



SETTING UP A GCS PROXIPEN GUARD TOUR SYSTEM

General

As a general statement, the purpose of a guard tour system is to ensure that security officers are present at specific locations at specific time intervals; to prove that the officers were or were not present at those locations at those time intervals; and to provide documentation of those facts. The guard tour system may, as an option, allow the documentation to (1) indicate the names of the officers performing the tours, and (2) permit the officers to record events or conditions that they observe while performing the tours. Such events or conditions ("incidents") generally pertain to security, safety, maintenance or operational issues.

Guard Tour System Components

The ProxiPen guard tour system includes data points (RFID tags), one of which is physically installed at each location that an officer is to visit. The officer carries a device to read the data point at each location ("checkpoint"); this device is the ProxiPen. As the officer visits each checkpoint and reads the data point, the ProxiPen records the time and date, along with the data point's unique identification number.

The ProxiPen guard tour system also includes a device for downloading the data acquired during the tour from the ProxiPen. This device is referred to as the "data transfer unit" (PenDTU).

The ProxiPen guard tour system also includes TopGuard Patrol software that produces reports of the officers' activities; this requires that a computer be provided on which the software may be installed. This can be either a stand-alone PC or a workstation in a network.

The TopGuard Patrol software translates the downloaded data into a report that documents each tour that was performed and indicates the time and date that each checkpoint was visited. The report also highlights any checkpoints that were not visited ("missing"), any that were visited more often than required ("double" or "multiple"), and any from another tour that should not have been visited. As mentioned above, the report may optionally include the names of the officers who performed the tours and any incidents that the officer observed during the tour. The report concludes with a numerical summary of the tour activity included in that report.

Establishing the Tour(s)

If you are upgrading a Detex guard tour system or changing over from a competitor's system, the officer tours are probably already established. However, if you do not have an existing guard tour system, it must be determined how many tours are needed and which checkpoints are to be included in each tour. You must also decide how often and when you wish to download the tour data and prepare the tour activity reports.

These parameters are based solely on your needs and wishes. You obviously have reasons for employing security officers, and you already know what tasks they are to perform and how often they should be done. The establishment of the tours is simply a process of organizing and formalizing those tasks.

A guard tour generally consists of a set of locations ("checkpoints") that an officer is to visit at specified time intervals. The officer usually visits each checkpoint once during each tour, although the tour may be configured so that multiple visits to specific checkpoints are required.

The expanded "PLUS" version of TopGuard Patrol also permits the designation of checkpoints as "optional;" that is, they are to be visited by the officer if time permits, but are not identified as "missing" if the officer is unable to visit them.

The ProxiPen system requires that each tour begin with a unique checkpoint that cannot be used as a part of any other tour. This "start point" identifies the tour to the software and simplifies the reporting logic by making it easier to identify "exceptions" (missing, double or multiple checkpoint readings, etc.). It is essential that an officer begin any and every tour by first reading the "start point" for that tour. The start point may be the first checkpoint in the tour, if it is intended that the tour always begin at that point; or it may be mounted in another location (a guard shack, for example) if it is desirable that the tour not always be performed in the same order.

When setting up the ProxiPen system, you may create only one tour, if that meets your needs, or you may create multiple tours. One factor in this decision is what you want to see in the tour reports. If you have a large facility but anticipate that in some cases you will only want a report of officer activities in a certain area, then a tour should be created including only that area; the same goes for any other similar areas.

You may also create tours that are similar, including some (but perhaps not all) of the same control points and adding others, as long as each tour is assigned its own unique starting data point and is given a suitably descriptive name in the software. For example, you might want a tour performed in one way during the week but a slightly different way on weekends, holidays or during plant shutdowns.

Setting Up the System

The first step in setting up the ProxiPen system is to prepare a list of the tours that the security officers are to perform and the checkpoints that are to be included in each tour. The checkpoints are generally described by their physical location, and this description should be included for each checkpoint. Each tour should also be given a descriptive title.

If you wish to use data points for identifying the officers, you should prepare a list of the officers' names that are to be assigned to the data points. In practice, the officer will typically read his own identifying data point with the ProxiPen before he begins his first tour. The software then displays that officer's name in the report at the beginning of that tour and every subsequent tour, until either (1) another officer's identifying data point is read with that same ProxiPen, or (2) the ProxiPen's data memory is cleared.

Where these officer identification data points are physically located is determined by where the officers transfer the ProxiPen from one to another (at a shift change, for example). If the officers normally begin tours from one physical location (a guard shack or security office, for example), and this location is where the ProxiPens are kept and/or transferred between officers, then the officer identification data points might be physically mounted in that location on a board, wall, etc. If the officers are mobile and normally transfer the ProxiPen between officers at remote locations, then the officer identification data points might be mounted on a plastic card that the officer carries with him, as an example.

If you wish to have officers record incidents that they observe while performing the tours, you should prepare a list of the incident descriptions that you want to appear in the tour reports. Incidents are recorded by having the officer carry a wallet-sized "incident book" with him while performing the tours. The ProxiPen's incident book contains 20 RFID tags, each of which may be assigned a description in the TopGuard Patrol software. A list of the descriptions for each RFID tag is prepared and inserted into the incident book. As the officer performs the tour, if he observes an event or condition described in the incident book, he first reads with the ProxiPen the checkpoint that identifies his location, then reads the RFID tag in the incident book that describes the incident.

