

Name:

Francis Carl Ducote, PE

Mechanical Engineer (LA #13805; Active)

1980-Present

Ducote Engineering Assoc., Inc.

- Engineered hull extension of dust-pan dredge Wallace McGeorge.
- Designed walking spud Idler Barge for hydraulic cutter dredge Butcher.
- Provided FEA analysis if notch for ITB hull (ABS classed vessels).
- Designed 250 and 100 Te crane pedestals for M/V Midnight Wrangler. (DNV class vessel.)
- Provided support engineering services for upgrade of cutter head dredge R.S.Weeks.(Structure FEA/ Intact stability/ Ventilation)
- Designed bridge lock for bascule bridges. (Machine design)
- Engineered conversion of 260 Ft. dive support vessel for class DP-2 (Lloyds Register) operation; added 4-point mooring system.
- Provide engineering support services in conversion of 170,000 BBL 502 Ft. asphalt barge (FEA analysis of floating structure and cargo tanks).
- Designed DP-2 class pipe lay barge (1500 Ton), Midnight Eagle.
- Engineered 535 ton floating A-frame derrick (conversion).
- Engineered floating platform for 150 ton ringer crane used on I-95 bridge construction project.
- Engineered mechanical systems on (3) 24" dredge floating boosters 3200 Hp each.
- Provided naval architecture support services for 500 ton and 1800 ton floating drydocks.
- Designed two towing A-Frames for side and aft end of USCG polar ice breaker, and a bow tower.
- Provided naval architecture support services in the development of 2000 Ton displacement cutter head dredge Meridian.
- Designed conversion for OSV (mid-body extension) for increased liquid-mud capacity. (M/V Blanche Candies..et..al..)
- Designed, engineered, inspected production of hydraulic cutter head dredges, boats and coring barge for air transport within the state of Alaska. Designed, engineered and supervised construction of large booster pumps. Designed components for hydraulic cutter head dredge automation.
- Designed a 30 in. Dredge ladder with a 2000 Hp underwater DC cutter drive. Designed and engineered two idler barges with 50 ton thrust capacity walking spuds.
- Designed and constructed 240' floating dock. (Two vessels)
- Designed and engineered a complete 2000 TPH mid-stream coal ship loader.
- Designed transporters for moving hull modules in shipyard.
- Designed ammunition elevator for CIWS on military vessel.
- Designed and constructed array handler system and side-scan sonar winches.
- Back-engineered and re-manufactured a Navy towing crane.
- Designed 11600 HP, 36", 3000 gross ton dustpan dredge classed for ocean service.
- Certified numerous floating derricks and engineered heavy lifts for contractors and vessel owners.
- Designed and engineered self-propelled mining dredge. Widened hull of DPD to improve stability; increased electrical power capacity.
- Have accepted assignments from attorneys as an expert witness and consultant in marine and mechanical engineering.

Projects require knowledge of marine classification society requirements (ABS, DNV, Lloyds Register) and USCG regulations.

- 1972-1980** **Kenner Marine & Machinery, Inc.** LaPlace, Louisiana
(Sec.-Treas./ Engineer)
- 1966-1972** **Pellerin Milnor Corporation, Inc.** Kenner, Louisiana
(Machine Designer)
- 1966-1970** **Linfield & Hunter, Inc.** New Orleans, Louisiana
(Contract Designer; part-time)
- 1964-1965** **Avondale Shipyards, Inc.** Avondale, Louisiana
(Mechanical Draftsman)