Dynamic targeting includes prosecution of several categories of targets:

- Joint force commander (JFC)-designated time-sensitive targets (TST) — targets or target sets of such high importance to the accomplishment of the JFC’s mission and objectives, or one that presents such a significant strategic or operational threat to friendly forces or allies, that the JFC dedicates intelligence collection and attack assets, or is willing to divert assets away from other targets in order to engage it.

- Component-critical targets (CCT) – Targets that are considered crucial for success of friendly component commanders’ missions, but are not JFC-approved TSTs. Component commanders may nominate targets to the JFC for consideration as TSTs. If not approved as TSTs by the JFC, these component-critical targets may still require dynamic execution with cross-component coordination and assistance in a time-compressed fashion.

- Targets that are scheduled to be struck on the ATO being executed but have changed status in some way (such as fire support coordination measures changes).

- Other targets that emerge during execution that friendly commanders deem worthy of targeting, prosecution of which may not divert resources from higher-priority targets.

Each of the four categories of targets specified is prosecuted via the same dynamic targeting portion of the tasking process—they differ only in relative priority.

Rules of engagement (ROE), combat identification (CID), positive identification (PID), and target validation all play important part roles in dynamic targeting.

ROE comprises the directives that delineate the circumstances and limitations under which US forces will conduct combat operations. They provide a framework that encompasses national policy goals, mission requirements, and the rule of law. All targeting decisions must be made in light of the applicable ROE.

For prospective targets, there are essentially three levels of CID, which must be acquired prior to engagement that are relevant to AOC personnel and those tasked
Emerging Terminology: JFC Critical Targets

By definition, “time-sensitive target” implies that creating effects against a target needs to happen quickly. Many targets are “time-sensitive” – they may be fleeting targets of opportunity (e.g., enemy leader leaving a compound) or pose an imminent, direct danger to friendly forces (e.g., enemy forces flanking friendly forces). “JFC-TST” is appropriate for such circumstances. However, the way the term is currently used, it also encompasses high priority targets that are not time-sensitive (e.g. enemy HHQ or communication node). Using “time-sensitive” in these cases may add confusion to the process and adversely affect decisions relating to whether or not to strike a target and how to strike it. In order to distinguish between high priority targets and time-sensitive targets, the term “JFC-Critical Target (JFC-CT)” has been introduced. While “JFC-TST” is still extant practice, targeteers must ensure they understand target prioritization and timing involved regardless of the title. Of note, JFC-TSTs and JFC-CTs can be targeted in deliberate and dynamic targeting cycles.

PID is conducted through observation and analysis of target characteristics including visual recognition, electronic support systems, non-cooperative target recognition techniques, identification friend or foe systems, or other physics-based identification techniques, and is informed by CID processes.

Target validation ensures that targets meet the objectives and criteria outlined by the commander’s guidance and ensures compliance with the law of war and ROE. Target validation during dynamic targeting includes analysis of the situation to determine whether planned targets still contribute to objectives, whether targets are accurately located, and how planned actions will impact other friendly operations. The PID decision is crucial to having a valid target.
Dynamic targeting consists of six distinct steps: find, fix, track, target, engage, and assess (F2T2EA).

These are the same steps used to prosecute joint TSTs, as explained in the Multi-Service Tactics, Techniques, and Procedures for Dynamic Targeting (AFTTP 3-2.3). This method referred to as F2T2EA or colloquially as the “kill chain.”

The F2T2EA kill chain applies equally to the application of military capabilities to achieve lethal/nonlethal effects through other means, such as information operations, airdrop, space operations, or directed energy. The decision to employ these capabilities is based on their availability, desired effects, potential consequences, and the JFC’s guidance.

Each step is discussed below.

**Find.** The find step involves detection of an emerging target, which various aspects of its characterization will result in it being binned into one of the dynamic targeting categories listed above. The find step requires clearly designated guidance from commanders, especially concerning target priorities, and the focused ISR collection plan based on JIPOE, to include named areas of interest and target areas of interest. Following this collection plan leads to detections, some of which may be emerging targets, that meet sufficient criteria (established by the AOC with commander’s guidance) to be considered and developed as a target. The time sensitivity and importance of this target may be initially undetermined. Emerging targets usually require further ISR and analysis to develop and confirm.

Commanders should not task sensors without an idea of what they may collect. They should anticipate results, not request unfocused detection. The result of the find step is a potential target that is nominated for further investigation and development in the fix step.

