**A Commercial Off the Shelf (COTS) Packet Communications Subsystem for the Montana EaRth-Orbiting Pico-Explorer (MEROPE) CubeSat**

The Montana EaRth Orbiting Pico-Explorer (MEROPE) CubeSat is a Montana Space Grant Consortium CubeSat built by the Space Science and Engineering Laboratory (SSEL) at Montana State University[pg.474]. This satellite is built using mostly commercial off the shelf (COTS) components to reduce its cost and complexity. Due to the technical experience limitations of the MEROPE team, the communication subsystem design goal was to have a device that was as “plug-and-play” as possible, and communicate over common VHF uplink and individual UHF downlink bands.

Looking at the design specification of the MEROPE CubeSat, the authors focus primarily on the volume of the communications subsystem rather than the actual software program used to