



## Internal Air Transport Certification

AFLCMC/EZFC (ATTLA)  
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<https://afkm.wpafb.af.mil/AirTransport>



**Date:** 23 July 2013

**Item Nomenclature:** Blue Bird/All American Bus

**File Number:** 2008.07.11 Rev 8

**Requestor:** AFCENT A4/TRNS (TSgt Michael Johnson)

**Superseded One-time Approval Date:** 2 October 2011

**New Information Summary:** Increases the allowable ratio of rear overhang to rear ground clearance.

**Item Description:** The subject items are identified to be two axle buses. Their approximate dimensions are 426" L x 96" W x 118" H. This certification covers all Blue Bird All America buses with similar dimensions, with a wheelbase (distance between axles) of 195" to 214", and ratio of rear overhang to rear end ground clearance not greater than 9.9. The bus must have a minimum Gross Vehicle Weight Rating (GVWR) of 30,000 lbs, a front axle weight rating of 13,200 lbs, and a rear axle rating of 19,000 lbs. The 44 passenger bus is included in this approval. Other Blue Bird All American buses with different number of seat are covered by this approval if the dimensions and ratings meet the limits previously stated.



**Figure 1: Blue Bird/All American Bus**

**Certified Aircraft:** USAF C-17 and C-5

### Conditions of Certification:

#### 1. Maximum Weight for Air Transport:

- a. Gross Vehicle Weight: 24,000 lbs (80% GVWR)
- b. Axle Limits:
  - (1) Front – 10,560lbs (without shoring, 80% rating); 11,360 lbs (with shoring, axle rating)
  - (2) Rear – 15,200 lbs (80% axle rating)

**Note:** All air ride suspension buses require shoring, see paragraph 5.b. for dimensions.

#### 2. Item Preparation:

- a. Shipper is responsible for approach and sleeper shoring, see paragraph 5 for dimensions.

- b. Tire pressures are reported to be 120 psi or less. It has been determined that the load per tire at this inflation pressure meets C-17 floor limitations.
- c. All hazardous materials (to include fuel level, batteries, etc.) must be prepared and certified for airlift in accordance with TM 38-250/AFMAN 24-204(I). Do not consider this air transport certification as approval for hazardous materials. Authorization for airlifting hazardous material is the responsibility of 401 SCMS/GUMAA (DSN 787-4503 or COM (937) 257-4503).

### 3. Loading Instructions:

- a. Bus can be loaded front or aft end first into the aircraft cargo compartment.
- b. Approach shoring is required to prevent contact with the ramp or the ground during loading operations, see paragraph 5 for minimum shoring dimensions.
- c. Sleeper shoring might be required for the front axle as per paragraph 1.a. Sleeper shoring is required for both front and rear axles if the vehicle is fitted with an air ride suspension. Minimum sleeper shoring dimensions are as listed in paragraph 5.

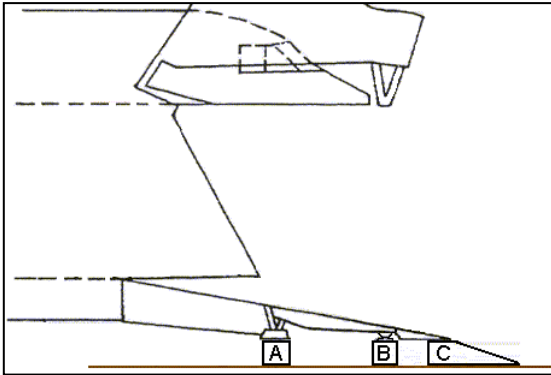
**4. Restraint Requirements:** The bus and all accompanying cargo must be restrained to meet MIL-HDBK-1791 requirements of 3G forward, 1.5G aft and lateral, and 2G up. In addition, stored or installed equipment must meet these requirements and be capable of withstanding a 4.5G down load. 25K tie-down chains shall be attached to the bus frame primary structures. Route chains around the main longitudinal frames, preferably adjacent to cross-member frame components that are bolted to the frame. Chains can also be attached to the support frame located aft of the rear axle between the two main longitudinal beams. See Figure 2 for examples of identified locations. Do not apply more than 50% of required restraint to vehicle axles for longitudinal and lateral directions up to the rated capacity located on the vehicle data plate.



Figure 2: Example of Frame Locations Available for Tiedown

**5. Recommended Shoring Dimensions & Diagrams:**

a. Approach Shoring:



**C-5 Forward Shoring (Forward Kneel)**

Pedestal Shoring

"A" 16" L x 13" W x 3" H (2 each inboard)

18" L x 15" W x 3" H (2 each outboard)

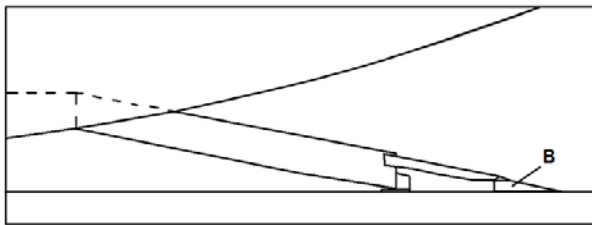
"B" 15" L x 15" W x 7" H (4 each)

Approach Shoring

"C" 68" L x 24" W x 10" H (2 required)

(Ramp toe end shall be supported by the approach shoring – min 11" L)

**(C-5) CAUTION:** Width of approach shoring "C" in the area under the toe must be as wide as the ramp toe it is placed under. The remaining approach shoring extending away from the ramp toe extension contact point must be a minimum of 24 inches wide.



**C-17 Shoring**

Approach Shoring

"B" 78" L x 24" W x 11" H (2 required)

(Ramp toe end shall be supported by the approach shoring – min 11" L)

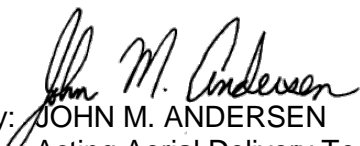
**(C-17 and C-5) NOTE:** For ratios of rear overhang to rear end ground clearance greater than 6.3, step up shoring is required in front of each approach ramp. The step up shoring must be at least 96" L x 22" W x 1-1/2" H (2 required).

b. Sleeper Shoring: 13" L x 13" W (two stacks, one per side). The sleeper shoring must be placed in close proximity to the axle stacked to within 1/2" of chassis/frame area and secured with cargo straps.

**Required Distribution:**

1. Shipper shall give a copy of this certification to the ATOC representative when the item is presented for airlift. This memo shall be part of the official cargo manifest documentation package and shall be briefed to the aircraft loadmaster prior to loading this item.
2. AMC/A3V & AMC/A4T.
3. SDDC TEA.

**Point of Contact:** Chris Boggs, at christopher.boggs.3@us.af.mil, DSN 986-9953 or Commercial (937) 656-9953. Refer to file number 2008.07.11 Rev 8 to reference this item.

Approved by:   
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