Threat and Error Management, Sixth Generation CRM at Big Picture Aviation

Threat and error management (TEM) is a systems approach to aviation safety originally developed by human factors researchers at the University of Texas. TEM competencies are now embraced by airlines worldwide and recognized as an international best practice by, among others, the International Civil Aviation Organization, the European Aviation Safety Authority, the International Air Transport Association, the National Air Transport Association, and the U.S. Federal Aviation Administration. TEM offers an intuitive and flexible approach to practical risk management. TEM not only offers a framework for understanding and directing human performance in complex operating environments, it also provides aviation professionals — regardless of their organizational function or status — a risk management lexicon that supports a positive safety culture.

TEM grew out of extensive experience and research related to Crew Resource Management (CRM) and represents a proactive set of strategies for managing flight related risk that is supported by the enabling skills known as CRM. CRM skills encompass both individual competencies such as communication and decision-making, and team skills that enable a flight crew to maintain situational awareness and manage risk through cooperative interaction. Thus TEM is a set of operational risk management processes enabled, supported and reinforced by CRM.

Adapted from the Flight Safety Foundation abstract on TEM

At Big Picture Aviation, we connect the science of flight deck human performance with proven pilot training methods to develop the complete aviator. We start with a focus on ensuring technical proficiency. Our training programs begin in the classroom and proceed, in a seamless learning order sequence, to the full-flight simulator, and ultimately, the aircraft.

Today’s advanced technology aircraft demand more than excellence in technical skills. Effective, efficient and safe operations require a full array of razor sharp flight management skills—the classic Crew Resource Management skills that all modern pilots must have. But we go beyond that. We train pilots in the “Sixth Generation” CRM—Threat and Error Management (TEM). TEM builds on the traditional CRM skills as a critical foundation and we focus them like a laser in a practical, operational approach to managing flight risk that every pilot will instantly recognize as vital to competent airmanship. Our TEM training is aligned with the standards and recommendations of the International Civil Aviation Organization making it ideal for both domestic and international clients.

We train TEM throughout our curriculum, but the key to our program’s success comes in the full-flight simulator where we connect top flight technical proficiency with the skilled application of TEM skills in line-oriented scenarios we call Tactical Training Situations. The end result is a pilot who has to perform with all of his tools, technical and non-technical, in a rigorous and carefully documented training regimen. No one walks away untested. Everyone is trained to proficiency and proceeds to line flying with the confidence to excel. At BPAC, good science + real world training = airmanship for the demands of your airline.