

1st of March, 2005

New FIE rules: Analysis and considerations on the missing hits.

As many people have observed, the elongation to 14msec of the tip impact time for the foil, required by the new FIE rules, causes a loss of signaling of some valid hits. After many tests and an in-depth analysis, we have camed to the following conclusions:

<u>1.</u> The contacts have often some micro-breaks which can annul the hit. These microinterruptions, in fact, can break the total duration of the contact in several parts such that none of them reaches the required time of the 14 msec.

This problem did not take place with the old rules, where the required time, of only 2-3 msec, was so short that was easily included in the broken parts of the contact.

<u>To solve this problem</u> we have developed the new <u>**T2005A**</u> program, which replaces the previous T2005 version.

- 2. The hit given on hard surfaces (chest, breast protectors, etc) tends to bounce and the impact time is shorter than a hit on soft surfaces. <u>Too fast actions</u> on these surfaces can not be signaled for their insufficient duration.
- 3. Important and particular attentions must be paid for the pointe of the foil:

<u>See the Fig.1</u>: When the pointe presses against the conductive jacket, if the latter touches both the crown (1) and the collar (3), it causes the reclosure of the tip contact and therefore the hit is not recognized because the pointe comes out as not pressed.

To remedy this inconvenience it is recommended the use of a pointe d'arrêt where the collar (3) has a diameter definitely lower than that of the insulation (2), as shown in fig.2, so that the jacket is never able to touch the Collar.

Another constructive solution of the pointe d'arrêt is to make the Insulation (2) that covers the whole Collar (3), as shown in fig.3.

If this kind of pointes are not available, should be good to isolate the Collar (3)

with a good insulating paint.

<u>See the fig.4</u>: If the Insulating ribbon (5) does not cover the blade very well, the conductive jacket can touch both the Crown (1) and the Base (4), annulling the hit how for the foregoing case.

To avoid this inconvenience it is recommended to cover the blade very well with insulating ribbon till its end, as in fig.3.



