# LE CAISSON



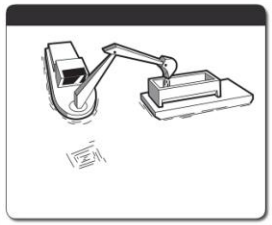



**"LE CAISSON"** IS A MOTORIZED FLOATING PLATFORM USED FOR SOIL DECONTAMINATION OPERATIONS IN AQUATIC ENVIRONMENTS. IT IS DESIGNED TO SUPPORT AN INDUSTRIAL CONTAINER IN ORDER TO COLLECT SOIL EXTRACTED FROM THE RIVER BED AND BRING IT TO THE SHORE. A TRAILER TRUCK WILL THEN PICK-UP THE FILLED CONTAINER AND TRANSPORT IT TO A DECONTAMINATION TREATMENT CENTER.

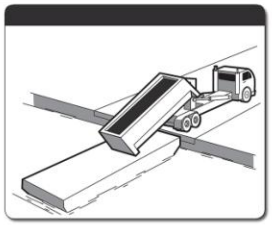
THIS PROJECT WAS DEVELOPED TO BE OPERATED WITH THE AMPHIBIOUS EXCAVATOR MANUFACTURED BY NORMROCK INDUSTRIES. THE COMPANY PROPOSES ENVIRONMENTALLY FRIENDLY SOLUTIONS WHERE CURRENT DECONTAMINATION PRACTICES USUALLY DESTROY THE RIVER SHORES IN ORDER TO ACCOMMODATE TRADITIONAL EXCAVATING HEAVY MACHINERY. THEIR FLOATING MACHINERY ALLOWS TO OPERATE WITHOUT DAMAGING THE AQUATIC ENVIRONMENT AND EASES THE ACCESS TO REMOTE AND HARD TO REACH PLACES.

"LE CAISSON" HAS FOUR HYDRAULIC PILLARS DISTRIBUTED TO EACH CORNER. THEY CAN BE ORIENTED VERTICALLY AND PLUNGED UNDERWATER TO ANCHOR AT THE BOTTOM OF THE LAKE/RIVER AND STABILIZE THE BOAT DURING STATIC OPERATIONS. THEY CAN ALSO HELP THE SHIP TO NAVIGATE THROUGH SWAMPS AND SHALLOW WATERS IN A CRAWLING MANEUVER. THE MULTI-HULL GEOMETRY WILL INCREASE ROLL STABILITY SPECIALLY NEEDED WHEN THE CONTAINER IS FILLED WITH A MIX OF MUD AND WATER.

THE COCKPIT IS ELEVATED AND SHIFTED TO THE SIDE IN ORDER TO GIVE A BETTER VISIBILITY OVER AND AROUND THE CONTAINER ON THE BRIDGE. THE CABIN ARCHITECTURE ENABLES THE ROOF TO BE LOWERED DURING THE SHIP'S TRANSPORT ON A TRAILER TRUCK AND MEET THE MAXIMUM LEGAL HEIGHT REQUIRED ON AMERICAN ROADS. IN ADDITION TO CONTAINER RELAY OPERATIONS, THE SHIP LAYOUT GIVES ENOUGH SPACE TO RUN A PIPELINE THROUGH THE WHOLE SHIP FOR INSTALLATION OR MAINTENANCES PURPOSES. ITS MULTI-TASK ABILITY, AQUATIC MOBILITY AND EASE OF TRANSPORTATION ON A TRAILER TRUCK GIVE "LE CAISSON" EFFICIENCY AND A SPEED OF INTERVENTION UNEQUALED IN THIS FIELD OF OPERATION.







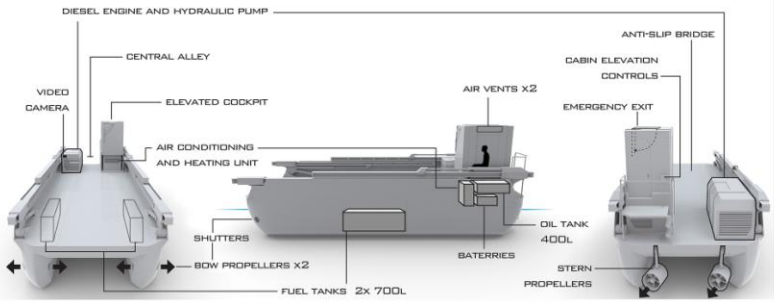
PASCAL GODIN
PASCALGOD@GMAIL.COM

Design d'équipements
de transport UQÀM

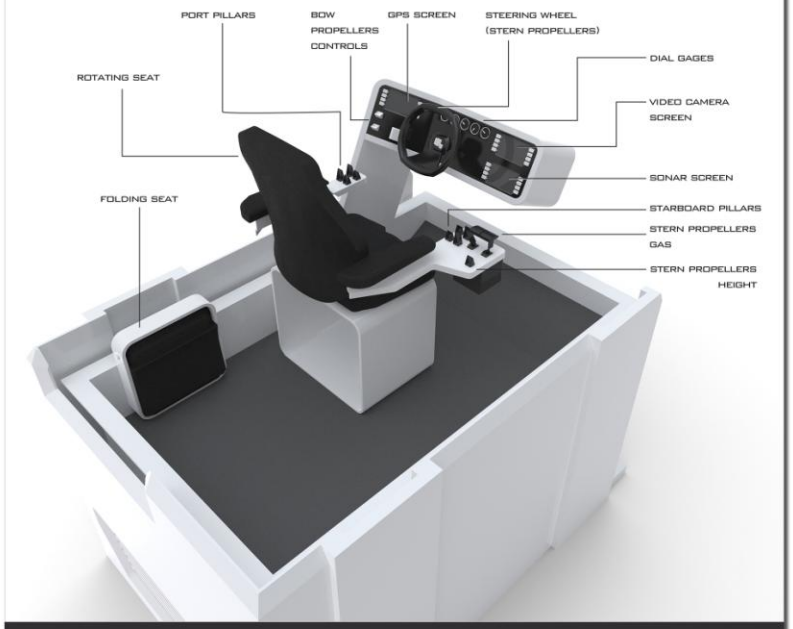
NORMROCK

# TECHNICAL DETAILS

## MAIN COMPONENTS




## COCKPIT LAYOUT




PASCAL GODIN
PASCALGOD@GMAIL.COM

Design d'équipements
de transport UQÀM

NORMROCK