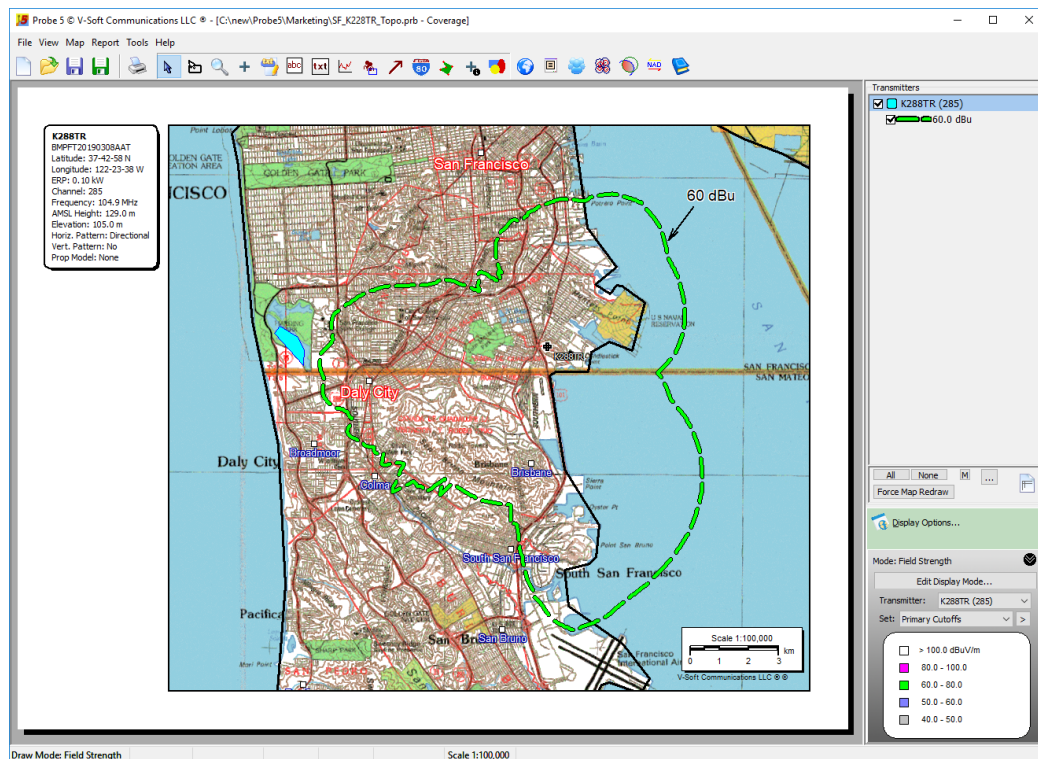


## Probe 5™ Features & Enhancements

Some said that it could not be done; nothing can beat Probe 4™ for power and flexibility. Yet, V-Soft Communications has exceeded expectations by developing something better, Probe 5™. Here are some of the highlights of the program's new features:

**Under the hood it's now 64 Bit** – Probe 5 has been updated to a full 64-bit application. This means it can take advantage of all of your system's memory and computing resources.

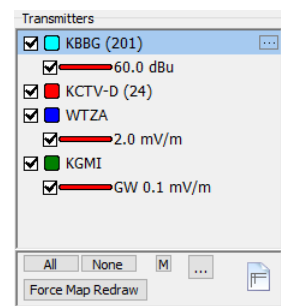
**Raster Map Data Layer** - The program is now able to use raster map data as a base layer of the map. This consists of digitized topographic maps and aerial imagery. This feature uses pre-indexed data files to merge different tiled maps together automatically. The program includes 1:100k and 1:250k USGS Digital Raster Graphic (DRG) data. Also available is 1:24k high resolution US Topo data and orthoimagery (photographs) and the 1:50k Canadian Toporama and 1:250k CanMatrix data.



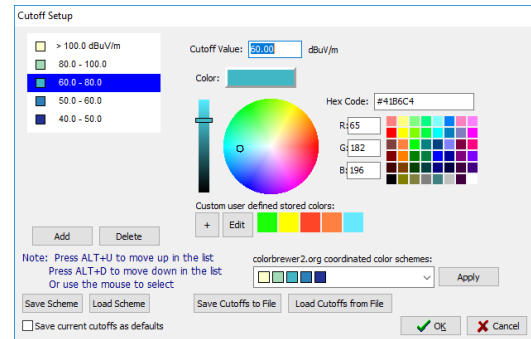
**New Transmitter List Interface** - The transmitter list on the main window has been completely revamped. It allows users to see/edit/add contours and do all the things that were on the contour list window directly from the main program window.

**ESRI Shapefile Support** - The program can now load .SHP files for import layers and export contours to the .SHP file format.

**PDF Export** - Export maps directly to PDF files from within the program (via "File" → "Render to PDF...").



**Field Strength Cutoff Editor** – The new streamlined cutoff editor greatly reduces the number of clicks needed to set up your signal cutoff levels. The color selection interface is built right into the cutoff window. This new editor also includes a feature that will assign a coordinated color palette to your defined field strength levels.



**Map Move Tool** – Need to make a small adjustment to the map center to make your map look just right? This new tool makes it easy. Select the tool and just drag your mouse on the map to move it around.

