

# 与时并进 TO MOVE WITH TIMES



# 全面推行中式步操

消防处先于其他纪律部队,在二零二二年一月于仪式和 典礼场合全面采用中式步操。全面推行中式步操既能增 进属员对国家的认同和自豪感,也有助推动港人更好地 融入国家治理体系、丰富「一国两制」的实践,以及向市民 传递正面信息,对本处来说,意义重大。

# 仪仗队

消防处仪仗队在二零二二年成立,成员逾百,由不同职系 的军装人员兼任。仪仗队不论在本处内部不同场合,或是 在跨部门的典礼仪式和活动中,均会担当礼仪职务及表 演中式步操,借此增强本处属员的国民身分认同,并培养 属员的爱国精神。

自二零二二年十二月起,仪仗队更肩负在中小学教授中 式步操的重任,以增强青少年对国家的归属感。首阶段的 训练计划在黄大仙区展开,有超过20所中小学参与。

# Full implementation of Chinese-style foot drill

The FSD has taken the lead amongst disciplined forces in adopting Chinese-style foot drill in its ceremonial occasions on a full scale in January 2022. The full implementation of Chinese-style foot drill is of great importance to the department as it helps raise service members' sense of identification with and pride in the country. It is also conducive to driving better integration of Hong Kong people into the country's governance system, enriching the implementation of "one country, two systems" and spreading a positive message to members of the public.

#### The Guard of Honour

The department's Guard of Honour (GoH), comprising more than 100 uniformed members across grades who served on a secondary-duty basis, was established in 2022. The GoH performs ceremonial duties and Chinese-style foot drill demonstrations in different events within the department, as well as in various inter-departmental ceremonies and activities, with a view to enhancing the national identity and cultivating patriotism of service members.

Since December 2022, the GoH has taken up an important responsibility of teaching Chinese-style foot drill in primary and secondary schools so as to foster young people's sense of belonging to the country. The first phase of the training programme has been kicked off in Wong Tai Sin District with more than 20 primary and secondary schools participating in it.



### 消防及救护学院训练课程评审

消防及救护学院的「辅助医疗专业文凭课程」于二零二二 年六月通过香港学术及职业资历评审局的评审,获纳入 「资历名册」。属员完成该课程为期22周的训练并通过 评核后,会获颁「辅助医疗专业文凭」。此资历属香港资 历架构第四级别,相当于副学士学位或高级文凭/高级 证书程度。

学院将为其所办的其他主要训练课程申请评审,预期为 救护员而设的「救护专业文凭」会于二零二三年通过评 审,列入资历架构第四级别。此外,本处亦会为专队的训 练课程申请资历架构评审,以确立专队的专业地位,其中 高空拯救专队和烟火特遣队的训练课程可望于二零二三 年第二季通过评审,列入资历架构第四级别。 消防处仪仗队教授中小学生 中式步操,以增强青少年对国 家的归属感。

The FSD's Guard of Honour teaches Chinese-style foot drill to primary and secondary school students so as to foster young people's sense of belonging to the country.

# Accreditation of training courses of the Fire and Ambulance Services Academy

The Professional Diploma in Paramedicine of the Fire and Ambulance Services Academy (FASA) was accredited by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications and included in the Qualifications Register in June 2022. Members who have completed the 22-week training and passed the assessments of the course will be awarded a Professional Diploma in Paramedicine at Hong Kong Qualifications Framework (QF) Level 4, which is equivalent to an Associate Degree or a Higher Diploma/Higher Certificate.

FASA will seek accreditation for its other key training programmes. The Professional Diploma in Ambulance Services for Ambulanceman/Ambulancewoman is expected to be accredited as attaining QF Level 4 in 2023. Moreover, the department will apply for accreditation of the training courses for the specialised teams under the QF to affirm their professional status. The training courses for the High Angle Rescue Team and the Compartment Fire Specialists are expected to be accredited as attaining QF Level 4 in the second quarter of 2023.



消防处建立了无人机系统,以 提高消防和紧急行动的效率, 从而加强保障市民的安全。 The FSD has set up an Unmanned Aircraft System (UAS) to improve fire and emergency operational efficiency and public safety.

# 灭火机械人和水下遥控机械人

本处的灭火机械人于二零二二年六月投入服务,协助执 行灭火救援行动。机械人能在复杂且高危的火场长时间 执行灭火和侦测工作,有助提高行动效率,并减低前线消 防人员所承受的风险。机械人采用模组化设计,可改装成 不同模式执行工作,此外,还可因应不同的行动需要,装 上伤病者抬床、工具运输篮,或用以移除障碍物的机动清 障架 。

此外,本处亦引入了水下遥控机械人,以提高行动效率。 水下遥控机械人能长时间在水下搜索有否受伤人士,即 使能见度低也不受影响,故有助提升本处的搜索能力及 保障潜水人员的安全。

# 无人机系统

无人机系统在全球已广泛应用于灭火、应对事故的计划 部署和救援行动上。随着无人机系统的使用快速增加,消 防处建立了无人机系统,当中包括企业级的新型无人机、 无人机配件及感应器,并已于二零二二年六月起投入运 作,以提高消防和紧急行动的效率,从而加强保障市民的 安全。

本处在二零二二年十月开始试行「人工智能攀山拯救无 人机相片分析软件」计划,该软件让搜救人员于山岭搜救 行动中利用人工智能技术,从无人机拍摄所得的相片中 识别出人形物体,务求大大减省从相片中寻找伤者的时 间。本处会继续提高该软件的准确度,并会引入新技术, 以提高搜救效率。

#### **Unmanned Aircraft System**

Unmanned Aircraft System (UAS) has been widely used in firefighting, incident planning and rescue operations around the world. With the rapid increase in the use of the system, the FSD has set up an UAS and put it into operations since June 2022, which includes new drones at enterprise level, drone accessories and sensors, as a means to improve fire and emergency operational efficiency and public safety.

