By letter dated May 6, 2020, Airlines for America (A4A), on behalf of its members, petitioned the Federal Aviation Administration (FAA) for an exemption from the requirements of §§ 91.9(a) and (b), 121.153(a), and 121.337(b)(9)(iii) of Title 14, Code of Federal Regulations (14 CFR). For the reasons explained herein, the FAA is partially granting the requested relief. This exemption allows A4A members and other part 119 certificate holders conducting part 121 operations that submit a Letter of Intent (in the form and manner described below) to carry cargo on the main deck (secured to seats or secured to seat tracks) of transport category airplanes used in part 121 operations when no revenue passengers are being transported, and some or all seats are removed, through July 10, 2021.

The petitioner requests relief from the following regulations:

Section 91.9(a) states, with an exception not relevant here, that no person may operate a civil aircraft without complying with the operating limitations specified in the approved Airplane or Rotorcraft Flight Manual, markings, and placards, or as otherwise prescribed by the certificating authority of the country of registry.

Section 91.9(b) states that no person may operate a U.S.-registered civil aircraft (1) for which an Airplane or Rotorcraft Flight Manual is required by 14 CFR § 21.5 unless there is available in the aircraft a current, approved Airplane or Rotorcraft Flight Manual or the manual provided for in 14 CFR § 121.141(b); and (2) for which an Airplane or Rotorcraft Flight Manual is not required by 14 CFR § 21.5, unless there is available in the aircraft a current approved Airplane or Rotorcraft Flight Manual, approved manual material, markings, and placards, or any combination thereof.

Section 121.153(a) states, in pertinent part, that no certificate holder may operate an aircraft unless that aircraft (1) is registered as a civil aircraft of the United States and carries an appropriate current airworthiness certificate issued; and (2) is in an airworthy condition and meets the applicable airworthiness requirements of this chapter, including those relating to identification and equipment.
Section 121.337(b)(9)(iii) states, in pertinent part, that protective breathing equipment with a portable breathing gas supply meeting the requirements of this section must be easily accessible and conveniently located for immediate use by crewmembers in combatting fires, including that in each passenger compartment, one for each hand fire extinguisher required by 14 CFR § 121.309, to be located within 3 feet of each required hand fire extinguisher, except that the Administrator may authorize a deviation allowing locations of protective breathing equipment more than 3 feet from required hand fire extinguisher locations if special circumstances exist that make compliance impractical and if the proposed deviation provides an equivalent level of safety.

The petitioner supports its request with the following information:

A4A (the petitioner) requested relief for a period of two years to enable its members and other part 119 certificate holders conducting part 121 operations to transport cargo on the main deck of transport category airplanes configured with a passenger cabin, when no “revenue passengers” are carried, subject to specific conditions identified in its petition. The petitioner requests that the relief apply to operations outside the United States because its members seek to operate internationally to bring critical supplies to the United States. Additionally, the petitioner requests the FAA permit operators conducting operations under an exemption to transport “deadheading” crewmembers.

The petitioner states that, in connection with the novel coronavirus disease 2019 (COVID-19), U.S. air carriers, including A4A members, are currently experiencing an unprecedented downturn in passenger traffic. The petitioner states that passenger air carriers, facing extreme cash flow and liquidity problems, have parked more than 3,000 aircraft and taken other steps to reduce costs. Further, the petitioner states COVID-19 has dramatically impacted the number of airline passenger bookings internationally and domestically, such that demand for air travel has plummeted. The petitioner explains that, because of the extreme reduction in demand, air carriers that typically transport passengers now have the capacity to carry cargo, including critical medical cargo, on the main deck of their airplanes when seats are removed. The petitioner asserts that carrying cargo on the main deck will make efficient use of many now-empty passenger aircraft.

The petitioner seeks relief for a period of two years. In support of that duration, the petitioner states that experts predict the aviation industry will experience a slow recovery. The petitioner asserts that a two-year period provides operational experience to determine future actions, time

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2 The petitioner cites Transportation Security Administration (TSA) data showing that as of May 6, 2020, checkpoint volume has dropped by more than 94 percent from the previous year. See TSA, Checkpoint travel numbers for 2020 and 2019, available at https://www.tsa.gov/coronavirus/passenger-throughput. The FAA observes, however, that the checkpoint volume has increased since May, but the downturn in checkpoint volume remains significant.

