

231. AIR CARRIER OPERATIONS BULLETIN NO. 1-94-30

CREWMEMBER CABIN SAFETY TRAINING

(NTSB SAFETY RECOMMENDATIONS A-92-66 AND A-92-70).

- a. This bulletin provides information which should clarify certain cabin safety training requirements regarding crewmember cabin safety training.
- b. BACKGROUND. The primary focus of aviation safety is the prevention of accidents. However, when accidents occur, a well trained crew can reduce the number of injuries and fatalities. Therefore, the Federal Aviation Administration (FAA) requires crewmember training in the cabin safety aspects of emergencies which occur while the aircraft is being operated inflight or on the surface.
- c. CABIN SAFETY TRAINING. Each operator required to have a training program must provide ground and flight training. Also as required, provide instruction and practice to ensure that each crewmember remains adequately trained and currently proficient with respect to each aircraft, crewmember position, and type of operation in which the crewmember serves. Each crewmember of an operator required to have a training program must satisfactorily complete applicable training curriculums before serving as a crewmember in operations conducted under FAR Part 121 or 135. There is no provision in the FAR for an individual to complete any required training under an approved training program in a manner other than that prescribed in that program. The subjects in the program should include those subjects required by the various FAR and covered by other FAA advisory material. Each subject should be described in the program. The program descriptions should give the amount of time and method used to cover each subject on each aircraft. The parts of the program should together form a unified, coherent training program. It should not be contrary to the FAR and should teach and reinforce safe operating practices and serve the operation for which it is intended.
 - (1) Cabin safety ground training is a required portion of several types of training, including:
 - (a) Indoctrination training which is given to crewmembers who are newly hired by a particular operator. Basic indoctrination training should, at least, include a description of the general safety duties and responsibilities of crewmembers, the appropriate provisions of the FAR, and the appropriate portions of the carrier's operating manual. Crewmembers transferring from one airline to another must complete the new airline's indoctrination training program. In addition, transferring crewmembers must complete the transition and differences training necessitated by the variance between the aircraft of the crewmembers' old and new operator.
 - (b) Initial training is the training required for crewmembers who have not qualified and served in the same capacity on another airplane of the same

group. Each operator must provide and each crewmember must complete initial training which is in addition to indoctrination training. Crewmember initial training must include instruction on general subjects as well as subjects pertaining to the airplane type to be operated. The subjects for which crewmembers are to receive instruction must be applicable to their assigned duties. Initial training is based on equipment and crewmembers not qualified in an aircraft group should complete initial training on the aircraft in that group. Crewmember initial training programs should include drills and actual operation of the equipment as described in the FAR. It should be noted that the requirements for initial training are more extensive than the requirements for recurrent training.

- (c) Transition training is the training requirement for crewmembers who have qualified and served in the same capacity on another airplane of the same group but not of the same type. For example, crewmembers who are qualified on the DC-9 must complete transition training on the B-737 before they would be qualified on the B-737.
- (d) Differences training is the training required for crewmembers who have qualified and served on a particular make, model, and series airplane and the Administrator finds that the variant of the same make, model, and series airplane varies so much that training on the differences is necessary. An example of this could be when the doors on the different airplanes operate the same but are located in significantly different places on the airplane. The appropriate differences training would emphasize this variance in location. When differences training is required, the programmed hours should be specified.
- (e) Recurrent training is the training which crewmembers must periodically complete. This training should ensure that each crewmember is adequately trained and currently proficient with respect to each type of aircraft and each crewmember position.
- (f) Emergency training is required for all crewmembers during initial, transition, upgrade, and recurrent training. There are four methods of emergency training: drills, actual operation of emergency equipment, individual instruction, and overall instruction. These methods of training are discussed separately below. The method of training and the number of programmed hours should be specified for each subject area. Subject areas include instruction in emergency assignments and procedures, individual instruction in the location, function and operation of emergency equipment, instruction in the handling of emergency situations, review and discussion of previous aircraft accidents and incidents pertaining to actual emergency situations, and emergency drills. For example, actual operation of equipment will be used to train crewmembers on fire extinguishers. The time needed to train each

student should be 5 minutes; however, each one should be trained to proficiency.

- (2) The following is a discussion of the four methods of training and checks/tests:
- (a) Emergency drills. When the training program stipulates emergency drills, instructors should ensure that each crewmember acts as a crewmember during the designated drills for each piece of equipment and each type of aircraft. Since drills are practices for actual emergencies, they should be as realistic as possible. Thus, even if artificial smoke was not used in an emergency evacuation drill, attempts should be made to simulate darkened conditions. They may be used for training or combined with checks.
 - (b) Actual operation of emergency equipment. Instructors giving training which calls for the actual operation of equipment should observe each crewmember properly operate each piece of specified equipment. This does not mean having one person in a group operate the equipment, nor does it mean giving an oral or written description of the operation. It also does not mean passing a piece of equipment around the classroom and touching it. It means the actual physical operation of the equipment.
 - (c) Individual instruction. This should be used to ensure that each crewmember receives instruction so that person knows the location, function, or use/proper operation of the equipment. It is possible this could be done in the classroom, especially with the use of audiovisual aids. When an instructor shows the use of a piece of equipment to more than a few crewmembers at a time, this alone may not satisfy the intent of individual instruction. This would especially be true on an airplane since many times it is difficult for each individual in a larger group to see. When instruction is used in conjunction with a competency check where the instructor actually sees each individual operate the piece of equipment, then the intent of individual instruction has been met.
 - (d) Overall instruction. Instruction may be given in the classroom, simulator, mockup, airplane, or in the form of take-home exercises. Take-home tests, workbook, and study guides are valuable training tools; however, even when permitted, the number of hours in either classroom or other structured setting (including mockups and aircraft) that take-home tests can replace should be carefully examined. The substitution of take-home exercises for classroom hours should not be on a one-hour to one-hour ratio, since take-home material is a less effective teaching technique than classroom training. Subjects should be covered in take-home material only if effective teaching does not require observation of equipment or observation of instructor demonstrations, and only if the subject area is unlikely to raise questions appropriate for classroom discussion. Examples of subjects which could lend themselves to take-home exercises include subjects related to flight above 25,000 feet;

abnormal and hazardous conditions involving occupants; management of handbooks; and procedures for maintaining passenger seatbelt discipline.

