Where are you right now?

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Globetrotting executives have extremely demanding and highly fluid schedules. Determining where they are at any point in time is a huge challenge for those who need to stay connected with such executives to ensure they are informed, safe and secure.

Mobile phones, PDAs and laptops enable these executives to move at will and still stay in touch. However, they require keying in information in order to communicate their location back to someone who can respond to an emergency or incident. In many cases, a traveling executive may not even know where they are with sufficient precision to tell anyone even if they were in a position to do so.

The global positioning system (GPS) developed by the military has been commercially available and in use for a considerable amount of time, especially by the trucking industry. Over the past two decades the technology has become ever more useful and ubiquitous. Cities track their emergency vehicles for dispatching; companies track trucks to optimize loads and routes; automobiles obtain driving directions to their destination; and backpackers can track their progress. Unfortunately, these applications usually depend on vehicle or backpack-based units that are cumbersome to carry. Simple applications such as the one for backpackers consist of passive units that determine location, but do not need to transmit information to another location. Thus current GPS tracking and data transmission technology, infrastructure and software applications are proven and robust. However, they currently lack the level of portability an executive would demand for personal security and safety purposes.

This is changing. The mass-market demand for anytime, anywhere location capabilities for use in personal navigation, friend-finding, and location-based games has mobile communications suppliers feverishly vying against each other to make their products, services and applications stand out. The upshot is that executives already carry the most advanced of handheld devices on the market. Once available, adding location capabilities will be straightforward.

The true challenge is to handle the information and response related to an event appropriately. From a security and safety perspective, such services may be effective and dependable, but cannot be considered 100% reliable. Any such location-based system must be tempered by personal prudence by the user, and training on the capabilities of the system by user and respondent alike.

Many GPS or terrestrial location systems will lose "contact" with the target when a "view of the sky" is lost when entering a tunnel, parking structure or building. In such cases, the system remembers the "last known location" until the target is reacquired. If users and respondents are aware of such limitations and have procedures in place for dealing with them when they arise, handheld GPS and other tracking systems will prove very useful and reliable for executive protection protocols.

Should an organization seek to provide key personnel with an immediate security link to the home office when personally threatened, in distress or faced with other emergencies, GPS can provide a vital link to inform the home office of the precise location of the distressed person. Combined with airline flight data software, personal and intended schedules, procedures can be in place to quickly and accurately determine or, at least, make a best approximation of the person's location.

Essential components of such a security link would include the ability to:

- Precisely locate a PDA or vehicle given a wide geographical area.
- Transmit a distress signal from the PDA or vehicle to the home office.
- Respond to a distress signal by the home office.
- And, optionally, automatically transmit audio from the PDA or vehicle.

The continued de-classification of the Global Positioning System (GPS) by the U.S. government has made GPS applications more and more precise. The continued declassification (some military and homeland security events can trump immediate access to high accuracy GPS) is expected to narrow the potential for error in PDA or vehicle location to a range that is effectively negligible for responding to a security event affecting an executive.

However, view-of-the-sky requirements will continue to persist. In the case that a person enters a tunnel, a dense forest, parking garage or other sky-obstructing structure, GPS will give last known location information only. Some terrestrial location systems do have better penetration capabilities with regards to weather, buildings, forests, etcetera, but have significant limitations given coverage on a global scale.

In conclusion, the use of GPS and a variety of terrestrial, wireless data transmission networks offered by a number of vendors can provide effective security coverage for an organization and its personnel. These technologies enable a company's security operations to monitor the location of key personnel and to dispatch an appropriate response to lend assistance in case of an emergency. Handheld devices with GPS tracking capability and related software applications will only become more portable and user-friendly over time. Thus providing organizations another tool in protecting its executives.