3 Regarding expectations for recovery, the petitioner cites reports of analysts from Deutsche Bank, Bank of America, JPMorgan, Evercore ISI, Fitch Ratings, and Cowen, as well as MIT professor of Aeronautics John Hansman.
for off-setting investments needed to meet the conditions and limitations the FAA includes in an exemption, and, most importantly, the provision of transportation for critical medical supplies and other cargo. The petitioner describes the need for relief as immediate and states that, throughout the United States, hospitals and medical centers are in dire need of critical medical supplies.

The petitioner states that both industry and the public as a whole would benefit from permitting operators of aircraft configured with passenger cabins to transport cargo, including critical medical supplies, on the floor of the main deck. The petitioner also asserts that optimizing the volume of cargo that can be carried on passenger aircraft would alleviate the overall supply chain capacity constraints that have been generated by significant reductions in passenger flight operations. The petitioner contends that its request is in the national public interest as it is based on the President’s March 13, 2020 declaration of a national emergency concerning COVID-19.

The petitioner further asserts that, if subject to certain conditions identified in its petition, granting the requested relief would not adversely affect safety or would provide a level of safety at least equal to the existing rules. The conditions identified by the petitioner to maintain safety include the following:

- Restrictions on the kind of cargo that certificate holders may carry on the main deck, to prohibit the carriage of hazardous materials.

- Cabin preparation measures, including removal of seats and other interior features to enable cargo to be secured to the aircraft floor, disabling/deactivating passenger convenience systems not necessary for safety or normal operations (e.g., in-flight entertainment installed in seats, in-seat power, galley systems, and any other heat generating systems) and deactivating the automatic passenger oxygen system.

- Cargo loading limitations that would:
  - Ensure that cargo would not be loaded in the stowage compartments in which protective breathing equipment and portable oxygen bottles are stored.
  - Restrict cargo loaded in a given accessible area, whether on a pallet or directly tied to the floor, to no more than 200 cubic feet.
  - Require cargo loading in a manner that permits sufficient access to the cargo to allow effective firefighting.
  - Ensure that cargo does not interfere with features that allow decompression venting (i.e., cargo must not obstruct decompression vents or flow when the vents are activated).

- Safety equipment must be available to each crewmember whose duties include fire detection and firefighting, including portable oxygen equipment that meets §§ 25.1439(b)(1), (2), and (4) and 25.1443(e). The petitioner also identified additional conditions regarding the type, number, and location of fire extinguishers.

- Environmental control system setting requirements to minimize the likelihood that smoke would enter the flight deck, and to maximize the ability of a crewmember to detect a fire.

- Revisions to air carrier operating manuals, including emergency procedures, that address operations with cargo on the main deck, to include: listing of minimum number of
additional crew members on the main deck (at least two) necessary to respond to fire; description of main deck fire emergency procedures based on manual firefighting; listing of duties associated with inspecting cargo; procedures for decompression notification; and information regarding seats that must be occupied during taxi, takeoff, and landing and emergency scenarios.

- Training on any revised procedures for crewmembers and training for any “cabin occupants” regarding fire-fighting, use of emergency equipment, and operation of emergency exits and evacuation procedures.

Finally, the petitioner requests that the FAA forgo publication of the Petition for Exemption in the Federal Register because the petitioner contends that any delayed action on the Petition would adversely affect its members.

The FAA’s analysis is as follows:

Consistent with 14 CFR § 11.85, the FAA published a summary of the petition in the Federal Register on May 27, 2020. 85 FR 31850. The FAA received comments from VisionSafe, International Air Transport Association (IATA), and Air Line Pilots Association, International (ALPA). All commenters expressed their support for granting the petition for exemption.

While ALPA supports the exemption, it also identified several concerns and additional conditions regarding carriage of dangerous goods, cargo loading and restraint, protective breathing equipment, and training requirements. ALPA’s points are generally addressed in the conditions and limitations of this exemption, explained in more detail in the following analysis. Additionally, ALPA sought to include as a condition of the exemption, coordination with the FAA’s Cargo Focus Team. While we agree that coordination among FAA offices by way of the Cargo Focus Team is an important component of the oversight of operations conducted under this exemption, is not appropriate for inclusion as a condition and limitation as this is an internal FAA function.

Under the unprecedented circumstances associated with the COVID-19 public health emergency, the FAA finds that partially granting the requested exemption for one year is justified. The FAA agrees that this relief is in the public interest because it supports the continuity of air transportation, which is essential, especially during this national emergency. Part 119 certificate holders conducting operations under part 121 are a key part of the United States infrastructure that transports cargo, including food, medical supplies, mail, and other goods. The stability of the U.S. transportation infrastructure is particularly critical at this time because of the increased and immediate demand for medical supplies and other essential cargo prompted by the COVID-19 public health emergency. As passenger-carrying part 121 flights may commonly carry “belly cargo” in the lower deck, the decline of passenger-carrying flights because of COVID-19 diminishes available air freight capacity.

