Safety Standards and Protective Eyewear

Because they are anything but anodyne
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Foreword

In airsoft circles, it goes without saying that using airsoft replicas without wearing protective eyewear well-suited to the activity is completely unthinkable. This eyewear exists in a variety of forms, including safety glasses, mesh glasses, goggles and face masks.

These can vary hugely in price and quality but when it comes down to it, are they all equally as effective, and, in addition, what does "suitable protective eyewear" really mean?

This is the question we will be endeavouring to answer here, in the most comprehensive terms possible.

This document, however, is produced solely for information purposes; in no way does it aim to act as a substitute for existing standards or legislation. Similarly, the information contained in this document is purely theoretical, and does not pretend to take the place of practical tests.

That said, this document neither aims to deal with practical tests, nor the untold “claims” made regarding the mechanical resistance of protective eyewear. The purpose of this document is rather to specify the standards certifying the mechanical resistance of this protection, and the original use for which it was designed and certified.

Finally, although this document chiefly concerns airsoft, it can be used as a reference for all activities posing a risk to eye safety, such as shooting sports or paintball.

We hope this document proves both interesting and useful.

Jérémy Walther,
President of the Association de Normalisation de l’Airsoft [Airsoft Association for Normalization]
What protective eyewear do we need?

If it seems obvious that welders should wear helmets or that construction site workers should wear hardhats, it should seem equally obvious that airsofters should wear suitable protective eyewear to prevent any possibility of pellets coming into contact with the eyes. We should never lose sight of the fact that vision is precious.

Protection against impact energy

A fact probably most readily apparent is that good protective eyewear is what bears the brunt in the event of impact from an airsoft pellet. The average muzzle energy of a projectile fired from one of our replicas is one joule; in practice, the maximum energy observed is 3.5 joules.

However, it appears that the vast majority of protective eyewear on the market is far from meeting our needs.

Suitable face cover

The other vital aspect of this protection is face cover or, more precisely, eye cover.

There is no question that suitable protective eyewear should perfectly cover the eyes and leave no space for a pellet measuring 6mm in diameter to enter. This means that no gap, or none greater than 6mm, should exist between the protection and the face.

The face shape of the person wearing the protection can influence this significantly, although it is generally considered that goggles or a face mask provide better face cover than safety glasses. This parameter, contrary to the aforementioned risk, will relate significantly more to the testing of the protection itself than to the standards applying to it, although, in general, standard-compliant protection correctly covers the eyes.
European and military standards

EN 166, European standard on protective eyewear

In brief
European standard EN 166 applies to protective eyewear; it guarantees that the protection, both the frame and the eyepiece, are adequately resistant. It covers impact resistance as well as protection against UV and any other hazard.

This is the standard most commonly found on protective eyewear.

In detail
Standard EN 166 comprises a number of parameters, clarifying levels of protection:

- In terms of optical class (quality of the protection):
  - 1: highest quality, for constant wear.
  - 2: for intermittent wear.
  - 3: for occasional wear.

- In terms of impact resistance (mechanical resistance):
  - F: guarantees protection against impact from a steel bullet 6mm in diameter and 0.86g in mass fired at 45m.s\(^{-1}\), i.e. an impact energy of 0.87 joules (or a velocity of 93.31m.s\(^{-1}\) or 306 FPS with a 0.20g bullet). Maximum protection for safety glasses.
  - B: guarantees protection against impact from a steel bullet 6mm in diameter and 0.86g in mass fired at 120m.s\(^{-1}\), i.e. an impact energy of 6.19 joules (or a velocity of 248.84m.s\(^{-1}\) or 816 FPS with a 0.20g bullet). Maximum protection for goggles.
  - A: guarantees protection against impact from a steel bullet 6mm in diameter and 0.86g in mass fired at 190m.s\(^{-1}\), i.e. an impact energy of 15.52 joules (or a velocity of 393.99m.s\(^{-1}\) or 1,292 FPS with a 0.20g bullet). Maximum protection for face masks.

Consequently, suitable protective eyewear for airsoft activities involving a maximum energy limit of 6 joules must carry the following mark: EN 166 B.

The standard mark must feature on the frame itself as well as the eyepiece, as the frame must also be impact-resistant.

Limitations of the standard
Standard EN 166 is relatively ill-suited to our gaming environment. F-level protection is inadequate, whereas B-level protection is too high and, furthermore, can only feature on goggles and face masks, not safety glasses.

