FIRE SERVICES DEPARTMENT

Introduction

Before the formation of a rudimentary fire brigade in 1868, all fires in Hong Kong were dealt with by the police and volunteer fire-fighting groups. In 1868, after a series of disastrous fires, a fire brigade was formed under Police Magistrate Charles May. It was an integral part of the police force with a strength of 66 full-time firemen and 100 volunteers. Its main equipment was a small battery of hand pumps which was later augmented by steam engines.

- Steady mechanization brought a tremendous improvement to the efficiency of the brigade. In 1912 the first motor fire escape arrived in Hong Kong and the first motor pump came into service in 1917. The brigade continued to expand, but it was not until 1922 when Mr. H.T. Brooks (ex-London Fire Brigade) arrived that it came under the control of professional firemen. By 1932 there were four fire stations operating on Hong Kong Island and another two on Kowloon peninsula. The Fire Brigade was eventually separated completely from the police and Mr. J.C. Fitz-Henry was appointed as the first Chief Fire Officer on 1 January 1941. At the recommendation of the Trench Report (1960), the Fire Brigade changed its title to the Hong Kong Fire Services Department on 1 April 1961 and began its long term expansion and development. At that time, the Department operated a total of 16 fire stations; 5 each on Hong Kong Island and Kowloon peninsula, 3 on the off-shore islands and 3 in the New Territories, with an establishment of 1,180 Officers and other ranks.
- 3. The ambulance service has been part of the Fire Services since the introduction of the first motor ambulance in 1919. Originally police/fire ambulances served emergencies while the Medical Department dealt with non-emergency cases only. All government ambulance resources were placed under the control of the Fire Brigade in 1953 when 14 ambulances primarily serving the urban areas, were manned by firemen on rotation. In 1966 the ambulance service was re-organised into a semi-autonomous Ambulance Division staffed by specially trained ambulance personnel.
- 4. After a century of growth, the Fire Services Department today has an establishment of 7,386 disciplined and civilian staff and a total of 78 fire stations and ambulance depots/stations.

General

Subject to the policy guidance of the Secretary for Security, the Department operates under the provision of the Fire Services Ordinance, Chapter 95. The Director of Fire Services is charged with the supreme command of the department and is directly responsible to the Governor for the department's efficiency.

Establishment and strength

- 6. To cope with the development of Hong Kong the Fire Services Department has expanded considerably from 1979 to 1988. As shown in Annex 2.2 Appendix I, the establishment of disciplined staff has grown by 45% from 4,635 in 1979 to 6,757 in 1988.
- 7. The department's current strength of disciplined staff is 145 below the approved establishment. The department has encountered particular difficulties in recruiting Station Officers. In the 1987 recruitment the selection ratio was 4% for Station Officers and 10% for Firemen, and the size of the pool of applicants was far from satisfactory. The Officer shortage problem was further compounded by the increasing rate of Officer wastage which rose from 1.2% in 1985/1986 to 2.9% in 1986/1987 and 4.8% in 1987/1988. Wastage statistics are at Annex 2.2 Appendix II.

Budget

8. The budget of the Fire Services Department for the years 1979 to 1988 is at Annex 2.2 - Appendix III. The departmental expenditures throughout the years represent an average of 1.1% of the annual Government expenditure.

Organisation

- 9. The Fire Services Department is under the Command of the Director of Fire Services who is assisted by a Deputy Director. The department is divided into six formations (Commands), each with its own area of responsibility:-
 - (a) Hong Kong, Kowloon and New Territories Fire Commands - fire fighting and rescue operations and fire protection law enforcement in their respective areas. Hong Kong Fire Command is also responsible for off-shore islands and incidents at sea.
 - (b) Fire Protection Bureau overall fire protection policies and their enforcement in the Territory.
 - (c) Ambulance Command ambulance service in the Territory.

