VOLUME 3 GENERAL TECHNICAL ADMINISTRATION

CHAPTER 32 MANUALS, PROCEDURES, AND CHECKLISTS FOR 14 CFR PARTS 91K, 121, 125, AND 135

Section 4 General Operations Manuals for Parts 121 and 135

3-3201 GENERAL. This section contains information, direction, and guidance that principal operations inspectors (POI) should use in the evaluation of an operator's General Operations Manual (GOM). The operator's GOM is a segment of the operator's general manual system. Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.133 and 14 CFR part 135, § 135.21 require that each operator prepare and keep current a manual. The Federal Aviation Administration (FAA) requires that the GOM contain guidance for flight, ground, and management personnel during the conduct of the operator's operations.

3-3202 CONTENT OF GOMs. Sections 121.135 and 135.23 specify topics that an operator's GOM must address. The operator's GOM must contain the duties and responsibilities for each category of employee. This manual must also provide sufficient policy, direction, and guidance to its employees for the safe and efficient performance of their duties. In addition, an operator's GOM must address the policies, systems, and procedures necessary to comply with operations specification (OpSpec) provisions and safe operating practices. This section contains discussions of selected topics that POIs should look for when evaluating an operator's GOM, and which the operator's initial and final compliance statements may require (see Volume 2, Chapter 4, Section 1, paragraph 2-348 for part 135 certification compliance statement information).

> NOTE: The requirement to develop a GOM does not apply to a part 135 single-pilot operator or a part 135 operator issued an exemption to § 135.21 by OpSpec A005 (see Volume 2, Chapter 4, Section 6, paragraph 2-460).

3-3203 OPERATOR MANAGEMENT STRUCTURE. When evaluating an operator's GOM, POIs must ensure that the GOM includes the operator's management structure and that it meets the following guidelines:

A. Management Structure. The GOM must contain a description of the operator's management structure as it pertains to flight operation activities. Organizational entities, areas of responsibility, and titles of key management positions must all be identified. The POI must ensure that the Director of Operations (DO) is responsible for, and has the authority to direct, all operational functions. Furthermore, the FAA requires POIs to ensure that the chief pilot, as well as all operational and support personnel (i.e., training managers and dispatchers), and those persons in the certificate holder's operations organization who are in a position to exercise control over operations ultimately report to and are accountable to the DO. Additionally, procedures should be in place that ensure proper coordination between flight operations management and aircraft maintenance management concerning aircraft airworthiness status and maintenance release. Organizational charts and diagrams may be useful in showing the relationship between operational units within the company.

B. Names of Management Personnel. The GOM must list the names of the individuals filling required management positions. An acceptable way for the operator to meet this requirement is to include a copy of its OpSpecs in the manual. The FAA may approve management structures and titles different from those specified by 14 CFR part 119, §§ 119.65 (for part 121) and 119.69 (for part 135) by granting a deviation to these regulations (see Volume 3, Chapter 18, Section 3, OpSpecs A005 and A006 for further guidance). When the FAA grants such a deviation, list it in OpSpec A005 along with the names and titles of the approved management positions listed in OpSpec A006.

3-3204 AUTHORIZED OPERATIONS. When evaluating an operator's GOM, POIs must ensure that the operator's GOM meets the following authorization guidelines:

A. Clear Descriptions of Authorized Operations. Per § 121.33, the GOM must contain clear descriptions of the types and kinds of operations that the operator should conduct. The GOM must prohibit those operations that a flightcrew could possibly conduct but which the OpSpecs specifically prohibit the operator from conducting. The GOM must contain information on the authorized areas of en route operation in which the operator may conduct flights, including the types of aircraft authorized, crewmember complements, and any special en route and instrument approach procedure (IAP) authorizations or requirements. One way an operator may describe the types and kinds of authorized and prohibited operations is to include a copy of the operator's OpSpecs in the GOM. Since the OpSpecs address a variety of situations and are not easily understandable as they apply to specific operational circumstances, POIs should encourage operators to extract the applicable information and incorporate it in the GOM. Also, the operator should include clearly written direction and guidance on how to comply with authorizations and limitations. It is acceptable for operators to contract a charting and publishing service (such as Jeppesen Sanderson, Inc.) to prepare manual material concerning these authorizations and limitations. In these cases, consider the charting and publishing service's product to be a part of the operator's GOM. POIs must review this portion of the operator's GOM as well as all other portions.

B. Flight Operations Policies, Methods, and Procedures. Either the GOM, a section of the GOM such as a Flight Operations Policy Manual (FOPM), or a Company Flight Manual (CFM) (see Volume 3, Chapter 32, Section 1 for a definition of CFM) may contain flight operations policies, methods, and procedures. When an operator operates a variety of aircraft, it may be preferable to publish the flight operations policies, methods, and procedures that are common to all aircraft in the GOM instead of each CFM. Crewmembers are required to comply with the flight operations policies, methods, and procedures, regardless of whether they are in the GOM or the CFM. Therefore, flight operations policies, methods, and procedures should be written in directive language and provide specific operational criteria. An example of a flight operations policy statement that does not provide a clear directive or specific operational criteria is the following: "Use caution when arriving or departing a terminal area when thunderstorms are present." An example of a flight operations policy statement that is clearly a directive and provides specific operational criteria is: "Takeoffs and landings shall not be attempted when thunderstorms are within 3 miles of the airport or the path of takeoff or arrival."