**Distance to Contour Window** – A new table style window showing the distance to contour for all contours defined for a selected station has been added. It also shows the ERP and HAAT for each azimuth. This table can be printed, converted to text, and exported to a comma separated value (.CSV) file.

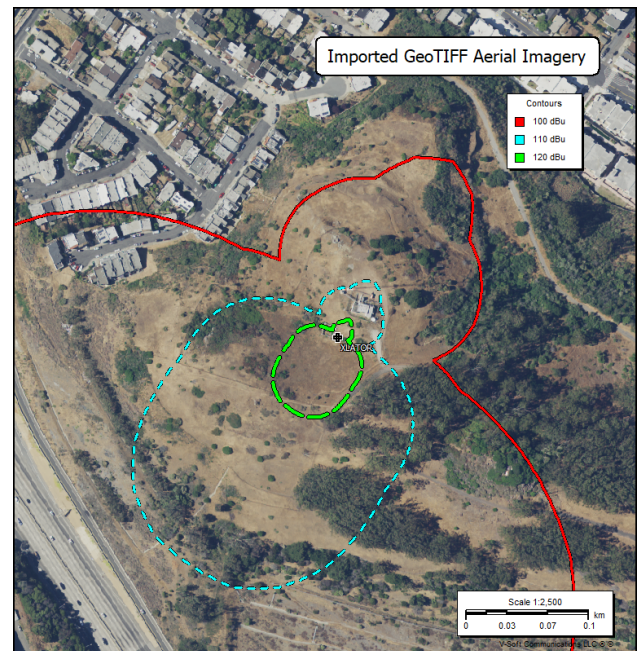
| Azi | ERP     | HAAT  | 120.0 dBu | 100.0 dBu | 110.0 dBu |
|-----|---------|-------|-----------|-----------|-----------|
| 0   | 0.00327 | 122.8 | 0.0127    | 0.1268    | 0.0401    |
| 1   | 0.00331 | 123.6 | 0.0128    | 0.1275    | 0.0403    |
| 2   | 0.00335 | 124.2 | 0.0128    | 0.1283    | 0.0406    |
| 3   | 0.00339 | 126   | 0.0129    | 0.1291    | 0.0408    |
| 4   | 0.00341 | 126.7 | 0.0129    | 0.1295    | 0.0409    |
| 5   | 0.00345 | 127.1 | 0.013     | 0.1299    | 0.0411    |
| 6   | 0.00345 | 127.5 | 0.013     | 0.1303    | 0.0412    |
| 7   | 0.00347 | 127.6 | 0.0131    | 0.1308    | 0.0413    |
| 8   | 0.0035  | 127.8 | 0.0131    | 0.1312    | 0.0415    |
| 9   | 0.00352 | 127.9 | 0.0132    | 0.1316    | 0.0416    |
| 10  | 0.00354 | 127.8 | 0.0132    | 0.132     | 0.0417    |
| 11  | 0.00356 | 127.1 | 0.0132    | 0.1324    | 0.0419    |
| 12  | 0.00359 | 126.3 | 0.0133    | 0.1329    | 0.042     |
| 13  | 0.00361 | 126.2 | 0.0133    | 0.1333    | 0.0421    |
| 14  | 0.00375 | 125.4 | 0.0136    | 0.1359    | 0.043     |
| 15  | 0.0039  | 126.8 | 0.0138    | 0.1385    | 0.0438    |
| 16  | 0.00404 | 128.2 | 0.0141    | 0.1411    | 0.0446    |
| 17  | 0.00419 | 128.6 | 0.0144    | 0.1437    | 0.0454    |
| 18  | 0.00435 | 128.6 | 0.0146    | 0.1463    | 0.0462    |
| 19  | 0.0045  | 128.6 | 0.0149    | 0.1488    | 0.0471    |
| 20  | 0.00466 | 128.7 | 0.0151    | 0.1514    | 0.0479    |
| 21  | 0.00482 | 128.6 | 0.0154    | 0.154     | 0.0487    |

**Additional Map Interactivity** – Placing the mouse cursor over a contour line shown on the map will now indicate the contour and station associated with it. Now you can just click on a contour plotted the map to go directly to the contour settings editor.

**Quick Study** – This new feature allows the user to bypass the new study wizard and create a basic coverage study using the programs default settings entering only a station's callsign.

**KMZ Export** – Google Earth file export has been enhanced with the ability to generate a “KMZ” file. This allows export data to be generated and contained in a single file (previous .KML export required multiple files).

**GeoTIFF File Import** – Probe 5 can import individual GeoTIFF format files to plot on the map. These files contain geo-referenced raster data that can be obtained from third parties. Using data downloaded for free from the USGS Earth Explorer website you can generate extremely detailed plots of site locations and other areas. The example image to the right shows a 1:2,500 scale map and the 100, 110, and 120 dBu FCC contours for an FM translator.



**OHLOSS Propagation Model** – Probe 5 includes our implementation of the National Spectrum Managers Association (NSMA) OHLOSS propagation model. It is a complete terrain based point-to-point model. This model can be used for FM and TV frequencies and is commonly used for microwave link analysis.

**Terrain Profile Preview** – When using the profile tool a sample display of the profile is shown as you move the mouse around the map.