



Internal Air Transport Certification

AFLCMC/EZFC (ATTLA)
2145 Monahan Way
WPAFB, OH 45433-7017
<https://afkm.wpafb.af.mil/AirTransport>



Date: 14 May 2013

Item Nomenclature: 66 Passenger American Blue Bird School Bus

File Number: 2013.05.04

Requestor: JRI Denton Operations (James J. Bailey)

Item Description: The subject item is identified to be a 1992 32 passenger American Blue Bird School Bus. The approximate dimensions are 394" L x 108" W x 126" H. The bus' reported gross weight is 17,140 lbs with a gross vehicle weight rating (GVWR) of 30,000 lbs. The front axle is reported to weigh 8,940 lbs with a rating of 12,000 lbs. The rear axle is reported to weigh 8,200 lbs with a rating of 19,000 lbs.



Figure 1: American Blue Bird 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
- b. Axle Limits: First Axle – 9,600 lbs without sleeper shoring, 12,000 lbs with sleeper shoring;
Second Axle – 15,200 lbs without sleeper shoring, 19,000 lbs with sleeper shoring.

2. Item Preparation:

- a. Tire pressures are reported to be 120 psi for the front axle and 105 psi for the rear axle. For those tire pressures, and even if the tire pressures on the rear axle were 120 psi, rolling shoring is not required. However, parking shoring is required for the front axle only unless sleeper shoring is required for that axle per paragraph 1.b. See paragraph 5 for specifications.
- b. Approach shoring is required for both aircraft loading/unloading unless loading/unloading from/to a K-loader or flatbed trailer. See paragraph 5 for approach shoring specifications.
- c. Shipper is responsible for providing all shoring materials.

d. 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(l). Do not consider this air transport certification as approval for hazardous materials. Authorization for airlifting hazardous material is the responsibility of AFMC AFSC/LOET (DSN 787-4503 or COM (937) 257-4503).

3. Loading Instructions:

- a. The Item can be loaded using general loading procedures as listed in the respective aircraft cargo loading manual.
- b. C-5: Configure aircraft with forward ramp in forward kneel mode. If visor/forward door loading complex is inoperative the vehicle may be loaded through the aft door, drive-in loading method. Calculate, over the toes, shoring requirements in accordance with T.O. 1C-5A-9.
- c. If sleeper shoring is required for the front axle per paragraph 1.b, build shoring up so it is snug against the underside of the frame/chassis (2 stacks – 1 each side) to prevent the need for parking shoring. If sleeper shoring is not required, place parking shoring under the tires of the front axle. If sleeper shoring is required for the rear axle, height should be built up to within 1/2" of the underside of the frame/chassis and secured to the cargo floor (2 stacks – 1 each side). Parking shoring is not required for the rear axle.

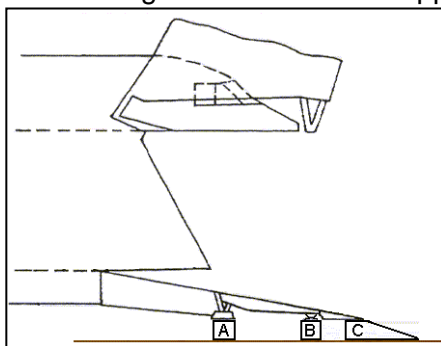
Restraint Requirements: The American Blue Bird Bus and all accompanying cargo must be restrained to meet MIL-STD-1791 requirements of 3G forward, 1.5G aft and lateral, and 2G up. In addition, stored or installed equipment must meet these requirements and be capable of withstanding a 4.5G down load. Apply restraint to frame attachment points as illustrated in figures 2. Restraint may be applied to axles up to their rated capacity in longitudinal and lateral directions as listed in the Item Description paragraph. Do not apply more than 50% of required restraint to vehicle axles for longitudinal and lateral directions. Note that spring mounted axles provide zero vertical restraint.



Figure 2: Frame Attachment Points

4. Shoring Dimensions & Diagrams:

- a. Approach shoring: minimum recommended dimensions for 7° approach angle, requirements for other configurations are in the applicable aircraft loading manual.



C-5 Forward Shoring (Forward Kneel)

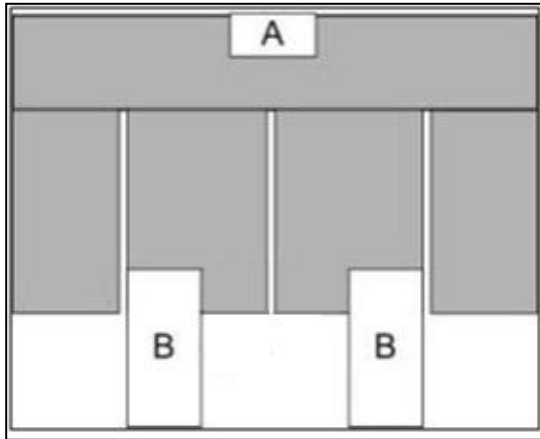
Pedestal Shoring

- "A" 16" L x 13" W x 10" H (2 each inboard)
18" L x 15" W x 10" H (2 each outboard)
- "B" 15" L x 15" W x 22" H (4 each)

Approach Shoring

- "C" 275" L x 24" W x 28" 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

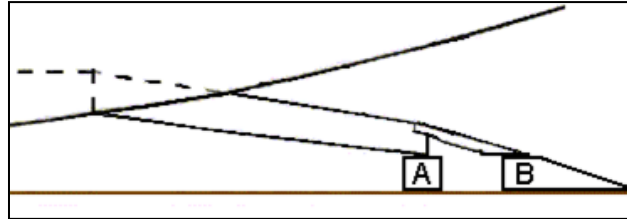
Ramp Pedestal Shoring

"A" 18" L x 30" W x 14" H

Approach Shoring

"B" 314" L x 24" W x 32" H (2 required)

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



b. Sleeper Shoring (if required per paragraph 1.b): Sleeper shoring height must be at least half the largest base dimension.

1. Front Axle: 12" L x 12" W – built up snug against the underside of the frame/chassis.
2. Rear Axle: 16" L x 16" W – built up to within 1/2" of the underside of the frame/chassis

c. Parking Shoring (front axle only): 10" L x 10" W x 1" H, each tire. (not required if sleeper shoring is required per paragraph 1.b)

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: David Daniels, at david.daniels.11@us.af.mil or WP.ATTLA@wpafb.af.mil, DSN 986-9904 or Commercial (937) 656-9904. Refer to file number 2013.05.04 to reference this item.

Reviewed by: MARK A. KUNTAVANISH
Aerial Delivery Technical Expert
Crew Systems Branch

Approved by: JENNIFER L FARRELL
Technical Advisor
Crew Systems Branch