3-3205 WEIGHT AND BALANCE (W&B) PROCEDURES. When evaluating an operator's GOM, POIs will ensure that an operator includes their W&B procedures in the operator's GOM and that they meet the following guidelines:

A. Placement of W&B Procedures. Each type of airplane the operator uses may require a separate W&B procedure. In such cases, it may be appropriate for the operator to place the W&B procedure flightcrews need in the CFM and the procedures other flight operations personnel need in sections of the GOM. If the operator develops a single W&B procedure for all aircraft operated, it may be appropriate for the operator to place the procedure that flightcrews and other flight operations personnel need in the GOM. Operators may develop their own W&B procedures or use the procedures that aircraft manufacturers furnish. POIs should recommend the current editions of the following documents to the operator:

- FAA-H-8083-1, Aircraft Weight and Balance Handbook;
- Advisory Circular (AC) 43.13-2, Acceptable Methods, Techniques, and Practices—Aircraft Alterations; and
- AC 120-27, Aircraft Weight and Balance Control.

B. Approval of W&B Procedures. OpSpecs A011, A096, A097, A098, A099, and E096 grant the approval of W&B procedures. The POI will have primary responsibility for authorizing the operations that approve actual, average, or segmented passenger and baggage weights outlined in OpSpecs A011, A096, A097, A098, and A099, and the principal maintenance inspector (PMI) will issue OpSpec E096, which permits the use of actual or average aircraft fleet weights.

C. Carry-On Baggage/No-Carry-On Baggage Programs. Volume 3, Chapter 18, Section 3 provides the guidance necessary for approving OpSpec A011, authorizing the use of a carry-on baggage program or a no-carry-on baggage program for operations conducted under 14 CFR parts 91 subpart K (part 91K), 121, 125, and 135.

D. Additional Guidance for Issuing OpSpecs. Volume 3, Chapter 18, Section 3 provides additional guidance for issuing these OpSpecs. AC 120-27 provides additional information that will assist the POI in approving an operator's W&B control program. An operator may reference the OpSpecs in the GOM; however, the operator may not use the reference instead of a detailed description of the procedures flight operations, ground handling, and flightcrew personnel need. POIs must ensure that the information and guidance in the operator's GOM is consistent with that in the General Maintenance Manual (GMM). The W&B procedures described in the operator's manuals should normally address the following topics:

1) Procedures for complying with W&B limitations for each type of aircraft;

2) For part 135 operators that operate multiengine aircraft, procedures for ensuring that the empty weight and center of gravity (CG) of each multiengine aircraft is determined by actually weighing the aircraft within the preceding 36 months;

3) Procedures for determining the weight of passengers, crew, cargo, and baggage;

4) Procedures for making the CG calculations, including loading schedules or other approved methods, if applicable;

5) Procedures for the completion and disposition of load manifests and W&B records; and

6) Procedures for loading the aircraft.

3-3206 OPERATIONAL CONTROL. When evaluating an operator's GOM, POIs must ensure that an operator's operational control procedures are included. The GOM must include descriptions of the procedures, duties, and responsibilities of flightcrew, operational control, and management personnel. Furthermore, the GOM must contain staffing requirements for operational control personnel during the periods of time that flights are operational. When a training and qualification document does not contain training and operational control requirements for operational control personnel, the GOM must list the requirements. The POI must ensure that the operator's GOM meets the following requirements:

A. Part 121 Domestic and Flag Operations. The description of the operational control system that part 121 operators use for conducting domestic and flag operations must be comprehensive. The GOM must contain flight dispatch procedures as well as flight-watch procedures. The GOM must also contain a detailed outline of the interrelation of flight dispatch, crew scheduling, and airworthiness control. The GOM must address the communication facilities for operational control purposes, procedures with air traffic control (ATC), and methods for handling delayed flights. The GOM must also cover procedures used during adverse weather conditions and for discontinuing flight in unsafe conditions. If the operator conducts unscheduled flights under supplemental regulations, the operator must outline the procedures used (see Volume 3, Chapter 25, Section 2 for more detailed information on flight dispatch systems).

B. Part 121 Supplemental Operations. The description of the operational control system that part 121 operators who conduct only supplemental operations use must contain the flight release and flight-watch procedures that flightcrew, operational control, and management personnel use. The operator must outline the interrelation of flightcrews, persons authorized to release flights, and airworthiness control personnel. The GOM must also cover the communication facilities and the procedures for using these facilities. GOMs must contain procedures for adverse weather conditions and for discontinuing flight in unsafe conditions. Section 121.125(d) requires that the OpSpecs specify the flight-following system and the location of the flight-following centers. OpSpec A008 is allocated to authorize this type of operational control system. If the GOM contains a comprehensive description of the system, only reference that GOM section in OpSpec A008 (see Volume 3, Chapter 25 for more detailed information on flight-following systems).

