

For Official use Only

**GOVERNMENT OF INDIA
MINISTRY OF HOME AFFAIRS**



**COMPENDIUM OF RECOMMENDATIONS
OF
THE STANDING FIRE ADVISORY
COMMITTEE/COUNCIL**

(Corrected upto the 28th Meeting)

VOL. 2

APPENDICES

**PUBLISHED UNDER THE AUTHORITY OF THE CHAIRMAN.
STANDING FIRE ADVISORY COMMITTEE/COUNCIL
MINISTRY OF HOME AFFAIRS
NEW DELHI
1998**

P R E F A C E

The standing Fire Advisory Committee was constituted by the Government of India (Ministry of Home Affairs) on the recommendation of Chief of Fire Services in 1955 to examine the technical problems relating to fire services and to advise the Government of India on matters concerning the organisation and speedy development of fire services all over country. While constituting the committee, representatives from each State having important fire service, Union Territory of Delhi, the Minister of Home, Defence, Transport and Communications and the Indian Standards Institution were included in it, Later, more Members were co-opted so that almost each State, Union Territory and important Ministry were represented on it. The objectives and functions of the Council were, however, the same as these of the Standing Fire Advisory Committee.

The Committee/ Council has held 28th meetings so far and has made valuable contribution to fulfill the objectives for which it was constituted. During the various meetings of the Committee, it was observed that progress on its recommendations was slow and some of the topics on which decision had been taken at earlier meetings were repeated at Later meetings. Some of the important recommendations which have not yet been fully implemented by all States include enactment of the Fire Force Bill and the Rules thereunder; creation of an organised service in each State/ Union Territory as per the “ Organizational Structure.” recommended by the committee; matters pertaining to personnel of fire service; etc.

The Committee at its eleventh meeting decided that all recommendations made by it should be consolidated in the Form of a Compendium for easy accessibility and ready reference. this Compendium is an up-date on the earlier one and includes all recommendations of the Committee/ Council up to the 28th meeting.

Heads of fire services in each State/ Union Territory /Central Ministry are requested to vigorously pursue the implementation of the recommendations in their respective jurisdiction in the interest of speedy development of a well organised and efficient fire service.

NEW DELHI

Dated the 12 March, 1998

(M. K. SHUKLA)
Chairman

Standing Fire Advisory Council

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**RECOMMENDATIONS OF THE EXPERT COMMITTEE ON FIRE FIGHTING SET-UP
BY THE GOVERNMENT OF INDIA VIDE G.O. NO. 44/14/50- PUBLIC,
DATED 27.3.1950**

(See para 3 under INTRODUCTION)

The main recommendations of the Committee were :-

1. Setting-up of an All India Central Fire Fighting Institution for training of Officers and Instructors (Civilian and Defence Services Personnel) in up-to-date methods of fire fighting.
2. Standardisation and procurement of fire fighting equipment on an All India basis and the setting-up of a Design and Development Committee to draw up specifications and arrange procurement of supplies.
3. Re-organisation of Fire Services in States and the promulgation of an uniform fire legislation for all States. This involved provincialisation of ‘fire ‘services as State Fire Services and drafting of legislation containing provisions indicated by the Expert Committee.
4. Model set-up of the State Fire Services if provincialisation was accepted, prescription of qualifications for the officer and ranks and constitution of an All India Fire Service.
5. Central control and advice, constitution of a Central Advisory Board and Regional Inspectors to ensure operational uniformity and efficiency.
6. Constitution of Auxiliary Fire Service on an experimental basis in each State after seeking views of the State Governments.
7. Organisation of street fire parties.
8. Education of house-holders’ responsibilities and propaganda.
9. Standardisation of badges of rank for the Fire Services.
10. Inclusion of suitable provision in the Model Fire Services legislation in regard to fire prevention.
11. Organisation of a Salvage Service and Machinery for financing the same.
12. Levy of Fire Tax.
13. Separation of the Police and Fire Forces in order to ensure technical efficiency and convenience from administrative point of view.

APPENDIX –“1-B”

**NAMES AND DESIGNATIONS OF GENTLEMEN WHO ATTENDED CONFERENCE OF THE
CHIEFS OF FIRE SERVICES IN INDIA HELD ON 23RD AUGUST, 1955 IN THE DEFENCE
MINISTRY COMMITTEE, ROOM NO. 129-D,
CENTRAL SECRETARIAT BUILDING, NEW DELHI**

(See para 7 under INTRODUCTION)

1. Shri B. N. Datar, Deputy Home Minister, Government of India
2. Shri A. V. Pai. ICS. Secretary, Ministry of Home Affairs, Government of India.
3. Shri M. Gopal Menon, ICS, Deputy Secretary, Ministry of Home Affairs, Government of India.
4. Shri L. G. Mirchandani, Oficer on Special Duty, Ministry of Home Affairs, Govt. of India.
5. Shri C. M. Chakravarti, Under Secretary, Ministry of Home Affairs, Govt. of India.
6. Shri M. G. Pradhan, Commandant, National Fire Service College, Rampur.
7. Dr. M. K. Maitra, Chief Inspector of Explosives, Ministry of WH&S, Government of India.
8. Shri M. P. Mukherji, Inspector of Explosives, Ministry of WH&S, Government of India.
9. Shri T.J. Makhijani, PA to Chief Engineer, CPWD, Ministry of WH&S, Govt of India
10. Sardar Kartar Singh, Fire Superintendent, CPWD, Ministry of WH&S, Govt. of India
11. Shri A. K. Chakraborty, Fire inspector, Eastern Railways Fairlie Place, Calcutta(Ministry of Railways)
12. Shri N. M. Karanjia, fire Superintendent, Central Railway, Bombay (Ministry of Railways)
13. Shri G. S. Bhagwan, Western Railway, Bombay Central (Ministry of Railways)
14. Shri Jaswant Rai, Fire Officer, Northern Railway, Delhi (Ministry of Railways)
15. Shri S. F. Lakahani, Fire Adviser, Ministry of Defence, Government of India
16. Major Sahib Singh, Inspector of Fire Services, Ministry of Defence, Government of India
17. Shri M. B. Chakankar, Assistant Fire Adviser, Ministry of Defence, Government of India
18. Shri G. B. Singh, Deputy Director, D.G.C.A.' HQs; Ministry of Communications, Government of India.
19. Shri Babar Mirza, Deputy Director, D.G.C.A.HQs, Ministry of Communications, Government of India.
20. Shri P. N. Mehrotra, Fire Officer, Civil Aviation Deptt., Ministry of Communications, Government of India.
21. Shri N. S. Mankikar, Chief Adviser (Factories), Ministry of Labour, Government of India.

22. Shri Lal C. Verman, Director, Indian Standards Institution, New Delhi.
23. Shri C. S. Chandradekhra, Deputy Director, Indian Standards Institution, New Delhi.
24. Shri A. V. R. Sharma, PA to Inspector General of Police, Andhra Pradesh.
25. Shri D. M. Bora, IPS, Asstt. Inspector General of Police, Assam.
26. Shri B. R. Modi, State Fire Officer, Bihar
27. Capt. M. J. B. Manekji, Commandent General, Home / Guards and Honorary Fire Adviser, Bombay.
28. C. S. Salvi, Assistant Commandent, Fire School, Bombay.
29. Shri S. G. Vengsarkar, Chief Fire Officer, Bombay Fire Brigade, Bombay.
30. Shri V. B. Masooji, Staff Officer, Home Guards, Bombay
31. Shri A. B. Advani, Chief Fire Officer. Delhi Fire Service, New Delhi.
32. Shri Syed Sayeed Hassan, state Fire Force commander, Hyderabad.
33. Shri M. B. Rishi, Chief Superintendent, Indore Fire Brigade, Madhya Pradesh.
34. Shri V. F. Shinde, Superintendent Fire Brigade, Nagpur.
35. Shri John Koshi, District Fire Officer, Tiruchirapalli, Madras.
36. Shri K. P. Katare, Chief fire Officer, Mysore.
37. Shri B. Roy, Inspector General of Police, Orissa.
38. Shri Mohinder Singh, Fire Officer, Orissa.
39. Shri M. Balkrishna Menon, Inspector General of Police, Pondecherry.
40. Shri R. M. Himnani, Executive Engineer, Public Health Division No.2, Chandigarh, Punjab.
41. Shri V. B. Eswaran, Officer on Special Duty, Saurashtra.
42. Shri J. V. Bharucha , Superintendent, Fire Brigade, Bhavnagar, Saurashtra.
43. Shri L. D. Dava, Superintendent, Fire Brigade and Ambulance, Rajkot, Saurashtra.
44. Shri JJ. Goinhe, Chief of Fire Service, Travancore-Cochin.
45. Shri P. N. Banerji, Superintendent of Police, Tripura.
46. Shri S. K.. Bose, Chief Fire Officer, Allahabad, U.P.
47. Capt. C. M. Gogerly, Director, West Bengal Fire Service, Calcutta.

APPENDIX "1-C"

RECOMMENDATIONS OF THE CONFERENCE OF THE CHIEFS OF FIRE SERVICES IN INDIA HELD IN DEFENCE MINISTRY COMMITTEE, ROOM NO. 129-D, CENTRAL SECRETARIAT BLDG. NEW DELHI FROM 23-25 AUG.55

(See para 7 under INTRODUCTION)

The conference recommended that :-

1. The syllabi for various courses to be conducted at the State Fire Schools and the National Fire Service College, Rampur, be modified as per recommendations of the Sub-Committee set-up by the Conference for this purpose.
2. The fire drill manual, as finalised by the Sub-Committee, may be adopted.
3. A healthy convention should be developed for encouraging consultation with local Fire Services by all Central, State and local authorities responsible for the licensing of storage of flammable and other hazardous goods and licensing of factories.
4. A nucleus of Fire Research Station be established in India and the scope of its activities be expanded gradually, for carrying out an intensive study of all aspects relating to fire control and fire fighting and for undertaking research work on cognate matters and that a Sub-committee should be appointed to work out the details.
5. Steps be taken to ensure that factories and industrial establishments in the country provide themselves with fire fighting equipment necessary to protect their premises, goods, etc. against fire risks and that the minimum scales of fire fighting equipment to be so maintained be laid down, after grading the factories, etc., into required number of categories on the basis of the number of workers, area covered, accessibility, fire hazards and water supply available and similar other factor.
6. An Indian Institute of Fire Engineers should be established on the lines of the one established in London, with the object of promoting fire prevention, fire extinction and fire engineering and to lay down standards by which one could gauge the knowledge of fire fighting personnel, It was decided that initiative in this matter should be left to the Fire Officers who might desire to constitute an Institute of Fire Engineers and approach the Govt. of India for registration and such other help as they would consider necessary.
7. A technical bulletin relating to fire matters should be issued periodically from National Fire Service College, Rampur.
8. A design and development committee may be set-up by the Government of India for the purpose of having the specifications of fire fighting equipment standardised through the India Standards Institution. the composition of the Committee- Capt. C. M.. Gogerly (West Bengal), Shri S. F. Lakhani (Ministry of Defence), Shri A. B. Advani, Delhi Fire Service, Shri S. G. Vengsarkar (Bombay Fire Brigade), a representative of the Punjab Government and a representative of the Civil Aviation Department – as decided by the Government of India, was approved and it was decided by the Government of India, that the Committee may also take up the Standardisation of designs of various types of fire stations.
9. Statistics of fires should be collected on proforma approved by the conference with a view to :-
 - (a) planning an efficient fire fighting organisation throughout the country,
 - (b) controlling fire hazards, and
 - (c) avoiding obsolescent types of equipment and training.

10. A Standing Fire Advisory Committee should be set-up under the Government of India, Composed of representatives of the following Central ministries and States, to examine the technical problems relating to Fire-Services in the country which may arise from time to time :-

(a)	Ministry of Defence	Shri S. F. Lakhani
(b)	Ministry of Communications	Shri P.N. Mehrotra
(C)	Ministry of Railways	Shri G. S. Bhagwan
(d)	Madras State	Shri John Koshi
(e)	Calcutta (West Bengal)	Capt. C. M. Gogerly
(f)	Delhi	Shri A. B. Advani
(g)	Indian Standards Institutions	Shri C. S, Chandrasekhra
(h)	Bombay State	Shri S. G. Vengsarkar
(i)	Uttar Pradesh State	Shri S. K. Bose
(j)	Convenor	Shri M. G. Pradhan

APPENDIX "2A"

STANDING FIRE ADVISORY COMMITTEE – OBJECTIS AND SCOPE

(See para 1 under 2-SFAC)

1. Appointment and functions of Standing Fire Advisory Committee

There shall be a Committee called Standing Fire Advisory Committee to examine the technical problems relating to Fire Services and to make recommendations to the Government of India in the matter including the Standardisation of the fire fighting equipment through the Indian Standards Institution.

The members of the Committee shall be appointed by Government who would ensure that the representative from (i) each of the States having important Fire Service, Union Territory of Delhi, and (ii) the Ministers of Home Affairs, Defence, Transport and Communications and the Indian Standards Institution are included.

2. Chairman of the Committee

The Chairman of the Committee shall be a nominee of the Ministry of Home Affairs. If the Chairman for any reasons is unable to act, the Government may appoint another Chairman in his place and if the Chairman is absent from any sitting, the Committee shall chose another member to act as Chairman for that sitting.

3. Powers of the Secretary

The Commandant of the National Fire Service College shall be the Member-Secretary of the Committee. The secretary shall, in consultation with the Chairman, convene the meetings of the S.F.A.C. He shall prepare the agenda and other notes for the meetings after they have been approved by the Chairman and then circulate them to the members. The Secretary shall also prepare the minutes of the meetings, recommendations of the Committee and submit these to the Chairman for approval before forwarding to the Ministry of Home Affairs.

4. Quorum

The quorum to constitute a sitting of the Committee shall be as near as may be half of the total number of the Committee.

5. Sittings of the Committee and venue of the meetings

The meeting of the Committee shall be held in rotation at important Fire Service Centres, like, Madras, Hyderabad, Bombay, Calcutta, Allahabad and Delhi.

The Chief Fire Officer of the area where the meeting is to be held should provide accommodation and Secretariat Staff for the meeting. the private accommodation at such places can be arranged by the members of the Committee directly with the host Chief Fire Officer concerned.

6. Powers to appoint Sub-Committees

The standing Fire Advisory Committee may appoint one or more Sub Committee each having the power of the undivided Committee to examine any matter that may be referred to them and the reports of such Committee(s) shall be deemed to be the reports of the full committee if these are approved at the sitting of the full committee.

APPENDIX "3A"

CONSTITUTION OF THE STANDING FIRE ADVISORY COUNCIL

(See para 1 & 2 under 3 – SFAC)

No. VI—14022/1/78 – DGCD (F)

GOVERNMENT OF INDIA /BHARAT SARKAR
MINISTRY OF HOME AFFAIRS/GRIH MANTRALAYA

2nd Floor, Express Building,
Bahadur Shah Zfar Marg,
New Delhi, 110002
22nd February, 1980

To,

All Members of Standing Fire Advisory Committee

Subject :- Change in the name of the Standing Fire Advisory Committee.

Sir,

I am directed to inform you that the name of the Standing fire Advisory Committee has now been changed to “*Standing Fire Advisory Council*”

Yours faithfully,

Sd/-

(P. N. MEHROTRA)

*Fire Adviser & Member Secretary
Standing Fire Advisory Committee*

Copy to PS to DGCD

No. 443/70 –DGCD (F)
GOVERNMENT OF INDIA
MINISTRY OF HOME AFFAIRS

A. B. ADVANI
*Fire Adviser
Tel. No. 376631*

23rd April 1978

Sub :- Composition of standing Fire Advisory Committee.

Dear,

I am writing this to inform you that Lt. Gen. Moti Sagar PVSM has taken over as director General of Civil Defence and Chairman of the Standing Fire Advisory Committee consequent upon the retirement of Lt. Gen. R.N. Batra, PVSM.

Shri P. N. Mehrotra who was Senior Fire Officer in the Civil Aviation Department and has been the member of the Standing Fire Advisory Committee since its inception has now jhoined Ministry of Home Affairs as Dy. Fire Adviser. he will, therefore, now be serviing on the standing Fire Advisory Committee as a nominee of the Ministry of Home Affairs.

With regards,

Yours Sincerely,

Sd/-

(A. B. ADVANI)

To,

As in the list attached

No. 16/1/66-ER
GOVERNMENT OF INDIA
MINISTRY OF HOME AFFAIRS

To,

1. The Chief Secretary to the Governments of all States/Union Territories.
2. The Commissioners, Municipal Corporation of Bombay/ Delhi.

NEW DELHI --- 11,
the 23 Sept, 1966.

Asvina, 1988

Sub :- Reconstitution and re-organisation of the Standing Fire Advisory Committee.

Sir,

I am directed to invite a reference to this Ministry's letter No. 33/3/62 – ER. II(B) dated the 23rd February, 1963 on the subject noted above and to say that the Standing Fire Advisory Committee has since been reconstituted again. I am accordingly to forward herewith for information and guidance a note detailing the objects, composition and functions of the reconstituted Committee. A list showing the designation of the members of the reconstituted Committee is also sent herewith.

Authorised for issue

Sd/-

(CHANAN SINGH)
Section Officer.

Yours faithfully,

Sd/-

(K.B. MATHUR)

Under Secretary to the Government of India

No.16/1/66 --- ER, dated, the 23rd Sept, 1966. 1st Asvina, 1888.

Copy together with a copy of the note, forwarded for information and guidance to the :-

1. ministers of Defence, Railways and Transport and Aviation (Deptt. of Aviation).
2. All other Ministries.
3. Chairman, Standing Fire Advisory Committee.
4. All Members of the Standing Fire Advisory Committee; and
5. Director, Indian, Standard Institution, 9-Mathura Road, New Delhi.

Sd/-

(K. R. MATHUR)

Under Secretary to the Government of India

STANDING FIRE ADVISORY COMMITTEE

1. **Appointment and functions of the Standing Fire Advisory Committee**

There shall be a Committee called the Standing fire Advisory Committee to examine the technical problems relating to fire services and to make recommendations to the Government of India in the matter including the Standardisation of the specifications of the fire fighting equipment through the Indian Standards Institution.

The members of the Committee shall be appointed by Government who would ensure that the representatives from (i) each of the states having fire services, Union Territory of Delhi and (ii) the Ministries of Home Affairs, Defence, Railways, Transport and Communications, Indian Standards Institution and the Director, National Fire Service College, are included.

2. **Chairman of the Committee**

The Chairman of the Committee shall be a nominee of the Ministry of Home Affairs. If the Chairman for any reasons is unable to act, Government may appoint another Chairman in his place and, if the Chairman is absent from any sitting another member may be requested to act as Chairman for that particular sitting.

3. **Quorum**

The quorum to constitute a sitting of the Committee shall be as near as may be $\frac{1}{2}$ of the total members of the Committee.

4. **Sitting of the Committee and venue of the meeting**

The venue and date(s) of the meeting(s) of the Standing Fire Advisory Committee shall be decided by the Committee.

5. **Powers to appoint Sub-committee**

The S.F.A.,C. may be appoint one or more sub-committee each having the power of the undivided committee to examine any matter that may be referred to them and the reports of such committees shall be deemed to be the reports of the full committee, unless it is considered necessary to press any report before the Sub-Committee.

6. **Secretariat of the S.F.A.C.**

The Ministry of Home Affairs will provide the necessary secretariat staff for the administrative work of S.F.A.C. A meeting of the S.F.A.C. will be convened in

consultation with the Chairman. The agenda and the notes on the items included in the agenda will be circulated to the members well before the date of the meeting Matters requiring the presentation of technical notes etc. may, if necessary be referred to the Director, National Fire Service college. The recommendations of the Committee will be submitted to the Chairman for his approval, before they are dealt with by the Ministry.

(13.9.1966)

MINISTRY OF HOME AFFAIRS

(E. R. Section)

List showing the designation of members of the Standing Fire Advisory Committee

Sr. No.	Designation	Name of the State/Central Ministries represented
1.	Director General of Civil Defence	Ministry of Home Affairs Chairman
2.	Deputy Secretary (ER)	Ministry of Home Affairs, Member-Secretary
MEMBERS		
3.	Director of Fire services, Fire Service Head Quarters, Dar-us-Salam, Hyderabad	Andhra Pradesh
4.	Chief Fire Officer, Fire Brigade Municipal Corporation, Ahmedabad	Gujarat
5.	I. G. of Police, Govt. of J & K Srinagar	J & K
6.	Director of Fire force, Kerala Trivandram	Kerala
7.	Chief Fire Officer Commisariat Road, Banglore-25	Mysore
8.	The Additional Director of Fire Service, Madras-9	Madras
9.	Fire Officer Orissa, Cuttack	Orissa
10.	Secretary to the Govt. of punjab, Housing and Local Govt. Department, Chandigarh	Punjab
11.	Chief Fire Officer, Lucknow	U.P.
12.	Director West Bengal Fire Services, 13-D, Free School Street, Calcutta.	West Bengal
13.	Fire Adviser, State Fire Service Orga nisation, Shilong	Assam
14.	State Fire Officer, Bihar, Patna	Bihar
15.	Fire Officer, Municipal Fire Brigade, Jaipur	Rajasthan
16.	Chief Superintendent police, fire Brigade, Indore	Madhya Pradesh
17.	Fire Adviser, Ministry of Defence, New Delhi	ministry of Defence
18.	Fire Officer, Civil Avation Department, C/o the Controller of Aerodrome, Calcutta Region, Culcutta Air port, Dum Dum, Calcutta – 28	Ministry of Transport and Aviation (Department of Aviation)
19.	Joint Director (Security), Railway Board, New Delhi	Ministry of Railways

20	Chief Fire officer, Mumbai Fire Brigade, Mumbai	Mumbai Municipal Corp. Mumbai
21	Director, Civil Engineering, Indian Standards Institution Manak Bhawan 9 Bahadur Shah Zaffer Marg, New Delhi - 1	Indian Standards Institution, New Delhi
22	Chief Fire Officer, Delhi Fire Service, New Delhi	Delhi Municipal Corporation, Delhi
23	Director, National Fire Service College, Nagpur	National Fire Service College, Nagpur

No. 33/3/62 – ER – II (B)
GOVERNMENT OF INDIA
MINISTRY OF HOME AFFAIRS

20, Travancore House Hutments
Canning Road
New Delhi – 1
dated the 23rd Feb, 1963

From,

Shri C. L. Goyal,
Under Secretary to the Government of India.

To,

1. The Chief Secretary to the Governments of all States/ union Territories.
*Except Bihar, Madhya Pradesh, Assam and Rajasthan who have been addressed separately.
2. The Commissioners, Municipal Corporation of Bombay/Delhi.

Subject :- Reconstitution and re-organisation of the Standing Fire Advisory Committee.

Sir,

I am directed to invite a reference to this Ministry's letter No. 45/2/59-ER-II, dated the 9th May, 1958, on the subject noted above, and to say that the Standing Fire Advisory Committee has since been reconstituted again. I am accordingly to forward herewith for information and guidance a note detailing the objects, composition and functions of the reconstituted Committee. A list showing the names and designations of the members of the reconstituted Committee is also sent herewith.

Yours faithfully,

Sd/-
(C. L. GOYAL)

Under Secretary to the Government of India

No. 33/3/62-ER-II (B), Dated the 23rd February, 1963.

Copy, together with a copy for the note, forwarded for information and guidance, to the :-

- (i) Ministries of Defence, Railways, Transport & Communications (Department of Communications & Civil Aviation)
- (ii) All other Ministries
- (iii) Chairman, Standing Fire Advisory Committee
- (iv) All Members of the Standing Fire Advisory Committee and
- (v) Director, Indian Standards Institution, 9. Mathura Road, New Delhi.

Sd/-
(C. L. GOYAL)
Under Secretary to the Government of India

STANDING FIRE ADVISORY COMMITTEE

1. Appointment and functions of the Standing Fire Advisory Committee

There shall be a Committee called the Standing Fire Advisory Committee to examine the technical problems relating to fire services and to make recommendations to the Government of India in the matter including the Standardisation of the specifications of the fire fighting equipment through the Indian standards Institution.

The members of the Committee shall be appointed by Government who would ensure that the representative from (i) each of the states having fire services. Union Territory of Delhi, and (ii) the Ministries of Home Affairs, Defence, Railways, Transport and Communications, Indian Standards Institution and the Director, National Fire Service College, are included.

2. Chairman of the Committee

The Chairman of the Committee shall be a nominee of the Ministry of Home Affairs. If the Chairman for any reasons is unable to act, Government may appoint another Chairman in his place and, if the Chairman is absent from any sitting. another member may be requested to act as Chairman for that particular sitting.

3. Quorum

The quorum to constitute a sitting of Committee shall be as near as may be $\frac{1}{2}$ of the total members of the Committee.

4. Sitting of the Committee and venue of the meetings

The venue and date(s) of the meeting(s) of the Standing Fire Advisory Committee shall be decided by the Committee.

5. Powers to appoint Sub-committee

The S.F.A.C. may appoint one or more sub-committees each having the power of the undivided committee to examine any matter that may be referred to them and the reports of such committees shall be deemed to be the reports of the full committee, unless it is considered necessary to press any report before the Sub-committee.

6. Secretariat of the S.F.A.C

The Ministry of Home Affairs will provide the necessary secretariat staff for the administrative work of S.F.A.C. A meeting of the S.F.A.C. will be convened in consultation with the Chairman. The agenda and the notes on the items included in the agenda will be circulated to the members well before the date of the meeting Matters requiring the presentation of technical notes etc. may, if necessary be referred to the Director, National Fire Service college. The recommendations of the Committee will be submitted to the Chairman for his approval, before they are dealt with by the Ministry.

MINISTRY OF HOME AFFAIRS
(E. R. II Section)

(23-2-1963)

List showing the names and designations of members of the Standing Fire Advisory Committee

Sr. No.	Name & Designation	Name of the State/Central Ministers represented
1.	Commandant General, M.J.B. Maneekji Honorary Adviser (Emergency relief), Ministry of Home Affairs, Fire Adviser to the Govt. of Maharashtra, Old Secretariat Annexe, Mumbai	1. Ministry of Home Affairs 2. Govt. of Maharashtra Chairman
2.	Shri Syed Yeed Hussain, Director of Fire Services, Fire Service Head qrs. Dar-us-Salam, Hyderabad Deccan	Andhra Pradesh
3	Shri S. M. Bharucha, Ag. Chief Fire Officer, Fire Brigade, Municipal Corporation, Ahmedabad	Gujarat
4	Shri D. W. Mehra, I. G. of Police, Government of Jammu & Kashmir, Srinagar	J & K
5	K. P. Balkrishana Menon, Divisional Fire Officer & P.A. to the I.g. Police, Fire Service Branch, Kerala, Trivandrum	Kerala

Sr. No.	Name & Designation	Name of the State/Central Ministers represented
6.	Shri S. V. Symss, Chief Fire Officer, Manglore, Mysore	Mysore
7	Shri John Koshi, Chief Fire Officer, Southern Region, Madurai	Madras
8	Shri M. Singh, Fire Officer, Orissa Cuttack.	Orissa
9	Shri R.I.N. Ahooja, I.A.S., Secretary to the Govt of Punjab, Housing & Local Govt. Department, Chandigarh	Punjab
10	Shri S. K. Bose, Chief Fire Officer, Lucknow	Uttar Pradesh
11	Shri S. C. Chatterjee, Director, West Bengal Fire Service, 13-D, Free School Street, Calcutta	West Bengal
12	Shri S. Bose, Fire Adviser, State Fire Service Organisation , Shillong.	Assam
13	Shri B. R. Modi, State Fire Officer, Bihar, Patna.	Bihar
14	Shri Lachhan Dass,	Rajasthan

	Fire Officer, Municipal Fire Brigade Jaipur	
15	Shri M. B. Rishi, Supdt., Fire Brigade, indore, Madhya Pradesh.	Madhya Pradesh
16	Shri S. F. Lkahani Fire Adviser, Ministry of Defence New Delhi	Ministry of Defence
17	Shri P. N. Mehrotra Fire Officer, Civil Aviation Department, C/o The Controller of Aerodrome, Calcutta Region, Calcutta Airport, Dum Dum, Calcutta-28	Ministry of Transport & Communications (C-A. Department)
18.	Shri Usman Ali Khan, Joint Director (Security) Railway Board, New Delhi.	Ministry of Railway
19	Shri S. G. Vengsarkar, Chief Officer, Mumbai Fire Brigade, Mumbai	Mumbai Municipal Corporation, Mumbai
20	Dr. H. C. Visesvaraya, Deputy Director, Indian Standards Institution, 9-Mathura Road, New Delhi.	Indian Standards Institution
21	Shri A. B. Advani, Chief Fire Officer, Delhi Fire Service, New Delhi	Delhi Municipal Corporation, Delhi
22	Shri M. G. Pradhan, Director, National Fire Service College, Nagpur	National fire Service College, Nagpur.

APPENDIX “3-B”

RESPONSIBILITIES AND COMPOSITION OF STANDING SUB-COMMITTEES CONSTITUTED BY THE STANDING FIRE ADVISORY COUNCIL AT THE 22ND MEETING.

(See para 3 under Standing Fire Advisory Council)

The details of constitution of each of these Sub-committees as decided are as follows :-

(a) Organisation and Personnel Sub-Committee

- | | | |
|---|---|-----------------|
| (i) Shri Raja Rajendra Singh, Director of Fire Services -
Himachal Pradesh | - | Convener. |
| (ii) Shri G. B. Menon,
Fire Adviser, M.H.A. | - | Member |
| (iii) Shri B. B. Mehta,
General Secretary, I.F.E. (India) | - | Member |
| (iv) Shri S.S.L. Sharma
C.F.O., Delhi Fire Service, Delhi | - | Member |
| (v) Shri J. L. Bhatt,
Chief Fire Officer, Surat | - | Member |
| (vi) Shri S. P. Batra, | - | Co-opted Member |

Chief fire and Security Officer
Shipping Corporation of India

- (vii) Shri B. Krishnamurthy, - Co-opted Member
Addl. Director of Fire Services, Andhra Pradesh
- (viii) Shri T. L. Varma, Fire Officer, Ambala - Co-opted Member
- (b) Modernisation and Resource Sub-Committee**
- (i) Shri D. Vivaya Devaraj Urs. IPS Devraj Urs, IPS - Convener
Director, Karnataka State Fire Force.
- (ii) Shri A. Venkatachalam, IPS - Member
Director of Fire Force, Kerala
- (iii) Col. V. V. K. Rao - Member
Fire Adviser,
Minister of Defence
- (iv) Shri C. P. Gossain, - Member
Fire Officer, CPWD.
- (v) Shri B. Krishnamurthy, - Co-opted Member
Addl. Director of Fire Service,
Andhra Pradesh
- (c) Equipment Sub – Committee**
- (i) Shri D. Viyaya Devaraj Urs, IPS Devraj Urs, IPS - Convener
Director, Karnataka State Fire Force
- (ii) Shri A. S. Kulkarni, Fire Adviser, Maharashtra - Member
Development Officer, DGTD.
- (iii) Shri R. R. Dhoblay, - Member
Chief Fire Officer, BARC
- (iv) Shri K. M. Mathur - Member
Dy. Director, ISI
- (v) Shri V. B. Nikam - Co-opted Member
Dy. Chief Fire Officer
Mumbai Fire Brigade
- (vi) Shri V. P. Dewan - Co-opted Member
Controller of Inspection, Fire Fighting Equipment
Ministry of Defence
- (vii) Shri P. N. Ghosh. - Co-opted Member
President IFE (India)
- (viii) Lt. Col. R. M/ Rajan, Assistant Dir. General - Co-opted Member
(Commns) DGCD
- (d) Training Sub-Committee**
- (i) Shri K. K. Das Gupta - Covener
Director.
- (ii) Shri Satguru Prasad, - Member
State Fire Officer, Bihar
- (iii) Shri P. N. Panchal, - Member
Asstt. Inspector General, CISF.

- (iv) Shri S. K. Dheri
Chief Fire Officer,
Himachal Pradesh - Co-opted Member
- (v) Shri P. K. Chatterjee
P. Sc. O. Dy. Director
(Training Wing), DIFR. - Co-opted Member
- (vi) Shri C. T. Kunjumathan
Fire Officer,
Vikram Sarabhai Spaced Centre
Trivendrum - Co-opted Member

(e) Fire Prevention and Legislation Committee

- (i) Shri B. B. L Gupta. IPS director Fire Service, U.P. - Convener
- (ii) Shri C. K. Reddy, IPS,
Director of Fire Service,
Andhra Pradesh - Member
- (iii) Shri Vijay Kumar,
Regional Director,
Regional Labour Institute (Kanpur) Ministry of
Labour & Employment - Member
- (iv) Dr. G. N. Badami
Dy. Director. Fire Research. C.B. R.I. - Member
- (v) Shri V. B. Nikam.
Dy. Chief Fire Officer,
Mumbai fire Brigade. - Co-opted Member
- (vi) Shri Mahendra Prasad
Asstt. Fire Adviser,
Ministry of Defence. - Co-opted Member
- (vii) Shri R. K. Bharadwaj
A.D.O., Delhi, Fire Service - Co-opted Member
- (viii) Representative,
Loss Prevention Association - Co-opted Member

It was decided that the five Standing Sub-committees may examine the issues which have been raised in Agenda points as indicated below and forwarded their reports to the Ministry of Home Affairs by the target dates, also indicated against each :-

(a) Organisation and Personnel Sub-Committee

- (i) Item No. 24 of Main Agenda - Formulate rules governing the grant of Long Service and Good Conduct Medals and Submit report by 15 May, 1982.
- (ii) Item No. 59 of Main Agenda - Report to be submitted by 30th April, 1982
- (iii) Item No. 11 of Annexure II - The Sub-Committee to conduct detailed examination of the proposals already with the SFAC, the replies received from the States and put up revised proposals, if any for final consideration before commending the same for adoption by the Fire Service-Report to be submitted by 31st May, 1982
- (iv) Item No. 13 of Annexure II - To examine the proposals when received from the earlier Sub-Committee and submit a report within 2 months.
- (v) Item No. 16-B Annexure II - To examine the Report already received at Annexure III of Agenda and submit its comments and recommendations by 30th April, 1982

(b) **Modernisation and Resources Sub-Committee**

- (i) Items 7, 8, 10, 12, 13 and 17 - Examine the proposals in these items and to put up a comprehensive case for being put up to the Central Government by 15th April, 1982.

(c) **Equipment Sub-Committee**

- (i) Item 34 - To examine the proposal and put up Report by 31st January, 1982.
(ii) Item 36 - To examine and put up Report by the 15th April, 1982

(d) **Training Sub-Committee**

- Item 39 - To examine the problem and to recommend suitable proposals for securing the services of well qualified and experienced Fire Officers from major Fire Services to work as Instructors at NFSC-Report to be submitted by 30th April, 1982
(ii) Item 41 - To examine the proposal in its entirety, for certain selected Regional Training Centres in the country to take over the responsibility for conducting the Sub-Officers' courses from the NFSC. And work out the methodology to be adopted with details including financial implications –Report to be submitted by 30th June, 1982
(iii) Item 47 - To examine the proposal and put up detailed recommendations by 31st March, 1982
(iv) Item 49 - To examine and put up recommendations for implementation of the proposal – Report be submitted by 31st March, 1982

(e) **Fire Prevention and Legislation Sub-Committee**

- (i) Items 5 & 6 - To put up draft Central Legislation on Fire Prevention and Fire Safety by 30th June, 1982

33. It was decided that each Sub-Committee will be free to co-opt any expert as a Member – However, all expenditure in connection with the work of the Sub-Committee, including TA/DA etc., will be borne by the Parent administrative Deptt./Organisation each Member belongs to. Further, Sub-Committees may also constitute their own Working Groups to deal with any part of the work assigned to them, if they so desire.

APPENDIX “4 A”

GRADATION OF CIVIL DEFENCE TOWNS IN GROUPS I TO III AS RECOMMENDED BY S.F.A.C AT THE SPECIAL MEETING HELD IN OCTOBER, 1959

(See paras 2 to 4 under 4 Priority for Development of Fire Services)

3. At that meeting the members expressed the views that the existing grouping of towns in respect of fire fighting requirements should be revised. Because that for those were based largely on the population and it would be more realistic if other major considerations, like, susceptibility of fire risks, etc. were also considered. A revised gradation of towns in different groups was therefore recommended as given below:-

Group I

This should include towns having important areas essential from the point of view of Civil emergency and where high fire risk exist and which have been specifically earmarked for fire protection by the Government of India. These are :-

Sr. No.	State	Name of Town
1.	Jammu and Kashmir	Jammu
2.	Jammu and Kashmir	Srinagar
3.	Punjab	Jullundar
4.	Punjab	Ludhiana
5.	Delhi	Delhi and New Delhi
6.	Bihar	Jamshedpur
7.	West Bengal	Greater Calcutta
8.	Mumbai	Greater Mumbai
9.	Bombay	Kandla (now in Gujarat)
10.	Assam	Digboi

Group II

This should include towns of very high fire risk and industrial areas, which are subjected to serious fire risks. These are :-

Sr. No.	State	Name of Town
1	Andhra Pradesh	Hyderabad-Secunderabad
2	Mumbai	Poona
3	Mumbai	Solapur
4	Mumbai	Ahmedabad
5	Mumbai	Nagpur
6	Kerala	Cochin
7	Madras	Madras
8	Mysore	Banglore
9	Punjab	Ambala
10	Punjab	Amritsar
11	Punjab	Ferozpur
12	Punjab	Pathankot
13	Punjab	Bhara Nangal
14	Punjab	Chandigarh
15	Rajasthan	Jodhapur
16	Uttar pradesh	Kanpur (including Chakeri)
17	Uttar pradesh	Agra
18	Uttar pradesh	Bareilly
19	Uttar pradesh	Mathura
20	Uttar pradesh	Allahabad
21	Uttar pradesh	Banaras

Group III

Such towns of high fire-risks where Fire Services need expansion or provision of fire fighting equipment is essential. These are :-

Sr. No.	State	Name of Town
1.	Andhra Pradesh	Guntur
2.	Andhra Pradesh	Kakinada
3.	Andhra Pradesh	Rajahmundry
4.	Andhra Pradesh	Vijaywada
5.	Andhra Pradesh	Vishakhapatnam

6.	Andhra Pradesh	Warrangal
7.	Bihar	Gaya
8.	Bihar	Patna
9.	Bihar	Bhagalpur
10.	Bihar	Ranchi
11.	Mumbai	Baroda
12.	Mumbai	Bhavnagar
13.	Mumbai	Bhuj
14.	Mumbai	Aurangabad
15.	Mumbai	Jamnagar
16.	Mumbai	Nanded
17.	Mumbai	Rajkot
18.	Mumbai	Kolhapur
19.	Mumbai	Surat
20.	Kerala	Alleppy
21.	Kerala	Kozhikode
22.	Kerala	Trivendrum
23.	Madhya Pradesh	Bhopal
24.	Madhya Pradesh	Gwalior
25.	Madhya Pradesh	Indore
26.	Madhya Pradesh	Jabalpur
27.	Madhya Pradesh	Ratlam
28.	Madhya Pradesh	Ujjain
29.	Madras	Coimbtur
30.	Madras	Madurai
31.	Madras	Salem
32.	Madras	Sivakasi
33.	Madras	Trichinapalli
34.	Madras	Tanjore
35.	Madras	Vellore
36.	Mysore	Belgaum
37.	Mysore	Hubli
38.	Mysore	Karwar
39.	Mysore	Manglore
40.	Mysore	Mysore
41.	Orissa	Cuttack
42.	Rajasthan	Ajmer
43.	Rajasthan	Bikaner
44.	Rajasthan	Jaipur
45.	Uttar Pradesh	Aligarh
46.	Uttar Pradesh	Gorakhpur
47.	Uttar Pradesh	Jhansi
48.	Uttar Pradesh	Dehradun
49.	Uttar Pradesh	Lucknow
50.	Uttar Pradesh	Meerut
51.	Uttar Pradesh	Moradabad
52.	Uttar Pradesh	Rampur
53.	Uttar Pradesh	Saharanpur
54.	West Bengal	Behala(South Calcutta)
55.	West Bengal	Bhatpara
56.	West Bengal	Garden Reach
57.	West Bengal	Kharagpur
58.	West Bengal	Howrah
59.	West Bengal	Tollyganj

APPENDIX "5-A"

BILL TO PROVIDE FOR THE MAINTENANCE OF A FIRE FORCE FOR THE STATE

(See paras 3.5 under LEGISLATION)

Be it enacted by the State Legislature in the _____ year of the Republic of India as follows :

PRELIMINARY

1. Short title, extent and commencement. – (1) This Act may be called the _____ Fire Force Act, 195.

(2) It extends to the whole of the State

Name of the State.

(3) It shall come into force in any area on such date as the State Government may, by Notification in the Official Gazette, appoint and for different provisions of this Act.

2. Definitions - In this Act, unless the context otherwise requires :-

- (a) "Director" means the Director of the Fire Force appointed under Section 4:
- (b) "Fire fighting property" includes –
 - (i) lands and buildings used as fire stations.
 - (ii) Fire engines, equipments, tools, implements and things whatsoever used for fire fighting.
 - (iii) Motor vehicles and other means of transport used in connection with fire-fighting and
 - (iv) Uniforms and badges of ranks;
- (c) "Fire-station" means any post or place declared, generally or specially, by the State Government to be a fire-station.
- (d) "Force" means (Name of the state) Fire Force maintained under this Act;
- (e) "Officer-in-charge of a fire station" includes when the officer-in-charge of the fire station is absent from the station or unable from illness or other cause to perform his duties, the fire officer present at the station who is next in rank to such officer;
- (f) "Prescribed" means prescribed by rules made under this Act.

MAINTENANCE OF THE FIRE FORCE

3 Maintenance of fire Force – There shall be maintained by the State Government a fire force to be called Name of the state Fire Force for services in the local areas in which this Act is in force.

4. Appointment of Director of Fire Force – The State Government may appoint a person to be the Director of the Fire Force.

5. Superintendence and control of the Force – (1) The superintendence and control of the force shall vest in the Director and shall be carried on by him in accordance with the provisions of this Act and of any rules made thereunder.

(2) The State Government may appoint such officers as it may deem fit to assist the Director in the discharge of his duties.

6. Appointment of members of the force – The Director or such other officer of the force as the State Government may authorize in this behalf shall appoint members of the force in accordance with the rules made under this Act.

7. Issue of certificate to members of Force - Every person shall, on appointment to the force, receive a certificate in the prescribed form under the seal of the Director or an officer authorized in this behalf by the State Government and

thereupon such person shall have the powers functions and privileges of a member of the force under this Act.

(2) The certificate referred to in sub-section (1) shall cease to have effect when the person named therein ceases for any reason to be a member of the force; and on his ceasing to be such member, he shall forthwith surrender the certificate to any officer empowered to receive the same.

(3) During any term of suspension, the powers, functions and privileges vested in any members of the force shall be in abeyance, but such member shall continue to be subject to the same discipline and penalties as he would have been if he had not been suspended.

8. Auxiliary Fire Force – Whenever it appears to the state Government that it is necessary to augment the force, it may raise an auxiliary force by enrolment of volunteers for such area and on such terms and conditions as it may deem fit.

9. Power to State Government to make orders - The State Government may from time to time make such general or special orders as it thinks fit :-

- (a) for providing the force with such appliances and equipments as it deems proper,
- (b) for providing adequate supply of water and for securing that it shall be available for use;
- (c) for constructing or providing stations or hiring places for accommodating the members of the force and its fire fighting appliances;
- (d) for giving rewards to persons who have given notice of fires and to those who have rendered effective service to the force on the occasion of fires;
- (e) for the training, discipline and good conduct of the members of the force;
- (f) for the speedy attendance of members of the force with necessary appliances and equipment on the occasion of any alarm of fire;
- (g) for sending members of the force with appliances and equipment beyond the limits of any area in which this Act is in force for purposes of fire fighting in the neighborhood of such limits;
- (h) for the employment of the members of the force in any rescue, salvage or other similar work;
- (i) for regulating and controlling the powers, duties and functions of the Director; and
- (j) generally for the maintenance of the force in a due state of efficiency.

10. Powers of members of the force on occasion of fire :- On the occasion of fire in any area in which this Act is in force, any member of the force who is in charge of fire fighting operations on the spot may -

- (a) remove, or order any other member of the force to remove, any person who by his presence interferes with or impedes the operation for extinguishing the fire or for saving life or property;
- (b) close any street or passage in or near which a fire is burning;
- (c) for the purpose of extinguishing fire, break into or through or pull down, any premises for the passage of hose or appliances or cause them to be broken into or through or pulled down, doing as little damage as possible;
- (d) require the authority in charge of water supply in the area of regulate the water mains so as to provide water at a specified pressure at the place where fire has broken out and utilize the water of any stream, cistern. Well or tank or of any available source of water public or private, for the purpose of extinguishing or limiting the spread of such fire;
- (e) exercise the same powers for dispersing an assembly of persons likely to obstruct the fire fighting operations as if he were an officer-in-charge of a police station and as such if such an assembly were an unlawful assembly

and shall be entitled to the same immunities and protection as such an officer, in respect of the exercise of such powers;

- (f) generally take such measures as may appear to him to be necessary for extinguishing the fire or for the protection of life or property.

11. Power of Director to make arrangements for supply of water - The Director may with the previous sanction of the state Government, enter into an agreement with the authority in charge of water supply in any area for securing an adequate supply of water in case of fire, on such terms as to payment or otherwise as may be specified in the agreement.

12. Power of Director to enter into arrangements of assistance - The Director may, with the previous sanction of the State Government enter into arrangements with any person who employs and maintains personnel or equipment or both for fire fighting purposes, to secure, on such term as to payment or otherwise as may be provided by or under the arrangements the provision by that person or assistance for the purpose of dealing with fire occurring in any area in which this Act is in force.

13. Preventive measures –(1) The State Government may by notification in the Official Gazette, require owners or occupiers of premises in any area or of any class of premises used for purposes which its opinion are likely to cause a risk of fire, to take such precautions as may be specified in such notification.

(2) Where a notification has been issued under sub-section (1), it shall be lawful for the Director or any officer of the force authorized by the State Government in this behalf to direct the removal of objects or goods likely to cause a risk of fire, to a place of safety; and on failure of the owner or occupier to do so, the Director or such officer may, after giving the owner or occupier a reasonable opportunity of making representation seize, detain or remove such objects or goods.