- (d) Headquarters Command departmental policy, support and administrative service to various units, and fire fighting and rescue operations within the Airport.
- 10. The Ambulance Command and each of the Fire Commands are divided into divisions, each comprising several fire stations or ambulance depots/stations. The Headquarters Command and the Fire Protection Bureau comprise divisions to carry out their functions. Details of the department's organisation are at Annex 2.2 Appendix IV. The strength of major commands is at Annex 2.2 Appendix V.

Rank structure

11. Described below in broad terms are the duties and responsibilities of the various ranks.

Director of Fire Services

12. The Director of Fire Services is charged with the supreme direction and administration of the Fire Services Department subject to the orders and control of the Governor.

Deputy Director of Fire Services

13. The Deputy Director of Fire Services assists the Director in the execution of his duties.

Chief Fire Officer

14. A Chief Fire Officer is the commanding officer of a Fire Command, the Fire Protection Bureau or Headquarters Command. He commands operations at No. 5 Alarm fires and other major disasters. The Chief Fire Officers of Fire Protection Bureau and Headquarters Command advise the Director of Fire Services on their respective policies.

Deputy Chief Fire Officer

15. A Deputy Chief Fire Officer is the second commanding officer of a Fire Command, Fire Protection Bureau or Headquarters Command. He deputises for the Chief Fire Officer and takes command at No. 5 Alarm fires and other major disasters in the latter's absence.

Senior Divisional Officer

16. A Senior Divisional Officer is the commander of a division of a Fire Command, the Fire Protection Bureau or the Headquarters Command. He is responsible to the Chief Fire Officer for the discipline and efficiency of his division, and takes command of fire fighting and rescue operations at No. 3 and No. 4 Alarm fires and serious or complicated incidents.

Divisional Officer

17. A Divisional Officer is the second commander of a division. He assists the Divisional Commander and takes command of No. 3 and No. 4 Alarm fires and serious or complicated incidents in the Divisional Commander's absence. He may also be put in charge of Stores and Supplies, Welfare, etc. Divisions.

Assistant Divisional Officer

18. An operational Assistant Divisional Officer commands a fire station. He is responsible to the Divisional Commander for the management, discipline and efficiency of the station; supervising his personnel at incidents; and marshalling duties at No. 3 Alarm fires and above. In staff duties he leads a working team providing administrative support; in fire protection duties he supervises Senior Station Officers/Station Officers.

Senior Station Officers/Station Officers

19. A Senior Station Officer/Station Officer is Watch Commander of a fire station; officer-in-charge of a major fire appliance or fireboat and takes charge of No. 1 Alarm fires and other non-fire emergencies in which life is endangered. In fire protection duties he is an inspecting officer to enforce the law.

Principal Fireman

20. A Principal Fireman is responsible to the Watch Commander for staff discipline, and supervision of work. He is the officer-in-charge of a fire appliance and takes charge of minor incidents. He may also be deployed as the Watch Commander of a small fire station in the rural area or on an off-shore island.

Senior Fireman

21. A Senior Fireman assists officers and Principal Firemen in maintaining staff discipline, and supervising Firemen. He rides as second officer-in-charge of a fire appliance and leads a team of Firemen in fire fighting and rescue operations. Senior Firemen posted to fire protection duties assist officers in large scale survey inspections or perform inspection duties independently.

Fireman

22. A Fireman is a crew member of a fire appliance or fireboat and protects life and property in fire suppression and life rescue. He also does routine station work; daily maintenance of appliances/equipment; and fire prevention inspection duties.

Chief Ambulance Officer

23. The Chief Ambulance Officer is the commanding officer of the Ambulance Command. He is responsible to the Director of Fire Services for the control of all ambulance resources, and the operational and administrative efficiency of the Command.

Assistant Chief Ambulance Officer

- 24. There are two posts of Assistant Chief Ambulance Officer in the Command.
 - (a) The Assistant Chief Ambulance Officer (Administration) is responsible for the administration of policy and resource planning in Ambulance Command Headquarters.
 - (b) The Assistant Chief Ambulance Officer (Operation) is responsible for the five operational Ambulance Divisions and control and management of all ambulance units.

