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## SMALL BUSINESS ADMINISTRATION

### 13 CFR Parts 121 and 126

RIN 3245-AE76, 3245-AE66

#### Small Business Size Regulations, HUBZone Program; Correction

**AGENCY:** U.S. Small Business Administration.

**ACTION:** Correcting amendments.

**SUMMARY:** The U.S. Small Business Administration (SBA) is correcting amendments to regulations governing SBA's Small Business Innovation Research (SBIR) Program and its Historically Underutilized Business Zone (HUBZone) Program. These regulations addressed Employee Stock Ownership Plans, or ESOPs, but incorrectly referred to the ESOP as an Employee Stock Option Plan.

**EFFECTIVE DATE:** These corrections are effective on November 30, 2006.

**FOR FURTHER INFORMATION CONTACT:** Carl Jordan, Office of Size Standards, (202) 205-6618 or by e-mail at [sizestandards@SBA.gov](mailto:sizestandards@SBA.gov); Michael P. McHale, Associate Administrator for the HUBZone Program, (202) 205-8885 or by e-mail, at [hubzone@sba.gov](mailto:hubzone@sba.gov).

**SUPPLEMENTARY INFORMATION:** The SBA published a final rule in the December 3, 2004 *Federal Register* (69 FR 70180) that amended the regulations governing size for the SBIR program. In the preamble to the regulation, SBA stated that it received comments supporting ownership and control of SBIR concerns by Employee Stock Ownership Plans, or ESOPs, for investment and employee incentive purposes. In the final rule, however, SBA inadvertently referred to the ESOP as an Employee Stock Option Plan. An ESOP is a retirement plan in which the small business contributes its stock to the plan for the benefit of the company's employees. Hence, SBA's regulations provide that it will consider

each stock trustee and plan member to be an owner of an SBIR concern, since with an ESOP all employees that are part of the plan own the stock in the company. In comparison, an employee stock option plan is merely a right given to an employee to buy the company's stock at a set price within a certain period of time. To avoid confusion on this issue, SBA is correcting this error.

SBA published in the May 24, 2004 *Federal Register* (69 FR 29411) a final rule that amended the regulations governing the HUBZone Program. In the final rule, SBA inadvertently referred to an ESOP as an Employee Stock Option Plan. Again, SBA meant to state that an ESOP is an Employee Stock Ownership Plan. Therefore, SBA is correcting this regulation as well.

#### List of Subjects

##### 13 CFR Part 121

Administrative practice and procedure, Government procurement, Government property, Grant programs—business, Loan programs—business, Reporting and recordkeeping requirements, Small businesses.

##### 13 CFR Part 126

Administrative practice and procedure, Government procurement, Reporting and recordkeeping requirements, Small businesses.

■ Accordingly, 13 CFR parts 121 and 126 are corrected by making the following correcting amendments:

#### PART 121—SMALL BUSINESS SIZE REGULATIONS

■ 1. The authority citation for part 121 continues to read as follows:

**Authority:** 15 U.S.C. 632, 634(b)(6), 636(b), 637(a), 644, and 662(5); and Pub. L. 105-135, sec. 401 *et seq.*, 111 Stat. 2592.

■ 2. Amend § 121.702 by revising paragraph (a)(2) to read as follows:

##### § 121.702 What size standards are applicable to the SBIR program?

\* \* \* \* \*

(a) \* \* \*

(2) If an Employee Stock Ownership Plan owns all or part of the concern, SBA considers each stock trustee and plan member to be an owner.

\* \* \* \* \*

## PART 126—HUBZONE PROGRAM

■ 3. The authority citation for part 126 continues to read as follows:

**Authority:** 15 U.S.C. 632(a), 632(j), 632(p) and 657a.

■ 4. Amend § 126.201 by revising the second sentence of the introductory text to read as follows:

##### § 126.201 Who does SBA consider to own a HUBZone SBC?

\* \* \* If an Employee Stock Ownership Plan owns all or part of the concern, SBA considers each stock trustee and plan member to be an owner. \* \* \*

\* \* \* \* \*

Dated: November 17, 2006.

