Assessors perform many types of assessment across the strategic, operational, and tactical levels to inform a wide array of decisions. These levels are distinct yet interrelated. **Strategic-level assessment** addresses issues at the joint force (e.g., winning a particular conflict) and national levels (e.g., enduring security concerns and interests). It involves a wide array of methodologies, participants, and inputs. The President and Secretary of Defense rely on progress reports produced by the combatant commander or other relevant joint force commander (JFC), so assessment at their levels often shapes the nation’s, or even the world’s, perception of progress in an operation.

**Operational-level assessment** begins to evaluate complex indirect effects, track progress toward operational and strategic objectives, and make recommendations for strategy adjustments and future action extending beyond tactical reattack. Assessment at this level often entails evaluation of course of action (COA) success, assessment of the progress of overall strategy, and joint force vulnerability assessment. These are commonly performed by joint force component commanders and the JFC with their staffs.

**Combat assessment** (CA) is defined in Joint Publication (JP) 3-60 as the determination of the overall effectiveness of force employment during military operations. CA is composed of three major components: battle damage assessment, munitions effectiveness assessment, and reattack recommendation.\(^3^4\) CA typically focuses on task accomplishment and specific engagements. The results of tactical tasks, measured by measures of performance (MOPs), are often physical in nature, but also can reflect the impact on specific functions and systems. CA may include assessing progress by phase lines; destruction of enemy forces; control of key terrain, people, or resources; and security or reconstruction tasks. Assessment of results at the tactical level helps commanders determine operational and strategic progress, so JFCs should have a comprehensive, integrated assessment plan that links assessment activities and

\(^3^4\) With a broader concern for assessing operational, campaign level results, Air Force Annex 3-0 uses the term “Tactical Assessment” over “CA” because it is more broadly applicable and descriptively accurate: Not all operations (and hence not all assessments at the tactical level) involve combat. The name should apply to all tactical-level evaluation. The terms, however, are functionally equivalent for most purposes.
measures at all levels. From the Air Force perspective, these would include but not be limited to: in-flight reporting, weapon system video (WSV), mission reports (MISREPs), full motion video (FMV), and cyberspace ISR activities.

CA determines the results of weapons engagement (with both lethal and nonlethal capabilities), and thus is an important component of joint fires and the joint targeting process. To conduct CA, it is important to fully understand the linkages between the targets and the JFC’s objectives, guidance, and desired effects. CA includes the three related elements: battle damage assessment, munitions effectiveness assessment, and reattack recommendations or future targeting.

The purpose of battle damage assessment\(^{35}\) (BDA) is to compare post-execution results with the projected results generated during target development. Comprehensive BDA requires a coordinated and integrated effort between joint force intelligence and operations functions. Traditionally, BDA is a phased process. It begins with aimpoint-level evaluations of primary damage mechanisms and effect upon the targeted elements of a given target type (facility, individual, virtual, equipment, or organization). These assessments are aggregated and form the basis of system-level assessments. BDA is defined in three phases:

- **Phase 1 BDA**: This is the Initial Target Assessment reporting on physical damage assessment (PDA) and or change assessment with initial functional damage assessment (FDA) of the target. This BDA level phase is often derived from single source reporting. Typical timelines associated with this phase are 1-2 hours after information becomes available (e.g., sortie debrief, WSV review, Initial Imagery Report). It also provides initial inputs for a Restrike Recommendation.

- **Phase 2 BDA**: This is the Supplemental Target Assessment report on the physical, change assessment, and functional damage assessment of the target. This report is a detailed PDA, FDA, and change assessment normally based on multi-source reporting. Phase 2 BDA reporting is provided when there is a significant change to the Phase 1 reporting to include the multi-source verification and change to the confidence level of the initial reporting.

- **Phase 3 BDA**: This is the Target System Assessment (TSA) and represents the aggregate of previous phase reporting. This assessment is normally produced by national-level intelligence agencies working closely with the Joint Task Force assessment teams (J2, J3, & J5). It represents an in-depth target system functional damage assessment with respect to a target system (collection of related facilities/entities) and provides commanders with high level assessments that help


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determine future weights of effort for future planning and execution. Reporting for this phase is normally provided 24 hours after information becomes available.