**Fix.** The fix step positively identifies an emerging target as worthy of engagement and determines its position and other data with sufficient fidelity to permit engagement. When the emerging target is detected, sensors are focused upon it to confirm its identity and precise location. This may require implementing a sensor network or diverting ISR assets from other uses to examine it. The COMAFFOR may have to make the decision on whether diversion of ISR resources from the established collection plan is merited, but this decision can often be made by COD personnel. Data correlation and fusion confirms, identifies, and locates the target, resulting in its classification in one of the four target categories listed above. Target location and other information should be refined enough to permit engagement in accordance with ROE. An estimation of the target’s window of vulnerability frames the timeliness required for prosecution and may affect the prioritization of assets and the associated risk assessment.

If a target is detected by the aircraft or system that may engage it (for example, by an armed remotely piloted aircraft, or platform with an advanced targeting pod), this may result in the find and fix steps being completed near-simultaneously, without the need
for additional ISR assets. It may also result in the target and engage steps being completed without a lengthy coordination and approval process. Battle management systems [i.e., airborne warning and control system (AWACS) and joint surveillance target attack radar system (JSTARS) aircraft] can often fix target locations precisely enough to permit engagement without the need for further ISR collection. Growth in sensor technology has permitted “non-traditional” sources of ISR to supplement the find, fix, and track steps. Integrating data from platforms other than those traditionally dedicated to intelligence collection, to include information gleaned from weapons systems or even munitions themselves, helps to build a common operational picture that commanders can use to shorten the F2T2EA cycle.

Track. The track step takes a confirmed target and its location, maintaining a continuous track. Sensors should be coordinated to maintain situational awareness and track continuity on targets. Windows of vulnerability should be updated when warranted. This step may require re-prioritization of ISR assets, just as the fix step may, in order to maintain situational awareness. If track continuity is lost, it may be necessary to re-accomplish the fix step—and possibly the find step as well. The track step results in track continuity and refining the target identification. This is maintained by appropriate sensors or sensor combinations, a sensor prioritization scheme (if required), and updates on the target’s window of vulnerability (if required). The process may also be run partially “in reverse” in cases where an emerging target is detected and engaged. Once it becomes clear that it is a valid target, the sensors detecting it can examine recorded data to track the target back to its point of origin, such as a base camp. This could potentially identify threats or more lucrative targets. Such point of origin hunting has proven especially useful during stability and counterinsurgency operations such as those in Iraq and Afghanistan.

Target. The target step takes an identified, classified, located, and prioritized target; determines the desired effect and targeting solution against it; and obtains required approval to engage. During this step, COD personnel should review target restrictions, including collateral damage, ROE, law of war, the no-strike list (NSL), the restricted target list (RTL), and fire support coordination measures (FSCM). In essence, the targeting and operational members of the COD must accomplish all facets of the “target validation” process. This step also accomplishes effects validation, weaponeering/capabilities analysis, and collateral damage estimation (CDE) analysis. COD personnel match available strike and sensor assets against desired effects, then formulate engagement options. They also submit assessment requirements.

The selection of assets for a specific target may be based on many factors, such as the location and operational status of ISR and strike assets, support asset availability, weather conditions, ROE, target range, the number and type of missions in progress, available fuel and munitions, the adversary threat, and the accuracy of targeting acquisition data. This can be the lengthiest step due to the large number of requirements that should be satisfied. In many cases, however, dynamic targeting can be accelerated if target step actions can be initiated and/or completed in parallel with other steps.
**Engage.** In the **engage step**, identification of the target as hostile is confirmed and engagement is ordered and transmitted to the pilot, aircrew, or operator of the selected weapon system. The engagement orders should be sent to, received by, and understood by the operator of the weapons system. The engagement should be monitored and managed by the engaging component (for the air component, by the AOC). The desired result of this step is successful action against the target.

**Assess.** In the **assess step**, predetermined assessment requests are measured against actions and desired effects on the target. ISR assets collect information about the engagement according to the collection plan (as modified during dynamic targeting) and attempt to determine whether desired effects and objectives were achieved. In cases of the most fleeting targets, quick assessment may be required in order to make expeditious reattack recommendations.

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22 “…the central tenet of centralized control coupled with decentralized execution authority remains the doctrinal gold standard for efficient employment of airpower. Senior leaders should resist the temptation to make tactical-level decisions that are best left to subordinate commanders and forward decision makers.” Volume 1, *Basic Doctrine.*