§ 1546.209 Use of X-ray systems.

(a) TSA authorization required. No foreign air carrier may use any X-ray system within the United States to screen accessible property or checked baggage, unless specifically authorized under its security program. No foreign air carrier may use such a system in a manner contrary to its security program. TSA authorizes foreign air carriers to use X-ray systems for inspecting accessible property or checked baggage under a security program if the foreign air carrier shows that—

(1) The system meets the standards for cabinet X-ray systems primarily for the inspection of baggage issued by the Food and Drug Administration (FDA) and published in 21 CFR 1020.40;

(2) A program for initial and recurrent training of operators of the system is established, which includes training in radiation safety, the efficient use of X-ray systems, and the identification of weapons, explosives, and incendiaries; and

(3) The system meets the imaging requirements set forth in its security program using the step wedge specified in American Society for Testing Materials (ASTM) Standard F792–88 (Reapproved 1993). This standard is incorporated by reference in paragraph (g) of this section.

(b) Annual radiation survey. No foreign air carrier may use any X-ray system unless, within the preceding 12 calendar months, a radiation survey is conducted that shows that the system meets the applicable performance standards in 21 CFR 1020.40.

(c) Radiation survey after installation or moving. No foreign air carrier may use any X-ray system after the system has been installed at a screening point or after the system has been moved unless a radiation survey is conducted which shows that the system meets the applicable performance standards in 21 CFR 1020.40. A radiation survey is not required for an X-ray system that is designed and constructed as a mobile unit and the foreign air carrier shows that it can be moved without altering its performance.

(d) Defect notice or modification order. No foreign air carrier may use any X-ray system that is not in full compliance with any defect notice or modification order issued for that system by the FDA, unless the FDA has advised TSA that the defect or failure to comply does not create a significant risk of injury, including genetic injury, to any person.

(e) Signs and inspection of photographic equipment and film. (1) At locations at which a foreign air carrier uses an X-ray system to inspect accessible property the foreign air carrier must ensure that a sign is posted in a conspicuous place at the screening checkpoint.

(2) At locations at which a foreign air carrier or TSA uses an X-ray system to inspect checked baggage the foreign air carrier must ensure that a sign is posted in a conspicuous place where the foreign air carrier accepts checked baggage.

(3) The signs required under this paragraph must notify individuals that such items are being inspected by an X-ray and advise them to remove all X-ray, scientific, and high-speed film from accessible property and checked baggage before inspection. This sign must also advise individuals that they may request that an inspection be made of their photographic equipment and film packages without exposure to an X-ray system. If the X-ray system exposes any accessible property or checked baggage to more than one milliroentgen during the inspection, the sign must advise individuals to remove film of all kinds from their articles before inspection.

(4) If requested by individuals, their photographic equipment and film packages must be inspected without exposure to an X-ray system.

(f) Radiation survey verification after installation or moving. Each foreign air carrier must maintain at least one copy of the results of the most recent radiation survey conducted under paragraph (b) or (c) of this section and must make it available for inspection upon request by TSA at each of the following locations—

(1) The foreign air carrier’s principal business office; and
(2) The place where the X-ray system is in operation.


(h) Each foreign air carrier must comply with the X-ray operator duty time limitations specified in its security program.


This section applies in the United States to each foreign air carrier operating under §1546.101(a), (b), or (e).

(a) Before a foreign air carrier authorizes and before an individual performs a function described in paragraph (b) of this section—

(1) Each individual must successfully complete a security threat assessment or comparable security threat assessment described in part 1540 subpart C of this chapter; and

(2) Each aircraft operator must complete the requirements in part 1540 subpart C.

(b) The security threat assessment required in paragraph (a) of this section applies to the following:

(1) Each individual who has unescorted access to cargo and access to information that such cargo will be transported on a passenger aircraft; or who has unescorted access to cargo that has been screened for transport on a passenger aircraft; or who performs certain functions related to the transportation, dispatch or security of cargo for transport on a passenger aircraft or all-cargo aircraft, as specified in the foreign air craft operator’s or foreign