- Munitions effectiveness assessment (MEA): evaluates whether the selected weapon or munition functioned as intended. It examines the munitions’ known parameters, the delivery tactics used, and the interaction between the munition and the delivery platform. MEA is fed back into the planning process to validate or adjust weaponeering and platform selections. It is also the form of assessment with the highest potential return on investment in terms of weapons and tactics development, because the data it generates is fed into the Joint Munitions Effectiveness Manual (JMEM) revision process, resulting in more accurate future capability analysis. MEA is combined operations and intelligence function.

- Estimated damage assessment (EDA): EDA is a type of physical damage assessment and is the process of anticipating damage using the probability of weapon effectiveness to support Estimated Assessments and allows the commander to accept risk in the absence of other information. Many times during execution, it is not possible to wait on ISR verification of strike results without inordinately delaying presentation of assessments to decision-makers. EDA is an evolving technique of using Service documented munitions effectiveness (e.g., reliability, accuracy, effects, etc.), MISREPs, and other data to predict weapons effectiveness on targets and target systems as place holders for the probabilities of success in absence of reported BDA; a process facilitated by the precision and reliability of modern weapon systems. For instance, depending on the target type, size, number of weapons employed, and associated probability of damage, a prediction can be made of the target’s continued level of operational capability. This information is also used to weigh the need for additional collection in lieu of inherent reporting from the weapon(s), aircraft, or aircrew to provide an assessed prediction of the level of physical and functional damage inflicted on selected targets and target systems. Essentially, the prediction becomes more accurate as additional information is received and incorporated, if the additional accuracy is needed. Due to EDA’s requirements for empirical data, its use should be limited to weapons that have Air Force certified data and/or are contained in JMEM. How and when EDA is used should be determined during deliberate planning but should also be reviewed prior to each ATO execution. In general, it is appropriate for all but high-priority targets, but considerations for schemes of maneuver and strategic implications must always be considered. Normally, the COMAFFOR will provide guidance as to what level of risk he or she is willing to accept for a given target/target set when authorizing assessments based on EDA.

- Reattack Recommendations and Future Targeting: Future target nominations and reattack recommendations merge the picture of what was done (BDA) with how it was done (MEA) and compares the result with predetermined MOEs that were developed at the start of the joint targeting cycle. The purposes of this phase in the process are to determine degree of success in achieving objectives and to formulate any required follow-up actions, or to indicate readiness to move on to new tasks in the path to achieving overall JFC objectives. Both operations and intelligence should
work closely to present each target considered for restrike recommendation with the best and most current available information. Analysts may also discover that other targets in the system/network are now logical follow-on targets, or that the commander’s objectives have now been met in regard to certain target(s), and that it is appropriate to recommend an end to further targeting within that target system or network. From the Airman’s perspective, this element of Tactical Assessment occurs at the operational level. AOC planners are an integral part of providing the information to accomplish this for the COMAFFOR. Reattack recommendations should be consistent with JFC objectives and guidance.

Assessment is an inherently joint force process. It relies upon intelligence and operational data from multiple levels. As such, organizations and individuals who may conduct assessment require access to the intelligence analyses of those who developed the targets and the operational information from the ATO which executes against those targets. Both joint and national agencies often provide federated subject matter expertise to support all phases of BDA and other assessments. See Appendix B for an expanded discussion on federated support for targeting and assessment.

**Products of the Phase**

Assessment products are standardized but can be tailored in accordance with the level and type of assessment. For more on tactical assessment refer to Joint Publication (JP) 5-0, *Joint Planning, Appendix D*; JP 3-60, *Joint Targeting, Appendix D*; AFTTP 3-2.87; and AFI13-1AOCV3. For more on combat assessment refer to JP 5-0, Appendix D; JP 3-60, Appendix D; CJCSM 3162.01, CJCSI 3370.01; and DI-28209-2-03, *Commander’s Handbook for Joint Battle Damage Assessment*. 