

Report to ICFRA on Incident during Palma Teams Match.

This report advises of a risk to competitors and organisers of shooting events that deserves to be emphasised and communicated within our organisations.

An incident occurred that resulted in injury to two competitors [for which they were treated on the range] when a round of ammunition detonated outside of a rifle action during the Palma Teams Match on Saturday 9 February 2019 on Seddon Range at Trentham, New Zealand.

A shooter and coach from the Channel Islands received minor injuries as the result of a rifle bolt malfunction. The shooter was loading a relatively tight round which required the bolt to be forced closed. Being uncomfortable with firing the round after forcing it closed the shooter decided not to fire it and to eject it.

The rifle being used was an RPA model 2000 which is an approved action under our rules. However the ejection port on this model does not have enough length to allow for the ejection of loaded rounds (only expended cases). As such the bolt needs to be removed completely to facilitate the removal of the round.

In this instance the shooter pushed the release button on the side of the action and the coach sitting alongside him removed the bolt. As the coach was moving the bolt into a position to remove the round from under the extractor it detonated with both he and the shooter suffering cuts from exploding brass.

While it is appreciated that relatively little energy is generated by a round exploding outside of a rifle chamber, bits of flying brass can and did cause injury.

On investigation of the incident the following combination of circumstances were found to have contributed to this event occurring.

The shooter was a relatively inexperienced and younger member of the team using a borrowed rifle owned by the College he attended. He stated that while he fired it and cleaned it he didn't know how to disassemble it or anything. He also commented that the bolt had a habit of de cocking, especially in transport. He understood it was a known feature of those particular rifles so had not been too worried about it.

On inspection of the firearm by a qualified gunsmith (Mike Collings) it was observed that there was evidence of wear on the cocking cam (top) to the degree that the slightest touch was likely to set it off. The firing pin protrusion was also found to be excessive at 70 thousandth of an inch (thou) instead of 55 thou.

Spent cases and fully loaded rounds from the same lot as used by the shooter were examined with no evident defect or anomaly disclosed. Whilst the projectile was not located it is a reasonable expectation that it would not have travelled an appreciable distance. There were no other atmospheric or environmental conditions that may have caused the discharge.

Since that event, another incident on our Te Puke range attended by our official armourer for the Palma Match, Mike Collings has further highlighted this issue, this time with a Barnard action. Mike has documented this occurrence and uploaded it to a You Tube video found here; <https://youtu.be/ISEKmgckS6E>

The recommendation is that anyone using a rifle of this age should have it checked regularly. Highlighting the fact that using a good grease to lube the cam which can prevent this wear from occurring should also be communicated.

Rob Morgan

Chief Range Officer: Long Range World Championships 2019