EXPENDITURE ON MAINTENANCE OF FORCE

14. Expenditure on the force – The entire expenditure in connection with the force shall be met out of the Consolidated Fund of the State :

Provided that the State Government may recover from any local authority of any area in which this Act is in force such contribution towards the cost of the position of the force maintained in that area as the State Government may direct from time to time.

15. Levy of fire tax – (1) There may be levied a fire tax on Land and Building which are situated in any area in which this Act is in force and on which property tax by whatever name called is levied by any local authority in that area.

(2) the fire tax shall be levied in the form of surcharge on the property tax at such rate not exceeding... per cent of such property tax as the State Government may, by notification, in the Official Gazette, determine.

16. Mode of assessment, collection etc., of fire tax – (1) The authorities for the time being empowered to assess, collect and enforce payment of property tax under the law authorizing the local authority of the area to levy such tax shall, on behalf of the State Government and subject to any rules made under this Act, assess, collect and enforce payment of the fire tax in the same manner as the property tax is assessed paid and collected; and for this purpose, they may exercise all or any of the powers they have under the law aforesaid and the provisions of such law including provisions relating to returns, appeals, reviews, revisions, references and penalties shall apply accordingly.

(2) Such portion of the total proceeds of the fire tax as the State Government may determine shall be deducted to meet the cost of collection of the tax.

(3) The proceeds of the fire tax collected under this Act reduced by the cost of collection shall be paid to the State Govt. in such manner and at such intervals as may be prescribed.

17. Fees – (1) Where members of the force are sent beyond the limits of any area in which this Act is in force, in order to extinguish a fire in the neighborhood of such limits, the owner or occupier of the premises where the fire occurred or spread shall be liable to pay such fee as may be prescribed in this behalf.

(2) The fee referred to in sub-section (1) shall be payable within one month of the service of a notice of demand by the Director on the owner or occupier and if it is not paid within that period, it shall be recoverable as an arrear of land revenue.

ACQUISITION OF FIRE FIGHTING PROPERTY

18. Prohibition against transfer of fire fighting property – No local authority of any area in which this Act is in force shall, after the commencement of this Act in that area, transfer or otherwise part with any fire fighting property without the previous sanction of the State Government.

19. Acquisition of fire fighting property – (1) If after making such inquiry and investigation as it deems necessary and after giving the local authority an opportunity to make its representations, the State Government is of opinion that the standard of efficiency of the fire fighting personnel and equipment maintained by the local authority is not adequate to meet the normal requirements of the area, the State Government may acquire the fire fighting property of the local authority by publishing in the Official Gazette a notice to the effect that the State Government has decided to acquire such property on payments of its market value, a copy of such notice shall also be served on local authority.

(2) When a notice as aforesaid is published in the Official Gazette, the property specified in such notice shall on and from the beginning of the date on which the notice is so published, vest absolutely in the State Government free from all encumbrances.

20. Principles and method of determining compensation – (1) The amount of compensation payable in respect of any fire fighting property acquired under this Act shall be the market value of such property on the date of issue of the notice referred to in section 19. that is, the price which is would have fetched in the open market if it had been sold on that date

(2) The amount of compensation shall be determined in the manner and in accordance with the principles hereinafter set out, that is to say ---

- (a) where the amount of compensation can be fixed by agreement it shall be paid in accordance with such agreement;
- (b) where no such agreement can be reached, the State Government shall appoint as arbitrator a person who is, or has been or is qualified for appointment as, a Judge of a High Court.
- (c) the State Government may in any particular case nominate a person having expert knowledge as to the nature of the property acquired to assist the arbitrator and where such nomination is made, the local authority concerned may also nominate an assessor for the same purpose;
- (d) at the commencement of the proceedings before the arbitrator, the state Government and the local authority shall state what in their respective opinion is a fair amount of compensation
- (e) the arbitrator shall after hearing the dispute make an award determining the amount of compensation which appears to him to be just and in

making the award he shall have regard to the circumstances of each case and the provisions of this section;

- (f) nothing in the Arbitration Act, 1940 shall apply to arbitrations under this section.

21. Appeals from awards in respect of compensation – Where the State Government or local authority is aggrieved by an award of the arbitrator under section 20, it may within thirty days from the date of such award prefer an appeal to the High Court within whose appellate jurisdiction to the required property is situated.

22. Powers of arbitrator – The arbitrator appointed under section 20, while holding arbitration proceedings under this Act, shall have all the powers of a Civil Court, while trying a suit under the Code of Civil Procedure, 1908 in respect of the following matters, namely -

- (a) summoning and enforcing the attendance of any person and examining him or oath;
- (b) requiring the discovery and production of documents;
- (c) receiving evidence on affidavits; and
- (d) issuing commissions for examination of witness.

PENALTIES

23. Penalty for violation of duty etc – Any member of the force who -

- (a) is found to be guilty of any violation of duty or willful breach of any provision of this Act or any rule or order made thereunder, or
- (b) is found to be guilty of cowardice, or
- (c) withdraws from the duties of his office without permission or without having given previous notice of at least two months or
- (d) being absent on leave fails without reasonable cause to report himself for duty on the expiration of such leave, or
- (e) accepts any other employment or office in contravention of the provisions of section 29, shall be punishable with imprisonment which may extend to three months or with fine which may extend to an amount not exceeding three months' pay of such member or with both.

24. Failure to give information – Any person who without just cause fails to communicate information in his possession regarding an outbreak of fire shall be deemed to have committed an offence punishable under the first part of section 176 of the Indian Penal Code.

25. Failure to take precautions – Whoever fails without reasonable cause to comply with any of the requirements specified in notification issued under sub-section (1) of Section 13 or of a direction issued under sub-section (2) of that section shall be punishable with fine which may extend to five hundred rupees.

26. Willfully obstructing fire fighting Operations – Any person who willfully obstructs or interferes with any member of the force who is engaged in fire fighting operations shall be punishable with imprisonment which may extend to three months or with fine which may extend to five hundred rupees or with both..

27 False report –Any person who knowingly give or causes to be given a false report of the outbreak of a fire to any person authorized to receive such report by means of a statement, message or otherwise shall be punishable with imprisonment for three months or with fine not exceeding five hundred rupees or with both.

GENERAL AND MISCELLANEOUS

28. Training Centres –The State Government may establish and maintain one or more training centers in the State for providing courses of instruction in the prevention and extinguishments of fire and may close down or re-establish any such center.

29. Bar to other employment – No members of the force shall engage in any employment or office whatsoever other than his duties under this Act unless expressly permitted to do so by the Director.

30. Transfer to other area –The Director or any officer authorized by the State Government in this behalf may, on the occasion of a fire or other emergency in any neighbouring area in which this Act is not in force, order the dispatch of the members of the force with necessary appliances and equipments to carry on fire fighting operations in such neighboring area and thereupon all the provisions this Act and the rules made there under shall apply to such area, during the period of fire or emergency or during such period as the Director may specify.

31. Employment on other duties –It shall be lawful for the State Government or any officer authorized by it in this behalf to employ the force in any rescue, salvage or other work for which it is suitable by reason of its training, appliances and equipments.

32. Liability of property owner to pay compensation –(1) Any person whose property catches fire on account of any action of this own or of his agent done deliberately or negligently shall be liable to pay compensation to any other person suffering damage to his property on account of any action taken under section 10 of this Act by any officer mentioned therein or any person acting under the authority of such officer.

(2) All claims under sub-section (1) shall be preferred to the District Magistrate within 30 days from the date when the damage was caused .

(3) The District Magistrate shall, after giving the parties an opportunities or being heard, determine the amount of compensation due and pass an order stating such amount and the person liable for the same, and the person liable for the same and the order so passed shall have the force of a decree of a civil court.

33. Inquiry into origin of fire and report to Magistrate –Where any fire has occurred within any area in which this Act is in force, the senior-most officer in rank among the members of the force in that area shall ascertain the facts as to the origin and cause of such fire and shall make a report thereon to the Magistrate having jurisdiction in the place in which such fire occurs; and the said Magistrate shall in any case where he may deem fit summon witness and take evidence in order to further ascertain such facts.

34. Power to obtain information –Any Officer of the force not below the rank of officer in charge of a fire station may for the purpose of discharging his duties under the Act require the owner or occupier of any building or other property to supply information with respect to the character of such building or other property, the available water supplies and means of access thereto any other materials, particulars and such owners or occupier shall furnish all the information in his possession.

35. Power of entry –(1) The Director or any member of the force authorized by him in this behalf may enter any of the places specified in any notification issued under section 13 for the purpose of determining whether precautions against fire required to be take on such place have been so taken.

(2) Saving as otherwise expressly provide in this Act, no claim shall lie against any person for compensation for any damage necessarily caused by any entry made under sub-section (1).

36. Consumption of water –no charge shall be made by any local authority for water consumed in fire fighting operations by the force.

37. No compensation for interruption of water supply –No authority in charge of water supply in an area shall be liable to any claim for compensation for damage by reason of any interruption of supply of water occasioned only by compliance of such authority with the requirement specified in clause (d) of section 10

38. Police Offices to aid –It shall, be the duty of police officers of all ranks to aid the members of the force in the execution of their duties under the Act.

39. Information on outbreak of fire –Any person who possesses any information regarding an outbreak of fire shall communicate the same without delay to the nearest fire station.

40. Indemnify –No, suit prosecution or other legal proceedings shall lie against any person for anything which is in good faith done or intended dot be done in pursuance of this Act or any rule or order made thereunder.

41. power to make rules –(1) The State Government may, by notification in the Official Gazette, make rules for carrying out the purposes of this Act.

(2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for -

- (a) the number and grades of officers and members of the force;
- (b) the manner of appointment of members of the force;
- (c) the form of the certificate to be issued to the members of the force;
- (d) the conditions of the service of the members of force including their ranks, pay and allowances, hours of duty and leave, maintenance of discipline and removal from service.
- (e) the circumstances in which and the conditions (including the levy of fee) subject to which members of the force may be dispatched to carry on fire fighting operations in neighbouring areas;
- (f) the conditions subject to which members of the force may be employed on rescue, salvage or other work;
- (g) the manner in which and the intervals at which the process of the fire tax levied under this Act shall be paid to the state Government.
- (h) the manner of service of notice under this Act;
- (i) the procedure to be followed in arbitration proceedings under section 20;
- (j) the payment of rewards to persons, not being members of the force, who render services for fire fighting purposes;
- (k) the compensation payable to members of the force in case of accidents on to their dependents in case of death while engaged on duty;
- (l) for the employment of members of the force or use of any equipment outside the area or on special services and the fee payable therefore, and
- (m) any other matter which is to be or may be prescribed.

42. Repeal and saving –If immediately before the day on which this Act comes into force in an area, there is inforce in that area any law or rule having the force of law which corresponds to this Act, such corresponding law in so far as it relates to

any matter of which provision has been made in this Act shall on that day stand repealed;

provided that such repeal shall not be deemed to limit, modify or derogate from the general responsibility of any local authority-

- (a) to provide and maintain such water supply and fire hydrants for fire fighting purposes as may be directed by the state Govt. from time to time.
- (b) to frame bye-laws for the regulation of dangerous trades;
- (c) to order any of its employees to render aid in fighting a fire when reasonably called upon to do so by any member of the force and
- (d) generally to take such measures as will lessen the likelihood of fires or preventing the spread of fires.

MODEL RULES UNDER THE FIRE FORCE BILL
(See para 18 under 5 LEGISLATION)

THE _____ FIRE SERVICE
RULES, 19_____

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THE _____ STATE FIRE SERVICE RULES, 19 _____

In exercise of the powers conferred by Section 41 of State Fire Force Act, 19 the Government of hereby makes the following special rules for the Fire Services :-

CHAPTER I – PRELIMINARY

- 1. Short title and commencement.**-(1) These rules shall be called State Fire Service Rules.
(2) They shall take effect from the State of the publication in the Official Gazette.
- 2. Definition.** – In these rules, unless the context otherwise requires
 - (1) “Act” means Fire Force Act.
 - (2) “Governor” means the Governor of
 - (3) “Director or Regional Fire Officer/Dy. Director of Fire Force” shall mean a person appointed to these posts under the Act of these rules as such.
 - (4) “Service” means State Fire Service, and
 - (5) “Member of the Service” means a person appointed to a post in the cadre of the service.

CHAPTER II – CONSTITUTION OF FIRE SERVICE.

3. Regions & Division of the State. – For the purposes of these Rules the State may be divided into regions, which may be further divided into Divisions.

Each region shall be in charge of a Regional Fire Officer, while the Headquarters region shall be in charge of the Dy. Director of Fire Service.

4. Division of Region. – Each Division shall be in charge of a Divisional Fire Officer – assisted in high fire risk areas, by such number of Assistant Divisional Fire Officers as may be required.

5. Strength of the establishment. – The sanctioned strength of the Fire Service shall be determined by the Government from time to time and shall on the commencement of these rules, be as specified in Schedule I of these rules. (Vide item No.11 of 6th Standing Fire Advisory Committee meeting).

6. Supervision and Control. – (1) Subject to the control and supervision of theGovernment the Director of Fire Service shall be in sole charge of the Fire Service Department of the State.

(2) The Deputy Director of Fire Service/Regional Fire Officer shall work under the control and guidance of the Director of Fire Service and the Divisional Fire Officers shall work under the direct control and guidance of the respective Dy. Director/Regional Fire Officer.

7. Appointment of Superior Service. – The Director or Deputy Director of Fire Service, Regional Fire Officer and Divisional Fire Officer shall constitute Superior Fire Service.

8. Gazetted Officers. – The State Government shall by notification in the Gazette appoint the following officers :-

- (1) A Director of Fire Service.

(2) Such number of Dy. Directors/Regional Fire Officers as there are regions and such number of Divisional Fire Officers as there are divisions.

9. Reservation of appointments. – The rule of reservation of appointments shall apply to all appointments by direct recruitment.

10. Probation. – Every person appointed to the Fire Service shall be on probation for a period of one year from the date of appointment.

11. Staff. – The State Government or any Officer specially empowered in this behalf by the State Government, shall appoint such person or persons as may be deemed necessary, to the posts of Assistant Divisional Officers, Station Officers, Sub Officers, Leading Firemen, Driver Operators, Firemen, Watch Room Operators, Fitters, Mechanics, Drivers, Painters, Blacksmiths, Carpenters, Fireman-Aides, Storekeepers, Cashiers, Clerks, Office orderlies, Gardeners, Sweepers/Scavengers and such other posts – gazetted or non-gazetted in the administrative and ministerial establishment and to any other posts created from time to time as may be deemed necessary by the State Government.

12. Pay and Allowances. – Rates of monthly pay admissible to increments of the various posts, whether the appointment is substantive or in officiating capacity of as a temporary measure, shall be as fixed from time to time by the State Govt.

13. Posting and transfers. – All postings and transfers of Director of Fire Service, Dy. Director of Fire Service and Regional Fire Officers shall be made by the Secretary, State Fire Department.

14. Quarters. – Members of the Fire Service shall be eligible for free quarters or for a house rent allowance in lieu of free quarters, and for water and electricity free of charge.

15. Uniform. – All articles of Uniform and Kit for the Director and Fire Service Officers and all other ranks shall be in accordance with standard uniforms as specified in Schedule II (Vide item 10 of 4th S.F.A.C. and vide item No.18 of 8th S.F.A.C.) and be issued free in accordance with the scales approved by the State Govt.

16. Monthly allowance for maintenance of uniform clothing for Director & officers up to the rank of Divisional Fire Officers. – The Director of Fire Service, other Fire Service Officers up to the rank of Divisional Fire Officers and such other Officers as may be decided by the State Government shall receive such monthly allowance for the maintenance of their Uniform Clothing as may be determined by the State Government. Assistant Divisional Officers, Station Officer, Sub-officers, lower ranks and such other members of the Fire Service as may be determined by the Director of Fire Service, shall be supplied monthly with material for the maintenance of their uniform clothing as fixed by their respective Dy. Director/ Regional Fire Officer.

17. Transport. – All officers shall be entitled to free transport facilities for the performance of their official duties. The Director and Dy. Director of Fire Service, Regional Fire Officer and the Divisional Fire Officers shall be entitled to a free motor car and the Assistant Divisional Officers, Station Officers and Sub-Officers shall either be allowed to keep motor cycles or shall be allowed to use the vehicles maintained by the Fire Service along with other lower ranks when on official duties.

18. Qualifications. – No person shall be eligible for appointment as Director of Fire Service or Dy. Director/Regional Fire Officer by direct recruitment unless he -

(a) has completed the age of 25 years and has not completed the age of 35 years on the first day his taking charge of his post in the Fire Service of the State.

- (b) Hold the B.A. or B.Sc. degree or any other equivalent degree of a university in the Indian Union preferably in Science of Engineering subject,
- (c) has passed the Divisional Officers Course or the General Fire Prevention Course at the National Fire Service College or hold Associate Membership of the College or other equivalent qualifications.
- (d) Has a minimum of 10 years' service (7 years in case of Dy. Director/Regional Fire Officers) in a full time Fire Service, of which at least 3 years should be in a senior executive post carrying responsibility,
- (e) Is not less than 5 feet 5 inches in height,
- (f) Is not less than 32 inches round the chest and has a chest expansion of not less than 2 inches on full respiration to 34 inches round the chest, and
- (g) Is not less than 110 lbs in weight.

(28)

- (h) satisfies a Medical Board in _____ as to his physique fitness in all respect and capacity for active outdoor work. The Medical Board shall certify that he is free from organic diseases of any sort and not subject to vertigo, or diseases of heart, lung or kidney or abnormal blood pressure. His eye sight shall be good and if he wears glasses, it shall be certified by the Superintendent of the Government Ophthalmic Hospital that he shall be able to perform Fire Service duties at fires and other rescue works from high elevations without any hindrance.

19. Subordinate Service. – A person appointed to the Subordinate Service either by direct recruitment from outside or by transfer from other regular recognized full time fire Services, shall possess physical standards, academic or technical qualifications and practical experience as per Schedule III. (Vide item No.3 of 7th S.F.A.C.)

20. Training. – A probationer recruited direct from outside, shall during the prescribed period of probation, successfully complete the various standards of examination and courses as stated in the Schedule III. The pay of probationers recruited shall be Rs. _____ a month while undergoing training in the National Fire Service College or a Regional/State Fire Training Centre and Rs. _____ a month whilst undergoing a practical training in a regular recognized full time Fire Service.

21. Uniforms & Badges. – The uniforms and badges to be worn by the Director of Fire Service, the other officers and the staff shall depend on the various ranks held by them in accordance with the numbers of appliances they are in control of and shall be as prescribed in Schedule II.

22. Discipline. – The rules as to the maintenance of discipline in the Services shall be as set out in the Discipline Code prescribed in the Schedule IV (As per Model Discipline Code prepared by the Sub-Committee and placed before the 9th SFAC.)

23. Drill. – The rules relating to drill and exercise shall be as prescribed in the Drill Manual prepared by the Central Government and set out in Schedule V. (As per Standard Drill Manual).

CHAPTER III - POWER AND DUTIES

24. Director of Fire Service. – (1) The Director of Fire Service shall be in control of the entire Fire force and shall be responsible to the State for the efficient functioning of the Fire Service.

(2) He shall be empowered to take all such necessary steps as he may think fit under the powers given to him under the Act for protection of life and property from fire.

(3) He shall personally supervise serious outbreaks of fires when the Deputy Director/Regional Fire Officer considers his presence necessary. When the Deputy Director/Regional Fire Officer is in attendance at a fire, he shall be supreme control not only of the Fire Force but also of all other Forces and essential Services including volunteers from the public engaged in putting out fires.

25. Deputy Director of Fire Service/Regional Fire Officer. – He shall be in operational command of at least two divisions or second in command to the Director of Fire Service, or shall have equivalent staff duties. He shall normally be in complete command of all operations in any serious emergencies or conflagrations. The Deputy Director at HQ shall also be in charges of the Fire Service during short absence of the Director, other regular, acting or officiating arrangements shall be made by the appointing authority.

26. Divisional Officer.- The Divisional Officer shall be in charge of two to eight fire stations depending upon the size and importance of the stations or equivalent staff duties. He may be assisted by an Asstt. Divisional Officer if necessary in high fire risk areas who may be entrusted with a charge of two to three fire stations or four to six fire fighting units or other equivalent staff duties.

27. Station Officer & Sub-Officer. – Officer-in-charge of a Fire Station shall hold charge of a Fire Station having not more than three fire fighting units with all equipments or equipments or equivalent staff duties. He shall have under him staff attached to the Fire station. He will be responsible for the maintenance of communications systems, water resources including hydrants with in his station area, and shall be in charge of operations of fire where not more than three complete fire engineers required to work.

He may be assisted by a Sub-Officer in high fire risk areas who may be entrusted with a charge of any fire fighting unit.

28. Leading Fireman. – The Leading Fireman shall be the leader of the fire crew and responsible for the execution of the orders of his officer and for the work of individual members of the crew.

29. Driver-Operators, Firemen and others. – They shall form members of the fire crew and perform duties assigned to them by the leading Fireman or such other officers as may be in command.

(2) The functions of the mechanical staff and other persons engaged by the Fire Services shall be such as may be assigned to them from time to time.

30. Information of Fire. – Any officer-in-charge of a Fire Station shall immediately on receipt of information of the occurrence of a fire, turn out units to the place of occurrence and shall take all necessary steps to extinguish the fire expeditiously.

31. Report of Fire. – The report of every fire which occurs within the respective areas shall be submitted by the Officers-in-charge of Fire Station not later than 2 days following the fire, to their respective Divisional Officers who shall make such further enquiries, if any, as they may deem necessary and shall furnish such reports to their respective Regional Fire Officers, who shall furnish a weekly return of all fires in the respective areas to the Director of Fire Services.

32. Adequate supply of water. – The Director of Fire Service shall take all reasonable measures for adequate supply of water and in particular provide :

(1) For ensuring areas with different fire risks as follows :-

(a) **Piped Water Supply :**

- (i) For industrial and commercial areas the main pipe line should not be less than 6” in dia. and shall be capable of supplying a minimum of 1,000 gallons per minute at a pressure of not less than 10 lbs. Per sq.inch.
- (ii) For residential areas, the main pipe line should not be less than 4” dia. and should be capable of supplying minimum of 500 gallons per minute at a pressure of not less than 10 lbs. per sq.inch.

(b) **Reserve :**

- (j) One gallon per head of the population (Scattered in small tanks and pools etc. all over the area)

(c) **Additional requirements for special risks :**

- (i) Class ‘A’ risk areas (Ware house, 2500 gallons of water per minute of pipe water congested factories) supply or static water supply or a combination of both.
- (ii) Class ‘B’ risk areas (Concentration of 1000 to 1500 gallons per minute from similar factories, warehouses, large shopping areas) sources as in (i).
- (iii) Class ‘C’ risk areas (Areas of smaller risk 600-700 gallons per minute from similar sources)

than (i) & (ii)	as in (i).
(iv) Class 'D' risk areas (Residential. Scattered similar source factories, rural areas, etc.)	250-700 gallons per minute from as in (i).

Note :- This supply should be available for 100 minute, 50 per cent of this supply or 10 lakh gallons, whichever is less, should be in the form of static supply.

(d) Static Water Tanks :

Areas where congested shopping centers exist, the static water supply can be of great help for fighting fires. Static water can be made available in the form of underground tanks, for instance in parks and at road crossings in the shape of fountains.

(30)

This should supplement the plans for the beautification of the city also. Open tanks and swimming pools can also be constructed at appropriate places, which can be used as static water supply for fighting fire.

Although tubewells are considered to be unsafe and unreliable because of their unhealthy and dirty water, yet these can be of great help in the incidence of fire. When local authorities propose to install any tubewells, it is desirable that the Fire Service is consulted for their suitable and appropriate location.

(2) Provision of water units especially for rural areas.

(3) Provision of Mobile one-mile pipe line with victualic joints in a movable vagon.

33. Right of way. – (1) When the fire unit is in transit to the place of occurrence of a fire, the fire alarm bell shall be rung continuously.

(2) On hearing the said alarm bell every person and vehicles on the route shall immediately draw to the extreme left and stop till the fire unit passes by, providing a clear and unobstructed passes to the fire unit, provided that a vehicle running on fixed rails like the tram car shall stop in a such manner as to provide clear passage to the fire unit.

(3) Whosoever contravenes the provision of sub-section (2) above shall be punishable with a fine, not exceeding Rs.50/-

34. Preventive Powers. – (1) The trades which are likely to cause a risk of fire, shall be as enumerated in a list which may be amended from time to time.

(2) In respect of such fire risks and to all fire risks not covered by any Central or other State enactments, in respect of which a notification under section 13 of the Act has been issued, any member of the Fire Services of the area, duly authorized by the Director of Fire Services in this behalf, may inspect any place where he suspects such risks exist and direct compliance with such preventive measures as he may deem fit.

35. List of Occupations involving Fire risks. – List of occupations involving fire risks is as per Schedule VI (Finalised at the 9th SFAC Meeting)

36. Purchase of Equipments.- The Director of Fire Service shall, as far as possible, conform to the standard specifications for fire fighting equipments laid down by the Indian Standard Institution as per Schedule VII in the purchase of such equipments for the Fire Service. (Vide list attached).

37. Minimum water discharge of pumps. – The Director of Fire Service shall take all necessary steps to raise the standards of minimum water discharge of pumps to conform to the approved standards viz. 100 gallons per minute pumping capacity for every 10,000 population with 20% as reserve.

38. Minimum requirements of Fire Station. - The Director of Fire Services shall take all necessary steps to ensure the maintenance of the minimum requirements of fire Stations as set out in schedule III (Vide item No.3 of 2nd SFAC).

39. Statistics. – The Director of Fire Service shall cause the maintenance of record of all fires and the losses caused by such fire in the form prescribed under Schedule IX (Vide Item No.13 of 6th SFAC).

CHAPTER IV - MISCELLANEOUS

40. Compensation to members of the Service. – The compensation payable to the members of the Service in the case of accidents or to the dependents in the case of death shall be in accordance with the scales laid down by the State Government as per Schedule X (Vide item No.5 of 3rd SFAC).

41. Disciplinary Actions. – Every member of the Service who shall be guilty of any violation of duty or willful breach of any provisions of the Act or the rules made thereunder or of any order made by a competent authority, or who shall be guilty of cowardice or who withdraws from duties from his office without permission or who, being absent on leave, fails, without reasonable cause to report himself for duty on the expiry of such leave, or who shall engage without authority in any employment other than his duty, shall be liable on a conviction before the Magistrate of First Class to a fine not exceeding three months pay or imprisonment not exceeding three months or both.

(31)

42. Employment of Fire Service for purpose other than fire fighting within or outside the State. – The Fire Service may be engaged on purpose other than fire fighting at the discretion of the Director or his authorized subordinate officer in following circumstances :--

- (i) Special Services free of charge in cases of types of rescues of Life.
- (ii) Special Services which should be charged according to rate fixed by the State Government, such as for pumping out wells, floor waters, attending to duties like fire protection at large assemblies or gatherings subject to safe use of equipment if it can be spread.
- (iii) Services of all kinds, rendered beyond limits of jurisdiction to be charged according to rates fixed by State Government.

Note :- Fire Fighting units, equipments and appliances shall not be used for duties like road sprinkling, supply of water, washing of places, etc.. except in case of emergency.

SCHEDULE I – STRENGTH OF THE ESTABLISHMENT

As per following extract of recommendations vide Item No.11 of the minutes of the 6th Standing Fire Advisory Committee meeting :-

(A) Station Officer & Sub-officers

The scale of Station Officers and Sub-officers at stations should be as under :-

1 Pump Station -- 1 Staff Officer or 1 Sub-officer.

2 Pumps Station	--	1 Station Officer and 1 Sub-officer.
3 Pumps Station	--	1 Station Officer and 2 Sub-officers.
4 Pumps Station	--	2 Station Officers and 2 Sub-Officers.
5 Pumps Station	--	2 Station Officers and 3 Sub-officers.
6 Pumps Station	--	2 Station Officers and 4 Sub-officers.

Note I :- Where the extent of fire risk may justify, Sub-officers may be replaced by Station Officers.

Note II :- Reserve Staff :-

- (a) A 50% reserve of total staff of Station Officers and Sub-officers on duty to be provided for periodical relief to enable officers to avail 24 hours off after every 48 hours on duty.
- (b) A 10% of the total staff on duty and periodical relief to be provided as Training Reserve.
- (c) A leave reserve of 15% on the total staff on duty, periodical relief and training reserve to be provided as replacement for all types of leave.

(B) Leading Firemen

There should be one Leading Fireman per fire appliance and one for Station and out door duties per station at all times.

(C) Drivers/Operators

One driver/operator per motor vehicle plus a duty reserve which will ensure the following minimum number to be provided at each station :-

Station with 1 Motor Vehicle	--	2 Drivers/Operators.
Station with 2 Motor Vehicles	--	3 Drivers/Operators.
Station with 3 Motor Vehicles	--	4 Drivers/Operators.
Station with 4 Motor Vehicles	--	6 Drivers/Operators.
Station with 5 Motor Vehicles	--	7 Drivers/Operators.
Station with 6 Motor Vehicles	--	9 Drivers/Operators.

(D) Firemen

The scale of Firemen will be six per fire appliance apart from one fireman for fire alarm duties, two firemen for hydrant and water resources inspection and one fireman for dispatch duties per station

(32)

Note I :- There should be a reserve of 25% of the total number of Leading Firemen, Drivers/Operators and Firemen worked out according to the above scale to serve as Training Reserve, and Leave Reserve of all types.

Note II :- Where two shift system is in vogue, the number of Leading Firemen, Drivers/Operators and Firemen will be doubled

Note III:- Where three shift system is in vogue, the number of Leading Firemen, Drivers/Operators and Firemen will be three times the scale mentioned above

(E) Watch Room Operators

Four watch room operators for each station to be provided, one to be on duty for every 8 hours and the 4th man to be spare for relief work. In addition, an overall reserve of 25% for the service as a whole to be provided.

(F) Clerks

Whether the Station functions as an independent unit and has its own cash and store work, one clerk may be provided.

(G) Sweepers/Scavengers

This class of employees should be provided at the scale of one per 3,000 sq.ft. of covered area, and one per 7,000 sq.ft. of open area subject to a minimum of one at each station.

(H) Gardeners

One gardener for every half acre of land required to be maintained as a garden.

At places having more than one station where headquarters of city fire brigade exist, the staff required should vary from place to place depending on the strength of the crew. The following general observation may serve as guide :--

Officers – The scale of officers with relation to their responsibility or command should be fixed as per recommendations made by this Committee under item No.10 of its 4th meeting held in March, 1968. It is however, considered necessary that there should be an Equipment Officer of the rank of Divisional Officer. Assistant Divisional Officer, Station Officer or Sub-officer depending upon the size of the Brigade.

Training Staff – A minimum of one Station Officer, one Sub-officer, one Leading Fireman, one Driver/Operator and six Firemen should be provided if there is no full fledged training school attached to the Service.

Ministerial Staff – A Store Keeper, a Cashier, a Stenographer and an Accountant must be provided for the Fire Service. However, where considered necessary, assistants should be provided to these posts while other ministerial staff should be provided as per actual requirements.

Headquarters/Control Room – A Mobilising Officer holding a rank from a Divisional Officer to a Sub-officer depending on the size of Fire Service should be provided to hold charge of the Control Room. In addition, an adequate number of watch room operators working on three shift system should be provided.

Fire Aides – One fireman aide for each officer above the rank of Station Officer should be provided.

Office Orderlies – These requirements for offices should be worked out separately as per scales laid down.

General – In addition to above the staff required for maintenance of hose, for arranging supply of water for fire-fighting and for fire prevention work should be engaged as per actual requirement.

The scale of staff required for manning the fire service workshop would depend on the size of the service and the number of motor vehicles and fire appliances. This would therefore, be in accordance to recommendations vide Item No.9 of 7th SFAC meeting.

SCHEDULE II -- UNIFORMS AND BADGES

Uniforms – As per recommendations vide Item No.18 of the minutes of the 8th meeting of the SFAC.

Badges -- (i) Officer's Peak Cap Badge, as per recommendations vide Item No.5 of the minutes of the 5th SFAC meeting.

(ii) Shoulder markings for the various ranks as detailed under Item No.5 (b) of the minutes of 2nd SFAC meeting.

SCHEDULE III -- SUBORDINATE SERVICE

As per "Recruitment Rules for the various ranks in the Fire Services" as recommended vide Item No.3 of the 7th SFAC meeting with Annexure 'A', 'B', 'C' & 'D'.

SCHEDULE IV -- DISCIPLINE

As per Model discipline code prepared by the Sub Committee and placed before the 9th meeting of the Standing Fire Advisory Committee.

SCHEDULE V -- DRILL

As per Standard Drill Manual Government of India, Ministry of Home Affairs.

SCHEDULE VI -- LIST OF OCCUPATIONS INVOLVING FIRE RISKS

As per item No.19 of the 8th meeting of Standing Fire Advisory Committee, (Finalised at the 9th SFAC meeting).

SCHEDULE VII -- LIST OF STANDARDS ON FIRE FIGHTING EQUIPMENTS

As per list attached.

SCHEDULE VIII -- MINIMUM REQUIREMENTS OF FIRE STATION

As per recommendations of Standing Fire Advisory Committee vide table under Item No.3 of the minutes of 2nd meeting entitled "Requirements of a Standard Fire Station".

SCHEDULE IX -- STATISTICS

As per recommendation of the Standing Fire Advisory Committee vide proforma under Item No.13 of the minutes of the 6th meeting entitled "Collection of Fire Statistics elaborated proforma relating to--"

SCHEDULE X -- COMPENSATION TO MEMBERS OF THE SERVICE

As per recommendations of the Standing Fire Advisory Committee vide Annexure-II with Annexure of Item No.5 of the minutes of 3rd meeting.

List of Standards of Fire Fighting Equipment

1. Couplings Double Male and Double Female Instantaneous Pattern for Fire Fighting purposes Doc; BDC 22 (220).
2. Fire Hose Delivery Couplings, Branch Pipe, Nozzles and Nozzle Spanner Doc; BDC 22 (242)
3. Suction Hose Couplings for Fire Fighting purposes Doc; BDC 22 (243).
4. 2-Way and 3-way Suction Collecting Heads for Fire Fighting purposes Doc; BDC 22 (244).

5. Delivery Breechings, Dividing and Collecting, Instantaneous Pattern for Fire Fighting purposes Doc; BDC 22 (240).
6. Branch with Revolving Head for Fire Fighting purposes Doc; BDC 22 (245).
7. Suction Strainers, Cylindrical and Shoes Types for Fire Fighting purpose Doc; BDC 22 (247).
8. Hydrant, Stand Post Type Doc; BDC 22 (248).
9. Under Ground Hydrant, Sluice Valve Type Doc; BDC 22 (250).
10. Under Ground Hydrant Double Valve Type Doc; BDC 22 (313).
11. Combined Hydrant, Hydrant Cover Lift and Lower Valve Key Doc; BDC 22 (249).
12. Washers for Water Fittings for Fire Fighting purposes Doc; BDC 22 (339).
13. Fireman's Axe Doc; BDC 22 (221)
14. Fire Hooks Doc; BDC 22 (251)
15. Fire Bell Doc; BDC 22 (252)

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16. Hook Ladder Doc; BDC 22 (264)
17. Extension Ladders Doc; BDC 22 (265)
18. Wheeled Fire Escape Doc; BDC 22 (260)
19. Mechanically Operated Turn Table Ladder for Fire Brigade Use Doc; BDC 22 (207)
20. Portable Chemical Fire Extinguishers, Foam type Doc; BDC 22 (253)
21. Portable Chemical Fire Extinguishers, Carbon Dioxide : Doc; BDC 22 (255).
22. Portable Chemical Fire Extinguishers, Soda Acid Type Doc; BDC 22 (254).
23. Fire Extinguishers, CBM Type Doc; BDC 22 (367).
24. Fire Extinguishers, Pure Water Type, Doc; BDC 22 (303).
25. Fire Extinguishers, Bucket Pump Type, Doc; BDC 22 (402).
26. Blower and Exhauster for Fire Fighting Doc; BDC 22 (219).
27. 275 LPM (or 60 GPM) Portable Pumps Set for Fire Fighting Doc; BDC 22 (256).
28. 680 LPM (or 150 GPM) Trailer Pump for Fire Brigade use, Doc; BDC 22 (257).
29. 1800 LPM (or 400 GPM) Trailer Pump for Fire Brigade use, Doc; BDC 22 (258).
30. 1800 LPM (or 400 GPM) Motor Fire Engine, Doc; BDC 22 (259).
31. 3400 LPM (or 750 GPM) Motor Fire Engine, Doc; BDC 22 (260).
32. Motor Fire Engine with 270 LPM (or 60 GPM) Portable Pump and 1800 Litre (or 400 gallon) water tank Doc; BDC 22 (261).
33. Motor Fire Engine with 1800 LPM (or 400 GPM) Pump and 1800 Litre (or 400 gallon) water tank BDC 22 (268).
34. Emergency Tender for Fire Brigade Use Doc; BDC 22 (263).
35. Combined Foam and CO2 Crash Tender Doc; BDC 22 (284).
36. Foam Crash Tender Large Doc; BDC 22 (285).
37. Foam Crash Tender Small Doc; BDC 22 (286).
38. CO2 Crash Tender Doc; BDC 22 (287).
39. Dry Powder Crash Tender Doc; BDC 22 (288).
40. Rescue Tender Doc; BDC 22 (289).
41. Control Post Van Doc; BDC 22 (290).
42. Small Fire Engine Doc; BDC 22 (412).
43. Towing Tender for Trailer Pump for Fire Brigade Use Doc; BDC 22 (262).
44. Stirrup Pump for Fire Fighting purposes Doc; BDC 22 (382).
45. Self-contained breathing apparatus for Fire Brigade Use Doc; BDC 22 (383).
46. Electric Motor Sirens for Fire Brigade Use BDC 22 (385).
47. Helmets, Firemen Doc; BDC 22 (386).
48. Oxy-Acetylene Cutting set used in Fire Services, Doc; BDC 22 (388).
49. Snatch Block single Sheave for Fire Brigade Use, Doc; BDC 22 (390).

50. jacks, Screw, 5 ton, for Fire Brigade Use, Doc; BDC 22 (391).

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APPENDIX “5-C”

**FIRE SERVICE DISCIPLINE AND APPEAL RULES RAMED UNDER
SECTION – OF THE FIRE FORCE ACT**
(See para 19 under 5, LEGISLATION)

FORWARDING NOTE

The Fire Service is an essential service, where implicit obedience of orders and strict adherence to discipline are imperative as in the Armed Force or Police. However, keeping the civilian privileges in view, the stringency of the Army Rules and the unrestrained freedom admissible under the rules governing the other civilian and utility services have been modified to suit the basic needs of fire service. The cardinal principle that no one shall be punished unless he has been given an adequate opportunity to defend himself if against the action proposed has however been observed. Provision has been made for dealing with offences peculiar to fire services in a deterrent and speedy manner to ensure desired effect and discipline, which are vital.

The rules are intended to be made applicable for all the fire services maintained by the Government, Corporations or other statutory bodies. Municipalities or other local authorities or autonomous institutions in India.

DRAFT

**Fire Services Discipline and Appeal Rules framed under
..... Section of**

I. General.

1. These rules may be called the Fire Service Discipline and Appeal Rules 19.....

They shall come into force from

II. Definitions.

2.

III. Classification.

3. The Services the members of which are subject to the rules shall be classified as follows :-

- (a) The Superior Fire Service.
- (b) The Subordinate Fire Service.

4. The Superior Fire Service shall consist of the following categories of posts :-

- (a) Director of Fire Services/Chief Fire Officer.
- (b) Deputy Director of Fire Services/Dy.Chief Fire Officer/Regional Fire Officer.
- (c) Divisional Fire Officer.

5. The Subordinate Fire Service shall consist of the following categories of posts :--

- (a) Assistant Divisional Fire Officer and equivalent ranks.
- (b) Station Officer and equivalent ranks.
- (c) Sub Officer and equivalent ranks.
- (d) Leading Fireman, Telephone Operator and equivalent ranks.
- (e) Driver/Mechanic/Driver Operator and equivalent ranks.
- (f) Fireman and equivalent ranks.

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IV. Discipline Penalties.

6. The following penalties may be awarded summarily in Orderly rooms upon the categories of Officers enumerated under Clauses (d) to (f) of rule 5 above :--

Extra duty and/or extra drill not exceeding 3 hours in all at one hour per day, can be imposed by an officer of the rank of Station Officer or Sub officer. Extra duty of extra drill for a period not exceeding 7 hours. At one hour per day can be imposed by an officer of the rank of Assistant Divisional Officer and above. The imposition of these penalties shall not be recorded in the service records of the individual or in his personal file.

The person to be punished, should be given the opportunity in the Orderly Room to explain the circumstances under which he committed the offence before the penalty is awarded. No appeal shall lie against these punishments.

7. The following penalties may for good and sufficient reasons be imposed upon members of the Superior and subordinate Fire Services specified in Rules 4 & 5 above, namely :--

- (a) Censure.
- (b) Debarring from appearing for departmental or professional examination for promotion for a specified period not exceeding two years.
- (c) Withholding of increments, or promotion including stoppage at an efficiency bar.
- (d) Recovery from pay to the extent necessary of the monetary value equivalent to the amount of increments ordered to be withheld where such an order cannot be given effect to.

Explanation :

In cases of stoppage of increment from cumulative effect, the monetary value equivalent to three time the amount of increment ordered to be withheld may be recovered.

- (e) Recovery from pay of the whole or part of any pecuniary loss caused to the department, by negligence or breach of orders.

Explanation :

This penalty may be imposed in additional to any other penalty which may be inflicted in respect of the same neglect or breach or orders.

- (f) Suspension where a person has already been suspended under Rule 13(a) to the extent considered necessary by the authority imposing the penalty
- (g) Reduction to a lower rank in the seniority list to a lower grade, post or time scale or to a lower stage in the time-scale.
- (h) Compulsory retirement.
- (i) Removal from service.
- (j) Dismissal from service.

Discharge of a person appointed on probation during the period of probation or of the person appointed to hold a temporary appointment on the expiration of the period of temporary appointment does not amount to removal or dismissal within the meaning of this rule.

8. Besides the penalties specified in Rules 6 and 7 the following penalties may also for good and sufficient reasons be imposed upon the members of the Subordinate Fire Service specified in Rule 5 above:--

- (a) Reprimand in the case of Subordinates specified in Item (a) to (e) of Rule 5 above.
- (b) Black mark in the case of subordinates specified in items (d) to (f) in Rule 5 above.
- (c) Suspension for a period not exceeding 15 days in the case of subordinate specified in Rule 5 above, if the penalty of reduction to a lower grade, post or time-scale or to a lower stage in the time-scale cannot be imposed.

9. The authority which may impose any of the penalties prescribed in Rule 7 and 8 above on a member of the superior or subordinate fire service specified in Rule 4 and 5 above shall be the authority prescribed in Appendix I to those rules or any higher authority :

Provided that where in any case a competent authority has imposed or has declined to impose a penalty under this rule a lower authority shall have no jurisdiction to proceed under this rule in respect of the same case.

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Explanation :

- (a) The fact that a competent authority has imposed or declined to impose a penalty in any case shall not debar a higher authority from exercising his jurisdiction under this rule in respect of the same case.
- (b) The order of a higher authority imposing or declining to impose in any case a penalty under this rule shall supersede any order passed by any lower authority in respect of the same case.
- (c) Where, on promotion or transfer a member of the service in a class, category or grade is holding an appointment in another class, category or grade thereof or in another service, no penalty shall be imposed upon him in respect of his work or conduct before such promotion or transfer except by an authority competent to impose the penalty upon a member of the service in the latter class, category, grade or service, as the case may be.
- (d) Where a person has been reverted from one service to another or from one class, category or grade of the service to another class, category or grade thereof, no penalty shall be imposed upon him in respect of his work or conduct while he was a member of the service, class, category or grade, as the case may be for which he was reverted or reduced except by an authority

competent to impose the penalty upon a member of such service, class, category or grade, as the case may be.

10. In every case where it is proposed to impose on a member of a superior or subordinate Fire Service any of the penalties mentioned in clauses (a) to (f) of Rule 7 clauses (a) to (c) Rule 8 the delinquent shall be given a reasonable opportunity of making any representation, that he may desire to make as laid down in paragraphs 1 and 2 of Appendix II to these rules.

11. In every case where it is proposed to impose on a member of the service any of the penalties mentioned in clauses (g) to (j) of Rule 7, the procedure indicated in paragraphs 3 to 7 of Appendix II to these rules shall be followed.

Exception :--

12. (a) The requirements of rules 10 and 11 shall not apply where the officer concerned has absconded or where it is for other reasons impracticable to communicate with him.

(b) The provision of rule 11 shall not apply where the Government of Local Authority is satisfied that in the interest of State or Local security it is expedient to follow the procedure prescribed in the rules.

(c) All or any of the provisions of rules 10 and 11 may, in exceptional cases, for special and sufficient reasons to be recorded in writing, be waived where there is a difficulty in observing exactly the requirements of the rules and these requirements can be waived without injustice to the person charged.

(d) If any question arises whether it is reasonably practicable to follow the procedure prescribed in rule 11 the decision thereof of the appointing authority shall be final.

Suspension :--

13. (a) A member of a service may be placed under suspension from service, where –

- (i) an inquiry into grave charges against him is contemplated, or is pending or
- (ii) a complaint against him of any criminal offence is under investigation or trial and if such suspension is necessary in the public interest.

(b) A member of the Fire Service who is detained in custody, whether on a criminal charge or otherwise, for a period longer than forty-eight hours shall be deemed to have been suspended under this rule.

(c) An order of suspension under clause (i) may be revoked at any time by the authority making the order or by any authority to which it is subordinate.

14. (a) The authority imposing any penalty under rules 7 and 8 shall maintain a record showing :--

- (i) the allegations upon which action was taken against the person punished;
- (ii) the charges framed, if any;
- (iii) the person's representation, if any and the evidence taken, if any; and

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- (iv) the finding and the grounds thereof, if any.

(b) All orders of punishment shall also state the grounds on which they are based and shall be communicated in writing to the person against whom they are passed.

