

#1 A description of the nature of the research project being conducted.□

The research involves monitoring the hydrodynamic properties of marine craft in various sea conditions, with the marine craft in various operational configurations, and travelling at various speeds and heading relative to the seas and winds. In order to monitor the marine craft we will have instrumentation within a mobile van. Test plans will be communicated to the marine craft prior to commencement of testing; but communications during testing is required between the marine craft and the mobile instrumentation van. VHF marine band radio is preferred for communications between the instrumentation van and the marine craft because these radios are common to marine craft, commercially available and inexpensive. The amount of communications required between the marine craft and instrumentation van test conductor is similar to the amount of communications required between two marine craft conducting a joint operation (average of one short sentence per minute).□□#2 A showing that the communications facilities requested are necessary for the research project involved.□ In order to communicate test progress, test safety and test conduct communications between the instrumentation van test conductor and marine craft captain is required.□□#3 A showing that existing communications facilities are inadequate.□ There are no existing communications facilities in the instrumentation van; nor in typical locations that the instrumentation would be located during testing. Although cell phones could be used, these would be unreliable in remote coastal regions and when the craft is operating at modest distances from the shoreline.