For discussion on 1 June 2021

Legislative Council Panel on Security

Developing the Fire and Ambulance Services Academy as a Regional Training Centre for Emergency Rescue and a Local Platform for Community Emergency Preparedness Education

PURPOSE

This paper briefs Members on the progress made by the Fire Services Department (FSD) in developing the Fire and Ambulance Services Academy (FASA) as a regional training centre for emergency rescue and a local platform for community emergency preparedness education, as well as the way forward.

DEVELOPMENT OF FASA

2. Since the commissioning of FASA in January 2016, FSD has been making good use of the well-equipped Academy to provide an array of diversified training for members of the Fire, Ambulance, Mobilising and Communications as well as Workshop Streams, which include foundation training in firefighting, rescue, ambulance services and mobilisation as well as specialised training in handling major disasters, in such a way that our members can receive better training to serve our society.

Foundation Training

3. Lasting for 26 weeks, the foundation training in fire services is to equip new recruits with the full set of basic knowledge and skills required for firefighting and rescue, including, among others, the use of breathing apparatus, rescue and firefighting strategies in high-rise buildings as well as guiding rules for search and rescue at fire scenes. For this, FASA is equipped with various live fire training facilities such as the Drill Tower, the Rescue Training Tower and the Burn House, for trainees to practise the strategies and techniques of firefighting and rescue as well as those of handling casualties applicable to various kinds of buildings. Among the facilities, the Burn House is designed to simulate a number of indoor fire scenarios, including sub-divided units in tenement buildings, hotels, industrial buildings and karaoke establishments. Vivid live fire, high

temperature, audio effect and smoke are simulated to help trainees acquire firefighting and rescue techniques in a simulated live fire environment that is safe and controlled.

4. For new ambulance recruits, they receive foundation training in ambulance services in the Ambulance Services Training area at FASA. Also lasting for 26 weeks, the training covers ambulance aid, Patient Assessment Model, as well as the know-how and equipment in respect of patient conveyance, etc. The specifically-designed Ambulance Services Training area features a cluster of various kinds of ambulance services training facilities (including the Simulated Ambulance Compartment, the Accident and Emergency Department Simulation Room and the Disinfection Simulation Room) to allow trainees to go through a simulated training process covering the complete turn-out procedures in one go – from responding to an ambulance call, carrying out patient assessment, administering medical treatment, handing over a patient to hospital to finally conducting disinfection.

5. On the other hand, trainees from the Mobilising and Communications Stream receive 12-week foundation training at FASA, which comprises, among others, communication skills for answering calls for assistance, classification of cases requesting assistance as well as knowledge of dispatching manpower and emergency appliances. A training room fitted with simulated consoles of mobilising system is set up at FASA to allow trainees to be trained in an environment close to real life.

6. As for members of the Workshop Stream, since they have acquired relevant professional qualifications at the time of appointment, they will go through three-week foundation training at FASA to learn about FSD's structure, internal orders/instructions, conduct and discipline, basic ambulance aid as well as occupational safety and health, etc.

7. Apart from the specific training for individual Streams, FASA's curriculum is so designed that members of various Streams would have more opportunities to receive training together. For example, through live exercises/drills for major traffic accidents involving multiple casualties, trainees from different Streams can undergo training in mobilisation, rescue and patient treatment at the same time. This not only ensures a more effective use of training resources but also helps build team spirit and rapport among members of various Streams, with a view to enhancing their close cooperation and generating synergy effects when facing emergencies.

8. Moreover, FASA has adopted a multi-pronged approach to reinforce the training on national affairs and the Basic Law for all new recruits, such as organising seminars on the Basic Law with the Civil Service Training and Development Institute (CSDTI), and providing them with the training materials on the National Security Law for the HKSAR produced by CSDTI. By doing so, the awareness of the new recruits on national affairs and safeguarding national security could be consolidated.

9. As at 31 December 2020, FASA has provided foundation training for a total of 306 Station Officers, 1 189 Firemen, 69 Ambulance Officers, 846 Ambulancemen, 102 Mobilising and Communications personnel as well as 21 Workshop personnel.

Specialised Training

10. In view of the rapid development of the society, a number of large scale cross-boundary and inter-district infrastructures and mass transit systems have been completed, coupled with the increasing complex structure of the new infrastructures and buildings emerged in recent years, FSD personnel are facing greater challenges in different aspects such as firefighting, rescue and ambulance, etc. The level of expertise and skills required has become more advanced than before.

11. To tackle the various new challenges in firefighting and rescue operations, FSD is committed to enhancing the operational capability of its members, optimising and consolidating the firefighting and rescue techniques of serving fire and ambulance personnel. FASA provides specialised training in the handling of major emergency incidents that may happen in Hong Kong. These incidents are relatively complex and tend to create rather serious and widespread impact, including building, aquatic, fuel storage, aircraft, hazardous materials and structural collapse incidents as well as traffic accidents, etc. For the purpose of training for these major incidents, FASA is fitted with advanced simulators and training centres (e.g. the Paramedic Training Centre, simulated road tunnel, Swift Water Rescue Simulator as well as Fuel Tank and Petrol Filling Station Simulator, etc.) to allow newly recruited as well as serving fire and ambulance personnel to undergo realistic training in a safe and simulated setting, so as to enhance their firefighting, rescue and patient handling techniques for the sustained enhancement of the quality of fire and ambulance services, and operational efficiency.

12. Among the many training facilities in FASA, the Compartment Fire Behaviour Training Simulator merits special mention. Constructed out of 19 units of 40-foot freight containers, the simulator is now the largest of its kind in the world. A total of four fire zones are put in place on the ground floor, and the hot smoke generated by the burning of chipboards in the fire zones can be diverted to 1/F and 2/F by hatches. This helps simulate various realistic fire scenarios with live fire and hot smoke, providing different firefighting, search and rescue and ventilation strategies training to fire personnel, thereby enhancing their response capability and adaptability under extreme heat and smoke-filled conditions.

Driving Training

13. Firefighting and rescue work is time-critical. It is crucial that FSD's crew must arrive at the scene by fire appliances and ambulances in the shortest time upon receipt of dispatch instructions. Since fire appliances and ambulances are, in general, relatively large in size and loaded with various types of rescue tools, frontline drivers of these vehicles must be conversant with their operation and have excellent driving skills and awareness in order to drive safely at high speed in the busy streets, promptly arrive at the scene and convey patients to hospital for treatment A Driving Training Centre is therefore built at FASA to provide swiftly. driving training in fire appliances, ambulances and other specialised rescue vehicles, as well as conduct assessment for learner drivers. The training centre is equipped with an advanced driving training simulator and a designated training ground. Coupled with the road network and buildings inside FASA which are designed to simulate the real-life environment in Hong Kong, the learner drivers can undergo training in a safe and controlled environment, so as to enhance their safety awareness and driving skills.

PROVISION OF TRAINING FOR LOCAL ORGANISATIONS AND OVERSEAS COUNTERPARTS

14. To implement the objective of nurturing talents as set out in the Chief Executive's 2017 Policy Address, apart from providing foundation and advanced specialised training for newly recruited and serving FSD personnel of various ranks, FASA also provides training for other government departments, public and private organisations in Hong Kong, as well as its fire and ambulance counterparts in other countries/regions. Training courses relating to fire services – including, among others, Basic Firefighting Training Course, Advanced Firefighting and Rescue Training Course, Firefighting Training Course for Practitioners in Oil/Chemical

Industries, Fire Safety Training Course for Frontline Staff of Petrol Filling Stations and "Fire Safety Train-the-trainer" Course for Karaoke Establishment Employees - have been provided for public and private organisations in Hong Kong, such as the MTR Corporation, power companies, gas companies, oil companies and property management companies. In addition, FASA has also provided training on basic firefighting, first aid, risk management, fire investigation, and disaster preparedness and fire protection for personnel of other government To strengthen the capability to respond to public order departments. events involving arson, FASA has also specifically arranged training and exercises for different disciplined services departments on the proper use of fire-fighting equipment and the handling of chemical substances or dangerous goods,. Since its commissioning, FASA has provided training courses relating to fire services for over 2 500 personnel from other government departments and practitioners from various industries, with a view to enhancing their knowledge of firefighting and fire protection, thereby raising the overall fire safety level of Hong Kong.

15. As a training centre for emergency rescue in the region, FASA is equipped with an array of diversified training facilities including, in particular, the state-of-the-art Compartment Fire Behaviour Training Simulator and various simulated training scenarios, attracting visits from rescue teams in the region for exchange. Since its commissioning, FASA has provided exchange and training programmes for its rescue counterparts in other countries/regions (including the Mainland, Macao, Vietnam, South Korea, Singapore and Taiwan). So far, over 900 counterparts have participated in these programmes, which cover training in high angle rescue, hazardous materials incident, compartment fire behaviour, fire investigation, aircraft incident, road traffic accident, paramedic and disaster preparedness, etc.

STRENGHTENING EXCHANGE, COOPERATION AND TRAINING WITH GUANGDONG-HONG KONG-MACAO GREATER BAY AREA

16. Separately, to tie in with the development of the Guangdong-Hong Kong-Macao Greater Bay Area, FASA has held no less than 12 specialised techniques training courses¹ for the Mainland counterparts every year

¹ The topics of the exchange and training programmes comprise high angle rescue, hazardous materials incident, compartment fire behaviour, fire investigation, aircraft incident, road traffic accident, paramedic and disaster preparedness, etc.

since its commissioning in 2016. FASA also sends its personnel to visit the fire and ambulance units in the Greater Bay Area for technical exchanges and discussions on matters relating to fire services. These units are also invited to visit FSD, including the training facilities in FASA. A mode of collaboration within the Greater Bay Area is developed to strengthen the rescue techniques as well as the communication and For instance, FSD sent a group cooperation of the three places. comprising instructors and members specialised in road traffic accident rescue under the Urban Search and Rescue Team to a five-day fire services study visit to Guangzhou, Foshan and Jiangmen in January 2019, during which they exchanged views with their counterparts on, among others, the basic overview of rescue, risk assessment, the use of hydraulic break-in equipment and case studies. They also demonstrated the techniques used by FSD in performing road traffic accident rescue and technical rescue. In the same month, FSD invited its counterparts in Zhuhai and Macao for a visit to FASA and to participate in the "Hong Kong Fire Services Department's Exchange Workshop on Pre-hospital Ambulance Service and Disaster Preparedness". The purpose of the workshop was to foster, through experience sharing and exercises, a better understanding among the three parties in areas such as pre-hospital emergency ambulance service and the relevant professional development as well as incident management strategies, so as to jointly increase disaster management efficiency, and to enhance rescue response capabilities and strategies in relation to major cross-boundary infrastructures.

17. Though most of the overseas and Mainland exchange programmes, conferences and forums originally scheduled in 2020 were either cancelled or postponed due to COVID-19, FSD still conducted video conferences with the Mainland counterparts to continuously strengthen communications and experience sharing. For example, the personnel of FASA held a video conference in June 2020 with the Fire and Rescue Corps of Guangdong Province on marine firefighting, community emergency preparedness and fire protection measures.

18. FASA will continue to arrange exchanges and visits with its counterparts in the Greater Bay Area to strengthen rescue techniques, communications, cooperation and training of each other for the promotion of the development of fire and ambulance services in the region, jointly enhancing the capabilities on emergency rescue and disaster preparedness to respond more effectively to emergencies in the Greater Bay Area.

COMMUNITY EMERGENCY PREPAREDNESS AND OTHER PUBLIC EDUCATION WORK

19. Public education plays a pivotal role in raising the overall safety level of our society. Currently, the Fire and Ambulance Services Education Centre cum Museum (FASECM) at FASA, which is open to the public by appointment free of charge, is the only public education facility in Hong Kong dedicated for disseminating information on fire services, ambulance services and community emergency preparedness. With a four-storey exhibition hall, FASECM provides an array of interactive and multimedia information facilities as well as different exhibition and experiential areas, including the "Historical Appliances Display Area", the "Partnering with the Community Area" and the "Major Incidents Area". Through the facilities and exhibits at FASECM, it is hoped that the public will be able to gain a better understanding of the work of FSD.

20. To tie in with FSD's strategies on community emergency preparedness, the Department especially set up a "Community Emergency Preparedness Education Area" at FASECM. There is a variety of interactive facilities in the area (including virtual reality games with the themes of fire extinguishment and escape, story games on how to respond to terrorist attacks, and simulation games related to cardiopulmonary resuscitation (CPR)), in addition to electronic interactive screens and exhibition boards showing the information on natural disasters and emergency preparedness, etc which seek to enhance public awareness on disaster prevention and response capability in the event of emergencies, and impart knowledge to the public through "Three Basic Skills on Emergency Preparedness", namely "Extinguish and Prevent Fire", "Selfhelp and Help others" as well as "Escape and Evacuate".

21. The Community Emergency Preparedness Division² of FSD adopts various promotional strategies, such as making use of the virtual character "Anyone" to publicise the concept of "Anyone Can Save Lives" and "Dare to Do, Save a life", in a bid to achieve wider public knowledge on CPR and the use of automated external defibrillators (AEDs)³. Callers

² FSD established the Community Emergency Preparedness Division on 2 October 2018 to promote in the community ways and skills in emergency preparedness through educational and promotional activities, with a view to further enhancing public awareness of emergency preparedness in a holistic manner and strengthening the public's response capability in the event of emergencies or contingencies.

³ In 2021, FSD plans to launch the "AED Anywhere for Anyone" Programme, and to install more than 100 AEDs outside the fire stations and ambulance depots across the territory for public access during emergencies. One-stop support services will be provided to organisations which are interested in

for emergency ambulance services are also encouraged to follow FSD's post-dispatch advice (PDA) and provide timely first aid to patients before the arrival of ambulance crew at scene. A specific scenario simulating the provision of PDA is thus included in the simulation games related to CPR at the "Community Emergency Preparedness Education Area" to help the public understand how to follow PDA and assist in stabilising patients' conditions.

22. Regarding the community education programme on CPR and the use of AEDs, FSD will continue to reach out to people from different age cohorts and community groups through various platforms and keep on organising, among others, the CPR Training Programme in Campus, the "Press to shock – Save a life" AED Course and the Community CPR Training Course, with some of them to be held at FASECM.

23. Moreover, FASA also provides a Fire Safety Ambassador (FSA) Trainer Course which covers fire safety talks, the use of fire extinguishers and fire hose reels, teaching methods for trainers, visits to fire stations and inspection of fire service installations and equipment in buildings, etc. The course is aimed at training volunteers from all walks of life to become FSA Trainers, so that they can assist FSD in training up more FSAs in the community to further disseminate fire protection messages and help abate or report fire hazards. At the same time, in the "Enhanced Smart Teen Project" co-organised by FSD and the Education Bureau, some secondary four and five students will be arranged to receive systematic training in discipline and teamwork at FASA. The students will also attend the "Press to shock – Save a life" AED Course and be trained to become FSAs to assist FSD in promoting fire prevention messages in the community.

WAY FORWARD

24. FASA will keep abreast of the times and adopt an enhanced scientific approach in pressing ahead with building a fire and ambulance brigade which stands out with ever-improving professionalism, so as to meet the challenges arising from rapid social development, ageing population and buildings, as well as extreme weather faced by our society.

installing/have installed AEDs to facilitate proper installation of AEDs and effective public access to the device during emergencies. A centralised AED registry will be rolled out to provide a convenient means for the public to find out which nearby government departments, private organisations or public utility companies are equipped with AEDs during emergencies.

25. Moreover, to strengthen Hong Kong's position as a talent education and training hub, FASA will also continue to play an active role in providing various training services to other government departments, public and private organisations in Hong Kong as well as its counterparts in other countries/regions. FASA will strive to become a leading training centre in the region for emergency rescue and fully realise Hong Kong's soft-power in grooming talent. Meanwhile, FSD will continue to exchange and cooperate with counterparts in the Guangdong-Hong Kong-Macao Greater Bay Area to jointly push the firefighting, emergency rescue and pre-hospital ambulance services in the Greater Bay Area to new heights.

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