8 TRAINING

GACAR § 109 Subpart F

IATA DGR Section 1.5

8.1 PURPOSE AND SCOPE

The purpose of Riyadh Air's Dangerous Goods Training Program is to ensure personnel are competent enough to perform any function involving the transport of dangerous goods by air, in accordance with ICAO Technical Instructions, Chapter 4 and GACAR, Part 109, Subpart F.

As a non-carry operator, Riyadh Air's training curriculum will align with the requirements in GACAR, Part 109, Appendix B, Table B2 for operators not authorized to carry dangerous goods. This section outlines required training topics tailored to specific personnel functions regarding handling cargo, baggage, and passengers where undeclared dangerous goods may be present.

In developing this training program, IATA's Dangerous Goods Training Guidance – Competency-Based Training and Assessment Approach provides a valuable industry framework aligned with International Civil Aviation Organization (ICAO) standards for establishing effective function-specific competency-based training. The Guidance outlines best practices for training methodology, delivery techniques, assessment, and program evaluation that will help ensure Riyadh Air personnel achieve appropriate dangerous goods competencies.

The training program scope encompasses all Riyadh Air personnel involved in handling cargo, passenger baggage, company material, and passengers. It is designed to provide familiarity with general dangerous goods requirements, function-specific knowledge to perform duties, and awareness of hazards and emergency response procedures. Assessment procedures will validate personnel competencies.

8.2   TRAINING METHODOLOGY

8.2.1   Delivery Methods

Riyadh Air will utilize a combination of classroom instruction, computer-based training, on-the-job training, and practical exercises/simulations to deliver dangerous goods training.

The training delivery methods will be selected based on the most effective approach for each personnel function and the complexity of required competencies. A blended training approach ensures instructors calibrate their techniques based on audience and objectives.

8.2.1.1   Classroom Instruction

Classroom instruction will provide fundamental knowledge acquisition for personnel through instructor-led training sessions. This is well-suited for flight crew, cabin crew, and flight operations functions where hands-on tasks are limited.

It is also encouraged for initial training.

8.2.1.2   Computer/Web-Based Training

Self-paced online modules will supplement classroom training for administering consolidated assessment and reinforcing retention. This enables personnel to refresh knowledge at any time. Web-based training is mainly used for recurrent training.

8.2.1.3   Job Shadowing and On-the-Job Training

Per International Air Transport Association (IATA) guidance, on-the-job shadowing and hands-on practice is critical for Ground Handling Personnel to gain real-world dangerous goods experience. This will be overseen by Supervisors following classroom and online training.

8.2.1.4   Simulations/Practical Exercises

Simulated dangerous goods handling scenarios and facilitated exercises will provide risk-free practice and skills assessment for ground personnel accepting/handling cargo and passenger baggage.

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8.2.2 Training Environment and Tools

To facilitate effective dangerous goods training delivery, Riyadh Air should obtain and utilize the tools and equipment outlined in the following sections.

8.2.2.1 Facilities and Equipment

1. Dedicated training facilities equipped with classroom spaces configurable for lectures, small groups, and hands-on activities.

2. Computer lab for web-based training modules and knowledge testing.

3. Mock cargo warehouse area to simulate real-world handling scenarios.

4. Camera systems to record and review personnel hands-on proficiency.

5. Dangerous goods shipment examples across all classes for observation and handling.

6. Packing, labeling, and marking supplies to construct training shipments.

7. Safety gear like gloves, goggles and protective clothing for realistic practice.

8.2.2.2 Training Aids

1. PowerPoint presentations, manuals, job aids, and quick reference guides tailored to each function.

2. Interactive e-learning modules with embedded quizzes and videos.

3. Example dangerous goods transport documents for review and completion.

4. Checklists for acceptance, packing, labeling, loading, etc.

5. Dangerous goods identification job aids organized by class and division.

8.2.2.3 Practice Shipments

1. Inert replicas allowing realistic handling without hazard exposure.

2. Simulated leaking or damaged packages to practice emergency response.

3. Partially prepared shipments for personnel to complete required actions.

4. Mock improper shipments with errors for personnel to identify and correct.

5. Sample NOTOCs, Dangerous Goods Declarations (DGDs) covering a wide variety of scenarios and classes.

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8.3   TRAINING CURRICULUM

8.3.1   Flight Crew

Flight crew initial and recurrent training will cover familiarity with general provisions for air transport of dangerous goods, aircraft limitations, emergency procedures, and other topics outlined in GACAR 109, Appendix B, Table B2 (for Riyadh Air as a non-carry operator).

