UNIFIED FACILITIES GUIDE SPECIFICATIONS

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SECTION 28 20 02

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11/08

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USACE / NAVFAC / AFCEC / NASA | **UFGS-28 20 02 (November 2008)**

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SECTION 28 20 02

CENTRAL MONITORING SERVICES FOR ELECTRONIC SECURITY SYSTEMS
11/08

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NOTE: This guide specification covers the requirements for central monitoring services for electronic security systems.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).

****

PART 1 GENERAL

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NOTE: This guide specification specifies monitoring facility criteria. This specification does not cover requirements pertaining to the installation of alarm systems at a protected site monitored by a central monitoring facility.

A monitoring facility, as used in this document, is a building, an office, or a suite of offices that houses the security system central station and monitoring personnel. In this type system, the operation of alarm devices and electrical circuits is automatically signaled to, recorded, maintained, and supervised from a central station with persons in attendance at all times. These persons monitor the signals and dispatch the response force to any

unauthorized entry into the protected area. Connection of alarm equipment to the central monitoring facility may be over leased telephone company lines.

****

1.1 REFERENCES

****

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a Reference Identifier (RID) outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

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The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. DEFENSE INTELLIGENCE AGENCY (DIA)

DIA DCID 6/9	(2002) Physical Security Standards for Sensitive Compartmented Information Facilities

U.S. DEPARTMENT OF DEFENSE (DOD)

DOD 5100.76-M	(2012; Change 1-2018; Change 2-2020) Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives
DOD 5220.22-M	(2006; Change 1-2013; Change 2-2016) National Industrial Security Program Operating Manual (NISPOM)

UNDERWRITERS LABORATORIES (UL)

UL 827	(2014; Reprint May 2020)UL Standard for Safety Central-Station Alarm Services
UL 1981	(2014; Reprint Nov 2019) Standard for Central Station Automation Systems
UL 2050	(2003; 4th Edition) Standard for National

Industrial Security Systems for the Protection of Classified Materials (limited distribution publication, direct purchase request with justification to UL)

1.2 SUMMARY

1.2.1 General System Description

Provide central monitoring services, including associated facilities, equipment, appurtenances and trained personnel for the service of remotely monitoring alarm systems and taking actions as appropriate. The central monitoring facility shall be capable of monitoring security related alarm systems and shall be in compliance with UL 827 and UL 2050. The central monitoring facility shall be staffed and in operation at all times.

[1.2.2 Redundant Monitoring Facility

****

NOTE: A redundant monitoring facility is typically not necessary. Facilities meeting UL requirements, have redundancy on critical systems and are inherently reliable. However, requiring a redundant facility would allow signals to be rerouted in the event of a disaster at the primary monitoring facility with the break in the continuity of monitoring service being minimized. Requiring a redundant monitoring facility should be based on the importance of the protected site. Designer should confirm with the owner of the protected site as to whether a redundant monitoring facility is required.

Practices that are currently in use in the alarm industry would route alarm signals to a facility that is staffed and operating. Thus, it is unnecessary to permit an extensive break in the continuity of monitoring service. The designer should consider what length of time is acceptable for a break in the continuity of monitoring service based on the protected site being monitored.

****

Provide a redundant monitoring facility in addition to the primary monitoring facility in the event that the primary monitoring facility is disabled. In that case, reroute all alarm signals to the redundant monitoring facility such that there is [no] [less than a 15 minute] [less than a thirty minute] [_____] break in the continuity of monitoring service. The redundant facility, when manned, shall meet the requirements covered in this specification for the primary monitoring facility.

]1.3 SUBMITTALS

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NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list, and corresponding submittal items in the text, to reflect only the submittals required for the project. The Guide Specification technical editors have classified those items that

require Government approval, due to their complexity or criticality, with a "G." Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a "G" to an item, if the submittal is sufficiently important or complex in context of the project.

For Army projects, fill in the empty brackets following the "G" classification, with a code of up to three characters to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

The "S" classification indicates submittals required as proof of compliance for sustainability Guiding Principles Validation or Third Party Certification and as described in Section 01 33 00 SUBMITTAL PROCEDURES.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

****

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are [for Contractor Quality Control approval.][for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government.] Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-07 Certificates

Hiring Practices Outline; G[, [_____]]
Central Station Operator Certificates; G[, [_____]]
In-House Training Outline; G[, [_____]]
Alarm History Report; G[, [_____]]
UL Certificate of Compliance; G[, [_____]]
Notarized Affidavit; G[, [_____]]
Proof of Insurance; G[, [_____]]
Operating Procedure Plan; G[, [_____]]

1.4 QUALITY ASSURANCE

1.4.1 Monitoring Facility Personnel Hiring Practices

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NOTE: Hiring practices are typically incorporated that lead to employing upstanding and reliable personnel.