This being the case, all safety glasses are ill-suited to airsoft activities involving more than 0.87 joules.
STANAG 2920, NATO standard on ballistic protection

In brief
STANAG 2920 is a standard for military use. It is used for assessing the resistance of protective materials against impact and perforation. By extension, it also applies to protective eyewear intended for military use and determines its maximum strength. This standard does not guarantee a minimum protection threshold in the same way as EN 166.

In detail
Standard STANAG 2920 does not define a minimum protection threshold as such. A speed, generally $V_{50}$, is therefore specified in addition to the standard.

Several values exist that can be given with the STANAG 2920 mark:

- $V_{50}$: speed at which a projectile has a 50% chance of perforating material.
- $V_0$: minimum estimated speed at which a projectile perforates material without fail.
- $V_{LP}$: lowest measured speed at which a projectile perforates material.
- $V_{LNP}$: highest measured speed before material is perforated.

Consequently, protective eyewear for military use can carry the reference: STANAG $V_{50}$ 275m.s$^{-1}$ if $V_{50}$ equals 275m.s$^{-1}$. It should be noted that speed can also be expressed in both m.s$^{-1}$ and km.h$^{-1}$.

The standard projectile mass used is 1.102g. It refers to perforating projectiles, posing therefore considerably more threat to protection than our pellets.

As a precaution, a margin of 40m.s$^{-1}$ between the speed $V_{50}$ and the maximum velocity of projectiles should be observed to ensure that they do not perforate material.

A suitable standard
STANAG 2920 may well have been designed by NATO for military use, it nevertheless remains the standard best suited to our activity. Furthermore, it also covers the protective requirements of paintball.

This standard enables the mechanical resistance of the protection to be precisely determined and for us, therefore, to be able to kit ourselves out according to our needs, without being weighed down with any excess. Furthermore, this standard, unlike EN 166, can apply to all types of protection, eyewear or otherwise, glasses, goggles and masks alike.
STANAG 4296, NATO standard on protective eyewear

In brief
STANAG 4296 is based on STANAG 2920 as well as several other MAS (Military Agency for Standardization) specifications to specify the criteria to be fulfilled for military protective eyewear. Whereas STANAG 2920 could cover any type of ballistic protection, STANAG 4296 only covers protective eyewear.

In detail
Standard STANAG 4296 stipulates a number of aspects to be respected in relation to protective eyewear:

- It must resist an impact of 7.51 joules, according to the conditions defined by STANAG 2920.
- It must be as light and comfortable as possible.
- It must allow fog to be reduced to a minimum (through ventilation or a coating).
- It must provide a field of vision of at least 160°.
- The eyepiece must not distort vision and must be clear.
- The eyepiece must also be scratch-resistant over a period of prolonged use.
- It must be as matt as possible.
- It must be compatible with wearing other protection.

In addition to these points, approved STANAG 4296 protection must retain its protective properties during 10 years in storage and/or one year in use.

An equally suitable standard
STANAG 4296 is a very suitable standard for airsoft, since it offers protection up to 7.5 joules, which is one of the maximum levels authorised in Europe for our replicas, and well beyond the maximum energy limit of our firearms at the present time. Furthermore, it offers guarantees in terms of comfort, fog and protection life-expectancy.

However, due to its restrictions, it has the disadvantage of carrying a price tag associated with approved protection and, above all, it is a standard that is ill-suited to other activities, such as paintball.
Choosing a standard based on energy

Determining energy through calculation

In order to determine the kinetic muzzle energy of a projectile fired from an airsoft replica firearm or a projectile marker, measuring the muzzle speed of the projectile fired from the firearm or marker is all that is required. The mass of a projectile usually being something that is known, and its velocity measured, it is possible to apply the following kinetic energy formula:

\[ Ec = \frac{1}{2} \times m \times v^2 \]

Where:

- \( Ec \): kinetic energy in joules (J).
- \( m \): projectile mass in kilograms (kg).
- \( v \): muzzle speed of the projectile in metres per second (m.s\(^{-1}\)).

In the event that the speed of the projectile is given in feet per second (FPS), it is advisable to convert this to the international system (known as SI or MKS) using the following ratio: \( 1\text{ fps} = 0.3048\text{ m.s}^{-1} \).

