

# TURNING PAGES

~ book reviews of interest to the aviation professional

## **Superforecasting:** *The Art and Science of Prediction*

By Philip E. Tetlock and Dan Gardner. New York: Crown Publishers 2015. 340 pp. Available in hardcover, paperback, kindle, and MP3 CD formats at <https://www.amazon.ca/Superforecasting-Science-Prediction-Philip-Tetlock/dp/0804136696>.

A book review by CPT Sean Clement

The nature of the Army profession compels many, especially those in planning sections, to compile, list, and catalog assumptions for any plan being set before a commander. By the time a training calendar reaches a commander, by the time the assumptions have been vetted, re-vetted, and vetted once more in a seemingly endless chain of meetings, in-progress reviews, and slide shows we make the assumption that our predictions for the modern battlefield

What environment will we encounter? How will we fight? His S-3 is acting as a forecaster, and he is likely not very good at it.

Answering these questions can be difficult, they can be incredibly uncertain, and in the field of aviation, small mistakes or incorrect planning assumptions can cost lives. My assertion that the hypothetical S-3 is not a very good forecaster is not a judgement on S-3s in general nor is it a condemnation for Army officers as a whole. On the contrary, some of the most imaginative, quick thinking, and professional people I have ever met are officers in the military. However, people tend to be only slightly more accurate than chance, and usually worse than even the most basic extrapolation algorithms when it comes to predicting future events. What is worse is that fame (rank), and notoriety tend to make one a worse forecaster. So what can we do to improve our ability to predict what we face in the modern battlefield?

First of all, realize that difficulty predicting future events is not limited to the military. A cursory glance at mutual fund performance over a ten year stretch will show you that, while some do well if you compare them to the market index, the vast majority underperform. Another glance at the energy sector where just this year the price of oil crashed when

Activity (IARPA), the ability to forecast is trainable, achievable, and not at all a mysterious process.

During a multiyear long competition sponsored by IARPA, civilian forecasters, without access to classified information, were able to consistently outperform the intelligence community when it came to prediction by a margin of 30%. One of the main impediments that face those who use forecasting in their military professions, from weather observers to intelligence analysts, is that they are not keeping score. When an aviator takes a check ride, he receives instant feedback on his performance. Yet, we seldom hold forecasters to this same standard. When the S-2 told you that you were likely to encounter or not encounter enemy in a certain region, was he correct? The answer to this question becomes harder than we realize.

In P.E. Tetlock and D. Gardner's book *Superforecasting: The Art and Science of Prediction*, we can see that measuring the accuracy of a prediction, and making ourselves better forecasters is not impossible, but it does require diligent hard work, honest introspection, and intellectual openness. If we can take just some of the lessons from this book, such as understanding how to make our evaluation of risk more granular, supporting viewpoints only in so far as data supports or at least does not contradict, and explicitly specifying probability in a no-nonsense way, then perhaps we can avoid the same mistakes so many other forecasters have made. I would implore anyone in a decision making or analysis role to read and internalize the lessons of this book. It is well worth the time, especially when our estimates, analysis, and recommendations carry the weight of our Soldier's lives.

will be at least accurate enough for us to adapt. Right now, somewhere in the Army there is a battalion or brigade commander taking command, and his S-3 is going through this exact process. Where will we be in two years?

most predicted it would rise. Or last year when 98% of economists predicted a rise in interest rates and were not just wrong, but 180 degrees off. So what hope do we have when professional forecasters are wrong so often? According to research done through the Intelligence Advanced Research Projects