In support of responding to impacts of the COVID-19 public health emergency, this exemption would reduce the risk of interruption in the movement of critical cargo by enabling certificate

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4 As explained later in this document, the FAA considers this exemption a partial grant of relief based on the fact that it is limiting the duration of the relief to one year, rather than for the two years requested by the petitioner.
holders with aircraft currently configured for passenger transportation to carry additional cargo instead. Granting this exemption for one year supports the sustainment of this critical component of the U.S. transportation infrastructure during the public health emergency and while passenger demand remains depressed, which may persist past the public health emergency. Furthermore, given the urgent need for sustaining continuity in air transportation, it would not be feasible for the FAA to address, in a timely manner, ad hoc requests for relief from certificate holders individually.

The FAA finds that the exemption granted here for one year will not result in an unacceptable risk to aviation safety as long as operations under this exemption comply with the conditions and limitations outlined below. Critically, some of the conditions and limitations of this exemption require certificate holders to address particular safety concerns with respect to the carriage of cargo: restraint and loading, fire risk and hazard mitigation, and required training. Compliance with the conditions and limitations allows operators to transport cargo on the main deck without an unacceptable level of risk and allows the FAA to maintain effective oversight of a certificate holder’s new type of operation.5

The main deck of an airplane configured with a passenger compartment does not meet the varying design standards applicable to cargo compartments, all of which exist to mitigate a wide variety of risks involved in carrying cargo. For example, cargo compartment design standards isolate airplane occupants from the cargo and provide controlled loading criteria to require proper restraint within weight and balance limitations. The FAA also requires cargo compartments to include fire protection measures such as fire detection, means of fire suppression, means to prevent smoke from entering into areas of the airplane that people occupy, or protection of the critical systems and structure using a cargo compartment liner. In contrast, passenger compartments do not include these critical cargo compartment design requirements for fire detection and, in some cases, suppression. Thus, the conditions and limitations of this exemption provide mitigations to address the intent of the cargo compartment requirements in §§ 25.855 and 25.857 through prevention, additional methods for detection, and the safe extinguishing of a fire if necessary.

For example, Condition and Limitation Nos. 4 through 7 serve to eliminate possible ignition sources by prohibiting hazardous materials, instituting controls for loading cargo near oxygen equipment or equipment containing lithium batteries, and requiring deactivation of certain systems. Additionally, because the mail can be a source of inadvertent hazardous materials that have resulted in several recent incidents of fires under investigation by the United Stated Postal Inspection Service, the FAA has determined that mail must not be carried on the main deck during operations conducted under this exemption, as provided in Condition and Limitation

5 The FAA is aware that some operators seeking to use this exemption may use both the floor and seats to restrain cargo on the same airplane. An operator seeking to carry cargo only on seats may continue to do so consistent with the Conditions and Limitations of Exemption No. 18561A; however, an operator seeking to carry cargo secured to seat tracks, exclusively, or an operator seeking to carry some cargo secured to seat tracks and some cargo secured to seats, may only do so in accordance with this exemption No. 18584.
No. 4. Finally, the FAA agrees with ALPA’s comments that control of dangerous goods is an important consideration. Operators with authorization (“Will Carry”) to accept, handle, and transport dangerous goods must have processes in place to control how and where the dangerous goods are loaded, including means to prevent undeclared dangerous goods. The FAA is ensuring Will Carry operators are aware that these procedures must be adapted as necessary for carriage of cargo on the main deck.

Condition and Limitation Nos. 12, and 15 through 20, provide a framework for fire detection and response by providing access to the cargo for frequent inspections for potential fire; identifying and assigning a sufficient number of persons to fire detection and response duty; and, should a fire occur, providing sufficient fire extinguishing equipment. The FAA notes that VisionSafe encouraged the FAA to include a condition in the exemption to require installation of its Emergency Vision Assurance System. This system is designed to provide a means for crew to see instruments in the event the flight deck becomes filled with smoke to the extent that visibility is compromised. However, the conditions and limitations set forth in this exemption are intended to extinguish a fire before it can grow to the point that smoke penetration and accumulation in the flight deck would occur.

