

THE TYRE

How often do you look back on your time and reflect on what you have done that has really made a difference, that someone really appreciated? Perhaps there are specific instances that come to mind, and that others would remember too. In this article, **Svetlana Bunjevac** recalls one such event and asks whether we should take more time to reflect and discuss when a colleague on the ground or in the air has said thank you...and really meant it.

KEY POINTS

1. **Repetition of the training methods that are used to develop competencies will give similar results.**
2. **This is reliable to maintain the required competencies but not sufficient to grow expertise.**
3. **No amount of regulation will compensate for a lack of critical thinking.**
4. **The purpose of lifelong professional training for aviation staff is to cultivate critical and creative thinking.**

It is early afternoon in the true South Balkan type of summer. B737 is at RWY 16 ready to roll: "Cleared for take-off, wind calm". And off it goes. A very long roll, fortunately still within the available runway length. But not all seems quite right.

I am not sure if it is the hot air dancing above the tarmac. Or did a small part of the tyre get separated from one of the wheels that I saw flickering in that radiating heat? Was it anything at all? The crew is quiet; they seem quite content with their take off. Should I send the car to check the runway? Should I say something to the crew? What would you do?





Less patient back then, I spoke: "ABC123 it seems that a part of one of your gears got detached. Am unsure about this and am sending a car to check the runway for the debris. Will get back to you."

The car went for the check and found nothing. There were some skid marks on the tarmac but this is not unusual in that type of heat.

There was no physical proof to support the transmission I just made.
What would you say to the crew now?

Option 1:

*"We found nothing on the runway.
Contact 123.4 and have a safe flight."*

The aircraft continued. It was a very short flight (25 min). It crash-landed at destination, caught fire and the crew were caught by surprise. It was missing a part of a tyre.

Option 2:

*"We found nothing on the runway.
Contact 123.4 and have a safe flight."*
The aircraft landed with no issues whatsoever.

Option 3:

"We found nothing on the runway but the gear part could still be somewhere on the side."
"Roger."
"Contact 123.4 and have a safe flight."

The pilot declared and performed an emergency landing, foam on the landing runway. The crew was ready to act. A hard but safe landing. No fire.

Option 4:

"We found nothing on the runway but the gear part could still be somewhere on the side."
"Roger."
"Contact 123.4 and have a safe flight."
The pilot did not declare an emergency landing. They landed with all the gears down, locked and complete.

Which one is it? »



The road to getting above the 'thin red line' of competence is detailed in various places, including the

- Common Core Content document
- Unit Training Plan
- Unit Competence Scheme
- Operational Manual
- ICAO 10 Competences.

It all starts with good recruitment and selection, and classroom and objective based training levels. Common Core Content Levels 0, 1, 2 and 3 (page 20, para 6.5.2) take you through the theory and basic applications to the simulators. Objectives level 3, 4 and 5 take you through the job simulations to the on the job competences. Research shows that the six levels of learning are arranged hierarchically by the

level of mental complexity involved (Bloom et al, 1956; Anderson et al, 2001). Then ICAO's 10 competencies take over, providing a description of ATCO competencies (ICAO Doc 10056, Appendix B to Chapter 2).

"No amount of regulation will compensate for a lack of critical thinking."

Once we get there, the aim is to remain competent – but how? The answer is by providing good classroom training, simulator refresher training, e-learning and assessments to fortify what we have and need. And repeat. But there is a part missing, the 'create' part (see Figure 1). By repeating the class-sim-assess cycle the big five below are taken care of. But if we want to go

higher we need a 'breakthrough' – a different approach and recognition of the developmental nature of competence.

No amount of regulation will compensate for a lack of critical thinking. The ultimate purpose of lifelong professional training for aviation staff is to cultivate critical and creative thinking. One should be able to evaluate that no procedure, rule, regulation exists for that one situation, and create a safe yet new solution, on the spot. Competence is having ready-made solutions for clear-cut problems and emergencies. But more so it is about creating solutions when one is not readily available. Expertise means recognising the danger of relying only on prescribed procedures.

So, do we mention the tyre?



