

Protecting People, Places, and Property,



NeighborNet



A service of participating municipalities and,





Over the years.....

we have learned that there are many different needs in developing improved community safety and reduction of property loss. No longer can we depend solely on traditional methods to address the increasing needs of our communities. It is time to focus on the TOTAL needs of our communities and to develop more efficient ways to respond in times of emergency.

Historically, we have addressed specific needs such as courthouse security after the Atlanta courtroom shooting in 2005, school safety after Sandy Hook, and most recently; municipal building safety after a narrowly avoided life threatening event in Weaver, AL. We developed specialized equipment for the cities of Cullman and Greenville to help apprehend burglars, and emergency call buttons for robbery reporting by merchants in Evergreen, AL. Unfortunately, we never addressed the total needs of a community until we sat down with the Mayor of a small Alabama city who explained the REAL community needs.

We were familiar with the inability of traditional alarm systems and 911 to quickly get information to first responders when dealing with assault, burglary, and robbery. To address these needs, we developed two systems to provide direct reporting to first responders which cut typical response times from ten minutes or more to two minutes or less. See <http://falconcommunityservices.com> for more information.

As we learned more about the total community needs, we partnered with an Atlanta company that had developed an incident command and reporting system known as *SparkGap*. This technology provides the capability of meeting total community needs right down to individual households as well as addressing disaster response to extraordinary events (i.e. earthquakes, hurricanes, tornados, chemical spills, mass transit accidents, etc.).

The *SparkGap* technology provides the capability to instantly initiate calls for assistance using an affordable beeper type device with messages being instantly delivered to similar devices and/or text messages to cell phones and/or PC's. These user devices, known as *Hornet* responders can either send or receive emergency calls for assistance. Other devices are available for fixed monitoring and device activated reporting. We'll be telling you more about these devices and how they are used on the following pages as we introduce you to the *NeighborNet* program.

Burch H. Falkner
At your service!

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NeighborNet Protects People, Places, and Property!



NeighborNet - How It Works!

NeighborNet is a dedicated wireless network designed to address the needs of a single institution, such as a large hospital (Johns Hopkins for example), a wide area emergency network (Such as Monroe County (Rochester) NY), a small city, a large city, or a neighborhood within a large city (such as Woodlawn, a part of the City of Birmingham, AL).

Technically, *NeighborNet* uses a technology known as *SparkGap*. This is a hybrid system employing many of the features associated with public safety 2-way radio, digital paging in an updated 2-way configuration, and cellular data service. Before proceeding with system details, let us just say for now that calls for assistance can be initiated in either one of two ways - by humans or automatically by devices (such as a burglar alarm). These calls for assistance can be received by the same device used for emergency calling or on Cell phones, PC's, Smart phones, or Tablets.



This is the user device, known as a *Hornet*. We'll tell you more about how that name came to be shortly. It looks very similar to the one-way digital pagers used in the 90's. The big difference is that these devices (weighing less than 3 ounces) have 2-way messaging capability! They can be used as emergency calling devices, emergency call receiving devices, or as pocket carried incident command coordinators.



We call this the *Harkener*. Similar in size to the *Hornet*, the main difference is in the way it activates a call for assistance. The *Hornet* relies on a person pushing a button. The *Harkener* is activated by an electronic switch closure of an associated device such as a home or business security alarm system, activated by a motion sensor, smoke detector or associated wireless call buttons.

As you will note, the *Harkener* has no display screen or control buttons since there is no human associated with activation or monitoring. However, it is also a 2-way device. The difference being that a *Harkener* can be activated by an associated device (instead of a person). Activation of the Sentry initiates the sending of a pre-recorded text message that can be sent to a *Hornet*, to a Cell phone, PC, Smart phone or Tablet. In addition, the *Harkener* can activate another co-located device using an output connection for wired control of other devices.



Protecting People (and maybe even their pets) is our #1 Goal!

There are no safe places - Not the bank, the convenience store, the courthouse, where you pay your utility bill, where you go to church, where your children go to school, or even in your own home.

Depending on your age, where you live, and with whom; you are potentially in peril by those who would do you harm, assault you, rob you, or even kill you. The reason is that assaulters, robbers, and rapists are everywhere. Even family members can do you and your family great harm.