**Anthony Martoccia,**

*Associate Deputy Administrator, Government Contracting and Business Development.*

[FR Doc. E6-20268 Filed 11-29-06; 8:45 am]

**BILLING CODE 8025-01-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. NM321; Special Condition No. 25-338-SC]

#### Special Conditions: Airbus Model A380-800 Airplane, Ground Turning Loads

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final special conditions.

**SUMMARY:** These special conditions are issued for the Airbus A380-800 airplane. This airplane will have novel or unusual design features when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. Many of these novel or unusual design features are associated with the complex systems and the configuration of the airplane, including its full-length double deck. For these design features, the applicable airworthiness regulations do not contain adequate or appropriate safety standards regarding ground turning loads. These special conditions contain the additional safety standards that the Administrator considers necessary to

establish a level of safety equivalent to that established by the existing airworthiness standards. Additional special conditions will be issued for other novel or unusual design features of the Airbus Model A380–800 airplane.

**EFFECTIVE DATE:** The effective date of these special conditions is November 9, 2006.

**FOR FURTHER INFORMATION CONTACT:**

Holly Thorson, FAA, International Branch, ANM–116, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–1357; facsimile (425) 227–1149.

**SUPPLEMENTARY INFORMATION:**

**Background**

Airbus applied for FAA certification/validation of the provisionally-designated Model A3XX–100 in its letter AI/L 810.0223/98, dated August 12, 1998, to the FAA. Application for certification by the Joint Aviation Authorities (JAA) of Europe had been made on January 16, 1998, reference AI/L 810.0019/98. In its letter to the FAA, Airbus requested an extension to the 5-year period for type certification in accordance with 14 CFR 21.17(c). The request was for an extension to a 7-year period, using the date of the initial application letter to the JAA as the reference date. The reason given by Airbus for the request for extension is related to the technical challenges, complexity, and the number of new and novel features on the airplane. On November 12, 1998, the Manager, Aircraft Engineering Division, AIR–100, granted Airbus' request for the 7-year period, based on the date of application to the JAA.

In its letter AI/LE–A 828.0040/99 Issue 3, dated July 20, 2001, Airbus stated that its target date for type certification of the Model A380–800 has been moved from May 2005, to January 2006, to match the delivery date of the first production airplane. In a subsequent letter (AI/L 810.0223/98 issue 3, dated January 27, 2006), Airbus stated that its target date for type certification is October 2, 2006. In accordance with 14 CFR 21.17(d)(2), Airbus chose a new application date of April 20, 1999, and requested that the 7-year certification period which had already been approved be continued. The FAA has reviewed the part 25 certification basis for the Model A380–800 airplane, and no changes are required based on the new application date.

The Model A380–800 airplane will be an all-new, four-engine jet transport

airplane with a full double-deck, two-aisle cabin. The maximum takeoff weight will be 1.235 million pounds with a typical three-class layout of 555 passengers.

**Type Certification Basis**

Under the provisions of 14 CFR 21.17, Airbus must show that the Model A380–800 airplane meets the applicable provisions of 14 CFR part 25, as amended by Amendments 25–1 through 25–98. If the Administrator finds that the applicable airworthiness regulations do not contain adequate or appropriate safety standards for the Airbus A380–800 airplane because of novel or unusual design features, special conditions are prescribed under the provisions of 14 CFR 21.16.

In addition to the applicable airworthiness regulations and special conditions, the Airbus Model A380–800 airplane must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36. In addition, the FAA must issue a finding of regulatory adequacy pursuant to section 611 of Public Law 93–574, the “Noise Control Act of 1972.”

Special conditions, as defined in 14 CFR 11.19, are issued in accordance with 14 CFR 11.38 and become part of the type certification basis in accordance with 14 CFR 21.17(a)(2).

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, the special conditions would also apply to the other model under the provisions of 14 CFR 21.101(a)(1).

**Discussion of Novel or Unusual Design Features**

The A380 has a landing gear arrangement consisting of a nose gear, two wing mounted gears, and two body mounted gears. This is different from the conventional tricycle landing gear arrangement envisioned by 14 CFR 25.495. The simple load condition specified in § 25.495, while providing a realistic approximation for designing a tricycle landing gear arrangement, will give unrealistic results for the A380. Safe sizing of the A380 landing gears necessitates a rational ground turning analysis that considers the way the airplane as a whole responds to a turning maneuver.

