

TCRM: The Beginnings

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We have conducted numerous studies on ORM and its effectiveness in the fleet, and have a firm grasp on in-depth and deliberate-level ORM actions. However, when it comes to time critical risk management (TCRM) — when time and resources are limited — we are lacking. Why? Our surveys and assessments determined that the five steps are too complicated for on-the-fly application.

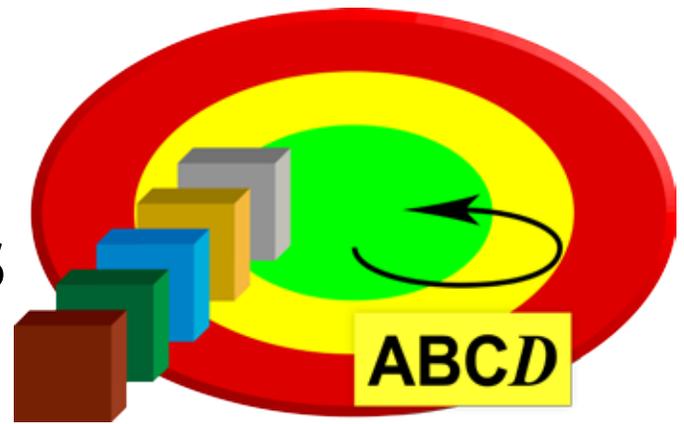


Illustration courtesy of Volant

How did we fix the situation?

We adopted the ABCD Model for TCRM from the Marine Corps MV-22 community. It was developed by Ms. KD VanDrie and derived from her Volant Model. Below are segments of an interview with her that begins with her research.

What's the science behind TCRM? KD VanDrie, developer of the ABCD Model explains

Research related to risk management has grown by leaps and bounds in the past decade and has led to the development of our ABCD Model which consists of a mnemonic, icons, resource blocks and a three colored target. We refer to the ABCD Model as a set of tools because it's a framework to help managers ensure that they don't expose their organization to any more risk than is acceptable.

Behind the ABCD mnemonic and icons (which captures the basic skills of situational awareness, decision making, communications and active learning), there is a wealth of science. This includes the phases of situational awareness, complexity theory, risk assessment, development of expertise, habit formation, decision making styles, communication and education.

The ABCD Model toolbox is there to help mitigate the effects of stress on the brain and to provide a mental model that can be shared by everyone.

The first icon is the **resource blocks** which are based on extensive experience in the design and development of operational guidance, instructional design, use of automation, and operations research in both civilian and DoD applications. Additionally we have drawn from NASA Human Factors research. The model has been used extensively in the design of scenario-based training and was further validated through data collection and analysis of those events. The resource blocks are consistent with widely accepted mishap causal-factor research and exist to visually show how to stop a chain of errors before it becomes a consequence, even if we've lost track of the errors.

The second icon is the **target** which helps to quickly evaluate and communicate your level of risk, from the green

area where everything is optimal, through the yellow area where stress begins to take its toll, or in the red area where there is a significant chance goals may not be met, or where the risk exceeds the reward. It can also be used as a lens for situational awareness from green (good) to red (poor).

The framework of the **ABCD Model** is meant to make all of this science easily accessible in real-time to people that need to get a job done in a dynamic, time-critical, and often high-risk environment. At its core, the ABCD Model is about dealing with the physical and psychological effects of stress on the brain. When we are under stress from any source, it affects our ability to effectively manage risk.

We designed the ABCD Model to make complex ideas intuitive, to get the core concepts into the habit and instinct part of the brain as quickly as possible. With the ABCD mnemonic loop, we built a continuous improvement process that is just as instinctive as the rest of the tools, and effective whether done informally with personal evaluation or formally with organization wide data collection and analysis.

The solution begins here and now with you. What is your knowledge of TCRM? Have you provided your people with the necessary resources, tools and training to successfully do their jobs? The leader's role is a decisive factor in the successful integration of TCRM. This is a Navy team effort and as teammates, they must know their responsibilities and consequences of a loss of a teammate. We still have to measure up and TCRM assists us. TCRM, it's for on- and off-duty. Learn it. Use it.

For more on KD VanDrie's interview, the ABCD Model, and risk management, visit www.public.navy.mil/navsafecen/pages/orm/ORM.aspx or www.volantmodel.com. ▲