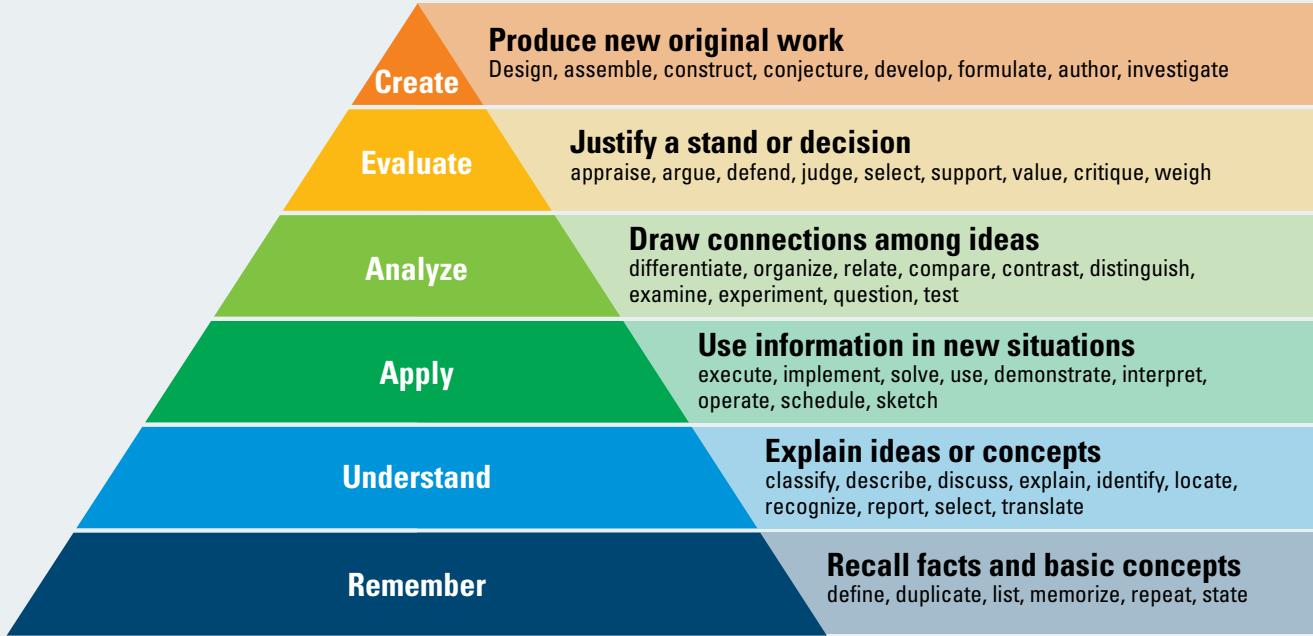


Figure 1: Bloom's (2001) revised taxonomy (Vanderbilt University Center for Teaching CC BY 2.0)

Using facilitation in peer-to-peer learning events provides controllers with the opportunity to achieve the highest levels of mastery: analysis, evaluation, and most importantly creation, in the continuation training stage.

This is a very powerful way of unlocking capacity for creation and exchange of experience. It is TRM that brought the method of facilitation into our learning structures many years ago, although through very small doors at times. But it is here. Our Spanish colleagues and ENAIRE have 150 facilitators today and are spreading this way of assisted learning and exchange throughout the 10 ATCO competencies. Of course, simulations and classrooms remain. The additional element is sharing and learning from the unwritten case studies that everyone carries with them.

What happened with my B737, though? "I think you lost a part of the wheel", I said. While it felt so uncomfortable, as a young controller, the heavy feeling didn't last too long. I got a phone call about an hour after the take-off. It was the captain, and I have kept these words in my head for the last 29 years: "One of our wheels was incomplete but we are all safe and the plane can be used again. Thank you."

It was Option 3.

In our work, significant events happen that do not always find their way to 'breaking news', but could make their way into our continuation training content. Support for the growth of expertise requires more than presentations, e-learning, and simulations of known scenarios. It needs exposure to the unknown, and not solely while in the working position. One possibility is to exchange our experiences of unknown situations. There ought to be more possibilities, though. Can we put our heads together to support the growth of expertise and critical and creative thinking, creating more engaging continuation training events? That is what I wish for. S



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