

# Mobile Acoustic Source



The Mobile Acoustic Source (MOAS) is a pneumatically driven 56 ft long fiberglass horn designed to be a high amplitude acoustic source. The source of airflow for MOAS is a rotary compressor driven by a 150-hp diesel engine. This gives a maximum flow rate of 1200 cubic feet per minute at a pressure of 7.5 pounds per square inch. The airflow passes through a Wyle WAS-3000 modulator, which is electrically driven to produce the fluctuations in the airflow. The modulator is remotely operated due to the output intensity of the source. The fiberglass horn is designed to match the impedance between the modulator and the atmosphere over the frequency range of operation. The frequency range of operation is 10 to 500 Hz with a maximum output level of 145 dB with minimal distortion. These characteristics allow for the system to reproduce the acoustic signal in frequency and amplitude from most potential acoustic targets. The system can broadcast single tones, multiple tones, or tape playbacks. The system can be operated off of hard power, generator, or inverter. The trailer can be easily compacted to allow for transportation on any commercial highway.

#### **Specifications:**

Frequency Range: 10-500 Hz

Output Level: 145 dB (re: 20 m Pa)

Output Signal: Single Tone, Multiple Tones, or Tape Playback

Remote Operation

#### **Utility:**

- Low Operating Cost Acoustic Target
- Long Range Detection (5-15 km)
- Countermeasures
- Low Frequency Active Noise Control

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**WARNING!! This Department of Defense interest computer system is subject to monitoring at all times. Unauthorized access is prohibited by Public Law 99-474 (The Computer Fraud and Abuse Act of 1986). Users are advised to read and agree to the following [Security Notice](#).**

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