

Designation: F2940 - 13 (Reapproved 2017) F2940 - 21

An American National Standard

# Standard Practice for Air Soft Field Operation<sup>1</sup>

This standard is issued under the fixed designation F2940; 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 ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

#### INTRODUCTION

This practice sets forth procedures for operating an air soft playing field. The goal is to assist air soft field operators in running a safe business. Like any other physical activity, air soft presents a potential for injury. No procedural practice can prevent all injuries, especially when air soft players do not follow safety instructions. The ultimate responsibility for preventing injury lies with the air soft player. This practice, however, intends to promote safe air soft field operation through standardization of operating practice.

## 1. Scope

# iTeh Standards

- 1.1 This practice establishes minimum safety requirements for the operation of air soft playing fields, and provides for certain materials and procedures required.
- 1.2 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

# 2. Referenced Documents

<u>ASTM F2940-21</u>

https://standards.iteh.ai/catalog/standards/sist/a638a3c1-db80-4e7a-9bfa-975e1c4ba303/astm-f2940-21

- 2.1 ASTM Standards:<sup>2</sup>
  - F1776 Specification for Eye Protective Devices for Paintball Sports
  - F2679 Specification for 6 mm Projectiles Used with Airsoft Guns
  - F2748 Specification for Airsoft Guns
  - F2879 Specification for Eye Protective Devices for Airsoft Sports
  - 2.2 ANSI Standards:<sup>3</sup>

ANSI Z87.1 American National Standard for Occupational and Educational Personal Eye and Face Protection Devices

### 3. Terminology

- 3.1 Definitions of Terms Specific to This Standard:
- 3.1.1 air soft projectile, n—projectile complying with Specification F2679, which is fired from an air soft gun.

<sup>&</sup>lt;sup>1</sup> This practice is under the jurisdiction of ASTM Committee F08 on Sports Equipment, Playing Surfaces, and Facilities and is the direct responsibility of Subcommittee F08.27 on Airsoft.

Current edition approved April 1, 2017Dec. 1, 2021. Published April 2017January 2022. Originally approved in 2013. Last previous edition approved in 20132017 as F2940 – 13 (2017). DOI: 10.1520/F2940-13R17:10.1520/F2940-21.

<sup>&</sup>lt;sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.



- 3.1.2 *air soft gun*, *n*—device specifically designed to discharge air soft projectiles such as but not limited to those described in Specification F2748.
- 3.1.3 accidental discharge device, n—device specifically designed to be installed on an air soft gun to prevent the accidental discharge of air soft projectiles.
- 3.1.4 *ear, nasal cavity and oral cavity protection, n*—device or devices that cover the ear, nasal cavities or oral cavities and prevent direct entry of air soft projectiles into these areas.
- 3.1.5 firing mode, n—operating mode at which a specific weapon can fire or launch its projectiles.
  - 3.1.5.1 Discussion—

Common modes include pump action, semi-auto, three round burst or full auto.

- 3.1.6 *game area*, *n*—area in which air soft games are conducted and in which eye protection suitable for air soft game play is required to be worn.
- 3.1.7 *goggles*, *n*—eye protection device suitable for use in air soft games.games and that meets the requirements of Specification F2879.
- 3.1.8 *goggles on area*, *n*—areas in which all persons are required to wear an eye protection device suitable for air soft games, such as and not limited to playing fields, game areas, chronograph areas, and target ranges.
- 3.1.9 *minimum engagement distance*, *n*—recommended minimum distance between the shooter and the target at which a shot may be fired.
  - 3.1.9.1 Discussion—

This distance is defined based on various factors in Table 1.

3.1.10 player, n—air soft game participant.

# 3.1.11 playing fields, n—

- 3.1.11.1 *indoor playing field*, *n*—indoor playing arena or area, where air soft games are conducted in which close range engagements are common.
  - 3.1.11.2 outdoor playing field, n—area delineated by a boundary marker, in which air soft games are conducted.
  - 3.1.11.3 Discussion—

Fields may be a combination of both indoor and outdoor conditions. The field operator shall determine the best practices for recommended minimum engagement distance based upon the specific conditions at the facility in question.