Table showing energy/velocity equivalents

<table>
<thead>
<tr>
<th>Energy (in joules)</th>
<th>For a projectile of 0.20 grams</th>
<th>For a projectile of 0.12 grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>( Ec ) (in m.s(^{-1}))</td>
<td>( v ) (in FPS)</td>
<td>( v ) (in FPS)</td>
</tr>
<tr>
<td>0.08</td>
<td>28.28</td>
<td>92.80</td>
</tr>
<tr>
<td>0.87</td>
<td>93.27</td>
<td>306.02</td>
</tr>
<tr>
<td>1.00</td>
<td>100.00</td>
<td>328.08</td>
</tr>
<tr>
<td>1.14</td>
<td>106.77</td>
<td>350.30</td>
</tr>
<tr>
<td>2.00</td>
<td>141.42</td>
<td>463.98</td>
</tr>
<tr>
<td>3.00</td>
<td>173.21</td>
<td>568.26</td>
</tr>
<tr>
<td>4.00</td>
<td>200.00</td>
<td>656.17</td>
</tr>
<tr>
<td>5.00</td>
<td>223.61</td>
<td>733.62</td>
</tr>
<tr>
<td>6.00</td>
<td>244.95</td>
<td>803.64</td>
</tr>
<tr>
<td>6.19</td>
<td>248.80</td>
<td>816.26</td>
</tr>
<tr>
<td>7.00</td>
<td>264.58</td>
<td>868.03</td>
</tr>
<tr>
<td>7.51</td>
<td>274.04</td>
<td>899.09</td>
</tr>
<tr>
<td>8.00</td>
<td>282.84</td>
<td>927.96</td>
</tr>
<tr>
<td>9.00</td>
<td>300.00</td>
<td>984.25</td>
</tr>
<tr>
<td>10.00</td>
<td>316.23</td>
<td>1,037.49</td>
</tr>
<tr>
<td>11.00</td>
<td>331.66</td>
<td>1,088.13</td>
</tr>
<tr>
<td>12.00</td>
<td>346.41</td>
<td>1,136.52</td>
</tr>
<tr>
<td>13.00</td>
<td>360.56</td>
<td>1,182.92</td>
</tr>
<tr>
<td>14.00</td>
<td>374.17</td>
<td>1,227.58</td>
</tr>
<tr>
<td>15.00</td>
<td>387.30</td>
<td>1,270.66</td>
</tr>
<tr>
<td>15.52</td>
<td>393.95</td>
<td>1,292.50</td>
</tr>
<tr>
<td>16.00</td>
<td>400.00</td>
<td>1,312.34</td>
</tr>
<tr>
<td>17.00</td>
<td>412.31</td>
<td>1,352.72</td>
</tr>
<tr>
<td>18.00</td>
<td>424.26</td>
<td>1,391.94</td>
</tr>
<tr>
<td>19.00</td>
<td>435.89</td>
<td>1,430.08</td>
</tr>
<tr>
<td>20.00</td>
<td>447.21</td>
<td>1,467.24</td>
</tr>
</tbody>
</table>
Table showing energy/standard equivalents
Below is a table showing equivalence between standards STANAG 2920, STANAG 4296 and EN 166, as well as some key values:

<table>
<thead>
<tr>
<th>Energy (in joules)</th>
<th>EN 166**</th>
<th>STANAG 2920***</th>
<th>STANAG 4296***</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.08</td>
<td>EN 166 1F</td>
<td>STANAG 2920 V_{50}: 187.3km.h(^{-1}) (52.05m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>0.87</td>
<td>EN 166 1F</td>
<td>STANAG 2920 V_{50}: 287.05km.h(^{-1}) (79.74m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>1.00</td>
<td>EN 166 1B</td>
<td>STANAG 2920 V_{50}: 297.3km.h(^{-1}) (82.60m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>1.14</td>
<td>EN 166 1B</td>
<td>STANAG 2920 V_{50}: 307.7km.h(^{-1}) (85.49m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>2.00</td>
<td>EN 166 1B</td>
<td>STANAG 2920 V_{50}: 360.9km.h(^{-1}) (100.3m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>3.00</td>
<td>EN 166 1B</td>
<td>STANAG 2920 V_{50}: 409.6km.h(^{-1}) (113.8m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>4.00</td>
<td>EN 166 1B</td>
<td>STANAG 2920 V_{50}: 450.7km.h(^{-1}) (125.2m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>5.00</td>
<td>EN 166 1B</td>
<td>STANAG 2920 V_{50}: 486.93km.h(^{-1}) (135.26m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>6.00</td>
<td>EN 166 1B</td>
<td>STANAG 2920 V_{50}: 519.7km.h(^{-1}) (144.4m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>6.19</td>
<td>EN 166 1B</td>
<td>STANAG 2920 V_{50}: 525.63km.h(^{-1}) (146.01m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>7.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 549.77km.h(^{-1}) (152.71m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>7.51</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 564.29km.h(^{-1}) (156.75m.s(^{-1}))</td>
<td>STANAG 4296</td>
</tr>
<tr>
<td>8.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 577.78km.h(^{-1}) (160.50m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>9.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 604.10km.h(^{-1}) (167.80m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>10.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 629.0km.h(^{-1}) (174.7m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>11.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 652.65km.h(^{-1}) (181.29m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>12.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 675.27km.h(^{-1}) (187.58m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>13.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 696.97km.h(^{-1}) (193.60m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>14.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 717.8km.h(^{-1}) (199.4m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>15.00</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 737.0km.h(^{-1}) (205.0m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>15.52</td>
<td>EN 166 1A</td>
<td>STANAG 2920 V_{50}: 748.25km.h(^{-1}) (207.85m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>16.00</td>
<td>Non-standard</td>
<td>STANAG 2920 V_{50}: 757.46km.h(^{-1}) (210.41m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>17.00</td>
<td>Non-standard</td>
<td>STANAG 2920 V_{50}: 776.34km.h(^{-1}) (215.65m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>18.00</td>
<td>Non-standard</td>
<td>STANAG 2920 V_{50}: 794.67km.h(^{-1}) (220.74m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>19.00</td>
<td>Non-standard</td>
<td>STANAG 2920 V_{50}: 812.50km.h(^{-1}) (225.70m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
<tr>
<td>20.00</td>
<td>Non-standard</td>
<td>STANAG 2920 V_{50}: 829.87km.h(^{-1}) (230.52m.s(^{-1}))</td>
<td>Non-standard</td>
</tr>
</tbody>
</table>

*Velocity calculated for a 0.20g bullet.
**Information given as a guide only.
**Taking into account a margin of 40m.s\(^{-1}\), given as a guide only.

Online standards calculator

If you would like to quickly find out the equivalence between standards EN 166, STANAG 2920 and STANAG 4296 or you wish to estimate the minimum protection necessary for a given velocity or energy, you can visit the following web address:

http://calcunormes.ftad.fr
Coverage of standards

EN 166
European standard EN 166 is recognised throughout the European Union (EU), as well as in the member countries of the European Free Trade Association (EFTA) having a national standardisation body which is a member of the International Organization for Standardization (ISO), namely in the 30 following countries:

Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

STANAG 2920/STANAG 4296
Military standards STANAG 2920 and STANAG 4296 are recognised in all NATO member countries, namely in the 28 following countries:

Albania, Belgium, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Turkey, the United Kingdom and the United States.

Note on the coverage of standards
It may be that some standards are recognised in more countries than those listed; however you should be aware that a national standard will always prevail over an international standard if it is more stringent. International standards represent the minimum requirements to be respected. It is nonetheless a wise idea to ask an insurance company about the standards recognised in your country, or at least those recognised by your insurance cover.

Other standards

There are many other standards on protective eyewear around the world, and we have currently only explained the most important ones. If you know of other standards not discussed here, we would be grateful if you could contact us at the following address: contact@ana.asso.fr.

In addition, this document is currently aimed at a European audience; standards that do not apply to Europe are therefore not addressed. With a view to creating an international document on these standards, we invite you once again to contact us by emailing contact@ana.asso.fr.
In summary

To sum up, there are three standards that we use, two are specific to protective eyewear and one relates to ballistic protection in general.

European standard EN 166, on protective eyewear, is an acceptable and conceivable standard for airsoft activities only. In terms of other activities where higher energy limits come into play, the characteristics required by the protection render it unusable. Furthermore, this standard is inadequate for safety glasses.

Military standard STANAG 4296, also on protective eyewear, is the standard of choice. It guarantees a high level of protection as well as certifying a number of added benefits, such as fog resistance. However, due to the conditions required for obtaining approval, the equipment tends to be costly and, above all, it cannot be used for activities such as paintball either.

Military standard STANAG 2920, on ballistic protection, is the standard most suitable for activities posing a risk to eye safety. It has the dual advantage of covering all energy values while also certifying all types of protective eyewear. However, due to the conditions necessary to obtain it, protection tends once again to be costly.

Yet, whatever the standard, it is vital that chosen protective eyewear complies with at least one of these.

At the end of the day, standards are the only method of determining with any certainty the level of resistance offered by a chosen protection.
What should we use?