Both Assistant Chief Ambulance Officers take command of ambulance operations at major incidents which require the deployment of a large number of ambulances.

Superintendent (Ambulance)

25. A Superintendent is the commander of an Ambulance Division and commands ambulance operations when a large number of ambulances is deployed.

Senior Ambulance Officer

26. A Senior Ambulance Officer is the officer-in-charge of one or more sub-divisions. He attends incidents where four or more ambulances are required.

Ambulance Officer

27. An Ambulance Officer is responsible for an ambulance depot/station. He supervises staff at incidents with many casualties.

Principal Ambulanceman

28. A Principal Ambulanceman is the officer-in-charge of a Watch in an ambulance depot/station and responsible to the Depot/Station Commander. He also rides as ambulance supervisor to lead his crew. When posted to a hospital, he is responsible for arranging and co-ordinating ambulance services to transfer patients.

Senior Ambulanceman

29. A Senior Ambulanceman assists the Principal Ambulanceman and rides as ambulance supervisor to lead his crew.

Ambulanceman

30. An Ambulanceman is a member of an ambulance crew. He performs the work needed to keep a patient alive, reduce pain and to take him to a hospital or for medical attention.

Ranks of special streams

Mobilisation and Communication

31. The Mobilisation and Communication Division is in Headquarters Command and headed by a Senior Divisional Officer assisted by a Divisional Officer and Assistant Divisional Officers. Apart from these supervising officers, all officers of and below the rank of SStnO (Control) are members of a separate stream/grade and are not required to perform rescue and fire fighting duties.

Senior Station Officer/Station Officer (Mobilisation and Communication)

32. An officer in this stream supervises the Fire or Ambulance Control, or is in charge of a Mobile Command Unit to deal with emergencies and requests for assistance from the public.

Principal Fireman/Firewoman (Control)

33. A Principal Fireman/Firewoman (Control) is the leading Console Operator in the Fire or Ambulance control, or the second officer-in-charge of a Mobile Command Unit. He/she leads a group of Senior Firemen/Firewomen (Control) in mobilisation and communication duties.

Senior Fireman/Firewoman (Control)

34. A Senior Fire/Firewoman (Control) is a Console Operator at the Fire or Ambulance Control or the Mobile Command Unit. He/she is responsible for mobilising resources to incidents, and maintaining communication with the officer-in-charge of an incident.

Workshop and Transport

35. The Workshop and Transport division is headed by Engineers and Technical Officers but the physical maintenance and repair work is carried out by disciplined staff comprising Principal Firemen, Senior Firemen and Firemen.

Principal Fireman (Workshop)

36. A Principal Fireman (Workshop) is responsible to the Mechanical Inspector for supervising teams of Senior Firemen (Workshop) and Firemen (Workshop) in the maintenance, servicing, repair and modification of fire appliances and equipment.

Senior Fireman (Workshop)

37. A Senior Fireman (Workshop) is responsible to the Principal Fireman (Workshop) for supervising the work of Firemen (Workshop) under his control.

Fireman (Workshop)

38. A Fireman (Workshop) is responsible for maintaining, repairing, and servicing fire appliances and equipment.

Duties of Fire Services Department

- 39. The duties of the Fire Services Department as prescribed in section 7 of the Fire Services Ordinance, Chapter 95 are to:-
 - (a) extinguish fire;
 - (b) protect life and property in case of fire or other calamity;
 - (c) give advice on fire protection measures and fire hazards as occasion requires;
 - (d) assist any person who appears to need prompt or immediate medical attention by -
 - (i) securing his safety;
 - (ii) resuscitating or sustaining his life;
 - (iii) reducing his suffering or distress;
 - (e) convey -
 - (i) any person referred to in paragraph (d) to a hospital or other place where medical attention is available to him; and
 - (ii) in co-operation with the proper authorities, any person to or from any hospital or clinic to or from any other place, and administer care and attention to any person so conveyed;

- (f) carry out such other duties as may be imposed on it by law or by any direction of the Governor; and
- (g) do anything which is necessary or desirable to carry out effectively any duty which is specified in the preceding paragraphs or imposed under paragraph (f).

