Appendix F
Access/Egress Roadway System (AERS)

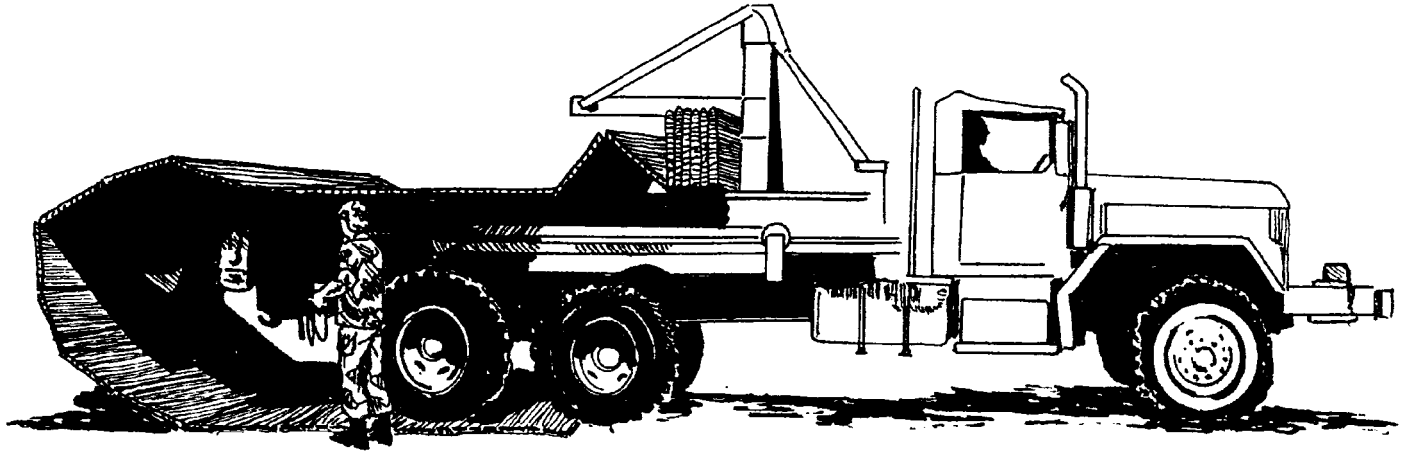
The AERS system is composed of hinged, folding, MLC 70 panels mounted on a dispenser unit. Transport is accomplished using a dedicated standard ribbon bridge truck. The panels are mounted on a dispenser, which can be launched and recovered in the same manner as the bridge bays. The system is designed to provide a stable roadway to (or away from) bridge or raft sites. The roadway provided by one system is approximately 100 feet long with a roadway width of 13.15 feet. Additional missions include temporary stabilization of roadways or other surfaces. The AERS will be issued to all bridge companies.

Equipment Data

Dimensions of the dispenser with the panel pack installed are provided below:

Length – 22.2 feet
Width (with retrieval arms stored) – 10,5 feet
Width (with retrieval arms extended) -14.8 feet
Height (with upper beam horizontal) -6.15 feet
Height (with upper beam rotated to its maximum vertical position) – 13.5 feet
Weight -10,970 pounds

Launching MLC 70 panels from dispenser unit



Deployment

For highway transport, the panel pack is aligned parallel to the dispenser. Launching requires that the panels be rotated perpendicular to the dispenser. This is done by setting the dispenser on the ground and then using the boom on the truck to pick up the panel pack, rotate it, and set it back down on the dispenser. Once the dispenser is recovered by the truck, the matting is ready to be emplaced. As an alternative, the panels may be rotated with the dispenser on the truck, but this requires a crane or another truck with a free boom.

Launching

Launching is typically performed by pulling the first panels out and having the truck back up over the mat as it is laid. Since the matting is generally used to cover poor soil conditions, this permits the truck to ride on a stable roadway at all times. Launching may also be performed by tying down the first panel with pins and a cable, then pulling the panels off as the truck moves away. If additional lengths are required, they may be hinged together or overlapped.

Retrieving

Retrieval is accomplished with the truck on the matting. Brackets provided with the system are attached to the end panel of the roadway. Winch controlled cables connected to these brackets lift the panels up and over the sprockets. Excessive amounts of mud must be removed to permit the panels to fold back onto the dispenser. If the matting has been pushed deep into soft soil, it may have to be pulled free by a large vehicle prior to the retrieval operation. Panels that are damaged must be replaced or removed in order for the matting to properly fold onto the dispenser.