- (e) Checks and tests. Competency checks, proficiency checks, quizzes, and reviews. One of the areas which the FAA has been asked specifically to address is the area of checks, tests, and reviews as they are given during emergency training in cabin safety.
 - (1) The wording of the regulation pertinent to quizzes and competency checks indicates that all the subject areas of FAR Sections 121.517 and 135.339 should be covered by either a quiz or competency check.
 - (2) Competency checks for flight attendants and proficiency checks for flight crewmembers on each aircraft and position on which they are qualified are required during initial, transition, and recurrent training. These checks should be conducted to determine if an individual crewmember has the necessary knowledge, skills, and abilities to meet the requirements of the FAR.
 - (3) With the exception of the emergency drills and operation of equipment required during initial and recurrent training (every 24 months under Part 121 of the FAR and every 12 months under Part 135 of the FAR), the checks may be written, oral, “hands on,” or any combination of the three. For those items required for the drills or for actual equipment operation, the competency check should be actual observation of the crewmember performing the drill or operation of equipment and a record should be kept of each observation. Other competency checks, quizzes, and reviews should be given so it can be easily determined if an individual crewmember knows the required material. Written “take-home” tests cannot accomplish this objective. Neither can oral nor “hands on” tests which are administered to a group in the classroom.
 - (4) A competency check could involve an individual instructor watching a crewmember perform certain required drills such as using each type of extinguisher. In the situation where individual instruction is required, a competency check could be an instructor observing a crewmember actually locate and demonstrate knowledge of the function and operation of a piece of equipment. This should include actual unstowing of the equipment since it would be restrained during actual operations. It is not desirable to have an instructor take two or three flight attendants and have one operate one type of fire extinguisher, another operate another type of extinguisher, and so on, because this does not, in fact, establish the competency of each individual on each type of fire extinguisher. In a similar situation, oral checks should be given on a one-to-one instructor-crewmember ratio basis. When an instructor goes around a

group of crewmembers and asks each one a different question, the competence of each crewmember is not established.

- (5) During recurrent training when take-home exercises are substituted for hours in class, it is important for crewmembers to be given competency checks on the take-home material as well as on the material covered in the classroom. Competency checks/quizzes which cover the take-home material should be given at the beginning of the classroom period.
 - (6) Many airlines operate several different types of aircraft. It is important that competency checks be given for each aircraft type and model. For example, a flight attendant qualified on the B-747, DC-10, L-1011, and B-727 should have satisfactorily completed a competency check on each of the four types of aircraft. These competency checks should be consistent with the competency checks given when the crewmember initially qualified on the equipment.
 - (7) When the operator submits a training program for FAA approval, the method of determining an individual crewmember's competency for those items where it is required should be documented. For example, if an operator is going to use a written test to determine first aid proficiency, this should be stated in the program. Regardless of the method used by the operator to maintain crewmember currency in the subject matter, each examinee is responsible for, and subject to, testing on the general subject matter.
- (3) Reduction of training. Programmed hours and subject matter should not be reduced to the extent that a program cannot meet training program goals and objectives and, in all cases, the training program should ensure that the crewmember stays adequately trained and currently proficient. Only basic indoctrination, initial, and recurrent training under Part 121 of the FAR have specified numbers of programmed hours. For all other curriculums, only the subject matter requirements or objectives are stated in the regulations. Reduction of hours is permitted under FAR Part 121 operations for indoctrination, initial ground, and recurrent training; however, the specified subjects should still be covered. When an established operator requests a reduction in the number of programmed hours, it must demonstrate to the Administrator that, for the applicable students' level of experience, the reduction will not be detrimental in achieving the requisite level of competency. Reductions in classrooms hours for the 12 hours set forth in the recurrent training regulations should be discouraged where there are several different types and models of aircraft in a fleet except upon the showing of exceptional, time saving, and effective training techniques such as separate mockups for each aircraft type and model. If the number of programmed hours of training is reduced, the FAA will provide the certificate holder with a statement giving the basis for the approval. The same conditions upon which approval for the reduction were based should continue. However, any change or addition of

aircraft type to the operator's fleet of aircraft should necessitate review of the reduction of the number of programmed hours. Transition, differences, or upgrade ground training curriculum segments are derived from the applicable initial ground training curriculum segment. Therefore, upon approval of the Administrator, an established operator may omit particular subjects and have fewer hours than in the initial training curriculum. For this to be acceptable, the operator must show that the material is adequately addressed in another manner, such as recurrent training, that portions are not pertinent to the operation, or that the material can be sufficiently covered in less than the programmed hours approved in the initial training. When increases in recurrent or initial training are mandated by the FAA, as happened when security training was required, these increases would not be compensated for by decreases in the hours of existing training in other areas.

- (4) Additional training requirements under Part 108 of the FAR were not considered within the scope of this bulletin.