Air Force Readiness Assessment

How Training Infrastructure Can Provide Better Information for Decisionmaking

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ISSUE

Senior Department of the Air Force leadership is increasingly concerned that the current readiness assessment system is not providing sufficient insight into the capability of the force to meet future mission requirements because of the lack of quality outcome measurements in the readiness system. Concurrently, the U.S. Air Force (USAF) is evolving its training infrastructure in response to the prospect of operations in contested and denied environments, an increased pace of warfare, and the potential loss of superiority across multiple domains in a conflict with near-peer adversaries. Advances in the technological capabilities of training infrastructure can help fill gaps in current readiness assessments to provide senior leaders with better insight into the readiness of the force for future contingencies.

APPROACH

To understand how investments in training infrastructure could fill gaps in readiness assessment, we used a multimethod qualitative approach that included an extensive review of the relevant bodies of literature; policy and USAF documents, including Defense Readiness Reporting System squadron reports; and training system technical documents. We also conducted 13 discussions with four Air Force senior leaders and nine technical experts or subject-matter experts on readiness from various major commands. Ultimately, the synthesis of our analysis yielded recommended options for the future design of training infrastructure that take into account the benefits to readiness assessment.

CONCLUSIONS

- Leaders across the Department of Defense need readiness assessments that consider the ability of disparate military units to integrate and conduct the full spectrum of operations against any adversary. The USAF senior leaders we interviewed think about readiness along two dimensions: resource readiness and capability readiness. Adjustments are needed for resource and capability readiness to align with the needs of Department of Defense leaders.

- The USAF is not measuring the most useful things to gain insight on the readiness of the force. Legacy metrics focus on the ability of individual service members to conduct individual missions. But most National Defense Strategy missions require an integrated approach: Both USAF training requirements and how training is achieved need to change to capture more-meaningful readiness metrics.

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• We identified three gaps in the current readiness assessment process: (1) measurement of factors that come into play only when forces are integrated, (2) readiness report aggregation that does not match force presentation, and (3) the requirement for unit commanders to report readiness on threat environments and scenarios they cannot or rarely train against. These gaps cannot be addressed using the current training infrastructure.

• Senior leaders we interviewed across major commands identified the following investments in training assets to help address readiness assessment gaps: (1) distributed mission operations training; (2) more simulators in general; (3) new synthetic threat environments; (4) aggregated force readiness measurement; and (5) adaptive, proficiency-driven training.

• The Air Force plans for the new Common Synthetic Training Environment contain technical challenges in the design process; the decisions made to resolve these challenges will affect how well the new system will improve readiness assessment.

RECOMMENDATIONS

• Further differentiate capability readiness and align new dimensions with supporting inputs from appropriate functions at headquarters and major commands. The Air Force should define specific, measurable, attainable, relevant, and time-bound (SMART) elements of the broader definition of readiness and align these elements with inputs that can be provided by appropriate functional organizations across the service (e.g., inputs from the Intelligence Directorate on adversary capabilities and from the Logistics Directorate for issues of sustaining capabilities in extended scenarios).

• Consider a process mechanism to bring information into readiness reporting from more-appropriate sources when unit commanders lack information. We recommend that planners use the best available information from across different functions to inform readiness reporting. Then, the same functional areas can leverage new synthetic training opportunities to improve the state of capability knowledge and, in turn, improve future readiness assessments.

• Consider adding a field in Defense Readiness Reporting System–Strategic to capture the quality of information used as inputs for subjective assessments. Adding such a field would be an immediate improvement to the data-collection approach. Collecting this information explicitly would provide feedback on the quality of information informing subjective assessments today. More importantly, however, it would position the Air Force to measure the impact of new synthetic training capabilities on the quality of information flowing into the system.

• Create a working group focused on data and measurement to guide synthetic environment design decisions. A wide range of entities stands to benefit from the general-purpose information that might be created by future synthetic training environments. To ensure that new synthetic environments meet the diverse needs of these stakeholders, the Air Force should form a semipermanent cross-functional working group to advise acquisition efforts on design issues pertaining to data and measurement.

• Factor readiness assessment gaps into operational test and training infrastructure (OTTI) priorities. Plans and priorities for future OTTI capabilities might not realize the full benefit of the capabilities unless they also factor in the impact of training technologies on readiness assessment gaps. Planning documents, such as the OTTI Flight Plan, should consider the readiness benefits when setting priorities for OTTI development.