## LCQ11: Search and rescue and patrol work in the countryside

Following is a question by the Hon Jeffrey Lam and a written reply by the Secretary for Security, Mr John Lee, in the Legislative Council today (March 17):

## Question:

It has been reported that since the number of people visiting the countryside for recreation and amenity (hikers) increased sharply last year as compared with those of the previous years, the number of mountain search and rescue (S&R) calls received by the relevant government departments in the same period rose correspondingly. In addition, quite a number of hikers committed unlawful acts during their visits to the countryside, such as littering and improper disposal of cigarette butts, causing damage to trees and recreational facilities, as well as barbequing or cooking outside designated places. Regarding S&R and patrol work in the countryside, will the Government inform this Council:

- (1) of the number of mountain S&R operations in which the Government Flying Service (GFS) participated, and the average number of officers, fuel cost and total expenditure involved in each of such operations, in each of the past three years;
- (2) of the number of mountain S&R calls received by the Fire Services Department (FSD), and the casualties of the relevant incidents, in each of the past three years; whether the Government will consider making public the relevant figures and details on a monthly basis so as to remind hikers to pay attention to safety;
- (3) whether it has assessed, among the cases of the calls mentioned in (2), the respective numbers of those belonging to (i) misuse of the service and (ii) incidents arising from the reckless acts of the persons seeking assistance (e.g. taking photographs at spots located at precipitous terrains or hiking under inclement weather), as well as the impacts of these two types of cases on other emergency rescue services; whether the Government will step up publicity efforts to remind hikers to pay more attention to safety and make reasonable use of emergency call services;
- (4) of the number of occasions on which hikers activated the GPS Hiker Tracking Service on the Government's mobile applications, and the number of S&R operations in which the location of the persons seeking assistance was ascertained through such service, in each of the past three years;
- (5) given that the number of mountain S&R calls increased in recent years, whether the Government has allocated additional resources to the relevant government departments (i.e. the FSD, GFS and Civil Aid Service) so as to

enhance their equipment, manpower and training in respect of S&R;

- (6) whether it will make good use of technologies to carry out mountain S&R operations, e.g. using unmanned aircraft systems to search for persons seeking assistance as well as deliver relief materials to them, providing QR codes on the distance posts along hiking trails to facilitate persons seeking assistance to provide their accurate locations, and erecting luminous warning signs powered by solar photovoltaic or wind power generation systems; and
- (7) of the approaches currently adopted by the relevant government departments for patrolling hiking trails to combat hikers' unlawful acts and how much manpower is involved in such work, as well as how such departments get to know that there are damaged trails or recreational facilities; the time normally taken to complete the restoration of damaged trails and recreational facilities?

## Reply:

President,

Different government departments have been striving to publicise and promote the importance of mountaineering safety among the public through various channels to prevent danger. The departments concerned are also constantly reviewing their capabilities for conducting emergency rescue operations in mountaineering accidents. If necessary, the Government will allocate additional resources to maintain the quality and efficiency of related emergency services and rescue operations.

Having consulted the relevant bureau and departments, our consolidated reply to the Hon Jeffrey Lam's question is as follows:

(1) Every Government Flying Service (GFS) helicopter on a call-out is normally manned by two pilots and at least two air crewman officers. Depending on operational needs and the condition of the injured in each mountain search and rescue operation, the GFS may also arrange their Air Medical Officer and Air Medical Nursing Officers, officers of the Fire Services Department (FSD) and the Civil Aid Service (CAS), etc. to join the call-outs to provide support.

The numbers of helicopter flights conducted by the GFS in mountain search and rescue operations in the past three years are tabulated below:

	2018	2019	2020
Number of flights	435	421	885

In the past three years, on average, each mountain search and rescue operation takes about one hour. The average direct operating costs of helicopter call-outs (i.e. maintenance cost and fuel cost) are tabulated below:

	2018	2019	2020
AS-322 L2 Super Puma	\$28,950	\$25,830	\$21,470
	(\$3,883)	(\$3,672)	(\$3,532)
EC 155B1	\$21,960	\$22,610	\$22,300
	(\$3,164)	(\$2,992)	(\$2,878)
H 175	\$26,310	\$22,290	\$20,590
	(\$3,595)	(\$3,400)	(\$3,270)

Note: The figures in brackets represent the fuel cost.

(2) According to the FSD's record, the statistics on mountain rescue incidents handled by the Department in the past three years are tabulated below:

	2018	2019	2020
Number of mountain rescue call-outs	242	215	602
Number of casualties in the incidents	129 (9)	121 (13)	323 (11)

Note: The figures in brackets represent the number of deaths.

Currently, the FSD has no plans to publish the relevant figures and details on a regular basis. However, it has uploaded information on mountaineering safety to its website and official Facebook page to remind hikers to stay safe.

(3) The FSD does not maintain relevant statistics on the abuse of emergency services and accidents due to recklessness of hikers among the emergency call cases as mentioned in part (2).