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Demonstrate the existence of a pre-hire screening process. Satisfactory

results for each segment of the screening process shall be a requirement for any employment opportunity. The process shall, at a minimum, include the following segments:

a. felony conviction screening
b. drug screening
c. previous employment statement verification
d. [a two-year degree]

Submit a hiring practices outline detailing the pre-hire screening practices currently in place.

1.4.2 Monitoring Facility Operator Qualifications

Each monitoring facility operator assigned to monitor alarms under this contract shall be qualified as specified in this section.

1.4.2.1 Central Station Operator Certificates

Monitoring facility operators shall be Security Industry Association (SIA) trained and certified as Central Station Operators. Submit the monitoring facility operators' current Central Station Operator Certificates verifying that each monitoring facility operator has completed and passed the SIA Central Station Operator course.

1.4.2.2 In-House Training

Train monitoring facility operators on facility specific equipment and policies. Submit an in-house training outline detailing facility specific training requirements that each monitoring facility operator must complete.

1.4.3 Regulatory Requirements

****

NOTE: UL 827, Central Station Alarm Services is the UL standard that covers central monitoring facilities. Under UL 827, three categories exist. Each category is identified by its UL Category Control Number (CCN). The categories and their respective CCN are as follows:

Protective Signal Services - Central Station (UUFX)
Burglar Alarm Systems - Central Station (CPVX)
Monitoring Station, Residential (CVSU)

Where the asset(s) to be monitored consist(s) only of one or any combination of the following three cases, omit the paragraph below and include paragraph titled: Central Monitoring of High Security Assets, below.

1. The asset(s) is(are) under the authority of the National Industrial Security Program.

2. The asset(s) is(are) Sensitive Compartmented Information.

3. The asset(s) is(are) Arms, Ammunition and Explosives.

****

All alarms monitored under this contract shall be received and handled on systems and at facilities that are in compliance with regulatory requirements specified in this section.

1.4.3.1 Security Alarm Systems

Provide a monitoring facility that is in compliance with UL 827, Central Station Alarm Services. Determine compliance by a UL-Listing in any of the following three categories:

a. UUFX (Protective Signal Services - Central Station)
b. CPVX (Burglar Alarm Systems - Central Station)
c. CVSU (Monitoring Station, Residential)

Substantiate UL-Listing in any of the above categories by submitting the associated UL Certificate of Compliance.

1.4.3.2 Central Monitoring Facility Staffing

****

NOTE: UL reviews the actions taken in response to alarm signals generated by UL certificated alarm systems. UL does not review the handling of alarm signals that are not generated from UL certified alarm systems. UL only addresses alarm signals from non-certified alarm systems if they interfere with the handling of alarm signals from UL certified alarm systems. The handling of alarm signals is affected by the central monitoring facility staffing. Specify an alarm history report be submitted prior to selecting a central monitoring facility to verify that the monitoring facility is staffed such that all alarms have been acknowledged and a response to the alarm has been initiated within 45 seconds per UL 1981.

Select item "a." to require compliance to the 45 second staffing requirement. Select item "b." to exceed the 45 second staffing requirement and specify a new time in the blank space provided.

****

UL 1981 requires monitoring facility staffing be such that all alarm signals be acknowledged and the appropriate dispatch or verification action be initiated not more than 45 seconds after the monitoring facility receiver acknowledges to the alarm panel at the protected site that the alarm signal has been received (receiver kiss-off signal).

[a. Staffing at the central monitoring facility shall be such that it is in compliance with UL 1981.]

[b. Staffing at the central monitoring facility shall exceed requirements in UL 1981. Staffing shall be such that all alarm signals be acknowledged and the appropriate dispatch or verification action be initiated not more than [_____] seconds after the monitoring facility receiver acknowledges to the alarm panel at the protected site that the alarm signal has been received (receiver kiss-off signal).]

Submit an alarm history report listing all alarms received on [specify unannounced date here] between [specify start time here] and [specify end time here]. The date, time, and type (such as burglar, panic, trouble) of each received alarm signal as well as the date and time at which the operator initiated a response (such as verification or dispatch) shall be included in the report.

[1.4.3.3 Central Monitoring of High Security Assets

****

NOTE: Requirements related to equipment at the protected site as well as data transmission and response forces are not within the scope of this guide specification. The DCID 6/9, NISPOM and the AA&E manual provide requirements for all aspects of a security system including installation guidelines, maintenance, and testing of equipment installed at a protected site as well as requirements for monitoring facility operations and staffing.

Note that inclusion of the paragraph below does not require compliance with the selected government security document in its entirety (i.e. it does not invoke requirements related to equipment at the protected site). However, designer must ensure that the alarm equipment installed at the protected site complies with regulatory and UL 2050 requirements.

The paragraph below should only be included when it is mandatory that the monitoring facility meet requirements of the DCID 6/9, NISPOM, or the AA&E manual.