C. Part 135 Operations. As a minimum, the description of the operational control system used by part 135 operators must contain a list of the names and titles of the personnel who the operator authorizes to exercise operational control. If the operator does not establish a flight-watch system, the GOM must contain directions to flightcrews for filing an FAA flight plan for each flight conducted. If the operator establishes a flight-watch system, the GOM must contain an outline of the procedures that provide the operator with at least the information

included in a visual flight rules (VFR) flight plan for each flight operated. The GOM must also contain an outline of the procedures that provide the operator with information on the location, date, and estimated time for reestablishing radio or telephone contact when conducting flights in areas where such communications cannot be maintained with the operator. The flight-locating system must also be provided for timely notification to an FAA facility and search and rescue facility when an aircraft is overdue or missing. The GOM will also contain a description of the procedures for retaining flight location information until a flight is complete. If a part 135 operator uses a flight control system that is more sophisticated than the basic requirements of the regulation, the GOM will contain a description of the system and procedures actually used (see Volume 3, Chapter 25 for more detailed information on part 135 flight control systems).

NOTE: For additional guidance, see Volume 3, Chapter 25, Section 1 and Volume 6, Chapter 2, Section 22.

3-3207 FLIGHT PLANNING. When evaluating an operator's GOM, POIs will ensure that an operator includes their flight planning procedures. The direction and guidance for flight planning must be comprehensive and address the responsibilities of both flight control and flightcrew personnel. The GOM must contain a discussion of weather minimums, special airports, and other special requirements such as driftdown, rerelease, and diversion contingencies. Some operators may elect to place the flight planning procedures in the CFM and the operational control procedures in a dispatch or flight control user manual.

3-3208 NOTICES TO AIRMEN (NOTAM) AND PILOT WEATHER REPORTS (PIREP). When evaluating an operator's GOM, POIs will ensure that the operator includes procedures for the acquisition of NOTAMs and PIREPs and for the distribution of these NOTAMs and PIREPs to applicable personnel. The GOM should also contain a description of the procedures for obtaining applicable NOTAMs that are only distributed to a local area.

3-3209 RESTRICTED OR SUSPENDED OPERATIONS. The regulations require operators knowing of conditions that preclude safe operations (including hazardous airport and runway conditions) to restrict or suspend operations until those conditions change. POIs must evaluate an operator's GOM to ensure that it contains a description of the procedures for employees to follow should they become aware of such conditions.

3-3210 INTERNATIONAL OPERATIONS. For an operator that conducts international operations, POIs must evaluate the operator's GOM to ensure that it includes pertinent and necessary flight control information. In the GOM, the operator should place particular emphasis on fuel and performance requirements, communications, weather reports and forecasts, flight planning, and any specialized means of navigation. POIs should refer operators to the current editions of the following ACs concerning international operations:

- AC 91-70, Oceanic and International Operations.
- AC 120-33, Operational Approval of Airborne Long-Range Navigation Systems for Flight within the North Atlantic Minimum Navigation Performance Specifications Airspace.

3-3211 OBSERVER'S SEATS. POIs should ensure that the operator's GOM includes the requirement that the operator must provide an observer's seat (jump seat or passenger seat) to FAA inspectors and other specified personnel. Usually, operators assign the authority to control the use of these observer's seats to a flight control department. Gate agents and passenger handling personnel must also be aware of these requirements. Crewmembers must also be aware of the procedures to be used for observer seat assignments. The GOM must include information to comply with §§ 121.547, 121.548, 121.581, and 135.75, such as the following:

A. Priorities of FAA inspectors, National Transportation Safety Board (NTSB) personnel, Secret Service agents, crewmembers, manufacturer's technical representatives, and other personnel. The FAA has second priority after Secret Service when they are protecting someone on the flight;

B. Methods for ensuring that no more than one person is assigned to a jump seat at any particular time; and

C. Procedures for disseminating jump seat assignments to other stations.

3-3212 LINE STATION OPERATIONS. Line station operations are those activities the operator's personnel performs (or other personnel for the operator) to originate, turn around, or terminate flights the operator conducts. For an operator that conducts line station operations, POIs must evaluate the operator's GOM to ensure that it includes the necessary information on the various topics that follow:

A. Line station operations should include the use of the following types of facilities and equipment:

1) Ramp areas, including markings, signs, signaling devices, lighting, and blast fences;

2) Ramp facilities and equipment, such as passenger and cargo boarding and deplaning equipment (towing, refueling, catering, and ground power equipment);

3) Crewmember meeting areas, facilities for crewmember flight planning (preparation for flight), and postflight activities; and

4) Ground station personnel work areas and facilities, communications equipment, and administrative support.

B. Inspectors must ensure that an operator's GOM contains the policies, procedures, and guidance the personnel needs to support the operator's flight operations at line stations. This manual material must include those situations in which the operator maintains line stations, as well as situations in which the operator contracts for or purchases line station support. This type of material is usually within various user manuals, such as ground station operations and maintenance manuals, passenger service manuals, facilities and equipment manuals, fueling manuals, and other special types of manuals. An operator may format and organize this type of manual material in a manner that is most consistent and usable for the operator's kind and type of operation. Regardless of the format and organization, however, consider this type of manual

information to be GOM material. The following are examples of the types of information that manual material concerning line stations operations should address:

1) Duties and Responsibilities. The GOM or GMM, as appropriate, must contain an outline of the duties and responsibilities of line station supervisory personnel. The types of positions that the GOM or GMM should address include the following: ground station operations personnel, passenger handling agents, cargo and baggage handling personnel, and aircraft servicing personnel (when not addressed in the GMM). When an operator contracts for, or purchases line station support, the GOM or GMM, as appropriate, must detail the procedures the personnel use providing the support.