Furthermore, recent studies of the current generation of transport category airplanes carried out in the U.S. and in

Europe indicate a correlation between lower load factors in ground turns and higher gross weight of an airplane. This correlation was documented in the FAA-sponsored report, DOT/FAA/AR–02/129 *Side Load Factor Statistics from Commercial Aircraft Ground Operations*, dated January 2003. As stated in the report's abstract, “The results of this study clearly indicate, however, that the lateral loads experienced by the larger/heavier transport jets during ground turns are substantially less than those of smaller jet transports.” Based on this rationale, for the Model A380 airplane at maximum ramp weight—which is more than 30% heavier than any currently certificated airplane—the 0.5 g design turning load factor specified in § 25.495 is conservative. A load factor of 0.45 g is more appropriate for the A380 at maximum ramp weight. The data provided to the FAA support this reduced factor.

Therefore, in lieu of the requirements of § 25.495, a special condition regarding ground turning loads is justified for the Model A380 airplane. The special condition would require the applicant to determine the loads on the airplane during ground turning in a rational manner and would allow the applicant to determine a limit turning lateral load factor—not less than 0.45 g's—for the A380 at maximum ramp weight.

**Discussion of Comments**

Notice of Proposed Special Conditions No. 25–05–16–SC, pertaining to ground turning loads for the Airbus A380 airplane, was published in the **Federal Register** on August 9, 2005 (70 FR 46106). Comments supporting the intent and the language of the proposed special conditions were received from the Airline Pilots Association (ALPA). Comments requesting changes were received from the Boeing Company.

**Requested change 1:** Boeing states that it agrees special conditions are necessary, because the current regulations do not adequately address the A380 landing gear arrangement. However, Boeing disagrees with the general content of the proposed special conditions, because the proposed special conditions do not apply either the current safety standard for the Model 747 four-post gear arrangement or the standards for ground and loading conditions for multi-post gear arrangements developed by the FAA's Aviation Regulatory Advisory Committee (ARAC).

Boeing adds that the current safety standard for a four post gear

arrangement is found in Special Conditions A-4 issued for the Boeing 747 airplane and that this standard should apply to the Model A380 "since the configurations and gear arrangements are very similar to the Model 747 gear arrangement." \* \* \* Alternatively, Boeing suggests, the set of standards developed by ARAC for ground and landing conditions for multi-post gear arrangements should be incorporated as the basis of the Model A380 ground handling and landing requirements.

*FAA response:* This special condition was proposed in accordance with 14 CFR 21.16, which states that the Administrator prescribes special conditions, if she or he finds that the airworthiness regulations do not contain adequate or appropriate safety standards for an aircraft because of a novel or unusual design feature. Section 21.16 does not constrain the Administrator to prescribe only such standards as have been proposed by ARAC, and the Administrator routinely prescribes special conditions that are neither existing standards nor standards proposed by ARAC.

These special conditions are motivated primarily by the size and weight of the Model A380 airplane and the effect of these parameters on ground turning loads. Nevertheless, the FAA recognizes the importance of the multi-post landing gear configuration on the individual landing gear loads. (In separate special conditions for the A380, we have adopted the set of standards developed by ARAC for ground and landing conditions for multi-post landing gear arrangements, as Boeing suggests. Those special conditions, No. 25-324-SC, do not address ground turning loads.)

As discussed in the Notice of Proposed Special Conditions, pertaining to ground turning loads, the FAA concludes that, "Safe sizing of the A380 landing gear necessitates a rational ground turning analysis that considers the way the airplane as a whole responds to a turning maneuver," and the proposed special condition contains provisions for such an analysis. The FAA considers these provisions to adequately address the commenter's safety concern. The 747 Special Condition A-4 was not adopted for the A380, because it does not constitute a current safety standard for all four-post main landing gear.

*Requested change 2:* Boeing states that the proposed special conditions are not justified by the rationale stated by the FAA in the *Discussion of Novel or Unusual Design Features*. This rationale was essentially that the simple load

conditions specified in § 25.495-while providing a realistic approximation for designing a tricycle landing gear arrangement-would give unrealistic results for the A380 and that recent studies of the current generation of transport category airplanes show a correlation between lower load factors in ground turns and higher gross weight.

