



**US Army Corps
of Engineers®**
Philadelphia District

CONGRESSIONAL FACT SHEET

U.S. Army Corps of Engineers Hopper Dredge McFARLAND

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CONGRESSIONAL INTEREST: Reps. Castle (DE-AL), Andrews (NJ-1), LoBiondo (NJ-2), Saxton (NJ-3), Brady (PA-1), Sestak (PA-7), Murphy (PA-8), Schwartz (PA-13)

ABOUT THE McFARLAND: One of four oceangoing hopper dredges owned and operated by the U.S. Army Corps of Engineers as its "minimum fleet" for national security, the *McFarland* is the only dredge in the world with triple capability for direct pumpout, bottom discharge and sidecasting or boom discharge.

Designed by the Corps' Marine Design Center, it was built in April 1967. Its name honors the late Arthur McFarland, a Corps of Engineers authority on dredging. The *McFarland* has a twofold mission: 1) Emergency and national defense dredging — as required and on short notice — anywhere in the world. 2) Planned dredging in the Delaware River and Bay and along the East and Gulf Coasts.

HOW IT WORKS: Dredging is accomplished by a dragarm on each side of the ship with a draghead at each end. As the ship navigates the channel with its dredging pumps engaged, the dragheads are lowered to the channel bottom. Like vacuum cleaners, they pull the dredged material into the ship's hoppers.

The *McFarland* can then discharge the material any of three ways:

1. As a conventional hopper dredge with bottom discharge into deep water.
2. As a sidecaster discharging dredged material aside the channel.
3. As a pipeline dredge pumping material into disposal areas or through a direct ship-to-shore pipeline to confined upland areas.

WHAT IT CAN DO: The *McFarland* offers a degree of performance and flexibility unmatched by any other dredge: It can handle a variety of materials including silt, sand, clay, shell and mixtures, thanks to these features:

- High-powered pumps, large single open-hopper design amidships, and hopper distribution system with retention capability for efficient handling of fine materials
- It can dredge year-round in any environment, working around the clock while on assignment.
- Its average removal rate in a typical year (140 days) is 1.5 to 2 million cubic yards — enough dredged material to fill the area of a football field 900 to 1,200 feet high.

ABOUT THE CREW: The *McFarland* is operated by a civilian crew of about 40. Many of the members, including all the deck and engine room officers, hold U.S. Coast Guard licenses. Certified as an oceangoing vessel, it undergoes regular annual safety inspections by the U.S. Coast Guard and the American Bureau of Shipping.