Operators’ compliance with requirements to update procedures in the operating manual and provide training specific to the operations conducted under this exemption (Condition and Limitation No. 21 and 22) will enable all crewmembers and other persons to respond quickly and effectively by adhering to critical procedures to prevent and, if necessary, respond to an emergency involving a fire. Consistent with ALPA’s comment that the FAA should specify the necessary training, the FAA has included a description of the minimum training required (Condition and Limitation No. 22). For example, subparagraph a of Condition and Limitation No. 22 specifies the training for the flight crew conducting an operation under this exemption. Subparagraphs b and c of Condition and Limitation No. 22 specify the training for the persons that will perform the duties of fire detection and firefighting on board the airplane. This training includes instruction in fire detection and firefighting as well as hands-on training of the equipment used during firefighting. Subparagraph b applies to currently qualified crewmembers. Subparagraph c applies to other persons that are not currently qualified crewmembers. The training requirements in subparagraphs b and c are the same, except other persons that are not currently qualified crewmembers must also complete hands-on drills of fighting an actual fire and using personal breathing equipment (PBE) as required by

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6 Exemption 18561A does not prohibit mail on the main deck, because the seats provide an inherent limit on the quantity of cargo in any given location. Thus, an opportunity for a fire to spread is reduced, and for mail carried in a stowage compartment, when cargo is carried on seats, there is direct access to extinguish a fire. In addition, operators are required to implement a system to avoid inadvertent carriage of hazardous materials in accordance with § 121.135(b)(25).

7 The petitioner proposed to require 2A rated water portable fire extinguishers, or “an equivalent amount of water.” The FAA finds that for the operations enabled by this exemption actual fire extinguishers are necessary, since the quantity of cargo in any one area could be significant and a water equivalent would not be sufficient to extinguish the fire.

8 For purposes of this exemption, crewmember refers to pilots, flight engineers, and flight attendants.
§ 121.417(c)(1)(i) and (ii) and (c)(2)(i)(C). Currently qualified crewmembers would have already completed these drills as required by § 121.417 during initial training. Additionally, Condition and Limitation No. 23 requires any training equipment used in the drills to be approved in accordance with § 121.408. Lastly, Condition and Limitation No. 25 requires the certificate holder to provide an outline of the training curricula to its assigned principal operations inspector.

The FAA notes that Condition and Limitation No. 14 refers to the persons that will perform the duties of fire detection and firefighting on board the airplane as “persons” rather than “crewmembers.” Part 121, subpart N requires “crewmembers” to complete additional training prior to serving on an airplane, such as basic indoctrination training.9 The FAA intends to require persons performing the duties of fire detection and firefighting to complete training only as necessary to perform the fire detection and firefighting duties. The FAA does not intend to require these persons to complete additional training required for “crewmembers” in subpart N. Therefore, Condition and Limitation No. 15 uses the term “person” instead of “crewmember.” Condition and Limitation Nos. 19, 20, 21, 22, 24, and 25 also use the term “person”.

To address existing airplane weight and balance manual (WBM) limitations, Condition and Limitation Nos. 8 through 11 limit the weight, volume, and height of the cargo and provide a necessary procedure for operators to ensure proper restraint of the cargo, in observance of the applicable WBM limitations and criteria—whether the cargo is secured to seat tracks or carried on a seat. For clarity, Condition and Limitation Nos. 10 and 11 specify that the FAA is not granting any relief from the requirements in § 25.561 related to restraint of cargo. Thus, for carriage of cargo secured to seat tracks, operators will have to develop methods to robustly secure the cargo using straps, nets, pallets and other suitable means that attach to the airplane seat tracks. This will prevent hazard from cargo becoming loose in the cabin. Sections 91.9(a) and 121.153(a)(2) prohibit operations of airplanes that do not occur in accordance with approved manuals and that do not comply with all airworthiness rules, respectively. An airplane WBM is a required component of the Airplane Flight Manual, an approved manual. The WBM provides critical information and instruction on acceptable loading of the airplane to ensure structural safety and maintain the limits on weight and balance, center of gravity, and other criteria necessary for safe operation. WBMs for transport category airplanes configured with passenger compartments including seats do not currently address carriage of cargo on passenger seats or restrained directly to the floor.

The petitioner proposed to limit the volume of cargo in any loading area to 200 cubic feet.10 In general, cargo compartments are designed to suppress—but not extinguish—a fire until the airplane can be safely landed. A suppressed fire can continue to produce smoke and spread, even though it may not grow in intensity. Thus, fire suppression would be an insufficient response to a fire that developed on the main deck during operations conducted under this exemption, because

9 Section 121.415(a)(1) states in pertinent part, each training program must provide basic indoctrination ground training for newly hired crewmembers.

