

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056

In the matter of the petition of

Aviation Services, Ltd. d.b.a. Freedom Air

for an exemption from § 121.314(c) of Title 14,
Code of Federal Regulations

Regulatory Docket No. FAA-2001-9134

PARTIAL GRANT OF EXEMPTION

By letter of February 22, 2001, Mr. Joaquin L. Flores, Jr., General Manager, Aviation Services, Ltd., d.b.a. "Freedom Air," Guam International Airport, P.O. Box 1578, AGANA, GUAM 96932, petitioned for an exemption from certain requirements of § 121.314(c). The petition, if granted, would allow Freedom Air to operate one SD3-30 airplane beyond the cargo compartment modification deadline of March 19, 2001, until the conversion data is available from the aircraft manufacturer.

The petitioner requests relief from the following regulations:

Section 121.314(c) requires that after March 19, 2001, each Class D compartment, regardless of volume, must meet the standards of §§ 25.857(c) and 25.858 for a Class C compartment unless the operation is an all-cargo operation in which case each Class D compartment may meet the standards in § 25.857(e) for a Class E compartment.

Section 25.857(c) requires that a Class C cargo or baggage compartment have (1) a separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station, (2) an approved built-in fire extinguishing or suppression system controllable from the cockpit, (3) means to exclude hazardous quantities of smoke, flames, or extinguishing agent, from any compartment occupied by the crew or

passengers, and (4) means to control ventilation and drafts within the compartment so that the extinguishing agent used can control any fire that may start within the compartment.

Section 25.858 requires (1) the detection system must provide a visual indication to the flightcrew within one minute after the start of a fire, (2) the system must be capable of detecting a fire at a temperature significantly below that at which the structural integrity of the airplane is substantially decreased, (3) there must be means to allow the crew to check in flight, the functioning of each fire detector circuit, and (4) the effectiveness of the detection system must be shown for all approved operating configurations and conditions.

The petitioner's supportive information is as follows:

“Please find enclosed a request for temporary exemption from 121.314 on behalf of Aviation Services, Ltd. d.b.a. Freedom Air for continued operation beyond the compliance date for converting Class D compartments to Class C. Freedom Air realizes that the normal 120-day advance notice is not given. We have planned and have every intent to comply, but the aircraft manufacturer only informed us a couple of weeks ago of its failure to supply the required installation data by the compliance date. At this time there are no other resources available for the conversion and must rely on the aircraft manufacturer. Due to our location, size and scope, and short time frame, we urge you to act favorably to this temporary extension.”

“Request for Temporary Extension to FAR 121.314

“Aviation Services, Ltd. d.b.a. Freedom Air request a temporary extension to FAR 121.314 for the modification of Class D cargo compartments to Class C cargo compartments due to non availability of approved data for compliance.

“Section of FAR Affected

“Section 121.314 (c)

“(c) After March 19, 2001, each Class D compartment, regardless of volume, must meet the standards of §§ 25.857(c) and 25.858 of this Chapter for a Class C compartment unless the operation is an all-cargo operation in which case each Class D compartment may meet the standards in § 25.857(e) for a Class E compartment.

“Supportive Information

“Freedom Air operates an SD3-30, 30 passenger aircraft. This aircraft was originally certificated with class D cargo compartments. As a result of an amendment to the 121 rules, all Class D cargo compartments must be modified to conform to the standards of a Class C cargo compartment.

“This is the only SD3-30 aircraft flying on the United States Registry in passenger service. At present there are no companies or individuals with approved data to properly modify the compartments. The manufacturer is supportive of our operation and is in the engineering process of determining such data. However, they are unable to meet the FAA requirement date of March 19, 2001. (See attachment).

“The duration of the extension to the regulations would only be necessary for the aircraft manufacturer to complete engineering testing to issue the approved data. Once this data is available in the form of a Service Bulletin, work can begin on the installation.