2) Passenger Handling and Protection. The GOM must contain procedures and guidance for ensuring the safety of passengers during line station operations. The following are examples of passenger handling and protection subjects that the GOM must address:

a) Procedures for passenger boarding and deplaning;

b) Procedures for use of jetways, passenger boarding stairs, air stairs, and other types of passenger boarding equipment;

c) Procedures to ensure the safety of passengers on the ramp, including restricting ground equipment and vehicle operation on ramps and directing passengers to and from aircraft, around equipment, and to painted pathway lines on the ramp;

d) Procedures and guidance for protecting passengers from jet intake and blast, rotating and static propellers and rotors, ice on the ramp and boarding equipment, and tripping hazards;

e) Procedures for prohibiting smoking in no-smoking areas;

f) Procedures for assisting and ensuring the safety of handicapped persons;

g) Procedures for handling intoxicated, hostile, or unruly persons;

h) Procedures for handling and controlling carry-on baggage;

i) Procedures for exit seating; and

j) Procedures for identifying and handling hazardous materials (hazmat).

3) Aircraft Servicing and Ramp Operations. The GOM and GMM must contain detailed safety procedures and guidance on servicing and maintaining aircraft during line station operations. These manuals should also contain instructions on the maintenance and use of ramp areas. The following are examples of procedures for aircraft servicing and ramp operations that the GOM should address:

a) Procedures for the safety and protection of personnel working on the ramp;

b) Procedures and/or guidance for the maintenance and catering of aircraft, with or without passengers onboard;

c) Procedures for fueling aircraft with or without passengers onboard, including any requirements for crewmembers to be onboard during fueling, or prohibitions against positioning fuel trucks next to open exits with passengers onboard;

d) Procedures for operating ground equipment, including the capabilities and limitations of the equipment, and the training and qualification of persons using the equipment;

e) Procedures and guidance for properly locating and stowing ground equipment;

f) Procedures for the operation of aircraft cargo doors, baggage and cargo loading, closing and checking the security of doors;

g) Procedures for foreign object damage (FOD) control and periodically inspecting ramp areas;

h) Procedures for adverse weather conditions such as thunderstorms, high winds, or low visibility; and

i) Procedures for the inspection and removal of frost, ice, snow, or standing water.

4) Hot and Cold Weather Operations. POIs should evaluate an operator's GOM to ensure that it (as well as the GMM) contains detailed procedures and guidance on hot and cold weather operations, including the following:

a) Procedures for the inspection of ramps for accumulation of frost, ice, snow, or standing water;

b) Precautions for the operation of vehicles and equipment;

c) Restrictions and cautions on aircraft movements; and

d) Restrictions and cautions for the protection of passengers and ramp personnel.

5) Deicing Procedures. The operator should clearly delineate aircraft ground deicing procedures. While such procedures are usually in the GMM, the operator's GOM must contain the following types of information concerning deicing for crewmembers, ground operations, and management personnel:

a) Assignment of responsibility for ensuring that aircraft is clear of frost, ice, and snow accumulation;

b) Conditions that require aircraft ground deicing;

c) Procedures to ensure the effectiveness of deicing, including the frequency of applications, proper fluid mixtures, and tactile or close visual checks of selected portions of critical surfaces;

d) Parts of the aircraft to deice, including a description of the critical surfaces of the aircraft the operator uses;

e) Locations on the ramps or airports where deicing will be conducted;

f) Engine auxiliary power unit (APU) and ground equipment operation during deicing;

g) Passenger and ramp personnel protection during deicing;

h) Procedures contract personnel use when the operator contracts for deicing services;

i) If applicable, a complete description of the elements of the operator's ground deicing/anti-icing program and the procedures required to operate under that program; and

j) If applicable, a complete description of the ground deicing/anti-icing operational procedures that the operator uses to comply with §§ 121.629 and 135.227.

6) Aircraft Movement in the Ramp Area. POIs must ensure that the operator carefully coordinates their procedures and guidance for the movement of aircraft in the ramp area between the operator's GOM and GMM (or appropriate user manuals). The definitions of signaling devices, signs, and ramp markings (such as taxi lines, stop lines, boundary and clearance lines) must be the same, and both crewmembers and ground handling personnel must mutually understand them. The GOM (or an applicable user manual) must provide specific procedures for engine start, pretaxi pushback, powerback (if approved), taxi-out, taxi-in, and parking while in the ramp area. Communication procedures for ground handling personnel and crewmembers must be thoroughly coordinated. POIs must ensure that the interphone terminology and hand signals ground handling personnel and crewmembers use have the same meaning. The need for common terminology and hand signals is also important for crewmembers and passenger handling agents. The GOM and GMM (or appropriate user manuals) should provide illustrations of standard hand signals and their meanings. The appropriate manuals must describe the training and qualification requirements of personnel authorized to move aircraft on the ramp or on the airport. For example, when an operator is approved to powerback, the GOM must contain specific procedures for those operations for each authorized airport and gate. Crewmembers and ground handling personnel must thoroughly coordinate powerback communications and hand signals.

