

Maneuvers/Procedures	Required		Permitted			
	Simulated instrument conditions	Inflight	Visual simulator	Non-visual simulator	Training device	Waiver provisions of § 121.441(d)
VII. Emergency Procedures: Each applicant must demonstrate the proper emergency procedures for as many of the emergency situations listed below as the person conducting the check finds are necessary to determine that the person being checked has an adequate knowledge of, and ability to perform, such procedure:						
(a) Fire in flight	B	.....	.....
(b) Smoke control	B	.....	.....
(c) Rapid decompression	B	.....	.....
(d) Emergency descent	B	.....	.....
(e) Any other emergency procedures outlined in the appropriate approved Airplane Flight Manual	B	.....	.....

[Doc. No. 9509, 35 FR 99, Jan. 3, 1970, as amended by Amdt. 121–80, 36 FR 19362, Oct. 5, 1971; Amdt. 121–91, 37 FR 10730, May 27, 1972; Amdt. 121–92, 37 FR 12717, June 28, 1972; Amdt. 121–108, 38 FR 35448, Dec. 28, 1973; Amdt. 121–136, 42 FR 43389, Aug. 29, 1977; Amdt. 121–366, 78 FR 67844, Nov. 12, 2013; Docket FAA–2013–0485, Amdt. 121–376, 81 FR 90175, Dec. 13, 2016; Amdt. 121–376B, 83 FR 1187, Jan. 10, 2018; 83 FR 4420, Jan. 31, 2018]

APPENDIX G TO PART 121—DOPPLER RADAR AND INERTIAL NAVIGATION SYSTEM (INS): REQUEST FOR EVALUATION; EQUIPMENT AND EQUIPMENT INSTALLATION; TRAINING PROGRAM; EQUIPMENT ACCURACY AND RELIABILITY; EVALUATION PROGRAM

1. *Application authority.* (a) An applicant for authority to use a Doppler Radar or Inertial Navigation System must submit a request for evaluation of the system to the responsible Flight Standards office charged with the overall inspection of its operations 30 days prior to the start of evaluation flights.

(b) The application must contain:

(1) A summary of experience with the system showing to the satisfaction of the Administrator a history of the accuracy and reliability of the system proposed to be used.

(2) A training program curriculum for initial approval under § 121.405.

(3) A maintenance program for compliance with subpart L of this part.

(4) A description of equipment installation.

(5) Proposed revisions to the Operations Manual outlining all normal and emergency procedures relative to use of the proposed system, including detailed methods for continuing the navigational function with partial or complete equipment failure, and methods for determining the most accurate system when an unusually large divergence between systems occurs. For the purpose of this appendix, a large divergence is a divergence that results in a track that falls beyond clearance limits.

(6) Any proposed revisions to the minimum equipment list with adequate justification therefor.

(7) A list of operations to be conducted using the system, containing an analysis of

each with respect to length, magnetic compass reliability, availability of en route aids, and adequacy of gateway and terminal radio facilities to support the system. For the purpose of this appendix, a gateway is a specific navigational fix where use of long range navigation commences or terminates.

2. *Equipment and equipment installation—Inertial Navigation Systems (INS) or Doppler Radar System.* (a) Inertial Navigation and Doppler Radar Systems must be installed in accordance with applicable airworthiness requirements.

(b) Cockpit arrangement must be visible and useable by either pilot seated at his duty station.

(c) The equipment must provide, by visual, mechanical, or electrical output signals, indications of the invalidity of output data upon the occurrence of probable failures or malfunctions within the system.

(d) A probable failure or malfunction within the system must not result in loss of the aircraft's required navigation capability.

(e) The alignment, updating, and navigation computer functions of the system must not be invalidated by normal aircraft power interruptions and transients.

(f) The system must not be the source of cause of objectionable radio frequency interference, and must not be adversely affected by radio frequency interference from other aircraft systems.

(g) The FAA-approved airplane flight manual, or supplement thereto, must include pertinent material as required to define the normal and emergency operating procedures and applicable operating limitations associated with INS and Doppler performance (such as maximum latitude at which ground alignment capability is provided, or deviations between systems).