



# CASE STUDY

The SecurTrak approach has been evolving over years of testing various technologies including Wi-Fi and a range of lower RF frequencies. The results overwhelmingly showed that the lower the frequency, the easier RFID tags communicated through the various materials of construction as found in healthcare facilities. In short, 433 MHz was found to be a minimum of 3:1 more accurate and reliable with regard to locating RFID tags in real-time than Wi-Fi at 2.4 GHz and above.

The result is SecurTrak, a system that enhances safety and efficiency, as well as staff and patient experience, through precise real-time tracking of individuals and assets using an innovative blend of three distinct technologies. (433MHz RF, Diffused Infrared, and 125 KHz Exciters). SecurTRAK produces unequalled results particularly in instances where reliability and accuracy protect the safety of patients and staff.

This case study will follow the largest implementation of SecurTRAK, located at the VA Health System in Pittsburgh, PA. This installation involves two major sites, and covers over 7 million square feet of space both indoors and outdoors.



**Staff  
Duress  
Alert System**



Beginning in 2008, MGM initiated installation of PanicALERT at both campuses of the VA Pittsburgh Health System. PanicALERT is SecurTRAK's wireless Staff Duress product. The duress button is located on staff's ID badge and when activated, immediately notifies police dispatch of the alert location, and is integrated with CCTV cameras to proactively stream video a each alerted tag location. This comprehensive and easy to use system provides peace of mind to staff and their families, and highlights the facility's commitment to staff safety.

## SecurTrak

Three technologies working seamlessly together:

### Low Frequency RF Exciters

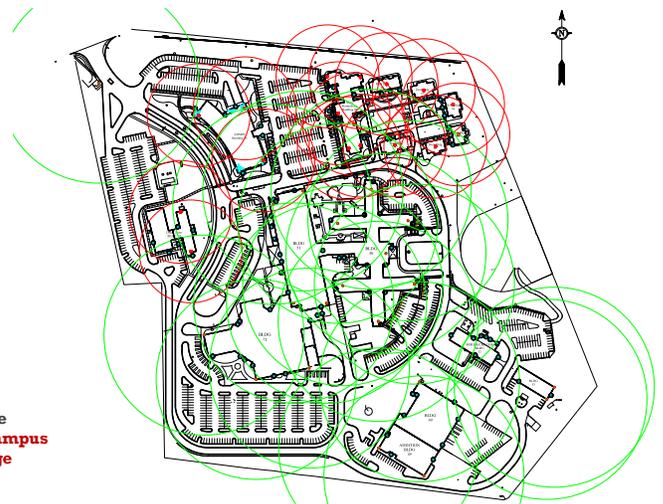
Instantly detect tags at portals and activates rule based mechanisms to protect patients (lock doors, lock elevator cabs, activate CCTV cameras).

### Diffused Infrared Readers

Locates tags to room and bed-level accuracy, within 5 feet.

### 433MHz RF Readers

Blankets whole campus to prevent dead zones. This lower frequency reliably penetrates even the densest of walls to accurately triangulate tag locations indoors and out.



Example Total Campus Coverage





### Safeguard At-Risk Patients



Building off of the SecurTRAK infrastructure, the **PatientTRAK** installation was initiated in 2010. PatientTRAK is the SecurTRAK product that tracks at-risk patients in real-time. PatientTRAK allows for customization consistent with each patients care plan, and can monitor patients within small or large zones, both inside and outside, and interacts with building systems such as CCTV, and door and elevator locks to prevent egress. If a patient or resident does wander outside of the desired area, they will continue to be monitored throughout the campus in order to ensure safe retrieval by the appropriate staff. PatientTRAK allows maximum autonomy for patients and resident and peace of mind for loved ones, while not compromising on safety.

NAME	BLDG	FL	RM	STATUS	END TIME
MGM Te...	70	150	BA014 RECORD...	T	
R1234	70	150	CB002 CORRIDOR	LX	Aug 30 12:47
MGM Te...	70	1	1A133 CHART P...		
L5555	70	150	CB002 CORRIDOR	OX	Aug 30 13:30



### Immediate & Precise Equipment Locator



Again building on the SecurTRAK infrastructure, the VA Pittsburgh HCS most recently added the web based **AsseTRAK** to their suite of SecurTRAK products. This allows patient care and biomed staff to track and locate medical equipment and other assets in real-time on both VA Pittsburgh HCS campuses. Ongoing testing and monitoring has proven location accuracy of 7-15 feet with 99% reliability. The system vastly simplifies and shortens routine maintenance functions, and also ensures the efficient utilization of high dollar medical equipment.



All of this and more is possible building on the highly accurate and flexible SecurTRAK infrastructure. Including precise time and motion studies for process improvement initiatives, as well as clinical flow monitoring on both an inpatient and outpatient basis that will provide data to support enhancements to both staff and patient experience.

### For More Information:

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