7) Line Station Emergency Procedures. POIs must ensure that the operator's GOM and GMM contain procedures used by crewmembers or ground personnel in case of emergency situations during line station operations. Line station emergency procedures must contain the specific duties and actions of appropriate personnel. This type of manual material must also include notification procedures and requirements. The notification procedures and requirements should contain specifications as to who to notify, who will make the notification,

how to make the notification, and when to make it for the various types of emergency situations that could occur at line stations. Usually this type of manual material should also include a quick reference telephone listing for obtaining firefighting and medical assistance, and for notifying appropriate company management, law enforcement officials, and FAA and NTSB officials. Line station emergency procedures should be published in a distinct section of the GOM or GMM so that they are easily accessible. For large, complex operators, line station emergency procedures are usually published as a manual under separate cover to ensure rapid accessibility. Operators should publish a line station emergency procedures manual for each station because of the uniqueness of each line station. POIs should encourage this as a preferred practice. Line station emergency procedures should cover the following types of situations:

a) Aircraft accidents and incidents (POIs should encourage operators to develop guidance for ground personnel providing passenger lists to aid in handling passengers and accounting for all passengers immediately after a survivable type accident. Handling passengers includes actions such as providing suitable transportation for injured passengers to locations where medical assistance can be obtained).

b) Bomb threats, hijack procedures, and other types of security incidents.

c) Fuel spills and hazmat mishaps.

d) Procedures for postflight handling of passenger injury, illness, or incidents involving passenger altercations and interference with crewmembers.

e) Employee/passenger accidents and injuries.

f) Adverse weather conditions, such as tornadoes and hurricanes or other adverse conditions such as earthquakes (if such conditions are likely to occur at the operator's line stations).

g) Emergency evacuation of aircraft while parked. (This should include procedures for both the flightcrew and Flight Attendants (F/A) to activate the aircraft emergency lighting systems during an emergency evacuation, regardless of the perceived ease with which an evacuation can be accomplished, and passenger egress procedures for crewmembers and other operations personnel. These procedures should include the requirement that whenever passengers are onboard the aircraft before airplane movement on the surface, at least one floor-level exit must be usable for the egress of passengers through normal or emergency means.

1. Aircraft Rescue and Fire Fighting (ARFF) emergency notification procedures while parked; and POIs will encourage their assigned operators to develop explicit ARFF emergency notification procedures for crewmembers and other operations personnel to employ in the event of an emergency occurrence on their aircraft while they are parked.

2. ARFF notification procedures apply to situations where ARFF equipment is both on and off airports. These procedures should include information concerning:

- Whom to notify (such as airport fire department, airport control tower, or alternate facility if control tower is closed).
- The means of notification (such as jetway telephone, including ARFF telephone numbers, and aircraft radio communication system, including ARFF radio frequencies).
- The persons by job title whom the operator determines will implement notification procedures in the event of an emergency occurrence on the operator's aircraft.

h) For passenger-carrying operations, if the operator's ARFF procedures require its crewmembers to implement these procedures, then the operator should include the following guidance: In the event of an aircraft fire or other emergency scenario involving aircraft evacuation, the first actions of crewmembers and/or other personnel qualified in accordance with § 121.391(a) should be to initiate the evacuation of the aircraft occupants. Once the crew determines the evacuation of all aircraft occupants, the crewmembers can then initiate the ARFF emergency notification procedures.

8) Contract Services. POIs must ensure that the GOM and GMM, as appropriate, contain policy and guidance concerning the interrelationship between the operator's personnel and the personnel of organizations who provide contract services at line stations. Contractor personnel are required to be trained on operator-specific procedures. The appropriate manual must contain the specifications for the following: the types of training given to contractor personnel, who is responsible for providing the training, and who is responsible for keeping records of the training. Although the contractor may be delegated this responsibility, the operator has final responsibility.

9) Trip Records. POIs must ensure that the operator's GOM contains policies, procedures, and guidance concerning the preparation and disposition of trip records at line stations. Trip records include documents such as dispatch and flight releases, flight plans, weather, NOTAMs, oceanic plotting charts, load manifests, and W&B documents. The manual material must specify who is responsible for preparing the trip records, the coordination activities that must be accomplished during the trip record preparation process, and the intermediate and final disposition of the trip records. The POI must ensure that the policies, procedures, and guidance in this manual material consistently contain accurate information for crewmembers and flight operational control personnel.

10) Local Conditions at Line Stations. Personnel at line stations have immediate access to and knowledge of various conditions and activities that could affect flight operations at those line stations. Examples of local conditions and activities include the following: weather conditions, runway and taxiway conditions, airport construction activities, and new obstacles observed in the airport takeoff flightpaths. As such, inspectors must ensure that an operator's GOM contains instructions and procedures so that line station personnel can provide the operator with local condition reports. This manual material must contain clear instructions about the circumstances in which line station personnel are authorized to suspend or delay flight operations.

3-3213 PASSENGER BRIEFING PROCEDURES. POIs must ensure that the operator's GOM or flight manual, as appropriate, specifies the procedures to be used for pretakeoff, en route, and post-landing briefings of passengers. Operators who use F/As may publish F/A user manuals as sections in their GOMs. The GOM or F/A user manual must contain the briefings to be given. Passenger briefing cards must be used to supplement the oral briefings. These passenger briefing cards must depict all of the required items that the oral briefings addressed. The current edition of AC 121-24, Passenger Safety Information Briefing and Briefing Cards, contains guidance on passenger safety information and briefing cards.

