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### Child Locator

The implementation part of this project is not such a simple matter. This is assuming the Federal Communication Commission (FCC) has allocated a specific Very High Frequency (VHF) and will allow us to transmit at a certain Peak Envelope Power output (PEP) or Wattage. Once we have the blessing of the FCC we will then use the frequency and create a crystal transmitter/receiver. Once we have designed crystal radio we will ship the plans to a radio manufacture to have the radios built. We will then contact the United States Geologic Association (USGA) and acquire a web-based map of the United States. We will then create the code to place the incoming marker from the child locator onto the map. Once the web page is created and tested for proper coding we will create the front end of the website along with a log in process. Once the web page has been fully created and tested we will procure a web domain name and buy space on a web server through a company called Rack Space who will house our website and will handle all of the traffic.

The second part of making the system to work is a live test site. We will approach the owner of a tower and pay to place our antenna and transmitter on his tower. We predict we will only have a small to nominal cost in order to place our antennas onto towers because of the nature of the project. Once we have a test site up and working we will attach the radio transmitter to a server. The server will be attached to the Internet through a local Internet Service Provider (ISP) in the area with a 56K modem. The software on the server to communicate with the radio will be coded and tested. This is a simple piece of code because all the server will do is send the Global Positioning System (GPS) Identification Number to the

radio through a communication port and then receive the (GPS) Identification Number and the location information from the radio. The server will then send this information over the Internet to the main server who will display the information onto the website. Once the testing is completed and the product is fine tuned for size and any other unknown problem the next step can take place.

The installation of the servers and the radio transmitters/receivers onto radio towers will all depend on the FCC and the amount of PEP we are allowed to use. The higher the PEP the less radios and servers we have to install to cover an area. The lower the PEP the more radios and servers we need to install. It is in our best interest to make our case in front of the FCC a strong one and to convince them the need for a high level PEP allowance. The starting cost of the project is directly related the level of PEP and the frequency the FCC gives the project. The only documentation we will need for the project is a frequently Asked Questions (FAQ) we will have placed onto the website along with the grant letter from the FCC allowing us to use a specific frequency and PEP.

The next step in the project is the training of the users. This part of the project is where we as a project learn if the website is simple or the website is too confusing for the public to understand and use. This is also where we as a project will do most of the work. The project will have to go to malls, stores, conventions, and state capitals to meet and tell people about our project and the product. We will have to show people the working model and persuade the public it is for the good of the children and how we are not going to store any information about the children who are going to have the GPS Child Locator in their clothing. We will have to show the people the data flow diagram (figure 1) and explain how the system works. The project will go to the State Capitals and the United States Government and show the product to the

politicians. With the help of the politicians we will be able to convince the public this is not an act of Big Brother, but a product to find lost children.

The last step for this project is the support. The support part is a simple part. This will include a call center of 100 employs to answer calls from parents. The other part of the support team is 100 employs who are familiar with radios and servers. These 100 employees well be broken into teams of two and each team will have a States to overlook and they will be responsible for the servers and radios in there area.

The project team knows the hardest and most complex part of the project will be in convincing the public the product is not a Big Brother product but a tool to help parents find their lost child. The project team does for see lawsuits from the ACLU and others. Because of the nature of the project we do not for see problems with the courts but we do foresee problem with having to pay for lawyers to fight the few lawsuits we do see coming down the pipe line at us because of the nature of the project and the capability of our product to be used for many different applications other then the finding of lost children. As a project team, we have evaluated the benefits and the harm our product can cause. It is our belief the product is worth the risk of massif lawsuits by anyone. If our product saves just one child it will be worth all the lawsuits in the world.

