

ance, but it does not necessarily consider separation from other air traffic. The pilot must consider other factors such as the aircraft's geographical location with respect to the prescribed missed approach point, direction of flight, and/or minimum turning altitudes in the prescribed missed approach procedure. The pilot must also consider aircraft performance, visual climb restrictions, charted obstacles, published obstacle departure procedure, takeoff visual climb requirements as expressed by nonstandard takeoff minima, other traffic expected to be in the vicinity, or other factors not specifically expressed by the approach procedures.

5-4-22. Use of Enhanced Flight Vision Systems (EFVS) on Instrument Approaches

a. Introduction. During an instrument approach, an EFVS can enable a pilot to see the approach lights, visual references associated with the runway environment, and other objects or features that might not be visible using natural vision alone. An EFVS uses a head-up display (HUD), or an equivalent display that is a head-up presentation, to combine flight information, flight symbology, navigation guidance, and a real-time image of the external scene to the pilot. Combining the flight information, navigation guidance, and sensor imagery on a HUD

(or equivalent display) allows the pilot to continue looking forward along the flightpath throughout the entire approach, landing, and rollout.

An EFVS operation is an operation in which visibility conditions require an EFVS to be used in lieu of natural vision to perform an approach or landing, determine enhanced flight visibility, identify required visual references, or conduct a rollout. There are two types of EFVS operations:

1. EFVS operations to touchdown and rollout.
2. EFVS operations to 100 feet above the touchdown zone elevation (TDZE).

b. EFVS Operations to Touchdown and Rollout. An EFVS operation to touchdown and rollout is an operation in which the pilot uses the enhanced vision imagery provided by an EFVS in lieu of natural vision to descend below DA or DH to touchdown and rollout. (See FIG 5-4-34.) These operations may be conducted only on Standard Instrument Approach Procedures (SIAP) or special IAPs that have a DA or DH (for example, precision or APV approach). An EFVS operation to touchdown and rollout may not be conducted on an approach that has circling minimums. The regulations for EFVS operations to touchdown and rollout can be found in 14 CFR § 91.176(a).

FIG 5-4-34
EFVS Operation to Touchdown and Rollout