3-3214 RAPID REFUELING OF HELICOPTERS. Inspectors should consider the following requirements when evaluating an operator's procedures for the rapid refueling of helicopters with and without passengers onboard.

A. Refueling Procedures. Operators may need to conduct operations such as the refueling of a helicopter with the engine running, rotors turning, or with passengers onboard. Before conducting such operations, the operator must develop procedures acceptable to the POI and publish these in the operator's GOM. The operator must train and qualify all applicable personnel in these procedures before conducting such operations.

1) Only turbine engine helicopters using fuels that have a flash point equal to or greater than JET A or JET A-1 fuels should be fueled while an engine is operating.

2) Helicopters being refueled while an engine is operating should have all sources of ignition of potential fuel spills located above the fuel inlet port(s) and above the vents or tank openings. Sources of ignition include, but are not limited to, engines, exhausts, APUs, and combustion-type cabin heater exhausts.

3) The operator should only permit helicopter fueling while engines are operating under the following conditions:

a) An FAA-certificated helicopter pilot should be at the aircraft controls during the entire fuel servicing process.

b) Passengers should be offloaded to a safe location prior to rapid refueling operations. When the pilot in command (PIC) deems it necessary for passengers to remain onboard for safety reasons, the provisions of subparagraph 3-3214B should apply.

c) Passengers should not load or offload during rapid refueling.

d) Only designated personnel, properly trained in rapid refueling operations, should operate the equipment. Written procedures should include the safe handling of the fuel and equipment.

e) All doors, windows, and access points allowing entry to the interior of the helicopter that are adjacent to, or in the immediate vicinity of, the fuel inlet ports should be closed and should remain closed during refueling operations.

f) Before placing fuel into the helicopter, the helicopter should be bonded to the fuel source to equalize static electricity between the fuel source and the aircraft.

NOTE: Grounding of the aircraft and/or fuel truck is no longer recommended because it does not prevent sparks at the fuel source, and the grounding cable may not be sufficient to discharge the electrical current.

g) Fuel should be dispensed into an open port from approved deadman-type nozzles, with a flow rate not to exceed 10 gallons per minute (38 liters per minute), or it should be dispensed through close port pressure fueling ports.

h) An appropriate type fire extinguisher of an appropriate size for the refueling operation must be within easy reach of the refueling personnel at all times during rapid refueling operations.

B. Evacuation Procedures. An operator's refueling policies and procedures should include any special considerations for the evacuation of passengers in case of emergencies. Inspectors should consider the following requirements when evaluating an operator's procedures for evacuation of passengers during helicopter rapid refueling.

1) If passengers remain onboard the aircraft during fuel servicing, at least one qualified person trained in emergency evacuation procedures should be in the aircraft at or near a door at which there is a passenger loading walkway, integral stairs that lead downward, or a passenger loading stair or stand.

2) A clear area for emergency evacuation of the aircraft should be maintained adjacent to not less than one additional exit.

3) If fueling operations take place with passengers onboard away from the terminal building and stairways are not provided, such as during inclement weather (diversions), the operator should notify the ARFF services to assume a standby position in the vicinity of the fueling activity with at least one vehicle.

4) The aircraft operator should establish specific procedures covering emergency evacuation under such conditions for each type of aircraft they operate.

5) All "no smoking" signs should be displayed in the cabin(s), and the no-smoking rule should be enforced. For aircraft without closed refueling systems, the operator should use "no smoking" placards or temporary signs as opposed to lighted "no smoking" signs.

3-3215 CODE-SHARE SAFETY PROGRAM GUIDELINES.

A. On February 29, 2000, the Department of Transportation (DOT), the Office of the Secretary of Transportation (OST), and the FAA jointly issued Code-share Safety Program Guidelines (current version located at http://www.faa.gov/air_traffic/international_aviation/media/code_share_guidelines.pdf), which describe one method for U.S. air carriers to address the level of safety of the U.S. code-share

passenger services provided by their foreign air carrier partners through periodic onsite safety audits.

B. The Code-Share Safety Program Guidelines describe the elements of a code-share audit program and the process for review and acceptance of a U.S. air carrier's audit program by the FAA and the OST. Upon completion of the review and a determination by both the FAA and the OST that the audit program is acceptable, the DOT will issue a letter to the U.S. air carrier stating that the audit program is acceptable. It is OST and FAA policy that the U.S. air carrier should then incorporate the accepted audit program into the manual required by § 121.133.

NOTE: The International Programs and Policy Division (AFS-50) will conduct an FAA review and acceptance of audit programs.

C. Each POI will determine that an accepted audit program of his or her air carrier has been incorporated into the manual required by § 121.133 and that the date of its incorporation is recorded in the Program Tracking and Reporting Subsystem (PTRS) using activity code 1302.

D. Following the date of incorporation of the audit program into the carrier's manual, each POI will determine that the accepted audit program is reviewed for currency at least once during each 12 calendar-month period thereafter. If the audit program is current, the POI should enter the review complete date in the PTRS. If the audit program is not current, the POI should provide the necessary followup actions to ensure currency and enter the date of the revision to the manual required by § 121.133 making it current.