****

Submit a notarized affidavit attesting to compliance with either of the following referenced standards:

a. UL 827 and the requirements of UL 2050, section 7, and of [DIA DCID 6/9] [DOD 5220.22-M, NISPOM] [DOD 5100.76-M, AA&E Manual] as applicable to the monitoring facility only, or

b. UL 2050, section 6, and of [DIA DCID 6/9] [DOD 5220.22-M, NISPOM] [DOD 5100.76-M, AA&E Manual] as applicable to the monitoring facility only when the area being monitored is [under the authority of the National Industrial Security Program] [Sensitive Compartmented Information] [Arms, Ammunition and Explosives].

]1.4.4 Insurance

Contractor is required to carry not less than $1,000,000 in general liability insurance,including coverage for omissions and errors. Submit proof of insurance.

1.4.5 Procedure Development Conference

Hold a procedure development conference, prior to the start of alarm signal monitoring. The purpose of this conference is to establish a clear understating of step-by-step instructions for handling each type of alarm

signal to be monitored under this contract. Attendees shall include, at a minimum, a facility manager of the monitoring facility and appropriate Government personnel. Topics for discussion shall include: alarm signal types and the corresponding operator actions, the order in which operator actions are taken, Government contact information and alternate Government contact information. Other topics for discussion may include: when cancel codes are required, alarm log content, how often an alarm log will be submitted, what signals are to be flagged in the alarm log, what operator actions are to be taken if a signal fails to restore, and other topics deemed necessary by the attendees.

1.4.5.1 Scheduling and Location

Coordinate the scheduling and location of the procedure development conference. Provide notification of scheduling and location information to [the Government] [_____] [two weeks] [_____] prior to the conference date. Notification information shall include the procedure development conference date, time, location, the attendees who will represent the Contractor, and their titles.

1.4.5.2 Operating Procedure Plan

****
NOTE: Select, in the paragraph below, the operating procedure plan submittal date relative to the start of alarm signal monitoring or relative to the procedure development conference.
****

[Prior to the start of alarm signal monitoring] [Within [_____] days following the procedure development conference], submit for review a comprehensive operating procedure plan detailing alarm signal types and the corresponding operator actions, the order in which the operator actions are to be taken, Government contact information, alternate Government contact information, and other relevant topics discussed at the procedure development conference.

1.4.5.3 Plan Verification

Verify [annually] [_____] with the Government, the information in the operating procedure plan, including Government contact and operating procedure information. Update and submit the verified plan to the Government.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

3.1 INTERFACE

3.1.1 Alarm Signal Format

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NOTE: Listed below are several examples of the numerous possible alarm signal formats. Specify the alarm signal format(s) corresponding to the format(s) produced by the alarm system installed at

the protected location.
****

Contractor shall be capable of receiving and processing the following alarm signal [format] [formats].

a. [Ademco Contact ID]
b. [FBI Superfast]
c. [4+1]
d. [4+1 Extended]
e. [SIA]
f. [Radionics BFSK]

3.1.2 Communication Means

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NOTE: Specify the primary communication means and, if used, the back-up communications means. In the blank spaces following the listed communication means indicate each as "primary" or "back-up", if used.
****

Contractor shall be capable of receiving alarm signals via the following communications means.

a. [dial-up network], [_____]
b. [cellular network], [_____]
c. [long-range radio network], [_____]
d. [Internet (TCP/IP)], [_____]
e. [leased line (DSL, T-1)], [_____]
f. [Local Area Network (LAN)], [_____]
g. [Wide Area Network (WAN)], [_____]

[3.2 AUDIO VERIFICATION

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NOTE: Audio verification capabilities may be specified if an audio system will be used at the protected site.
****

Contractor shall be capable of supporting audio alarm verification. Audio alarm verification support shall be such that, in an alarm event, an operator can establish [two-way communication with a protected site - similar to an intercom system.] [one-way communication with a protected site.] Audio alarm verification shall be such that an operator can use it to help determine what dispatch action(s) is (are) appropriate.

][3.3 VIDEO VERIFICATION

****
NOTE: Video verification capabilities may be specified if a video system will be used at the protected site. This specification assumes video data is not recorded at the central monitoring facility.

Presently, there are no standardized video alarm

verification packages.

Use the first bracketed paragraph below if designer will specify information defining the video alarm verification package. Include information that will ensure compatibility between the protected site and the central monitoring facility.

Use the second bracketed paragraph below if Contractor is to determine video alarm verification compatibility between the central monitoring facility and the protected site.

****

Contractor shall be capable of supporting video alarm verification. Video alarm verification support shall be such that alarm triggered video media can be transmitted to the central station and used by an operator to assess pre-alarm and post-alarm video information. Video alarm verification support shall be such that it can be used by an operator to help determine what dispatch action(s) is (are) appropriate. [Provide resources required to be capable of monitoring the following video alarm verification package:[_____]] [Determine compatibility with video alarm verification system to be used at the protected site.]

] -- End of Section --