10 The FAA notes that a limit on the cargo volume was not necessary for Exemption No. 18561, since cargo loading was limited to seats, and the seats provide an inherent limitation on cargo volume.
the fire will continue to spread and generate products of combustion that can enter the flightdeck. In the absence of further mitigations, the fire will eventually reignite with the potential for catastrophic damage. Accordingly, the intent of the Conditions and Limitations in this exemption is that any fire will be detected and extinguished before it can become a hazard to the airplane. This being the case, the FAA carefully considered the volume of cargo that will provide assurance that any fire can be extinguished, as well as flexibility in loading. The FAA has conducted research and published three relevant reports\textsuperscript{11} regarding fire load and the effectiveness of manual firefighting. Based on the research described in those reports and the FAA’s expertise in aircraft fires, the FAA determined that a cargo compartment volume of less than 150 cubic feet would be necessary with the types and quantities of extinguishers specified in this exemption, because this is the largest compartment volume for which the FAA expects a fire could be successfully extinguished by manual firefighting. Since the volume of cargo must be less than the compartment that contains it, and in order to provide some measure of conservatism, Condition and Limitation No. 11 establishes a limit of 125 cubic feet of actual cargo within a cargo loading area, for the purposes of this exemption.

ALPA commented on several aspects of cargo loading. ALPA also requested that the exemption require cargo to be restrained in a manner that meets 14 CFR § 25.561(c), and that the exemption stipulate that existing strength and loading envelopes be met. ALPA’s comments are addressed by Condition and Limitation Nos. 10 and 11 of this exemption, which require compliance with § 25.561, including compliance with its load factor requirements. Such required load factors include the paragraph (b) load factors for occupants; paragraph (c) provides performance standards which may be met by meeting paragraph (b). Also, the guidance provided in Advisory Circular 120-85A, Cargo Operations, provides recommended procedures for cargo loading generally and including dense or piercing cargo and spillage, a concern identified in ALPA’s comments.

The petitioner sought relief from several provisions for which relief is not necessary. Section 91.9(b) requires the carriage of an approved Airplane Flight Manual (AFM). An operator does not need to alter an AFM to engage in the operations allowed by this exemption; thus, relief from § 91.9(b) is unnecessary. Similarly, § 121.153(a)(1) requires the existence and carriage of an airworthiness certificate for each airplane used in operations under part 121. Relief from this requirement is neither appropriate nor necessary to conduct the operations contemplated by this exemption. Further, relief from § 121.337(b)(9)(iii) is also unnecessary, as this provision provides an alternative method for seeking relief (i.e., through a deviation), if necessary.

Additionally, the petitioner requested relief to allow the carriage of “deadheading crewmembers” on all-cargo operations under this exemption. The petitioner did not identify a specific regulation requiring this relief.

from which relief would be necessary to allow the carriage of such persons during the operations contemplated by this exemption and the carriage of such persons is not limited by this exemption. With regard to the carriage of persons in general, Condition and Limitation No. 3 of this exemption limits the persons whom certificate holders may carry on board an airplane engaged in operations under this exemption. The FAA bases this limitation on its assessment that all persons on board would be exposed to the hazards associated with a cargo fire. Minimizing the number of persons on board will minimize the associated risk; therefore, Condition and Limitation No. 3 of this exemption limits the persons being carried to those listed at § 121.583(a)(1), (a)(2), (a)(3), and (a)(4)(i).

The petitioner sought an exemption lasting two years. The FAA expects to evaluate operations that operators conduct under this exemption to monitor safety and to amend any conditions and limitations, if appropriate. The FAA finds that, balancing all considerations, it is appropriate at this time to grant an exemption through July 10, 2021. This duration supports the sustainment of cargo movements during the public health emergency and while passenger demand remains depressed, which may persist past the public health emergency. The FAA continues to reserve its discretion later to consider a possible extension of the relief granted here, if warranted and under appropriate conditions and limitations.

Because A4A is a trade association and not a certificate holder, the FAA cannot grant A4A an exemption from FAA operating requirements. Accordingly, the FAA will partially grant the relief requested by A4A to its members that are 14 CFR part 119 certificate holders conducting operations under part 121 and all other 14 CFR part 119 certificate holders conducting operations under part 121, when appropriately requested. To make this exemption effective, each affected certificate holder must submit to the FAA a request to use this exemption and affirm its intentions to comply with the conditions and limitations of this exemption.