3-3216 AIRCRAFT GROUND TOWING PROCEDURES.

A. Towbar and Towbarless Towing. When towing aircraft, the operator must use the proper towbar and/or tow vehicle. The wrong type of towbar, or makeshift equipment, can cause damage to the aircraft. Persons performing towing operations must be thoroughly familiar with the procedures that apply to the type of aircraft to be moved and the type of tow vehicle. Recommend the current editions of the following ACs to the operator:

- AC 00-65, Towbar and Towbarless Movement of Aircraft;
- AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport; and
- AC 150/5210-20, Ground Vehicle Operations on Airports.

B. Towbarless. The weight of an aircraft is a major consideration during towing because handling characteristics of the towbarless tractor change proportionally with the change in aircraft weight. Heavier aircraft put more stress on this vehicle and after movement begins, heavy aircraft can "push" the tug with a greater force than lighter aircraft because of weight, momentum, and the fuel load of the aircraft. Tow operators must recognize and understand these characteristics. Heavier weights and too much speed create the potential for disaster. Therefore, operators should reduce towing speeds according to the weight of the aircraft. The braking distance required to stop a large aircraft will be greater than the distance required to stop a small aircraft.

C. Towing Vehicle Inspections. Tow vehicle operators must ensure that all towing equipment is serviceable and functioning properly before starting any towing operation. Before connecting the towbar to the aircraft, the tow vehicle operator should inspect the tow vehicle for defects or extraneous material that may interfere with safe operation. An operator must inspect each tow vehicle at least once each shift to verify that the cab and exterior of the vehicle are clear of all extraneous materials and the vehicle is in safe working condition. Additionally, the operator should check all radio communications before dispatching a tow vehicle. When tow vehicle operators find mechanical defects affecting safety on tow vehicles, the air carrier should take the equipment out of service and send it to vehicle maintenance for repairs.

D. Towing Operations. Using trained personnel, following established procedures, and properly planning for weather, local conditions such as inclined ramps, emergencies, and other limitations should prevent mishaps. For maximum safety, towing personnel must not place themselves in the direct path of aircraft wheels nor ride on any external portion of an aircraft or tow vehicle. Towing personnel should use a checklist and ensure placards are serviceable and located inside the tow vehicle cab to identify any restrictions that apply to the tow vehicle. Towing personnel should observe any other placards that might be of a temporary nature prior to all movements. When connecting a towbar to any tow vehicle, personnel must stand clear until the backing tow vehicle is in close proximity to the towbar. When connecting a tow vehicle, personnel must be extremely vigilant to any sudden movement of the tow vehicle or aircraft.

E. Personnel Training. Operators should ensure that aircraft ground handling personnel are thoroughly familiar with all published towing procedures pertaining to the type of aircraft being towed, as well as understand the restrictions and/or limitations on any vehicle authorized to move an aircraft. Newly assigned aircraft maintenance specialists/ground vehicle operator personnel must pass a proficiency test on the types of aircraft towed and types of tow vehicles after completing supervised on-the-job training (OJT). Wing and tail walkers may not have to be familiar with all published towing procedures or receive annual proficiency training if their duties are restricted to these positions during towing operations. The tow team leader should clearly define duties and responsibilities and the use of a checklist covering all items pertaining to the safe movement of the type aircraft being towed, and he or she must brief all team members prior to the aircraft being moved. The operator's procedures manual should cover this information. All operators of tow vehicles in the airport operations area must be trained and possess a valid driving permit, usually issued by the airport authority, before being granted access in movement and safety areas when performing towing operations. This requires recurrent training that typically consists of airport signage, limitations, and air traffic and/or ground control communications procedures. Tow vehicle operators must complete the training prior to the initial performance of such duties and at least once every 12 consecutive calendar-months. If the employee can demonstrate the ability to write, explain the intent of a selected reading, and read back simulated communications with little or no hesitation and/or misunderstanding, he or she will have satisfactorily met the intent of the English language requirement.

F. Aircraft Movement. Prior to movement of any aircraft, the operator should comply with the requirements of part 91, § 91.209(a)(2) which states: "No person may park or move an aircraft in, or in dangerous proximity to, a night flight operations area of an airport unless the aircraft—(i) Is clearly illuminated;" (which means that the location of the wingtips and tail of the aircraft must be visible by alternate means of illumination the same as if the aircraft position

lights were turned on) or "(ii) Has lighted position lights." The aircraft position lights may be powered by the aircraft battery, APU, or an external power source such as the tow vehicle. Also, the tow operators should ensure that all landing gear struts and tires are properly inflated and that brake pressure is built up when applicable.

G. Flight Deck/Cockpit Observer. A trained person should be in the pilot's seat to operate the aircraft's brakes if needed. If the hydraulic pressure that provides braking drops below safe operating limits, the operator should terminate the towing operation. Additionally, the observer serves as backup to any communications failures between tow driver and control tower/ramp control.

H. Tow Vehicle Operator. The tow vehicle driver is responsible for operating the vehicle in a safe manner. The vehicle operator must obey emergency stop instructions given by any team member. The vehicle operator must be at the controls of the towing vehicle at all times during aircraft movement. The tow vehicle must be connected in a manner that will allow the vehicle driver to face the direction of travel while seated. The vehicle operator must stop the vehicle upon losing communication with the cockpit observer, control tower, and/or ramp control.