V. Appeals

15. Every person who is member of the service specified in rule 3 shall be entitled to an appeal from an order imposing on him any of the penalties specified in Rules 7 and 8 :--

- (a) if such order was passed by an authority specified in the relevant column of the Schedule, to the authority specified in the last column thereof;
- (b) if such order was passed by an authority higher than that specified in the relevant column of the Schedule to the next higher authority to whom the former authority is administratively subordinate;

16. In the case of an appeal against an order imposing any penalty specified in rules 7 and 8 the appellate authority shall consider :--

- (a) whether the facts on which the order based have been established ;
- (b) whether the facts established afford sufficient ground for taking action ;
and
- (c) whether the penalty is excessive, adequate or inadequate ; and after such consideration shall pass such order as it thinks proper.

17. In the case of an appeal against an order under Rule 9 the appellate authority shall pass such order as appears to it just and equitable, having regard to all the circumstances of the case.

18. An authority from order an appeal is preferred under rule 15 shall give effect to any order made by the appellate authority.

19. Every person preferring an appeal shall do so separately and in his own name.

20. Every appeal preferred under rule 15 shall contain all material statements and arguments relied on by the appellant shall contain no disrespectful or improper language and shall be complete in itself. Every such appeal shall be submitted through the head of the office to which the appellant belongs or belonged and through the authority from whose order the appeal is preferred.

21. No appeal shall be admitted by the appellate authority if it has not been preferred within one month from the date on which a copy of the order appealed against was communicated to the appellant ;

Provided that, if the appellant satisfied the appellate authority that he had sufficient cause for not preferring the appeal within the said period, the appeal may be admitted by such authority if it is preferred within two months from the date on which a copy of the order appealed against was communicated to the appellant.

Explanation :

Where the person concerned has absconded or where it is for any other reason impracticable to communicate with him, the period of one month referred to in this rule shall be counted from the date of the order appealed against.

22. An appeal may be with-held by an authority not lower than the authority from whose order it is preferred, if –

- (a) it is an appeal in a case in which under these rules no appeal lies, or
- (b) it does not comply with the provisions of rule 15 ; or
- (c) it is a repetition of a previous appeal and is made to the same appellate authority by which such appeal has been decided, and no new facts or circumstances are adduced which accord grounds for a reconsideration of the case ; or
- (d) it is addressed to an authority to which no appeal lies under these rules ;

Provided that in every case in which an appeal is rejected the appellant shall be informed of the fact and reasons for it ;

Provided further that an appeal with-held on account of the failure to comply with the provisions of the first paragraph of rule 15 may be re-submitted at any time within one month of the date on which the appellant has been informed of the with-holding of the appeal and if re-submitted in a form which complied with those provisions shall not be with-held.

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23. A list of appeals with-hold under rule 22 with the reasons for with-holding them, shall be forwarded half-yearly by the with-holding authority to the appellate authority.

24. No appeal shall lie against the with-holding of an appeal, by a competent authority.

25. The appellate authority may call for an appeal admissible under these rules which has been with-held by a subordinate authority and may pass such orders thereon as it considers fit.

26. Every appeal which is not with-held under these rules shall be forwarded to the appellate authority by the authority from whose order the appeal is preferred with an expression of opinion.

27. The authority by whom an order imposing a penalty under rule 9 may be reversed or altered in cases in which no appeal is preferred shall be the appellate authority specified in Appendix I referred to in rule 9 or any higher authority.

28. **Registration** – No member of the service shall be permitted to resign when disciplinary proceedings against him are pending or under contemplation.

29. Nothing in these rules shall operate to deprive any person of any right of appeal which would have had if these rules had not been made in respect of any order passed before they came into force. An appeal pending at the time when or preferred after these rules came into force, shall be deemed to be an appeal under these rules, and rules 16 and 18 shall apply as if the appeal were against an order appealed under these rules.

APPENDIX “I”

(Referred to in Rule 9)

Class of Officers Appellate authority	Powers	Authority empowered to Impose the penalty
1. Director of Fire Service/ immediately Chief Fire Officer Superior authority	All penalties prescribed in Rule 7 and Suspension to the punishing	Appointing authority The authority
2. Dy. Director of Fire	Suspension and	Head of the Fire

Service/ Dy.Chief Fire Officer/ Regional Fire Office	penalties mentioned in item (a) to (e) of Rule 7.	Service	
r.	3. Divisional Fire Officer	All other penalties pres- cribed in Rule 7.	Appointing authority
4. Members of the - subordinate Fire. Service.	Penalties mentioned in Item (g) to (j) of Rule 7	Appointing authority	All other penalties mentioned Authority immediately The authorityin Rules 7 & 8 and subordinate to the immediately suspension. Appointing authority superior to the punishing but not lower in rank Divisional Officer authority to a

APPENDIX "II"

Procedure to be followed while imposing the penalties prescribed in Rules 7 and 8 of the Discipline and Appeal Rules

1. **Preliminary enquiry** – When any member of the service is alleged to have committed an offence punishable under rules 7 and 8 the matter should be reported within 18 hours of the occurrence by the Officer under whom the member is working to the next higher authority. The report should contain all relevant details including the nature of offence time, date and place of occurrence, names of witnesses etc.

On receipt of such a report, the Officer concerned shall make such investigation, if any, as he considers necessary and if as a result of this a prima facie case to disciplinary action is established, a decision should be taken by the authority competent to impose the penalty or by any authority but superior in rank to the officer on whom it is proposed to impose the penalty, whether the full machinery preliminary to punishment should be set in motion or not.

2. Charge sheet for the award of penalties other than those mentioned in clauses (g) to (j) of Rule-7—if a prima facie case is established, the delinquent shall be issued a charge sheet either by or under the orders of the authority competent to impose the proposed penalty. The charge or charges should be carefully framed, should be brief but couched in clear terms. A full and clear statement of facts in support of the charge or charges should be embodied in the charge sheet. The charge sheet should specifically state the period within which the representation of the delinquent should be submitted. Ordinarily this period should not exceed seven days from the date of receipt of the charge memo by the delinquent. Any representation made by the delinquent should be taken into consideration before the order imposing the penalty is passed by the competent authority.

It is not necessary that the charge should be framed by the authority competent to award a penalty or even that the enquiry should be conducted by such authority. The charge can be framed and the enquiry held by any officer acting under the orders of the authority competent to award the penalty. This does not, however, imply that no other officer can frame charges and enquire. An officer can at any time and without specific authorization by the authority competent to impose the penalty frame charge against or enquire into the conduct of an officer directly subordinate to him although he may not be competent to impose a penalty.

3. Charge sheet for the award of penalties in clauses (g) to (j) of rule 7.

(a) It is particularly important that the charge or charges should be carefully framed and in doing so the following points should be borne in mind :--

- (i) The charge should be brief, couched in clear terms. Any vagueness should be avoided, the date of occurrence of the incident should always find a place in the charge.
- (ii) A single charge of a general nature such as corruption cannot be regarded as sufficiently definite. In connection with an inquiry into alleged corruption a separate charge should be framed in respect of each instance of alleged corruption. A series of charges on particular instances may, however, be combined with a general charge of corruption or incompetence of which the instances form the evidence. For example, the results of a series of charges of delays may be noted after due enquiry as they occur in a conduct of dilatoriness may be passed on them.
- (iii) A full and clear statement of the facts in support of the charge or each of the charges should be communicated to the delinquent along with the charge or charges.
- (iv) The names of prosecution witnesses (to be styled 'P.Ws') to prove the charges will be mentioned therein. This should be done on the following lines :--

“The following are some of the witnesses it is proposed to examine in this connection. Others may also be examined as found necessary”. There is no need to enter what these witnesses are to prove.

(v) The delinquent should be directed to submit his written statement within a sufficient specified period not exceeding 15 days and also to produce a list of documents he proposes to cite and a list of witnesses whom he proposes to examine in defence, with the points upon which he expects each will speak.

(vi) He should be required within a reasonable time to state specifically in writing whether he wishes to have an oral enquiry or only to be heard in person. He should understand what each means.

Note – In grave cases it is often desirable to conduct an oral enquiry whether the delinquent wants it or not.

(vii) He may be apprised of the nature of the maximum penalty that may be imposed upon him if the charge or charges against him are proved.

(b) Two copies of the charges together with statements of the allegations on which each charge is based and of any other circumstances, which it is proposed to take into consideration in passing orders on the case against the delinquent shall be prepared. One copy shall be given to the delinquent for his personal use and he will be required to return forthwith the other copy with his Written Acknowledgement of receipt thereon.

1. Procedure for conducting oral enquiries :

(i) The delinquent's written reply to the charge(s) when received should be examined carefully to see whether all items have been correctly answered. If an oral enquiry is considered necessary a date for it should be fixed. If the delinquent, refusing to submit a list of defence witnesses with his written statement, fearing that the prosecution will tamper with them, he will not be precluded from citing his witnesses during the enquiry as there can be no question of refusing to hear them on the ground that he refused to give a list of them before and,

(ii) The oral enquiry shall be conducted by the punishing authority or by a subordinate authority not below the rank of a Asstt. Divisional Fire Officer but superior in rank to the delinquent.

(iii) (a) when the delinquent appears for the oral inquiry, the enquiring should put the following question which with its answer (as in the case of all further questions and answers noted below) should be recorded in writing in the 'Oral Enquiry Fire' :--

Q.—"You have received a copy of the charge(s) and the facts in evidence and submitted your written explanation. Have you anything further to add before I proceed with this Oral Enquiry ?"

A.—This recorded question and answer (as in the case of all further questions and answers) must be read over (in translation if necessary) to the delinquent and his signature and that of the enquiring officer, appended to it. The form to be used should be :--

"Recorded by me ; read over (and translated) to deponent and acknowledged by him to be correct."

(b) The prosecution evidence shall then be taken. It is not necessary to record again the evidence of those prosecution witnesses who were examined and whose evidence was recorded in the presence of the delinquent at the preliminary investigation. It will be sufficient if their evidence so recorded is read out in the presence

of the delinquent, the enquiring officer certifying in the proceedings file that this was done, and the delinquent is given an opportunity to cross-examine such witnesses, whether or not he had already cross-examined them at the preliminary investigation. The prosecution witnesses need not be recalled unless the delinquent desired to cross-examine them further. If, however, any witness was examined at the preliminary investigation in the absence of the delinquent such witnesses must, if the delinquent so desires, be examined-in-chief in his presence (instead of the evidence given at the preliminary investigation being read out) and the delinquent must also be given an opportunity to cross examine the witness. The prosecution must re-examine such of the prosecution witnesses as it considers necessary, after which delinquent must again be given an opportunity to put further questions.

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(c) Prosecution witnesses who are summoned for the first time at the oral enquiry shall be examined. The delinquent should be asked to state if he wishes to cross-examine them. Prosecution witnesses may be examined in such order as the officer holding the enquiry deems.

(d) At the head of each evidence, the name and rank of the witness must be entered, e.g. 'P.W.I. Leading Fireman (name) No.516. X station.

(e) At the foot of the completed deposition of each and every witness the entry detailed in paragraph (a) should be made, the enquiring officer, the witness and the delinquent all signing. If there is more than one page of deposition the pages other than the last should also be initialed by the all the parties mentioned.

(f) All the statements of prosecution witnesses should be kept in one file to themselves.

(g) Prosecution documents are lettered as Exhibits a.A etc. and must be kept in their own file for which an index is required showing the letter of the exhibit, its nature in brief and who has produced it.

(h) The prosecution side of the hearing is now over. On the 'Oral Enquiry File' the enquiring officer should enter the following question which he puts to the delinquent.

Q.—You have heard the evidence against you. Have you any witnesses you wish you have examined in your defence and any documents you wish to have produced for the same “

A. --

(i) He must be given fair time to draw up and present his list. The enquiring officer can question him for what purpose each witness is required so as to avoid protraction of the enquiry by irrelevancies or the citation of witnesses merely for annoyance. He can for sufficient reasons refuse to hear any particular witness or to allow any particular document to be produced, but he must record in the same file his reasons for such refusal. Failure so to record the reasons will vitiate the enquiry.

(j) Defence witnesses (styled 'D.Ws.' are thereafter examined in chief by the delinquent and cross-examined if necessary by the enquiring officer (and not be other witnesses to the enquiry however, much they are impugned). The delinquent may re-examine such of the defence witnesses as he considers necessary after which prosecution may again question the

defence witnesses further. The procedure is the same as in paragraph (b) to (h) above. A separate file will be maintained for defence evidence.

(k) Defence documents are numbered as Exhibits 1, 2 etc. for which an index should be prepared.

(l) If the delinquent dispenses with any of the defence witnesses cited by him, this fact should be recorded in the 'Defence Witnesses' file under the signature of the delinquent and the officer conducting the enquiry.

(m) If the enquiry is conducted on the complaint of a private person of body, the complainant shall not be allowed to cross-examine the officer charged, who is in such enquiry, in the position of an accused person, but the complainant may suggest questions to the enquiring officer to be put to the witnesses produced in defence of the officer charged or the enquiring officer may, in his discretion, permit the complainant to cross-examine the said witnesses.

(n) An officer conducting a departmental enquiry cannot be cited as a prosecution witness in the enquiry. If however, he is required as a defence witness by the delinquent, the latter should be asked to state in writing what points the officer is cited to elucidate. If the enquiring officer considers it unnecessary to allow himself to be examined as a defence witness, he will file that application with his remarks as part of the records of the enquiry and, if relevant will incorporate the information contained in that application and his remarks in the minute. In case, however, he thinks necessary, he may still conduct the enquiry if the points to be elucidate from him are such that his answers will not in any way vitiate the result of the enquiry. In such cases, he should record verbatim the delinquent's questions and his replies to the signing all the pages of the depositions.

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In cases where the evidence that the officer is required to adduce is vital and is likely to have a bearing on the result of the enquiry, the enquiry should not be conducted by that officer but by some other officer.

(iv) Having completed the defence the enquiring officer should continue to make entries in the 'Oral Enquiry File' as follows."

Q.— "Your defence witnesses have been examined and such documents as you required have been produced and exhibited (with the exceptions refused by me as noted already in these proceedings for the reasons shown). Have you anything further to request or so? You are entitled to put in, if you desire, a further written statement of defence."

A.—

His reply and the questions should be recorded, read over translated, if necessary, and acknowledged by his signature and that of the enquiring officer as detailed above.

With reference to the first question if the delinquent states that he desires to recall certain witnesses for further cross-examination he should be allowed to do so, for in a departmental enquiry the delinquent is entitled to reserve his cross-examination or

further cross-examination of the prosecution witnesses. But the officer holding the enquiry should always ask him what further questions he wishes to put to these witnesses in order to satisfy himself that they are relevant, and, if they are not, he can, for reasons to be recorded refuse to recall such witnesses.

(v) (a) The officer holding the enquiry must be strictly impartial. It is particularly important that the formalities prescribed in the statutory rules and orders should be followed. It is essential that the conduct of the proceedings should not give rise in the mind of the person charged to a belief that the enquiry is being conducted in anything but an impartial and detached frame of mind.

(b) The oral enquiry should be completed with as little delay as possible. Care should be taken to avoid all dilatoriness and adjournment or postponement of the inquiry should be allowed with circumspection and only when necessary. Where an officer is suspended pending enquiry into his conduct on the ground that it is undesirable to allow him to continue on duty during the enquiry, it is all the more necessary that the enquiry should be completed with expedition.

5. Procedure for being heard in person.

Should the delinquent wish only to be heard in person, the actual proceedings will commence only after the action specified below has been taken by the enquiring officer.

The delinquent, in his written explanation should ordinarily have cited all his defence witnesses and documents for the consideration of the enquiring officer. The documents cited, which need not be proved by being produced by a witness, will be collected and examined by the enquiring officer, who will also examine the defence witness cited unless for reasons to be recorded in writing decides not to examine all or any of them.

After having done all this the enquiring officer will proceed to hear the delinquent in person. The delinquent is entitled to put in only a personal representation to the enquiring officer in addition to what he has already stated in his written explanation. There is no question of citing witnesses or documents when the delinquent is being heard in person as all that should have been done in his explanation to the charge. If however, any further witnesses or documents are cited by the delinquent at this stage, it will be for the enquiring officer to consider their relevancy in regard to the charge and examine them, if necessary, remembering that full justice is needed.

The enquiring officer will then record the personal representation of the delinquent and proceed to dispose of the charge.

6. Drawing up of minutes.

(i) A minute shall be written in all cases where the penalties mentioned in Rules 7 and 8 of the Rules are imposed.

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(ii) (a) To facilitate the writing of the minute and its reading by those who have to deal with it, subsequently all papers should be sorted and documents into their respective files for which indices should be prepared and attached. E.g. charge and delinquent's written and oral statements.

Charge and delinquent's written and oral statements (Proceedings file).

Statement of prosecution witnesses.

Statement of defence witnesses.

Prosecution documents.

Defence documents.

(b) Statements should be page-numbered and exhibits should be lettered and a list of them included in the record. References in the minute to depositions or exhibits should be made by page number, letter or figures, as the case may be.

(c) Finally, all files forming the record of enquiry should be docketed with an index showing their nature.

(iii) (a) The minute has its own file and shall be written under the following heads :-

(A) Statements of the charge(s)

(B) Summary of the facts and evidence.

(C) Summary of the defence and the evidence adduced therefore.

(D) Findings on the charge.

(E) The order (by the authority competent to award it).

(b) No reference to the demeanour of witnesses should be made in the minute unless a note was made in the records at the time of the enquiry in this regard. This is necessary to ensure that enquiring officers who frame minutes do not speak about the demeanour of witnesses merely from their memory.

(c) The summary under items (B) and (C) of the minute should not comprise a reproduction of the evidence but only so much of it as is essential for adequate discussion of the matters actually at issue. The evidence both for and against the delinquent should be attached to the minute. The minute should contain clear reasons for each finding.

(iv) The Officer holding the enquiry should record his findings on each charge separately after carefully considering the evidence adduced in support of it as well as that for the defence. In case where there are several charges, the enquiring officer should deal with each sub charge under 'B', 'C' and 'D' one below the other, so that the difficulty that is usually experienced in such cases is avoided. If necessary, a full final summing up may be given at the end covering all the charges. In cases which are submitted to a higher authority for the imposition of the penalty, the officer holding the enquiry may make a recommendation regarding the penalty to be imposed in those cases which takes up *suo motu* and in cases where he is directed to hold an inquiry, it is open to the authority ordering the enquiry to direct the enquiring officer to make such recommendations.

7. Imposing of penalty :- For the award of penalties other than those mentioned in clauses (g) to (j) of Rule 7, the competent authority shall straightway, pass the order on the minute taking into consideration the delinquent's explanation to the charge. In other cases the authority competent inflict penalty after arriving at a provisional conclusion in regard to the penalty to be imposed, should supply the person charged with a copy of the minutes and call upon him to show cause within a reasonable time, not ordinarily exceeding 15 days against the particular proposed to be imposed. Any representation in this behalf submitted by the person charged shall be duly taken into consideration before final orders are passed.

Note : The opportunity to show cause against the particular penalty proposed to be imposed referred to above can be given either by the authority competent to

inflict the penalty or under his direction by a subordinate authority who is superior in rank to the officer on whom it is proposed to impose the penalty.

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APPENDIX "5-D"

**RULES FOR PROVISION OF FIRE FIGHTING EQUIPMENT IN
INDUSTRIAL ESTABLISHMENT**
(See para 20 under LEGISLATION)

Draft Model Rules under Sub-Section 7 of Section 38 and Section 112 of the Factories Act, 1948.

Rule 61(A) : Fire Fighting Apparatus and water supply

1. In every factory there shall be provided and maintained the following fire fighting equipments:--

- (a) Two fire buckets of not less than 2 gallon capacity for every 1000 sq. ft. of floor area subject to a minimum of four buckets on each floor.
- (b) Every bucket provided under this sub-rule shall :--
 - (i) conform to appropriate Indian Standards Specifications ;
 - (ii) be kept in a position approved by the Inspector and shall be used for no other purpose than fire extinguishing ; and
 - (iii) at all times be kept full of water, except where the principle fire risk arises from inflammable liquid or other substances where water cannot be used. It shall be kept full of clean, fine dry sand, stone dust or other inert material.

Provided that where the Chief Inspector is of the opinion that owing to the other adequate fire fighting apparatus provided in the factory building or room, he may issue a certificate in writing (which he may at his discretion, revoke) specifying the extent to which the above requirements are relaxed in respect of that building or room.

2. In every factory, adequate provision of water supply for fire fighting shall be made and where the amount of water required as calculated from the formula $A+B+C+D$ divided by 1000 is 120 gallons or more per minute, power driven trailer pumps of adequate capacity to meet the requirement of water as calculated above shall be provided and maintained.

In the above formula :--

- A = the total area in sq. ft of all floors including galleries in all buildings of the factory ;
- B = the total are in sq. ft. of all floors and galleries including open spaces in which combustible materials are handled or shored ;
- C = the total are in sq. ft. of all floors over 50 feet above ground level ; and

D = the total area in sq. ft. of all floors of all buildings other than those of fire resisting construction :

Provided that where the fire risk involved does not require use of water, such areas under B,C,D, may, for the purpose of calculations, be halved :

Provided also that where the areas under B,C, or D are protected by permanent automatic fire fighting installations approved by any fire association or fire insurance company, such areas may, for the purpose of calculations, be halved :

Provided further that where the factory is situated at not more than 2 miles from an established city or town fire service, the pumping capacity arrived at by the formula above may be reduced by 25% but no account shall be taken of this reduction in calculating water supply required under the sub rule 7.

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3. Each Trailer Pump shall be provided with equipment as per schedule A. Such equipment shall conform to Indian Standards Specifications wherever they exist.
4. Firemen inclusive of Driver-Operator and one leader for each Trailer Pump adequately trained in fire fighting and in operation of Trailer Pumps shall be available during all times.
5. Trailer Pumps shall be housed in a separate shed/sheds which shall be sited close to a principal source of water supplies in the vicinity of the main risks of the factory.
6. In factories where the area is such as cannot be reached by man-hauling of trailer pumps within reasonable time, vehicles with towing attachment shall be provided at the scale of one for every four trailer pumps with a minimum of one such vehicle kept available at all time.
7. Water supply shall be provided to give flow of water as calculated under sub-rule (2) for at least 100 minutes. At least 50% of this water supply or 1 lakh gallons whichever is less, shall be in the form of static tanks of adequate capacities (not less than 10,000 gallons each) distributed round the factory with due regard to the potential fire risks in the factory, (Where piped supply is provided, the size of the mains shall not be less than 6" diameter and it shall be capable of supplying minimum of 1000 gallons per minute at a pressure of not less than 10 Lbs. per sq. inch).
8. Fire Fighting drills and practices by Fire crew shall be held at least once a week and shall closely approximate to actual conditions of fire fighting including use of equipment.
9. (a) In factories having more than 1000 sq. ft. floor area and where fire may occur due to combustible materials other than inflammable liquids, electrical equipment and ignitable metals, soda acid or equivalent type of portable extinguishers at the rate of one for every 5000 sq. ft. of area spaced at not more than 1000 ft. apart subject to a minimum of one extinguisher shall be provided in addition to fire buckets as required under sub-rule (1).
- (b) In factories where fires may occur due to inflammable liquids of grease or paint, the extinguishers to be provided at the scale laid down in clause (a) shall consist of foam, carbon tetrachloride, dry powder, carbondioxide, chlorobromo methane or other equivalent types.
- (c) In factories where fires may occur due to electrical equipment, the extinguisher to be provided at the scale laid in clause (a) shall consist of carbondioxide, dry power, carbon tetrachloride or equivalent types.
- (d) The factories where fires may occur due to magnesium aluminium or zinc dust or shavings of other ignitable metals, the use of liquids, carbondioxide and foam

type extinguishers shall be prohibited and an ample supply of clean, fine, dry sand, stone dust or other inert material shall be kept ready for segregating such fires.

(e) Every type of portable fire extinguisher shall be kept mounted in a position approved by the Inspector :

Provided that where the Chief Inspector is of the opinion that owing to other adequate fire fighting apparatus or permanent automatic fire fighting installations approved by any recognized fire association or fire insurance company provided in the factory building or room, he may issue a certificate in writing (which he may at his discretion, revoke) specifying the extent to which the above requirements are relaxed in respect of that building or room.

10. (a) Every portable fire extinguisher to be provided under sub-rule (9) shall :--

- (i) conform to the appropriate Indian Standards Specifications,
- (ii) be kept charged ready for use, properly mounted in a position approved by the Inspector and accompanied by the maker's printed instructions for its use, and
- (iii) be examined, tested or discharged periodically in accordance with the makers' recommendations.

(b) The manager of every factory shall keep and maintain sufficient number of spare charges for each type of extinguisher provided in the factory with a minimum of 12 spare charges always in stock and readily available.

11. Every worker of the factory should as far as possible be trained in the use of portable fire extinguishers, subject to a minimum of at least one-fourth of number of workers, engaged separately in each section of the factory.

12. Each factory shall detain a trained officer who shall be responsible for the proper maintenance and upkeep of all fire fighting equipments.

13. The Factory Management for the observance of factory discipline and orderliness, shall prepare a detailed "Fire Safety Plan" for proper enforcement of fire safety rules and for actions to be taken in proper sequence, in case of a fire in the factory.

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APPENDIX "9-A"

**MAXIMUM LIFE, ANNUAL DEPRECIATION AND RESIDUAL VALUE OF FIRE
FIGHTING EQUIPMENT AS RECOMMENDED BY THE S.F.A.C. AT ITS
5TH MEETING**

(See para 1 under 9 Equipment – Maximum Life)

1. This subject first came up before the Committee at the fifth meeting and then again at the sixth meeting, but was deferred both times for want of sufficient data. It was finalized at the eighth meeting. The Committee recommended as follows :--

The equipment should be classified into 6 categories and the normal life, annual depreciation and residual value fixed for equipment in each category as shown in Table below :--

Cate- gory	Residual	Items on Equipment Remarks	Normal Life Depreciation	Annual value	
A		Portable Pump Set, 275 L/min. self- propelled Trailer Fire Pump, 680 L/min. vehicles, every 15 Trailer Fire Pump, 1800 L/min. road Motor Fire Engine, 1800 L/min. equivalent Motor Fire Engine, 3200 L/ of Water Tender Type 'A' opera- Water Tender Type 'B' 5000 Mechanically operated Turntable stationary Ladder for Fire Brigade use. Operation shall be Jeep for Fire Engine. to 75,000 Emergency Tender running. Combined Foam and CO2 Crash Tender Foam Crash Tender CO2 Crash Tender Dry Powder Crash Tender Dry Powder Jeep Fire Truck Rescue Tender Trailer Mounted Tanker	5000 hrs. stationary 10% operation or 10 years whichever is completed earlier.	2% 2%	For miles run on shall be to one hour stationary tion. Thus hrs. of equal miles
B		Suction Hose Unlined Delivery Hose Fire Flax Canvas Hose test, Hose Reel Tubing.	2 years or 200 hours of use whichever is earlier.	50% Nil	'Use' means operation on practice or etc.
C		Ladders, all types except Turntable Hook ladders, Wooden or Metal Extension Ladders, Wooden Extension Ladders, Metal Wheeled Fire Escape, Wooden Wheeled Fire escape Metal Scaling Ladders, First Floor Ladders, Wooden First Floor Ladders, Metal.	5 year 5 year 7 year 10 year 10 year 5 year 5 year 5 year	20 per cent 20 per cent 15 per cent 10 per cent 10 per cent 20 per cent 20 per cent 20 per cent	Nil

Cate- gory	Remarks	Items on Equipment	Normal Life	Annual Depreciation	value	Residual
D		Hand Controlled Branch Pipe 10 Metal :		Metal :		Metal :
		Hatchet	10 years	per cent ;		2 per
		Knap sack tank		Wooden :	Wooden:	20
		Remainders :				
		Nozzles	5 years	per cent		Nil
		Nozzle spanners		Rubber,		Rubber or
		Strainer		Leather		Leather or
		Suction collection Habd		Canvas		Canvas: cent
		Suction Hose Wrench	1 year	per cent		metal 10
		Metal				
		Stand Pipe	10 years	per cent		2 per
		cent;				
		Shovel		Wooden		Wooden: 20
		Remainders				
		Couplings	5 years	per cent		Nil
		Suction and delivery hoses		Rubber		Rubber
		Breaching, dividing and collecting		Leather		Leather or
		Cylinders		or		Canvas : cent
		Hans Pumps		Canvas		Per cent.
		Spades	1 years			
		Carpenter's Saw				
		Shears				
		Bolt Croppers				
		Persuader				
		Door Breaker				
		Steel Shod Lever				
		Skid Chain				
		Grapnel				
		Pulley Block				
		Chain Lifting				
		Chain Sling				
		Jacks				
		Mattocks, handed				
		Picks with shafts				
		Hammer				
		Spreader for iron railings				
		Bending bars				
		Knife with sheath				
		Stirrup for life saving.				
E		Fire Extinguisher – All types Nil	5 years for all			Dry Powder
		Stirrup pumps.		Except for Fire		extinguishers
			Extinguishers of	10% Remain-		
			Dry Powder Type	ders 20%		
			for which life is			
			fixed at 10 years			
F		Self contained breathing Apparatus for fire service use	4 years	25%		Nil

(oxygen or compressed air – open or close circuit)

Resuscitation apparatus
Helmets with bellows or
Blowers and respirators.

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- Reference :**
1. Page 7 of the minutes of the fifth meeting of SFAC.
 2. Page 6 of the minutes of the sixth meeting of SFAC.
 3. Pages 9 and 10 of the minutes of the eighth meeting of SFAC.

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APPENDIX “11-A”

**QUALIFICATIONS FOR VARIOUS RANKS AS RECOMMENDED BY S.F.A.C. AT
THE THIRD MEETING**

(See para 5 under 11 – Personnel)

QUALIFICATIONS FOR VARIOUS RANKS

2. Prescription of qualifications for the various ranks in the Services was considered at the third meeting, the Committee made the following recommendations :-

1. **Physical standards :** Should be left to the discretion of the Heads of the Service for all ranks. The following test for physical fitness may be kept in view while fixing standards :
 - (a) Running a distance of 100 yards with a weight of 10 stones in one minute.
 - (b) Lifting the hook ladder to a vertical position by 3rd and 6th round.
 - (c) Climbing a rope or a vertical pipe to a height of 8 – 10 feet from the ground.

2. Age Limits :

- (a) For Departmental candidates, there should be no age limit.
- (b) For direct recruits or outsiders, the age limits should be as follows :-

Ranks	Age Limits
Firemen	Between 18 and 25 years
Leading Firemen	Between 18 and 25 years
Driver	Between 20 and 28
years	
Telephone Operator	Between 18 and 25
years	
Sub Officer	Between 18 and 25 years
Station Officer	Between 20 and 25
years	
Divisional/Asstt.Div.Officer	Between 25 and 35
years	
Deputy Chief Officer or Asstt. To Fire Force Commander	

Or to Chief Fire Officer or to Director Fire Service or
years
Chief Divisional Fire Officer

Between 30 and 45

Fire Force Commander or Chief Fire Officer or Director
Fire Service
years

Between 30 and 45

3. Academic

(a) **For Departmental Candidates.** For ranks from Sub Officer upwards, must have passed Matriculation or equivalent examination.

(b) **For Direct Recruits or Outsiders:**

Fireman : Must be able to read and write well any language.

Leading Firemen : Must have passed the middle school examination (equivalent to III form or 7th standard) relaxable in case of suitable Departmental candidates only.

Driver : Same as Leading Firemen.

Telephone Operators : Must have passed Matriculation or equivalent examination relaxable in case of suitable departmental candidates only

Sub Officer : Same as for Telephone Operator

Station Officer : Must have passed Intermediate or equivalent examination, preferably with Science or Engineering subjects.

Asstt. Divisional Officers and above : There will be no direct recruitment unless he has already served in a whole time fire service and possesses the minimum technical qualifications and practical experience prescribed for such posts. In such cases, the academic qualifications should be the same as for the Departmental candidates.

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4. Technical

(a) For direct recruits upto Station Officer's post no technical qualifications are essential if they possess the requisite educational (academic) qualifications, physical standards and age limits prescribed for them under 1 to 3 above.

(c) For direct recruits above the ranks of Assistant Divisional Officers and for Departmental candidates for all posts above the ranks of a Fireman, the following minimum technical qualifications should be essential :-

Rank	Technical Qualifications
Leading Fireman	Must passed the Departmental Examination for promotion to Leading Fireman. Seniority amongst the passes should be considered along with the seniority in service.

Driver	Same as for Leading Fireman plus must be possession of a current driving licence for heavy vehicles.
Telephone Operator Sub Officer	Should be at the discretion of the Head of the Service. Successful completion of the Elementary (General) Fire Service course at the Regional Fire Training Centre.
Station Officer and Asstt.	Must have successfully completed the Junior Officers' and Instructor'
Divisional Officer	course at the National Fire Service College or must be in possession of the graduateship diploma of the I.F.E. London.
Divisional Officer	Desirable successful completion of the Divisional Officers course at the National Fire Service College or Associate Membership Diploma of the Institute of Fire Engineers, London.
Deputy Chief and Chief Fire Officer.	Same as for Divisional Officer.

5. Practical Experience :

- (a) For direct recruits upto Station Officers' post, no practical experience is essential if they requisite educational (academic) qualifications, physical standard and age limit prescribed for them under 1 to 3 above.
- (b) For direct recruits above the rank of Assistant Divisional Officer and for Departmental candidates for all posts above the rank of a Fireman, the following minimum experience should be essential :-

Rank	Experience
Leading Fireman	Not less than 3 years as whole time Fireman.
Driver	Same as for Leading Fireman.
Telephone Operator Sub Officer	Should be at the discretion of the Head of the Service. Minimum of 2 years' service as a Leading Fireman or 5 years total service in the Fire Service Department.
Station Officer and Asstt. Divisional Officer	Minimum of 5 years' service in a whole time Fire Brigade out of which at least 3 years should be as a Sub Officer or Leading Fireman.
Divisional Officer	Minimum of 7 years service in a whole time Fire Brigade out of which at least 3 years should be as a Station Officer or Assistant Divisional Officer.
Deputy Chief and Chief Fire Officer.	Same as for Divisional Officers. Minimum of 10 years service in a whole time Fire Brigade out of which 3 years should be in a senior executive post carrying responsibility.

Note : The Committee recommends that promotions to the various ranks in the Fire Services should be made as far as possible from amongst the ranks and other fire Service personnel and direct recruitment should only be considered when suitable candidates for such appointment are not available.

Reference : Pages 5 to 9 of the minutes of the third meeting of SFAC.

6. While considering the designation of Fire Officers at the fourth meeting the Committee also recommended that the qualification prescribed for appointment should be to the various ranks and not for the designations or posts held.

Reference : Page 12 of the minutes of the fourth meeting of SFAC.

APPENDIX "II-B"

DRAFT RECRUITMENT RULES AS RECOMMENDED BY S.F.A.C. AT THE 7TH MEETING

(See paras 7 and 8 under II-PERSONNEL)

RECRUITMENT RULES

7. Draft recruitment rules for the various ranks in the Fire Services were first taken up for

consideration at the sixth meeting, but a decision on those was postponed.

8. The draft rules were reconsidered at the seventh meeting and finalized Committee's recommendations are reproduced below.

1. Fireman

He should be between the age of about 18 and 25 years should be at least 5'-5" in height and have a minimum chest of 32" with a minimum expansion of 2".

He should be able to run a distance of 100 yards with a load of 10 stones in one minute and should be capable of climbing a rope or a verticle pipe to a height of 8 to 10 feet from the ground. These physical tests should be at the discretion of the head of service.

He should preferably have read upto middle standard (3rd Form or 7th Standard) or at least he should be able to read and write the local vernacular. At the end of his probationary period, the fireman would be allowed to continue in service only after he has passed the departmental examination (which will be entirely of practical nature). Standard of this examination will be as laid down in **APPENDIX "11-C"**.

2. Leading Fireman

The physical standards and tests should be the same as for fireman

There will be no direct recruitment to this rank and departments candidates from the rank of fireman with not less that 5 years experience as a whole time fireman will be promoted as Leading Fireman on probation only if they pass the examination in accordance with the standards as laid down in **APPENDIX "11-C"**. They will be confirmed only after satisfactory service during the probationary period. Seniority amongst the passes shall be considered along with the seniority in service and those who pass in subsequent years for promotion. In case the fireman possesses better educational qualifications, his case for promotion would be considered earlier but not less than 2 to 3 years' service as fireman.

3. Driver

Physical standards and test will be same as those for Fireman, except that the age limit should be between 20 to 30 years, upper age limit not being applicable to departmental candidates. Besides this, he will have to pass the departmental examination in Firemanship. Persons to be appointed should have at least two years experience to drive heavy vehicles. In

addition, he must be in possession of current driving licence for heavy vehicles.

4. Telephone Operator

He should be between the age of 18 and 25 years, upper age limit not being applicable to departmental candidates. Academically, he must have passed the matriculation or Equivalent examination, relaxable in case of suitable candidates. Technically, qualifications and practical experience should be at the discretion of the head of the service.

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5. Sub-Officer

May be appointed by promotion or by recruitment. Physical standards and tests would be the same as that of fireman. Should be between the age of 18 and 25 years, upper age limit not being applicable to departmental candidates. Academically, he must be matriculate or have passed the equivalent examination, relaxable in case of departmental candidates. Before he can be appointed on probation to this rank, the candidate must have two years minimum service as a Leading Fireman in 5 years total service in the fire Service Department and must have passed the Sub Officers course at the National Fire Service College or at a Regional/State Fire Training Centre or a departmental test. He will be confirmed on rendering satisfactory service during the probationary period.

6. Station Officer

The physical standards should be the same as for Fireman. If he is a direct recruit, he should possess the Intermediate standard or equivalent examination certificate, preferably in Science or Engineering subjects. The departmental candidates eligible for promotion to this rank would be required to have minimum 5 years service in a whole time Fire Service, out of which, at least 3 years should be as a Sub Officer or Leading Fireman and to attend and pass the Station Officers course of the National Fire Service College and/or hold the diploma of Fire Engineering from the said college or of equivalent examination or a test prescribed by the Standing Fire Advisory Committee at APPENDIX "11-D" to be carried out by the local authorities concerned. Appointment will be on probation, only to be confirmed after satisfactory service during the probationary period.

7. Assistant Divisional Officer and Divisional Officer

There will be no direct recruitment unless the candidate has already served in a whole time Fire Service and holds the following qualifications :-

"He must be between 25 years and 35 years of age, upper age limit not being applicable to departmental candidates ; must have a minimum of 7 years service in a whole time Fire Service, out of which at least 3 years should be as a Station Officer or higher. This candidate must also have attended and passed Divisional and Assistant Divisional Officers Course or the General

Fire Prevention course at the National Fire Service College, or equivalent examination and holding the Associate Membership of the College before can be appointed to those ranks. Appointment will be on probation, only to be confirmed after satisfactory service during the probationary period.”

Syllabuses under Draft Rules for examination for promotions in Fire Services in India are given at APPENDIX “11-C” and APPENDIX “11-D” to give broad outlines, for laying the standards or for framing the rules in respect of examinations, and promotions according to local conditions

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APPENDIX “11 C”

**SULLABUS FOR EXAMINATIONS FOR PROMOTION IN THE
FIRE SERVICES UNDER DRAFT RULES FRAMED BY S.F.A.C.
(See para 9 under 11-PERSONNEL)**

**(a) SYLLABUS FOR ORAL AND PRACTICAL TESTS FOR CONFIRMATION
OF FIREMAN.**

Oral

(i) Chemical Extinguisher

Types in use and types of fires on which each one can be used ; care and maintenance

(ii)

Ladders

Types in use with limitations of each : care and maintenance; Duties of each member of crew in standard drills.

(iii)

First Aid

Treatment in cases of shock, wounds, burns, bleeding, fractures and respiratory failure.

(iv)

Hose and Hose Drills

Types of delivery and suction hose; construction, care and maintenance; methods of testing, cleaning drying, repairing and slowing; duties of each member of crew in standard drills.

(v) Foam and Foam Equipment

Types of foam and foam making appliances and their uses – care and maintenance.

(vi) Hydrants and Hose Fittings

Types and sizes of hydrants; hose fittings, like couplings, breachings, collecting heads, branches and nozzles, strainers, stand-pipes; hose wrappers and bandages; hose ramps, branch holders; care and maintenance.

(vii) Knots and Lines

Types of lines; methods of testing; care and maintenance. Following 12 knots and their uses :-

(aa) Overhaul knot or thumb knot.

(bb) Reef knot

(cc) Clove hitch

(dd) Rolling hitch

(ee) Round turn and two half hitches

(ff) Single sheet bend

(gg) Sheep shank

(hh) Cat's Paw

(ii) Bow line

(jj) Running bow line

(kk) Bow line on the bight

(ll) Chair knot;

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(viii) Pumps and Pump Drills

Types of pumps and priming systems; identification of parts; care and maintenance; duties of each member of crew in standard drills.

(ix) Practical Firemanship

Method of "entry" into and searching a building or locating a fire; precautions to be observed when working in smoke laden places.

(x) Small Gear

Uses of special gear, like door openers, persuaders, braking-in-tools, axes, preventers, rakes, scoops, cutting shears, hand-pumps, etc.

(xi) Water Room Procedure

Method of dealing with calls to fire and other emergencies; standard messages.

(xii) Water Supplies and Relays

Types of water supplies and essential requirements for making their use for fire fighting; tapping of water mains; relay systems by collector and series pumping; normal relay distances.

Practical

(i) Breathing Apparatus

Harnessing a breathing set.

(ii) Chemical Extinguishers

Method of operating and recharging after use.

(iii) Ladders

Ascending and descending; handling hook ladder with pompler belt and performing one man or two men drill.

(iv) First Aid

Bandaging at different parts of body; artificial respiration.

(v) Hydrant, Hose and Hose Drills

Operating hydrants; lifting, laying; making-up, adding replacing or removing of hose length, carrying hose lines to upper floors or on ladders.

(vi) Knots and Lines

Practical tying up of the following knots :-

(aa) Overhaul knot or thumb knot.

(bb) Reef knot

(cc) Clove hitch

(dd) Rolling hitch

(ee) Round turn and two half hitches

(ff) Single sheet bend

(gg) Sheep shank

(hh) Cat's Paw

(ii) Bow line

(jj) Running bow line

(kk) Bow line on the bight

(ll) Chair knot;

(vii) Pumps

Operation of pumps with different priming systems.

(viii) Rescue Drills

Picking-up, lowering and carrying down insensible persons by Fireman's lift and lines rescue,--

(ix) Squad Drills

Performing squad drill, marching in step, turning right, left and about, turning in inclination and forming squad.

(b) **SYLLABUS FOR EXAMINATION FOR PROMOTION TO AND CONFIRMATION OF LEADING FIREMAN**

(I) **Breathing Apparatus and Resuscitation**

Written and/or oral -- Types in use with their limitation circumstances in which sets are to be used – conditions when resuscitation is necessary standard test.

Practical demonstration -- Practical demonstration in harnessing a breathing set ort using a resuscitation apparatus.

(ii) **Chemical Extinguishers**

Written and/or oral -- Types of extinguishers in use and fires on which each one can be used; advantages and disadvantages and general methods of maintenance; standard tests.

Practical demonstration -- Method of operation; recharging after use.

(iii) **Escape Ladders, Extension Ladders and Hook Ladders, with Drills**

Written and/or oral -- Types in use with their limitation care and maintenance; duties of each member of crew in performance of standard drills; standard tests;

Practical demonstration -- Slipping and pitching; handling of hook ladders with pompier belt and ascending and descending on ladder.

(iv) **First Aid**

Written and/or oral -- Method of approach and subsequent treatment in cases of shock, wounds, burns, bleeding, fractures and respiration failures

Practical demonstration -- Methods of bandaging at different parts of body and artificial respiration.

(v) **Foam and Foam Equipment**

Written and/or oral -- Types of foam making appliances in use with their limitations; circumstances, when these can be used; care and maintenance; standard tests.

Practical demonstration -- Practical demonstration on how to use each equipment.

(vi) **Hose and Hose Drills**

Written and/or oral -- Types of delivery and suction hose in use its construction with care and maintenance; method of testing, cleaning, drying, repairing and stowing; duties of each member of crew in performance of standard three-men and four-men drills; standard tests.

	Practical demonstration	--	Lifting, laying, making-up, adding, replacing or removing of hose as also carrying lines on upper floors on ladder.
(vii)	Hydrants and Hose Fittings		
	Written and/or oral	--	Types of hydrants in use with sizes and construction of outlets; hose fittings, like couplings, breeching, collecting heads, branches with different types of nozzles, strainers, standpipes, hose wrappers, hose bandages, hose ramps, branch holders and their uses; standard test of hydrants.
	Practical demonstration	--	Operation of hydrants and different hose fittings.
(viii)	Knots and lines		
	Written and/or oral	--	Types of lines in use, method of testing and different uses to which different knots can be put to standard test.
	Practical demonstration	--	Practical tying up of various knots.
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(ix)	Pumps and Pump Drills		
	Written and/or oral		Types of pumps with priming systems in use; advantages and disadvantages; duties of each member of crew in case of standard pump drill.
	Practical demonstration		Operation of pumps and standard pump drill.
(x)	Practical fireman ship		
	Written and/or oral		Methods of entry into and searching a building, locating a fire and precautions to be observed when working in smoke laden building.
(xi)	Rescue Drills		
	Practical demonstration		Picking up, lowering and carrying down insensible persons; rescue by fireman's lift and line rescue.
(xii)	Small Gear		
	Written and/or oral		Uses of special small gear, like door openers, persuaders, bracking-in-tools, cutting plants; rescue gear; jacks and pulleys; axes and preventers, etc.
	(xiii) Squad Drill		
	Practical demonstration		Conducting practical squad drill with formation of squad, marching in step, turning with right and left inclination methods of March-past and presentation of parades.
(xiv)	Topography		
	Written and/or oral		Knowledge of the layout of the town/city with names of prominent localities, main roads, connecting such localities, names of different bazaars and important lanes; general spread of the fire hazards in the area served by the Fire Station concerned.
(xv)	Watch room procedure		

- | | |
|--|---|
| Written and/or oral | Functions of watchroom; methods of keeping records of incoming and outgoing messages; mobilizing procedure; method of dealing with fire and emergency calls; standard messages. |
| (xvi) Water problems
Written and/or oral | Types of water supplies, essential requirements for making their use for fighting pressures in water mains, capacities of pumps for tapping water mains. |
| (xvii) Water relay
Written and/or oral | Meaning of collector and series pumping; normal relay distance; method of detecting disturbances in relay hose-lines. |

(c) DRAFT RULES FOR PROMOTION

- (i) All promotions to different ranks in the Fire services up to the rank of Divisional Officer, shall be made out of the candidates who are eligible in all respects having successfully passed the appropriate examination for such promotion and not otherwise.
- (ii) For being termed as “successful” at any examination, the candidate shall have to score 50 per cent marks and above of the total marks.
- (iii) Seniority amongst the passes shall be considered along with seniority in service and those who pass in previous years shall be termed as seniors to those who pass in subsequent years for promotion. Candidates to be sponsored for training at the Regional/State Training Centres or National Fire Service College, should be drafted according to seniority, as far as possible, from amongst those eligible for respective courses.
- (iv) Only in exceptional and very rare cases shall the appointing authority have the discretion of waiving the condition of passing a promotion examination in case of an otherwise eligible candidate, if circumstances then prevailing warrant such consideration. In such a case, the appointing authority may preferably arrange selection for appointment by interviewing candidates by a Board of not less than three officers.
- (v) For promotion to the ranks of Leading Firemen, the eligible candidates must pass a departmental written and oral and practical examination of the standard as laid down in the syllabus above.