The FAA concluded that "Based on this rationale, for the A380 at a maximum ramp weight—which is more than 30% heavier than any currently certificated airplane—the 0.5 g design turning load factor specified in § 25.495 is conservative." However, the Boeing Company suggests that these conclusions from the operational data are broadly applicable to the current large/heavy fleet of transport airplanes and are not unique to the Model A380 configuration or design weights.

*FAA response:* The FAA agrees with Boeing that conclusions from the recent studies are broadly applicable to the current large/heavy fleet and that these studies indicate that the ground turning load factor of § 25.495 is conservative for certain heavier model airplanes. That conclusion does not alter the fact that an airplane of the size and gross weight of the A380 also exhibits decreased ground turning loads and thus warrants issuance of special conditions with ground turning loads lower than those specified in § 25.495.

*Requested change 3:* Boeing states that—by proposing to lower the side load factor in the ground turn—the proposed special conditions would adopt a lesser safety standard. According to the commenter,

This is a reduction of the established standard, which will result in decreased gear strength relative to the existing fleet. We consider the current 0.5g side load factor as a 'book' case intended to provide relatively simple criteria to ensure adequate side strength in lieu of an all-inclusive rational analysis. The special condition does not consider supplementary criteria to maintain equivalence to existing safety standards.

*FAA response:* As discussed above, data show that there is an inverse relationship between load factors experienced by airplanes in turns and their size and gross weight (i.e., greater weight implies lower load factors). Statistical analysis of these data indicates that the probability of achieving the "book" case on the A380 is exceedingly low—to the point that it cannot practically be achieved. Using a side load factor of 0.45g still results in a turning load that is very unlikely to be exceeded in operation. (By way of comparison, a single aisle airplane, such as an A320 or a Boeing 737, is more likely to exceed the "book" case of 0.5

g's in a turn than the A380 is of exceeding 0.45 g's.) Furthermore, the special condition states that the 0.45g load factor may be used, only if it can be shown by rational analysis that this lower value cannot be exceeded in service considering adverse variations in airplane characteristics and operations. Thus there is no practical decrease in safety relative to that provided by § 25.495. Since this special condition is based on a more realistic analysis, no supplementary criteria are necessary.

*Requested change 4:* The commenter indicates that "[Additionally,] the proposed SC would require a rational distribution of side load among the tires. While this provision may be conservative for the inboard gears, we find the SC not to be conservative for the wing gears. We suspect this will result in a lower level of strength for portions of the landing gear structure relative to the current commercial airplane fleet."

*FAA response:* The FAA does not agree. The special condition requires a rational distribution of side loads among tires in a severe turn, assuming a conservative turning load factor. This can be expected to result in side loads that are rationally distributed and conservative for both inboard gear and wing gear in comparison to any loading actually expected in operation. Boeing did not provide any data to support its claim that the special condition, as proposed, would result in a lower level of strength for portions of the landing gear structure relative to the current commercial fleet.

*Requested change 5:* Boeing comments that "In order to justify the reduced side factor, a more extensive set of likely ground maneuvers should be considered than those listed in the proposed special conditions." \* \* \* At a minimum, regardless of the side load factor, the rational turning analysis should consider critical combinations of steering, braking, and power as well as turning in a crosswind."

*FAA response:* The FAA does not agree that to justify the reduced side load factor, a set of likely ground maneuvers more extensive than those listed should be considered in the special conditions. The special conditions require that the rational analysis consider "the maximum load factor that can be reached during the full range of likely ground operations at maximum ramp weight." \* \* \* The full range of likely ground operations would include likely critical combinations of steering, braking, power, and turning in crosswinds.

*Requested change 6:* Finally, Boeing comments that "A significant amount of the Model 747 main gear truck and axle assembly is designed by ground turn. Additionally, the axle stiffness, which is a very important parameter for brake interaction and for tire shoulder wear, could be negatively affected if the requirements are reduced. By lowering the loads below current practice, new service-related problems could result."