The department has started using an Artificial Intelligence-assisted Drone Image Analysis software under a pilot project since October 2022, which aims to adopt artificial intelligence technology for detecting human-like objects in drone images used in mountain search and rescue operations so that the time for searching casualties from the images can be greatly reduced. The department will continue to increase the accuracy of the software and introduce novel technologies so as to enhance search and rescue efficiency.





香港消防处年报 2022

# Firefighting robots and underwater remotely operated vehicles

The department's firefighting robots were put into service in June 2022 to assist in firefighting and rescue operations. They can carry out long-term firefighting and detection work in complex and highrisk fire scenes, enhancing operational efficiency and reducing the risk of frontline fire personnel. Their modular design offers interconvertibility that allows them to work in different modes. They can be equipped with a stretcher for patients, a basket for material transportation or a motorised bull-bar for obstacle removal according to different operational needs.

Moreover, the department introduced underwater remotely operated vehicles (UROV) to improve operational efficiency. The UROV can search for possible casualties underwater for a long period of time even under poor visibility, enhancing the department's search capability and ensuring the safety of the diving personnel.

> 01 灭火机械人的模组化设计可 02 让其改装成不同模式执行工作。

The modular design of the firefighting robots offers interconvertibility that allows them to work in different modes.

#### 推行大量伤者事故检伤分流系统

本处于二零二二年十一月推出大量伤者事故检伤分流系 统。这电子系统可用以记录大量伤者事故中的伤者人数、 伤势和分流资料,以便安排适当的救护资源及通知相关 医院作紧急准备。

#### 新消防局和救护站

机场北消防局已于二零二二年落成启用,为香港国际机场三跑道系统提供支援。此外,将设于香港国际机场的机场东消防局,以及分别设于赤鱲角北和将军澳第72区的 消防局暨救护站,现时正在施工。

### Implementation of Patient Tagging System for Multiple Casualties Incidents

The department launched a Patient Tagging System for Multiple Casualties Incidents (PTS-MCI) in November 2022. It is an electronic system to record the number, nature and triage information of the casualties involved in multiple casualties incidents, so that appropriate ambulance resources can be arranged and relevant hospitals can be alerted for emergency preparedness.

#### New fire stations and ambulance depots

In 2022, the Airport North Fire Station was put into commission for supporting the Three-Runway System of the Hong Kong International Airport (HKIA). Meanwhile, the Airport East Fire Station in the HKIA, as well as the fire station-cum-ambulance depots in Chek Lap Kok North and Area 72, Tseung Kwan O are currently under construction.

# 年度开放数据计划

根据政府的政策,政府部门应开放更多其数据,供公众免 Under the Government's policy, government 费使用,以促进创新及科研。本处资讯科技管理组按照政 departments should release more of their data 府这项政策,公布年度开放数据计划,列出发放的28个 for public use for free to facilitate innovation and 数据集,包括火警事故、火警危险投诉、防火巡查、注册 research. To comply with the policy, the FSD's 消防装置承办商、消防处设施的空间数据、自动心脏除颤 Information Technology Management Unit (ITMU) 器位置和目标迷你仓处所等的统计数字。本处亦已制定 has published annual open data plans which set 年度空间数据计划,列出将于空间数据共享平台入门网 out 28 datasets to be released, including the 站发放的空间数据集,以供公众阅览。 statistics of fire incidents, fire hazard complaints, fire protection inspection, registered fire service installation contractors, spatial data of FSD facilities, locations of automated external defibrillators and target mini-storage premises. Annual Spatial Data Plans have also been drawn up to set out the spatial datasets to be released on the Common Spatial Data Infrastructure (CSDI) portal for public access.

# 发展大数据分析

自二零二零年起,资讯科技管理组一直致力更加善用大数据分析,支援部门管理决策工作。本处至今已开发超过 50个仪表板,涵盖多个行动,并用以监察绩效指标,这亦 便利各级管理层分享数据。本处正推行中央数据库,把多 个应用系统的数据整合,从而能够开发更多仪表板,包罗 更多方面的资讯。



消防处于二零二二年十一月 推出大量伤者事故检伤分流 系统。

The FSD launches a Patient Tagging System for Multiple Casualties Incidents in Novermber 2022.

#### 更换第三代调派系统

本处于二零一九年设立专责内部项目小组,负责管理和 监督有关推行第四代调派系统的工作。项目小组与承办 商及香港警务处、香港天文台及运输署等部门紧密合作, 确保能顺利推行系统,同时与其他部门确立彼此系统的 协作和实时交换数据的安排。第四代调派系统现正在系 统测试阶段,预定于二零二五年第一季投入服务。

#### Annual open data plans

#### Big data analytics development

Since 2020, the ITMU has been devoted to make better use of the data analytics for supporting management decisions. More than 50 dashboards have been developed to cover various operations and monitor the performance indicators. This also facilitates data sharing across different levels of management. A centralised data warehouse is being implemented to integrate data from various application systems and upon which more dashboards could be developed to cover a wider spectrum of information.

### **Replacement of the Third Generation Mobilising System**

A dedicated in-house project team was established in 2019 to manage and oversee the implementation of the Fourth Generation Mobilising System (4GMS). The project team has been working closely with the contractor and other government departments including the Hong Kong Police Force, the Hong Kong Observatory and the Transport Department to ensure the successful roll-out of the system, while establishing system collaboration and realtime data exchange with other departments. The 4GMS is under system testing and scheduled for commissioning in the first quarter of 2025.