I. Wing Walker. The operator should station a wing walker at each wingtip to ensure adequate clearance of any obstruction in the path of the aircraft. The wing walker is responsible for properly signaling the tow vehicle operator as soon as it appears the aircraft is in danger of colliding with an obstruction. In such cases, the vehicle operator should stop towing until he or she personally checks the clearance. Wing walkers are not required for helicopters being towed with rotor blades in the parallel position. Wing walkers do not require annual proficiency testing and need not be fully trained in all towing procedures as long as this is their only task. Thorough pre-tow briefings by the tow team lead will satisfy the training requirement.

J. Tail Walker. The operator should use a tail walker during towing operations when turning the aircraft sharply or back into position. The tow operator should avoid the backing of aircraft as much as possible. Tail walkers do not require annual proficiency testing and need not be fully qualified in all towing procedures as long as this is their only task. Thorough pre-tow briefings by the tow team lead will satisfy the training requirement.

NOTE: When towing small aircraft, the operator can eliminate the tail walker at the discretion of the tow team lead.

K. Personnel Riding or Walking. Under no circumstances should personnel walk between the nosewheel of an aircraft and its towing vehicle, nor should they ride on the outside of a moving aircraft, on the towbar, or on the outside of the vehicle unless in an authorized seat. No person should attempt to board or leave a moving aircraft or towing vehicle.

L. Night Crew Signals. Operators should issue two luminous wands to towing team members who require wands. Other tow team members should use wands, as required, to warn any aircraft traffic that may approach. Additionally, before any aircraft is moved, the operator should ensure that aircraft position lights are operational.

M. Control Tower Clearance. Before proceeding to tow an aircraft on or across an established taxiway or runway, the tow vehicle operator must obtain clearance from the control tower. At no time should any aircraft be towed on or across runways or taxiways without advance approval of the control tower. The primary means of communication will be the aircraft radio. An alternate method (when conditions restrict aircraft battery operation) is through an escort vehicle in direct radio contact with the control tower. The radio-equipped escort vehicle will accompany the aircraft throughout the towing operation.

N. Towing Speed. Towing speed should not exceed that of walking team members, with a maximum of 7 miles per hour (mph).

O. Brakes. To prevent serious mishaps, the operator should charge aircraft brake systems before each towing operation and stop towing immediately if brake pressure drops below safe operating limits. The tow vehicle operator should not tow aircraft with faulty brakes, except to repair facilities, and then only with personnel standing by ready with chocks for emergency use.

P. Towbars. Before moving any aircraft, the operator should inspect the towing vehicle, towbar, towbar connections, and other associated equipment for defects, using only authorized equipment in good condition in towing operations.

Q. Chocks. The operator should make chocks immediately available in case of emergency throughout towing operations. The operator should place them properly before disconnecting the towing vehicle. When an operator tows or parks aircraft with snow, ice, or frost present anywhere on the parking ramp or towing surface, he or she should use sand bags and chocks. The operator should use heavier tow vehicles with chains to improve starting and stopping traction during tow operations on ice or snow-covered towing surfaces. The operator should not place or hang chocks or other support equipment on any part of the aircraft exterior during towing or repositioning.

R. Starts and Stops. When moving aircraft, tow vehicle operators should not stop and start suddenly. Operators should never apply aircraft brakes when an aircraft is being towed, except in emergencies and upon instructions given by any team member. Before disconnecting the towing vehicle from the aircraft, the operator should stow chocks properly in place and set the aircraft's brakes.

S. Equipment, Stands, and Similar Materials. The operator should ensure removal and proper storage of all equipment, work stands, loose aircraft parts, and other materials from the vicinity of an aircraft.

T. Entrance Doors, Ladders, and Downlocks. To avoid possible worker injury and aircraft damage during towing operations, the operator should close entrance doors, retract or remove ladders, and install landing gear downlocks (if required). The only allowable deviations from these requirements are those allowed by specific aircraft manufacturer instructions.

U. Struts and Tires. Prior to towing any aircraft, towing team members should check nose and main landing gear struts and tires for proper inflation. Unless the applicable manufacturer instructions require a gauge check, a visual check of tires and struts is adequate for towing purposes.

V. Towing Aircraft without Access to Cockpit. When moving an aircraft with no cockpit observer (if applicable, such as small aircraft) the operator should make sure chocks are immediately available throughout towing operations in case of an emergency.

W. Engine Operation. As a general rule, the operator should not tow aircraft with engines operating. The following exception applies to aircraft towing operations with engines running: pushing aircraft away from terminal gates used by airlines for dispatch. Ensure that the operator has developed procedures for personnel so that they keep away from rotating propellers and the danger zones of jet engines.

3-3217 ACCIDENT NOTIFICATION REQUIREMENTS. Title 49 of the Code of Federal Regulations (49 CFR) part 830 requires operators to notify, immediately and in the most expeditious manner, the nearest NTSB Bureau or Aviation Safety (AVS) field office of accidents, serious incidents, and overdue aircraft. The operator must develop procedures that accomplish this.

- The manual should include a copy of 49 CFR part 830.
- Also included should be the names and telephone numbers of the appropriate operator personnel who must be notified.

RESERVED. Paragraphs 3-3218 through 3-3230.