Condition and Limitation No. 1 requires those members of A4A that intend to exercise the relief provided in this exemption to submit a Letter of Intent to use the relief provided in FAA Exemption No. 18584 prior to conducting any operation under Exemption No. 18584. Letters of intent should be submitted by email to the following address: 9-AVS-AFS200-COVID-Exemptions@faa.gov. The FAA will place the letters in the exemption docket in the Federal eRulemaking Portal at: http://www.regulations.gov. Certificate holders should retain documentation to verify proper and timely submission of the Letter of Intent. Given the time sensitive nature of the relief required, the FAA will also accept Letters of Intent from other part 119 certificate holders conducting operations under part 121 that are not members of A4A.

As outlined in Condition and Limitation No. 2, each certificate holder seeking to use this exemption must first obtain authorization through the entry of this exemption into Operations Specification (OpSpec) A005. The FAA will not enter this exemption in OpSpec A005 until the principal operations inspector confirms operating manual updates and required training. Additionally, prior to authorizing the use of this exemption through OpSpec A005, the FAA will verify that the certificate holder has assessed the potential risks concerning fire hazards and identified the appropriate mitigations (e.g., additional fire extinguishers and persons to perform fire detection and firefighting) for the operations described in the concept of operations.
The FAA’s Decision

In consideration of the foregoing, I find that a partial grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 106(f), 40113, and 44701, delegated to me by the Administrator, part 119 certificate holders conducting part 121 operations are hereby granted an exemption from 14 CFR §§ 91.9(a) and 121.153(a)(2). The petition is granted to the extent necessary to allow affected part 119 certificate holders conducting operations under part 121 to carry cargo on the main deck of transport category airplanes, including on passenger seats, when no passengers are being transported, without classifying the main deck as one of the compartments defined in 14 CFR § 25.857.

In order to implement the relief provided by this exemption, the FAA anticipates that applications and if appropriate, FAA approval for design changes in the form of Supplemental Type Certificates, or amendments to type certificates, will be necessary. When seats are removed and other reconfigurations necessary to prepare the airplane for cargo are accomplished, the resulting design change is not considered minor.

This exemption is subject to the conditions and limitations below.

Conditions and Limitations

1. This exemption applies only to 14 CFR part 119 certificate holders conducting operations under part 121 that have submitted a Letter of Intent to the FAA at the following address: 9-AVS-AFS200-COVID-Exemptions@faa.gov. The Letter of Intent must state the certificate holder’s intention to exercise the relief granted in this exemption and affirm the intention to act consistently with the conditions and limitations herein.

2. This exemption applies only to part 119 certificate holders conducting operations under part 121 that have been granted authorization by their assigned principal operations inspector in operations specification A005.

3. Certificate holders may only carry persons described at §§ 121.583(a)(1), (a)(2), (a)(3), and (a)(4)(i) during operations conducted under this exemption.

4. Certificate holders may not transport dangerous goods (hazardous materials as covered in 49 CFR parts 171 through 178) or mail on the main deck of any airplane being used to conduct operations under this exemption.

5. Certificate holders must disable or deactivate passenger convenience and other cabin systems not necessary for safety or normal operations (e.g., in-flight entertainment systems installed in seats, in-seat power, galley systems, and any other heat generating systems) on any airplane used to conduct operations under this exemption, prior to such operation.

The type certificate holder can amend the type design of airplanes in service via Service Bulletins, which are FAA approved.

Crewmembers and other persons whose duties on board the airplane include fire detection and firefighting are persons necessary for the safety of flight in accordance with § 121.583(a)(4)(i).
6. Certificate holders must deactivate any automatic activation of the passenger oxygen system on any airplane used for conducting operations under this exemption, prior to such operation.

7. Certificate holders may not load cargo in any stowage compartment (including stowage compartments with internal dividers) containing portable oxygen bottles, protective breathing equipment, or equipment containing lithium batteries. The certificate holder must identify or lock each such compartment prior to cargo loading. Certificate holders may not install portable oxygen, or any equipment containing a lithium battery, on any exposed wall surface in areas where cargo is carried.

8. Cargo loaded on a seat must not exceed 50 lbs. per seat place, or 110 lbs. in a single package per triple seat, and must not extend above the seatback height. A certificate holder may exceed the limits specified in this condition and limitation only upon receiving written approval prior to operation. Any request for such approval must be submitted to the certificate holder’s principal operations inspector and include the following information: the requested cargo weight per seat place, the proposed method of restraint, and the substantiation data that supports the request.

9. Cargo stowed under seats must not exceed 20 lbs. per seat place.

10. Certificate holders must restrain all cargo loaded on each seat, using the primary load path of the seat so that each cargo installation is restrained to the load factors specified in 14 CFR § 25.561 and complies with all other applicable structural retention requirements. Primary load path elements include:
   a. The seat belt;
   b. Seat beams (cross tubes); and
   c. Seat legs.

11. Cargo restrained to the floor must be restrained to the load factors specified in § 25.561 and comply with all other applicable structural retention and weight and balance requirements. Cargo cannot exceed a height of 50 inches. The volume of each cargo loading area, as defined by the access provisions required in Condition and Limitation No. 12, must not exceed 125 cubic feet.

12. Certificate holders must load all cargo in a manner that allows sufficient access to the cargo to allow effective firefighting. Sufficient access to the cargo to allow effective firefighting requires, at a minimum, the following:
   a. A longitudinal aisle or aisles a minimum of 20 inches wide, that enables a person to traverse it while walking upright.
   b. Lateral access fore and aft of each cargo loading area that is 15 inches wide.
   c. The access dimensions required in Condition and Limitation No. 12a and 12b must not be obstructed by the means used for cargo restraint.
   d. Certificate holders must load any cargo loaded on the main deck of a twin aisle airplane so that, in each section of the main deck, there is a means to cross from one aisle to the other aisle at approximately equal distance from the existing cross-aisles.
13. Certificate holders must not load or restrain cargo in any manner that obstructs decompression vents or airflow when the vents are activated.

14. Certificate holders must provide each person occupying the main deck of the airplane at the time of operation with portable oxygen equipment that meets §§ 25.1439(b)(1)(2) and (4) and 25.1443(e).

15. Certificate holders must ensure that each person whose duties on board the airplane include fire detection and firefighting on the main deck carry the equipment provided under Condition and Limitation No. 14, during their inspections required by Condition and Limitation No. 20.

16. Certificate holders conducting operations authorized by this exemption must make the following fire extinguishers available on the main deck:
   a. Two Underwriters Laboratories (UL) 2A (2-1/2 gallon) rated water portable fire extinguishers;
   b. At least two fire extinguishers with a minimum UL 4A-80B: C-rating or equivalent;\(^\text{14}\) and
   c. The quantity and type of fire extinguishers identified in the certificate holder’s safety risk assessment required by Condition and Limitation No. 25 in addition to the number required by Condition and Limitation No. 16a and 16b.

17. Certificate holders must locate the fire extinguishers required by Condition and Limitation No. 16 next to the seats occupied by persons identified in Condition and Limitation No. 21e. Certificate holders may provide additional fire extinguishers identified in Condition and Limitation No. 16 at locations that the operator determines would be effective in providing fire protection.

18. Certificate holders must configure the Environmental Control System (ECS) settings of any airplane used to conduct an operation authorized under this exemption, prior to such operation, to minimize the likelihood smoke would enter the flight deck, and to maximize the ability of a crewmember to detect a fire, including:
   a. Adapt the ECS setting to the number of aircraft occupants.
   b. If configured with Gasper outlets, turn them to closed/off position for all phases of flight.

19. The minimum number of persons required to perform the duties specified in Condition and Limitation No. 15 is as follows: at least two persons whose duties are to detect and fight a fire and relay information to the flightcrew; and any additional persons identified by the certificate holder through a safety risk assessment that considered, at a minimum, the size of the airplane, the length of flight, and the availability of alternate airports.

20. Persons assigned to inflight fire-fighting duties must make a visual inspection of the cargo on a regular basis, not exceeding 30 minute intervals including prior to taxi, takeoff, and landing.

\(^\text{14}\) Four UL 2A-10B: C extinguishers is equivalent to two fire extinguishers with a minimum UL 4A-80B: C-rating.
21. Prior to conducting operations under this exemption, certificate holders must revise the operating manual required by § 121.133 to:

   a. Identify the minimum number of additional persons required on the main deck under Condition and Limitation No. 19 during an operation conducted under this exemption;

   b. Include procedures for persons assigned to inflight fire-fighting duties to make a visual inspection of the cargo on a regular basis, not exceeding 30 minute intervals including prior to taxi, takeoff, and landing;

   c. Include procedures for persons who must carry portable oxygen equipment, or equivalent, when making the inspection required by Condition and Limitation No. 20;

   d. Include procedures for the flight crewmembers to notify persons in the main deck in case of a decompression;

   e. Identify which seats must be occupied during takeoff and landing and in emergency situations such as turbulence or decompression, unless each such seat is individually so placarded;

   f. Include a main deck fire emergency procedure based on manual firefighting; and

   g. Update any additional existing procedures (including emergency procedures that result from Condition and Limitation 19 and 20), consistent with the conditions and limitations of this exemption.