Per IATA's Dangerous Goods Training Guidance – Competency-Based Training and Assessment Approach, training topics and delivery methods will be tailored to flight crew functions and competency requirements, focused on:

1.   Hazard awareness and risk mitigation,

2.   Interpreting the NOTOC,

3.   Responding to dangerous goods incidents in flight,

4.   Communicating with dispatch, Air Traffic Control (ATC) and emergency services.

The curriculum will utilize a blended approach including classroom, web-based, simulations and practical drills.

Upon completing training, flight crew will demonstrate the ability to competently perform duties related to transport of dangerous goods.

Per GACAR, 109, flight crew must complete recurrent dangerous goods training within 24 months of their previous training to maintain qualification. If recurrent training is completed within the final three months of validity, the new validity period extends 24 months from the prior expiry date.

8.3.2   Ground Handling Personnel

Ground handling personnel training will cover topics outlined in GACAR, 109, Appendix B, Table B2 relevant to their specific function and relevant to Riyadh Air as a non-carry operator. Training delivery and tools will focus on building competencies through hands-on instruction. Initial and recurrent training will be provided.

Recurrent training will be provided within 24 months to maintain qualifications.

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8.3.2.1   Dangerous Goods Acceptance

Personnel accepting cargo will be trained on:

1.   Identifying undeclared dangerous goods,

2.   Completing Acceptance Checklists,

3.   Verifying shipper's declaration and package marking/labels,

4.   Documentation requirements and recordkeeping.

Delivery: Classroom instruction, on-the-job shadowing, practical exercises with example shipments
Tools: Acceptance checklists, example Dangerous Goods Declarations (DGDs), and simulated leaking packages

Recurrent training will emphasize new regulations and reinforce skills through practical exercises.

8.3.2.2   Cargo and Baggage Handling

Personnel handling cargo and baggage will be trained on:

1.   Recognizing undeclared dangerous goods,

2.   Safely loading, unloading, and transporting shipments,

3.   Segregating incompatible dangerous goods,

4.   Securing packages and verifying marks/labels.

Delivery: On-the-job instruction, warehouse simulations, and team practical exercises
Tools: Job aids, videos, and example build-up shipments

8.3.2.3   Passenger Handling

Personnel assisting passengers will be trained on:

1.   Identifying prohibited dangerous goods items,

2.   Explaining passenger provisions and duty to declare,

3.   Approval requirements for passenger exceptions,

4.   Reporting undeclared or non-compliant dangerous goods.

Delivery: Classroom instruction, self-paced online modules, and practical exercises at check-in/boarding gates
Tools: Prohibited Items job aid, Dangerous Goods quick reference guide, and example passenger items

Recurrent training will reinforce knowledge through online refresher modules and evaluation of real-world passenger items.

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8.3.3   Flight Operations and Dispatch

Flight Operations and Dispatch personnel training will cover topics outlined in GACAR, 109, Appendix B, Table B2 relevant to their functions. Initial and recurrent training will focus on:

1.   Identifying and verifying Dangerous Goods,

2.   Completing NOTOC and ensuring Captain receives information,

3.   Responding to Dangerous Goods Incidents or emergencies,

4.   Coordinating with ground staff, ATC, and emergency services.

Training delivery methods will include:

1.   Classroom lectures on regulations and operational procedures,

2.   Web-based training for recurring knowledge checks,

3.   Simulated dispatch scenarios involving dangerous goods situations,

4.   Communication drills to practice relaying details to flight crew.

Upon training completion, Dispatch personnel will demonstrate competency in:

1.   Recognizing Undeclared or Non-compliant Dangerous Goods,

2.   Completing accurate NOTOCs and providing crew notification,

3.   Applying emergency procedures and contacting appropriate parties,

4.   Communicating clearly with flight crew, ground staff, ATC, and authorities.

8.3.4   Cabin Crew

As the last line of defense identifying Undeclared or Non-Compliant Dangerous Goods brought on board by passengers, cabin crew training will be robust and focused on building the following competencies:

1.   Identifying prohibited dangerous goods that are absolutely forbidden for air transport,

2.   Recognizing restricted items that require approval and proper packaging,

3.   Verifying passenger exceptions, like medical supplies, meet approval requirements,

4.   Taking appropriate actions for suspicious items or non-declarations,

5.   Applying emergency procedures for Dangerous Goods Incidents in flight,

6.   Communicating clearly with flight crew during dangerous goods situations.

Training topics outlined in GACAR, 109, Appendix B, Table B2 will be covered through:

1.   Classroom lectures on identification and passenger provisions,

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2.   Web-based modules reinforcing restricted vs prohibited items,

3.   Extensive practical exercises and simulations including:

    a.   Identifying prohibited items in mock passenger bags,

    b.   Interviewing volunteer passengers with mock exceptions,

    c.   Applying emergency procedures for spill/leak scenarios,

    d.   Communicating with flight crew during simulated incidents.

