

After three failures, miracle awaits Nirbhay test success

By Hemant Kumar Rout

Bhubaneswar: With three failures and without clearance from the technical committee formed to recommend rectification measures, Defence Research and Development Organisation (DRDO) is all set to conduct a fresh experimental trial of homegrown subsonic cruise missile Nirbhay on May 31.

However, the move to put the missile into trial with faults in the system has left a section of scientists worried. While navigational and hardware problems still persist in the weapon system, glitches in Nirbhay flight control computer are yet to be rectified. So far, of the four tests of Nirbhay missile, three have met with failure. Though the missile covered a distance of nearly 1,000 km during its second trial on October 17, 2014 and was claimed as successful by the DRDO, it could not maintain low height as intended.

Sources said an independent technical committee was formed after the failed fourth trial in December last year to identify faults in the missile sub-systems and suggest remedial measures.

'Even as the committee refused to give a go-ahead for the test, the top brass of DRDO is adamant on going for fresh trial. They are expecting a miracle to happen but with defects in the system, failure is a foregone conclusion,' said a defence scientist on condition of anonymity.

During Aero India 2017 in February, Director General of DRDO S Christopher had said the suggestions of the technical committee have been incorporated and the missile is ready for trial.

Sources said Nirbhay cruise missile, which was powered by a turbofan engine earlier, will be tested using a turbojet engine this time. The first test flight conducted on March 12, 2013, was a failure as the missile fell down only after 20 minutes of flight. On October 16, 2015, the missile during its third test nose-dived into the sea after covering only 129 km in 11 minutes.

Nirbhay's fourth trial on December 21, 2016 was aborted midway as the missile changed its course due to late deployment of wings. Before third and fourth trials, 'The Express' had raised doubts on the outcome of the tests as the missile had faults in the flight control and navigation software.

Having a strike range of nearly 1,000 km, the two-stage missile is six metres long. With a diameter of 0.52 metres and wing span of 2.7 metres, Nirbhay weighs around 1,500 kg and can carry warhead of 200 kg. Designed by Aeronautical Development Establishment (ADE) and launched in 2004, the projected date of completion of Nirbhay was December 31 last. It was, however, extended till June, 2018 after a review. Christopher chose to ignore the queried about the faults in the missile system.