This examination should be conducted by a Board of officers having as Asstt. Divisional Officers or a Senior Station Officer with not less than 5 years’ service as Chairman and two Station Officers or Sub Officers with not less than years’ service as members.

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**APPENDIX “11-D”
SYLLABUS FOR TEST FOR PROMOTION TO STATION OFFICER’S RANKS
AS
RECOMMENDED BY S.F.A.C.**

(See para 10 under 11 – PERSONNEL)

Syllabus for test for promotion to Station Officer’s rank

(i) Breathing apparatus

- | | | |
|---------|----|---|
| Written | -- | Types in use with brief description of working principles; circumstances in |
|---------|----|---|

			which each type can be used; care and maintenance.
	Oral and practical	--	Harnessing and actual use in smoke or gas laden chamber and standard test.
(ii) Building construction	Written	--	Types of buildings; properties of various building materials and their behaviour in heat and fire, different construction of walls, roofs, floors, stairs, hearths and chimneys with flues, doors, windows, etc; their advantages and disadvantages in relation to fire risk. Placing of lifts, stairs, fire escapes, etc. in relation to occupancies.
(iii) Chemical extinguisher	Written	--	Types in use with constructional details working principles with limitations of use their advantages and disadvantages; care and maintenance.
	Oral and practical	--	Operational working; procedure of recharging after discharge and standard test.
(iv) Chemistry and Heat	Written	--	Principles of chemistry; heat and combustion; fundamental chemical reactions with risk involved; risks with important chemical compounds and volatile liquids.
	Oral and practical	--	Laboratory experiments of production of heat, combustion and evolution of gases due to chemical reactions.
(v) Discipline	Written	--	General rules of discipline; its importance in Fire Service and how it can be maintained; procedures in dealing with disciplinary matters.
(vi) Electricity	Written	--	Principles of electricity and fire risks in relation to generation, distribution, domestic and industrial electrical hazards.
	Oral and practical	--	Creation of sparks due to static charge, short circuits and leakages.

(vii) Escape ladder (optional if not in use)	Written	--	Types in use with brief description of constructions and working with appropriate identification of parts; care and maintenance.
	Oral and practical	--	Standard drills in slipping, pitching, bridging, correct methods of ascending and descending; standard tests.
(viii) Exercises (situation and tactical)	Oral and practical	--	Exercises in practical fire fighting, with fire ground conditions incorporating various fire drills using different fire appliances and ladders and message work; night exercises.
(ix) Fire Service Administration	Written	--	Fire Station administration; maintenance of records of hose, occurrences, watchroom work, fire engines and other appliances; preparation of report of fires; special services and periodical returns.
(x) First Aid	Written	--	General procedure; treatment of shock, wounds, burns and scalds, haemorrhage, fractures, etc. method of artificial respiration and bandaging.
	Oral and practical	--	Demonstration of methods of treatment; artificial respiration and bandaging.
(xi) Fixed Fire Fighting Installation	Written	--	Systems of Dry risers, rising mains, internal hydrants, fire resisting doors and shutters and their uses.
(xii) Foam and foam equipment	Written	--	Types and composition of foam and their properties, expansion ratio, stability, methods of creating mechanical and chemical foam with advantages and disadvantages. Construction and working principles of foam making equipment like foam branches, multiple jet and inline inductors, foam pourers and towers etc; care and maintenance.
	Oral and practical	--	Standard drills with foam equipment and standard tests.
(xiii) Gas Fires (optional)	Written	--	Properties of different gases, the hazards relating to gases, hazards of domestic gas installations.
(xiv) Hook ladder			

	Written	--	Constructional features; identification of parts; care and maintenance of ladder and belt.
	Oral and practical	--	One man and/two men standard drills to 4 th floor with hose and rescue lines; standard tests.
(xv) Hose	Written	--	Construction of delivery and suction hose; operational misuse; methods of testing; cleaning, drying and repairing, care and maintenance.
	Oral and practical	--	Repairing and darning of hose, standard tests.
		(59)	
(xvi) Hose Drills	Oral and practical	--	Three and four men standard drills; carrying, running, laying and making up of hose; adding, removing, replacing and raising to upper floors.
(xvii) Hose fittings	Written	--	Construction of delivery and suction couplings, branches, nozzles, spray, diffuser, stream form and revolving branches, basement sprays, collecting and dividing breechings, suction collection heads, etc; their use, care and maintenance.
	Oral and practical	--	Demonstration with each type of hose fitting.
(xviii) Hydrants	Written	--	Construction of different types of hydrants, sizes of outlets and outlet fittings; methods of connecting to fire pumps, marking and hydrant pits and covers; care and maintenance.
(xix) Internal combustion engines	Written	--	Principles of Internal combustion engine; types of ignition systems; electrical system; use of fuel, care and maintenance.
	Oral and practical	--	Demonstration of actual moving parts in dismantled i.e. engines.
(xx) Knots and Lines	Written	--	Types and composition of lines; working load, braking load and testing load; various knots and their uses; care and maintenance.
	Oral and practical	--	Tying of various knots; splicing and whipping of lines; standard tests.

(xxi) Ladders			
Written	--	Types in use with brief description of construction and working with appropriate identification of parts; care and maintenance.	
Oral and practical	--	Standard drills in slipping and pitching; correct methods of ascending and descending; standard tests.	
(xxii) Physical & Squad Drills			
Oral and practical	--	Conduct of squad and physical drills with appropriate sequence and words of command; methods of presentation of parades and march past.	
(xxiii) Pumps			
Written	--	Types use with constructional details and working principles; types of primers and methods of priming; testing and fault finding; care and maintenance.	
Oral and practical	--	Demonstration of operating pumps of different types and priming systems, from hydrants and from an open source of water supply; standard tests.	
			(60)
(xxiv) Pump Drills			
Oral and practical	--	Standard drills with hose; hose reels; foam making equipments and places including upper floors; visual signals and whistle signals.	
(xxv) Plan Reading (optional)			
Written	--	Importance of plan reading; methods of reading with explanation of common symbols in use.	
(xxvi) Practical Firemanship			
Written	--	Qualities of a fireman; his important duties at Fire Station and Fire Ground.	
Oral and practical	--	Methods of entry, rescue, room-searching, working in darkness and in thick smoke; line signals.	
(xxvii) Rescue drills			
Oral and practical	--	Picking up, lowering and carrying insensible persons with Fireman's life and lines rescues.	
(xxviii) Refrigeration (optional)			
Written	--	Principles of refrigeration; properties and hazards of different refrigerants	

and actions to be taken in case of leakage.

(xxix) Resuscitation

Written

-- Description of resuscitation sets, methods of working and circumstances when used; care and maintenance.

Oral and practical

-- Demonstration in use of resuscitation set.

(xxx) Rural Fires

Written

-- Causes of rural fires; precautions to be taken in rural areas; methods of fighting rural fires.

(xxxi) Salvage

Written

-- Meaning of salvage; how fire loss can be reduced by salvage; salvage equipments and their uses.

Oral and practical

-- Demonstration in salvage sheeting, indoor and outdoor chutes, drawing and mopping.

(xxxii) Small Gear

Written

-- Types and uses of breaking in tools, door-openers, persuaders, bolt croppers, rescue gear, jacks and pulley blocks, axes, preventers, rakes, saws, etc.

Oral and practical

-- Demonstration in the operation of small gear.

(xxxiii) Special appliances

Written

-- Brief description and working principles of oxy-acetylene cutting plant, blower and exhauster machine, portable lighting sets, etc; their uses and precautions to be taken.

Oral and practical

-- Operation of special gear.

(xxxiv) Special Services

Written

-- Rescue of trapped persons from sewers, lifts, collapsed buildings and drowning; rescue of animals; methods to be used and precautions to be taken.

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(xxxv) Sprinklers, Drenchers and CO₂ Installations

Written

-- Brief description and working principles of 'wet', 'dry' and 'alternate' systems of sprinklers and drenchers, CO₂ methyl-bromide etc; installation; methods of spacing locating and uses, care and maintenance.

(xxxvi) Turn Table Ladders (Optional, if not in use)

Written	--	Description and working principles of turn table ladders their advantages, situations when these can be used and precautions to be taken when in use; care and maintenance.
Oral and practical	--	Demonstration of operating the ladder with varying loads, uneven surfaces and weather conditions, standard tests.
(xxxvii) Watch Room Procedure		
Written	--	Functions of watch room; method of working with fire alarm and telephone systems; fire around and control room messages; mobilizing procedure; maintenance of records, etc.
Oral and practical	--	Demonstration of receiving and transmitting messages, log keeping and mobilization of Fire Force in major incidents.
(xxxviii) Water Problems		
Written	--	Study of pressure; heads, rate of flow, capacity and friction loss in relation to behaviour of water under pressure; discharge pressures of pumps and different nozzles.
Oral and practical	--	Demonstration of discharge of water from different nozzles at varying pressures; effect of jet and spray and length of throw.
(xxxix) Water Supply		
Written	--	Principles of 'series' and 'collector' pumping; methods of arranging relays.
Oral and practical	--	Demonstration of 'series' and 'collector' pumping.
(xl) Lecturette (optional – For Instructors)		
Written	--	Methods of imparting instructions and conducting training on various subjects on fire fighting, fire prevention, etc.
(xli) Special Risks		
Group I		
Hazardous storages in warehouses		
Written	--	Warehouses and storage sheds for hazardous goods and their construction from fire risk point of view, methods of storage and precautions to be taken.
Group II		
Ships and Dock Risks		
Written	--	Principles of nautical stability of floating objects and safety limits; causes of fires in ships and methods of fire fighting.
Group III		
Aircraft fires and rescue		
Written	--	Construction of aircraft; locations, emergency exits, fuel tanks, batteries,

etc; usual causes of fires in aircraft;
methods of rescue and of fire fighting.

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APPENDIX "11-E"

**DUTIES OF VARIOUS RANKS IN THE FIRE SERVICES AS
RECOMMENDED BY S.F.A.C.**

(See Para 16 under 11 – PERSONNEL)

DUTIES OF VARIOUS RANKS IN THE FIRE SERVICES

6. The standardization of duties of various ranks in the Fire Services was first taken up at the fifth meeting, but was deferred for want of full information regarding the prevalent duties in various State fire services.
7. This was considered again at the ninth meeting and the following duties were recommended :-

General duties of an officer-in-charge of Station (Station Officer/Sub Officer).

- (a) To be available and to hold himself in readiness for any duties at any time he may be called upon by his superiors to perform, and to keep his superiors acquainted with all matters coming to his knowledge, affecting either his own station or general business of the Fire Service Department.
- (b) To obey implicitly all orders of his superiors and exact the strictest obedience and civility from those serving under him; to devote the whole of his time and attention to the Fire Service Department; to set an example to his men by sobriety, cleanliness, promptitude, civility and general attention to his duties.
- (c) To take charge of and be responsible for all appliances, stores, equipments, etc, issued to his station and submit a report to his superior as to the correctness or otherwise of such articles taken charge of. He should submit a requisition to his superiors of the requirements of his station as necessary.
- (d) To see that all appliances and equipments are kept clean and in thorough working order, stowing them properly for immediate use at fires and other emergencies without loss of time.
- (e) To instruct and drill all men under his charge in the use and maintenance of fire appliances and equipments.
- (f) To hold a muster parade for the inspection of uniforms, clothing, boots, and equipments at least once a month to see that the men keep themselves and their clothing in a clean and good condition and to report shortages, if any, to his superiors. The inspection of uniforms and equipments should be carried out periodically.
- (g) To ensure that the roll is called at such times as he considers most suitable.
- (h) To ensure prompt attendance of fire appliances and men. He should carry out surprise turn outs at odd hours at least once a month.
- (i) To ensure that his station time clock is checked with time clock or time signal at least twice a day at proper intervals.

- (j) To see that the man placed on station duty is properly dressed and is acquainted with his duties.
- (k) To see that the communication system is in proper working order and to send an immediate report to appropriate authority then it is not so.
- (l) To keep himself and men at all times in readiness, to receive any superior officer and to give if required an accurate account of all matters connected with the station under his charge.

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- (m) To see that the fire pumps under his charge have water passed through their pumps at least once every week. This only refers to cases where a fire pump has not otherwise worked during the above period.
- (n) To report at once to his superior Officer-in-charge of his Section and/or the Police, any damage or casualty that may have occurred as a result of accident.
- (o) To keep himself and his staff acquainted with the water supply within the area under his charge. In cases where fire hydrants are provided, it shall be his duty to see that he and his staff examine all the hydrants falling within his jurisdiction periodically as may be fixed from time to time.
- (p) To make himself and his staff acquainted with the network of communication system as may be existing in the service.
- (q) To make himself and his staff acquainted as far as possible with the topography of his and adjoining areas, as well as fire risks in such areas.
- (r) To maintain all registers, log books, occurrence books, attendance rolls, etc up-to-date and to submit all returns and statements including pay rolls of his staff to his superiors every month. All Fire and Special Services reports shall be submitted by him within 48 hours of the occurrence. Sundays and Holidays being excepted.

N.B.-- In case of a Station having a Station Officer and a Sub-Officer, the former shall be in charge of the Station and the latter shall assist him in carrying out the above mentioned duties. In the absence of the Station Officer, Sub-Officer shall be in charge of the Station.

Duties of Leading Fireman

- (a) To be available at the station to which he is posted, while on duty.
- (b) To obey implicitly all orders of his superiors and exact the strictest obedience and civility from those serving under him.
- (c) To see that the men placed under him on duty are properly dressed and are assigned duties pertaining to the station, and fire appliances, and such other duties that may be incidental to the efficient working of the station. He shall also be responsible for

maintaining the station premises clean and tidy and appliances and equipments in neat and efficient working condition, and ready for immediate use.

(d) To see that all equipments, gears, etc., are properly accounted for and be responsible for the same when incharge of fire appliances or equipments. In case of any loss or damage of articles or equipments, uniform clothing, etc., he shall immediately report to his next senior officer about the same.

(e) To keep his superiors acquainted with all matters coming to his knowledge affecting the Fire Station staff or the general business of the Fire Service Department.

N.B.—Any duties as may be asked by a Station Officer and/or Sub-Officer, in addition to those specified above shall be carried out by him.

Duties of Driver/Operator

(a) To be available at the station to which he is posted, while on duty.

(b) To obey implicitly all orders of his superiors and exact the strictest obedience and civility from those serving under him, if any.

(c) To be responsible for the proper upkeep and mechanical condition, maintenance and movements of the vehicles and pumps under his charge. He shall also be jointly responsible with the Leading Fireman for the proper maintenance and stowing of equipments and gears that are carried on the fire appliances or kept at the Fire Station.

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(d) To test at least twice a day, the fire appliances in his charge to make sure that the same are in serviceable condition and to record the same with the man on station duty. To report any defects immediately that he may come across to the Leading Fireman incharge and to the man on station duty.

(e) To keep an inventory of all articles and equipments under his charge and to maintain a record of time at work, mileage, petrol and oil consumption, etc.

N.B.—Any other connected duties relating to the maintenance, mobility and operation of fire appliances, motor vehicles, pumps or other fire fighting and rescue gears as may be asked by his superior officer or the Leading Fireman, in addition to those specified above, shall be carried out by him.

Duties of Fireman

(a) To be available at the station to which he is posted, while on duty.

(b) To obey implicitly all orders of his superiors and hold himself in readiness to carry out all duties as may be assigned to him by his superiors obediently, smartly and efficiently.

(c) To keep himself and his quarters, if provided, neat and clean.

(d) To devote whole of his time and attention to the Fire Service Department while on duty.

(e) To set example to others by sobriety, cleanliness, promptitude, civility and general attention to his duty.

(f) To be responsible for keeping the station premises, such as appliances room, officers, drill yard, watch room, workshop, dormitory, drill tower, hose drying tower, and neat and clean by washing when necessary and appliances, equipments, gears, etc. clean and tidy.

(g) To keep himself alert to attend to fires, special services, fire drills, etc. in the shortest possible time on the alarm being sounded.

(h) To keep himself acquainted as far as possible with the topography of his own and adjoining areas, as well as fire risks in such areas.

(i) To carry out duties that may be assigned to him from time to time and be responsible jointly and severally to the Leading Fireman of the Fire Units for the care, appearance, scrupulous cleanliness of the unit and all equipments there with, correct upkeep, stowage and maintenance thereof.

(j) To assist Driver/Operator in the proper maintenance of equipments and gears of the vehicles, perform guard duties, workshop duties, control room and watch room duties, duties of office orderlies and fire aides, dispatch messengers, etc.

(k) To thoroughly inspect the fire appliance to which he is posted and to report to the Leading Fireman of having verified the same. The firemen are jointly and severally responsible to the Leading Fireman of the Unit for the appearance, scrupulous cleanliness of the unit and various equipment therewith, correct upkeep, maintenance and stowage of equipments allotted. This shall include cleaning of vehicles and polishing the several equipments on the vehicle and in the stores, scrubbing and washing of the hoses, floors, walls, doors and windows of the premises, garages and drill towers, smoke chamber, maintenance of garden, etc.

Firemen and other ranks accommodated in barracks or dormitory shall be solely responsible for the proper cleanliness, orderly arrangement of their personal belongings, etc. They will also be held responsible for the safety of the various fixtures, sanitary and electrical fittings in such premises.

(l) Firemen, when posted as guard or sentry by turns, or by other method as deemed fit by the Officer Incharge of the Station, shall not leave his post until he is properly relieved. He shall be in full uniform prescribed for him for the season. While on guard duty, the Fireman shall be responsible :-

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(i) To guard all properties, fixtures, fittings and other effects, both in the Fire Station premises and station surroundings.

- (ii) To see that all persons entering upon the Fire Station premises are directed to the Officer in charge and to see that they leave the premises immediately their business is finished.
- (iii) To be aware and remain alert at all times.
- (iv) To control the movements of incoming and outgoing vehicles in avoid accidents.
- (v) To watch the garden and plants in station grounds.

(m) In addition to the above, a fireman shall perform any legal duty, in the interest of the Fire Service, when ordered by appropriate authority.

Duties of watch room operator

(a) To be available at the station to which he is posted, while on duty.

(b) To obey implicitly orders of his superiors and exact the strictest obedience and civility from those serving under him.

(c) While taking over charge, which should be at least 10 minutes before the schedule for change over, he shall be responsible to acquaint himself with all matters current and pending of operational and administrative importance. He shall also be responsible to check the station clock and the telephone connections with other stations.

(d) It shall be his duty to maintain the station occurrence book up-to-date at all times in the prescribed form as may be laid down.

(e) He shall be prompt in receipt and transmission of calls to fires, other emergencies, etc., reporting the same to the officers and men by the alarm system installed at the station and to the area control room as well as to other fire stations or essential services, as the case may be. In such cases, he shall keep record of movement of vehicles, officers and men regarding messages thereof, etc. in the occurrence book.

(f) He shall remain alert throughout watch period and shall not leave the place of duty for any purpose whatsoever on any account, however brief the absence may be, without first obtaining a suitable relief. He shall in such cases, make any entry in the occurrence book of his being relieved for that period.

(g) He shall not allow any unauthorized person to enter the watch room.

(h) He shall be in proper uniform.

(i) He shall be responsible for the maintenance of record of movements of staff, appliances and equipments and be responsible for maintaining a disposition board of appliances and men.

(j) He shall execute such other duties as may be entrusted to him from time to time by his superiors for the efficient administration of the station such as maintenance of records and registers.

General Duty

Operational staff, viz. Officers, Leading Firemen, Drivers/Operators, watch room operators, firemen, etc. shall form a part of the operational staff who for the purposes of fitness, alertness and suppleness of action shall undergo squads physical and fire drills, etc.

References :-- 1. Page 9 of the minutes of the fifth meeting of SFAC.

2. Page 3 of the minutes of the ninth meeting of SFAC.

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ANNEXURE II

Completed years of qualifying service	Scale of gratuity or pension	Maximum pension in Rs. per annum
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(a) Gratuity		
1.	1 month's pay.	
2.	2 month's pay.	
3.	3 month's pay.	
4.	4 month's pay.	
5.	4 $\frac{3}{4}$ month's pay.	
6.	5 $\frac{1}{2}$ month's pay.	
7.	6 $\frac{1}{4}$ month's pay.	
8.	7 month's pay.	
9.	7 $\frac{1}{4}$ month's pay.	
(b) Pension.		
10.	10/80 ths of pensionable pay.	
11.	12/80 ths of pensionable pay	
12.	14/80 ths of pensionable pay	
13.	16/80 ths of pensionable pay	
14.	18/80 ths of pensionable pay	
15.	20/80 ths of pensionable pay	
16.	22/80 ths of pensionable pay	
17.	24/80 ths of pensionable pay	
18.	26/80 ths of pensionable pay	
19.	28/80 ths of pensionable pay	
20.	30/80 ths of pensionable pay	

Amount of Family pension to be granted in case of Fire Services employees who is killed or in Consequence of injuries sustained in the execution of his duties

Designation	Pension per mensem	
	For the Widow child	For each
Chief Officer	25% of pay	7% of pay.
Deputy Chief Officer	-- do --	7% of pay.
2 nd Officer	-- do --	7% of pay.
Station Officer	-- do --	7% of pay.
Mechanic	-- do --	7% of pay.
Sub Officer	-- do --	7.5% of pay.
Motor Driver	-- do --	9% of pay.
Fitter	-- do --	9% of pay.
Tindal	-- do --	10% of pay.
Fireman, Fireman Attendant	-- do --	11% of pay.

- (i) The pension to the widow will be for life provided that, if the widow marries again, the pension payable to her shall cease.
- (ii) The pension to the child will be payable until the child attains the age of 21 years, or if the child is a female, until she is married, whichever is earlier.

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APPENDIX '11—G'

**PROCEEDINGS OF SUB-COMMITTEE ON MEDICAL STANDARDS
FOR FIREMEN**

PHYSICAL ASSESSMENT TESTS

The following constituted the Sub-Committee to recommend Physical Assessment Tests for the Fire Services Personnel employed in the various States of the Indian Union.

- (a) Brig.J.J.D.Logo, AVSM (Med). Ministry of Health Convener
- (b) Shri Chandrashekhar, Addl.IGP Karnataka and Director Fire Services.
- (c) Shri R.R.Dhobley, Chief Fire Officer, Bhabha Atomic Research Centre.
- (d) Shri S.A.Hameed, Chief Fire Officer, Jammu & Kashmir.
- (e) Shri Ram Karan Yadav, Chief Fire Officer, Andaman & Nicobar Islands.

Preamble

2. Personnel of the Fire Services, including officers, should have a high degree of physical efficiency and fitness in view of their arduous duties, under adverse conditions. For this purpose, fire service personnel may be classified into operational and non-operational categories.
3. The non-operational categories are those whose duties are supervisory and organizational, and as such, are not required to have the same physical efficiency standards as the operational category. Directors, Chief Fire Officers, Deputy Chief Fire Officers and Divisional Fire Officers would be classed into this category.
4. The operational categories would be those who are actively involved in fire-fighting duties and would comprise of Station Officer/Supervisors/Foremen, Sub Officers, Leading Firemen, Firemen/Fire Operators and such-like equivalent categories.
5. Certain other categories of staff in the fire service like Drivers, Mechanics and similar personnel, who are normally employed on duties like control room-operators, drivers of fire tenders, workshops and such like duties are not fundamentally involved in actual fire fighting duties like climbing to high-rise buildings, rescue operations and such-like highly strenuous duties and therefore may not required stringent physical efficiency standards. They however do constitute an active component of the fire-fighting team and will have to take a hand in fire fighting operations.
6. All fire services personnel must be physically active. Senior officers even though normally non-operational must be in a position to set a good example to their firemen. To this extent, they should all be subjected to an annual medical examination, to check for organic disease and physical disabilities. To ensure that they remain physically fit, they should be

subjected to the age-height-weight norms accepted as standards, as per Appendix A attached.

7. It is assumed that during recruitment to the fire services, only those who do not have any organic disease, congenital defects and physical disabilities are accepted into the service. Their height standards should be at least 5' 3" to 5' 8" depending upon the area of recruitment. Their chest measurements should be 32" – 35" with a minimum expansion of 2 1/2 " – 3". Their eye-sight should be normally 6/6 and they should be tested for colour blindness. A standard of 6/9 with glasses may be accepted for older hands, who are already in service. They may however, have to be relegated to maintenance tasks as opposed to actual fire-fighting and rescue operations, because spectacles are an impediment to active operations.
8. A study on physical efficiency of firemen carried out by DIPAS of Defence Services, has been taken into consideration while laying down physical assessment tests. A copy of the same is attached for information as Appendix-B. As a result, age would be an important factor for firemen. It is considered that 45 years should be upper age limit for firemen who are involved in actual fire fighting and rescue operations.

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Physical Assessment Tests

9. Certain data has been evolved as a result of live studies by the Defence Institute of Fire Research and are summarized as under :--
 - (a) The fire fighting staff may not be fit for strenuous duties after 50 years of age.
 - (b) When the crew are composed of all aged personnel i.e. above 47 years, their efficiency for fire-fighting operations, is at least 25 per cent below that of the crew composed of a lower age-group.
 - (c) The crew upto the age-group of 40 years, are able to perform fire-drills efficiently. In fact, crew composed of age-group 25-26 years took slightly more time than the crew of higher age-group upto 40 years. This is presumably because the younger crew had only an average of 2 years of service to their credit and therefore, lesser experience and practice than the older group.
 - (d) After 40 years of age, clinical abnormalities occur. This recorded as 3 per cent of the age group upto 50 years and rose to 13 per cent between 51-55 years and 33 per cent beyond 55 years. In other, 1/3rd of the fire-fighting beyond 55 years, suffer from some form of clinical abnormality.
10. The Fire Services would therefore, have to evolve a system for early retirement and alternative employment, as a result of deterioration in the physical standards for firemen, applicable primarily, for classes of Station Officers and below. It would be the responsibility of the Director of Fire Service to ensure that only those who are physically fit are employed in fire fighting and rescue operations and maintained their firemen in a fit condition by devising suitable activities and training during their service career.

Recommendations

11. Taking the above into consideration, the undermentioned physical assessment tests are recommended to be held *every six months* to ensure that fire-fighting personnel remain fit for their duties.

- (a) He should be above to perform the tests enumerated in Appendix 'C'. These have been extracted from the tests prescribed for the Hong Kong fire Services, suitably modified for Indian conditions.
- (b) He should be able to run 100 metres in 30 seconds.
- (c) He should be above to lay 4 lengths of hose, each of 50 ft. from the appliance, within 3 minutes.
- (d) He should be able to climb on Extension ladder of 35 ft. length and come down, twice with 2 minutes.
- (e) He should be able to carry a man of approximately his own weight by the fireman's lift method over 25 meters within 3 minutes.
- (f) He should be able to do 'push-ups' 20 times continuously.
- (g) He should be able to run one mile within 10-12 minutes.

Sd/-
(BRIG.J.J.D. LOBO, AVSM)
Director of Civil Defence (Medical)
8th December, 1976.
Convener.

Members

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Age – Height – Weight Chart

Average Weights of Men with clothes

(Deduct 3 Kg. For shoes and 4 kg. For clothing to determine nude weight)

Age	Height																	
	'152'	'155'	'157'	'160'	'163'	'165'	'168'	'170'	'173'	'175'	'178'	'180'	'183'	'185'	'188'	191'	'193'	'196'
20	53	54	55	57	58	60	62	64	66	67	69	71	73	75	78	80	82	84
21	54	54	56	57	59	61	63	64	66	68	69	71	73	76	78	80	83	85
22	54	55	56	58	59	61	63	64	66	68	70	72	74	76	78	81	83	85
23	54	55	57	58	60	62	64	65	67	68	70	72	74	77	79	82	84	86
24	55	56	57	59	60	62	64	65	67	69	71	73	75	78	80	83	85	87
25	55	56	57	59	60	63	64	66	68	69	71	73	76	78	81	83	86	88
26	56	57	58	59	61	63	64	66	68	70	72	74	76	79	82	84	87	89
27	56	57	58	59	61	63	64	66	68	70	72	74	77	79	82	85	87	89
28	57	58	59	60	61	63	65	67	68	70	72	74	77	80	83	85	88	90
29	57	58	59	60	62	63	65	67	69	71	73	75	78	80	73	86	88	90
30	57	58	59	60	62	64	65	67	69	70	73	75	78	81	74	86	89	91
31	58	59	59	61	62	64	66	68	69	71	73	76	78	81	84	87	89	92
32	58	59	59	61	62	64	66	68	70	72	74	76	79	82	84	87	89	92
33	58	59	59	61	62	63	66	68	70	72	74	77	79	82	85	88	90	93
34	58	59	60	61	63	64	66	68	70	73	75	77	80	83	85	88	91	93
35	58	59	60	61	63	64	66	68	70	73	75	77	80	83	86	88	91	94
36	58	59	60	62	63	65	67	68	71	73	73	78	80	83	86	89	92	94
37	59	59	60	62	64	65	67	69	71	73	76	78	81	83	87	89	92	95
38	59	60	61	62	64	65	67	69	71	73	76	78	81	84	87	90	93	95
39	59	60	61	62	64	65	67	69	71	73	76	78	81	84	87	90	93	96
40	59	60	61	63	64	66	68	69	72	74	76	79	82	84	88	91	93	96
41	59	60	61	63	64	66	68	69	72	74	76	78	82	84	88	91	94	95
42	60	61	62	63	64	66	68	69	72	74	76	79	82	84	88	91	94	95
43	60	61	62	63	64	66	68	70	72	74	76	79	92	95	88	91	94	95
44	60	61	62	64	65	67	68	70	73	75	77	80	83	85	88	92	95	98
45	61	61	62	64	65	67	68	70	73	75	77	80	83	85	88	92	95	98
46	61	62	63	64	65	67	68	71	73	75	78	80	83	86	89	92	95	98
47	61	62	63	64	65	67	69	71	73	75	78	80	83	86	89	93	96	98
48	61	62	63	64	65	67	69	71	73	75	78	80	83	86	89	93	96	98
49	61	62	63	64	65	67	69	71	73	75	78	80	83	86	89	93	96	98
50	61	62	63	64	65	67	69	71	73	75	78	80	83	86	89	93	96	98
51	61	62	63	64	65	68	69	71	73	75	78	80	83	86	89	93	96	98
52	61	62	63	64	66	68	69	71	73	76	78	81	83	87	90	93	96	99
53	61	62	63	64	66	68	69	71	73	76	78	81	83	87	90	93	96	99
54	61	62	63	64	66	68	69	72	73	76	78	81	83	87	90	93	96	99
55 & 61	62	63	64	66	68	69	72	74	76	78	81	83	87	90	93	96	99	99
over								74	76	78	81	83	87	90	93	96	99	99

MOTOR EFFICIENCY CLASSIFICATION TESTS (M.E.C.T.)

1. Balance

(1) Diver's Stance – Hold diver's stance for 20 seconds (On toes, arms outstretched, eyes closed)

Note :-- (The candidate should stand erect on his toes, hands fully stretched in front, eyes closed for 20 seconds).

Flexibility

(2) Floor-touch – Bend at waist and touch floor, with fingers, keeping knees stiff (Women touch palms).

Note :-- Self-explanatory.

(3) Trunk Flexion – Forward – From sitting position with knees held down, bend forward slowly, until forehead is 8 inches from floor.

Note :-- (Sit with legs stretched together forward, knees held down hands to the side, bend forward, try to touch knees with the head. The Head should be at least 8" from the ground).

(4) Trunk Extension – Backward – Lie face downward with back held down and hand behind necks, raise chin 18 inches from floor.

Note :-- Self-explanatory.

Ability

(5) back-spring – Spring up from floor and touch hands to toes while in air. Do 5 times.

Note :-- Self-explanatory.

Strength

(6) Man-Lift – Pick up partner your own weight and place on shoulders in 10 seconds.

Note :-- Self-explanatory.

Power

(7) Standing broad-Jump – Do standing broad-jump the distance of your height plus 1 foot.

Note :-- Self-explanatory.

Endurance

(8) Floor push-ups—Do 15 full-length push-ups form floor (Women do 30 from knees).

Note :-- Self-explanatory.

(9) V-Sit—Sit in V-position with legs and back off floor. Hold for 60 seconds.

Note :-- Lie flat on the round face upwards hands to the side of the body, lift the legs together from the abdomen, at 45° angle, lift the head from the abdomen, to as nearly 45° angle, as possible. Hold the position for 60 seconds.

(10) Breath Holding – Run in place (Skip) for 2 minutes, at 180 steps per minute. Then hold breath for 30 seconds.

Note :-- Self-explanatory.

DETAILS OF PHYSICAL FITNESS TEST AND ASSESSMENT AS IN FORCE IN HONG KONG FIRE SERVICE

1. Motor Efficiency Classification Test (M.E.C.T.)

This is designed to test the following Motor Functional aspects of each individual, Balance, Flexibility, Ability, Strength, Power and Endurance.

The subject will be allowed to practice each item priority-wise to test except the Endurance items.

Note :- Since the diagrammatic presentation of the exercise could not be depicted in this paper, explanatory note has been added under each item.

Sr. No.	No. of Attempts Permitted	Pass/ Fail	Item
			Balance
1.	1		1. Diver's Stance—Hold diver's stance for 20 seconds. (on toes arms outstretched, eyes closed) Note : (The candidates should stand erect on his toes, arms fully stretched in front, eyes closed for 20 seconds)
2.	1		2. Squat Stand – Squat and balance on hands for 10 seconds, toes off ground, knees outside elbows. Note : Squat-Stand-Squat, stand erect on toes legs apart bend forward and touch the ground remain in this position for 10 seconds.
3.	2		3. Dizziness Recovery – With one finger on floor, take 10 seconds around finger, then walk a 10 foot line in 5 seconds.
4.	1		4. Flexibility—Floor-Touch-Bend at waist and touch floor, keeping knees stiff (Woman palms) Note : Self-explanatory
5.	2		5. Trunk Flexion—Forward-From sitting position with knees held down, bend forward slowly until forehead is 8 inches from floor. Note : Sit with legs stretched together forward, knees held down hands to the side bend forward, try to touch knees with the head. The head should be at least 8" from the ground.
6.	2		6.Trunk Extension-Backward-I i.e. face downward with back held down and hands behind neck-raise chin 18 inches from floor.
7.	1		7. Ability—Kneeling-Jump Kneel so that insteps are flat on floor spring to feet and balance 3 seconds. Note : Self-explanatory.
8.	2		8.Back Spring—Up from floor and touch hands to toes while in air, do 5 times. Note : Self-explanatory.
9.	2		9. Agility 6—Count Exercise-Squat extend legs back ward (hands to floor extend legs forward; turn over, return to squat, stand. Do this 6 times in 20 seconds). (Woman squat extend legs backward, return to squat and 6 time in 10 seconds) Note : Squat on floor with legs together stretched forward hands resting sides, extend the legs backwards while supporting the body with 2 hands. Return back to squatting position with legs forward. Do this six times in 20 seconds.
10.	1		10. Strength—Man Lift-Pick up partner your own weight and place on shoulders in 10 seconds. Note : Self-explanatory.
11.	1		11. Stick-Body—With heels on floor, head on partner's knees and hands on hips, hold body rigid for 30 seconds. Note : This exercise to be carried out in pairs. Partner sitting on his toes with his knees forward. The candidate should lie flat and rest his head on the knees without support from the hands stretch his body rigid drawing support only from the head and the toes. Do this for 30 seconds.
12.	2		12. Extended-Pressure – Up-Lie face downward. With arms extended and without using elbows press up until body balances on hands and toes. Note : Self-explanatory.
13.	1		13. Power—Standard broad-jump. Do standing broad jump, the distance of your height plus 1 foot. Note : Self-explanatory.
14.	1		14. Endurance—Floor-Push-Ups—Do 15 full-length push-ups from floor. (Women do 30 from knees) Note : Self-explanatory.
15.	2		15.Straddle Chinning—Lie on floor straddled by standing partner, Grab his hand pull yourself up until your chest his legs. 20 times (Women do 10). Note : Self-explanatory.
16.	2		16. V-Sit-sit in V-position with legs and back off floor. Hold for 60 seconds. Note : Lie flat on the ground face upwards hands to the side of the body, lift the legs together from the abdomen at 45 degree angle lift the head from the abdomen as near 45 degree as possible. Keep the position for 60 seconds.

- | | | |
|-----|---|--|
| 17. | 1 | 17. Breath Holding—Run in place for 2 minutes at 180 steps per minute. Then hold breath for 30 seconds.
Note : Self-explanatory. |
| 18. | 2 | 18. In succession—Do 200 two-footed hops, 200 straddle jumps (jumps from I to Y position), 200 alternate stride hops. 50 hops on each foot & as many squat jumps as possible. Note : Self-explanatory. |
-

APPENDIX "13-A"

RECOMMENDED RANKS FOR FIRE SERVICES

(See para 2 under 13 Ranks Uniforms and Rank Markings)

1. The following ranks shall be adopted for Fire service in the Country :-
 - (a) Fire Force Commander
 - (b) Deputy Fire Force Commander or Chief Divisional Fire Officer
 - (c) Divisional Fire Officer
 - (d) Assistant Divisional Fire Officer
 - (e) Station Officer.
 - (f) Sub-Officer
 - (g) Leading Fireman
 - (h) Driver Operator
 - (i) Fireman (inclusive of selection grade)
2. As regards the ranks of Deputy Fire Force Commander and Chief Divisional Fire Officer it was felt that these two should be considered of equal ranks with the distinction that Deputy Fire Force Commander will assist the State Fire Force Commander at his headquarters while the Chief Divisional Fire Officer would be an Officer stationed in the mofussil exercising control over Divisional Officer.
3. Although the Committee recommended the above ranks for the Fire Service, they felt that it might not be necessary for several small fire services to have officers of some of the intermediary ranks in which case the discretion for filling up these ranks should be left to the authorities concerned.
4. **Fire Force Commander** – Large impeller 1” dia in a semicircular wreath surmounted by two small impellers each $\frac{1}{4}$ “ dia placed in line with the large impeller, made out of white metal worn on both shoulder straps.
5. **Deputy Fire Force Commander or Chief Divisional Fire Officer** :- Large impeller 1” dia in a semicircular wreath surmounted by one small impellers $\frac{3}{4}$ “ dia placed above , made out of white metal worn on both shoulder straps.
6. **Divisional Officer**- Large impeller 1” dia in a semicircular wreath made out of white metal worn on both shoulder straps.
7. **Assistant Divisional Fire Officer** – Three small impellers $\frac{3}{4}$ ” dia made out of white metal placed one above the other worn on both shoulder straps.
8. **Station Officer** – Two small impellers $\frac{3}{4}$ ” in dia placed one above the other, made out of white metal worn on both shoulder straps.
9. **Sub Officer** :- One small impeller $\frac{3}{4}$ “ dia made out of white metal worn on both shoulder straps.
10. **Leading Fireman** - One bar $\frac{1}{2}$ ” wide and 1 $\frac{1}{2}$ ” long with a semi -circular cross-section with flat bottom surface and round surface on the top made out of white metal to be worn $\frac{1}{2}$ ” from the bottom end of both shoulder straps.

11. **Driver Operator** :- 2” dia three spoked steering wheel embroidered in white on blue back ground worn on the right sleeve half way between the shoulder and the elbow.

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APPENDIX “13-B”**REVISED RECOMMENDATIONS FOR RANKS FOR FIRE SERVICES
ACCORDING TO SIZE OF COMMAND**

(See Para 3 under 13- Ranks Uniforms and Rank Markings)

The Committee recommended that ranks be laid down according to the Command and Responsibilities involved as detailed below :-

Sr. No.	Rank	Responsibility or command
1.	Sub-Officer	To be incharge of one pump fire station or to be second –in command to a Station Officer
2.	Station Officer	To be incharge of 2 to 3 pumping units and/or atleast one fire station or equivalent staff/duties .
3.	Assistant Divisional Officer	To be incharge of two to three fire stations or a four to six pumping units or second-in-command to Divisional Officer or equivalent staff duties.
4.	Divisional Officer	To be incharge of two to eight fire stations depending upon the size of the stations or equivalent staff duties.
5.	Regional Officer	To be in command of atleast two divisions or second-in-command to a Fire Force Commander or equivalent staff duties.
6.	Fire Force Commander	To be overall command of the Service when there are two or more regions.

The committee further recommended that the designation of Fire Officers should be based on the posts held by them and not connected with the ranks as stated above . The designations suggested for Government Fire services and Fire Services under Municipal Corporations are detailed below :-

S.No.	Government Fire Service	S.No	Fire Service under Municipal Corp.
1.	Director, Fire Services	1.	Chief Fire Officer
2.	Dy. Director Fire Services	2.	Deputy Chief Fire Officer
3.	Assistant Director of Fire Services	3.	Assistant Chief Fire Officer.
4.	District Fire Officer	4.	District Fire Officer
5.	O/C Fire Station	5.	O/C Fire Station
6.	Deputy O/C Fire Station	6.	Deputy O/C Fire Station

APPENDIX "13-C"**REVISED RECOMMENDATIONS FOR RANKS MARKINGS**

(See Para 4 under 13- Ranks Uniforms and Rank Markings)

Sr.No.	Rank	Badges of Ranks
1.	Sub-Officer	One Small impeller ¾" in dia
2.	Station Officer	Two Small impeller ¾" in dia
3.	Assistant Divisional Officer	Three Small impeller ¾" in dia
4.	Divisional Officer	Large impeller 1" dia in a semi-circular wreath.
5.	Regional Officer	Large impeller 1" in dia in a semi-circular wreath, surmounted by one small impeller ¾" dia
6.	Fire Force Commander	Large impeller 1" dia in a semi-circular wreath, surmounted by two small impellers, each ¾" in dia.

Note :- The badges of ranks recommended for the Regional Fire Officer would be the same as were recommended at the second meeting for the Deputy Fire Force Commander and chief Divisional Officer, those two terms now being replaced by a single rank of Regional Fire Officer.

APPENDIX "13-D"**RECOMMENDED RANK MARKINGS FOR FIRE HELMETS**

(See Para 8 under 13- Ranks Uniforms and Rank Markings)

- (i) Helmets to be used up to the rank of Station Officer should be back and without any marking.
- (ii) The colour of the helmet of the Assistant Divisional Officer and above should be white with the following marks:-

Assistant Divisional Officer	No marking
Divisional Fire Officer	One ½" red band around the helmet touching the peak
Deputy Chief Fire Officer or Deputy Director, State Fire Service or Regional Officer	Two ½" red bands around the helmet, one band touching the peak and the other ¼" above the first band.
Chief Fire Officer	One 1" red band touching the peak with another ½" band ¾" above the first band.
Fire Advisor, Central Govt.	1 ½" red bands around the helmet touching the peak and 1" red band across the top of the helmet from back to front.

It was agreed that differentiation in markings, if any, within each category based on the size of the Fire Service actually being commanded (e.g. by Chief Fire Officers) should be examined further by a Special Sub-committee to be set up by the Chairman.

APPENDIX “13-E”

**LIST OF UNIFORM CLOTHING WHICH SHOULD BE ISSUED TO FIRE
SERVICE PERSONNEL OF VARIOUS RANKS**

(See Para 11 under 13- Ranks Uniforms and Rank Markings)

Rank	Common	Summer	Winter	Remarks
Sub-Officer and above	1. Fire Tunic Khaki (Light/Heavy to be decided by Local Fire Officer)	1. Bush Shirts, Khaki cellular full sleeves	1. tunic, Khaki serge open collar	Light khaki superior summer cloth. Heavy Khaki serge superior.
	2. Trousers Khaki (Light/Heavy to be decided by Local Fire Officer)	2. Tunic, open collar khaki drill superior	2. Heavy woollen coat, khaki	Same as for I to No. 1
	3. Shirts, Khaki Lus Talin full sleeves		3. Cloves, woollen khaki	
	4. Tie, maroon blue			
	5. Peak cap, khaki serge superior with cloth peak and appropriate cap badge or Turban khaki muslim, 7yds. for Sikh Officers with appropriate cap badge			
	6. Socks, woollen.			
	7. Shoes, black with Oxford front toe cap.			
	8. Pair of black leather Wellington knee Boots .			
	9. Fire Helmet black leather.			
	10. Lanyard and Whistle (lanyard to be maroon plated and whistle to be thunder-bolt chrome-plated).			
	11. Belt khaki webbing with pouch and pocket line of 12 ft. white cotton cord.			
	12. Axe fireman with insulated handle			
	13. Buttons large and small white shinning met 1 with markings			
	14. Badges of ranks as applicable as per SFAC recommendation.			
	15. Water-proof coat.			
	16. Epaulettes white metal for Fire Tunics			
	17. Shoulder titles white metal.			