The fact is the courts are overloaded, law enforcement is overwhelmed, and the jails are full. This is not a new problem. In the past, citizens were involved. Today, most people want government to take care of everything. The truth is that government can't take care of everything. This is one of the reasons that our forefathers wrote in Constitutional rights for a citizen militia.

An armed militia is not acceptable to a great number of our citizens (with some very good reasons). However, a unified and informed community working together can be a highly effective crime deterrent and enhanced citizen safety. Local groups, working together with government and support services can be very effective in crime control as well as providing a planned response to natural (and unnatural) disasters. That is why we developed *NeighborNet*.

Our fundamental goal is to provide a simple and effective means of summoning help quickly when need. Let me provide a few simple examples.



Meet Bobby! Looks harmless enough doesn't he? And what place could be safer than a small town City Hall with the Police Department in the same building? With all that being said, Bobby showed up recently at the Weaver, AL City Hall with a badge (fake of course), handcuffs, and a pistol, demanding to see the Mayor (who fortunately was not in). The girls in the office had no way to quickly and covertly summon help. They do now!

Fortunately, no one was injured and Bobby was arrested. People under protective orders, municipal offices, utility offices (they frequently have a lot of cash on hand), county revenue offices (where citizens often lose their temper), courtrooms, churches, banks, credit unions, convenience stores - anybody, anywhere dealing with people and/or cash are potentially in harms way. The solution requires people who can respond quickly and a means to summon them.



Ever disturbed a hornets nest? If so, you likely made a vow to try and never do it again. If not, be forewarned. There IS a price to pay! Our *Hornet* responder works in the same way. One *Hornet* gives the alarm. The others come to take care of the issue. In other words, there is power in numbers. I'll give you an example.

In my neighborhood, there are a large number of live alone people, many of them well over 80 years old. There is no family nearby. Most do not have one of those "I'm down and can't get up buttons", and if one of them goes down, it could be a day or more before anyone knows they are in distress. With our *Hornet*, they can notify neighbors, family members, church members, or other responsive parties in less than five seconds, just by pushing a button. There are no delays in dialing and connecting by telephone to an alarm monitoring service, no delays in getting the call to 911, and no monthly fees - just a one time charge of \$300, assuming the local municipality has installed the necessary support infrastructure (we call it the *Hive*). We'll be telling you more about the *Hive* later.

When a distress button is pressed, others in the neighborhood, as well as local first responders (EMS, Fire, Law as applicable) equipped with *Hornet* responders will receive an emergency notification message indicating the name, address, and phone number of the person needing aid. The message can also be sent to cell phones and PC's as well as directly to municipal offices and/or dispatch centers.

The concept of detecting, reporting, and responding is greatly improved over traditional methods involving commercial alarm services, even 911. Upon activation, neighbors can *swarm* to the aid of a neighbor in need. In my own neighborhood, an elderly neighbor recently came home to find a stranger in her home. He had come in through a window and claimed he was only looking for work (along with his companion outside). Fortunately, this gal was a pretty crusty old bird and ordered him out of the house. He left, along with his companion. It could have gone quite differently. In either case, a *Hornet* could have called in a *swarm* of help in seconds!

Some of our neighbors already have commercial security systems with personal wireless call buttons and want to keep them. These folks can add a *Harkener* unit which can be directly connected to their existing alarm panel. When a call button or sensor is activated, notification to the alarm service dispatch center will be processed in the normal manner. While all that is going on, local responders will be notified by *Hornets* or via text message, and in action within seconds.

Hornets and *Harkener* units are equally well suited for serving the merchant community, churches, schools, municipal offices, utility offices and other places where people may need help in a hurry. The network that makes all this possible is called the *Hive*. We'll be talking more about the *Hive* and how it works in providing a *swarm* of help shortly. For now, the main point is that people CAN get help in a hurry, at reasonable cost, using each other as the resource that makes it all possible. We will be giving some specific examples as we continue our introduction to *NeighborNet*.



Protecting Places, and the People in them!

Places where things of value are available are high on the risk list, both for burglars and robbers. These include any location with cash, drugs, guns or high value property. The places include banks, convenience stores, and pharmacies as primary targets with cash advance stores, credit unions, pawn shops, retail stores of all types, and utility payment offices.

During the day, there is the risk of both personal assault and robbery. In the evening, the smash and run burglars often do as much property damage as the value of the goods stolen.

Unfortunately, the capture rate on these bad guys is not so good. The reason being that the average law enforcement response time in most cities is around ten minutes. In rural and suburban communities, the response time ranges from forty five minutes to several hours, even when a commercial alarm is activated. There is simply too much time involved in the response process. The bad guys know this. The average time, in and out for armed robbery or burglary is four minutes or less.

In many cases they send a scout to survey the premises to determine if an alarm system is used and if so, to purposely set it off to test the response time of law enforcement. Generally the burglary or robbery will occur within the next twenty four hours. The scout is generally an innocent appearing young female. An interesting article on this subject is available at <http://info4u.us/scout.pdf>.

Most high risk retail locations already have a security system with panic buttons in the event of robbery and motion sensors for detecting and reporting burglary. They think they are protected. Nothing could be farther from the truth. That's the bad news. We have a solution

With our *Hornet* personal emergency call button, a person in trouble can alert other merchants in the area and/or local law enforcement in less than five seconds, just by pushing a button. There are no delays in dialing and connecting by telephone to an alarm monitoring service, no delays in getting the call to 911, and no monthly fees.

The price of a *Hornet* is just \$300, assuming the local municipality has installed the necessary support infrastructure. A companion product, known as the *Harkener*, can be connected to existing alarm panels to instantly alert other local area business managers equipped with *Hornet* responders, or by a text message to a cell phone or PC. Notification can also be made to the business owner/manager and/or law enforcement. Note: An agreement with local law enforcement is required along with the infrastructure (known as the *Hive*). The price of the *Harkener* is just \$475. The *Harkener* can be connected to an existing alarm panel or to your own sensors to eliminate all monthly fees.



Protecting Property and Contents

Protection of communal property is a part of the NeighborNet Program. Our churches, community centers, day care centers, hospitals, libraries, manufacturing facilities, medical clinics, nursing homes, schools, storage facilities, theaters, and warehouses are all at high risk for burglary, fire, and vandalism.

Churches and schools, in particular, are at the top of the list for arsonists, thieves, and vandals. Large air conditioning units, in the back of unattended buildings are prime targets for copper thieves. The tragedy is that copper thieves cause much more damage than the value of the copper. It is not uncommon for them to destroy a twenty thousand dollar air conditioning unit for a few hundred dollars worth of copper. Some have been burnt to charred unidentifiable remains when attempting to take copper from electrical utility sub stations.

No unattended property is safe from copper thieves - homes under construction or restoration, broadcast towers, storage areas - anywhere they can find copper. We offer a simple and affordable solution for no more than the cost of the average insurance deductible. Special wireless sensors are available for use with our *Harkener* reporting system to detect and report tampering with air conditioners, unauthorized building entry, and fire.

Within the past month, two local area churches have been heavily damaged by fire - one by arson, the other, most likely by a lightning strike (most church fires are started by lightning). If there had been a system installed to detect and report the problem the loss could have been minimized IF there was a way to notify responders who could quickly take action. That's the difference between the *NeighborNet* system and commercial alarm systems.

Church leaders, living in close proximity to the sanctuary, equipped with Hornet responders can be immediately notified when a sensor is activated. A quicker response pays incalculable returns. Once on the scene, they can quickly determine the appropriate action required - often with no further assistance required. The same is true for business owners, school administrators, and others responsible for high value unoccupied property.

For use in rural areas or in municipal areas not served by *NeighborNet* infrastructure, we offer alternate standalone systems - *HelpAlert* for small facilities and *ActionAlert* for larger buildings. All of these systems are capable of detection and notification to local area building owners, custodians, or managers. Additional information is available at <http://falconcommunityservices.com>. None of our systems have monthly charges or long term contracts. ALL can provide better protection for property and contents at minimal cost. For a demonstration or additional information, just give us a call at 205.854.2611.



Disaster Mitigation and Interoperability

So far, we have discussed protecting people, the places they might be, and communal property. In some cases we may combine technologies to achieve a specific objective such as providing emergency notification capabilities in school classrooms. Additional information is available at <http://info4u.us/schools.pdf>. We have addressed needs and solutions for a number of different focus groups. There is another - TOTAL community safety in times of mass disaster.

Most municipal, county, and state agencies have a Disaster Mitigation Plan to prepare, respond, and administer unexpected catastrophic events such as chemical spills, major transportation accidents (auto, air, and rail) and acts of nature (earthquakes, hurricanes, snow storms, tornados, etc.). In Alabama, the most severe of these events are hurricanes and tornados, in particular, the area known as Tornado Alley extending across north Alabama. More recently, we have become increasingly aware of the possibility for acts of terror as they might apply to disruption of power and water.

FEMA has long recognized the need for interoperable communications. They have spent a lot of money toward meeting a goal of providing coordinated communications between traditional first responders (EMS, Fire, and Law Enforcement). Very little attention has been given to the need to include support and volunteer services. In times of need, transportation and utilities become key players along with the traditional first responders. Churches, Hospitals, and Schools are needed to provide food, shelter, and medical aid. School buses and public transportation vehicles can be used to quickly move people to safe areas and shelters. Electricians, plumbers, tree cutters, and wrecker services are needed as well as volunteer workers.

Most importantly, there needs to be coordination and management of the various support groups so that they can work together as a team. Cell phone service can be expected to seriously degrade in such times. Public safety communications systems are ineffective and expensive. A single radio on the Birmingham or Jefferson County radio system can cost several thousand dollars and the existing infrastructure is incapable of handling abnormally high traffic. Smaller communities use a variety of different technology, none of which is compatible with anything other than a single brand of equipment.

The infrastructure of *NeighborNet* can handle thousands of users with ease. The system can be built to serve one neighborhood at a time and expand as needs require and funds are available. The user devices, costing only \$300 each can be deployed as needed or purchased and used for daily activities while being ready for use in times of emergency. We'll be glad to provide additional information on request. Just drop us an email to ServinU@falcondirect.com.



System Pricing Guide

We have previously discussed the personal user devices used with the *NeighborNet* system. The *Hornet* (shown above at the top left) is capable of initiating or receiving a call for aid. The cost is \$300 each.

The *Harkener*, shown in the center above, is a fixed alarm reporting device. This unit can be used in conjunction with an existing alarm system, or as a standalone device used in association with a variety of sensor reporting devices. The cost of the *Harkener* is \$475. Normally, we assume a cost of \$125 to pay the alarm company to connect it to the alarm panel. This can vary depending on the company used to provide security services.

The *Harkener* is capable of wired connection of up to four input devices as well as up to four output connections. If used as a standalone device (no security system associated), you have the choice of using either wired or wireless sensors. Wired sensors - door, motion, personal smoke or tamper will average \$75 each plus installation by a licensed security systems contractor. Wireless sensors will average around \$150 each with no installation cost - the user can do it themselves. Messages from the *Harkener* are sent to associated *Hornet* units or optionally to cell phones or even private radio systems at optional cost.

The support infrastructure used with the *Hornet* and *Harkener* units is commonly known as the *Hive*. Obviously, there are more technical descriptions of the equipment used as a part of the infrastructure which can be discussed later. For now, it is important only to know what each component does, what it costs, and a simple name associated with its function.

For estimating purposes, we can assume a single *Hive* has a cost of around \$125,000 assuming availability of a suitable antenna support structure in the center of the proposed coverage area and a designated control point in that area. For estimating purposes, we assume the average coverage area to be around three miles extending in all directions from a centralized antenna location. The antenna location should be as high as possible with stable power and a weather protected enclosure. For most municipalities, this would mean a water tank with the equipment placed in an existing building or in a small enclosure constructed on the premises. Electrical power is minimal (about the equivalent of a 100 watt light bulb), so in most cases connection could be made to existing AC service.

Additional *Hives* could be added later and optionally connected to each other to provide wide area multi-zone coverage. A single *Hive* could cover the typical small city or a neighborhood in a larger city. Additional connected *Hives* can be added for \$100,000 each. We welcome the opportunity to provide a demonstration at your convenience, to provide detailed coverage projections from a designated site, to arrange long term payment plans, and assistance in obtaining federal grant funds. Our job is Serving YOU!



We Help Protect People, Places, and Property!

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On the web at <http://falconcommunityservices.com>