

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
TO BOLDLY GO - SPACE STATION EDUCATION AND OUTREACH (5)

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THE ISS AS USEFUL PLATFORM FOR THE RADIO AMATEUR COMMUNITY AROUND THE
WORLD

Abstract

The ISS is a symbol of technology, science and telecommunication for the humanity. In the last years, due to the wide spread of Internet worldwide the Radio Amateur Community has constantly been decreasing. Many UHF stations are not anymore in use, but in case of catastrophes and if the internet connection is not available; the radio amateurs can play an important role as communication bridge. The ISS has a reduced UHF service. Adding more functionality and a installing adequate equipment it will be possible to implement a very attractive Radio Amateur Program. The ISS can support sending selected information to the ground in a way that it can also be used as communication satellite; it means sending useful information around the world. With support of the ISS is possible to keep the Radio Amateur Community alive. Perhaps, this kind of activities will arouse interest within students and academia consequently the Radio Amateur Community will growth again in a short time. Training for interested people will be organised and the participants will get technical support to build their own stations. The way to obtain a Radio Amateur license will more easily. Open source software and free documentation will also be available. All these with a minimum support of the ISS crew, because the planned hardware shall work automatically and the Radio Amateur service will be available 24 hours daily. The transfer of data, like audio, video, messages, etc is feasible using the radio amateur frequencies, i.e. in UHF and VHF bands. The S-band offers even a faster data rate and with the support of the ISS, the usage of S-band becomes a next step for advanced Radio Amateurs. It is possible to arrange an S-band Radio Amateur Program for expert users. In fact all this will not only help the radio amateur users but also will support educational institutions like schools and universities. Merging the proposed program with the ISS capabilities a very important field of popular science will arise bringing space education to a lot of people and training people, able to help in case of emergencies.