“While the current configuration meets the requirements of Class D, the manufacturer has equipped the aircraft with a fire extinguishing system. This system allows a crewmember to extinguish a fire by discharging a hand held fire extinguisher through a special port. This system then, adds an increased level of safety above the requirements of the Class D. This is an equivalent level of safety. A crewmember can extinguish a fire in the baggage compartment. The letter of the law states “from the flight deck” this is true for the forward baggage compartment. For the rear, the flight attendant may discharge the extinguisher or a flight crewmember may walk to the rear of the cabin and operate the fire extinguisher from that position.

“Because of the fire extinguishing capabilities, the current baggage compartments do not meet the definition of class D cargo compartment, but rather a higher level.

“The manufacturer makes the following statement regarding the classification of the baggage compartments.

‘Classification of Baggage Compartment on SD3-30.

‘The SD3 aircraft were designed to the requirements of Part 25 at amendment 34 Standard, and operate to the requirements of Part 121.’

‘The Fwd and Aft Baggage Compartments were Certificated as meeting the Requirements of Part 25.857 (d) and 121.221 (e), and were classified as Class D. For original Certification it was intended that the SD3-30 would meet the requirements of Class D (i.e. no extinguishing system) however such a system was included to improve the fire containment ability for the diversion requirement to the nearest airfield in the event of a fire.’ -Jonny Doyle, Short Brothers.”

“In attached supporting documents, Short Brothers PLC had promised to supply the conversion kit to meet the deadline. Based on their statements, Freedom Air continued to operate with full intent to meet the deadline. It is beyond our control that the equipment is not ready to install.

“Economic Impact

“Freedom Air is the only certificated air carrier based on Guam and serving the Islands of Rota, Tinian, and Saipan. Our schedule alone meets the essential air service requirements for the island of Rota. Another operator from Saipan also utilizes the Short aircraft. Both of us are on the verge of being ‘shut down’ by circumstances beyond our control. Should this operation cease, air transportation service to these islands would be greatly affected. In fact, the economy would come to a halt with no transportation at all to these islands. Both airlines would suffer tremendous financial hardship, to the point of bankruptcy.

“The runways of Tinian and Rota are under construction and do not meet requirements for another operator, such as Continental, to service the community. Transportation of essentials in and out of these communities would cease. Tourism would come to a halt and the entire economy would falter. This impact to the public would be more serious than the ability of the pilot to extinguish a fire by pushing a button, or walking down the aisle to discharge a fire bottle manually.

“With the ability to extinguish fires directly by a crew member, there is an equivalent level of safety to the traveling public. The longest distance between any two city pairs is 60 NM. This is approximately 25 minutes flying time. That means that the aircraft is never more than 13 minutes from an approved airport. According to Short Brothers, the manufacturer, the volume of fire extinguishing currently used is the same as the proposed modification. The only difference is the electrical push button. Safety is not compromised would not be compromised by using the existing system until the manufacturer has approved equipment for installation.

“Summary

“Freedom Air operates the only SD3-30 in passenger operations in the United States. Based on the manufacturer’s promise to provide certified data by the deadline the company has full intention to comply with the letter of the law.

“The SD3-30 has a fire extinguishing system installed and operating which meets the intent of the law. Since the capacity of the current extinguishing system is sufficient to extinguish a fire in the baggage compartment, an equivalent level of safety is established.

“Grounding all the aircraft that service a particular community and creating economic hardship for the pacific island people is not in the best interest of the United States Government and will create a political burden for the United States Government.

“We urge the FAA to grant this temporary extension until such time the conversion data is available from the aircraft manufacturer.”

Attachments:

E-mail messages from the manufacturer (Shorts) to Mr. Warren Hann of Freedom Air showing a long-term dialog and promises for compliance.

“1. Date: Mon, 29 May 2000

‘Warren - thanks for your understanding - these issues will be discussed at the ops conference in June [are you going?]. If not I will ensure that a pack is sent to you. Kidde Graviner will be there and presenting on the progress of the baggage bay.’