Recurrent training will utilize web modules and practical evaluations at the boarding gate to maintain qualifications. Records of items identified, and actions taken will be maintained for program review.

8.4   PROGRAM DEVELOPMENT

8.4.1   Training Needs Analysis

A Training Needs Analysis will identify:

1.   Regulatory requirements for each personnel function,

2.   Operational procedures involving transport of dangerous goods,

3.   Desired competencies and performance outcomes,

4.   Potential gaps in knowledge, skills, and abilities.

This will inform curriculum design, tools, and delivery methods tailored to address needs.

8.4.2   Program Design

8.4.2.1   Assessment Plan

Assessment strategies will be developed for initial and recurrent evaluations, including:

1.   Written knowledge tests,

2.   Practical skills observations,

3.   Simulated scenario exercises,

4.   On-the-job performance appraisals,

5.   Passing scores will be determined and documentation procedures established.

8.4.2.2   Material Development

Instructional materials will be developed for each training delivery method:

1.   Presentations, manuals and job aids for classroom sessions,

2.   Interactive e-learning modules for online learning,

3.   Practical exercises and operational simulations,

4.   Checklists and quick references for on-the-job needs.

Subject Matter Experts (SMEs) will review to validate training content and effectiveness.

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8.5   ASSESSMENT PROCEDURES

Robust assessment strategies will evaluate personnel competency and program effectiveness.

Initial and recurrent training:

1.   Written exams will assess knowledge comprehension,

2.   Practical exercises will appraise skill application,

3.   On-the-job observations will gauge real-world proficiency.

Competency benchmarks:

1.   Passing scores will be set for written and proficiency assessments,

2.   Actions will address personnel not meeting benchmarks:

   a.   Retraining and re-evaluation,

   b.   Temporary duty restrictions,

   c.   Disqualification from dangerous goods functions.

Program metrics

1.   Training records will be analyzed to identify strengths and opportunities,

2.   Competency scores and trends will inform program adjustments,

3.   Feedback surveys will provide input on experiences.

Instructors

1.   Instructor capabilities will be evaluated through monitoring of training sessions,

2.   SMEs will ensure accurate knowledge transfer,

3.   Training the trainer programs will enhance facilitation skills.

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8.6 INSTRUCTOR QUALIFICATIONS

Dangerous goods training instructors will meet qualification requirements in accordance with GACAR, Part 109, Subpart F:

1. Complete relevant dangerous goods training program,

2. Demonstrate competence in training topics through evaluation,

3. Possess instructional skills validated by SMEs,

4. Undergo recurrent training within 24 months to maintain qualifications.

Specific selection criteria will include:

1. Experience performing the related technical functions,

2. Familiarity with Riyadh Air operational procedures,

3. Strong communication and facilitation abilities,

4. Knowledge of adult learning techniques and tools,

5. Motivation to improve training program effectiveness.

Initial instructor training will develop skills through methods such as:

1. Mentoring programs with experienced instructors,

2. Ground/flight instructor training and certification courses,

3. Hands-on practice teaching sessions with evaluator feedback.

Recurrent instructor training will provide:

1. Refreshers on curriculum, delivery techniques and tools,

2. Updates on changing regulations and operational procedures,

3. Reinforcement of facilitation skills through observed practice sessions.

8.7   RECORDKEEPING

Complete and accurate records will be maintained for the Dangerous Goods Training Program. This includes:

1. **Individual Training Files** - Details on courses completed, scores achieved, skills observed, qualifications attained and recurrent training status for each employee.

2. **Instructor Files** - Courses taught, techniques utilized, evaluations received and recurrent qualifications for each approved instructor.

3. **Program Administration Files** - Curriculum materials, proficiency metrics, feedback surveys, and overall training program reviews and revisions.

Records will be:

1. Readily accessible to instructors and program administrators.

2. Secure with access controls to ensure confidentiality.

3. Backed up regularly with off-site storage for redundancy.

4. Compliant with data privacy regulations.

Detailed, well-organized records will enable training analysis, program adjustments, and regulatory compliance audits. Refer to CPM section 4.9.

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8.8   EVALUATING PROGRAM EFFECTIVENESS

Several methods will be utilized to evaluate and enhance training program effectiveness:

1. **Personnel Feedback** - Anonymous surveys will collect input on experience, and areas for improvement.

2. **Instructor Observations** - Suggestions to update curriculum, tools, and techniques.

3. **Training Analysis** - Identifying topics with frequent failures to adjust training methods.

4. **Operations Review** - Assessing actual Dangerous Goods Incidents and how personnel responded.

5. **External Audit** - Third-party expert review against regulations and industry best practices.

6. **Recurrent Enhancements** - Regular content updates, delivery improvements, and tool revisions.

Evaluations will inform continuous program improvement regarding relevance, comprehension, retention, and results for personnel dangerous goods competencies.