COCHRAN CONSULTING, INC.
GEMINI DIVE COMPUTER

FCC ID: LYP744556-04

Description of Equipment:

Tank Unit – The battery powered Tank Unit is a combination microprocessor and very low power transmitter that transmits data to a receiver (Wrist Unit) using PCM, 246 kHz magnetic (inductive) transmissions. The Tank Unit transmits data once each second while in an activated mode. The bulk of the Tank Unit circuitry is not powered (OFF) except when the Unit performs computations and transmits data (ON). A 4.9152 MHz oscillator operates only during the ON time. A 32.768 kHz oscillator runs all of the time while batteries are installed. There are three screw heads (Touch Contacts) on the outside of the case that provide RS-232 communications with a P.C. using the optional Analyst package, described below. These same Touch Contacts, a finger, and a coin can be used to manually program configurations and/or cause logbook data to be transmitted to the Wrist Unit for display. There is a short cable with a high-pressure transducer on it that connects to the regulator on the air/gas cylinder to provide pressure data to the microprocessor.

Wrist Unit – The battery operated Wrist Unit is a combination microprocessor and receiver. The Wrist Unit of the standard system displays received data only. The Wrist Unit that comes with the Enhanced (NITROX) system displays additional information, can act as a stand-alone dive computer, and can communicate with a P.C. using the optional Analyst package. The NITROX Wrist Unit is programmed and accessed in the same way as the Tank Unit. A 3.2 MHz oscillator operates only during the Wrist Unit's ON time. A 32.768 kHz oscillator operates all of the time that batteries are installed.

Analyst – The Analyst is an optional RS-232 cable/software package for the Tank Unit and the NITROX Wrist Unit for interfacing with the serial port of a P.C. The package allows the sport diver to retrieve extensive information about previous dives and to tailor the programming of the GEMINI for the next dive.