ABSTRACT

Shooting is a competitive and measurable sport that requires proficiency both from accuracy and speed, whether using firearms or wind powered weapons, hunting is also a shooting sport. Shooting sports fall into several categories based on the weapon used, bullets, targets, and distance from the shooter to the target. With the encroachment of times, the world of shooting sports has developed rapidly both in terms of weapons technology and the targets used.

In Indonesia, many areas still use paper as targets and are manually assessed by the human eye, leading to inaccuracies and a long time in determining the results of shots and still a lack of athletes' and coaches' helpers to evaluate their shots. Therefore, the innovation of spot laser-based assessment systems can facilitate, accelerate, and reduce costs in the assessment of shots. By using lasers and cameras as determinants of shot results, it is expected that this tool can maximize the level of exercise with the feedback provided by the tool rather than just the value of the shot.

After research from the use of laser-based spot assessment systems, the results of the increase in the average value of athletes, the lowest was 2.6 and the highest was 6.9 point. The increase is fairly fast because within one week can produce a higher score increase than in three months. And in the implementation of testing, the system can provide a high level of accuracy where the results on the program with those obtained manually show the same results. Likewise, the operating cost only need Rp. 30 Rupiah in one training sessions compared to the use of bullets that cost Rp. 16,800 Rupiah.

Keywords: International Shooting Federation, Microcontroller, Scoring Target.