Rank	Common	Summer	Winter	Remarks
All other tanks	1. Fire Tunic Khaki (Light/Heavy to be decided by Local Fire Officer)	1 Shirts, Khaki cellular sleeves full	1. tunic, Khaki woollen closed collar double breasted broad cloth	Light khaki drill superior Heavy Khaki woollen broad cloth.
	2. Trousers Khaki (Light/Heavy to be decided by Local Fire Officer)		2. Jersey woollen Khaki full sleeves with leather elbow protector, two small side pockets & slot of shoulder strap.	
	3. Beret Khaki woollen with badge or Turban khaki muslim 7 yds. for Sikhs, with badge		3. Gloves woollen khaki	
	4. Socks woollen		4. Heavy woollen coat khaki	
	5. Boots ankle leather black (shoes for Driver operators)		5. Blanket woollen.	
	6. Gum boots			
	7. Fire Helmet black leather			
	8. Lanyard maroon with whistle thunder bolt for I/ firemen only.			
	9. Belt khaki webbing with pouch and belt line of 12 ft. white cotton cord.			
	10. Axe Fireman with insulated handle			
	11. Buttons large & small with shining white metals with markings.			
	12. Badges of ranks as applicable as per SFAC recommendation.			
	13. Kit bag /box			
	14. Overalls Khaki drill.			
	15. Vests cotton white			
	16. Shorts Khaki drill			
	17. Shoes Canvas white			
	18. Shoulder titles metal.			
	19. Durries			

APPENDIX “13-F”

DRESS ORDERS FOR VARIOUS OCCASIONS FOR FIRE SERVICE PERSONNEL

(See para 13 under 13 –Ranks, Uniforms and Rank Markings)

The orders of dress for Fire Services to be worn at different occasions as finally approved by the Committee are as follows:-

I ORDER OF DRESS FOR SUB OFFICERS & ABOVE

(a) Ceremonial dress

- (i) Peak Cap navy blue serge superior with cloth peak and appropriate cap badge (Turban for Sikhs) or Fire Helmets riding when riding appliances.
- (ii) Shirts khaki Lus Tlalin Full sleeves.
- (iii) Tie navy blue.
- (iv) Tunic open collar khaki drill superior with cloth belt for summer, or Tunic khaki serge open collar for winter.
- (v) Trouser khaki.
- (vi) Socks navy blue woolen.
- (vii) Shoes navy.
- (viii) Lanyard and whistle.
- (ix) Badges of rank and shoulders titles, and
- (x) Decoration (if any).

(b) Ceremonial dress

- (I) Fire Helmet.
- (II) Fire Tunic khaki with epaulettes according to rank
- (III) Trousers Khaki.
- (IV) Pair of black leather knee boots.
- (V) Lanyard and whistle.
- (VI) Web belt khaki with pouch, pocket line and axe.

(c) Non-operational working dress

- (i) Peak cap navy blue serge superior (Turban for sikhs)
- (ii) Bush shirt khaki cellular full sleeves for summer or Tunic khaki serge open collar for winter.
- (iii) Trouser khaki.
- (iv) Socks navy blue.
- (v) Shoes black.
- (vi) Lanyard and whistle.
- (vii) Badges of rank and shoulder titles.

II. ORDER OF DRESS FOR RANKS BELOW SUB OFFICER.

(a) Ceremonial dress

- (i) Beret navy blue woolen with badge (Turban for Sikhs) or Fire Helmet while riding fire appliance.
- (II) Shirts khaki cellular for summer and tunic khaki woollen closed collar for winter.
- (III) Trouser khaki.
- (IV) Web belt, pouch, pocket line and axe.
- (V) Socks navy blue.
- (VI) Boots Ankle leather black (Shoes for Driver Operators).
- (VII) Lanyard and whistle (for Leading Firemen only).
- (VIII) Badges of rank and shoulder titles.
- (IX) Decorations (if any).

(b) Operational dress.

(For turn out and fire drills).

- (I) Fire Helmet
- (II) Fire Tunic khaki.
- (III) Trouser khaki.
- (IV) Socks navy blue.
- (V) Gum Boots.
- (VI) Web belt, pouch, pocket line and axe.
- (VII) Lanyard and whistle (For Leading Firemen only).

(c) Non Operational working dress.

(For Squad drills and station duties)

- (I) Beret navy blue (Turban for Sikhs).
- (II) Shirt khaki cellular for summer and shirts with jersey woolen for winter.
- (III) Trouser khaki.
- (IV) Socks navy blue.
- (V) Gum Boots.
- (VI) Web belt, pouch, pocket line and axe.
- (VII) Lanyard and whistle (For Leading Firemen only).
- (VIII) Badges of rank and shoulder.

(d) Dress for Physical Training

- (i) Vests cotton white.
- (ii) Shorts khaki drill.
- (iii) Socks.
- (iv) Canvas shoes white.

DRAFT FIRE SERVICE UNIFORM RULES

Fire Service Uniform Rules 19

{See para 13 under 13-Ranks. Uniforms and Rank Markings)

In exercise of the powers conferred by Section-----of State Fire Force Act-----or -----Local Authority Act. the Governor of -----or the Chief of the -----Local Authority, hereby makes the following rules for the supply of Uniform to members of the Fire Service.

1. Short Title:-

These rules may be called the -----State (or Municipal) Fire Services (uniform) Rules 19-----.

2. Definitions:

In those rules, unless the context otherwise requires-

- (a) Government in relation to a member of the Service means the "Government" of the State, where the member is appointed.
- (b) "Service" means the respective Fire Force maintained by the Fire Authority.
- (c) "Fire Authority" means the Government of State, where the Fire Service is under the administration of the Government: or the Municipal Corporation, where the Service is under the administrative control of Municipality or the Corporation

3. Specification of Uniform:

The uniform to be worn by a member of the Service shall be as specified in the schedules to these rules (hereinafter referred to as "the uniform")

Provided that a person who was a member of the Service immediately before the commencement of these rules shall not be required to provide himself with any articles of the uniform, until the corresponding articles of his uniform equipment in use at such commencement is worn out or until he receives his next grant for the upkeep of the uniform, whichever is earlier.

4. Supply of Uniform:

Every member of the service shall on appointment thereto be receive from the Fire Authority a free supply of uniform, as per schedule to these rules, followed by further issues of such of the articles which require replacement annually or otherwise as decided by the Fire Authority on local conditions.

The fire Authority may in lieu of free supply of uniform articles, reimburse equivalent cost of such supply to ranks above station Officers.

5. Permitted Occasion of Wear:

The issue of Fire Services Uniform and foot-wear to members of Fire Services shall be made on the understanding that all articles of uniform are to be worn only while on duty or when going to or returning from duty . Supervisory officers shall bring these orders to the notice of all members of the Fire Services and shall take such action as they deem necessary to ensure that the orders are complied with.

6. Cleaning and Repairs of Uniforms :

Members of the Fire Service are responsible for the clearing and proper up-keep of their individual uniforms. ; The State Government or Local Authority shall make provision for expenditure on alterations, repairs and for clearing materials.

7. Responsibility for Loss or Damage:-

If any loss or damage occurs, which is proved to be due to the negligence on the part of the wearer, appropriate action shall be taken to recover the proportionate cost, taking into account the depreciated value of the article, due to fair wear and tear.

If the Fire Authority is satisfied that all appropriate care and precautions have been taken and decide that the loss was due to circumstances beyond individual control, the cost of uniform shall be written off and another set of uniform or items lost shall be supplied free of charge to the member concerned.

8. Withdrawal of uniform from Members of the Fire Service:

Any member leaving the service on resignation or discharge on disciplinary grounds is required to return his last supply of uniform clothing to the Fire Authority.

9. Deposit of Uniform before Proceeding on Long Leave:

All members of the Fire Service below the rank of Sub Officer shall deposit all articles of uniform to the respective Fire Authority before proceeding on long leave of 30 days or over and the same will have to be shown against the respective clothing card.

10. Personal Equipment Care:

Every members of the Fire Service , shall on appointment be issued with a card showing the items of personal equipment together with their quantity and the date of issue. A form of the card is given in Schedule VIII.

Any article of uniform condemned or written off or re-issued shall be entered in the card under the dated initials of the issuing authority . The card will have to be deposited with the uniform at the time of the return of the uniform as stated under clauses 8 and 9 above.

This card will facilitate quick checking of the articles at the time of monthly inspections and will serve the purpose of a duplicate card.

11. Interpretation:

If any question arises relating to the interpretation of these rules, it may be referred to the government (or Local Authority) For advice.

12 Repeal and Saving:

Any rules corresponding to these rules in force, immediately before the commencement of these rules are hereby repealed:

Provided that any order made or action taken under the rules so repealed shall be deemed to have been made or taken under the corresponding provision of these rules.

SCHEDULE –I

List of Uniform Clothing (For Sub-Officers & Above)

Rank	Common	Summer	Winter	Remarks
1.	2.	3.	4.	5.
Sub Officers and above	1. Fire Tunic Khaki (Light/ Heavy to be decided by local Fire Officer)	1. Bush Shirts Khaki Cellular full sleeves	1.Tunic Khaki serge open collar	Light Khaki superior summer cloth.(gabardine) Heavy-Khaki serge superior.
2.	Trouser Khaki (Light/ Heavy to be decided by local Fire Officer)	Tunic open collar khaki drill superior	2.Heavy woolen coat khaki.	Same as for item No.1
3.	Shirts Khaki Lus Tallinn full sleeves.	-	3.Gloves woolen khaki.	
4.	Tie Maroon.			
5.	Peak cap khaki serge superior cloth peak and appropriate cap badge, or Turban khaki Muslim 7 yds. with 1½ yds maroon under turban for Sikh Officers with appropriate cap badge.			
6.	Socks khaki woolen.			
7.	Jodhpur boots brown with plan front toe.			
8.	Pair of black leather Wellington knee boots.			
9.	Fire Helmet black leather.			
10.	Lanyard and whistle (Lanyard to be maroon plated and whistle to be (thunder-bolt) type chrome plated)			
11.	Belt khaki webbing with pouch and pocket line of 12 ft. white cotton cord.			
12.	Axe Fireman with insulated handle.			
13.	Buttons large and shamm white shining metal with markings.			
14.	Badges of ranks			
15.	Water-proof coat.			
16.	Epauettes white metal for Fire units.			
17.	shoulder titles white metal.			

SCHEDULE –II

List of Uniform Clothing (For other ranks below sub officers)

Rank	Common	Summer	Winter	Remarks
1.	2.	3.	4.	5.
All other ranks	1. Fire Tunic Khaki (Light/ Heavy to be decided by local Fire Officer)	1.Shirts Khaki Cellular full sleeves	1.Tunic Khaki woolen closed breasted collar double broad cloth.	Light Khaki superior. Heavy-Khaki woolen blazer broad cloth.
2.	Trouser Khaki (Light/ Heavy to be decided by local Fire Officer)	-	Jersey woolen khaki full sleeves with leather elbow protector, two small side pockets & slots for shoulder straps	Same as for item No.1
3.	Beret khaki woolen with badge, Or Turban khaki Muslim 7 yds with 1½ yds. khaki under turban for Sikhs, with badge.	-	3. Gloves woolen khaki.	
4.	Socks khaki woolen			
5.	Jodhpur Boots ankle leather black		Heavy woolen coat khaki.	
6.	Gum Boots black or ammunition boots black (additional pair of jodhpur boots black in place of this if preferred by local Fire Officer)		Blanket Woolen.	
7.	Lanyard maroon plated with whistle thunder bolt type for Leading Fireman only.			
8.	Fire Helmet black leather.			
9.	Belt khaki webbing with pouch and belt line of 12 ft. white cotton cord.			
10	Axe Fireman with insulated handle.			
11.	Button large & small with shining white metals with markings.			
12.	Badges of ranks			
13.	Kit bag/ box.			
14.	Overalls khaki drill.			
15.	Vests Cotton white.			
16.	Shots khaki drill.			
17.	Shoes Canvas brown.			
18.	Shoulder Titles White Metal			
19.	Durrie.			

Shoulder Markings for Various Ranks

1. **Fire Force Commander or Director Chief Fire Officer**- Large impeller 1 dia . in a semicircular wreath surmounted by two small impellers each $\frac{3}{4}$ dia. placed in line with the large impellers made out of white metal worn on both shoulders straps. Woolen Macron Band on peak cap and Maroon Georgette patches.(for Sikh Officers:- Tape maroon round the turban.)
2. **Deputy Fire Force Commander or/Regional Fire Officer or Deputy Director or Deputy Chief Fire Officer** – Large impeller 1 “ dia. in a semi-circular wreath surmounted by one small impeller $\frac{3}{4}$ “ dia. placed above made of white metal worn on both shoulder straps.
3. **Divisional Officer** : Large impeller 1” in dia in a semi-circular wreath made out of white metal worn on both shoulder straps.
4. **Assistant Divisional Fire Officer** : Three small impellers $\frac{3}{4}$ “ in dia made out of white metal placed one above the other worn on both shoulder straps.
5. **Station Officer** : Two small impeller $\frac{3}{4}$ “ placed one above the other, made out of white metal worn on both shoulder straps.
6. **Sub Officer** : One small impeller $\frac{3}{4}$ “ in dia made out of white metal worn on both shoulder straps.
7. **Leading Fireman** :- One bar $\frac{1}{2}$ ” wide and $1\frac{1}{2}$ ” long with a semi-circular cross-section with flat bottom surface and round surface on the top made out of white metal to be worn $\frac{1}{2}$ ” from the bottom end of both shoulder straps.
8. **Driver Operator** :- 2” dia three steering wheel metal on the right sleeve half way between the shoulder and the elbow.

SCHEDULE IV
Specifications for Officers Uniform Clothing

(A) COMMON ITEMS

(1) Fire Tunic

(2) **Trouser** : Wasted band to be 3 broad with two adjustable straps with buckles in front and 3 loops (one at the rear and one each on either side for passing Belt through). Two side pockets along the outer seam (one on each side) Bottom end to measure 18" to 19" in circumference.

(3) **Shirt**- To be provided with attached collar (for wearing tie) with 4 buttons along the front pleat. Two breast 6" deep and 5 ½ " wide with a pleat in the center fastened at the top with a small button to the flap which should be provided with a small button hole. Flap to be 2 ½ " deep and 5 ½ " wide . Full length sleeves with single cuff 2 ½ " wide and secured with a button.

(4) **Tie Maroon**- Total length of tie to be 44 " The broclet part of front end to measure 3 ½ " Woolen lining to be provided inside the tie its entire width from end to end.

(5) **Peak Cap**- Total depth 4 ½ " Diameter across the top to be 10 " for a cap of 22" circumference . This diameter to be increased or reduced by ½" for every ¼" increase or reduction in the circumference of the peak cap; sided to be made in 4 pieces and to be 2 ½ " between the wealth. Cap badge to be worn in front in the center of the band. The cap to be set upon a band of stiff leather or other material 1 ¼ deep and covered by khaki band and round. Chin strap of brown leather ¾" wide buttoned on to two Georgette of the Fire Service pattern placed immediately behind the peak.

(6) **Socks woollen**- Of army type or similar.

(7) **Jodhpur Boots**- Plain brown polished willow-calf leather with plain front toe with 2 pairs of eyelets with rings from underneath.

(8) **Wellington Knee –boots**- Plain black polished willow-calf chrome leather double uppers and with water-proof thick butt soles and heels with leggings rising up to about 3 " below the knee-cap having leather loops for pull.

(9) Fire Helmets.

(10) **Lanyard**- Maroon. Total Length 38" when opened up. of which 20" shall be flat plaited and made up to a loop to go round the shoulder . The remaining 18" to be round plaited with white metal snap hook at the free end to secure the -----

(11) **Web Belt** – Heavy quality web belt 2 ½" broad and 46" in length adjustable to any size, with white metal fitting and buckles and pouch for holding axe.

(12) **Axe Fireman**- As per Indian Standards Specification No BDC 22(221).

(13) **Buttons**- To be convex die-struck and embossed with 8 pointed star and State emblem with the words of "The Fire Service" in the ring Buttons large to be one inch in diameter and small buttons to be 11/16" in diameter.

(14) **Badges of Rank**- Details given in Schedule (VII).

(15) **Water – Proof coat**- Of Army type or similar.

(16) Epaulettes.

(17) **Shoulder titles**-Total length to be 4 centimeters and height 1.3 centimeters with the letters of the Fire Service 1.3 centimeters high and equally spaced with dots in between.

(18) **Badges for Peak Cap**- Eight pointed star surmounted by laurel wreaths pointed upwards the top point of the star being supported by the State Emblem the center circle of the star should bear the initial of the Fire Service. The badge should have a height of 2 ½" and width 2 ½" It should be embroidered with silver thread on the back ground of Maroon woollen superior cloth.

i. Cap badge and with woollen maroon band and maroon georgette patches on collars for the Director Fire Service, or Chief Fire Officer and Fire Force Commander.

ii. Same as above, but without woollen maroon band and maroon georgette patches on collars for all officers from Deputy Fire Force Commander, Deputy Chief Fire Officer, Deputy Director to sub Officers.

(B) SUMMER WEAR

1) **Bush Shirt** - With 4 pockets (similar to open collar tunic full lengths with single cuff sleeves with buttons stitched to the cuff. Button holes to be provided to secure 4 large Fire Service buttons down the front and 6 small Fire Service buttons - four for the pockets and two for shoulder straps. cloth belt 2" wide of the same material as the bush shirt with white metal two pronged buckle to be provided.

2) **Upon Collar Tunic** – Single breasted, cut as lounge coat to the waist, very loose at the chest and shoulders but close fitting at the waist, military type skirt to bottom edge. Length as in ordinary civilian lounge coat, i.e. covering the seat. Collar to be cut as in an ordinary civilian lounge coat. Two cross-patch breast pockets above, 5 1/2" wide and 6" deep to the top of the flap, with a 1 1/2" box pleat in the centre fastened at the top with a small Fire Service button in the centre; flap with button hole in the centre and two press buttons at the edges to cover pockets 2 1/4" deep and 5 1/2" wide. Two expanding pockets below the waist (pleats at the side) 7" wide at the top 9" at the bottom, 8 1/2" deep to the top of the pocket, fastened at the top with a small Fire Service button : flap with button hole to cover pockets 3 1/2" deep and 7" wide, the top of the pocket to be tacked down at the corner in such a manner that the pocket shall be expanded at the top also if necessary. Four large size fire Service buttons down the front. ; The buttons should be so fixed that the bottom most button covers the navel and top most button is fixed one-third distance between the navels and position of the tie knot. ;Pointed cuffs 5" high at the point and 2 1/2" behind. Shoulder strap to be stitched on either side at the outer end and to be provided with button holes on the inner ends for securing to the tunic with a small Fire Service button. Cloth belt 2" wide of the same material as the tunic with white metal two pronged buckle to be provided.

(C) WINTER WEAR :

- (1) Open Collar Tunic – Same specification as item 2 in summer wear.
- (2) Overcoat – Of Army type or similar.
- (3) Gloves – Of Army type or similar.

SCHEDULE V

Specification for Uniform of other Ranks

(A) COMMON ITEMS :

- (1) **Fire Tunic.**
- (2) **Trousers** – Same specifications as for items 2 under Common item for officers.
- (3) **Beret** – Two pieces beret, the crown to be 10” in diameter for a berets of 22” circumference. Diameter of the crown to be increased or reduced by 1/8” for an increase or reduction of 1/4” in the circumference of the head. The side piece or the level to be 2 ½ wide in front and the rear and 2” wide at the sides, to be provided with two eye lets at the rear. The base of the level (side peace) to be provided with a head band of good quality brown leather through which should pass the ribbon (Chord used for adjusting the size.)
- (4) **Socks, Woollen** – Of Army type or similar.
- (5) **Boots Ankle Jodhpur Type** – Black chrome leather boots with thick leather soles and uppers high enough to cover the ankles with plain front toe with tow pairs of eyelet having rings from underneath.
- (6) **Gum Boots** - Black canvas rubber with water proof thick soles and heels with leggings rising up to about 3” below the knee-cap.
- (7) **Fire Helmets** – Same as for item 9 under Common items for office.
- (8) **Lanyard**- Same as for officers lanyard- item 10
- (9) **Web Belt** – Same as for officers Web Belt – item 11.
- (10) **Axe Fireman** – As per Indian Standard specification No. BDC 22 (221)
- (11) **Buttons** – Same as for officers’ buttons – items 13.
- (12) **Badges of Rank** – As laid down by standing fire Advisory committee.
- (13) **Kit Bag or Box** – No specifications considered necessary.
- (14) **Overalls** – A combined trouser and shirt in single piece with adjustable belt at the waist. Open in front upto the groin with buttons 4” apart. Two breast pockets 6” X 5” with flaps, attached collar and full sleeves.
- (15) **Vests** – White ‘V’ or round neck heavy quality with half sleeves.
- (16) **Shorts** – Khaki Drill – Waist band 3” wide and provided with two adjustable straps with buckle in front one side pocket on either side along the same.
- (17) **Shoes Canvas** – Brown Canvas shoes without heels.
- (18) **Shoulder Titles** – Same as for officers – item 17.
- (19) **Durries** – Dark Blue cotton heavy quality durries 7 ‘ 6’ long, 3’ – 3’ wide and weighing not less than 3 Lab each.

(B) SUMMER WEAR

1. **Shirts, Khaki** – Same specification as for Officers shirt, item No.3 expect for the following difference..
Shoulder strap shall be attached to the shirts with a button hole at the inner end to be secured to the shirt with small Fire Service Button. Holes to be provided along the front pleat for three small Fire Service Buttons and on the breast pockets and flaps for one small Fire Service Button on each side. The top of the flap of the Brest pocket to be 1” above the level of the middle button on the front pleat.

(C) WINTER WEAR

- Tunic** – Same specifications as for tunic open collar for officers item 1 of Winter Clothing.
- Jerseys** – Same specifications as furnished in the list of Uniform Clothing.
- Gloves Woollen** – Of Army type or similar.
- Overcoat Heavy Woolen** – Of army type or similar.
- Blanket** – Heavy all wool blanket black or dark gray colour 7’ long 5’ – 3” wide and weighing not less than 4 ½ lbs each.

SCHEDULE –VI

VI. ORDER OF DRES FOR SUB OFFICERS & ABOVE

Ceremonial Dress ;

1. Peak Cap with appropriate cap badge (Turban for sikhs) or Fire Helmets when riding for appliances.
2. Shirts Khaki Lus Talin Full Sleeves.
3. Tie.
3. Tunic open collar for summer, or for winter (as the case may be).
4. Trouser Khaki.
5. Socks.
6. Jodhpur Boots Brown.
7. Lanyard and whistle.
8. Badges of rank and shoulder titles, and
9. Decorations (if any).

These shall be worn on all State ceremonies (e.g. public arrivals and departures of the President. Vice President, Prime Minister, or the Governors or presentation of Guards of Honour on such occasions), at ceremonial parades or whenever full dress is ordered.

(B)Operational Dress

(for turn out and fire drills).

1. Fire Helmet.
2. Fire Tunic Khaki with opauletts according to rank.
3. Trousers Khaki.
4. Pair of black leather knee boots
5. Lanyard and whistle.
6. Web Belt Khaki with pouch, pocket line and axe.
7. Badges of rank and shoulder tiles.

(C) Non-operational working dress.

(II) HEAD DRESS

As an alternative to the peak cap, as mentioned under Schedule (I), Officers may wear pagri of khaki silk or muslin. Officers of the rank Director, Chief Fire Officer or Fire Force Commander will wear woolen maroon band around the peak cap and maroon georgette patches on collar with appropriate badges of rank.

SCHEDULE VII

1. ORDER OF DRESS FOR RANKS BELOW SUB OFFICER

(A) Ceremonial Dress

1. Beret khaki woolen with badge (Turban for Sikhs) or Fire Helmets while riding fire appliances.
2. Shirt khaki cellular for summer and tunic khaki woolen closed collar for winter
3. Trouser, khaki
4. Web belt, pouch, pocket line and axe.
5. Socks.
6. Jodhpur Boots ankle leather black
7. Lanyard and/Whistle(For Leading Fireman only)
8. Badges of rank and shoulder titles.
9. Decorations (if any)

These shall be worn on all State ceremonies (e.g. public arrivals and departures of the President, Vice President or Prime Minister or the Governors or presentation of Guards of Honours on such occasions) at ceremonial parades or whenever full dress is ordered.

(B) Operational Dress

(for turn out and fire drill)

1. Fire Helmet.
2. Fire Tunic Khaki
3. Trouser Khaki
4. Socks
5. Gum boots.
6. Web belt, pouch, pocket line and axe.
7. Lanyard and whistle (for leading firemen only)

(C) Non-operational working dress

(for Sound Drills & Station Duties)

1. Beret Khaki (Turban for Sikhs)
2. Shirt Khaki cellular for summer and shirt with jersey woolen for winter.
3. Trouser Khaki.
4. Web-belt, pouch pocket line and axe
5. Socks
6. Jodhpur Boots Ankle leather black.
7. Lanyard and whistle (for leading fireman only)
8. Badges of rank and shoulder titles.

(D) Dress for Physical Training

1. Vests cotton white.
2. Shorts khaki drill
3. Socks
4. Canvas shoes brown.

SCHEDULE VIII
Personal Equipment Care

Name of person _____

Rank _____

Name of Fire Service _____

Address _____

Sl. No.	Item	Quantity	Date of issue	Remarks	Ref. of Issue Register	Signature of issuing authority
1	2	3	4	5	6	7
1						
2						
3						
4						
5						
6						
7						

REVERSE

Sl. No.	Item	Quantity	Date of return	Ref. of cloth Register	Reasons for return	Signature of the receiving authority
1	2	3	4	5	6	7
1						
2						
3						
4						
5						
6						
7						

STATUTES FOR AWARDS OF FIRE SERVICE MEDALS

To be published in Part I, Section I of the Gazette of India dated Saturday the 31st May, 1975.

STATUTES AND RULES RELATING TO THE PRESIDENTS FIRE SERVICES MEDAL AND THE FIRE SERVICES MEDAL

(See para 4, under 14 AWARDS)

Presidents Secretariat

NOTIFICATION

New Delhi, the 19th May, 1975

No.40-Pres/75. The President is pleased to institute the following awards to be conferred on the member of Fire Services organised and administered by the Central Ministers or Departments. State Governments. Union Territory Administrations, Municipal and other autonomous bodies and public sector undertakings, in consideration of distinguished or meritorious service or gallantry and outstanding devotion to duty, to be designated “*प्रेसिडेंट्स फायर सर्विसेज मेडल*” President’s Fire Services Medal” and “*फायर सर्विसेज मेडल*” Fire Services Medal” respectively and to make ordain and establish the following statutes governing them, which shall be deemed to have effect from the 19th May, 1975.

प्रेसिडेंट्स फायर सर्विसेज मेडल
PRESIDENTS FIRE SERVICES MEDAL

Firstly - The award shall be in the form of a model styled and designated as *प्रेसिडेंट्स फायर सर्विसेज मेडल* “PRESIDENTS FIRE SERVICES MEDAL” (hereinafter referred to as the Medal).

Secondly-The medal shall be circular in shape, made of silver with gold gift, thirty five millimeters in diameter and fitted to a ring and shall have embossed on the obverse the State Emblem with its motto *सत्यमेव जयते* in the centre and words “*प्रेसिडेंट्स फायर सर्विसेज मेडल*” President’s Fire Services Medal” , on either side along the edge of the medal separated by two five-pointed heraldic President’s Fire Service medal. President’s Fire Gallantry Medal. For Distinguished Service stars. On the reverse, it shall have embossed the Ashoka Chakra in the centre and the words “ *सर्विसेज मेडल* For GALLANTRY” or “*सर्विसेज मेडल* For DISTINGUISHED SERVICE” along the tower edge and a wreath joined by a plain class at the top along the upper edge. On the rim the name of the person to whom the medal is awarded, shall be inner bed. A medal of pattern of the medal shall be deposited and kept.

Thirdly –The medal shall be worn suspended from the left breast and the riband of thirty two millimeters in width shall, in the case of distinguished service, be half maroon and half Golden yellow. In the case of awards for acts of exceptional courage and gallantry, it will be half maroon and half golden yellow, the two colours being separated by a vertical navy blue line 3 mm in width.

Fourthly –The medal shall only be awarded to those who have either performed acts of exceptional courage and skill or exhibited conspicuous devotion to duty as members of Fire Services organised and administered by the Central Ministries or Departments. State Governments, Union Territory Administrations, Municipal or other autonomous bodies, and public sector undertakings.

such additional act an additional Bar may be added and for each Bar awarded a small silver rose with gold gilt shall be added to the riband when worn alone.

Seventhly –It shall be competent for the President to cancel and annual the award of the Decoration. and there upon the name of the person concerned shall be erased from the Register. It shall, however be competent for the President to restore any Decoration which may have been so forfeited. Every person ton whom the said Decoration is a warded shall, before receiving the same, enter into an agreement to return the medal if his name is erased as aforesaid. Notice of cancellation or restoration in every case shall be published in the Gazette of India.

Eighthly –It shall be competent for the President in make rules to carry out the purposes of these statutes.

Sd/-
(K. BALACHANDRAN)
Secretary to the President

To be published in Part-I of the Gazette of India dated Saturday the 31st May, 1975

President's Secretariat
New Delhi, the 19th May, 1975

NOTIFICATION

No. 41 Pres/75. In accordance with the Statute 'eighthly' if the Statutes relating to the award of the “**É¹JÄÖÇÊËÉ ÈÖÉ +ÏMËÉÉÉ ÉÉÉ ÉÉÉ ÉÉÉ ÉÉÉ (ÉÉÉÉÉ)** President's Fire Services Medal” . and the “**+ÏMËÉÉÉ ÉÉÉ ÉÉÉ ÉÉÉ (ÉÉÉÉÉ)** Fire Service Medal” the following rules governing them are notified :-

É¹JÄÖÇÊËÉ ÈÖÉ +ÏMËÉÉÉ ÉÉÉ ÉÉÉ ÉÉÉ (ÉÉÉÉÉ) PRESIDENT'S FIRE SERVICE MEDAL

- (1) Recommendations for awards for conspicuous gallantry shall be made as soon as possible after the occasion on which the conspicuous gallantry was shown.
- (2) All recommendations shall state the name and rank of the person recommended, the name of the FIRE SERVICE OF Which he is, or was a member and details of the act of gallantry or service for which the grant of the medal is recommended.
- (3) The medal shall be awarded :-
 - (i) For conspicuous gallantry in saving life and property, the risk incurred being estimated with due regard to the obligations and duties of the officer concerned.
 - (ii) For distinguished record of service, such as organising and maintaining fire services under special difficulties and handling various or wide spread outbreaks of fires.
- (4) The number of medals awarded for distinguished service in any one year shall not exceed 25. There will however, he no limit on the number of medals, to be awarded for gallantry in any one year.
- (5) When awarded for gallantry, the medal shall carry a monetary allowance at the rates and subject to the conditions set forth below. The charges thereof shall be borne by the revenues of the Central Ministries/States/Union Territories concerned in respect of recipients belonging to the Central Ministries/ States/ Union Territories and by the respective organisations in respect of personnel belonging to their Fire Services.

- (a) All the recipients of this gallantry award shall be entitled to the monetary allowance on a uniform rate irrespective of their ranks. The rates of monetary allowance for the Medal shall be Rupees Sixty per mensem and for the Bar to the Medal shall be Rupees thirty per mensem.
- (b) Where an officer who has already been awarded either the King's Police and Fire Services Medal/ President's Police and Fire Services Medal/President's Fire Services Medal, or that Medal and a Bar or Bars thereto for gallantry, is subsequently awarded the President's Fire Services Medal for a further act of gallantry, he shall be paid a monetary allowance attached to the Bar to the Medal in addition to the Original allowance and not the full allowance attached to the Medal for gallantry. If subsequently awarded the President's Fire Service Medal for a further act of gallantry he shall be paid the full allowance attached to the Medal in addition to the original allowances.
- (c) The allowance shall be granted from the date of the act for which the award is given and unless it is forfeited for misconduct shall continue until death.
- (d) Where a recipient is in receipt of the allowance at the time of his death, it shall be continued for life or his re-marriage of his widow (the first married wife having the preference.) In the case of a posthumous award of the Medal or a Bar the allowance shall be paid from the date of the act for which the award is made, to the widow (the first married wife having preference) for her life or till re-marriage.
- (6) The Medal is liable to be forfeited if subsequently the holder is guilty of disloyalty, cowardice in action or such conduct as in the opinion of the President brings the Service into disrepute.
- (7) Recommendations for the announcement of awards for distinguished service on the 26th January (Republic Day) and the 15th August (Independence Day) should be forwarded so as to reach the Secretary to the Government of India, Ministry of Home Affairs not later than the 26th October and the 15th May respectively each year.

+IMXÉRE ÉXÉ OÉÄ´ÉE (ÉMÜÈÒ)
FIRE SERVICE MEDAL

- (1) Recommendations for awards for gallantry shall be made as soon as possible after the occasion on which the gallantry is shown.
- (2) Each recommendation shall state the name and rank of the person recommended, the Fire Service of which he is or was a member and details of the act or service for which grant of the Medal is recommended.
- (3) The Medal shall be awarded :-
 (i) For gallantry ;
 (ii) For services characterized by resource and devotion to duty including prolonged service of ability and merit.
- (4) The number of Medals awarded for meritorious service in any one year (excluding Bars) shall not exceed 100. There will be no limit on the Medals to be awarded for gallantry in any one year.)
- (5) (a) When awarded for gallantry, the Medal shall, subject to the conditions set forth for the President's Fire Services Medal for gallantry carry a monetary allowance on a uniform rate of Rupees forty per menses and the Bar Rupees twenty per menses irrespective of the rank of the recipients. The charge thereof shall be borne by the revenues of the Central Ministers/ States/Union Territories concerned in respect of recipients belonging to the Central

Ministries/States /Union Territories and by the respective organizations in respect of personnel belonging to their Fire Services.

(b) Where an Officer who has already been awarded either the Indian Police Medal / Fire Service Medal or that Medal and a Bar or Bars thereto for gallantry, is subsequently awarded the Fire Services Medal for a further act of gallantry, he shall be paid the monetary allowance attached to the Bar to the latter Medal in addition to the original allowance and not the full allowance attached to the Medal itself. Where an officer who has already been awarded the King's Police and Fire Service Medal for gallantry, is subsequently awarded the Fire Service Medal for a further act of gallantry, he shall be paid the full allowance attached to the latter Medal in addition to the original allowance.

(6) The award of the Medal will not be a bar to the subsequent award of the
“‘É’JÄÖ(ÉÉÉÉ ÉÖÉ +ÏMXÉ QÉ” ÉXÉ QÉÄ´ ÉÉ (ÉMÜÉÖ) PRESIDENT FIRE SERVICES MEDAL”

(7) The Medal is liable to be forfeited if subsequently the holder is found guilty of disloyalty cowardice in action or such conduct as in the opinion of the President brings the service into disrepute.

(8) Recommendations for awards for meritorious service on the 26th January (Republic Day) and the 15th August (Independence Day) should be forwarded so as to reach the Secretary to the Government of India, Ministry of Home Affairs not later than the 26th October and 15th May respectively each year.

Sd/-
(K. BALACHANDRAN)
Secretary to the President

To be published in Part-I of the Gazette of India dated Saturday the 31st May, 1975

President's Secretariat
New Delhi, the 19th May, 1975

NOTIFICATION

No.42-Pres /75 – The President is pleased to direct that the following amendments shall be made in the Preamble and the statutes governing the award of the president's Police and Fire Service Medal and the Police Medal Published in Part I, of the Section I of the Gazette of India of the 10th March, 1951, under Notification No. 3-Press/51. dated the 1st March, 1951 as amended from time to time :-

- (1) The name of the “President's Police and Fire Services Medal wherever occurring the Preamble and the Statutes will be read as “President's Police Medals”.

President's Police Medal

- (2) The words “and organized Fire Services” occurring in the Statute Thirdly be deleted.

Police Medal

- (3) The words “or of an organized Fire Service” occurring in the statute Thirdly be deleted

Sd/-
(K. BALACHANDRAN)
Secretary to the President

Deputy Secretary to the President

**To be published in Part-I. Section 1 of the Gazette of India dated Saturday the 13th
October, 1984**

President's Secretariat
New Delhi, the 26-9-1984

NOTIFICATION

No. 103-Pres/ 84 –The President is pleased to direct that the following amendments shall be made in the rules governing the award of the President's Fire Service Medal and the Fire Service Medal published in Part I, Section 1 of the Gazette of India, dated the 31st May, 1975 under Notification No.41-Pres/75, dt. the 19.5.75 as amends from time to time :-

President's Fire Services Medal for Gallantry

For the existing sub-rule (a) of Rule (5) substitute the following :-

“All the recipients of this Gallantry Award shall be entitled to the monetary allowance on the uniform rate, irrespective of their rank. The rates of monetary allowance of the Medal shall be Rs. 90/- per mensem and for the Bar to the Medal it shall be Rs. 60/- per mensem.”

Fire Service Medal for Gallantry

For the existing sub-rule (5) (a), substitute the following :-

“When awarded for gallantry, the Medal shall subject to the conditions set forth for the President's Fire Services Medal for Gallantry to carry a monetary allowance on a uniform rate of Rs. 60/- per men sum and the Bar to the Medal Rs. 30/- per mensem irrespective of the rank of recipient. The charges thereof shall be borne by the revenues of the Central Ministries /States/ Union Territories concerned in respect of recipients belonging to the Central Ministries /States/ Union Territories, and by the respective organizations in respect of personnel belonging to their Fire Services.”

The revised rates of the monetary allowances will be effective from 26th September, 1982, the date of issue of the President's Secretariat Notification granting the revised rates in respect of the Police Medals.

Sd/-
(S. NILAKANTAN)
Deputy Secretary to the President

**To be published in Part-I. Section 1 of the Gazette of India
dated Saturday the 5th March 1988**

President's Secretariat
New Delhi, the 26-9-1984

NOTIFICATION

No. 15-Pres/ 88 –The President is pleased to direct that with immediate effect, the following amendments shall be made in the rules governing the award of the President's Fire Service Medal and the Fire Service Medal published in Part I, Section 1 of the Gazette of India, dated the 31st May, 1975 under Notification No.41-Pres/75, dt. the 19th May, 1975 and amended from time to time :-

President's Fire Services Medal for Gallantry

For the existing sub-rule (a) of Rule (5) substitute the following :-

“All the recipients of this Gallantry Award shall be entitled to the monetary allowance on the uniform rate, irrespective of their rank. The rates of monetary allowance of the Medal as also for the Bar to the Medal shall be Rs. 100/- per mensem.”

Fire Service Medal for Gallantry

For the existing sub-rule (5) (a), substitute the following :-

“When awarded for gallantry, the Medal as also the Bar to the Medal shall ,subject to the conditions set forth for the President's Fire Services Medal for Gallantry to carry a monetary allowance on a uniform rate of Rs. 60/- per men sum irrespective of the rank of recipient. The charges thereof shall be borne by the revenues of the Central Ministries /States/ Union Territories, and by the respective organizations in respect of personnel belonging to their Fire Services.”

Sd/-
(S. NILAKANTAN)
Director

**PROFORMA FOR RECOMMENDING AWARD OF FIRE SERVICE MEDALS
No.VI-1102/Policy/93-DGCD(P&C)**

(See Para 4 Under Awards)

**GOVERNMENT OF INDIA
MINISTRY OF HOME AFFIARS
DGCD (P&C) UNIT**

Dated: New Delhi, the 13th March,1995

To

- (i) The Chief Secretary/ Home Secretary of all States/UTs as per list.
- (ii) All Ministries/Departments of Govt. of India as per list.

Sub :- Co-ordination-Awards & Medals- Home Guards, Civil Defence & Fire Service Medals- Revision of formats for the recommendation of various types of Medals – Request for forwarding of recommendations in the revised formats.

Sir,

I am directed to invite your attention on the subject noted above and to say that this Ministry co-ordinates the award of various types of Presidential Medals now in vogue in Civil Defence, Home Guards and Fire Service Organisations. The Presidential Medals are broadly classified in two major groups, viz. Gallantry Medals which includes President's Gallantry Medal and Gallantry Medal and Service Medals including President's Distinguished Service Medal and Meritorious Service Medals.

2. Gallantry Medals are awarded to a candidate for an act of valour/ gallantry in any particular incident and depending upon the degrees of gallantry involved. President's Gallantry or Ordinary Gallantry Medals are considered. In contract, Service Medals are considered for award for unblemished long service marked with devotion and dedication which invites special merits or is of distinguished nature. In view of this, the prerequisites of informations for selection of suitable candidates naturally varies for the above broad two types of medals. In view of this, the Ministry recently reviewed the formats for recommendations for the above two types of medals, which are enclosed herewith as per following details :-

- (i) Appendix A : Revised formats for President's Gallantry/Gallantry Medals
- (ii) Appendix B : Revised formats for President's Distinguished Service/ Meritorious Service Medals.

Depending upon the broad types/ categories of medals, both the "CD" & HG and Fire Service Organisations can use the above two formats while recommending the cases for the award of medals.

3. In addition to above, General Informations about the various types of Medals and General Instructions for filling up the forms have also been enclosed in Appendix C, which may please be carefully studied before initiating and forwarding any recommendations to this Ministry for considerations.

4. It may be evident from the Information-cum-Instruction Sheet at Appendix C that there is no time limit or fixed date for recommending the cases of Gallantry Medals which as per accepted norms must reach this Ministry with the recommendations of the State Govt./UT Admns, or administrative controlling deptt./ Ministries of Govt. of India within one year of such act of gallantry to avoid technical rejections. But the Service Medals are awarded twice in a year on the occasion of Republic Day (26th January) and Independence Day (15th August) every year. For such Service Group of Medals (Distinguished Service of Meritorious Service) the statute for medals stipulates strict time frame for the receipt of recommendations of medals as 15th May for Independence Day and 26th October for Republic Day every year , to avoid technical rejections.

5. In view of the above, you are requested to kindly initiate immediate necessary action to ensure timely forwarding the recommendations for the Service Medals for the forthcoming Independence Day, 1995 so as to be received *latest by 15th May, 1995 in the suggested prescribed proforma, vide Appendix B to avoid technical rejections.* In future, you may like to follow the aforesaid time frame at your own level without waiting for the reminder from the Ministry, since the process is of on-going type in nature. As in the past, the recommendations may be addressed to secretary to the Govt. of India, Ministry of Home Affairs, New Delhi, with a cover addressed to *Senior Staff Officer (P&C), DGCD Unit, Ministry of Home Affairs, Express Buildings, 2nd Floor, 9 & 10, Bahadur Shah Zaffar Marg, New Delhi-110002.*

6. It is requested that the copies of this letter may kindly be circulated to all concerned with the copies of enclosures in the forms of Appendices A,B & C with the advice to keep them as model copy in the guard file for future use.

Yours faithfully,

Sd/-

Encls :- Appendices A,B & C
as in paras 2 & 3 above.

(Smt. UMA GOEL)
Deputy Secretary to the Govt. of India

No. VI-11021/Policy/93-DGCD(P&C) dated, New Delhi, the 13th March,1995.

Copy forwarded for information and necessary action to :-

- | | | |
|---|---|--|
| <p>(i) The Director of Civil Defence, Govt. of -----of All States/UTs as per list.</p> <p>(ii) The Commandant General of Home Guards, Govt. of -----of All States/UTs as per list.</p> <p>(iii) The Director/Head/Chief of Fire Service Govt. of -----of All States/UTs as per list.</p> <p>(iv) Head/Chief/In-charge of Fire Service, Civil Defence of all Public Sector Vital Plants/ Installations as per standard list.</p> | } | <p>With the request to kindly follow the instructions contained in Appendix C while forwarding the recommendations of various types of medals and also to strictly adhere to the time frame stipulated for Gallantry & Service Medals.</p> <p>Action must to initiated for the forwarding of recommendation for Distinguished and Meritorious Service.</p> |
|---|---|--|

Medals for the forthcoming Independence Day (15th August), 1995 immediately in the revised proforma suggested in Appendix B so as to be received by the Ministry strictly within the stipulated time frame , i.e. in or before 15th May, 1995, to avoid technical rejections. In future, they may like to initiate action in time at their own level without waiting for the reminder of the Ministry , since this is an on-going process.

Sd/-
(Smt. UMA GOEL)

Deputy Secretary to the Government of India

APPENDIX –A (GALLANTRY)

Revised Proforma for the Recommendations for the award of President’s Gallantry Medal/Gallantry Medal for the Volunteers and Paid Personnels of Home Guards, Civil Defence and Fire Service Organisations

(Please study the enclosed Instruction Sheet at Appendix-C before filling up the form)

A. DATE OF INCIDENT-----		DATE OF RECEIPT BY MHA:----- (TO BE FILLED BY M.H.A.)						
1.	Name of the State/UT/Ministry/ Deptt. of Govt. of India recommending the case with full address.							
2.	Specific name of the medal recommended in the present case clarifying whether it is the first recommendation for a particular type of medal or for Bar to the first medal already awarded.							
3.	Name and designation of the recommended candidate/ Recommendee							
	(i) Name and designation in full in English in Capital letters only.							
	(ii) Name and designation in English in standard abbreviated form in Capital letters only.							
	(iii) Name and designation in Hindi (for Hindi Notification in case of selection for the award.)							
4.	Present mailing residential address of the Recommendee/Next of kin (in case of posthumous award) complete with Pin Code and Name of Telegraph Office (for issue of congratulatory telegrams in case of selection). In case of deceased candidate, the name of Next of kin must be mentioned.		----- ----- ----- ----- PIN CODE ----- Telegraph Office Name : -----					
5.	Other details of the Recommendee		Status in Service -----		Caste (Pl. tick Mark)		Sex	
	On the date of recommendation-----in CD/HG/FS/Orgn.							
	Age (Nearest rounded up years)	Total length of service in CD/ HG/Fire Service Organisation	Whether Paid Staff or Honorary	SC	ST	OBC	General	Male/Female
6.	Details of receipt of other medals by the Recommendee from the State/Central Govt. (also mention the year and occasion (in case of service medals /other medals)within bracket against : (i) each. (For Gallantry Medal, date of act and date of award may be mentioned within bracket)							
	Service Medals		Gallantry Medals		Any other type of medals			
1.			1.		1.			
2.			2.		2.			

7	Details of other Awards/Commendation certificates/General Service Entry/ Honorarium/ Cash Award received by the candidates in the past (mention number of times only in the box).			
Cash Awards	Honorarium	Commendation Certificate	General Service Entry (GSE)	Awards in any other form other than specified one

Note : 12 Copies of recommendations for each case must be received by the Ministry with the recommendation of concerned State Govt./UT- Administration or administrative controlling Ministry/ Deptt. of Govt. of India within one year of the act of gallantry to avoid technical rejections.

CITATIONS

Citation should be brief and to the point, preferably within 500-600 words, but not exceeding the box provided for. The citations must highlight the date, time and place of incident, risk involved in the incident and degrees of valour/ act of gallantry performed by the recommendee , 12 copies of recommendations in the prescribed proforma including citations must reach this Ministry within one year from the date of incident to avoid technical rejections. All recommendations must be routed through the administrative controlling departments of State Govt./ UT- Administrations / Ministry's of Govt. of India, Hindi recommendations/ citations must accompany with an English translation . No. extra /additional sheet should be used for writing citations.

A.	Date, Time & Place of the Incident.
B.	Brief Introduction with chronological development of the incident.
C	Details of risk involved in the incident and its brief analysis.
D	Details of achievements highlighting the degrees of valour/act of gallantry by the recommendee.
E	Whether any honour conferred on the recommendee for the same act of gallantry by UT/State/Ministry/Deptt. of GOI of affirmative, furnish details.
G	Specific Gallantry Medal recommended for (Col. 2 on pre-page).
H	Details of enclosures attached as supportive documents :-

Dated :-----

Place/Full Address
with Pin Code

Signature of the Head of the Department
(Director of Civil Defence, Commandant General
Home Guards or Director of Fire Service *)

Name :

Designation

Office Seal :

Note (*) : If the recommendation is initiated by any other official other than Head of the Department, the same must be countersigned by HOD under his official seal or by competent authority of the States Govt./UT Admn/Ministry/Deptt. of Govt. of India.

APPENDIX –B(SERVICE:DISTN/MERIT)

Revised Proforma for the Recommendations for the award of President’s Distinguished Service /Meritorious Service Medal for the Volunteers and Paid Personnels of Home Guards, Civil Defence and Fire Service Organisations

(Please study carefully the Instruction Sheet at Appendix-C before filling up the form)

- OCCASION :- -----
(Please Specify Independence Day/Republic Day & Year above)

1.	Name of the State/UT/Ministry/ Deptt. of Govt. of India recommending the case with full address.								
2.	Specific name of the service medal recommended in the present case (please see Instruction sheet for exact nomenclature).								
3.	Name and designation of the recommended candidate/ Recommendee		First Name	Mid Name	Surname				
	(i) Name & Designation in full in English in Capital letters only.								
	(ii) Name and Designation abbreviated form in English in Capital letters only (for inscription in medals in case of selection)								
	(iii) Name and Designation in Hindi (for Notification in Hindi in case of selection)								
4.	Present residential mailing address of the Recommendee/Next of kin (name to be mentioned in address in case of posthumous award) complete with Pin Code and Name of Telegraph Office (for issue of congratulatory telegrams in case of selection).		----- ----- ----- -----					Telegraph ----- PIN CODE -----	
5.	Other details of the recommended candidate/recommendee Caste (Pl. tick Mark) Sex On the date of proposed								
	Age (Nearest rounded up years)	Total length of service in CD/HG/Fire Service Organisation	Status in Service in CD/HG/FS/ Orgn i.e. Paid or Honorary	SC	ST	OBC	General	Male or Female	
6.	Details of receipt of other medals by the recommendee from the State/Central Governments (also mention within bracket against each. the occasion and year of award in case of service medals and date of incident and date of award against gallantry Medals)								
	Service Medals		Gallantry Medals			Any other Medals			
1.			1.			1.			
2.			2.			2.			

7. Details of other honours/awards received by the recommendee.				
Cash Awards	Honorarium	Commendation Certificate	General Service Entry (GSE)	Honours/awards in any other form other than specified one (furnish details)
8. Integrity of the Recommendee				

CITATIONS

Citation should be brief and to the point, based on the que/guidelines noted in the margin, preferably typed neatly without overwriting in English (Hindi version must accompany English translation) and must be restricted within the space limit of the box provided for No separate sheet should be attached. No additional enclosures in the form of certificate /degrees/diplomas etc. are to be attached. 12 copies of recommendation for each case are to be forwarded through the concerned State Govt./ UT Admn/ administrative controlling Departments and Ministries of Govt. of India so as to be received by the Ministry within the statutory stipulated date, i.e. 15th May for Independence Day (15 th August) and 26th October for Republic Day (26th January) respectively every year to avoid technical rejections. Attempt should be made to limit citation within 500 words only)

A.	Introduction, General Background and General performance during the entire service period.	
B.	Specific instances of meritorious/ distinguished performances during the last 8 years which contributes to the goal of the CD/HG or FS Organisation.	
C	Specific Medal recommended (Please see Instruction-sheet in Appendix –C for exact nomenclature)	

Dated :-----
with Full Address
Pin code

Signature of the Head of the Department*
(Director of Civil Defence, Commandant General Home Guards / Director of Fire Service etc.)

Name :

Designation

Office Seal :

Note (*) : If the recommendation is initiated by any other HOD, the same must be countersigned by him or his competent authority of the States Govt./UT Admn/administrative controlling Deptt. Ministry of Govt. of India. All recommendations are to be routed through the State Govt./UT Admn/administrative controlling Deptt./ Ministry of Govt. of India to avoid technical rejections.

Instructions for the Initiating & Recommending Authorities for Various Types of Civil Defence, Home Guards and Fire Service.

MEDALS

(Please study carefully the Instructions before attempting any recommendations for Medals)

GENERAL INFORMATIONS ABOUT MEDALS

1. In Civil Defence, Home Guards and Fire Service Medals are considered for award to the bonafide members of aforesaid organisations. Apart from regular paid staff members, this also including Volunteers of Civil Defence & Home Guards Organisations.

2. There are total 8 types of Medals in vogue in Civil Defence, Home Guards and Fire Service, 4 of which are Service, Medals and remaining 4 are for Gallantry. The details of authorised Presidential Medals are furnished below in order of Precedence/ Priority :-

Home Guards & Civil Defence	Fire Service
A. GLLANTRY MEDAL : (I) President's HC & CD Medal for Gallantry.. (II) Home Guards & Civil Defence Medal for Gallantry	A.GALLANTRY MEDAL : (i) President's Fire Service Medal for Gallantry (ii) Fire Service Medal for Gallantry
B. SERVICE MEDAL : (I) President's HC & CD Medal for Distinguished Service. (II) Home Guards & Civil Defence Medal for Meritorious Service	B. SERVICE MEDAL : (i) President's Fire Service Medal for Distinguished Service. (ii) Fire Service Medal for Meritorious Service.

3. All Gallantry Medals are to be recommended in the prescribed proforma suggested in Appendix-A of this letter for each case, 12 copies are to forwarded, two of which must be signed by ink and for the remaining 10 numbers , photocopies will suffice.

4. All service medals are to be recommended in the prescribed proforma suggested in Appendix-B of this letter. For each case 12 copies are to forwarded, two of which must be signed by ink and for the remaining 10 numbers , photocopies will suffice.

5. Initiating authority for any case may be the Head of Office/ Head of the Department. But all recommendations are to be finally recommended by their respective State Governments/ UT- Administrations or Administrative Controlling Central Ministries/Departments of Govt. of India.

6. In case of Fire Service, only such Fire Service Organisations which are administered by State Governments, UT- Administrations, Municipal Corporations and allied /other autonomous bodies are eligible for consideration for the award of aforesaid medals including Fire Service of Public Sector Undertakings.

B. DETAILS ABOUT GALLANTRY MEDALS

1. Gallantry Medals are considered for award to the eligible members of Home Guards, Civil Defence and Fire Service Organisations for conspicuous act of Gallantry. For highest Order of Valour/ Gallantry /Bravery, President's Gallantry Medal may be considered, otherwise HG & CD/FS Medal for Gallantry is generally recommended for ordinary act of gallantry.

2. There is no time schedule for Gallantry Medals. But the recommendations must reach this Ministry within one year from the date of act of such gallantry to avoid technical rejections.

3. As stated earlier , 12 Copies of recommendations (2 ink –signed- 10 photocopies) for each case are to be forwarded to this Ministry in the prescribed proforma suggested in Appendix-A of this letter.

4. For subsequent act of gallantry. Bar to any particular Gallantry Medal is admissible which is required to be specifically highlighted in Column-02 of Appendix –A

5. For substantiating the act of gallantry, all recommendations are desired to be enclosed with supportive documents like attested copies of FIR/Abstracts of Occurrence Book, attested copies of Medical/Injury Report or Post-Mortem Report for injured/killed persons, Photographs of the Incident, if any, News Paper Cuttings, if any or any other supportive documents.

C. DETAILS ABOUT SERVICE MEDALS

1. Service Medals are considered for award to the eligible members of Civil Defence, Home Guards and Fire Service Organisations twice in a year, i.e. on the occasion of Republic Day and Independence Day every year . The details of authorisation of medals per year, with occasionwise break-ups are as under (cited in order of Precedence)

Sr. No	Type of Service Medals	HG & CD			Fire Service		
		Republic Day (26 th Jan.)	Independence Day (15 th Aug.)	Total	Republic Day (26 th Jan.)	Independence Day (15 th Aug.)	Total
i)	President's Distinguished Service Medal	25	25	50	13	12	25
ii)	Meritorious Service Medals	50	50	100	50	50	100
	Total	75	75	150	63	62	125

2. The recommendations made by State Government /UT-Administrations for various categories of Service Medals should not be disproportionate to size of the State/UT or Unit.

3. As stated earlier , recommendations for Service Medals are to be forwarded in prescribed proforma suggested in Appendix-B of this letter, 12 Copies of recommendations (2 ink –signed- 10 photocopies) are to be forwarded.

4. No copies of certificate/degree/diplomas are required to be attached with the recommendations. No separate sheets are to be attached.

5. As per provisions of the Statue regulating Medals, all recommendations for Service Medals must reach this Ministry on or before 15th May for Independence Day (15 th August) and 26th October for Republic Day (26th Jan.) to avoid technical rejections. So , if delay is anticipated, then the case may be forwarded in the next occasion, since this is a on-going process. So, timely submission of recommendations for Service Medals is extremely essential.

6. Because of number limitations and other constraints, if some case is not considered for award on some particular occasion, that does not debar his case not to be considered on subsequent occasion, if fresh recommendations are received from the competent authority in this regard. Competent authority is at liberty to recommend a name any time provided he is found fit for the award of medals.

7. Service Medals of any particular type are awarded once in life time and there is no provision for Bar to that particular type of Service medal.

C-1 SPECIFIC DETAILS ABOUT MERITORIOUS SERVICE MEDALS

8. Meritorious Service Medals are considered for the bonafide members of Home Guards, Civil Defence and Fire Service Organisations for valuable service characterised by devotion to duty, including prolonged unbroken service over 10 to 15 years for regular paid staff members and 8 years for Volunteers of Civil Defence & Home Guards Organisations.

C-2 SPECIFIC DETAILS ABOUT PRESIDENT'S DISTINGUISHED SERVICE MEDALS

9. President's Distinguished Service Medals are considered for award to the members of Home Guards, Civil Defence and Fire Service Organisations for distinguished record of service marked by exceptional ability and merit and is generally considered after five (5) years of the award/receipt of Meritorious Service Medals. So, all initiating/ recommending authorities, before recommending some one's name for President's Distinguished Service Medal, must ensure that he or she must have received Meritorious Service Medal at least 5 years back to avoid technical rejections.

D.GENERAL INSTRUCTIONS FOR FILLING UP THE FORMS

1. All columns should be filled up properly with legible hand, preferably by type-writing . In case of multiple choice, the relevant portion should be ticked off and other (non-relevant) should be stricken off.
2. All addresses, whether official or residential, must include, apart from House Name, No, Road, Post Office, Town/ Village, District , State etc. , the details of Pin Code and also Name of the Telegraph Office for facilitating issue of congratulatory Telegram in case of selection.
3. All initiating/recommending or forwarding authorities before recommending any name must ensure that (i) there is no adverse comments recorded in his Annual Character Report (ACR) Or (ii) no vigilance case is pending against him during the preceeding 8 years, nor (iii) any punishment in any form (minor or major) has been given to him during such period. Integrity in any case should be beyond doubt in any case. This is related to the Integrity Certificate required to be furnished in Col.8 of Appendix-B for service Medals only (for volunteers, the ACR may be replaced with last 8 years performance reports.)

QUALIFICATIONS FOR ADMISSION TO DIVISIONAL AND ASSISTANT DIVISIONAL OFFICERS' COURSE.

(See Twelfth Meeting para (b) under 15 Training and Education)

Admission to the Divisional & Assistant Divisional Fire Officer's course in the NFSC, Nagpur for those who have passed Station Officers' Course in the said College.

The Sub-committee's recommendations were considered by the SFAC and the following, qualifications were accepted for various courses at the NFSC :-

(a) **Sub Officers Course**

- | | | | |
|------|--|-------------|--|
| (i) | Direct entrants
qualification | Educational | Higher Secondary or equivalent |
| (ii) | Departmental
Educational qualifications
Experience | candidates | Matriculation or equivalent

Must be a driver or Leading Fireman having 3 years service. |

Note :-Firemen with higher secondary educational qualifications are to be treated at par with direct entrants for admission to the course.

(b) **Station Officers Course**

- | | | | |
|------|--|-------------|--|
| (i) | Direct entrants
Educational qualification | Educational | Graduate preferably with Science subjects |
| (ii) | Departmental
Educational qualifications
Experience | candidates | Matriculation or equivalent

Must have served as a Sub-Officer for 3 years and must have passed the Sub-Officers Course: or
Must have served as a Sub-Officer for 5 years if not attended a Sub-Officer Course. |

(c) **Assistant Divisional/Divisional Officers' course**

- | | | | |
|-------|--|-------------|---|
| (iii) | Direct entrants
qualification | Educational | Bachelor of Engineering |
| (ii) | Departmental
Educational qualifications
Experience | candidates | Higher Secondary or equivalent

Must be a Station Officer with 3 years experience as such and must have passed both the Sub-Officer and the Station Officers' course.
or
Must have six years experience as a Station Officer and must have done the Station Officers' course.
or
Must have worked as a Station Officer/Assistant Divisional Officer for 9 years and be a Graduate.
or
Be a Graduate, Member of the Institution of Fire Engineers (UK) with 3 years experience as a Station Officer. |

REQUIREMENTS OF A STANDARD FIRE STATION

(See para 1 under 16 Fire Station)

After discussing the matter the members stated that it would not be possible for any particular plan for a fire station to be standardised since this would depend on the lay-out of the plot in each individual cases.

Members brought out the question of the two types of duty –system that were prevalent in the Fire Station in country, namely the 24 hours continuous duty system and the shift system. They felt that if a particular plan was finalised for standardization of a Fire Station, it might not work out for the two separate duty system, and also that actual design would vary in each case according to the layout and location of the plot. They, therefore, decided that instead of recommending a specific design for fire stations, it would be advisable to give the general idea of the requirements of a one pump , two-pump, 3 pump, 4 pump and more that four pump fire stations separately for each system.

Following minimum dimensions were recommended for each of the requirements of Fire Stations.

REQUIREMENTS OF AN AERODROME FIRE STATION

Sr.No.	Type of accommodation	One Appliance Station	Two Appliance Station	Three Appliance Station	Four Appliance Station	Five Appliance & over Station
1	2	3	4	5	6	7
1.	Appliance room, with doors according to local requirements. (Height will depend on the type of ladders/overall height of appliance in use but will not be less than 12')	30'x10'x 14' high	The floor area should be double of the one appliance station	The floor area should under one appliance station should be multiplied by 3.	The floor area should under one appliance station should be multiplied by 4.	Multiply the floor area given under one appliance station by the number of pumps .
2	Office	120 sq.ft.	120 sq.ft.	180 sq.ft.	180 sq.ft.	240 sq.ft.
3.	Watch room	120 sq.ft.	120 sq.ft.	120 sq.ft.	120 sq.ft.	180 sq.ft.
4.	Store	180 sq.ft.	180 sq.ft.	200 sq.ft.	200 sq.ft.	300 sq.ft.
5.	Work Room (for minor repairs)	150 sq.ft.	200 sq.ft.	200 sq.ft.	250 sq.ft.	300 sq.ft.
6	Rest Room/ Recreation Room	200 sq.ft.	200 sq.ft.	250 sq.ft.	300 sq.ft.	300 sq.ft.
Appliance means all Fire Service vehicles including ambulances						
7.	Drill tower-cum-hose drying towe-	10'x15'x40' high	10'x15'x40' high	10'x15'x40' high	10'x15'x40' high	10'x15'x40' high
8.	Petrol store	According to existing petroleum Regulations				
9.	Petrol store	5000 gallons capacity with parapet wall not exceeding 3' and a depth not less than 3' with a sump of 2'x2'x2'	5000 gallons capacity with parapet wall not exceeding 3' and a depth not less than 3' with a sump of 2'x2'x2'	5000 gallons capacity with parapet wall not exceeding 3' and a depth not less than 3' with a sump of 2'x2'x2'	Two tanks of same capacity as for one pump station	

Sr.No.	Type of accommodation	One Appliance Station	Two Appliance Station	Three Appliance Station	Four Appliance Station	Five Appliance & over Station
1	2	3	4	5	6	7
10.	Hose Washing through	40'x3'x2' deep	40'x3'x2' deep	40'x3'x2' deep	40'x3'x2' deep	40'x3'x2' deep
11.	Smoke Chamber	8'x8'x8' high	8'x8'x8' high	8'x8'x8' high	8'x8'x8' high	8'x8'x8' high
12.	Hydrants	One of each type	One of each type	One of each type	One of each type	One of each type
13.	Record Room	Nil	Nil	150 sq.ft.	150 sq.ft.	180 sq.ft.
14.	Class Room	Nil	Nil	225 sq.ft.	225 sq.ft.	300 sq.ft.
15.	Drill Ground	200'x50'	200'x50'	200'x50'	200'x50'	200'x50'
16.	Dermitories	** An area of 10ft. x 5 ft. per person for the total number of persons on duty at a time.				
17.	Sanitary Facilities	To be provided at a scale of one lavatory and one bathroom for each 5 person on duty at any time subject to a minimum of 1 set.				
18.	Residential accommodation	a) At Training Centre – Single accommodation, messing facility and other connected services for 100 persons should be provided as close as possible to the Aerodrome. b) At all Station :- Residential accommodation for all Fire Service Staff should be provided as close to the Aerodrome as possible.				

* The watch room should be on top of the station.

** In case of upper floors , separate sliding poles should be fitted between each door.

**STANDARDISATION OF WORKSHOPS – UNIT REPAIR ORGANISATION,
LIGHT DETACHMENT AND CENTRAL WORKSHOP**

(See para 1 under 17 Workshop)

UNIT REPAIR ORGANISATION – U.R.O. (AT EACH STATION)

No. of appliances	Establishment required			Tools required	Works to be executed
	Fitter (Rank of LF)	Electrician (Rank of F.M.)	Total		
1 to 3 appliances (pumps & vehicles)	1	1	2	List attached	First line Repairs viz: - all running repairs. Second Line repairs ,viz :-
				a) All repairs of First Line & U.R.O. b) Starting trouble at normal temperature c) Minor repairs of engines. d) All lubrication troubles. e) Ignition troubles. f) Carburattor faults. g) Fuel supply system defects h) Cooling system defects. i) Cluntch troiubles. j) Propellar shaft and universal joint troubles. k) Wheel hub and bearing troubles. l) Rear axle fault m) Steering faults. n) Brake minor repairs. o) Other minor repairs. p) Smithing job, welding moulding and vulcanising q) Dynamo charging and battery. r) Electrical minor defects with cut-cut and wirings, to lights , horns, sparking plugs etc.	

Note :- 1. A trade allowance may be attached to each post, according to the local conditions, in addition to the pay and allowances admissible to the rank, to make the posts lucrative and to attract right type of persons.

2. “Fire Engine shall count as one appliance for the power engine unit and a separate appliance for the pump unit, whether composite or otherwise”. Thus , a fire pump shall mean two appliances if the pump is mounted on the vehicle.

For examine :- (1) Trailer pump = one appliances.

(2) Fire Pump or engine = two appliances.

**LIST OF TOOLS AND PEQUIUPOMENT REQUIRED FOR THE UNIT REPAIRS
OR GANISATION**

1.	Working table, Heavy pattern 6'x3'x2'-8" with 1-1/2" thick wood tap, 32" high with drawer lockers	one
2.	Parallel Jaw view 8" size	one
3.	Hand grinder Emery 5" size	one
4.	High lift Hydraulic Jack 2 to 3 tons	One
5.	Screw Jack 5 ton.	One
6.	Axle stands wooden , heavy adjustable 15" to 24"	Four
7.	Sheet metal trays (No. 10 guage iron sheet) various sizes 15"x24"x2" depth 18"x24"x2" depth 24"x36"x3" depth	Two Two Two
8.	Mobile Trolley hand compressor	One
9.	High pressure grease gun, hand	One
10.	Two chains	Two
11.	Battery voltmeter 3-0-3' (Discharge type)	One
12.	Battery Hydrometer	One
13.	Soldering equipment, comprising kerosene blow lamp with soldering iron or electric soldering iron.	One set
14.	Mechanics complete tool kit in metal carrying box	one
15.	Brast drill with sets of twist drills 1/32" to 5/10" size	One
16.	Blacksmith's Anvit , London pattern, 2 Cwt. size	One
17.	Insulated pliers 6"	One
18.	Electrician's knife	One
19.	Carpenter's Tool set	One
20.	Wheel chocks	Four
21.	Battery charger	One
22.	Fire Hose Binding Machine	One
23.	Fire Hose Vulcansing Machine	One

Light and Detachment – L.A.D. (At Range Headquarters)

No. of appliances	Turner	Mechanic (Sub/Cia Rank)	Fitter (rank of FM)	Black-smith (rank of FM)	Upholsterer (rank of FM)	Borer (rank of FM)	Electrician (rank of FM)	Bench Fitter (rank of FM)	Painter (rank of FM)	Carpenter (rank of FM)	Upper Division Clerk	Office Orderlies (rank of FM)	Watch-man	Total	Tools required	Works to be executed
2 to 50 Appliances (pumps of vehicles)	1	1	1	1	1	1	1	1	1	1	1	1	3	15	List attached	Second Line Repairs
									<p>Those repairs which the Unit Repairs Organisation is not in a position to undertake.</p> <p>Third Line Repairs viz.</p> <ul style="list-style-type: none"> a) Change of major assemblies. b) Complete and partial overhaul of major assemblies, such as gear box differential (exe: engine). c) Any other defect which is beyond Second Line Repairs. 							

Note :- 1 . A trade allowance may be attached to each post, according to the local conditions, in addition to the pay and allowances admissible to the rank, to make the posts lucrative and to attract right type of persons.

2. “ Fire engine shall count as one appliance for the power engine unit and a separate appliance for the pump unit, whether composite or otherwise”. Thus , a fire pump shall mean two appliances if the pump is mounted on the vehicle.

For example :- (1) Trailer Pump - One appliance.
(2) Fire Pump or Engine- Two appliance.

TOOLS AND EQUIPMENTS REQUIRED FOR LIGHT AND DETACHMENT

1.	(i)	Air Compressor, electric or petrol Engine driven 5-6 cu.ft. air per minute at 150-175 lbs pressure per sq. in complete	one
	ii)	Air regulator, moisture separator and control valve with 2 guages for above.	One
	iii)	Steel pipes and fittings	One set
	iv)	Air Line Cocks	Two
	v)	Fixomatic coupler complete with connector.	One
	vi)	High presses ¼ " bore air hose complete with ¼" Female coupling B.S. threads at both ends, 50 ft. long	Two lengths
2.		Set of High Pressure Guns comprising	
	i)	Grease Gun	One
	ii)	Oil Spray gun	One
	iii)	Spray paint gun with 1 point cup.	One
	iv)	Water spray gun	One
	v)	Air Blow gun	One
3.		Spark plug cleaner	One
4.		D.E. Spanners 3/8" to 7/8"	One set
5.		Comparison Gauge upto 200 Lbs.	One
6.		Ignition timing light	One
7.		Vaccum Fuel Pump Testner	One
8.		Electric hand drill 230 volts A.C. ½" size	One
9.		Decarbinishing Brush set	One
10.		Battery charger as per requirements	One
11.		Service tamp and washing platform	One
12.		Hydraulic Fire Extinguishers Pressure testing machine	One
13.		Fire Hose binding machine (big size)	One
14.		Fire Hose vulcanising machine (big size)	One
15.		Lathe Machine (Medium Size)	One

CENTRAL WORKSHOP (AT STATE HEADQUARTERS)

No. of appliances	Chief Mechanic (rank of ADFO)	Asstt. Chief Mechanic (Station Officer)	Mechanic (rank of Sub/O)	Fitters (rank of LF)	Leading Electrician (rank of LF)	Electrician (rank of FM)	Carpenter (rank of FM)	Blacksmith (rank of FM)	Upholsterers (rank of FM)	Tin Smiths (rank of FM)	Turners (rank of FM)	Painters (rank of FM)	Vulcanisers (rank of FM)	Welders	Storemen (rank of FM)	Upper Division Clerk	Lower Division Clerk	Office Orderlies (rank of FM)	Watchman	Cleaners	Total	Tools required	Work to be executed
51-100 Appliances (pumps & vehicles)	1	1	1	9	1	5	2	2	2	2	2	2	2	2	2	1	2	2	4	2	47	List attached	***

***** Third Line repairs :-**

Only those repairs which the L.A.D. is not in a position to undertake.

Fourth Line repairs, viz :-

- (a) Complete stripping of vehicles and re-assembling after repairs, major overhauls of complete vehicle including engine.
- (b) Body Building painting , upholstery, carpentry etc.

Note :-

1. A trade allowance may be attached to each post, according to the local conditions, in addition to the pay and allowances admissible to the rank to make the post lucrative and to attract right type of persons.
2. "Fire Engine shall count as one appliance for the power engine unit and a separate appliance for the pump unit, whether composite or otherwise". Thus, a fire pump shall mean two appliances if the pump is mounted on the vehicle.

For example :-

(1) Trailer Pump	-	One appliance.
(2) Fire Pump or Engine	-	Two appliances.

List of Tools and Equipment Required for Central Workshop

I.	Engine Section	
1.	Engine Analyser	One
2.	Portable Crank pin grinder complete, with attachment and driving motor 230 volts	One
3.	Parallel Jaw bench vice 8" jaws	Three
4.	Swivel type bench vice 8" jaws	Two
5.	Exhaust Gas Analyser	One
6.	Techometer 0-100 rpm. 0-3000 rpm face 8" dia Electricity type	Two
7.	Contact dwell Indicator	Two
8.	Electric Motor 5 HP to run shaft for tools	One
9.	Timing light	Two
10.	10 Ton bench drill press with hydraulic attachment and screw operated about 10" to 12 " screw Dravel	One
11.	Hydraulic High Lift Jacks, trolley type : (a) 3 ton capacity (b) 6 ton capacity	Three
12.	Axle stands, adjustable 9" to 18" height.	Two
13.	Connecting Rod and Piston aligning jig.	Six
14.	Piston Pull scale	Two
15.	Piston Groove cleaner	Three
16.	Piston Ring Clamp	Three
17.	Piston Ring Filling guage	Three
18.	Worm gear pulley blocks complete with monkey carriage 14 tons capacity underside of girder to inside of cross, bar , 4 inches	One
II	Machine Section	
1.	(a) Centre Lathe, sliding surfacing screw cutting, Lathe 8"-9" bed, with standard auxiliaries , fittings, and electric motor (b) Dog chuck independent 12" dia (c) Self centering chuck 6" dia.	One One One
2.	Sensitive Drilling machine pillar type 1% capacity with electric motor, complete	One
3.	Electric Grinder 6" motorized with wheel at either end.	One
4.	Heavy Duty Hack-saw power driven with motor	One
5.	Portable Floor Crane, Cantilever type with pulley and chain 1-1/2 ton capacity	One
6.	"In the Block" Portable electric Crank shaft Grinder complete with rear wheel driving attachment and motor.	One
7.	Flexible shaft with attachment and motor ¾ HP and having 3 speeds – 1100 ,3800, 6000 rpm.	One
	" ½ " Heave duty shaft for above complete with conflings	One
	"H" type Hand piece	One
	Spendle M- 24	One
	Adaptor H 213 for taking, Grinding Wheels	One
	Right angle Drive & Sender	One
	Felt Backing Pad.	One
	Lambswool Bonnet	One
	Spanding Discs 9" dia. Flat type 24 and 40 Grit.	One
	Chuk type Hand piece for drilling , 0 to 5/10"	One
	Valve seat grinding attachment	One
	Valve seat grinding kit complete with starting	One
	Switch cangle carbon , brushes etc.	One
	Grinding wheel 4" x1 " x ½ "	One
8.	Boring Bar complete switch motor, attachments, gauges	One
9.	Portable crank pin grinder, motor voltage 220/230	One
10.	Hand operated connecting rod bearing inserting machine for all cars and trucks complete with necessary parts and attachments	One
11.	Valve spring tester table type with large dial, for valve springs and clutch springs.	One
12.	a) Air Compressor, electrically driven with starter, automatic start stop, gauges	One

		etc. complete for free air displacement of 25 cfm. Per minute, upto 185 Lbs. Per sq. inch pressure and air receiver of about 100 Gallons. b) Condensation trap for above. c) Flex-tip blow guns with 18" at One end and fixomatic connection at the other Air hose, extra strong quality ½ " bore Coupler units with coupler and air chunk	One One 100 3 Mns.
	13.	Hydraulic Press hand-operated 40 ton capacity complete with pump, hand lever, gauges, safety valve etc.	One
	14.	Electric Valve refractor with A.C. motor 230 volts, single phase.	One
	15.	Electric Arc welding machine operating on A.C. 3 phase 400 volts output upto 150 Amps, complete with welding torch Head, assorted sizes clamp earthing cable shield.	One
	16.	Line boring machine for all cars and trucks	One
	17.	Electric Hand Drills 230 Volts Uni. Capacity ¼"	3 Nos.
	18.	Traveling chains hoist 1 ½ ton capacity complete with chain and hook and monkey carriage	One
	19.	Bench Drill press with 8" screw travel 2 ton capacity	Two
	20.	Universal type tool post grinder precision type Grinding wheels, guards spindle, extension and electrical cord.	One
III		Smithy and welding Sections	
	1.	Anvils	Four
	2.	Swage clock	One
	3.	Heavy Duty staple leg vice 4"	One
	4.	Bench vice parallel Jaw 5" size	One
	5.	Bench vice swivel type 4" size	Two
	6.	Pipe vice 4" size	Two
	7.	Blower Electric 11. P. 230 volts	One
	8.	Blower Hand 14" size	One
	9.	Acetylene Gas Generator, Medium size, Oxygen cylinders	Two
	10.	Gas welding equipment and tools complete set including nozzles, holders, goggles, hand gloves shield, sprout.	One
	11.	Sledge Hammer 8 lbs.	Two
IV		Carpentry Section	
	1.	Hand saw to cut planks upto 6" thick complete with motor	One
	2.	Circular saw bench with 12" blade and motor	One
	3.	Planner jointer medium size motor driven	One
	4.	Electric sander with 12" to 15" wheel motor driven	One
	5.	Electric drills ½ size ¼ size	Two Two
		Note :- Electric supply in all cases, A.C. 3 phase, 50 cps, 400 volts, and A.C. single phase 220/230 volts, 50 c.p.s.	
V.		Testing and Inspection	
	1.	Micrometer outside 0"	6 Nos.
	2.	Micrometer inside 0"	2 Nos.
	3.	Cylinder Dial gauge, size upto 4 ½ "	2 Nos.
	4.	Indicator Dial gauge	2 Nos.
	5.	Stroboscopic Revolution meter	1 Nos.
	6.	Feeler Gauges	5 Nos.
	7.	Spark plugring gauge	3 Nos.
	8.	Mechanics tool kit complete in box.	3 Nos.
	9.	Compression gauge upto 180/200 Lbs.	2 Nos.
	10.	Vacuum gauge and fuel pump tester	2 Nos.
	11.	Oil pump tester.	2 Nos.
	12.	Hydraulic Pressure Testing Machine for fire extinguishers	1 No.
	13.	0 to 300 Lbs. Pressure Gauge	1 No.
	14.	Fire Hose Binding machine (big size)	1 No.
	15.	Fire Hose Vulcanising machine (big size)	1 No.
	16.	Battery charger to 12 batteries at a time	1 No.
VI		Recovery Sections	
	I.	Personnel :- They may vary from 4 to 6. This figure may be finally arrived at after determining the question relating to their trade, grade etc	
	II.	Break down van – A jeep wrecker - 4 WD capable of more than one kind of towing as a wrecker for a garage and Service Station, by fitting up additional	

		equipment such as winches mobile pumps, hydraulic lifts, terracing blades, off-set angle dozer, it may be useful for removing the debris or heavy equipment in the rescue work in the fire operations	
	III.	List of equipment – as per attached.	
Note :-		1. The workshop is not to be treated as a commercial workshop. As such, it is not possible to run it at No loss basis.	
		2. Additional staff as required, may be appointed depending upon the quantum of work to be undertaken in a particular workshop.	

List of Recovery Equipment

- | | | | |
|-----|------------------------------|---|-----|
| 1. | Set spanner set | - | One |
| 2. | Box spanner set | - | One |
| 3. | Screw driver 12" | - | One |
| 4. | Screw driver 16" | - | One |
| 5. | Screw Spanner 16" | - | One |
| 6. | Hammer 2 ½ Lbs. | - | One |
| 7. | Cutting Plain | - | One |
| 8. | Jack | | |
| 9. | Grease Gun | | |
| 10. | Oil Can | | |
| 11. | Pump | | |
| 12. | Pipe Wrench | | |
| 13. | Grounder anchor with pin | | |
| 14. | Tarvalla winch | | |
| 15. | Snatch block steel wire rope | | |
| 16. | Snatch block hemp rope | | |
| 17. | "D" big | | |
| 18. | "D" small | | |
| 19. | Half chain | | |
| 20. | Tow chain | | |
| 21. | Towing Pole | | |
| 22. | Towing frame | | |
| 23. | Towing ambulance | | |
| 24. | Steel wire rope bundle | | |
| 25. | Hem rope bundle. | | |
| 26. | Hammers large 10 Lbs | | |
| 27. | Dak Chanin | | |
| 28. | Shovels | | |
| 29. | Pick axes | | |
| 30. | Axes | | |
| 31. | Ground Rollar (wooden) | | |
| 32. | Planch moving gun. | | |
| 33. | Grips wirebulldog type. | | |
| 34. | Rope Grip | | |
| 35. | Sheer longs | | |

One vehicle fitted with crane preferably a jeep.

PERSONNEL (Recover Section)

- Crew :-**
- (1) Incharge
 - (2) 2 nd – in- command
 - (3) Two or four firemen on the machine including driver

REPORT OF THE SUB-COMMITTEE ON ORGANISATION OF FIRE SERVICE COMMUNICATION

(See para 3 under 18 Communication and Alarm)

Report of Communication Sub-committee of S.F.A.C.

(Constituted at its XVII Meeting)

Terms of Reference :-

- I. The 18th Meeting of SFAC constituted the Communication Sub-committee to assess the communication requirement of Fire Services in India and recommend ways and means of modernizing them in the following aspects.
 - a. Requirements and scales of communication facilities for various level of fire stations including Brigade Headquarters Fire Station.
 - b. Manpower requirements and financial implications of additional allowances, if any, for dual trade personnel.
 - c. Communication training required for various categories of personnel who are required to use, operate and maintain communication system.
- II. **The Sub-Committee consists of :**
 - 1) Lt. Col. R.M. Rajan, ADG (Comns)MIIA - Convenor
 - 2) Shri R.S.Sundaram , Chief Fire Officer, Delhi - Member
 - 3) Shri P.C.Gupta, ADG (PHB) DG P&T - Member
 - 4) Shri S.S.Jena, Representative, Government of Orissa - Member

PART I

- III. **Requirement of Communication Facilities –** The following types of communication facilities are required by every Fire Service
 - a. Reliable and easily available facility in the form of telephones for the public to convey the information of incidence of fire to the Fire Station.
 - b. Reliable line and radio communication between the Hqrs. Fire Station and all the Fire Stations in the city/town
 - c. Radio communication between the Fire Stations and its appliances deployed on operational duties.
 - d. Radio communication between the appliances and the crew.
 - e. A well established control room at the Brigade Hqrs. Fire Station and Watch Rooms at Fire Stations at all levels.
 - f. Control Van with full communication facilities capable of controlling large fires as a forward control.

IV Communication between the public and the control Room for obtaining information regarding incidence of fire :-

The following measures intended to strengthen the communication facilities available between the general public and the control room for the purpose of passing information regarding fire incidence :

- (a) All Control Rooms at the HQ Fire Stations should be equip with dialing facility from public telephone system- dial No. 101. Where such facility does not exist at the moment, effort must be made to provide it at an early date. The number of 101 connections at the Control Room should depend upon normal statistics of simultaneous fire alarm calls received by the Control center. As a rough guide for the first 5 lakhs population one connection, and thereafter for every additional 5 lakhs one additional connection of 101. This should be provided on PBX numbering system so that in case one telephone is engaged automatically the other telephone is put through (hunting facility.)
- (b) Fire Alarm System _ Certain of the metropolitan cities have old fire alarm system installed but at present lying in various stages of disuse . Local Fire Service should asses their utility and recommend renovation or otherwise to the P&T for necessary action.

- (c) Putting through 101 calls over PCO connections should be made possible by P&T in all towns P&T should also make it a condition to permit 101 calls from PCOs.
- (d) Telephones available with the public and government telephones should be mobilized and made available for putting through fire alarm calls.
- (e) It should be made mandatory at the advice of Chief Fire Officer to provide non-exchange lines between the Fire Control Centre and the Control Rooms of large industries, establishments and so on at their cost so that direct communication is possible in calling for help.

V. Reliable line communication between Hqrs. Fire service Control Centre and all Fire Stations under its control.

The following facilities should be provided between the Hqrs. Fire Station Control Room and all the Fire Stations:-

- (b) Control Room of Hqrs. Fire Station should have direct line communication to all its Fire Stations. In case the Fire stations are grouped on divisional basis in large cities with setting-up of Divisional Control Rooms, line communication should be provided between the main Control Station and the Divisional Control Station and also from the Divisional Control Station to the Fire Stations in its jurisdiction.
- (c) At the HQs and Divisional ends there should be an exchange of capacity 5 plus 20, and in case of Fire Stations, telephone should be provided.

VI. Radio Communication between Hqrs. Fire Control and all Divisional and other Fire Stations.

There should be a radio net with control at the Hqrs. Fire Station Control Room working to out-stations in all the Fire stations of the City/Town . The Control station should be of the capacity of 50 watts. VHF and the out-stations 15 W VHF. 1/6th of the total number of sets authorized will be provided as reserves with a minimum on or each type.

Two VHF frequencies, one as operational and another is stand-by should be allotted for this net.

VII. Communication between the Hqrs. Control & the Appliance

Every appliance whether water tender, towing vehicles and rescue vehicles or any other special appliances all will be provided with the following radio equipment :-

- I. A 15W set with accessories capable of working to the Hqrs. Fire Control.
- II. A 15W set to function as a Control Station to work forward to the fire crew working on the fire ground.
- III. Two 3W VHF sets men-pack to be carried in the appliance to be used by the crew when they are deployed on the fire ground.
- IV. A total of 8 frequencies will be allotted for the appliances net. These are required to be used at the discretion keeping in view usual interference and deployment . The sets provided should be capable of functioning on 6 to 8 channels.
- V. All vehicles of CFO, DCFO, DFO, AFOs will be provided with a 15 watts VHF set.

VII. Control Room Lay out :

- (a) Lay out of control room for the Brigade Hqrs. Is given in the attached annexure.

(b) The following facilities should be available in any Hqrs. Control Room:-

- I. The Control Room should consist of 3 compartments the dimensions of which will depend upon accommodation available at the level of the Control Room. One compartment is intended for the Control Room Incharge, the second Main Watch Room for the Brigade and the third for the radio facility. Additional accommodation in the form of store, generating room , rest room may be provided.
- II. The Main Watch Room should contain the console having the termination of following communication facilities :-
Telephones on 101 numbering . The number of instruments will depend upon the load of calls.
- III. One telephone with two extensions from P&T Exchange- These will be provided for the Mobilization Officer and with one extension working for the Control Room and another in his residence.
- IV. On operational PBX with multiple boards at the scale of one preposition on the console. This PBX will have the terminations of non-exchange lines to all the Fire Stations, Lines to the Control Room of Police, Civil Defence, Water Works, Electricity Board and other essential services as required.
- V. Termination of public address system to all the barracks, residential area, crew rooms, appliances room and other essential areas.
- VI. Central Control of warning lights associated with PA system.
- VII. Remote operation of radio control.
- VIII. Tape-recording facilities of all in-coming and out-going calls and mobilization orders.
- IX. Controlling of traffic lights in close proximity to the exit of the appliances.

(c) **Watch-rooms of Fire Stations** :- The following facilities will be available in the watch rooms of dependent fire stations :-

- (i) Telephones on the non-exchange lines working to the Control room.
- (ii) One telephone connection with extension from the Posts & Telegraphs Exchange.
- (iii) One Telephone at the resident of Officer I/C fire station.
- (iv) Radio-terminal working to the control at Brigade Headquarters Control Room.
- (v) P.A. system with outlets to crew room, appliance room, residential areas and other important areas.
- (vi) Control of traffic lights at the exit of the fire station.

IX Mobile Van

In case of large fires, where control has to be exercised by a senior officer of the Fire Service on the fire ground itself, there will be a requirement of a mobile van to establish the forward control of the operation. This Mobile van should have the following facilities.

- (i) Two radio terminals one working to the Control Room in the Headquarters fire-stations and the another working forward to the appliances in the fire ground. The set working back to the control would be of the capacity of 50-W VHF, and the one working to the appliances will be of 15- W VHF . The lay out is given in the attached diagram. It will have facility for staff compartment in which conference could be held and plans formulated to control the operations. It will have facility of telephone connection from the P&T Exchange – pent houses on the side of the mobile vans to facilitate accommodation in case of prolonged operations.

PART II :

Man-power Requirements

All members of the Fire Service should be capable of talking over telephone and radio. Training in radio telephonic procedure should be imparted to all the members.

The radio sets that are located in the appliances will be in charge of the leading fireman or the sub-officer depending

Control Room Staff at the Brigade Headquarters Fire Stations:-

- | | | |
|---|---|--------|
| 1. Control Room Incharge | (Mobilisation Officer of the rank not less than Station Officer.....1 | |
| 2. Watch Room Operator for 101 – Connection at the scale of one per position. | He will be responsible to operate the position on the console | 2 |
| 3. Occurrence book I/C (Fireman) | |1 |
| 4. Mobilisation Map I/C (Fireman) | |1 |
| 5. Radio Communication I/C (Leading Fireman or equivalent) | |1 |
| 6. One operator per Static Radio Terminal | |1 |
| 7. One Messenger (Fireman) per shift | |1 |

Fire Station Watch Room staff :-

- | | | |
|---|--|--------|
| (1) Incharge (not less than a leading fireman or equivalent) | |1 |
| (2) Telephone-cum-Radio Operator or equivalent | |1 |
| (3) Messenger | |1 |

Maintenance of Radio Equipment

1. One Radio Technician per five piece of radio equipment .
2. One leading Fireman to equivalent Radio Mechanic for 25 piece of equipment .
3. One Foreman (equivalent to Class II Gazetted Officer) for 100 pieces of equipment . His additional responsibility will be to plan, establish and maintain system and be incharge of all communication facilities of the fire stations.

PART III

TRAINING

For efficient functioning of the communication system it should be ensured that all personnel involved in communication duties are adequately trained. For this purpose, the following recommendations are given:-

(a) Fire Service Communication Officer Course :-

Object :- To plan, establish, supervise communication lay out in Fire Brigade

Level :- Station Officer.

(b) Communications Instructor Course

Object :- To train Fire Service Instructor to organized training in their own Brigade of all FS personnel in the use of Radio Telephony.

Level :- Sub-Officer.

**RECOMMENDATION OF THE FIRE PROTECTION SEMINAR HELD BY
M.H.A. ON 19TH – 20TH NOV., 1974
RECOMMENDATIONS
(See para 13 under 19 Water Supply)**

SESSION I

FIRE SAFETY IN HIGH RISE BUILDINGS

1. Fire Safety Requirements For Buildings

- (a) For the time being all buildings with a height of over 15 m should be termed high rise buildings. The height of high rise buildings may be reviewed after building bye-laws have been revised and the services have been properly equipped.
- (b) Local Authorities should immediately take up revision of their building bye-laws, to cover fire safety requirements of all buildings in their respective jurisdiction – particularly the buildings which are more than 15 m. high. The revision should take into account the National Building Code of India and local conditions and should include the following compulsory provisions.
 - (i) Consultations with the local Fire Chief at the Planning stages of the building;
 - (ii) Approval of the local Fire Chief before grant of occupancy certificate;
 - (iii) Annual inspection by local Fire Chief or his representative and withdrawal of licence for occupation of building in case of any alterations seriously affecting fire safety;
 - (iv) Prohibition in the use of high rise buildings for hazardous occupancies, unless such buildings are located away from populated areas and extra fire safety measures are taken;
 - (v) Provision of safe refuge areas and egress routes in all buildings which are over 24 m high;
 - (vi) Provision of automatic fire detection system with facility for simultaneous alerting of fire services;
 - (vii) Provision of emergency communication facilities for contacting occupants of all floors;
 - (viii) Provision of sprinklers in the entire building (height to be determined according to occupancy) except in places where water should not be used. In such places, other automatic fixed fire extinguishing installations should be provided;
 - (ix) Provision of adequate stored water supply for fire service use and installation of wet risers, internal hydrants, fire hoses and hose reels at every landing;
 - (x) Provision of first aid fire fighting appliances in the form of Fire extinguishers;
 - (xi) Provisions of automatic escapes and rope ladders in all buildings upto 24 m. high;
 - (xii) Provision for using the roof of all buildings over 30 m. in height for carrying out rescue by helicopters;
 - (xiii) Provision of adequate number of lifts for fire service use;
 - (xiv) Alternative source of power, which should take over automatically in case of failure of normal power supply in all buildings exceeding 24 m. in height. Consideration should be given for this provision to be made common for groups of buildings in the interest of economy.

- (c) All existing high rise buildings (over 15 m high) should be surveyed and the owners should be required to provide reasonable fire safety measures within a specified time.
- (d) I.S.I. should take up the formulation of National Fire Codes which should be enforced by law.

2. Development & Expansion of Fire Services

Immediate steps should be taken for the development and expansion of fire services. The following measures are recommended for achieving this:

- (a) The State Governments should enact the Fire Force Bill, take over the fire services and organise them as a separate department of their respective States, with a professional Head of Service. All Union Territories should be treated as a single cache for this purpose and their fire services should be controlled by the Ministry of Home Affairs.
- (b) Development and expansion of fire services should be included in Fire Year Plans of respective States.
- (c) General Insurance directly benefits if the fire service is efficient and well organized. The General Insurance Corporation should, therefore, share the cost of development and expansion of fire services, including the research programme.
- (d) Facilities for training fire officer with a view to prepare them for higher responsibilities should be expanded.
- (e) There should be a 'System approach' to the development of fire services so that all facets of the service receive equal and simultaneous attention.

RECOMMENDATIONS

SESSION 2

WATER FOR FIRE FIGHTING

1. Managements of all high rise buildings (over 15 m high) and industrial premises should be required to provide stored water supply for the use of fire service for fighting fire in their premises. The requirements should be assessed by the local Fire Chief. The local Tariff Advisor Committee representative where available, should also be associated with such assessment.
2. Railways, Airports, Port Trusts and Public Sector Undertakings should provide their own stored water supplies for fire fighting in addition to piped supplies.
3. All possible steps should be taken for conservation of water for fire fighting. The following measures are recommended:
 - (a) Arrangements should be made for early detection and expeditions reporting of outbreaks of fire to the fire brigade.
 - (b) Fire stations should be judiciously sited and their number increased.
 - (c) Fire appliances, proceeding to a call, must get the right of way.
 - (d) Mixing of additives to water to make it more effective and to reduce its requirements should be practiced. The Fire Research Division of Central Buildings Research Institute and Defence Institute of Fire Research should develop these additives and the techniques of their use on a high priority basis and make the additives available to the fire services at economical rates.
 - (e) Fire Service should make increasing use of agents, like form, light water, high expansion foam etc. and should be equipped for this purpose.
4. All possible efforts should be made for the utilization of natural sources of water.
5. The guidelines given in IS : 6070 – 1971 should be adopted for normal fire fighting needs, I.S.I. should be requested to specify definite scales in this standard. For Civil Defence towns and high risk areas, the scales should be doubled that of the normal risks. For high hazard occupancies, the requirements of water supply should be worked out on the merits of each case.

RECOMMENDATIONS

SESSION 3

INDIGENOUS DEVELOPMENT OF FIRE FIGHTING EQUIPMENT

1. Fire Service Equipment must be of the highest quality and must be readily available.
2. To assist the manufacturers in achieving high standards and in effecting timely deliveries, they should be given a positive estimate of the country's requirements over the next five years.
4. A Central purchase and holding Organisation should be set up. This organisation should assess the overall requirements of the country, purchase the equipment as per this assessment and stock it in one or more Central Depot(s). The Fire Services can then draw equipment from the Central Depot. If necessary, Financial Regulations should be suitably amended.
5. Proper testing facilities should be provided and all equipment procured by the Central Purchase and holding organisations should be subjected to strict quality checks.
6. A central Inspectorate of Fire services should be set up in the Ministry of Home Affairs to assist the State Governments in assessing the requirements of their fire services and to guide them in services. Such an Inspectorate should also co-ordinate the requirements of training, research and development and similar matters.
7. General Insurance Corporation should accept only certified/approved fire appliances for the purposes of granting insurance rebates.

Figure

FIRE SERVICE EMBLEM

(See para 4 under 20 Service Motto and Emblem)

FORMS FOR COLLECTION OF FIRE STATISTICS

(See para 1 under 21 – Collection of Fire Statistics)

PROFORMA ‘A’

PARTICULARS TO BE COLLECTED FROM ALL FIRE SERVICES IN THE COUNTRY

Name of Service -----

Name of Town _____

District _____

State _____

1. Area in square miles and rateable value.
2. Population,
3. Fire Risks Covered.
 - (a) Textile, woolen, silk and artificial silk No. (Rayon etc. Mills)
 - (b) Ginning Mills _____
 - (c) Cotton Dresses _____
 - (d) Oil Mills _____
 - (e) Petrol & Oil Storages and refineries _____
 - (f) Match Factories, Fire Works and Explosives manufacture ____
 - (g) Explosive stores _____
 - (h) Processed involving dangerous petroleum products
 - (i) Cinematograph films, celluloid, plastics and bakelite work ____
 - (j) Timber and wood workings, paper manufacture _____
 - (k) Chemical works _____
 - (l) Gas and Electricity Undertaking _____
 - (m) Docks, Railways and Air Port Installations _____
 - (n) Ware-houses, goods yards and goods sheds _____
 - (o) Manufacture of rubber goods _____
 - (p) Others (Give details)
4. Fire risks around the town (Details to be given)
5. Water facilities: No. and experiments
 - (i) Hydrants _____ Capacity _____
 - (ii) Water ponds _____
 - (iii) Refilling places _____
 - (iv) Wells, Rivers and Canals _____
 - (v) Other facilities like static tanks, storage tanks, etc. _____
6. Communication system.
7. Is there any organization for collection of statistics relating to losses due to fires in the town irrespective of whether such fires are attended to by the Fire Services or not.
8. If so, what statistics, if any, are being collected.
9. Any other special points not covered by Nos. 1 to 8 above.

PROFORMA 'B'

PARTICULARS TO BE COLLECTED FROM ALL FIRE SERVICES IN THE COUNTRY

Name of service _____

Name of Town _____

District _____

State _____

1. Fire appliances.
- (a) Motor pumps with capacities _____
 - (b) Water Tender with capacities _____
 - (c) Trailer pumps with capacities _____
 - (d) Manual Pumps _____
 - (e) Canteen Vans _____
 - (f) Fire Boats _____
 - (g) Fire Escape ladders, Extension ladders etc. (with max. heights) _____
 - (h) Turn table ladders. _____
 - (i) Foam and Crash tenders _____
 - (j) Emergency Tenders _____
 - (k) Control Post Vans _____
 - (l) Rescue gears etc. _____
 - (m) House Laying Lorries _____
 - (n) Breakdown vans. _____
 - (o) Other vehicles _____

Note:- In each case give the number of appliances not in working order in brackets:

2. Equipment
- (a) Wireless scheme (if in operation).
Users (fire Brigade only or joint scheme)

No. of fixed stations _____
No. of mobile stations _____
 - (b) Hose (total length in feet) _____
 - (c) Breathing apparatus (No. of sets) _____
 - (d) Lighting sets:
 - (i) Electric _____
 - (ii) Other forms _____
 - (e) Oxy-Acetylene cutting outfits (No. of sets)

 - (f) Foam Equipment (Not extinguishers)
 - (i) Generators. _____
 - (ii) Foam making branch piles
(Give capacities).
 - (g) Street Fire Alarms (Total No.) _____

3. Number of Fire Stations.
4. Staff Superintendence:
 - Principal Officers.
 - Scale of pay and allowances
 - Whether entitled to fire quarters
 - Other terms and conditions of service.
5. Staff Supervisory
 - Other Officers.
 - Scale of pay and allowances
 - Whether entitled to fire quarters
 - Other terms and conditions of service.
6. Firemen
 - Number of personnel
 - Scale of pay and allowances
 - Whether entitled to fire quarters
 - Other terms and conditions of service.
7. Drivers
 - Number of personnel.
 - Scale of pay and allowances
 - Whether entitled to fire quarters
 - Other terms and conditions of service.
8. Other personnel, if any:
 - Number of personnel.
 - Scale of pay and allowances
 - Whether entitled to fire quarters
 - Other terms and conditions of service.
9. Whether reserves are maintained, if so, their conditions of service.
10. Whether any Auxiliary Fire Services are maintained. If so, Its strength and other details.
11. Motor cycles/ Cars/ Cycles
 - (a) Whether supplied for use of officers/staff;
 - (b) If so, details;
 - (c) Period for which Issued.
 - (d) Whether any allowances are admissible.
12. Uniform and personal equipment.
 - Whether provided free of charge;
 - Uniform prescribed (in details)
 - Whether any washing allowance is admissible.
13. Accoutrements:

	Helmets	Leather or Steel	Period for which issued
Fireman's axe	_____	_____	_____
Badges of Rank	_____	_____	_____
Buttons (embossed)	_____	_____	_____
Whistle	_____	_____	_____
Belts	_____	_____	_____
Gas Masks	_____	_____	_____
Others	_____	_____	_____
14. Whether the fire Service maintains First Aid and/or Ambulance unit; if so, staff:
 - Medical and other stores supplied
15. Training of personnel
 - Whether there is training school; If so, supply details of courses, Syllabi, duration of each courses, drills parades etc.
16. Medical facilities provided for staff;

17. Games and other extra-curricular activities.
18. Whether the Fire Service is maintained by the State Government direct and if so, state under which department of the State Govt.
19. Whether the Fire Service is maintained;
20. Average annual expenditure on the brigade ;
21. Does the Brigade attend to fires outside the town; if so, whether free of charge;
22. Whether the Fire services are also used for such purposes as watering roads, supplying water to public, pumping water due to floods, etc. If so on what conditions;
23. Does your fire fighting equipment conform to standard specification of fire appliances and equipment. If not, please supply copies of specifications of your equipment.
24. Which of your fire fighting equipment are obtained from manufacturers in India or procured from foreign countries;
25. State your estimated annual requirements of all equipments.
26. Any other special points not covered by Nos. 1 to 25 above.

What are the provisions :

By the Corporation/ Municipality/ Local Board or by Private Bodies.
 How the expenditure is met;
 Is any fire tax being levied (details);
 If any charges are levied, what are they; Any mutual Aid in force? If so, give details.

PROFORMA 'C'

STATISTICS OF ANNUAL LOSS OF LIFE AND PROPERTY DUE TO FIRE

	For the year 19__ 20__
Name of Service	_____
Name of Town	_____
District	_____
State	_____

- (1) No. of fires annually and amount of fire losses each year for the preceding three years.
- (2) No. of lives lost and saved due to fire each year for the preceding three years.
- (3) Statistics of fires for the year under report.

Types of Fires	No. of Fires			
	Small	Medium	Serious	Total
(1)	(2)	(3)	(4)	(5)
(i) House hold. (ii) Textiles woolen, silk etc. Mills (iii) Oil Mills, Factories, ginning & Pressing works & manufacturing concern.				

	(1)	(2)	(3)	(4)	(5)
(iv)	Granaries,				
(v)	Storage, ware-houses, Goods Yards and Sheds.				
(vi)	Explosives/Fire Works/Match factories etc.				
(vii)	Chemical Fires				
(viii)	Cellulose spraying & Lacquer Manufacture.				
(ix)	Electrical fires				
(x)	Chimney Fires				
(xi)	Timber & Wood works etc.				
(xii)	Cinematograph films, celluloid, plastics etc.				
(xiii)	Locks, Air Port & Rly. Installations.				
(xiv)	Petroleum/Oil/Refining Installations.				
(xv)	Shops, Offices and Commercial Establishments.				
(xvi)	Theatres, Cinemas dance Halls and places of public assembly.				
(xvii)	Educational Institutions, Libraries, Hospitals etc.				
(xviii)	Gas, Electricity, Water Sewage undertakings.				
(xix)	Professional establishments.				
(xx)	Farm lands, Hay stocks, Crops Hay ricks etc.				
(xxi)	forest & Plantations				
(xxii)	Rail and Road Vehicles & Polling stock.				
(xxiii)	Refuse and out door storages.				
(xxiv)	Miscellaneous				

Total

Note: “**Small fire**”: - a fire with an estimated loss of Rs.10,000 and below.

“**Medium Fire**” – a fire with an estimated loss of over Rs.10,000 and upto Rs.50,000

“**Serious Fire**” – a fire with an estimated loss of over Rs.50,000/-

Any fire where in there are human casualties or deaths to be considered as “Serious Fire” even if the estimated loss may be anything upto Rs.50,000.

(4) Total Number of False Alarms of Fires:-

Malicious	Due to defective alarms	With good intention	Total
-----------	-------------------------	---------------------	-------

(5) Supposed causes of fires.

REVISED FORMS FOR COLLECTION OF THE STATISTICS

FORMULA RELATING TO FIRE STATISTICS

(For Urban areas)

See para 2 under 21 Collection of fire statistics
Part I

General Particular

Year _____

Name of Town/City _____

District _____

State _____

Name of the Fire Service _____

No. of stations in the Town/City _____

Details	Town/City	Adjoining Rural areas Covered if any
1.	2.	3.
(a) Area in sq.miles		
(b) Rateable value in Rs.		
(c) Populations		
(d) Fire Risks covered		
(i) Textile, woolen, silk and artificial silk, Rayon etc.		
(ii) Ginning Mills		
(iii) Cotton Presses		
(iv) Oil Mills		
(v) Petrol & Oil storages and Refineries		
(vi) Match factories, Fire Works and explosives manufacture		
(vii) Explosive stores.		
(viii) Processes involving dangerous petroleum product		
(ix) Cinematograph films celluloid plastics and bakelite work		
(x) Timber and wood working paper manufacture		
(xi) Chemical work]		
(xii) Gas and Electricity undertakings		
(xiii) Docks, Railways and Air Port Installations		
(xiv) Ware houses, goods, yards and goods sheds		
(xv) Manufacture of rubber goods		
(xvi) Other goods (given details)		

2. Is the Fire Service maintained by the State Government ? If so, under which Department of the State Government?
3. If the Fire Service is not maintained by the Government, state the Authority, e.g. Corporation / Municipality/Local Board by Private Bodies by which it is maintained.
4. Does the Fire Service maintain First Aid and/or Ambulance Unit ?
5. (a) Average annual expenditure on the Fire Service:
 - (i) Recurring _____
 - (ii) Non Recurring _____
- (b) How the expenditure is met ?
- (c) Is any fire tax being levied (details);
6. Does the Brigade attend to fires outside the area covered by it (see item No.1) If any charges are levied, what are they:
Give details of any mutual aid scheme in force.
7. Are the fire services used for purposes such as watering roads, supplying water to public, pumping water due to floods, etc.? If so, on what conditions?
8. Is there any organization for collection of statistics relating to fires? If so, what statistics are being collected? A copy of proforma used to be enclosed.

PART – II

(1) Fire Appliances:

Sr. No.	Items	Number In Working Order	Number Not in Working Order	Total	Estimated Requirement for the next year.
---------	-------	-------------------------	-----------------------------	-------	--

1. Motor Fire Engine with capacities (in gallons/liters per minute)
2. Water tenders/Tanks with capacities (in gallons/liters per minute)
3. Trailer Pumps with capacities (in gallons/liters per minute) per size
4. Pump scape with capacities (in gallons/liters per minute)
5. Turn Table Ladders with size.
6. Fire Boats with capacities (in gallons/liters per minute)
7. Manual Pumps
8. Towing vehicles.
9. Canteen Vans
10. Foam & Crash tenders with total capacity and discharge rates.
11. Emergency tenders
12. Control Post Vans.
13. Hose laying Lorries.
14. Breakdown Vans
15. Other vehicles (staff cars, motor cycles and cycles.
16. Ladders-extension.
17. Ladders – First floor
18. Ladders – Hook
19. Ladders – Scaling
20. Rescue gear (give details)

(2) Equipment

- (a) Wireless Scheme (if in operation)
Users (fire Brigade only or joint Scheme) _____
No. of fixed stations. _____
No. of mobile stations. _____
No. of walkie talkie sets type (AM or FM) Frequency _____
- (b) Hose (total length in feet) _____
- (c) Breathing apparatus (No. & Type of sets) _____
- (d) Oxy-Acetylene cutting outfits (No. of sets) _____
- (e) Lighting sets:
 - (i) Electric _____
 - (ii) Other forms _____
- (f) Foam equipment
(not extinguishers)
 - (i) Generator/Inductor _____
 - (ii) Foam making Branch pipes _____ (give capacities)
 - (iii) Foam compound (gallons)

(3) Accoutrements: Qty. Period for which issue.

Fireman's Axe
(Type Ordinary/insulated)
Helmets (Steel/Leather)
Belt & Pouch

(4) What are the arrangements for repair and maintenance of the equipment and appliances?

(5) Communications system:

- (a) Telephone (State 'Yes' or 'No')
- (b) Street Fire Alarms (Nos.)
- (c) Other facilities.

(6) Staff:

Sr. No.	Designation	Scale of Pay (In Rs.)	Allowances Admissible (In Rs.)	Any other terms of service	Sanctioned Strength		Remarks
					Regular Leave	Irregular Leave.	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)

(7) Is any auxiliary Fire Service maintained?
(If so, give its strength and other details.

(8) Training of Personnel: Is there a training school? If so, give details of Course, duration of each course and syllabi.

(9) Water resources available for fire fighting purposes.

Sr.No.	Source	Number fit for Fire Fighting		Approximate capacity (wherever applicable)
		Perennial	Seasonal	
1.	Static Tanks			
2.	Hydrants (on mains 6" and above)			
3.	Hydrants on mains below 6"			
4.	Storage tanks			
5.	Rivers			
6.	Canals			
7.	Wells,			
8.	Water Ponds,			
9.	Any other facilities.			

PART – III

1) Statistics of human and animal lives rescued /lost due to fires in the year under report:

Sr.No.	Types of rescue work	Number
1.	2.	3.
1.	Persons rescued without injuries or burns.	
2.	Persons rescued with burns and/or injuries who subsequently recovered	
3.	Persons rescued alive with burns and/or injuries who subsequently died.	
4.	Human lives lost before arrival of fire brigade	
5.	Casualties amongst fire service personnel	
6.	Animal rescued alive	
7.	Animal lives lost.	

2) Approximate value of property lost by fire during the year under report, classified according to ownership.

Sr.No.	Type of property	Approximate value of property lost (in Rupees)
1.	Government	
2.	Local Bodies	
3.	Private	
	(a) Mainly Industrial	
	(b) Mainly Residential	
	(c) Other including rural	
	Total:	

(3) Total number of False alarms of Fires

Sr.No.	Types of Alarms	Number
1.	Malicious	
2.	Due to defective alarms	
3.	With good intension	
	Total:	

5. Total Emergency or Special Service Calls attended during the year.
 - (i) Leakage of noxious or dangerous gases eg. Ammonia, chlorine, Formaldehyde etc.
 - (ii) Drowning, floods, etc.
 - (iii) Electrocution
 - (iv) Sewer accidents,
 - (v) Lift accidents
 - (vi) House collapses, earthquakes etc.
 - (vii) Rescue from heights
 - (viii) Others.
6. Any other points special importance not covered by Parts I,II and III above.

**INSTRUCTIONS TO BE FOLLOWED WHILE FILLING
IN PARTS – I, II AND III**

(FOR URBAN AREAS ONLY)

1. Complete set of Parts I, II & III is to be filled in for each town.
2. When the information for any item is “Nil” it should clearly be written “Nil” and if not available, the word N.A. should be mentioned.
3. Designation by which the particular service is known may be shown against the item “Name of fire service”. (It may comprise of more than one station).
4. The year refers to Calendar year (1st January to 31st December) and not the financial year.
5. The term “Mutual Aid” in item No.9 of Part I relates to any aid between Fire Services under two different authorities.
7. All classes of staff including class IV should be mentioned and it should also be clearly stated in the remarks column, as and where the class IV staff is utilised for the fighting purposes. If employees other than those engaged in fire service or utilized for fire fighting purposes, a mention of the same should be made. An account of those who are employed part time, if any, should be given.
8. While reporting the pay scales of the staff, the basic pay of a category of staff should be given exclusive of other allowances, for reporting of which the following abbreviations may be used.

D.A.	___	Dearness Allowance
C.A.	___	Compensatory or City Allowance
H.R.	___	House Rent Allowance.
S.P.	___	Special Pay if any,
U.A.	___	Uniform Allowance or Uniform Supplied.

9. While filling in different types of fires i.e. small, medium and serious the following points may be kept in view:-

Small fires: A fire accident with an estimated loss of Rs.10,000/- and below.

Medium Fire: A fire with an estimated loss of over Rs.10000/- and upto Rs.50000/-

Serious Fire: A fire with an estimated loss of over Rs.50000/-,

Any fire irrespective of extent of damage, should, however be classified as serious if there are any deaths.

10. If the fire is attended to by more than one brigade, while reporting the value of property lost by fire in a rural areas (Sl.No.3 of Part III) only that brigade within whose jurisdiction the area falls should reply.

PROFORMA RELATING TO FIRE STATISTICS

(For rural areas)

Year _____

Name of Village _____

Tehsil _____

District _____

No. of Fires. _____

(1) Extent of damage to property:

Sr.No.	Item	Unit	Estimated loss in Rs.	Remarks
1.	(a) Food grains (specify)	Mds.		
	(b) Standing crops	Acres.		
	(c) Fodder	Mds.		
	(d) Stocks of harvesting crops	Mds.		
	(e) Jungle	Sq.Miles.		
2.	Huts	No.		
3.	Cattle	Heads		
4.	Others (Specify)			

(2) **Casualties:**

	Injured	Dead	Rescued	Remarks
Human _____				
Animal _____				

(3) Was fire brigade summoned? If so, what help it rendered?

(4) Is there any source of water supply like well, canal, pond, river etc. near the place of fire and is it approachable by a motorable road?

PROFORMA RELATING TO FIRE STATISTICS

(For Central Ministries)

Year _____

Ministry _____

Department / Office _____

Place _____

(1) **Fire Appliances:**

Sr.No.	Items	Number in working order	Number not in working order	Total	Estimated requirement for the next year..
1.	2.	3.	4.	5.	6.
1.	Motor Fire Engine with capacity (in gallons/ liters per minute)				
2.	Water ladders/ banks with capacities (in gallons/ liters per minute)				
			142		

3. Trailer pumps with capacities (in gallons/liters per minute).
4. Pump escape with capacities (in gallons/liters per minute) with size.
5. Turn table ladders with size
6. Fire Boats with capacities in gallons/liters per minute
7. Manual Pumps.
8. Towing vehicles
9. Canteen Vans.
10. Foam & Crash tenders with total capacity and discharge rates.
11. Emergency tenders
12. Control Post Vans.
13. Hose Laying Lorries
14. Breakdown Vans.
15. Other vehicles (staff cars, motor cycles & cycles etc.)
16. Ladders -- Extension.
17. Ladders -- First floor
18. Ladders -- Hook
19. Ladders -- Scaling
20. Ladders -- Rescue gears
(give details)

(2) Equipment:

(a) Wireless scheme (if in operation):

Users (Fire Brigade only or joint scheme) _____
 No. of fixed stations _____
 No. of mobile stations _____
 No. of walkie-talkie sets (type – AM frequency) _____

(b) Hose (total length in feet) _____

(c) Breathing apparatus (No. 2 type of sets) _____

(d) Oxy-Acetylene cutting outfits (No. of sets) _____

(e) Lighting sets: (i) Electric _____
 (ii) Other forms _____

(f) Foam Equipment (not extinguishers) –

(i) Generator/Inductors _____

(ii) Foam making Branch pipes _____

(iii) Foam compound (gallons) _____

(3) What are the arrangements for repair and maintenance of the equipments and appliances?

(4) Average annual expenditure on the fire service:

- (i) Recurring _____
(ii) Non-recurring _____

(5) Staff:

Sr.No.	Designation	Scale of Pay (Rs.)	Allowances admissible (Rs.)	Any other terms of service	No.of posts sanctioned		Remarks
					Regular	Leave & Trg.Reserved	
1.	2.	3.	4.	5.	6.	7.	8.

(6) **Accoutrements: Quantity Period for which issued**

Fireman's Axe (type ordinary/insulated)

Gas Masks (Type)
Helmets (Steel/Leather)

Belt & Pouch

(7) Water resources available for the fighting purposes:

Sr.No.	Sources	Number fir for fire fighting		Approximate capacity (wherever applicable)
		Perennial	Seasonal	
1.	2.	3.	4.	5.
1.	Static Tanks			
2.	Hydrants on mains 6" and above			
3.	Hydrants on mains below 6"			
4.	Storage tanks			
5.	Rivers			
6.	Canals.			
7.	Wells.			
8.	Water ponds			
9.	Any other facilities.			

(8) Statistics of human and animal lives rescued / lost due to fires in the year under report:

Sr.No.	Types of rescue work	Number
1.	2.	3.
1.	Persons rescued without injuries or burns	
2.	Persons rescued with burns and/or injuries who subsequently recovered.	
3.	Persons rescued alive with burns and/or injuries who subsequently died.	
4.	Human lives lost before arrival of fire brigade.	
5.	Casualties amongst fire service personnel	
6.	Animal rescued alive	
7.	Animal lives lost.	

(9) Statistics of Fires for the year under report:

Sr.No.	Types of fires	No. for fires				Estimated loss
		Small	Medium	Serious	Total	
1.	2.	3.	4.	5.	6.	7.
1.	House hold					
2.	Manufacturing and repairing establishment					
3.	Granaries					
4.	Storages, warehouses, goods yards & sheds					
5.	Explosives/Fire works/Factories.					
6.,	Chemical Works					
7.	Cellulose spraying and lacquer					
8.	Electrical Installations.					
9.	Timber & Wood works etc.					
10.,,	Cinematograph films, celluloid, plastics etc.					
11.	Docks, Air Ports & Railway installations.					
12.	Petroleum/Oil refining installations.					
13.	Shops, offices and commercial establishments.					
14.	Theatres, cinemas, dance halls & places of public assembly.					

Sr.No.	Types of fires	No. for fires				Estimated loss
		Small	Medium	Serious	Total	
1.	2.	3.	4.	5.	6.	7.
15.	Educational institutions, Libraries, Hospitals etc.					
16.	Gas, Electricity, Water-sewage undertakings.					
17.	Farm lands, Hay stocks, Crops, Hay ricks etc.					
18.	Forest & Plantations.					
19.	Rail & road, vehicles & rolling stocks.					
20.	Refuse and outdoor storages.					
21.	Miscellaneous.					

Total:

**INSTRUCTIONS TO BE FOLLOWED WHILE FILLING IN THE PROFORMAE
(FOR CENTRAL MINISTRIES)**

- The year refers to Calendar year (1st January to 31st December) and not the financial year.
- When the information for any item is "Nil", should be clearly written "Nil" it and if not available, the word "N.A." should be mentioned.
- Reporting of capacities for items such as motor pumps, water tenders and trailer pump is very important and should not be lost sight of while filling in the proformae.
- All classes of staff including Class IV should be mentioned and it should also be clearly stated in the remarks column, as and when the class iv staff is utilized for fire fighting purposes. If employees of Municipal Committee, other than those engaged in fire service, are utilized for fire fighting purposes. a mention of the same should be made. An account of those who are employed part time, if any, should be given.
- While reporting the pay scale of the staff, the basic pay of category of staff should be given exclusive of other allowances, for reporting of which the following abbreviations may be used:-

D.A.	___	Dearness Allowance
C.A.	___	Compensatory or City Allowance
H.R.	___	House Rent Allowance.
S.P.	___	Special Pay if any,
U.A.	___	Uniform Allowance or Uniform Supplied.
- While filling in different types of fires i.e. small, medium and serious the following points may be kept in view:-

Small fires: A fire accident with an estimated loss of Rs.10,000/- and below.

Medium Fire: A fire with an estimated loss of over Rs.10000/- and upto Rs.50000/-

Serious Fire: A fire with an estimated loss of over Rs.50000/-,

Any fire irrespective of extent of damage, should, however be classified as serious if there are any deaths.

APPENDIX 22-A

STANDARD FORM FOR REPORT ON ATTENDANCE OF FIRES ----- FIRE SERVICE

(See para 4 under 22 Reports)

FIRE REPORT

Division ----- Fire Report No. -----
Station----- Date of incident -----
Officer-incharge at fire -----

I-Call

Called by -----
Telephone/Fire Alarm No.-----
Address of premises involved -----
Occupier's name----- Business -----
Owner's Name and address -----
Time of call----- Time of first turn-out -----
Time of arrival at incident -----
Distance from station to incident ----- miles.

II- Particulars of Fire

Description of property, involved, industry , type
of construction , area etc.
Category of fire- Serious/medium/small -----
Extent of fire -----
Supposed cause of fire -----
Description of damage -----

Estimated value of
(i) Property involved-----
(ii) Surrounding risk, if any -----
(iii) Damage to premises -----
(iv) Damage of contents -----

Name of last officer to leave the fire -----
Time and date of leaving fire -----
Total time employed ----- hours ----- minutes.

III – Persons Escaped and Rescued

Escaped without assistance of Fire Service		Assisted out by Fire Service without aid of Appliances		Rescued by Fire Service using appliance	
M	F	M	F	M	F

Note :- Report on False Calls should be marked “False” in red ink across Part II of the report form.

Causalities

Lives Lost		Injured	
M.	F.	M.	F.
F.S. Others		F.S. Others	

V – Attendance at Occurrences

Name of Fire Station	Type of Appliance	Registration Number	Time of		Leaving Incident	Time of		Trip mileage	Pumping Hours
			Turn out	Arrival at incident		Return to station	back home		

F.S. Personnel in Attendance

(Relief personnel not to be included)

Rank	Officers Name	Rank	Personnel Number	Name
------	---------------	------	------------------	------

VII Any other Remarks

(Signed)-----
Officer –in-charge

STANDARD FORM FOR REPORT OF ATTENDANCE AT SPECIAL SERVICE CALLS

(See para 4 under 22 Reports)

-----**FIRE SERVICE**

Special Service Report

Division ----- Fire Report No. -----
 Station----- Date of incident -----
 Officer-incharge at incident -----

I-Call

Called by -----
 Telephone/Fire Alarm No.-----
 Address of premises involved -----
 Occupier's name----- Business -----
 Owner's Name and address -----
 Time of call----- Time of first turn-out -----
 Time of arrival at incident -----
 Distance from station to incident -----

II- Particulars of Incident

Full details of incident -----
 Supposed cause -----
 Service rendered -----
 Name of last officer to leave the incident -----
 Time and date of leaving incident -----
 Total time employed ----- hours ----- minutes.

III – Persons Escaped and Rescued

Escaped without assistance of Fire Service		Assisted out by Fire Service without aid of Appliances		Rescued by Fire Service using appliance	
M	F	M	F	M	F

Note :- Report on False Calls should be marked "False" in red ink across Part II of the report form.

IV –Causalities

Lifes Lost		Injured	
M.	F.	M.	F.
F.S. Others		F.S. Others	
Name	Address(es) *	Name	Address(es) *Nature of injuries

* Fire Service members will suffice in the case of Service Personnel.

V – Attendance at Occurrences

Name of Fire Station	Type of Appliance	Registration Number	Time of		Time of		Trip mileage	Pumping Hours
			Turn out	Arrival at incident	Leaving Incident	Return back to home station		

VI F.S. Personnel in Attendance

(Relief personnel not to be included)

Officers		Personnel		
Rank	Name	Rank	Number	Name

VII Any other Remarks

(Signed)-----
Officer –in-charge

STANDARD INSPECTION REPORT FORM

(See Para 7 under 22 Reports)

-----FIRE SERVICE

INSPECTION REPORT

Sub :- ----- Case No. -----
 Date of inspection : Street Date : -----
 Ward : -----

- (1) Premises No. & name of building.
- (2) Occupants :
 - a) Name of Firm or company or business or factory
 - b) Name of the Proprietor or Owner.
 - c) Name of Contact.
- (3) Description of
 - (a) Nature of business ,m trade or process.
 - (b) Commodities and quantities applied for.
 - (c) Position of storages in relation to number of rooms, floor, area, etc.
 - (d) Commodities already licensed together with quantities (by Municipality, State or central Government). State Licence Number .
 - (e) Trade, Business or Commodities applied for and disapproved with reasons, if any.
- (4) Building :
 - (a) **Constructional features** :-
 - (i) **General** :
 - Low risk – cement concrete or brick- walled .
 - Medium risk- brick –walled and timber-framed.
 - High risk- most timber-framed, such as timber-floors, timber roof, timber staircase etc.
 - (ii) **Particulars** :
 - No. of storeys and basement, if any.
 - Walls
 - Doors
 - Windows (Barred etc)
 - Verandahs or Balconies
 - Floors
 - (Attics, mezzanine floors, lofts etc.)
 - Ciling
 - Roof (or terrace)
 - No. of staircase and positions- enclosed or open
 - No. of lifts – enclosed or open Emergency Escapes, if any

- (b) Other occupancies:-
Shops, godowns, factories, workshops, hotels, departmental stores,
schools, hospitals, residences, offices etc.

(5) Observations :-

- (i) Width of road/street/lane.
- (ii) * Accessibility for Fire Engines
- (iii) * Nearest Fire Hydrant
- (iv) Bounded on (if open space, state width and whether road, lane, by-lane or sweeper's lane. If structures, state shed, building etc.) and proximity.

North
South
East
West

* In relation to (ii) and (iii) above , state proximity- distance in feet-from the premises under consideration.

(6) Nearest means of communication :

- I. Telephone
- II. Street Fire Alarm
- III. Fire Station
- IV. Police Chowki or station.

(7) Installed fire fighting equipments, if any (Buckets, sand, fire extinguishers and their types, First-aid hose reel. Private hydrants and hose. Sprinklers. Pumps etc.

(8) Fire Detection :

- I. Fire-Detecting and alarm system, if any.
- II. Watchman , if any.

(9) Water Supply, other sources, if any and gallonages:

Static Tanks, Wells, Ponds etc.
Storage Tanks (over-head , surface or underground)

(10) Recommendations :

(a) Particulars

- I. Commodities and quantities
- II. Locations
- III. Storage arrangements
- IV. Precautionary measures
- V. Structural recommendations.
- VI. Protective measures (Fire Fighting equipments)

(b) General

(c) Submit this case papers after ----- days/months to re-check if the requirements are satisfactory carried out.

(11) Notings Events after Inspection :

- (i) Records of Fires with dates
 - (1) Commodities involves.
 - (2) Causes.
- (ii) Breach of conditions noticed on re-inspection.
- (iii) Change in business or occupation, if any.

(12) Action Taken :

----- **FIRE SERVICE**
----- **STATION**

INSPECTION ROUTE CARD

Name of the
Inspecting Officer
Date of Inspection

No.	Location	C	R	R.I.	N.S.	P.A.

Abbreviations : C - Complaints
 R - Regular Inspection
 R.I. - Re-inspection
 N.S. - Notice served
 P.A. - Personally abated –hazard.

The Route Card to be used both by the Officers of the Fire Service and Inspection Officers of the Licencing Authority.

NOTE ON FIRE PREVENTION IN RURAL AREAS

(See para 2 under 24 FIRE PREVENTION)

RURAL FIRES AND THEIR PREVENTION

Introductory

India's millions of population, illiterate, half-starved, half naked and extremely poor, lives primarily on agriculture and farming. It is these people, the rural inhabitants of India, who toil hard and sweat to the bone, to produce food for the hungry millions of our country and to keep the cities and towns to live and prepare. And yet, these are the people, living in huts in the innumerable villages and hamlets of the country, who have been denied the most vital and necessary protection to their lives and property, namely, protection from hazards of fire.

2. Every year, thousands of fires occur in villages, farms, both amount the crops and the ricks, and in farm buildings resulting in losses of not only lakhs of rupees worth of goods but the most valuable and vitally required harvested crop for saving the countries teeming millions from starvation. In many a cases, even lives are lost in such fires and added to this, the possible deaths due to starvation, brings forth to us a most grim picture of India's helplessness in tackling this onerous problem.

3. Nothing can be more heart-breaking to the farmers who have toiled hard towards reaping a good harvest, when suddenly in front of their eyes they see that every thing that they hoped and worked for, has gone up in flames. If a careful survey of the causes of such disasters is made, it will be found that many of these fires can be easily avoided or atleast the damage could be minimised to a considerable extent.

Characteristics Disadvantages :

4. Villages and rural areas usually suffer from certain characteristics disadvantages, such as (i) highly combustible nature of village thatched dwellings. (ii) scarcity of water, particularly during summer. (iii) high wind velocity due to vast open areas ground (iv) improper road conditions leading to the village and farm lands unpassable by fire fighting vehicles and (v) ignorance of freight on the part of villagers to call Fire Service for help through village revenue officials or Police. Added to this, the natural human habit of inhabitation by close clusters affords ideal conditions for a very rapid spread of a small fire, which can throw a trail of disaster in its fury.

Common Causes

5. If we analyse the common causes of such fire disasters in villages and rural areas we find that these are normally :-

- (a) Use of open cooking fires in kitchen with fire wood as fuel, the burning embers of which, shoot up too high, igniting the thatched or split-bamboo-roof or wooden self above the kitchen fires.
- (b) Most careless and inattentive use of naked flame oil lamps as well as kitchen fires, which are left burning while retiring to bed. These are either upset by animal pets or carried away by pests like redents, cockroaches etc., thus starting fires during lying human lives.
- (c) Careless smoking and disposal of burning bidi or cigarette butts near about stocks of hay or grain or such other places where fire can thrive and spread.
- (d) Sparks from Chimneys or crude domestic heating and cooking arrangements or from near by rail locomotives.

- (e) Intention burning of grass lands without proper precautions.
- (f) Spontaneous combustion which starts in newly cut straw or hay stocks due to its moisture contents which transform into heat in very hot climate conditions of summer.

(6) Apart from above, there are causes like display of fire works at festival times, village fairs resulting in arson and due to lightning which also account for many such fires.

Preventive Measures

(7) It is not easy to have organised fire services in rural India to attend to such fires, specially at places situated far from towns and cities where fire services might be available. The solution to this problem therefore, would be to follow some of the fire preventive measures enumerated below so as to minimise the occurrences of such fires :-

- (a) The dwellings and huts should be constructed, as far as possible, with non-combustible materials, such as, thick mud walls, bricks or stones with roofs of metal or asbestos sheets or tiles, particularly the portions around the kitchen fire and the roof above it. If split-bamboo is used in construction, the same would be covered with thick mud plaster on both sides and lime washed to make it a little fire resistant.
- (b) Naked oil lamps or kitchen fires should never be allowed to burn while retiring to bed. It is much safer to keep a match box handy during night in order to light the lamp, whenever necessary.
- (c) Cigarettes or bidis ends as well as burning match sticks or cooking fire should be fully extinguished before disposal.
- (d) Stocks of straw and hay should be built up at short distances away from village roads or railway lines to avoid burning sparks falling on them. If fields are situated next to roadway or railway, necessitating the building of stacks in them, plough a belt or land at least 15 wide along side the road-way or railway and utilize it in growing green crops.

Hay stacks not more than 500 maunds in capacity and about 25 ft. in height, should be built up, at least 60 apart from each other or from other/farm building or combustible structure, and the open spaces between them should be kept clear of any combustible material.

- (e) Whenever waste material, grass land-rubbish stubble etc. are to be burnt, such burning should always be done away from residences or from hay stacks, on a calm day leaving 15' area around the burning, ploughed up to serve as a fire break, and the burning operations should be carefully supervised.
- (f) To avoid spontaneous combustion in newly cut hay, the same should be stacked from sides keeping a vertical opening through the centre which before the stack is sufficiently high should be filled in with loose straw to the top of the opening. This will allow the internal heat to escape out through the loose straw and dissipate it thus reducing the chances of spontaneous combustion.
- (g) The line of building the hay stacks should be across the line of prevailing wind direction to avoid sparks being carried from one stack to the other.
- (h) All combustible storages such as, fuel wood, oils, paints, spirits etc. should be kept in separate rooms detached from the dwellings.
- (i) Shopping areas and bazars should be built-up with sufficient wide open spaces between groups of shops and not clustered together.

Fire Fighting

(8) Observations of precautions mentioned above do not ensure complete safety from occasional accidental fires in rural India. Therefore it would be quite necessary to arrange for organised actions to be taken in case of a fire to put out the same.

(9) Due to the very nature of highly combustible materials likely to be involved in a village fire and due to the inherent disadvantages to which the village areas are placed, the only solution to this problem is to persuade the villagers to organised action by "Self-Help" even though the village may be within the call zone of a Fire Service in a nearby town. A beginning should be made by educating the villagers about the steps to be taken in the case of a fire. The fright from their minds has to be removed as regards calling the Fire Service through the Police or the village Revenue official , assuring them that they would in no way be punished for such actions on their part. They should, on the contrary, be taught to consider this as their sacred duty to help their fellow villagers in their hour of peril.

(10) As soon as a fire has occurred, immediate alarm should be raised for people around to hear and all efforts should be made to put out the fire by such means as (a) fire buckets with water (b) dry sand and earth, (c) fire beaters or brooms or fire bats using green twigs of trees, (d) shovels or spades and (e) isolation of all combustible material from the path of the fire. A few dwellings or huts around the fire may even have to be pulled down to achieve this object. A number of the group of workers should run up to the village Police Post or Revenue official and give information to enable him to call the nearest available Fire Service, if possible. In the meantime a band of active local villagers should be organised to make a concerted effort to put out the fire or atleast to localise it till the arrival of the Fire Service by preparing chains of water bucket suppliers, fire beaters shovel and spade workers, as also for isolation of the burning material. Removal of inhabitants from around the fire, especially women and children, to place of safety should also be undertaken simultaneously.

(11) Water is most essentially needed to extinguish fire and therefore, the villagers should be educated to maintain all sources of water, such as wells, ponds, streams , canals, lakes, rivers etc. in good condition and approachable by fire fighting pumps with hard surfaced roads and without any obstructions. Sufficient quantity of ropes and buckets should also be handy to draw water from deep levels.

Fire Fighting Implements

(12) Following fire-fighting implements are usually useful in fighting fires in rural areas :-

- (a) Fire Beaters or Fire Bats
- (b) Forks- Drag hook or Pitch fork types (commonly known as rakes).
- (c) Hay –knife.
- (d) Stack-Drag
- (e) Shovels and Spades
- (f) Bill hook or slashers
- (g) Pulaski Tool (useful for forest fires).
- (h) Stirrup or hand pumps.
- (i) Manually operated portable pumps
- (j) Back harnessed portable tank hand pumps with spray guns (for forest fires).

Village Fire Parties

13. It would be worth-while to consider the question of setting up small fire parties or fire squads in villages with the above implements.

14. The villagers may be persuaded to make efforts to see that atleast about 1000 gallons of water is available at all times within a reasonable distance around.

15. As regards requirement for communications between the village and the nearest town where fire service might be available, perhaps it might be possible to establish contact to secure aid by despatch of cycle –messenger if the nearest town is within reasonable distance- say about 10 to 15 miles. Beyond this range, it would be of little use to call for aid through a despatch rider.

FIRE PREVENTION MEASURES IN THATCHED HUTMENTS

(See para 3 under 24 Fire Prevention)

1. Bearing in mind that such hutments belong to the low income groups, it was agreed that it was not possible to ensure that such hutments were constructed of non-inflammable material or in a pattern to ensure adequate fire lanes. In view of this the SFAC recommended the following measures should be adopted in such areas :-

- (a) Inhabitants should be given education in fire prevention measures.
- (b) Inhabitants should be encouraged to mud lipai on both sides of the thatch and then to white wash it on the inside. This is not only in-expensive and can be done by self-help locally, but considerably reduces the inflammability of the thatch.
- (c) The inhabitants should be trained in elementary fire fighting methods, and if necessary supplied with simple fire fighting appliances such as buckets, stirrup pumps and hill hooks.

**MINUTES OF THE SUB COMMITTEE ON THE ESTABLISHMENT OF FIRE
PREVENTION WING IN THE FIRE SERVICES**

(See para 10 under 24 Fire Prevention)

Composition

Shri P.E. MOOSA .. Convenor
Shri S.K. BOSE .. Member
Shri SUBIMAL SARKAR .. Member
Shri R.S.GUPTA and Shri R.S. SUNDARAM were also co-opted as members, at the instance of the Chairman.

Recommendations :

“The fire prevention wing of a Fire Service or Brigade will be under the overall charge of a senior officer of suitable designation preferably a Divisional Officer or above. The jurisdictions of convenient number of fire stations will be grouped to be designated as District/Division/Zone. Each such unit will have one Fire Prevention Officer of the rank of a Station Officer who has put in service for a period of not less than 5 years as an operational service incharge of the Fire Station. He will be assisted by a Sub-Officer with similar experience of 5 years . Further, one Leading Fireman with a minimum of 3 years experience and two Fireman and a Clerk typist will be attached to each Zone.

“ The Station Officer Incharge of the Wing, as stated above should preferably be provided with some vehicle /conveyance to facilitate spot inspections of various places whenever required. Provision of conveyance to enable the Wing to highly mobile for speedy disposal of the work entrusted to them should be made.”

Charter of Duties of Fire Prevention Officer

“ The Fire Prevention Officer in the rank of a Station Officer will be responsible for discharging the following duties:-

- (a) He will be responsible for the smooth and efficient operation of the fire prevention section under his charge.
- (b) He is to conduct goodwill inspection whenever requested for assistance by a various statutory authorities in all matters connection with fire prevention /protection under the various Acts. Statutes, Rules, Bye-laws. Regulations etc. such an execution of provisions of requirements laid down in this regard in Petroleum Act. Cinematograph Rules etc.
- (c) He is to inspect placed of public entertainment like cinema house theatres etc. as and when required.
- (d) He is to carry out the testing of various first aid fire fighting appliances they have like the extinguishers fixed installations in any premises whenever requested/required to do so.
- (e) The Fire Prevention Officer is to submit reports on his inspection to the fire authority for onward transmission to the appropriate authority.
- (f) He will also be responsible for effective fire prevention propaganda from time to time throughout the year in consultation with the fire authority in order to minimise the loss of life and property due to fires”.

“The Sub Officer is to assist the Station Officer Incharge of the Fire Prevention Section of a district or zone in all respects towards the efficient discharge of his duties. He will also be most mobile for outdoor inspection of the various hazardous localities.”

“The Leading Fireman and Fireman attached to the Fire Prevention Section will be required to render all assistance to the Station or Sub-Officer in testing the various first-aid fire appliances such as fixed installations etc. where required in different occupancies and during such other duties, in connection with fire prevention as may be given to by the Officer Incharge .

“The Clerk/Typist will be responsible for the office work and in maintaining diary of reports/inspections.

