



Standard Guide for Selection of Security Control Systems¹

This standard is issued under the fixed designation F 1465; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide covers the identification of issues and decisions that need to be addressed to meet the objective of specifying an operational security control system for a detention facility.

1.2 Appendix X1 contains additional sources of information that may be useful to the user of this guide.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

F 1577 Test Methods for Detention Locks for Swinging Doors²

2.2 International Electrotechnical Commission:

IEC 1131 Part 3—Programming Languages³

3. Terminology

3.1 Definitions:

3.1.1 *analog, adj*—representing a range of values in the form of a continuously variable property, such as voltage in a circuit. Analog often refers to transmission methods for audio and video signals.

3.1.2 *audio threshold sensing, n*—mechanism which monitors a preset noise level and generates an alarm when that level is exceeded.

3.1.3 *biometrics recognition, n*—means of automatically identifying persons on the basis of unique personal characteristics, some of which include fingerprints, voice, retina, and hand geometry.

3.1.4 *bolt position switch (BPS), n*—electrical device that identifies the status of the deadbolt, roller bolt, or latchbolt within a locking mechanism.

3.1.5 *building automation system, n*—a system which includes multiple tasks such as HVAC (heating, ventilation, air conditioning) controls, in addition to specific correctional functions and MIS (management information systems), etc.

3.1.6 *Class A communications, n*—bidirectional signal within a looped wiring topology. Two cuts anywhere in the loop will disable the area between the cuts, but all other points in the loop will still communicate. A single cut will not result in a loss of communications.

3.1.7 *Class B communications, n*—a unidirectional signal within a radial wiring topology. Any interruption in the signal path will disable all points beyond the interruption.

3.1.8 *client, n*—a computer or application that makes use of the services provided by a server. A client typically has one user, whereas a server is shared by many different users.

3.1.9 *coaxial cable, n*—two-conductor cable in which a center conductor is surrounded by a shield. Used for transmitting/receiving radio and video signals.

3.1.10 *conformal coating, n*—plastic coating to protect electronic circuitry from moisture deterioration.

3.1.11 *deadlock status switch, n*—an electrical component within a device that provides the monitoring of a mechanical deadlock mechanism.

3.1.12 *detention, n*—a term which includes all types of facilities where people are held in custody, such as jails, prisons, and mental health facilities.

3.1.13 *dedicated microprocessor, n*—a software-driven control system created specifically to handle a defined application.

3.1.14 *digital, adj*—representing a range of values in the form of binary (that is, on or off) digits.

3.1.15 *digital signals, n*—electrical information in the form of a sequence of on/off voltage. The information may be coded in many ways, so more definition is required for any particular application.

3.1.16 *direct supervision, n*—management concept for operating a detention facility that relies on staff's ability to manage through personal interaction between the officer and inmate—does not rely on physical barriers or technology as the primary management mechanism.

3.1.17 *discrete logic, n*—a combination of distinct electronic components which performs a predetermined function in response to a defined input signal(s) (always custom to the application).

¹ This guide is under the jurisdiction of ASTM Committee F33 on Detention and Correctional Facilities and is the direct responsibility of Subcommittee F33.06 on Control Systems.

Current edition approved Sept. 10, 2003. Published September 2003. Originally approved in 1993. Last previous edition approved in 1999 as F 1465 – 99.

² *Annual Book of ASTM Standards*, Vol 15.07.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.