

Operational Risk Management by KD5BJ

Operational Risk Management is the process to detect, assess, and control the risk while enhancing performance.

Through brain storming, we identify hazards and develop a plan to mitigate them or avoid them. It is most effective when done in a group.

There are three kinds of Operational Risk Management:

- Deliberate
- Time-critical
- Strategic

Deliberate Operational risk management happens for planned events, like Winter Field Day, the eclipse, or disaster response planning. It gives more opportunities to develop informed decisions, order resources (human or equipment) and allows to fully integrate risk control into the plan.

The majority of risk management should be deliberate.

Time Critical Operational Risk management is the mental and verbal review of a situation, it is basic, not necessarily documented. Check lists and staff briefings can identify areas of risk when time is of essence.

Strategic Operational Risk Management is in depth, used to study hazards and associated risks on complex operations in which hazards are not well understood. It involves research, analysis tools, long term tracking of hazards. It allows us to expand operational capabilities identifying not only the risks, but also the risk barriers.

The Risk management process involves 5 steps:

Step 1 Identify Hazards: hazards are about everything that worries you: sleepy floors, flooded roads, sharp objects, and the like. What could go wrong with the plan? A bad plan can be a hazard itself.

Step 2 Assess Risk:

- How likely is that hazard capable to hurt you? A good chance? A remote Chance?
- How badly can that hazard hurt you? What kind of extensive damage or injury could it cause you?

The risk is HIGH if the risk is likely to happen and/or serious injury or damage could occur.

Step 3: Risk Control

Risk control is anything you can do, or change, that will reduce the probability of the risk to happen and the severity of the of injury or damage. For example:

- Remove the hazard
- Train people to properly do the task
- Provide protection
- Work slower, use a spotter when backing up the trailer.

Make controls you have identified, part of the plan.

Step 4 Implement Controls:

- Make risk controls part of the plan
- Perform your tasks or operations using those controls.
- May I say it again? Make those controls part of your plan and use them.

For example if the original plan dictates to cross the busy street, your risk controls are 1. at the crosswalk, 2. when the light is green, and 3. After looking both ways for traffic.

Step 5: Supervise and Evaluate:

- Are your risk controls working
- Look for changes in plan and/or hazards; is it going according to plan or the contingency plan? Do you need new risk controls or adjust the existing ones? Make your decisions.

These steps are part of a continuous loop

Implementation. There are many forms online to make the process easier. We do risk management in our daily life, if we stop and think about it. It is a cost benefit analysis and it can lead to better capabilities.

Other common hazards are mission mind set and over task oneself.

Mission minded task happens when an operator is so concentrated and willing to reach a destination or complete a task, that gets out of touch with reality or situational awareness. He is so close to the goal, he forgets dangers, takes short cuts, and causes accidents or mishaps.

Overtask occurs when an individual thinks it can do it all, until new hazards appear, like technical difficulties, severe weather, or stress. His world and span of attention shrink to the point when he cannot even understand advice, and loses also situational awareness. Mission mind task and over-tacking can be devastating.

Example our canceled Winter Field Day

It was a deliberate Operational Risk management.

We were near the time of execution with a refund deadline. The situation (flooding) kept escalating. The hazard was low water crossing flooding as 36 roads were closed in Williamson County at the moment of the decision, including on HWY 29, leading to the park. The park had only one road in and out. The risk probability was elevated, and the risk severity was catastrophic.

We were going to drive on county roads with trucks and trailers (emcomm or RVS) with no room to turn around. What would be the consequences, remain stuck there? Abandon the trailer? How do we guarantee the safety or supervise dozens of members coming from which way from two counties with equipment, with hundreds of low water crossings? How could we check to make sure we did not lose anyone or lose property?

Winter Field Day Hazards:

1. Potential catastrophic consequences for people and equipment
2. Elevated probability due to unpredictable weather.
3. Nearly impossible to supervise
4. Potential catastrophic consequences on our reputation with our served agencies if we became part of the problem, instead of the solution, by either needing agencies' assistance, or by not being able to respond to their call because we could not turn around.

For what reason or goal: a weekend of primarily fun with some training.

It was not worth it. That's why Terry Jones and myself, with Michael Moody who had all the tools to monitor the roads in real time, made the decision we made.

We will have a day of fun. We are thinking POTA, and we are certainly seeking suggestions from everyone who wish to participate.

Another example would be experimental airplane builder and aviator Mike Patey. Mike Patey was scheduled to be one morning six months ago at an aviation reunion where many people anticipated seeing him.

However, the previous day did not go as he planned, and he found himself to have fly on his plane in the dark. The sky was partly cloudy in mountainous terrain and he was tired. He has a three strike policy and night, clouds, and being tired were three strikes. Regardless of letting people down the next day, which was very hard on him, he canceled his appearance.

The next day, with picture perfect weather, he decided to go on a flight with his plane. At approximately 27,000 feet his engine literally unexpectedly, with no warnings, blew up, scattering chunks of metal and oil everywhere, thankfully causing only minor damage and scrapes to the fuselage. Without engine he glided back safely, with one shot only to landing at an airport. Had it happened the previous night, he would not be here with us today.

Let's always allow ourselves chances to recovery from the unpredictable, and never stack too many odds against us. Let's never be an emergency within an emergency or an incident within an incident.

Forms for Operational Risk Management:

<https://www.smartsheet.com/content/risk-assessment-forms>

<https://safetyculture.com/checklists/15-best-risk-assessment-checklists/>

<https://nps.edu/web/safety/orm>

[https://www.29palms.marines.mil/Portals/56/Docs/g7/safety/Safety_Risk%20Assessment%20Worksheet\[1\]\[1\].pdf](https://www.29palms.marines.mil/Portals/56/Docs/g7/safety/Safety_Risk%20Assessment%20Worksheet[1][1].pdf)