22. Certificate holders must provide training to each person who will perform duties on an operation authorized by this exemption, prior to the person’s performance of such duty.

   a. For currently qualified pilots and flight engineers serving as the flight crew, training must include the following—

      i. Instruction in the new or revised emergency assignments and procedures to comply with this exemption, including coordination among crewmembers; and

      ii. Instruction in the configuration of aircraft systems to comply with this exemption.

   b. For currently qualified crewmembers who will perform the duties specified in Condition and Limitation No. 15, training must include at least the following—

      i. Instruction in the new or revised emergency assignments and procedures to comply with this exemption, including coordination among crewmembers;

      ii. Instruction in the location, function, and operation of fire extinguishers required by Condition and Limitation No. 16;

      iii. Instruction in the handling of a cargo fire in the cabin, including assessing and evaluating hidden fires and removing cargo restraints required by Condition and Limitation Nos. 10 and 11; and
iv. Hands-on emergency drill using the fire extinguisher required by Condition and Limitation No. 16 including removing the extinguisher from the storage location and moving it to the furthest point on the main deck where a fire could occur.

c. For other persons who will perform the duties specified in Condition and Limitation No. 15, training must include at least the following—

i. Instruction in the emergency assignments and procedures to comply with the exemption, including coordination among crewmembers;

ii. Instruction in the location, function, and operation of fire extinguishers required by Condition and Limitation No. 16 and the portable oxygen equipment required by Condition and Limitation No. 14;

iii. Instruction in the handling of a cargo fire in the cabin, including assessing and evaluating hidden fires and removing cargo restraints required by Condition and Limitation Nos. 10 and 11;

iv. Hands-on emergency drill as specified in § 121.417(c)(1)(i) and (ii);

v. Hands-on emergency drill using the fire extinguisher required by Condition and Limitation No. 16, including removing the extinguisher from the storage location and moving it to the furthest point on the main deck where a fire could occur;

vi. Hands-on emergency drill as specified in § 121.417(c)(2)(i)(C).

23. If the hands-on emergency drills required by Condition and Limitation No. 22 are conducted using training equipment instead of actual aircraft equipment, the training equipment must be approved in accordance with § 121.408.

24. Certificate holders must provide any main deck occupant, other than a person assigned to duty during flight, with a briefing regarding the use of all emergency equipment, including portable oxygen systems, and on the operation of emergency exits and evacuation procedures.

25. Any part 119 certificate holder requesting to use this exemption must provide the following information to its assigned principal operations inspector:

a. A concept of operations listing the airplanes the certificate holder proposes operating, a description of the anticipated frequency of the operations, and a description of the flights the certificate holder plans to conduct.

b. Verification that the certificate holder has completed a safety risk assessment to determine the type and quantity of additional fire extinguishers necessary on the main deck. The safety risk assessment must include statements indicating whether additional fire extinguishers of a particular type need to be installed in the main deck in addition to the fire extinguishers identified in Condition and Limitation No. 16a and 16b.

c. Verification that the certificate holder has completed a safety risk assessment to determine whether any additional persons are required during an operation under this exemption. The safety risk assessment should include statements indicating
whether more than two persons are required for the operation, in accordance with Condition and Limitation No. 19.

d. An outline of the curricula that the certificate holder will use to conduct the training required by Condition and Limitation No. 22.

26. Apart from this exemption’s application within the United States, Part 119 certificate holders conducting operations under part 121 may operate outside of the United States under this exemption, unless otherwise prohibited by a foreign country. Crewmembers must have in their physical possession, or readily accessible in the airplane, a copy of this grant of exemption when exercising the relief provided. In accordance with the Convention on International Aviation (Chicago Convention), and its Annexes, crewmembers must present a copy of this grant of exemption for inspection upon request by a foreign civil aviation authority.

If you request an extension or amendment to this exemption, please submit your request by using the Regulatory Docket No. FAA-2020-0492 (http://www.regulations.gov).

Any extension or amendment request must meet the requirements of 14 CFR § 11.81.

This exemption terminates on July 10, 2021, unless sooner superseded or rescinded.


JAMES E WILBORN
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James E. Wilborn,
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