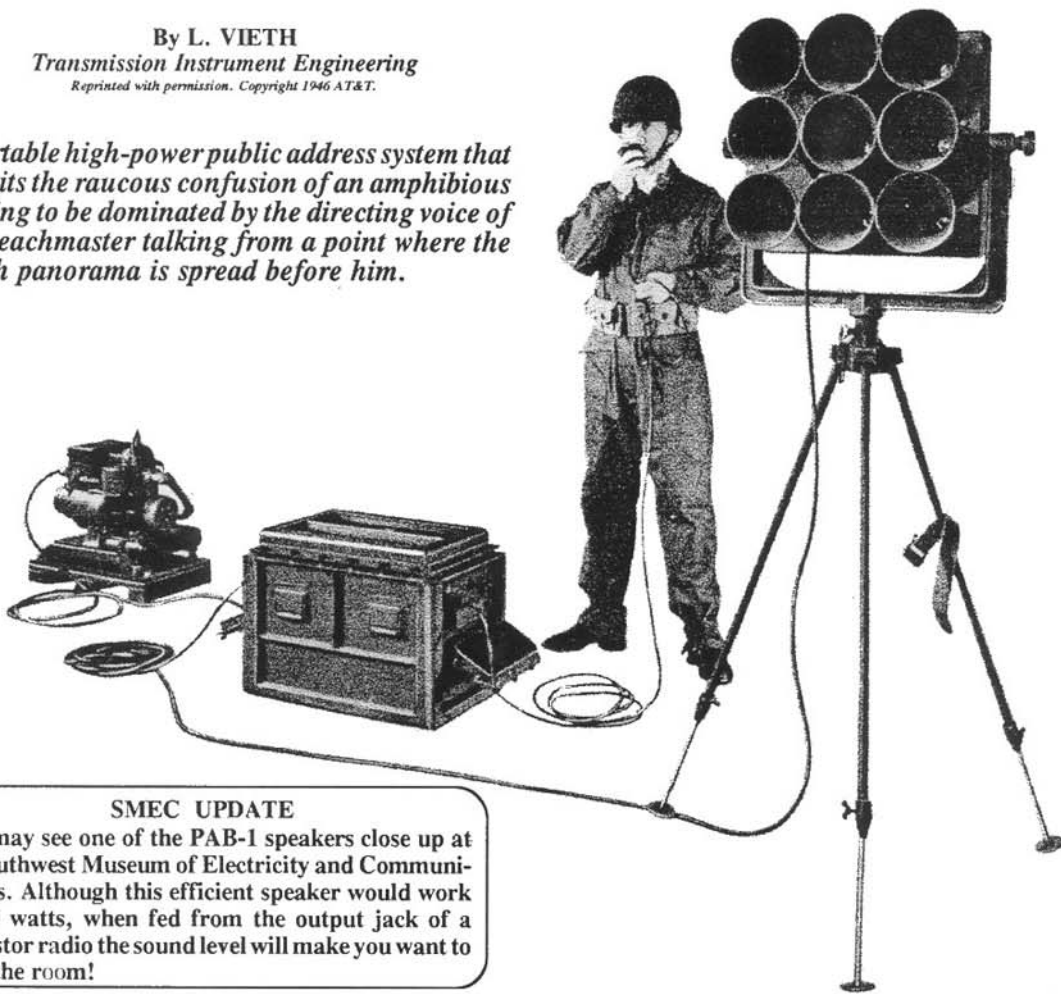


Beachmaster Announcing Equipment

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A portable high-power public address system that permits the raucous confusion of an amphibious landing to be dominated by the directing voice of the beachmaster talking from a point where the beach panorama is spread before him.



SMEC UPDATE

You may see one of the PAB-1 speakers close up at the Southwest Museum of Electricity and Communications. Although this efficient speaker would work at 250 watts, when fed from the output jack of a transistor radio the sound level will make you want to leave the room!

An invasion beachhead in its early phases appears to be in hopeless confusion. Piles of equipment mount higher as each boat unloads its cargo. Landing craft bearing more machines and men move toward the beach from all directions, while unloaded craft miraculously find their way back to a mother ship for more cargo.

As bulldozers clear paths for tanks and other vehicles pouring ashore in a seemingly endless stream, sounds of gunfire inland and airplanes overhead add to the confusion of mechanical noise and render the human voice puny and inaudible at all but the short distances.

Through all this turmoil and noise, strict control of the movements of troops and material must be maintained by the beachmaster, who acts as traffic cop and dispatcher—directs the incessant flow of foot and mechanized power. His indispensable assistant in the later phases of the war was the Western Electric Beachmaster Announcing System, technically known as the Navy PAB-1 Public Address Set. But for this equipment, the voice of authority would be muted by the noise from the very machines and men it would keep ill efficient order and deployment. Commands are instantly heard by all to whom they are directed, and there is no loss of time in relaying messages through a chain of command, which would be necessary with ordinary communication facilities.

Growing from experimental, small-scale use of loud-speaking equipment in early amphibious moves, the PAB-1 became available to the Navy early in 1944. It was used for the landing at Iwo Jima and played its part in most of the Pacific landings after that.

Thousands of these equipments were delivered to the Navy before the end of the war, and their applications have expanded far beyond original expectations. A close relative of the PAB-1 set is the Ship Mounted Landing Craft Control Announcing System (Navy IC Circuit 6 MC. See *BTL RECORD*, June, 1945, page 193.) whose major components are interchangeable with those of the former. Through the use of these two systems, direct two-way speech communication is possible between ships and shore.

Classed by the Navy as semi-portable equipment, the PAB-1 Public Address Set consists of a 250-watt loud-speaker, a 250-watt amplifier, a 1,500-watt gas engine driven alternator, and accessories and spare parts. The complete system is packaged as six individual units in rugged water-tight reinforced steel carrying cases with detachable covers. Each case is designed for its particular component and has ample buoyancy, so that if the occasion requires, it may be dumped overboard and floated ashore. The type of construction is evident from Figure 1, which shows the loud-speaker case with the cover removed. The loud-speaker itself is clamped to the bottom section of the case by corner brackets.

For the engine alternator, the four sides form part of the cover so that during operation the engine alternator is completely exposed. A different arrangement is provided for the amplifier because it is cooled by forced ventilation, and the cover must remain on the case. Two end doors are therefore provided, and these are opened during operation to expose the air intake and outlet ports and to give access to connections.