“2. Date: Wed, 23 Aug 2000

‘Warren - We are aware of this letter from CAS as it has been circulated to Shorts offering their services. I can calm your fears by telling you that CAS are misinformed in what they are stating. We have been working vigorously for more than a year now to address this requirement, and we are now at a stage where final tests need to be carried out prior to the production of a Service Bulletin. Once these are complete, we will be in a position to produce the SB.

‘In the very near future we will be polling operators to assess the depth of interest in buying the service bulletin, and if this is positive, we hope to have the framework in place to meet the regulatory requirements in good time to allow the SD3 operators to carry out necessary modifications. We shall keep you informed of any major developments in this project, and if you should have any further queries please do not hesitate to contact me.’

“3. Date: Wed, 1 Nov 2000

‘Hello Warren - Philip has sent me an email regarding some of your issues on the SD3 aircraft. On baggage bay classification it is Shorts intention to carry out tests with Air Cargo Carriers in Milwaukee in the first week in December along with Walter Kidde. Depending on the findings of the test a report will be drafted by the on site engineer and Shorts will respond if further work is required. I will keep you advised on the listed topics when further information is available.’

“4. Date: Mon, 8 Jan 2001

‘Hello Warren - Our engineers returned from Air Cargo Carriers the week before Xmas and the present status of the baggage bays is as follows:

‘We have conducted leakage rate tests on the forward and aft cargo bays of the SD3-30 and SD3-60 aircraft. The next stage is to establish the size of the extinguisher required based on the results of these tests. We are currently awaiting for the test results and hope to receive the test report by the end of January / early February. The extinguisher will be fully qualified ‘off the shelf’ type unit. Work on the electrical and mechanical installations is ongoing. I will keep you informed as we are given the information from Engineering.’

“5. Mon, 29 Jan 2001

‘Attn: Warren Hann - I spoke to the Head of Airworthiness Dept. this morning. He advised that a meeting on this subject was due to be held today. He advises that Shorts would be contacting FAA stating that bulletin would not be ready for 19 March deadline and asking for an extension. I will advise you via e-mail when he gives me specific information.’

“6. Date: Thu, 1 Feb 2001

‘Attn: Warren Hann - Shorts have received the official report from Walter-Kidde (fire extinguisher system suppliers). This is being evaluated for further discussion with the certifying authorities. It is Shorts intention to present current status to Authorities to aid requests for extension to requirement deadline.

‘It is also Shorts position that although existing baggage bays are listed as Class D they are in fact equipped with a fire extinguishing capability by way of the on-board hand-held extinguishers and the remote discharge points. As such they are a level above Class D, although do not meet the flight-deck operation requirement. I will keep you advised regarding any updates.’”

Due to the impending compliance date the FAA has waived the requirement to publish a summary of the petition in the Federal Register for public comment.

The Federal Aviation Administration's analysis/summary is as follows:

NATURE & EXTENT OF RELIEF SOUGHT

The petitioner’s request is to receive a temporary exemption, until the airplane manufacturer provides an approved modification kit, from the requirements of § 121.314(c) vis-à-vis compliance with § 25.857(c)(2) requiring installation of an approved built-in fire extinguishing or suppression system controllable from the cockpit on its fleet of one Model SD3-30 airplane.

The petitioner’s proposal is to continue to operate its one Model SD3-30 airplane that is currently configured with both the means to introduce fire-extinguishant into the cargo compartments and an approved smoke detection system. The detection system displays the required warning in the cockpit and the fire suppression system requires the manual introduction of fire extinguishant through a built-in distribution system. However, only the forward compartment system is directly operable from the cockpit. The aft cargo compartment has basically the same fire-suppression system but the design requires the flight attendant’s participation in introducing the fire extinguishant.

The petitioner intends to meet all applicable regulations for a Class C cargo compartment, i.e., §§ 25.857(c) and 25.858 by using the existing installations in the airplane as well as by modifying both the forward and aft Class D cargo compartments to Class C cargo compartments, as required by § 121.314(c), as soon as the airplane manufacturer makes the modification kits available.

DESCRIPTION OF EACH AIRPLANE TO BE COVERED

The one airplane to be covered is Short Brothers PLC, Model SD3-30, Registration Number N76NF, S/N SH3044.

INFORMATION IN SUPPORT OF THE PETITION

The FAA concurs with the unique intrastate commerce role of the petitioner's one Model SD3-30 airplane in providing scheduled passenger service between the Islands of Guam, Rota, Tinian, and Saipan. The FAA concurs that the submittal of a petition for an exemption is an appropriate avenue to address the petitioner's concerns supporting a temporary exclusion of its one SD3-30 airplane from compliance with § 121.314(c). The FAA notes that the airplane, although not certificated with respect to Class C requirements, already meets the smoke detection and indication requirements and has a manually operated fire suppression system. The FAA concurs that by implementing the proposed design changes, upon receiving modification kits from Short Brothers, Freedom Air will meet all applicable regulations. Continued operation during the interim with the current fire detection and suppression systems does not adversely affect safety.

COMMENTS IN THE PUBLIC INTEREST

Essential Air Services (EAS)

The Department of Transportation (DOT) guarantees Essential Air Service (EAS) to over 700 communities in the U.S., including Rota and Tinian in the Northern Mariana Islands in the Western Pacific. This program was established by Section 419 of the Airline Deregulation Act of 1978 (since changed to 49 U.S.C. 41731 et. seq., and 14 CFR parts 271, 272, 323, and 325). The DOT is relying on Freedom Air to provide EAS to Rota since it is the only carrier currently providing scheduled air service in these markets since it is one of only two small air carriers currently providing scheduled air service in these markets. The aircraft needed to provide island service is somewhat unique due to the short runways on several of the islands. Were Freedom Air to cease operations for any reason, the Department would be obligated to secure replacement service, and if no carrier were willing to initiate subsidy-free service, we would expend government funds to secure replacement service. The FAA is cognizant that curtailing air services until the airplane has an approved Class C cargo compartment would not be in the public interest.

The FAA is extremely reluctant to provide compliance time extensions to petitioners. The FAA acknowledged that the three-year compliance period would be aggressive and would require careful planning during the rulemaking process; however, none of the commenters provided credible reasons suggesting that detection and suppression systems cannot be installed in all affected airplanes within three years while the airplanes are undergoing other scheduled maintenance. Based on information received in the comments, the FAA concluded that a three-year compliance schedule was the optimal compromise between cost and safety considerations and that the benefits of the rule

justify the costs. The FAA is not persuaded that the petitioner has expended adequate resources to comply with the requirements of § 121.314(c). However, the FAA has carefully weighed the merits of the petitioner's arguments including the unique circumstances of the petitioner's operations; airplanes that have existing cargo compartment fire suppression system and the essential air service that is provided. The FAA contacted Shorts Brothers and has determined that the aircraft manufacturer has undertaken the development of a cargo compartment retrofit kit and will provide the design and parts to enable Freedom Air to meet the 90-day extension of the compliance time. Though the petitioner did not ask for a finite time extension, the FAA considers a 90-day extension for compliance is warranted. We expect that, contrary to past practice, the petitioner will make every effort to comply with the Class C cargo compartment requirements before the expiration date of this exemption and will not seek a further extension.

In consideration of the foregoing, I find that a partial grant of exemption would be in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701, delegated to me by the Administrator, Aviation Services Ltd. d.b.a. Freedom Air is hereby granted an exemption from 14 CFR § 121.314(c) to the extent necessary to allow its one Model SD3-30 airplane to operate until June 20, 2001.

Issued in Renton, Washington, on March 15, 2001.

/s/ Vi LI Lipski
Vi L. Lipski
Manager
Transport Airplane Directorate
Aircraft Certification Service, ANM-100