*FAA response:* The special conditions require the applicant to demonstrate that the reduced ground turning load cannot be exceeded in service. If the applicant can demonstrate this and can demonstrate compliance with other regulations affecting the integrity of landing gear, brakes, and tires, we consider that the potential for new service-related problems would be minimized. Nevertheless, as with any other type design, the FAA continually monitors the safety of airplanes in the operating fleet and has the means to require mandatory corrective actions, if warranted.

Accordingly, the special conditions are adopted, as proposed, with a minor clarifying change to the text of subparagraph b.

#### Applicability

As discussed above, these special conditions are applicable to the Airbus A380-800 airplane. Should Airbus apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design features, these special conditions would apply to that model as well under the provisions of § 21.101.

#### Conclusion

This action affects only certain novel or unusual design features of the Airbus A380-800 airplane. It is not a rule of general applicability.

#### List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

#### The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for the Airbus A380-800 airplane.

In lieu of the requirements of § 25.495, the following special condition applies:

a. The airplane is assumed to execute a steady turn by steering of any steerable

gear or by application of any differential power. The airplane limit vertical load factor must be 1.0, and, in the absence of a more rational analysis, the limit airplane lateral load factor must be 0.5.

b. The airplane is assumed to be in static balance, the lateral load factor being reacted by friction forces applied at the ground contact point of each tire. The lateral load must be shared between each individual tire in a rational or conservative manner. The distribution of the load among the tires must account at least for the effects of the factors specified in subparagraph c. (2) of this special condition.

c. At maximum ramp weight, a limit value of lateral center of gravity (cg) inertia load factor lower than specified in subparagraph a. but not less than 0.45g (wing axis) may be used, if it can be shown by a rational analysis that this lower value cannot be exceeded. The rational analysis must consider at least the following:

1. The maximum lateral load factor that can be reached during the full range of likely ground operations at maximum ramp weight, including ground turning, "fishtailing," and high-speed runway exit. In each case, the full dynamic maneuver must be considered.

2. The rational analysis must include at least the following parameters:

(a) Landing gear spring curves and landing gear kinematics.

(b) Reliable tire friction characteristics.

(c) Airframe and landing gear flexibility when significant.

(d) Airplane rigid body motion.

(e) The worst combination of tire diameter, tire pressure, and runway shapes, specified in §§ 25.511(b)(2), 25.511(b)(3), and 25.511(b)(4).

d. The limit lateral load factor at maximum landing weight is 0.5.

e. Details of the analysis and any assumptions used must be agreed to by the FAA. Any assumptions made in the analysis must be based on the intrinsic characteristics of the airplane and must be independent of airfield geometry. Other influences that cannot be controlled by the airplane design must be conservatively assessed.

Issued in Renton, Washington, on November 9, 2006.

**Ali Bahrami,**

Manager, Transport Airplane Directorate, Aircraft Certification Service.

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**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. NM354; Special Conditions No. 25-336-SC]

#### Special Conditions: Boeing Commercial Airplane Group, Boeing Model 777 Series Airplane; Overhead Cross Aisle Stowage Compartments

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final special conditions.

**SUMMARY:** These special conditions are issued for the Boeing Model 777 series airplanes. This airplane will have novel or unusual design features associated with overhead cross aisle stowage compartments. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for these design features. These special conditions contain the additional safety standards the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

**EFFECTIVE DATE:** November 15, 2006.

**FOR FURTHER INFORMATION CONTACT:** Jayson Claar, FAA, Airframe/Cabin Branch, ANM-115, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington, 98057-3356; telephone (425) 227-2194; facsimile (425) 227-1232.

#### SUPPLEMENTARY INFORMATION:

##### Background

On April 20, 2005, Boeing Commercial Airplane Group, Seattle, Washington, applied for a supplemental type certificate to permit installation of overhead cross aisle stowage compartments in Boeing 777 series airplanes. The Boeing Model 777 series airplanes are large twin engine airplanes with four or five pairs of Type A exits. The Boeing 777 airplanes can be configured with various passenger capacities and ranges.

The regulations do not address the novel and unusual design features associated with the installation of overhead cross aisle stowage compartments installed on the Boeing Model 777, making these special conditions necessary. Generally, the requirements for overhead stowage compartments are similar to stowage compartments in remote crew rest compartments (i.e., located on lower lobe, main deck or overhead) already in use on Boeing Model 777 and 747 series