Failure analysis

By Sid Heal

S

omewhat ironically, one of the most valuable methods for achieving success in tactical operations is analyzing failures. The harmonious resolution of the factors and influences involved in successful operations make them all but indistinguishable from each other but they are often patently obvious in failures. Even those with no expertise in tactical operations are able to assuredly identify shortcomings after an event. In fact, it has been said that “Defeat cries aloud for explanation, whereas success, like charity, covers a multitude of sins.”

It seems prudent then, to identify the mistakes resulting in failures to avoid repeating them.

Failures in tactical operations can be generally grouped into two broad categories: those that are a proximate cause and those that are a root cause. A proximate cause is a factor or influence that appears clearly apparent and directly connected. Proximate causes tend to be conspicuous, especially in failure, because they are so closely connected to the actual problem. They are usually relatively easy to fix but tend to be short-lasting because deeper problems still remain. They are also the most commonly cited cause for injury in civil cases.

A root cause is one that begins a causal chain that eventually leads to an outcome. Root causes are not as apparent as proximate causes and require more effort to identify and correct. Furthermore, root causes have wider reaching effects than proximate causes and they tend to be more difficult to correct. While it is not uncommon to have a single proximate cause, more often than not, root causes occur in groups.

To understand the distinctions between a proximate cause and a root cause, consider an investigation into a series of accidental discharges. The fact that the shooters’ fingers were on the triggers would be a proximate cause and could easily be corrected by prohibiting that behavior. Upon closer examination, however, the investigation reveals that the shooters had never been trained not to keep their fingers off the trigger. The lack of training, then, becomes a root cause. As the investigation continues it also reveals that these were common manners in which this might occur are with creeping missions or drifting standards. Creeping missions occur when a mission is changed or expanded without compensating for the shortcomings of equipment or capabilities. Similarly, drifting standards result when a lack of enforcement of minimum standards results in a deficiency of capabilities. Only with a realistic appreciation for the risks involved and a realistic appreciation of the capabilities available can a tactical team avoid becoming cocksure.

2. The people in charge are unprepared for command: This generally occurs for one or more of three reasons: a failure to learn, a failure to adapt or a failure to anticipate.

A failure to learn can usually be attributed to either ignoring or not recognizing contributory factors and influences. These are especially egregious when they are obvious, such as those that have occurred in previous operations. They reoccur most commonly as a result of failing to objectively critique and correct them. Only through a careful examination of what went right and wrong in previous operations can the favorable factors and influences be encouraged while restraining those that are not. Moreover, critiquing operations of others is just as valuable. As one adage states, “Learn from the mistakes of others because you’ll never live long enough to make them all yourself.”

A failure to adapt occurs when a commander fails to adjust to changing circumstances. One common cause is when tactics are practiced as a “skill set” rather than an intuitive application of tried and true principles. This is most commonly a result of a shallow understanding of the doctrine which comprises tactical science. Another frequent cause is when a plan is used as a “script” rather than a design capable of accepting change while remaining focused on the outcome.

A failure to anticipate occurs when a commander fails to plan and prepare for those factors and influences that can be
reasonably expected. A lack of adequate planning is one common cause and is often unjustly blamed on the inability to precisely determine future events. While it may be impossible to precisely predict future events, it is no excuse for a lack of foresight. Even when planning is adequate, some actions require specialized equipment and skills. Failing to organize and have them available results from a lack of preparation. Too often, the extra costs in time, money and effort are used as excuses for not having them available when needed. Another common cause for failing to anticipate is from incremental decision-making. In the simplest terms, incremental decision-making results when decisions are made and actions taken in solving an immediate problem without concern for the ultimate objective. This can easily lead to disorientation and disarray because it lacks the ability to progressively promote the accomplishment of strategic objectives.

Analyzing failure is not peculiar to tactical operations. A story is told of the inventor, Thomas Edison, who, after thousands of unsuccessful attempts to construct a usable light bulb, was chided for having failed so many times. His reply was that he had not failed because he alone knew of thousands of ways in which it couldn’t be done. Those without that knowledge are prone to follow the same failed pathways. So it is with tactical operations. ✴

Endnotes
1. Rear Admiral Alfred Thayer Mahan, Naval Strategy, 1911.
2. In natural and mechanical disasters, this occurs when the magnitude or scope of the consequences are underestimated.
3. For more information on creeping missions and drifting standards, see “Drifting Standards and Creeping Missions,” The Tactical Edge, Spring 2009, pp. 56-58.