3.1.12 *safety mechanism*, *n*—device that, when activated, disables a part of the air soft gun, usually the trigger, to prevent unintentional firing in normal use and must be released to allow the gun to be discharged by the movement of the trigger.

#### 3.1.12.1 Discussion—

The device is sometimes referred to as a safety, safety button, or safety lever. An electronic on/off switch is considered to be a safety mechanism if, when the switch is placed in the off position, it renders the gun inoperable.

TABLE 1 Air Soft Gun Minimum Engagement Info Chart

Maximum Velocity 0.20 g BB	Maximum Velocity 0.25 g BB	Outdoor Field Minimum Engagement Distance	Indoor Field Minimum Engagement Distance	Recommended Fire Mode
300 FPS	270 FPS	5 ft	5 ft	All
350 FPS	310 FPS	10 ft	5 ft	All Outdoor, Semi-Auto Indoor
400 FPS	350 FPS	20 ft	10 ft	All Outdoor, Semi-Auto Indoor
500 FPS	450 FPS	100 ft	100 ft	Semi-Auto or Bolt Action Only
550 FPS	500 FPS	100 ft	100 ft	Bolt Action Only

3.1.13 *staging area*, *n*—area protected against stray entry of air soft projectiles, in which air soft players organize themselves for a game.

#### 4. Operational Procedures

- 4.1 *Safety Rules Posted*—Player safety rules, printed in 24-point type or larger, shall be posted conspicuously at the registration area. Every player shall be instructed to read the safety rules.
- 4.2 Field Orientation and Safety Briefing—Prior to their first game of the day, every player shall be given or shown a formal briefing on safety rules, risk of injury, game rules, field orientation, and equipment operation. During this briefing every player will be advised of what to do in case of an emergency.
- 4.3 Accidental Discharge Requirements—At all times other than while on the playing field during games, at the chronograph, or at the target range all air soft guns shall be maintained in a condition which will eliminate the chance of accidental discharge. Acceptable methods of meeting this requirement are:
- 4.3.1 To have a clearly identifiable accidental discharge device installed in the gun, or
- 4.3.2 To have the air soft gun enclosed in a case or holster that does not allow a discharged air soft projectile to escape.
- 4.4 *Goggles*—All persons shall be required to wear an eye protective device at all times while they are in areas designated as "goggles on areas." As no standard exists for air soft <u>All</u> eye protective devices at this time all eye protective devices shall be subject to the approval of the game operator and meet one the requirements of the Specification F2879following:
- 4.4.1 An eye protective device which meets ANSI Z87.1 requirements and is manufactured and advertised by the manufacturer as suitable for use in air soft game activity. This protector must have a solid lens material used in the construction rather than a screen or other similar material, or
- 4.4.2 Meets Specification F1776.
- 4.5 It is recommended that all game participants wear additional protective device(s) which limit the impact of air soft projectiles to ears, the nasal cavities and oral cavity.
- 4.6 *Chronographing:*
- 4.6.1 All air soft guns shall be chronographed.
- 4.6.1.1 All field rental supplied air soft guns shall be chronographed daily prior to being used at the field.
- 4.6.1.2 All user supplied air soft guns shall be chronographed prior to being used on the field.
- 4.6.2 Each air soft gun will be classified based on the chronographed velocity, bb gram weight and fire mode restrictions in Table
- 4.6.3 All players will be advised of the recommended minimum engagement distance of their air soft gun based on the information in Table 1.
- 4.6.4 Players that carry multiple air soft guns will be advised of the recommended minimum engagement distance for each air soft gun.
- 4.6.5 Any air soft gun chronographing outside the required velocity limits or any other requirement listed in Table 1 will not be allowed on the field.
- 4.7 Required Signs: