#### **MINISTERIAL STATEMENT ON NATIONAL SERVICE TRAINING DEATHS**

1. Mr Speaker, Sir, I would like to report to this House the findings from the Committees of Inquiry (COI) that were convened after the deaths of two full-time National Servicemen in separate training incidents in April and May this year. Before I begin, I want to offer my deepest condolences to the families of PTE Lee Rui Feng Dominique Sarron and 3SG Tan Mou Sheng. The SAF and MINDEF are deeply sorry for the untimely and tragic loss of PTE Lee and 3SG Tan and the anguish and distress it has brought to their families.

2. The COIs were convened by the Armed Forces Council to investigate the circumstances surrounding the deaths of PTE Lee and 3SG Tan. COIs are chaired by senior civil servants outside MINDEF. Members also include one or two medical specialists, who would be able to provide professional expertise. The COI has full powers and access to information and personnel to independently investigate fully the circumstances leading to death, to determine the contributory events or persons and make recommendations to rectify lapses, if any. MINDEF and the SAF treat COI reports with utmost seriousness so that we can avoid similar occurrences.

3. In the cases of PTE Lee and 3SG Tan, their respective COIs have uncovered clear breaches of training safety regulations in the events that led to their deaths. I will now brief Members of this House on their key findings, and the follow up measures the SAF will take in response.

#### PTE Lee Rui Feng Dominique Sarron

4. First, on PTE Lee Rui Feng Dominique Sarron, the main substantive findings from the COI report on PTE Lee. On 17 Apr 2012, PTE Lee participated in an exercise at the Murai Urban Training Facility at Lim Chu Kang. Smoke grenades were thrown outside a building. PTE Lee entered one of the rooms of that building, and experienced breathing difficulties after exposure to the smoke. He was immediately accompanied away from the smoke but lost consciousness outside the building. He received Cardio Pulmonary Resuscitation on the spot and was evacuated in a safety vehicle to the Sungei Gedong Medical Centre, before being sent to the National University Hospital (NUH) in an SAF ambulance. Resuscitative efforts by an SAF medical officer continued throughout the journey and at NUH. The COI found that "the medical aid rendered was timely, adequate and proper". Regrettably however, PTE Lee was pronounced dead after these attempts failed.

# **Cause of Death**

5. The cause of death was certified by the forensic pathologist of the Health Sciences Authority (HSA) to be due to an "acute allergic reaction to zinc chloride due to inhalation of zinc chloride fumes". Zinc chloride is a primary component of smoke grenades currently used in the SAF.

#### Safety Breach

6. The COI found that the number of smoke grenades used in the exercise exceeded the limit specified in training safety regulations. The Training Safety Regulations, or TSR, stipulate that the minimum distance between each thrown smoke grenade should be not less than 20m and that the minimum distance between troops and the thrown smoke grenade should not be less than 10m. Based on the exercise layout, not more than two smoke grenades should have been used, but the Platoon Commander had thrown six grenades instead. The COI opined that "if the TSR had been complied with, PTE Lee and his platoon mates would not have been subjected to smoke that was as dense as that during the incident, and...for as long as they were during the incident" and that "reduced exposure to smoke would have reduced the risks of any adverse reactions to the smoke." The COI concluded that "the cause of death of PTE Lee resulted from inhalation of the fumes from the smoke grenades used in the incident".

# Platoon Commander "Negligent"

7. The COI is of the opinion that the actions of the Platoon Commander, a Regular Captain, were negligent as he was aware of the specific TSR but did not comply with it.

#### Other considerations – Asthma

8. PTE Lee's pre-enlistment medical screening records revealed that he had a history of asthma. The COI found that PTE Lee's medical classification and vocational assignment were appropriate, based on the severity and control of his asthma condition. The COI was unable to establish with certainty if PTE Lee's history of asthma was a contributory factor to his death. First, the COI noted that the specific effects of zinc chloride fumes on asthmatics had not been reported in medical literature. Second, adverse reactions to zinc chloride can occur even in individuals without asthma. Third, other platoon mates with asthma had developed only mild symptoms after the exposure to the zinc chloride fumes in the same exercise.

## **Recommendations of COI**

9. To prevent a recurrence, the COI recommended measures to ensure compliance with TSRs through strengthening the role of the Safety Officer and educating commanders and troops on Training Safety Regulations.

10. Sir, I have concluded the findings and recommendations from the COI and would like to now brief members on SAF's and MINDEF's measures in acting on the report.

11. First, on the use of smoke grenades in training. Smoke grenades which produce zinc chloride fumes have been in use by the SAF since the 1970s. They are also used by other militaries and agencies such as the United States and the Republic of Korea militaries because in acceptable concentrations of exposure, these smoke grenades are safe. Lung injury following exposure to zinc chloride fumes, and even deaths, have been reported in international literature but the numbers are few and mainly occur after exposure to high concentrations of zinc chloride fumes. In fact, PTE Lee's death directly attributable to zinc chloride inhalation is the first on SAF's records.

12. To update our TSR for smoke grenades, MINDEF had in 1998 commissioned the Department of Community, Occupational and Family Medicine of the National University of Singapore to conduct a detailed technical evaluation of smoke grenades. Specifically, concentrations of zinc chloride fumes were measured at different distances from the thrown smoke grenades to determine the safety parameters. The findings of that study now form the TSR for smoke grenades that I have previously detailed.

13. Smoke grenades, which have zinc chloride fumes, are still safe to use if TSRs are observed. However, despite these assurances, I can understand the anxiety of our soldiers and their families, arising from this isolated incident of a death due to inhalation of zinc chloride fumes. So that our soldiers can train with confidence, MINDEF would like to address these

concerns directly.

14. Following PTE Lee's death, the SAF has suspended for training exercises the use of smoke grenades which produce zinc chloride fumes. The suspension will continue as the SAF is studying using smoke grenades which do not produce zinc chloride for training exercises. For missions, we will continue to use zinc chloride smoke grenades as they are judged still to be the most operationally effective.

15. The second public concern arising from this case is due to asthma as a significant proportion of National Servicemen – one in five – have asthma, albeit often in a mild form. The SAF convened a Respiratory Medicine Specialist Advisory Board consisting of five senior respiratory medicine specialists to address this issue, taking into account the COI report. The Advisory Board concluded that the SAF medical classifications on asthma are relevant, up to date and in line with national and international standards. It is still safe for servicemen with a history of asthma to undergo training with smoke grenades if the TSRs are followed. I thank the COI and the Board for their valuable work.

16. MINDEF has relieved the exercise Chief Safety Officer, Captain Chia Thye Siong and the Platoon Commander who threw the smoke grenades, Captain Najib Hanuk Bin Muhamad Jalal, they have been relieved of their duties. They have been re-deployed to assignments which do not oversee soldiers in training or operations. Following procedures and due process, the Chief Military Prosecutor will determine if these personnel should be subject to a General Court Martial (GCM), to establish their degree of culpability and if found guilty, mete out the appropriate punishment. Police investigations are also on-going to determine whether to prosecute the personnel involved in Civil Court.

## 3SG Tan Mou Sheng

17. Let me now present the COI findings on the death of 3SG Tan. 3SG Tan was an instructor of a Reconnaissance Commanders' Course held at the Marsiling training area on 11 May this year. He was travelling with other instructors in a scout jeep and seated at the rear of that jeep. When the jeep overturned, 3SG Tan was thrown out and pinned under the jeep. 3SG Tan was extricated, attended to by a medic and evacuated in the safety vehicle to the Nee Soon Camp Medical Centre. The duty Medical Officer immediately accompanied 3SG Tan to Khoo Teck Puat Hospital via the SAF ambulance. 3SG Tan underwent emergency surgery but despite this succumbed to his injuries. According to the Health Sciences Authority, the cause of death as certified by the forensic pathologist was "haemorrhage from severe pelvic crush injuries".

18. The COI was of the opinion that specific instances of individual negligence and

breaches of safety had contributed to 3SG Tan's death. First, the jeep driver was not licensed to drive. The Conducting Officer had assigned the jeep driver to drive without checking if he had a license. Neither did the assigned jeep driver highlight to his superior that he was not licenced to drive a jeep. Second, the two rear passengers, one of whom was 3SG Tan, were not wearing helmets or lap belts. The Vehicle Commander did not ensure that the jeep passengers wore their helmets or lap belts.

19. The COI found that Combat Intelligence School, the CIS, the school in question which conducted this training package, had a weak safety culture. In the course of its investigations, the COI uncovered other previous instances of unlicensed driving. The vehicle management system was also not satisfactory, with lax access to vehicles by servicemen in the field during training.

20. Shortly after the incident, MINDEF removed the Commanding Officer (CO) of this school, the Combat Intelligence School, Lieutenant-Colonel Vincent Lam Fei Liong. MINDEF relieved him of his command and appointed a new Commanding Officer. Other personnel in the Combat School have also been relieved of their duties:

- a. The Head of the Reconnaissance, Surveillance, and Target Acquisition Wing, Major Poon Chen Song;
- b. The School Sergeant Major, 1st Warrant Officer Lim Ser Wei;
- c. The exercise Supervising Officer, Lieutenant Marcus Koh Men; and
- d. The exercise Conducting Officer, Master Sergeant Lee Kong Kean.

All these SAF personnel have been re-deployed to assignments where they will not be supervising soldiers for training or operations.

21. As in the previous case, the Chief Military Prosecutor will determine if these personnel should be subjected to a General Court Martial (GCM). Police investigations are also on-going to determine whether to prosecute the personnel involved in a Civil Court and this includes the unlicensed driver of the jeep, 3SG Cavin Tan.

22. The vehicular management system in the CIS has been tightened. The SAF has also reviewed other units to ensure that unauthorised driving does not occur during field training. It is now mandatory for drivers to display their driving license visibly on the vehicle dashboard. All SAF units have now tightened control over the use and movement of vehicles so that the keys

of that vehicle are not inadvertently handed on to unlicensed drivers.

## Strengthening Safety Across the SAF

23. While the SAF has a robust training safety system in place, these two incidents show that more needs to be done. The SAF is determined to put things right and correct any inadequacies uncovered. More importantly, we want to ensure that these lax attitudes toward training safety remain isolated instances and do not take root in our system.

24. Specifically, after these two incidents, we have already tightened the control and management of SAF vehicles in units and during field training. We will explore safer alternatives to the existing type of smoke grenade for use in training. We will reinforce measures to ensure safe management of servicemen with a history of asthma. We will also ensure that the TSRs are adhered to on the ground.

25. But beyond the specific measures, the SAF will also make three key systemic changes to strengthen training safety across the whole of the SAF.

26. First, we will deploy more safety officers on the ground. They will be designated as full-time Unit Safety Officers whose primary role will be to ensure that units and servicemen comply with safety measures.

27. Secondly, an Army Safety Review Board (ASRB) chaired by a senior civil servant outside MINDEF has been set up to review the Army's overall safety structure, processes and culture.

28. Third, the SAF will set up an SAF Inspectorate, reporting directly to the Chief of the Defence Force. The SAF Inspectorate will set the safety culture across the entire SAF and oversee the individual inspectorates of the three services. In this role it will promulgate best practices and ensure the robustness of safety related policies, that they are up to date and sound throughout the SAF.

### Conclusion

29. Mr Speaker, Sir, every Singaporean son is precious and any injury or death in the SAF is one too many. But to prevent injuries and death, our commanders and soldiers must observe training safety regulations. Any commander who ignores safety regulations, whether wilfully or

negligently, puts his soldiers at risk, is not fit for command. Our soldiers can train realistically and safely – there need not be a compromise. Indeed, the more we ensure that conditions are safe, the greater confidence our soldiers will have in training. These two deaths could have been avoided if safety instructions had been followed. The SAF will learn from the incidents, correct any inadequacies and punish those who disregarded safety regulations.