Automation and Technology

Are we losing our ability to think critically?
Or, how do we use technology to benefit but not derail our decision making?

WRMC
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Portland, Oregon
Automation and Technology have made vast improvements to our lives and our safety:
Tsunami warning system

Satellite transmits data to ground stations.

Data relayed to satellite.

Acoustic link transmits data to moored surface buoy.

Recorder on seabed monitors changes in pressure. It can detect tsunamis as small as one centimetre.
Presidential Alert
THIS IS A TEST of the National Wireless Emergency Alert System. No action is needed.
How has automation and/or technology positively impacted your program?

Break out….
The Paradox of Automation
The Paradox of Automation

1. Automatic systems accommodate incompetence by being easy to operate and automatically correcting mistakes.

2. Even if the operator is an expert automatic systems erode skills.

3. Systems fail in unusual ways or produce unusual situations.
With the potential for dire consequences...
What automation/technology concerns do you have for your programs? Actually experienced and/or anticipated...

Go back to your groups
Share experiences/concerns
Be prepared to share out
What can we do?
Put some unleaded in the diesel tank

-Gillian, 8 years wise

Math Norms
8/24/18
Answers are important but they are not the math.
The math is the addition, subtraction, multiplication, and division.
The math is the numbers, the math is for you to use your work.
Errors are gifts that promote discussion.

Errors are mistakes. So you learn from them and talk about them. They are gifts.
Talk about each other thinking. Share the way you found out the answer.

-Gillian, 8 years wise
Training
Stress and Startle response
Strategies for Improving Startle Performance

- Know your craft: Maintain handling skills
- Train appropriately
- Be cognisant of your surroundings
- Avoid complacency
- Anticipate threats
- Have a plan
Keep it simple
Action Steps

1. Create a staff training exercise that allows staff to see the potential for passivity in decision making when decisions are device influenced.
2. Review what devices/apps are used and for what purpose in your organizations.
3. Share internal examples and case studies with program managers.
Thanks!

Dave Yacubian

yacubian@readysf.com