For airsoft

Games involving energy limits of less than 0.08 joules
For airsoft activities involving minors, or more generally for airsoft activities using replicas with a maximum energy limit of 0.08 joules, European standard EN 166 1F or military standard STANAG 2920 V50 should be respected: $187.3\text{km.h}^{-1}(52.05\text{m.s}^{-1})$ at least, or military standard STANAG 4296.

Games involving energy limits of less than 2 joules
For airsoft activities using replicas where the muzzle energy does not exceed 2 joules, European standard EN 166 1B or military standard STANAG 2920 V50 should be respected: $360.9\text{km.h}^{-1}(100.3\text{m.s}^{-1})$ at least, or military standard STANAG 4296.

Games involving energy limits greater than 2 joules
For airsoft activities, it is advisable to impose an energy limit less than that of the mechanical resistance of the protective eyewear, and also that of the force tolerated by the players. With a view to activities allowing all players to kit themselves out easily with suitable protective eyewear, restricting energy limits to 6 joules is recommended, thus allowing protective eyewear covered by European standard EN 166 1B or even military standard STANAG 2920 V50 to be used: $519.7\text{km.h}^{-1}(144.4\text{m.s}^{-1})$ at least, or military standard STANAG 4296.

For paintball

Games involving energy limits of less than 10 joules
For paintball activities with markers not exceeding a muzzle energy of 10 joules, necessary protective eyewear must be certified by standard EN 166 1A or military standard STANAG 2920 V50: $629.0\text{km.h}^{-1}(174.7\text{m.s}^{-1})$ at least.

Games involving energy limits greater than 10 joules
For paintball activities with markers exceeding a muzzle energy of 10 joules, it is advisable to fix the energy limit according to the mechanical resistance of the protective eyewear. If the maximum energy limit does not exceed 15 joules, protective eyewear must be certified by European standard EN 166 1A or military standard STANAG 2920 V50: $737.0\text{km.h}^{-1}(205.0\text{m.s}^{-1})$ at least.
Regarding insurance

Generally, as legislation in this regard may differ from country to country, the insured party has the following obligations towards their insurer:

- It is up to the insured party to declare the risks associated with the activity.
- They must also declare any change to these risks.
- Failure to do so opens the insured party up to various penalties.

This being the case, and from the moment it has been specified that protective eyewear is used during this activity, whether airsoft or another activity, this protection must be recognised by insurance companies. For this to occur, the protective eyewear must comply with the use for which it is being employed; therefore, it must comply with the standards recognised in your country.

You will find the list of standards recognised by your country in the paragraph entitled "Coverage of standards".
Guide on how to use this document

Choosing a standard
This document provides indications regarding minimum standards to adopt during airsoft or paintball activities. It is advisable, however, to apply various precautionary and safety measures when participating in these activities.

Choosing a minimum standard for protective eyewear must be made in accordance with the maximum energy limit of the replicas/markers being used during games.

Finally, it is strongly recommended that protective eyewear exceeding the minimum specifications indicated in this document be used. Although a safety margin is applied using the STANAG 2920 calculation, it is advisable to choose protection offering the highest level of resistance. Likewise in the case of standard EN 166, it is advisable to adapt your choices in particular if the energy limits in play reach the level of resistance listed in specifications F, B or A. Lastly, if you opt for STANAG 4296, check the protection thresholds as well.

In all these cases, it is also advisable to check that the chosen standard is recognised in your country.

Finally, when choosing protective eyewear, it is important to ensure that the frame and the eyepiece are both fully certified. Normally, the standard mark must feature on both of these items.

Liability
This document has been drawn up by airsoft volunteers, who are aware of the risks associated with our activity. We are in no way specialists with regard to standards, nor are we legal or insurance experts or any other type of professional capable of being affiliated.

Our only wish is to lend some clarity to aspects that are hazy and with which few people are acquainted.

We can in no way be held liable for this document or its content. It is the responsibility of each individual to find out information about standards and the conditions of use for protective eyewear employed during airsoft, paintball or any other activities posing a risk to eye safety.

Finally, in the event that an error has made its way into this document, we would be grateful if you could inform us of the fact so that we can make the necessary corrections as quickly as possible.

Thank you in advance for your understanding.
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Note on the English translation

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www.lingo24.com

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www.shootinggamesshow.com

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- ANA: www.ana.asso.fr
- FTaD: www.ftad.fr
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The English version can also be downloaded as a PDF from the following addresses:

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Document revisions

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