With these lists of tours and checkpoint descriptions (and, if desired, officer names and incident descriptions) in hand, the next step is to install the TopGuard Patrol software on the computer. The PenDTU should be connected to a USB port on the computer. It is then necessary to configure the PenDTU (primarily to set the correct time zone).

The ProxiPen is then placed on the PenDTU and interrogated with TopGuard Patrol's Configuration function. This function is used to configure the ProxiPen with the correct port setting to ensure communication between the TopGuard Patrol software and the ProxiPen, and also to set the clock in the ProxiPen to the PC's system time. Once this is done, you can begin to program the tours into the software.

Let's assume that a tour has 20 checkpoints, including the start point. The simplest way to set up the tour is to lay out on a table or desk 20 RFID tags and to number them from 1 to 20 (with a piece of masking tape, for example). The list of checkpoints for that tour should also be numbered in order from 1 to 20, beginning with "1" for the start point.

With a cleared ProxiPen (no data in the memory), read the 20 RFID tags in order from 1 to 20. Then download the 20 tag readings into the TopGuard Patrol software, using "Add Control Points" on the "Tours" screen. The 20 tag readings go into the "Pool" from which they are selected and assigned to the tours.

Once the 20 RFID tags are assigned to a tour, the description for each checkpoint from your list is entered into the software, along with the name of the tour. Once this is done, the programming of the tour is complete. The 20 RFID tags should be collected and installed in their respective locations, based on their identifying numbers and referring to the tour list.

This process should be repeated for each tour on the list. Care should be taken in the labeling and handling of the RFID tags to avoid confusion about which tag is to be mounted in which location.

This is particularly true if some checkpoints are to be used in more than one tour. With the TopGuard Patrol software, once the RFID tags are read and downloaded into the "Pool," it is not necessary to read them again in order to assign them to multiple tours; they can just be selected from the Pool and assigned to as many tours as desired.

Ideally, the system will be set up in the software prior to installing the RFID tags at their eventual physical locations. It is easier to read the tags all together in one place and download them than it is to physically walk the tour, recording each RFID tag and its location, and trying not to get them confused.

The optional incident book and officer identification RFID tags are basically programmed into the software the same way. All ProxiPen incident books contain the same set of 20 RFID tags; thus it is only necessary to program them into the software once.

Installing the Checkpoints

The RFID tags that have been programmed as checkpoints on a tour should, insofar as possible, be mounted in locations that are shielded from the weather and direct sunlight; this will prolong their useful life. That being said, the RFID tags are readable even when wet, frosty, covered with dirt, grease or grime or having been painted over. They should also be mounted where they are least visible but still readily accessible to the officer; this will prevent damage and vandalism to the tags. For example, an RFID tag can be mounted on a doorjamb – preferably on the hinged side – where it is not visible until the door is opened.

Try to avoid mounting the RFID tag where an electromagnetic field or signals from radio transmissions may be present. Such interference will not damage the tag, but attempting to read the tag may result in garbled data and a corrupted download file.

The ProxiPen RFID tags have the advantage that they can be read without contact from a distance of up to $\frac{3}{4}$ ", depending on the strength of the ProxiPen's battery. Because they are read via proximity, they can be either surface-mounted or concealed behind any nonmetallic material: glass, mirrors, wallboard, paneling, stucco, etc. This can be helpful where aesthetics, vandalism, etc. are considerations.

The ProxiPen RFID tags should not be mounted directly on metallic surfaces (especially ferrous metal), as such surfaces interfere with the radio signal communication by which the ProxiPen reads the tags. If the RFID tags must be mounted on such surfaces, a spacer should be mounted between the tag and the metal surface. The spacer can be made of any nonmetallic material (i.e., plastic, wood, plexiglass, rubber, etc.) and should be at least the same thickness as the tag. Spacers are available from Detex, but you may choose to obtain spacers elsewhere or fabricate them yourself.

The checkpoints should be mounted in locations where the officer is compelled to perform the desired task in order to read them. For example, if there is a large room that should be

examined completely by an officer, mount the checkpoint at the far side of the room so that the officer must observe the entire room while walking to the checkpoint's location. Or, if the officer is to read a gauge and verify some operational parameter, mount the checkpoint so that the officer can't help but see the gauge while reading the data point; on the side of the gauge, for example.

Copy Protection Devices

If you have purchased the expanded "PLUS" version of the TopGuard Patrol software, it includes copy protection device (dongle) that must be connected to the PC in order for the software to operate. The importance of not misplacing that device cannot be overstressed. It is effectively what you are paying for when you purchase the software; Detex will replace software CD's or manuals at little or no cost; but if the copy protection device is misplaced, you must essentially buy the software all over again.

And this happens more often than one might think. You purchase new computers for your business and arrange to have the vendor come in during an evening or weekend to replace them, not giving a thought to the dongle hidden on the back of one of the machines. The vendor takes the old machines away and the copy protection device usually disappears.