

**EXHIBIT # 22**

**M110A1 8 INCH SELF-PROPELLED HOWITZER**

**USA**

The first M110 was developed in the 1960s and used extensively in Vietnam. The hull and chassis are the same as the M-107 175 mm gun. The M110A1's gun had a range of about 12 miles. The shell that this Howitzer fired weighed over 200 lbs. and could be loaded hydraulically via the equipped crane or manually. The velocity of the shell when launched is 1,935 ft. per sec. The suspension of the five road wheels per side is locked for firing so that the vehicle doesn't rock when firing, but the weapon's stability stems mainly from the huge hydraulically powered spade. The round holes on the side of the vehicle are for engine exhausts. The plow on the back of the vehicle helped to compensate for the massive recoil involved with firing a 200 lbs. shell.

**DATA**

**Length: 26 ft. 6 in.      Width: 10 ft. 4 in.      Height: 9 ft. 7 in.**

**Weight: 53,600 lbs.**

**Crew: 13**

**Power: 8V71T Detroit Diesel with Alison XTG-411-3A cross-drive transmission**

**Armament: one M203 8 inch Howitzer tube**

**Range of gun: approx. 20 miles**

**Builders: FMC, San Jose, CA; Pacific Car & Foundry Co., Renton, WA;**

**Bowen-McLaughlin-York Inc., York, PA**

**Speed: 34 mph      Driving Range: 450 miles**

