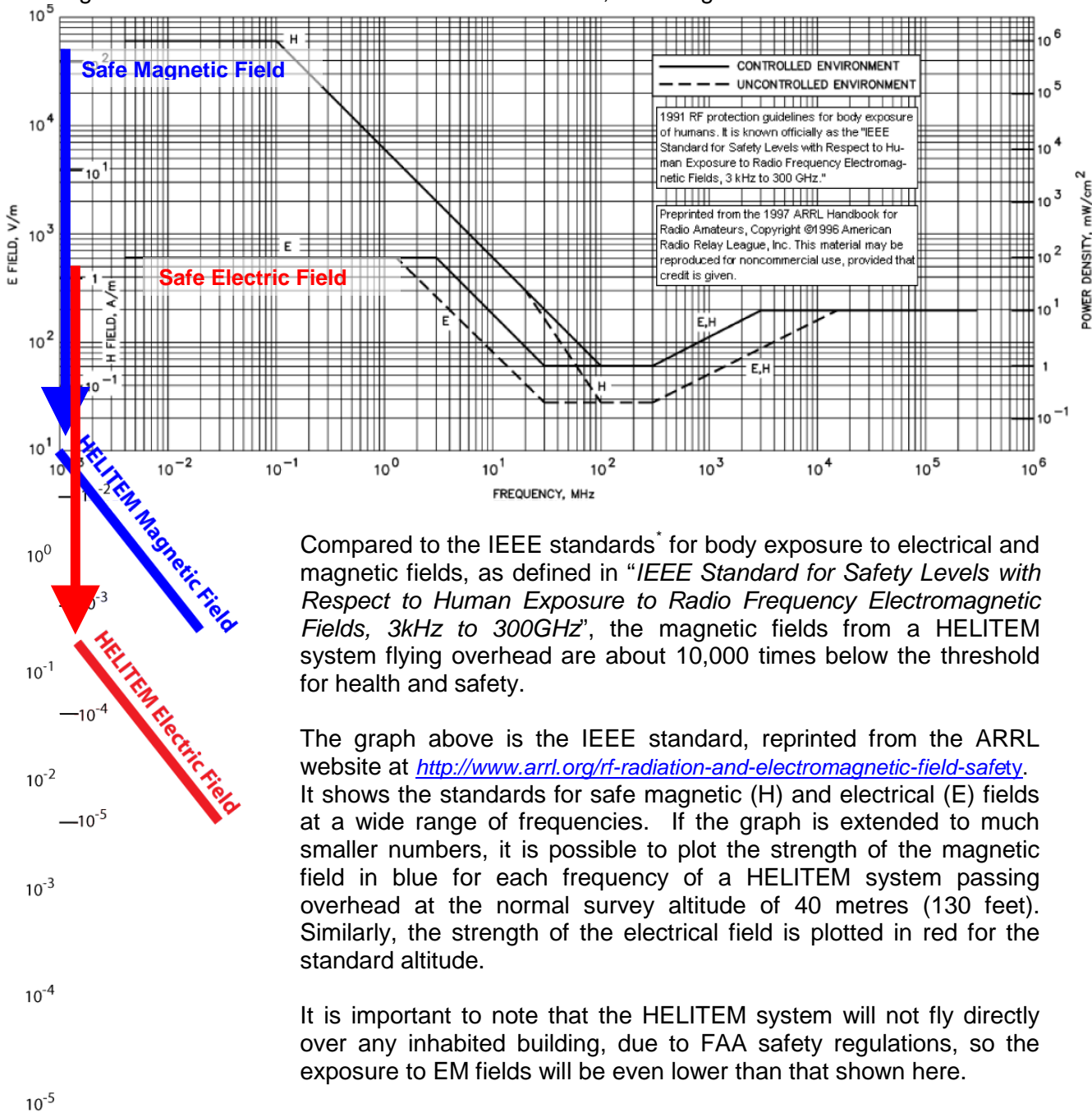




**ARE HELITEM ELECTROMAGNETIC FIELDS DANGEROUS TO BYSTANDERS?**

SHORT ANSWER: **No.**

In fact, the magnetic field from our system to a bystander on the ground below is about the same as the magnetic field beside a normal kitchen electric stove, set to high.



Compared to the IEEE standards\* for body exposure to electrical and magnetic fields, as defined in "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300GHz", the magnetic fields from a HELITEM system flying overhead are about 10,000 times below the threshold for health and safety.

The graph above is the IEEE standard, reprinted from the ARRL website at <http://www.arrl.org/rf-radiation-and-electromagnetic-field-safety>. It shows the standards for safe magnetic (H) and electrical (E) fields at a wide range of frequencies. If the graph is extended to much smaller numbers, it is possible to plot the strength of the magnetic field in blue for each frequency of a HELITEM system passing overhead at the normal survey altitude of 40 metres (130 feet). Similarly, the strength of the electrical field is plotted in red for the standard altitude.

It is important to note that the HELITEM system will not fly directly over any inhabited building, due to FAA safety regulations, so the exposure to EM fields will be even lower than that shown here.

\* Health Canada Guidelines are effectively the same as the IEEE standard.