## Cable ferry - M.J. LEE

This little car-ferry operates 15 hours per day, crossing the Willamette River near Canby, Oregon. Alan was project engineer for this ferry while employed at the engineering firm of Art Anderson Associates in Bremerton, Washington. The project started with a study of the river crossing, the existing shoreside infrastructure, and the existing 45-year old cable ferry. An economic study was performed, exploring a wide range of sizes, configurations, and propulsion schemes for a brand new ferryboat. Based upon comparison of the alternatives set forth in the economic analysis, the owner (Clackamas County, Oregon) formulated a set of design requirements. This evolved into a concept design, then a detailed contract design, and, in 1997, the new ferryboat, M.J. LEE, went into service. This unusual cable ferry is operated by a single person, except during peak summer days when a second person is added to the crew in order to speed up the collection of tolls. Propulsion is by a pair of Z-drives. But the most unusual feature of the ferry is the overhead electric trolley, from which the ferry draws its power, thus eliminating the need for internal combustion engines