Functions

Fire fighting and rescue operations

- 40. The responsibility for fire fighting and rescue operations is vested with the three Fire Commands. There are 56 fire stations in the Territory. The Fire Services Department has 600 modern fire appliances; six fireboats, the largest being 509 tonnes, and one personnel launch. The Airport Fire Contingent has 129 officers and men, operating out of two fire stations, one at each end of the runway.
- The target response time to an incident in the urban area is six minutes from the time of call. The deployment of resources at incidents is in accordance with predetermined attendance schedules. A fire call of unknown intensity is classified as No. 1 Alarm and the initial attendance is 4 fire appliances and 1 ambulance with about 29 Officers and men under a Senior Station Officer or a Station Officer. If this is insufficient, the Alarm can be upgraded and reinforcements provided with a more senior officer in command. In 1987, a total of 11,499 fires were attended with 783 persons being rescued.
- 42. The Department also provides emergency services at accidents where life is in peril most commonly traffic accidents, landslides, falling from height, bomb incidents, floodings, house collapses, leakage of flammable gases, trapped/shut-in lifts, mountain rescues, etc. In 1987 9,214 incidents were attended and a total of 21,157 persons were rescued.
- The nature of fire fighting, rescue and ambulance work imposes a high demand on the members' physique. In order to better monitor their physical conditions, members up to Senior Station Officer and Senior Ambulance Officer are required to attend an Annual Physical Fitness Assessment identical to the British Army programme, up to retirement age.

Fire protection

- 44. The Fire Protection Bureau is responsible for :-
 - (a) advising and assisting all sectors of the community, whether private or Government, on matters related to fire safety,

- (b) formulating and enforcing fire protection measures as required by the law, and
- (c) abating fire hazards which threaten public safety.

Fire protection work is shared between the Fire Protection Bureau, the three Fire Protection Regional Offices and the local fire stations. The main role of the Fire Protection Bureau is policy making with some of its divisions performing the functions mentioned above. The Regional Offices are more concerned with functions (b) and (c) than (a). The local fire stations are mainly involved in fire hazard abatement operations.

- 45. An important aspect of the Fire Protection Bureau's work is to advise on building materials and fire resisting construction, and checking of plans for all alterations or new buildings. In 1987 the Bureau received and processed 9,216 building plans.
- 46. Fire protection inspections cover dangerous goods, dangerous goods vehicles, timber stores, schools, places of public assembly, fire service installations, ventilation systems, and complaints (means of escape) and more than 35% of all annual inspections are made in response to complaints. In 1987, the Bureau carried out 78,208 inspections of all types of premises and 5,737 full building and area surveys. As a result, 6,780 fire hazard abatement notices were issued and 1,386 prosecutions were made resulting in fines amounting to more than \$3.29 million.

Ambulance service

- 47. The Ambulance Command has an establishment of 1,826 Officers and men operating 23 ambulance depots/stations, a fleet of 226 ambulances and seven ambulance aid motorcycles. Ambulance calls are classified into emergency, urgent or routine/removal.
- During 1987, personnel of the Ambulance Command responded to a total of 400,137 calls (Emergency: 213,769; Urgent: 67,632; Routine: 119,636) and served 510,048 patients.

Mobilisation and communication

49. The Centralised Fire Services Communication Centre (FSCC) is responsible for the overall control, mobilisation and communication of all fire fighting and ambulance resources of the Department to deal with emergencies and requests for assistance from the public. In 1987, the FSCC handled a total of 434,772 ambulance and fire calls.

