Federal Aviation Administration, DOT

§ 129.17 Aircraft communication and navigation equipment for operations under IFR or over the top.

(a) Aircraft navigation equipment requirements—General. No foreign air carrier may conduct operations under IFR or over the top unless—

(1) The en route navigation aids necessary for navigating the aircraft along the route (e.g., ATS routes, arrival and departure routes, and instrument approach procedures, including missed approach procedures if a missed approach routing is specified in the procedure) are available and suitable for use by the aircraft navigation equipment required by this section;

(2) The aircraft used in those operations is equipped with at least the following—

(i) Except as provided in paragraph (c) of this section, two approved independent navigation systems suitable for navigating the aircraft along the route to be flown within the degree of accuracy required for ATC;

(ii) One marker beacon receiver providing visual and aural signals; and

(iii) One ILS receiver; and

(3) Any RNAV system used to meet the navigation equipment requirements of this section is authorized in the foreign air carrier’s operations specifications.

(b) Aircraft communication equipment requirements. No foreign air carrier may operate an aircraft under IFR or over the top, unless it is equipped with—

(1) At least two independent communication systems necessary under normal operating conditions to fulfill the functions specified in §121.347(a) of this chapter; and

(2) At least one of the communication systems required by paragraph (b)(1) of this section must have two-way voice communication capability.

(c) Use of a single independent navigation system for operations under IFR or over the top. Notwithstanding the requirements of paragraph (a)(2)(1) of this section, the aircraft may be equipped with a single independent navigation system suitable for navigating the aircraft along the route to be flown within the degree of accuracy required for ATC if:

(1) It can be shown that the aircraft is equipped with at least one other independent navigation system suitable, in the event of loss of the navigation capability of the single independent navigation system permitted by this paragraph at any point along the route, for proceeding safely to a suitable airport and completing an instrument approach; and

(2) The aircraft has sufficient fuel so that the flight may proceed safely to a suitable airport by use of the remaining navigation system, and complete an instrument approach and land.

(d) VOR navigation equipment. If VOR navigation equipment is required by paragraph (a) or (c) of this section, no
§ 129.18 Collision avoidance system.

Effective January 1, 2005, any airplane you, as a foreign air carrier, operate under part 129 must be equipped and operated according to the following table:

<table>
<thead>
<tr>
<th>COLLISION AVOIDANCE SYSTEMS</th>
<th>If you operate in the United States any . . .</th>
<th>Then you must operate that airplane with:</th>
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</thead>
<tbody>
<tr>
<td>(a) Turbine-powered airplane of more than 33,000 pounds maximum certificated take-off weight.</td>
<td>(1) An appropriate class of Mode S transponder that meets Technical Standard Order (TSO) C–112, or a later version, and one of the following approved units:</td>
<td></td>
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<tr>
<td></td>
<td>(i) TCAS II that meets TSO C–119b (version 7.0), or takeoff weight a later version.</td>
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<td>(ii) TCAS II that meets TSO C–119a (version 6.04A Enhanced) that was installed in that airplane before May 1, 2003. If that TCAS II version 6.04A Enhanced no longer can be repaired to TSO C–119a standards, it must be replaced with a TCAS II that meets TSO C–119b (version 7.0), or a later version.</td>
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<td>(iii) A collision avoidance system equivalent to TSO C–119b (version 7.0), or a later version, capable of coordinating with units that meet TSO C–119a (version 6.04A Enhanced), or a later version.</td>
<td></td>
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</table>
| (b) Turbine-powered airplane with a passenger-seat configuration, excluding any pilot seat, or 10–30 seats. | (1) TCAS I that meets TSO C–118, or a later version, or  
| | (2) A collision avoidance system equivalent to excluding any TSO C–118, or a later version, or  
| | (3) A collision avoidance system and Mode S transponder that meet paragraph (a)(1) of this section. |  

§ 129.19 Air traffic rules and procedures.

(a) Each pilot must be familiar with the applicable rules, the navigational and communications facilities, and the air traffic control and other procedures, of the areas to be traversed by him within the United States.

(b) Each foreign air carrier shall establish procedures to assure that each of its pilots has the knowledge required by paragraph (a) of this section and shall check the ability of each of its pilots to operate safely according to applicable rules and procedures.

(c) Each foreign air carrier shall conform to the practices, procedures, and other requirements prescribed by the Administrator for U.S. air carriers for the areas to be operated in.

§ 129.20 Digital flight data recorders.

No person may operate an aircraft under this part that is registered in the United States unless it is equipped with one or more approved flight recorders that use a digital method of recording and storing data and a method of readily retrieving that data from the storage medium. The flight data recorder must record the parameters that would be required to be recorded if the aircraft were operated under part 121, 125, or 135 of this chapter, and must be installed by the compliance times required by those parts, as applicable to the aircraft.

§ 129.21 Control of traffic.

(a) Subject to applicable immigration laws and regulations, each foreign air carrier must furnish sufficient personnel necessary to provide two-way voice communications between its aircraft and stations at places where the FAA finds that communication is necessary but cannot be maintained in a language with which station operators are familiar.

(b) Each person furnished by a foreign air carrier under paragraph (a) of this section must be able to speak English and the language necessary to maintain communications with its aircraft and must assist station operators in directing traffic.

§ 129.22 Communication and navigation equipment for rotorcraft operations under VFR over routes navigated by pilotage.

(a) No foreign air carrier may operate a rotorcraft under VFR over routes that can be navigated by pilotage unless the rotorcraft is equipped with the