Amateur radio operators seem to have the idea that working the ham radio sats is incredibly hard and expensive not to mention needing a lot of power. It is true that one can have a tower, the az/el rotor, the amazingly complex multi-mode vhf/uhf radio, but it is also true that most people could work the FM birds with nothing more than their handheld and a small beam. The classic commerical beam for this is the 146/437-10W made by Arrow antenna (http://www.arrowantennas.com) This beam combines 3 elements on 2m with 7 elements on 436mhz. This beam is used by many amateurs to work the FM birds AO-27 and SO-50. If you are on a budget, you can combine designs by Kent Britain, wa5vjb (http://www.clarc.org/Articles/uhf.htm) as has been done by Howard, g6lvb (http://www.g6lvb.com/HomebrewArrow.htm). You can even work the FM birds with your current mobile and a 1/4 wave on the car roof. You want signals to reach straight up, which a 1/4 wave will do and which your normal 5/8's will not do. Multi-mode HF combined with uhf/vhf radios are now very popular as well. It does not take much work at all to get on some of the low earth orbit (LEO) "linear mode" birds. A simple "clarc" combination beam mounted on a camera tripod combined with a multi-mode radio is all thats necessary. Jerry, k5oe (http://members.aol.com/k5oe) has a great article on how to convert a pair of cushcraft beams into a simple but effective tripod beam that can get you onto the LEO linear birds.

Its not rocket science, its just radio. And its a lot of fun. Come on up and join us.

Diane Bruce (amsat area coordinator)