
    - 2 trainers...
    - 6 players...
    - 2 observers...
  - Integrated
    - 2 trainers...
    - All players...

Demo TORC game
COPE WITH UNEXPECTED ISSUES IN WORK

- Lack of Situational Awareness
- Time pressure
- Rules are not sufficient
- Adapt
- Poor instruction

Questions:

- Stretch
- Build
- Defend
REACTION DISTURBANCES?

- **Defend**
  - This is the preferred mode of operation. Resilient action takes place to deal with everyday operational surprise within the boundaries of the normal operation.

- **Build**
  - The organization provides additional defences. This can be done by adding robustness to the normal operation at spots where there are known vulnerabilities, or where procedures are known to need interpretation.

- **Stretch**
  - On a case-by-case basis, controlled action outside of modelled operation in a controlled manner is an option when responding to unexpected situations, e.g. through the management of change process if the available work permits, procedures and resources no longer support the necessary action.
START UP....

- The training / the game
- Roles player/ observer
  - Rules
    - Time frame 6 x 10 minutes to react
    - Anonymous, logposter to management, they play same game changers
  - Decide action/reaction
    - Within the procedures (defend), interpretation rules (build), big ones (stretch)
    - Take the lead teamleader; decide after you got input team members
  - Effect on
    - safety, efficiency, workload
  - Case based game use of realistic scenario
    - Game play according to steps
    - Reflect on decisions and actions observers
GAME PLAY BOARD
Demo TORC game

51. SUPPORT ACTIVE REFLECTION ON DEVELOPMENTS
a. Be sensitive for leaks in team/process (e.g., incomplete, unclear information on status, lacking proper balance internally and externally, awareness of assumptions, lack of trust)
b. Invite team on disturbances, concepts, and capacities to deal with situations: Is extra back/feedback necessary?
c. What new or important features now?

52. ADAPT WORK PROCESS
a. Adjust targets as you can focus on the essentials of your situation
b. Adjust rules to what is essential for situation
c. Tailor to unexperienced personnel on less critical tasks
b. Intesely monitor working and environment
i. Evaluate match of procedure/plan with emerging situation
ii. Add redundancy and buffers to work to reduce mental load

53. PRIORITIZE
a. Remove stressors from people (mentally and physically)
b. Define tasks that divert from team (e.g., data, feedback, communication)
c. Adapt leadership style to accommodate consequences of fatigue, stress of team members to prevent reduced alertness and emotion
i. Be approachable on the job where the safety critical work needs to be performed

54. MAKE SENSE OF DEVELOPMENTS
a. Assign a team member to coordinate and help in interpreting the situation continuously given input from team
b. Differentiate tasks when changing attention to do so
c. Create a climate that invites team members to speak up and ask critical questions
i. Search for relevant information and share it timely with the team

55. REALLOCATE RESOURCES
a. Create capacities by team members who are unutilized employable (experience, knowledge) or other more critical roles
b. Create capacities by team members who are trained and have complementary experience
c. Redundates teams by splitting them in sub teams with dedicated tasks

56. ACKNOWLEDGE VIEW OF TEAM MEMBERS
a. Take understanding for the current decisions by consulting supportive members who contribute consultancy to a malevolent way
b. Conduct real time risk and prioritization in consideration multiple perspectives (e.g., non-technical)
c. Arrange briefing before or with elaborate explanation

67. STRATEGY
a. 1. Decision support
b. 2. Resources
i. Manager
ii. Time

68. CREATE LEADERSHIP FOR DECISION SUPPORT
a. Contact mandated decision makers
b. Contact engineering department
c. Contact HQ department
d. Contact stakeholders

69. RESOURCE 1. INFORMATION
a. Manuals/Procedures
i. Decision making process
ii. Procedure on dialogue
b. Work instructions
c. System knowledge
d. Detailed information on assets,
e. Technology

70. RESOURCE 2. PEOPLE
a. Experts on safety, environment
b. Operators
i. Managers
ii. External stakeholders
e. Fact office
f. Operating/control room

71. RESOURCE 3. MACHINES
a. Machines
b. Additional staff/crowd

72. RESOURCE 4. TIME
a. Create extra timeslot to do task
b. Create vision with safety critical functions

73. RESOURCE 5. COMMUNICATION
a. Close communication among the team
b. Create vision with safety critical functions

74. TIME
a. Focus on safety critical aspects
Demo TORC game
ADAPTIVE PATH
TORC GAME LOG

Start

Action 1

Action 2

Action 3

Action 4

Action 5

Action 6

STRETCH
BUILD
DEFEND

INVESTMENT

Rental Load
Safety
Efficiency

Rental Load
Safety
Efficiency

Rental Load
Safety
Efficiency

Rental Load
Safety
Efficiency

Rental Load
Safety
Efficiency

Rental Load
Safety
Efficiency

STRATEGIES, RESOURCES
AND RESPONSES

Notes

Notes

Notes

Notes

Notes

Notes

Demo TORC game
AFTER ACTION REVIEW

- By players
- By observers
- By field staff in dialogue with managers (integrated training)

Demo TORC game
LET'S START
COMPANY CASE: STRUKTON RAIL DESCRIPTION

› Case 1. KROL defect

› Activities:
› Maintenance job with 3 activities at night. See outline drawing, Withdrawal of the track for service: 0:45am to 5:30 am

› Activities
› 1. replacement tongue movement
   2. revising the level crossings
   3. R3 turn switches

› NVW officials: 1 LWB (LWB - Leader Workplace Safety), 3 LLVs (Local Safety Leaders) and 3 TLs (Technical Leaders), 3 GMs (Tools Machinist; 1 at level crossings and 2 at tongue movement), 1 BBD (Supervisor for track that has been withdrawn for service)
COMPANY CASE: STRUKTON RAIL DESCRIPTION

- Situation: Track is out of service, instruction has been given. Staff are ready to deploy patches. And are waiting for call from the LWB to LLV to go to work.
- Trigger start game: At 04.00 pm the KROL of the tongue movement goes defect possibly resulting in the situation that the track cannot be delivered into service on time as well as the adjacent track as the KROL is situated with its boom in the adjacent track. At the moment it is 4.30h already with only 1 hour to go!
AFTER ACTION REVIEW

- By players
- By observers
- By field staff in dialogue with managers (integrated training)
THANK YOU FOR YOUR ATTENTION