



Designation: F 1448 – 93a (Reapproved 1999)

Standard Guide for Selection of Security Technology for Protection Against Counterfeiting, Alteration, Diversion, Duplication, Simulation, and Substitution (CADDSS) of Products or Documents¹

This standard is issued under the fixed designation F 1448; 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.

This standard has been approved for use by agencies of the Department of Defense.

INTRODUCTION

Any product or document of value has a high risk level of being counterfeited, altered, diverted, duplicated, simulated, or substituted (CADDSS). Counterfeiting of brand names, designer clothes, accessories, jewelry, and intellectual property is presently assessed as a 60-billion-dollar per year problem worldwide. This dollar figure does not include the losses in the financial community, including banknotes, stocks and bonds, etc., which are unknown and unreported. Just as counterfeiting and alteration of documents are severe problems in the financial sector, the counterfeiting, alteration, diversion, duplication, simulation, and substitution (CADDSS) of products are life threatening when they relate to aeronautical parts, auto parts, pharmaceuticals, life support equipment, and Department of Defense material. The problem cannot be eliminated, but it can be controlled by using anticounterfeiting technology selected to fit the user's requirements. A check list is needed to specify the user's requirements for anticounterfeiting technology to control one or all of the above-mentioned potential fraudulent problems. Whichever technology, or combination of technologies, is used, the frequency of authentication and the education of personnel or the public using the technology are vitally important in controlling counterfeiting, alteration, diversion, duplication simulation, and substitution (CADDSS) of products and documents.

ASTM F1448-93a(1999)

1. Scope

1.1 This guide is intended to assist the user in the selection of anticounterfeiting technology as follows:

1.1.1 By determining what the user's requirements are related to product or document by completing the user's specific CADDSS versus parameters matrix, and

1.1.2 By comparing the user's requirements matrix to a security technology feature matrix prepared by a knowledgeable person using the CADDSS versus parameters matrix.

1.2 This guide does not address or evaluate specific technologies, but rather provides a path when utilizing the matrix in Table 1 that allows proper evaluation of features of technologies available for use in the application.

1.3 This guide provides a procedure to accomplish the proper selection of a security system. Specific technologies are

not addressed, nor is any technology recommended. There are many security systems available in the public marketplace today. Each has limitations and must be carefully measured against the parameters presented in this guide. Once this careful analysis is done, the user will be in a knowledgeable position to select a security system to meet his needs.

2. Referenced Documents

2.1 *ASTM Standards:*

F 1156 Terminology Relating to Product Counterfeit Protection Systems²

3. Terminology

3.1 *Definitions*—For definitions of terms used in this guide, refer to Terminology F 1156.

3.1.1 *alteration*—the modification of a document or article with the intent that it will pass as genuine with minimum risk of detection in circumstances of ordinary use.

¹ This guide is under the jurisdiction of ASTM Committee F12 on Security Systems and Equipment and is the direct responsibility of Subcommittee F12.60 on Anti-Counterfeiting Systems.

Current edition approved Dec. 15, 1993. Published February 1994. Originally published as F 1448 – 93. Last previous edition F 1448 – 93.

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