Various government departments have been publicising and promoting mountaineering safety through different means, including the following:

- (i) The FSD's website and official Facebook page provide information on mountaineering safety for public access, including tips on pre-trip preparation, points to note on safety during hiking, as well as ways to seek help and self-rescue in case of danger.
- (ii) The Agriculture, Fisheries and Conservation Department (AFCD) has all along been encouraging hikers to use the hiking trails maintained by the department to avoid accidents. To assist hikers to plan suitable routes, the AFCD promotes and provides integrated information on hiking trails including Long Distance Trails, Country Trails, Family Walks and Nature Trails through the "Enjoy Hiking" website. Moreover, the AFCD has set up information boards and directory signs at suitable locations in country parks to provide trail information and remind hikers about safety. The AFCD has also erected warning signs at locations with higher risks within country parks to alert hikers to avoid these sites.

- (iii) The CAS regularly organises the Mountaineering Safety Promotion Day as well as mountaineering safety talks for secondary school students to enhance the public's mountaineering knowledge and safety awareness.
- (4) The Security Bureau's "Safeguard HK" mobile application and the AFCD's "Enjoy Hiking" mobile application both provide "Hiker Tracking Service", through which hikers could store their location records at the service centre of the Communications Association of Hong Kong. In case of accidents, the rescue team could trace the location of the missing persons with their mobile numbers, thereby enhancing the efficiency of mountain rescue operations. In the past three years, there were nine search and rescue cases in which the location of the missing hikers was tracked through this service.
- (5) The Government has been allocating additional resources to the departments concerned as necessary to enhance their emergency rescue capabilities in mountaineering accidents, including the following:
- (i) The FSD set up a Mountain Search and Rescue Team (MSRT) in October 2016, currently with 200 members deployed to fire stations near popular mountain activity spots. All MSRT members have to receive specialised training on advanced mountain search and rescue techniques, which include orienteering, rope rescue, large-area mountain search and rescue strategies, as well as performing rescue missions under extreme weather, etc.

MSRT members are all equipped with personal protective equipment, and each mountain search and rescue unit is equipped with professional rescue tools and emergency survival equipment to assist members in performing mountain rescue work. Besides, a Mountain Search and Rescue Support Team (MSRST), comprising instructors from the Fire and Ambulance Services Academy with rich experience in mountain search and rescue, was also established to provide incident commanders in mountain rescue incident with technical and strategic support by, for example, analysing information and clues about missing persons, assisting in formulating search and rescue strategy, and liaising with relevant government departments, etc.

The FSD also analyses trends of mountain accidents and reviews the search and rescue strategy from time to time with a view to strengthening the capability of handling incidents. For example, the number of mountain accidents in Lantau Island area has been increasing in recent years. To better cope with the mountain accidents in Lantau Island, the seventh MSRT was established in Tai O Fire Station in February 2021.

(ii) The GFS's seven new H175 helicopters have been fully operational since Q3 2019. In addition to improving flight safety, they have also enhanced the search and rescue capability, endurance and the loading capacity of the helicopter fleet.

Furthermore, the GFS is preparing for the establishment of a Flight Simulator Training Centre (FSTC) at the GFS Headquarters, which is expected to come into operation in Q4 2022. FSTC will provide the GFS pilots with the necessary flight simulation training, which will be conducive to enhancing

their training efficiency and technical competency, increasing the pilots' availability for deployment in conducting emergency flying missions, thereby enabling the GFS to meet service needs more effectively. In addition, the GFS Kai Tak Division is expected to be in full operation in Q3 this year, enabling the GFS to maintain effective and efficient emergency services round the clock.

- (iii) The CAS is upgrading the training facilities at Yuen Tun Camp and enhancing the related training to strengthen the rescue capabilities of its members in response to mountaineering accidents. With respect to equipment, the CAS plans to procure a brand new digital radio communications system to replace the existing system, thereby further promoting its operational efficiency.
- (6) The FSD provides MSRT with special equipment including GPS tracking device, Unmanned Aircraft Systems, Night Vision Systems, infrared telescope and communications equipment required for setting up temporary command posts in the countryside. The CAS has also procured two drones with night vision capabilities to further boost its search and rescue efficiency.

The AFCD will consider the feasibility of introducing the proposed technology according to the actual site conditions of hiking trails with a view to reducing hiking accidents and assisting relevant departments in conducting search and rescue operations.

(7) The AFCD staff conducts regular patrols in country parks and special areas to monitor the conditions of country parks and visitors' usage of relevant facilities. Appropriate enforcement action would be taken against illegal activities if detected. In view of the large number of people visiting country parks recently, the AFCD has stepped up patrol, publicity and enforcement action at popular hiking locations to raise visitors' awareness on caring for the countryside. At present, the AFCD has about 150 staff members responsible for the daily patrol and law enforcement work in country parks and special areas throughout the territory.

The repair and maintenance of hiking trails in country parks are part of the AFCD's regular management work for country parks. The department arranges staff to carry out regular inspection of the conditions of hiking trails and prioritises trail maintenance work according to the degree of wear and risk level of the hiking trails. The time required for the repair work will depend on the degree of wear and the surrounding environment of the trails and visitor facilities.