Overview:

Excel used for general user input and feedback output. The Excel interface will also interact with an Access database.

An Access database is used for data storage, basic filtering and data manipulation. An SQL interface to the database is used for all communications with the database.

Excel User Interface:

Metadata is entered at the top of the sheet before logging begins or when any of the information changes (i.e. operator). The user must enter the call sign and exchange on the log sheet. The metadata plus real time data (like time/date) will be automatically added by Excel to the log. When the user is done entering the contact information and presses the “Add Contact” button the information is sent to the database, a quarry is then send to the database to check for contact duplication. If the contact is a duplicate a feedback cell changes color and reports the duplicate entry. No user action is required to clear the feedback.

Access Tables:

The following tables are included in the database

Metadata – Contains the seldom changing information like operator. A key is used to link the metadata to each record in other tables.

Contacts – Contains the required exchange information.

Parks – Contains all park information to include ID, Lat/Long. To help with registered call signs the operators from the OSPATA list should be included.