2. In the opposite direction on the same runway behind a B757 takeoff or low/missed approach.

NOTE–
This 3–minute interval may not be waived.

e. A 4–minute interval will be provided for all aircraft taking off behind a super aircraft, and a 3–minute interval will be provided for all aircraft taking off behind a heavy aircraft when the operations are as described in subparagraphs c1 and c2 above, and are conducted on either the same runway or parallel runways separated by less than 2,500 feet. Controllers may not reduce or waive this interval.

f. Pilots may request additional separation (i.e., 2 minutes instead of 4 or 5 miles) for wake turbulence avoidance. This request should be made as soon as practical on ground control and at least before taxiing onto the runway.

NOTE–
14 CFR Section 91.3(a) states: "The pilot–in–command of an aircraft is directly responsible for and is the final authority as to the operation of that aircraft."

g. Controllers may anticipate separation and need not withhold a takeoff clearance for an aircraft departing behind a **large, heavy,** or **super** aircraft if there is reasonable assurance the required separation will exist when the departing aircraft starts takeoff roll.

NOTE–
With the advent of new wake turbulence separation methodologies known as Wake Turbulence Recategorization, some of the requirements listed above may vary at facilities authorized to operate in accordance with Wake Turbulence Recategorization directives.

REFERENCE–
FAA Order JO 7110.659 Wake Turbulence Recategorization
FAA Order JO 7110.123 Wake Turbulence Recategorization – Phase II
FAA Order JO 7110.126, Consolidated Wake Turbulence

7–3–10. Development and New Capabilities

a. The suite of available wake turbulence tools, rules, and procedures is expanding, with the development of new methodologies. Based on extensive analysis of wake vortex behavior, new procedures and separation standards are being developed and implemented in the US and throughout the world. Wake research involves the wake generating aircraft as well as the wake toleration of the trailing aircraft.

b. The FAA and ICAO are leading initiatives, in terminal environments, to implement next–generation wake turbulence procedures and separation standards. The FAA has undertaken an effort to recategorize the existing fleet of aircraft and modify associated wake turbulence separation minima. This initiative is termed Wake Turbulence Recategorization (RECAT), and changes the current weight–based classes (Super, Heavy, B757, Large, Small+, and Small) to a wake–based categorical system that utilizes the aircraft matrices of weight, wingspan, and approach speed. RECAT is currently in use at a limited number of airports in the National Airspace System.