



Boeing Guidance for Design of Run-up Areas

The tail (vertical and left horizontal stabilizer) of this 767 was heavily damaged as shown below, by pavement dislodged during a high-power engine run. The run-up was performed on a taxiway rather than on a dedicated run-up area. The debris field, shown below, was caused by the jet blast.



The preferred pavement surface on which to perform engine run-ups is concrete. However, often the area designated for run-ups is surfaced with asphaltic or bituminous materials. The surface ahead of and directly behind any location where an aircraft is likely to perform engine run-ups, or to have to initiate movement from a parked or



standing position must be free of open cracks and have no unsealed feather edges. The asphalt surfacing should be 4 inches thick or greater (5 inches thick wherever widebody aircraft are operated) and should be firmly adhered to the underlying pavement layers by way of a tack coat, or other means to assure a well bonded interface between the surface layer and the underlying strata.

Shoulder pavement in areas that are adjacent to aircraft support pavement should have thicknesses that are one inch less than those mentioned above but should have similar adhesion and must have smooth and well-sealed transitions to adjacent pavement areas.

The US Air Force's "Engineering Technical Letter (ETL) 01-5: Jet Engine Thrust Standoff Requirements for Airfield Asphalt Edge Pavements" is available to the public and provides additional discussion and guidance on this issue.