Training and development

- 50. The Fire Services Training School has full boarding facilities for the initial training of Officers and men. The School also offers a wide range of continuation training programmes, such as Fire Protection, Arson Detection, Management Induction, and Advanced Training. In 1987, 19 recruit Officers, and 365 recruit Firemen, underwent standard initial training; 16 probationary Station Officers attended continuation training; and 22 officers attended Fire Protection Courses. The School also offers a variety of fire fighting courses to non-fire services organisations.
- 51. Staff are required to be in top physical condition in order to perform emergency duties. The Physical Training Establishment, staffed by Physical Education Training Officers and uniformed members as physical training instructors, is responsible for the department's physical training and Annual Physical Fitness Assessment.

Planning and management

- 52. The Planning Group of the Headquarters Command is responsible for the department's overall planning of resources.
- 53. The Management Group of Headquarters Command is responsible for the deployment and efficient use of the department's resources.

Workshop and transport

- 54. The Department operates its own workshop because of the specialised nature of fire appliances and equipment, and the need to maintain their very high standard of operational efficiency and reliability.
- 55. The Workshop and Transport Division of the Headquarters Command, headed by two Electrical and Mechanical Engineers, operates four workshops. The Division is responsible for the repair, servicing, maintenance and modification of all fire appliances, vehicles and equipment except those under the Electrical and Mechanical Services Department. The workshops are staffed by uniformed members under the supervision of Technical Officers.
- 56. The Transport Officers of the Division are responsible for managing all pre-planned servicing and maintenance schedules of fire appliances and vehicles.

Recent developments

57. Since 1979, Hong Kong has seen considerable development such as new towns, road works, communication, and industries. The population has grown from 4.87 million in 1979 to 5.66 million in 1987. The Fire Services Department has grown

correspondingly to cope with the increase in public demand for services.

- Fire and special service calls attended by members of the department increased by 59.37% and 128.7% respectively between 1979 and 1987. In the same period, ambulance calls increased by 101% and the number of patients served increased by 93%. These figures also serve to reflect the increase in workload of the control staff.
- 59. The increase in workload in fire protection has also been considerable. In order to provide better service to the public, the Fire Protection Bureau was decentralised in 1981, with the devolution of some of its responsibilities to the Fire Protection Regional Offices. The continual increase in workload also led to the devolution of certain fire protection duties to operational personnel at fire stations.
- 60. The increase in height and complexity of buildings has placed more physical demands on Hong Kong firemen. They have to maintain a high standard of physical fitness and undertake training in the use of sophisticated new equipment. In addition, the assumption of fire protection duties from the Fire Protection Bureau has added considerable responsibilities to the operational personnel of all ranks.
- Obecentralisation of fire protection work has also changed Fire Protection Officers' working modes. Officers have to keep abreast with new fire protection designs and developments and enhance their professional knowledge. Together with changes in legislation which must be enforced, these changes in aspect and emphasis have added many responsibilities to Officers engaged in fire protection work.
- The centralisation of the Regional Fire Controls in 1979 led to a complete change in work procedures in mobilisation and communication. Control staff experienced added pressure, as they are required to respond both more quickly and with greater accuracy to complement the new system.
- 63. The department's fire appliance fleet has changed considerably both in quantity and complexity. As a result, workshop staff who are responsible for the upkeep and maintenance of fire appliances to the prescribed safety standards have also encountered an increase in responsibility.
- 64. A 10 minutes travel time requirement in response to 95% of emergency ambulance calls in the urban area has been implemented since 1986. The addition of the ambulance aid motor cycle service and the public demand for quality of service has brought added responsibilities to the ambulance personnel.

Future developments

65. Hong Kong will continue to change in the run up to the

Annex 2.2 (Cont'd)

21st century. The future will probably see, in the Fire Services Department, the formation of specialist teams to undertake special duties, the delegation of more fire protection duties to Fireman level, advanced ambulance aid training for ambulance personnel, the inception of the computerised Second Generation Mobilisation and Communication System, a requirement to take-over certain duties from the withdrawing British Forces, and departmental involvement in possible incidents of radiation leakage from the Daya Bay Nuclear Power Plant.