National Air Transportation Association
The Voice of Aviation Business

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NATA Aircraft Maintenance & System Technology Committee
Best Practices

Hazardous Material Training Program

BACKGROUND

Title 49 of the Code of Federal Regulations (CFR) establishes the requirements for safe and secure transportation of hazardous materials (HAZMAT). The regulations apply to persons who actually transport HAZMAT or who cause HAZMAT to be transported in commerce.

Part 171 under Title 49 provides the applicability and general requirements that contain information on subjects such as how to pack, ship, and store HAZMAT. Most importantly, for repair stations, air carriers, and air operators, section 171.8 provides the definition of an employer and employee regarding the handling and shipping of HAZMAT.

The definition of an employer and employee is important because the repair station regulation requires a HAZMAT training program if a repair station employs or uses at least one HAZMAT employee on a full-time, part-time, or temporary basis for transporting HAZMAT or causes HAZMAT to be transported.

HAZMAT TRAINING REQUIREMENTS

A repair station must have a HAZMAT training program that meets the requirements of 49 CFR part 172. The program must ensure HAZMAT employees are able to recognize and identify HAZMAT and are trained in the specific requirements of part 172.

During a repair station's initial certification, and when a repair station amends its certificate or changes a rating, it must meet the requirements of 14 CFR section 145.53. Meaning, the repair station must certify, in writing, that all its HAZMAT employees, its contractors, or its subcontractors are trained as required in 49 CFR part 172 subpart H. For repair stations located outside the United States, the repair station must certify, in writing, that all of its employees, its contractors, or its subcontractors who perform a job function concerning the transport of dangerous goods (HAZMAT) are trained as outlined in the most current edition of the International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air.

In 2009, the Federal Aviation Administration (FAA) discovered that not all repair stations located outside of the United States had provided a letter to the local FAA office certifying that its employees or contractors, etc., had been trained. The FAA issued a

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notice to establish a baseline, which required the FAA inspector to ensure a letter was in the file or obtain one from the repair station. That notice expired in 2010, and FAA Order 8900.1, Flight Standards Information Management System, the inspector handbook, was revised in 2012 with current general information for air carrier certification and fractional ownership HAZMAT training. The guidance also discusses the requirements for repair stations if employees will handle or be involved in HAZMAT.

In addition to any HAZMAT the repair station itself might handle, it also must ensure that any of its employees performing or directly supervising the loading of HAZMAT on an aircraft operated by a 14 CFR part 121 or part 135 certificate holder has received training in accordance with the operator's FAA-approved HAZMAT training program.

When performing or directly supervising any job function listed in section 121.1005 or section 135.501, a repair station worker is not any different than any other contractor or subcontractor performing or directly supervising a job function, including loading the certificate holder's aircraft. Any contractor loading the aircraft for transportation must be trained under the FAA's Approved Hazardous Materials Training Program for that part 121 or part 135 operator. There is not a requirement for the part 121 or part 135 operators to train all repair station employees, only those who perform a covered function for or on behalf of the certificate holder.

There are basically two categories of HAZMAT training requirements for repair station employees involved in handling HAZMAT. Normally, a repair station may only need to have a HAZMAT Recognition Program for its own operation or if it is a subcontractor to an air carrier or air operator who does not carry HAZMAT. In that case, each HAZMAT employee should be provided general awareness/familiarization training designed to provide familiarity and enable employees to recognize and identify hazardous materials.

A HAZMAT Recognition Program should provide information to assist repair station personnel (particularly maintenance, shipping, and storage personnel) in identifying or recognizing aircraft components and consumable materials that contain HAZMAT and how these aircraft components or consumable materials are to be moved, stored, or handled within the repair station.

Other procedures in the recognition program should contain information on:

- Proper packaging, marking, labeling, and materials compatibility;
- Guidance and precautions on the specific hazards associated with aircraft components and consumable materials containing HAZMAT; and
- Instructions and detailed procedures for the proper disposal of unserviceable aircraft components and consumable materials containing HAZMAT.

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If a repair station employee is going to handle HAZMAT for an air carrier or air operator, then the employee must be trained to that air carrier's program. If the air carrier is not going accept HAZMAT, then the carrier's training program should provide the repair station employees with procedures and instructions on the recognition of items classified as HAZMAT; instructions to ensure that no packages are accepted that contain HAZMAT; and procedures and instructions for reporting damaged packages found to contain, or that are suspected of containing, HAZMAT or dangerous goods are reported in compliance with 49 CFR sections 171.15, 171.16, and 175.31.

If a repair station employee is handling HAZMAT for an air carrier or air operator that does accept HAZMAT, then the training program is more in depth. In that case, the air carrier's training program should train the repair station employee on how to:

- Properly package, mark, label, and document the material;
- Identify the proper shipping name, hazard class or division, identification number, and packing group, when required, in accordance with 49 CFR part 172, or the ICAO Technical Instructions.
- Store HAZMAT, which should include instructions for Class 8 (corrosive), Class 7 (radioactive), and Class 6, Division 6.1 (poisonous).

The operator should provide specific guidance for loading HAZMAT and should include:

- Loading of HAZMAT in aircraft in accordance with 49 CFR part 175 subpart B;
- Loading and carriage of HAZMAT in cargo-only aircraft, when other means of transportation are not available or impracticable, in accordance with 49 CFR section 175.310, as revised;
- Loading of radioactive materials in aircraft in accordance with 49 CFR section 175.700 to ensure that imitations are in accordance with the provision of 49 CFR section 175.75 and that the operator transports radioactive packages in accordance with 49 CFR sections 175.701, 175.702, and 175.703;
- Loading of HAZMAT in cargo compartments or freight containers within cargo compartments, in accordance with 49 CFR section 175.75; and
- A prohibition against loading packages bearing a poison label in the same compartment that holds foodstuffs, feeds, or any edible materials intended for consumption by humans or animals unless both commodities are in separate, closed-unit load devices known as freight containers.

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RESPONSIBILITY FOR ACCEPTING/APPROVING, OVERSEEING, AND ENFORCING HAZMAT PROGRAMS

The FAA Office of Security and Hazardous Materials (ASH) has the overall authority for policy and regulations regarding HAZMAT and uses Hazardous Materials Branch Managers (HMBM) at the local or regional level to oversee HAZMAT programs.

The HMBM is the technical expert and must evaluate all HAZMAT programs. The FAA principal inspector (PI) ensures that repair stations include HAZMAT training in their manuals and actually provide the training. However, the PI must defer to the experts in the HMBM to evaluate the contents of the training program. Once the HMBM is satisfied with the training, the HMBM recommends, in writing, to the PI that the program can be accepted. Usually, the HAZMAT training is included in the HAZMAT manual, and the initial acceptance of the training is usually done at the same time as the review and acceptance of the HAZMAT manual.

NATIONAL SOURCES FOR INFORMATION

Title 14 CFR parts 91, 91 subpart K (91K), 121, 125, 135, and 145 are applicable to air carrier operations, air taxi operations, helicopter operations, and repair stations and define the duties and responsibilities for conducting training programs and procedural manuals dealing with the air transportation of HAZMAT.

Title 49 CFR parts 100 through 185 deal with the proper identification, classification, packaging, labeling, marking, and certification of HAZMAT transported in commerce.

Department of Transportation HAZMAT Web site: http://phmsa.dot.gov/hazmat.

FAA HAZMAT Web site:
http://www.faa.gov/about/office_org/headquarters_offices/ash/ash_programs/hazmat/.