ABRIDGED LIST OF TRADES INVOLVING SPECIAL, FIRE RISKS

(See para 1 under 27 SPECIAL RISKS)

Acetylene Engineers	Concert Halls	Job Masters
Acid Manufactures	Contractors.	Joiners
Agricultural Implement	Coopers	Lace Manufacturers
Manufacturers	Cork Merchants	Lecquer manufacturers
Ammunition Dealers &	Cotton Goods	Laundries
Manufacturers		
Analysis	Curriers and Tanners	Lithographic printers.
Artificial flowers	Decorators	Marine Stores
Ammonia manufacturers	Drapers	Meat Salesman.
Asphalt and Bitumen	Druggists	Metal Workers.
Auctioneers	Dyers and cleaners	Munition makers
Automobile engineers.	Electrical suppliers	Millers.
Bag Manufacturers	Enamellers	Milliners
Bakers & Confectioners	Muslim clippers	Millwrights.
Basket Manufacturers	Envelope Makers	Motors, works, & garages
Bazaars	Exhibitions	Musical instrument makers
Bedding & Mattress	Explosive manufacturers	Offices, Retail shops, and
manufacturers		stores.
Billposters	Export Pacers	Oil merchant
Biscuit Manufacturers	Fancy Box Makers and Goods	Oilmen and domestic stores
	Trades	
Blacksmiths and Farriers	Farmers	Packing case makers
Boarding Establishments	Factories and workshops	Painters
Boat Builders	Fish curers and fried fish shops	Paper Bag and Box Makers
Book Binders	Floor cloth manufacturers	Photographers
Boot and Shoe Factories	Flour Mills	Piano manufacturers
Bottle Merchants	Forage Merchants	Plumbers and Gas Fitters
Brewers	Founders	Printers
Bronze Powder manufacturers	French Polishers	Rag and waste dealers
Brush makers	Furriers	Restaurants.
Builders & applied trades	Galvanizers	Rubber Goods
Butchers and tripe boilers	Gas Singers and Cloth pressers	Sack and Bag Manufacturers
Cabinet Makers	Glass works	Saw Mills.
Cap and Hat Makers	Glovers	Ship Builders
Carbide of Calcium Makers	Glue merchants	Ship Chandlers
Carmen	Gramophone and Record trade	Silk
Carpenters	Grocers, coffee roasters.	Skin Dressers
Carriers	Gun Smiths	Soap Boilers
Case Makers	Hair dressers	Spice Grinders
Caterers	Hatters	Stables
Celluloid Goods manufacturers	Hay and straw dealers	Stationers
Cement Manufacturers	Hops	Tanners
Chair makers	Hosiers	Tarpaulin makers
Chemical manufacturers	Hospitals	Theatres.
Chemists	Hot Pressers	Timer merchants
Cinema & cinematograph stores	Incandescent mantle makers	Tobacco trades
Clothiers and outfitters	Indian rubber & guttapercha	Turkish baths
	manufacturers	
Coach builders	Ink (Printing) manufacturers	Upholsterers
Coal and coke merchants	Iron Founders	Varnish Manufacturers
colour manufacturers	Jewellers	Water proofers
Comb manufacturers		Wharfingers
		Wheelwrights

APPENDIX 27-B

CATEGORISED LIST OF TRADES INVOLDING SPECIAL FIRE RISKS REPORT ON THE CLASSIFICATION OF OCCUPANCIES ACCORDING TO LIST OF HAZARDOUS AND EXTRA HAZARDOUS GOODS AND THE GENERAL PRINCIPLES FOR RECOMMENDING FIRE PRECAUTIONS.

(See para 3 under 27 SPECIAL RISKS)

The Sub Committee considered the various types of occupancies as well as the hazardous goods involved in different trades and industries and propose the following broad occupancy grading :-

Group A – Assembly buildings .

1. Theatres and cinemas.
2. Other halls with a closely seated audience.
3. Exhibition halls.
4. Dance halls.
5. Restaurants.
6. Club rooms and similar minor assembly occupancies
7. Non-residential schools.
8. Department stores-ground floor, sales basements and any upper floor used for bazaars or special sales displays.

Group B- Trade commercial and industrial buildings

1. Retail shops.
2. Department stores-upper floors (except as Group A(8) above.)
3. Offices
4. Warehouses and wholesale stores.
 - a. Normal hazard
 - b. Abnormal hazard.
5. Factories –except large single-storey buildings
 - a. Normal hazard
 - b. Abnormal hazard.
6. Large area single storey factories
 - a. Normal hazard
 - b. Abnormal hazard.

Group C- Residential and institutional buildings.

1. Flats, maisonettes.
2. Hotels, boarding houses, hostels.
3. Residential schools institutions.
4. Hospitals , nursing homes, homes for old people.
5. Places of detention, jails asylums.

Considering groups A and C it will be seen that within each group, the contents of all buildings will be of a fairly well-defined and standardized type, coming within the low normal fire load category. In residential buildings, for example, the contents will be ordinary domestic furniture and the fire hazard involved will not vary substantially from one building to another.

In Group B occupancies there is a considerable variation in the contents of different buildings of the same type. In any one of these, i.e. offices, are the contents substantially similar. Warehouse, shops and factories all show a wide variation according to the quantity and nature of the goods involved or the processes carried on. In warehouse and factory buildings it is particularly necessary to draw a distinction according to contents and in these cases sub-division into the two types, normal and abnormal hazard is required.

Out of the above three groups, the Sub Committee was of the opinion that no extra fire precautionary measures other than those that work out as recommended vide item 4 of the Standing Fire Advisory Committee minutes of the 2nd meeting for industrial establishments will be necessary for the occupancies coming under Group A and Group C. The Sub Committee however, felt that additional fire precautionary measures will have to be taken in case of occupancies coming under Group B.

While working out the fire precautionary measures for the extra hazardous and hazardous goods in trades and industries the Sub Committee felt that the following factors are required to be taken note of :-

- a) Structure housing the industry or the trade.
- b) Area covered.
- c) Material stored or under process.
- d) Machinery likely to start a fire
- e) Exposure hazard.

As regards the factors at (a) and (b), the Sub-committee felt that these have been well covered in the formula recommended under item 4 of Standing Fire Advisory Committee minutes of 2nd meeting for working out the normal fire precautions. However, for taking into account the extra hazard and fire risk created by items 3,4 and 5, the Sub-committee is of the opinion that the value B of the formula should be multiplied by a coefficient Q of appropriate value.

A list of hazardous and extra hazardous goods of materials that are likely to be involved in the manufacture, process, storage or handling in trades in industries showing their classification as H= Hazardous and EH= Extra Hazardous is given below -

Regarding the assessment of risk due to the Exposure Hazard, a reference to the Indian Standard Code of Practice for Fire Safety of Buildings – Exposure Hazard, may be made.

Material	Class of Hazard
Absolute Alcohol	E.H.
Accelerine	H.
Accumulator Acid (See Sulphuric Acid dilute)	E.H.
Accumulator Cases, Celluloid	E.H.
Acetal	E.H.
Acetaldehyde	E.H.
Acetates, See under specific names	
Acetic Acid (Glacial)	H
Acetone, See Di Methyl Ketone	
Acetone Oils	E.H.
Acetylene (dissolved)	H.

Material	Class of Hazard
 सत्यमेव जयते Acetylene (Liquid)	E.H.
Acetyloid	E.H.
Acetyloid	E.H.
Acid. See under specific names	
Aconite Leaves. See Leaves	
Acrylonitrile	E.H.
Aeroplane Flares, See Flares	H.
African Fibre	H
Aguardiente, See Spirits Portable	
Alcohol. See under specific names	
Alfa (vegetable Fibre)	H
Algerian Fibre	H
Allyl Alcohol	H
Aloe Fibre	H
Alpha (Vegetable Fibre)	H
Aluminium Carbide	E.H.
Aluminium Dust	E.H.
Aluminium Paste	E.H.
Aluminium Powder	E.H.
Aluminium Resinate	H
Aluminium Supho-Cyanide, See Poisons	
Ambari Hemp (Vegetable Fiber)	H
American Moss Fiber	H
Ammonia (Aqueous solutions or spirits of ammonia exceeding 30 percent NH ₃ (less than 99 S.G.))	H
Ammonia, Anhydrous	H
Ammonium Bichromate	H
Ammonium Chloride	H
Ammonium Cyanide	E.H.
Ammonium Nitrate	E.H.

Material	Class of Hazard
Ammonium Picrate	E.H.
Ammonium Perchlorate	E.H.
Ammonium Persulphate	E.H.
Ammonium Sulpho Cyanide, See Poisons	
Ammunition, including Cartridge and Fuses, other than safety cartridges and safety fuses	E.H.
Safety Cartridges and safety fuses	H
Amorces (Explosive)	E.H.
Amorphous Phosphorous	H.
Amyl Acetate, F.P. below 24.4 ⁰ C (iso-from fuel oil) F.P. not below 65.5 ⁰ C	H
Amyl Alcohol	H
Amylamine	E.H.
Amyl Butyrate	H
Amyl Chloride	E.H.
Amylene	E.H.
Amylene Hydrate, See Amyl Alcohol	
Amyl Ether	E.H.
Amyl Formate	H
Amyl Nitrate	E.H.
Amyl Oxide See Amyl Ether	
Amyl Propionate n	H
Andersonian Fibre	H
Anhydrous Ammonia. See Ammonia, Anhydrous	
Aniline	H
Aniline Oil	H
Animal Black	H
Animal Oils, See Oils, Animal, Fish etc.	
Animi	H
Anhydrous denatured alcohol (Ansol M & Ansol PR)	E.H.
Anthracene	H.
Anthracene oil	H
Anti-Corrosive Paint . See paints	H

Material	Class of Hazard
Anti- Fouling Paint. See paints	
Antimony –potassium Tartrate See Poisons	
Antimony sulphate. See antimony trisulphate	
Antimony sulphate	H
Antimony trisulphate	E.H.
Aqua Fortis . See Nitric Acid	
Aqua Regia	E.H.
Arachis Oil . See Oils, Animal Fish ec.	
Archangel Mats. See Mats, Archangel or Russian	
Arca Nuts complete with husk or shell	H
Areca Nuts without husk or shell, i.e. shelled	E.h.
Arnica Flowers. See Flowers	
Arrack, See Spirit , portable	
Article made from non-feam. Cellulose base, excluding non-flam. Films on metal spools. See cellulose base articles or waste	
Artificial silk , fibre, See Rayon fibre	
Artificial silk waste, See Rayon Waste	H
Asafetida, unless packed in bottles in cases or in tins in cases	H
Asphalt	H
Asphalted Felt. See Felt.	
Asphalted Paper , See Paper	
Asphalt Saturated Felt, See Felt	
Asphaltum	H
Begarse. See Bagassee	
Bagassee (Vegetable Fibre)	H
Bagazo, See Bagassee	
Bags and Sacks	
Those which have contained nitrates or sugar, oily, greasy or treacly materials.	H
Balata, unmanufactured, if stored with other goods	H
Balasams, unless packed in bottles in cases or in tins in cases	H
Bamboo Fibre	H
Bamboo Mats	H

Material	Class of Hazard
Banana Fibre	H
Bamboo Fibre	H
Barium Acetate, See Poisons	
Barium Binoxide , See Barium Peroxide	
Barium Bromate	E.H.
Baromide. See Poisons	
Barium Carbonate See Poisons	
Barium Chlorate	E.h.
Barium Chloride, See Poisons	
Barium /Chromate. See Poisons	
Barium Cyanide, See Poisons	
Barium Ethylsulphate See Poisons	
Barium Fluoride, See Poisons	
Barium Hydrate. See Poisons	
Barium Iodide. See Poisons	
Barium Manganate, See Poisons	
Barium Manganate See Poisons	
Barium Nitrate	E.H.
Barium Oxide, See Poisons	
Barium Peroxide	EH
Barium Sulphide	H
Barium Sulphocyanate. See Poisons	
Barium Sulphocyanide, See Poisons	
Bass , See Bast	
Bassin (Vegetable Fibre)	H
Bast (Vegetable Fibre)	H
Battery Acid, See Sulphuric Acid (Dilute)	
Bay Leaves . See Leaves	
Beeswas	H
Beet Pulp	H
Belladonna Leaves. See Leaves	
Bengal Lights	E.H.
Benjamin	H

Material	Class of Hazard
Benzene	E.H.
Benzine	E.H.
Benzoic Acid	H
Bezoin	H
Benzol. See Benzene	
Benzole See Benzene	
Benzolene See Benzene	
Benzoyle Peroxide	E.H.
Benzolye Peroxide	H.
Berlin Black	H
Bichromates of all kinds	
Bichromate of Potash. See Potassium Bichromate	
Bichromate of Soda. See Sodium Bichromate	
Bi-Nitro –Benzene	H
Bi-Nitro-Benzol. See Bi-Nitro –Benzene	
Binoxalate of Potash. See Poisons	
Biri Leaves (Dry) known as “Tembri”, ”Apta” and “Kuda”	H
Bi-sulphide of Carbon , Carbon Bi-sulphide	
Bitumen (other than emulsified Bitumen containing not less than 45 percent of water and packed in metal drums)	H
Bituminous Damp Course, See Damp Course Bituminous	
Bituminous Felt . See felt	
Bituminous Paint , See Paints	
Blacking , See Cleaning and Polishing Liquids creams and pastes	
Black of all kinds	H
Blasting Powders (Explosives)	E.H.
Bombax Cotton (Vegetable Fibre)	H
Bon-bons . See Christmas Crackers	
Bone Black	H
Bone Oil, See Oils, Animal , Fish etc.	
Borneol	H
Brandy , See Spirits, Portable	
Bran Oil. See Oils. Animal Fish etc.	

Material	Class of Hazard
Brattice Cloth (Terred). See Cloth	
Brewers ' Grains, Dried	H
Brimstone, See Sulphur	
Bristle Fibre	H
Bromelia Fibers	H
Bromine . See Poisons	
Bronze Powder	E.H.
Broome Corn (Vegetable Fibre)	H
Broom Millett (Vegetable Fibre)	H
Brunswick Black	H
Buchu Leaves, See leaves	
Butalyde. See Butyl Aldehyde	
Butane	H
Butanel, see Butyl Alcohol	
Butyl Acetate	H
Bytyl Alcohol	H
Butyl Aldehyde	E.H.
Butylamine	H
Butyl Butyraten	H
Butyl Chloriden	E.H.
Butyl lactate	H.
Butyl Nitrate	E.H.
Cahco Nuts	H.
Caboun Nuts	H.
Cake , Oil Seed , See Oil Seed cake	
Calcium	E.H.
Carbide	E.H.
Calcium Chlorate	E.H.
Calcium Cyanamide, unless certified to contain not more than 0.3 percent of carbide and packed in air-tight metal containers	H.
Calcium Cyanide . See Poisons	
Calcium Nitrate	EH.
Calcium Permanganate	H.

Material	Class of Hazard
Calcium Peroxide	E.H.
Calcium Phospide	E.H.
Calcium Phosphite	E.H.
Calcium Resinate	H.
Calcium Silicide	E.H.
Calcium Sulphide	H
Calcium Sulpho-Cyanide. See Poisons	
Camomile Flowers, See Flowers	
Camphene	H
Camphor	H
Camphor Oil (Light). See Oils , Animal, Fish etc.	
Camphor , Synthetic	H
Canada Balsam, See Balsams	
Candles	H
Cane Fibres	H
Caoutchoue. See India Rubber	
Cape Palma Fibre	H
Capivi Balsam, See Balsams	
Cape for Toy Pistols	E.H.
Caraway Chaff	H
Carbic Cakes-unless packed in tins in cases	E.H.
If packed in tins in cases	H
Carbolic Acid. See Phenol	
Carbolic Oils	H
Carbon	H
Carbon Bi-sulphide	E.H.
Carbon Black	H
Carbon Di-sulphide. See Carbon Bi-Sulphide	
Carbon Tetrachloride. See Poisons	
Carbonyl Chloride (Phesgane)	H
Carnaube	H
* Cartridges. See Ammunition	
Cassia Leaves	H

Material	Class of Hazard
Castor Oil . See Oils Animal. Fish etc.	
Cattle Food Cake	H
Caustic Potash. See Potassium Hydroxide	
Caustic Soda. See Sodium Hydroxide	
Cellophane paper (Loose)	E.H.
Cellophane papers or sheets in rolls	E.H.
Cello-solve . See Chyco Mono Ethyl Ether	
Cello –solve Acetate	H
Cello-solve Butyl	H
Celluloid Methyl	H
Celluloid	E.H.
Celluloid Articles and preparations	E.H.
Celluloid Cases Accumulators. See Accumulators	
Celluloid cased.	
Celluloid cement. See Cement, Celluloid	
Celluloid Scrap	E.H.
Celluloid Solutions	E.H.
Celluloid Waste. See Waste	
Cellulose base articles or waste, non-inflammable, excluding non-inflammable films on metal spools	H
Cement, Celluloid	E.H.
Cerasine	H
Caresine, See cerasine	
Ceric-ammonium Nitrate	E.H.
Casium	E.H.
Cesium Nitrate	E.H.
Charcoal	H
Charcoal Black	H
Chemicals, Pharmaceutical. See Pharmaceutical Chemicals and Drugs	
Chickle	H
Chili Saltpetre. See Potassium Nitrate	
China Grass (Vegetable Fibre)	H

Material	Class of Hazard
Chinese Wood Oil. See Oils. Animal , Fish etc.	
Chlorobenzene	H
Chlorate Mixtures (Explosives)	E.H.
Chlorate of Barium . See Barium Chlorate	
Chlorate of Calcium. See Calcium Chlorate	
Chlorate of Potash . See Potassium Chlorate	
Chlorate of Soda. See Sodium Chlorate	
Chlorate of Zinc. See Zinc Chlorate	
Chlorates of all kinds	E.H.
Chlorides of Sulphur. See Sulphur Chlorides	
Chlorine	H
Chloro- Sulphenic Acid	E.H.
Christmas Crackers	H
Chromates of all kinds	H
Chromic Acid. See Chromic anhydride	
Chromic Anhydride	E.H.
Cinnabar . See Poisons	
Cleaning and Polishing liquids. Creams and Pastes F.P. below 24.4° C F.P. between 24°C and 65.5°C	E.H. H.
Clean waste. See waste of all kinds	
Cloth. Asphalted	H
Cloth Tarred	H
Clothing, Oiled, unless in sealed metallines cases	
Coal Dust	H
Coal Gas	EH
Coal Pitch	H
Coal, Pulverised	H
Coal Tar	E.H.
Coal Tar Dyes (Anilene Dyes)including Sulphur Dyes . See Sulphur Dyes	
Coca Leaves . See Leaves	
Coca Butter	H

Material	Class of Hazard
Coca Nut Fibre	H
Coconut Oil. See Oils, Animal, Fish etc.	
Hydrogenated Vegetable Oil	
Codilla (Vegetable Fibre)	H
Cod Oil. See Oils, Animal , Fish etc.	
Coir Dust	H
Coir Fibre	H
Coir Matting	H
Coir Rope	H
Coir Yarn	H
Cole Nuts	H
Collodion Cotton and Collodion	H
Collophony	E.H.
Common Resin	H
Concentrated Sulphuric Acid. See Sulphuric Acid (Concentrated)	
Confetti except when packed in wooden boxes	H
Confetti Bombs	H
Congo Fibre	H
Copaiba Balsam. See Balsams	
Copal	H
Copan Varnish	H
Copper Chlorate	E.H.
Copper Cyanide. See Poisons	
Copper Fluoride . See Poisons	
Copper Nitrate	E.H.
Copper Sulphide	H
Copper Sulpho Cyanide. See Poisons	
Copra	H
Copra Bags. See Bags and Sacks	
Copra Cake	H
Copra Meal	H
Cordage Sisel . loose and/or in bags	H
Cordite (explosive)	E.H.

Material	Class of Hazard
Coriander. See Herbs	
Cork Dust	H
Cork , Granulated, unless in the form of hard pressed bales, blocks or slabs	H
Corrosive Sublimate. See Poisons	
Cossaques. See Christmas Crackers	
Cotton (whether in fully pressed bales or otherwise)	H
Cotton Flock , See Flock	
Cotton Grass	H
Cotton Linters. See Linters	
Cotton seed Cake	H
Cotton Seed Oil, See Oils , Animal, Fish etc.	
Cotton Seed Screenings	H
Cotton straw	H
Cotton Waste See Waste	
Cowrie	H
Cresote	H
Creosote Oil	H
Cresols	H
Cresylic Acids	H
Crin (Vegetable Fibre)	H
Crotonaldehyde	H
Crude Petroleum . See Oils , Mineral etc.	
Cubra Bast	H
Cubic Nitre. See Sodium Nitrate	
Cumene	H
Cumin , See Herbs	
Cumol	H
Curled Vegetable Hair (Vegetable Fibre)	H
Cus Fibre (Cus Cus Root)	H
Cyanamide, See Calcium Cyanamide	
Cyanide of Lime . See Poisons	
Cyanogen	H

Material	Class of Hazard
Cymene P	H
Cymogens	E.H.
Cymol	H
Dammer	H
Damp Course Bituminous	H
Date Palm Fibre	H
D.L.T. Liquid	H
Dead Oil. See Cresote	H
Dackance	H
Decorative Moss. See Moss	
Decalin	H
Dessicated Coconut dry and Oily fresh and moist	
See Coconut Oil	H
Detonators (Explosives)	E.H.
Diacetone Alcohol	E.H.
Diamylane	H.
Diamyl Phthalaten	H
Diatol	H
Dibromocotylene	H
Dibutyl Oxalate n	H
Dibutyl Phthalate n	H
Dichlorethylene	H
Dichlore Pontanes (mixed)	H
Dichromate of Potash. See Potassium	
Dichromate	E.H.
Diethylamine	H
Diethyl Carbinol	H
Diethyl Carbonate	E.H.
Dimethyl Katons	H
Dimethylamine	E.H.
Di Nitro Amido Phenol	E.H.
Di Nitro Anline	H
Di Nitro Benzene	H

Material	Class of Hazard
Di Nitro Benzol. See Di Nitro Benzene	
Di Nitro Napthalene	E.H.
Di Nitro Phenol	E.H.
Di Nitro Toluene	E.H.
Di Nitro Toluol. See Di Nitro Toluene	
Dioxane	E.H.
Dipentane	H
Disinfectant Liquids (other than Hycol) F.I. below 24.4° C F.P. between 24.4°C and 65.5°C	E.H. H.
Down Vegetable	H
Dragon's Blood	H
Dried Brewers' Grains See Brevers Grains, Dried	
Dried Glass	H
Drugs, Pharmaceutical. See Pharmaceutical Chemicals & Drugs	
Dubbin , unless packed in tins in cases	H
Dusts, See under specific names	
Dyes , Sulphur. See sulphur Dyes	
Dynamite (Explosives)	E.H.
Earth Nuts (Shelled)	H
Earth Wax	H
Elemi	H
Edible Oils. See Oils , Animal, Fish etc.	
Enamels :- F.P. below 24.4° C F.P. between 24.4°C and 65.5°C	E.H. H.
Esparto Grass (Vegetable Fibre)	H
Esparto Leaves (Vegetable Fibre)	H
Esparto Two (Vegetable Fibre)	H
Essential Oils, See Oils, Animals , Fish etc.	
Esters. See under specific names	
Ethane	H
Ether. See Ethyl Ether	

Material	Class of Hazard
Ethyl Acetate	EH
Ethyl Acetoacetate	H
Ethyl Alcohol - S.G.below 0.919 : or more than 97% by volume of absolute alcohol	E.H.
S.G. not below 0.919 and of not more than 57% by volume of absolute alcohol	H
Ethyl Benzene	E.H.
Ethyl Bromide	H
Ethyl Butyrate	E.H.
Ethyl Carbonate , See Di Ethyl Carbonate	
Ethyl Chloride	E.H.
Ethyl Chlorocarbonate	E.H.
Ethylene	H
Ethylene Chloride. See Dichlorethylene	
Ethyl Ether	E.H.
Ethyl Formate	E.H.
Ethyl Lactate	H.
Ethyl Nitrate	E.H.
Ethyl Nitrite	E.H.
Eucalyptus Oil. See Oils. Animals , Fisth etc.	
* Explosives , generally (see also ammution and specific names)	
Fats, excluding butter and margarzie	H
Feather Grass (Vegetable Fibre)	H
Felt- Asphalted Asphalt, saturated Bituminous Roofing Tarred	H
Felt, Inodorous – Ferric Nitrate Ferrocyanide of Potash, See Poisons	E.H. E.H.
Ferro Silicon 30 per cent to 70 per cent silicos 15 percent to 30 percent and 70 percent to 80% silicos	E.H. H.
Fibres, vegetable, of all kinds. See Vegetable Fibres	E.H.
Films, Non-safety.	E.H.
Fire Balsam. See Balsams	

Material	Class of Hazard
Fire Lighters	
Fire works of all kinds	E.H.
Fish Oils., See Oils. Animal, Fish etc.	
Fish Guano	H
Fish Manure	H
Flares , Aeroplane, Ships ec.	E.H.
Flash Powders, Photographic	E.H.
Flax, of all kinds (Vegetable Fibre)	H
Flax Yarn, except when packed in wooden cases	H
Flock	H
Flowers , dried of all kinds, in bags, sacks, bales, baskets made of pockets	H
Fluoric Acid, See Hydrofluoric	
Fooder , Dried	H
Foots (Oil and varnish)	H
Formaldehyde. See Poisons	
Possil Wax	H
Frankineense	H
French Polish	H
Fuel Oil- F.I. below 24.4° C F.P. not below 24.4°C	E.H. H.
Fulminates (Explosives)	E.H.
Furfural	H.
Fuses, See Matches	
Fusel Oil	H
Fuses, See Ammunition	
Galibanum	H
Ganja	H
Gas Black	H
Gasioline Petrol	H
Ghee (other than vegetable ghee in tins not exceeding 10 Lbs in weight and /or in bottles)	H
Gilsonite	H

Material	Class of Hazard
Gilsonite, Superselects in bags	H
Gin. See Spirits, Potable	
Ginnings	H
Glacial Acetic Acid. See Acetic Acid (Glacial)	H
Glance pitch	H
* Glycarine	H
Glyco Mono Ethyl Ether	H
Goora Nuts	H
Grahamite	H
Granulated Cork, See Cork Granulated	
Graphic Greases and Lubricants	H
Grasses (Vegetable Fibres)	H
Grass Mats	H
Grease	H
Greasy Rags, See Rags	
Greasy Waste, See Waste	
Green Oil	H
Ground Nut Cake	H
Ground Nut Meal	H
Ground Nut Oil. See Oils Animal, Fish etc.	
Gumatti Fibre	H
Gums, See under specific names	
Gun Cotton (Explosive)	EH
* Gunnies (other than in fully pressed bales)	H

* Glycarine in tins, cases, steel drums or other large packages, subject to the following warranty may be treated as non hazardous, if stored in the manner indicated.

“That glycerine will not be stored with, or within 20 feet of permanganate of potash, nitrates, metallic sulphide, strong acid , fibres or fibrous goods or blacks such as lamp black “

** Loose gunnies for packing purposes provided the quantity will never be largely in excess of what required for immediate purpose of packing may be treated as non-hazardous, if stored in the manner indicated.

Material	Class of Hazard
Gunpowder (Explosive)	E.H.
Gurgan Balsam. See Balsams	
Gutta Jelatog, unmanufactured. If stored with other goods.	H
Gutta percha, unmanufactured. If stored with other goods	H
Hard Waste Yard	H
Health For Besoms	H
Hemp. Of all kinds (Vegeable Fibres)	HG
Hemp. Seed Oil. See Oils. Animals , Fish etc.	
Hemp Yarn	H
Hennequem (Vegetable Fibre)	H
Herbs, Dried, of all kinds, in bags, sacks, bales, baskets, mats or pckets	H
Hessians (other than in fully pressed bales)	H
Hexane n	E.H.
Hop Fibre	H
Hops, See Flowers	
Hops, Spent	H
Hull Fibre	H
Hydroibromic Acid	H
Hydrochloric Acid	H
Hydrogyanic Acid, See Poisons	
Hydrofluoric Acid	H
Hydrofluosilioic Acid	H
Hydrogen	H
Hydrogen Cynide	H
Hydrogen Peroxide – If exceeding 40 percent peroxide If exceeding 6 % but not exceeding @ peroxide	E.H. H.
Hypochlorous Acid	E.H.
Iceland Moss, See Moss	
Ifc Hemp (Vegetable Fibre)	H
Illuminating Oils. See Oils . Illuminating	
India Rubber , unmanufactured. If stored with other goods	H

Material	Class of Hazard
Indoor Fireworks, See Fireworks	
Industrial Alcohol	E.H.
Industrial Spirit, See Spirit , Industrial	
Inflammable Liquids – F.P. below 24.4 % F.P. between 24.4%	E.H. H.
Ink Printing – F.P. below 24.4 % F.P. between 24.4%	E.H. H.
Inodorous Felt. See felt . Inodorous	
Insecticides - F.P. below 24.4 % F.P. between 24.4% and 65.5%	E.H. H.
Irish Moss. See Moss	
Iron Sulphide	H
Isobutyl Carbinol	H
Isopropyl Alcohol	E.H.
Isopropylamine	E.H.
Istle Fibre	H
Italian Hemp Godilla	H
Italian Whisk (Vegetable Fiber)	H
Ita Palm Fibre	H
Ivory Black	H
Ixthe Fibre	H
Japanese Moss. See Moss	H
Jaumave (Vegetable Fibre)	H
Joss Paper and Sticks	H
Juniper	H
Junk	H
Jute (in fully pressed bales or otherwise)	H
Jute Cuttings	H
Jute Yarn (other than in full pressed bales)	H
Kapok (Vegetable Fibre)	H
Kapol Oil. See Oils, Animal , Fish etc.	
Kapok Seed	H
Kaur	H

Material	Class of Hazard
Kerosene, See Oils, Mineral etc.	
Kittol (Vegetable Fibre)	H
Kola Nuts (See Cola Nuts)	
Kumbi (Vegetable Fibre)	H
Lacquers– F.P. below 24.4 % F.P. between 24.4%	E.H. H.
Lamp Black	H
Lamp Oil . See Oils , Illuminating	H
Lard	
Lard Oil. See Oils. Animal , Fish etc.	
Laughing Gas. See Nitrous Oxide	
Laurel Leaves. See Leaves	
Lavender. See Herbs	
Lead Carbonate. See Poisons	
Lead Chloride. See Poisons	
Lead Dioxide	H
Lead Oxide., See Poisons	
Lead Peroxide, See Lead Dioxide	
Lead Resinate	H
Leather Pickers (Oily)	H
Leaves, Dried, of all kinds (except tobacco) in bags , sacks, bales, baskets, mats or pockets.	H
Lechugilla (Vegetable Fibre)	H
Lime , unslaked	H
Linen Fibre	H
Linen Yarn, See Flax Yarn	
Linseed Oil, See Oils , Animal Fish , etc.	
Linters	H
Liquid Acetylene, See Acetylene (Liquid)	
Lithium	
Lubricating Oils. See Oils Lubricating	E.H.
Lycopodium Powder except when packed in tins in cases	H
Lythene	E.H.

Material	Class of Hazard
Madagascar Fibre	H
Magnesium Bromate	H
Magnesium Candles	H
Magnesium Nitrate	E.H.
Magnesium Peroxide	E.H.
Magnesium Powder	E.H.
Magnesium Pibbon	H
Magnesium Forches	H
Magnesium Wire	H
Magney Fibre	H
Maguey Fibre	H
Maize Oil. See Oils , Animal , Fish etc.	
Manganese Dixoide	H
Manganese Peroxide. See Maganese Dioxide	
Manganese Resinate	H
Manila Hamp (Vegetable Fibre)	H
Manila Yarn	H
Manila Pope Tarred	H
Manjak	H
Marsh Gas , See Methane	
Matches of all kinds	H
Mats Archanged or Russian	H
Matting used	H
Maxphalt	H
Meal Oil see	
Medicinal Oils, See Oils, Animal fish , etc.	
Megasse, See Megasse	
Mendrol	H
Mercuric Chloride	H
Mercurio Sulphide. See Poisons	
Mercury Fulminate	E.H.
Metallic Powders . See under specific names	
Metallic Potassium	E.H.

Material	Class of Hazard
Methane	H
Methyl Acetate	E.H.
Methyl Acetone. See Diamethyl Ketone	
Methyl Alcohol	E.H.
Methylated Spirit	H
Methyl Cellosolve	H
Methyl Chloride	H
Methylene Chloride. See Dichloromethylene	
Methyl Ethyl Ketone	E.H.
Methyl Formate	E.H.
Mexican Fibre	H
Millet Stalk (Vegetable Fibre)	H
Mineral Black	H
Mineral Oils, and their liquid products. See Oils, Mineral etc.	
Mineral Turpentine , See Turpentine	
Mineral Wax	H
Mint See Herbs	
Mirbane Oil, See Nitro Benzene	
Molascuit	H
Molasses Meal	H
Molassine Meal	H
Monkey Bass (Vegetable Fibre)	H
Monkey Bread Tree Fibre	H
Monkey Nuts (Shelled)	H
Monochlor-Acetic Acid	H
Mono Nitramilrue (Nitra Line)	H
Mono Nitro Anline. See Mono Nitraniline	
Mono Nitro Naphthalene	H
Mono Nitro Phenol. See Nitro Phenol (Mono)	
Mono Nitro Toluol. See Nitro Toluene (Mono)	
Moss, dried , of all kinds	H
Mould Coats	H
Mulberyy Fibre	H

Material	Class of Hazard
Mango	H
Muriatic Acid . See Hydrochloric Acid	
Murva Fibre	H
Musa Fibres	H
Murrah	H
Mono Nitro Tolul. See Nitro Tolune (Mono)	
Naptha F.P. below 24.4 % F.P. not below 65.5%	E.H. H.
Naphthalene	H
Neats foot Oils. See Oils, animal, fish etc.	
Nettle fibres	H
New Zealand Flax (Vegetable Fibre)	H
New Zeland Hemp (Vegetable Fibre)	H
Nickel Feroxide	H
Nitraniline. See Mono Nitraniline	
Nitrate Mixtures	E.H.
Nitrates of all kinds	E.H.
Nitrate of Ammonia. See Amonium Nitrate	
Nitrate of Iron. See Ferric Nitrate	
Nitrate of Lime . See Calcium Nitrate	
Nitrate of Soda, See Sodium Nitrate	
Nitre, Sweet Spirit of	E.H.
Nitric Acid	E.H.
Nitrites of all kinds	E.H.
Nitrite of Potash, See Potassium Nitrite	
Nitrite of Soda , See Sodium Nitride	
Nitro Anilines. See Mono Di, Tri and Tera	
Nitro Anilines	H
Nitro Benzene	H
Netro Benzol, See Nitro Benzene	
Netro Cellulose , Plastic	H
Nitro Chalk	H
Nitro Compounds (Explosive)	E.H.

Material	Class of Hazard
Nitro Glycerine (Explosive)	E.H.
Nitrolim. See Calcium Cyanamide	
Nitro-Mannite	E.H.
Nitro –Methano	H
Nitro N-phthalenes, See Mono Di, Tri and Etra Nitro Naphthalenes	
Nitro Phenol (Mono)	H
Nitrose Phenel	H
Nitro Starch (Explosive)	E.H.
Nitro Toulene (Mono)	H
Nitro Tolul (Mon See Nitro Toleuene (Mono)	
Nitrous Ether. See Ethyl Nitrites	
Nitroous Oxide	H
Non-flammable cellulose. Base articles or waste. See cellulose base articles or waster	
Nordhausen Sulphuric Acid. See Sulphuric Acid, Nordausesn	
Nut Oil, See Oils, Animal , Fish etc.	
Nuts, See under specific names	
Oakum	H
*Oil Cake	H
Oiled Clothing , See clothing, oiled	
Oiled paper. See paper	
Oiled sheets, see sheets, oiled	
Oiled textile- materials. See textile materials, oiled	
Oil Foots, See Foots (Oil and Varnish)	H
Oil Gas	
Oil of Mibbane See Nitro Benzene	
Oil of Vitriol. See Sulphuric Acid (Concentrated)	
Oils , Animals, Fish and Essential , other than medicinal, edible and essential oils packed in bottles in case or in tins in cases	H
Oils, Vegetable (other than tins not exceeding 10 Lbs in weight and/or bottled)	H
Oils, Illuminating- F.I. below 24.4° C F.P. not below 24.4°C	E.H. H.

Material	Class of Hazard
Oils – Mineral, Rock, Schist, Shale Petroleum, Tar and their liquid products (except medicinal, packed in bottles in cases or in tins in cases F.I. below 24.4° C F.P. not below 24.4°C	E.H. H.
Oil-seed Cake (including Cotton Seed Cake)	H
Oil Seed Meal. See Meal , Oil Seed	
Oil Sheets	H
Oily Bags. See Bags	
Oily Waste , See Waste	
Oleine	H
Oleo	H
Oleum	H
Ollbanum	E.H.
Olive Oil, See Oils, Animal , Fish ,etc.	
Opponax	H
Ortho Nitro Phenol	H
Ortho Nitro Toluene	H
Oxalic Acid . See Poisons	
Oxygen	H
Ozakerite	H
Paint Removers F.I. below 24.4° C F.P. not below 24.4°C	E.H. H.

* “ Cocogem” in tins/and/or bottles may be treated as non-hazardous if stored in the manner indicated

Peppermint Oil. See Oils , Animal, Fish etc.	
Perchlorate of Ammonia. See Ammonium Perchlorate	
Perchlorate Mixtures (Explosive)	E.H.,
Perchlorates of all kinds	E.H.
Perchlorate of Potash. See Potassium Perchlorate	
Perchlorate of Soda. See Sodium Perchlorate	
Percussion Caps (Explosive)	E.H.
Permanganates of all kinds	H
Permanganate of Potash-See Potassium Permanganate	
Permanganate of Soda. See Sodium Permanganate	
Peroxide of all kinds	H
Peroxide of Benzoyl. See Benzoul Deroxide	
Peroxide of Hydrogen. See Hydrogen Peroxide	
Peroxide of Lead. See Lead Dioxide	
Peroxide of Manganese. See Manganese Dioxide	
Peroxide of Potassium. See Potassium Peroxide	
Peroxide of Sodium . See Sodium Peroxide	
Peroxide of Zinc . See Zinc Peroxide	H
Persulphates of all kinds.	
Peru Balsam. See Balsams	
Petrol	E.H.
Petroleum , See Oils, Minerals, etc.	
Petroleum Ether	H
Petroleum Jelly	H
Petroleum Oils and their liquid products	
See Oil, Mineral , etc.	
Pharmaceutical Chemicals and Drugs-	
Liquid or solid, consisting or containing or made up with substances listed as Hazardous, unless packed in bottles not exceeding one Minchester quart in capacity, or in tins or jars containing not more than 10 Lb and packed in cases	H
Pharmaceutical Drugs. See Pharmaceutical, Chemicals and Drugs	
Phenol (Carbolic Acid), See Poisons	
Phosgene. See Carbonyl Chloride	
Phosphine	E.H.

Phosphonium Iodide	E.H.
Phosphoric Acid	3 B
Phosphorus – Amorphous, See Amorphous Phosphorous Red . See Red Phosphorous White. See White Phosphorous	
Phosphorous Pentachloride	H
Phosphorous Sesquisulphide	E.H.
Phosphorous Sulphides (Except Phosphorous sesquisulphide q.v.)	H
Phosphorous Trichloride	H
Photographic Flash Powders. See Flash Powders, Photographic	
Pissava of all kinds (Vegetable Fibre)	H
Picramic Acid. See Dic Nitre Amido Phenol	
Picra-tas (Explosive)	E.H.
Picric Acid. See Tri Nitro Phenol	
Pineapple Grass	H
Pine Bark	H
Pinene	
Pine Oil, See Oils, Animal, Fish etc.	
Pine Tar Oil, See Oils, Minerals, Tar etc.	
Pita Fibre	H
Pitch	H
Plantain Fibre	H
Poisons, if stored on the same floor as or on floors-above, foodstuffs	H
Polishing Liquids, Creams and Pastes. See cleaning and polishing liquids, creams and pastes	H
Pontionac	H
Poppy Seed Oil. See Oils. Animal, Fish etc.	E.H.
Potable Spirits. See Spirits, Potable	E.H.
Potassium	E.H.
Potassium Bichromate	H
Potassium Binoxalate. See Poisons	
Potassium Chlorate	E.H.
Potassium Cyanide. See Poisons	
Potassium Ferricyanide. See Poisons	

Potassium Ferrocyanide. See Poisons	
Potassium Hydroxide	H
Potassium Nitrate	E.H.
Potassium Nitrite	E.H.
Potassium Perchlorate	E.H.
Potassium Permanganate	H
Potassium Peroxide	E.H.
Potassium Persulphate	H
Potassium Sulphide	H
Powders, Metallic, ?See under specific names	
Printing Inks, See Inks Printing	
Propyl Acetate	E.H.
Propyl Alcohol	E.H.
Prussiate of Potash. See Poisons	
Prussic Acid. See Poison	
Pulverished Coal. See Coal Pulverised	
Pure Alcohol	E.H.
Pyrene	H
Pyrethrum Flowers See Flowers	
Pyridine-	
F.P. below 24.4° C	E.H.
F.P. not below 24.4°C	E.H.
Pyridene Base -	
F.I. below 24.4° C	E.H.
F.P. not below 24.4°C	H.
Pyroxorm. See Potassium Sulphide	
Pyrogallic Acid. See Poisons.	
Quicklime, See Lime, Unslaked	
Quinoxime . See Nitroso Phenol	
Raffia (Vegetable Fibre)	H
Rags-	
Clean Rags (Not including clean textile cuttings)	H
Oily or Creasy Rags	E.H.
Ramie (Vegetable Fibre)	H

Rape Oil. See Oils, Animal, Fish etc.	
Raphia, See Raffia	
Rayon Fibre	H
Rayon Waste	H
Rayophane Papers (Loose)	H
Rectified Spirits of Wine . See Spirit of Wine, Rectified	
Red Lwad. See Poisons	
Red Lead. See Poisons	
Red Phosphorous	H
Renovators -	
F.P. below 75° F	E.H.
F.P. not below 73°F	H.
Resins Natural	H
Resinates	H
Rhea Fibre	H
Rhigolene	H
Rice Root (Vegetable Fibre)	E.H.
Rockets	E.H.
Rock Gas	H
Rock Oils and their liquid products. See Oils, Mineral etc.	
Roofing Felt, See Felt	
Rope , Tarred	H
Rosenary, See Herbs	
Rosin	H
Rosin Oils	H
Rosin Spirit	H
Rubber Spirit	H
Rubber Goods. Old. See Pubber Waste	
Rubber, Reclaimed	H
Rubber Seed Oil, See Oils, Animal , Fish etc.	
Rubber Solution –	
containing mineral naphtha-	
F.P. below 73° F or bi-sulphide of carbon	E.H.
F.P. not below 73°F and 150°F	H.

Rubber waste including old rubber goods	H
Rum, See Spirit, Potable	
Russian Mats, See Mats, Archangel or Russian	
Rye Grass	
Sacks and Bags, See Bags and Sacks	H
Safety cartridges. See ammunition	
Safety fuses. See ammunition.	
Safflower flowers. See Flowers	
Saffron flowers. See Flowers	
Sage . See Herbs	
Saltpetre. See Potassium Nitrate	
Salvage Goods. Fire or water-damaged	H
If so classified before damage	E.H.
Sandarac	H
Sansevieria Biores	H
Saw Dust	H
Schist Oils and their liquid products- See Oils. Mineral etc.	
Screenings , cotton seed. Cotton Seed Screenings	
Seal Oil. See Oils, Animal , Fish etc.	
Seeds, See under specific names	
Senna Leaves. See Leaves	
Seasame Oil . See Oils animal, Fish etc.	
Shale Oils and their liquid products. See Oils , mineral etc.	
Shark Oil. See Oils , Animal , Fish etc.	
Shavings wood or paper	H
Sheep Dips, See Poisons	
Sheets Oiled	H
Ship's Flares , See Flares	H
Shoddy	
Signal Lights	E.H.
Signal (Explosive)	E.H.
Silk Waste (artificial) See Rayon Waste	
Silver Cyanide., See Poisons	
Sisal (Vegetable Fibre)	H

Snaps for Bon-bon crackers or cossaques	E.H.
Sodium	E.H.
Sodium Amalgam	E.H.
Sodium Bichromate	H
Sodium Chlorate	E.H.
Sodium Cyanide. See Poisons	
Sodium Hydro Sulphite	E.H.
Sodium Hydroxide	H
Sodium Nitrate	E.H.
Sodium Nitrite	E.H.
Sodium Perchlorate	E.H.
Sodium Permanganate	H
Sodium Peroxide	E.H.
Sodium Sulphide	E.H.
Sodox	E.H.
Solidified Spirits, See Spirits solidified	
Solygnum Wood preservative	
Solvents -	
F.P. below 24.4° C	E.H.
F.P. between 24.4°C and 65.5°C	H.
Soot	H
Sorghum Stalk (Vegetable Fibre)	H
Soya Bean Oil, See Oils, Animal, Fish etc.	
Spangle Lights	H
Spanish Black	H
Spent Hops. See Hops, Spent	
Sphagrm Moss , See Moss	
Spirit, Industrial	E.H.
Spirits of Ammonia. See Ammonia	
Spirit of Salts	H
Spirit of Wine, Rectified	E.H.
Spirits Potable unless packed in bottles or jars	E.H.
Spirits, solidified	
Stains-	E.H.
F.P. below 24.4° C	H.
F.P. not below 24.4°C	

Stearic Acid in powder form in steel drums	H
Stearline	H
Storax Balsam. See Balsams	
Straw (Vegetable Fiber)	H
Straw Developes	H
Straw Plants	H
String Tarred	H
Strontium	E.H.
Strontium Chlorate	E.H.
Strontium Nitrate	E.H.
Strontium Peroxide	E.H.
Suint	H
Sulphide of Barium . See Barium Sulphide	
Sulphide of Calcium . See Calcium Sulphide	
Sulphide of Copper. See Copper Sulphide	
Sulphide of Iron . See Iron Sulphide	
Sulphide of Lime. See Calcium Sulphide	
Sulphide of Phosphorous. See Phosphorous Sulphide	
Sulphide of Potash. See Potassium Sulphide	
Sulphide of Soda. See Sodium Sulphide	
Sulphite. Waster Lequor	H
Sulphur	
Sulphur Chlorides (Monochloride and Dichloride)	H
Sulphur Dyes . Unless containing atleast 10% of inert inorganic salts and packed in air tight metal vessels	H
Sulphur Praecip in 1 Lb packets	H
Sulphuric Acid (Concentrated)	E.H.
Sulphuric Acid (Dilute)	H
Sulphuric Acid Nordhausen	H
Sulphuric Ether	E.H.
Sumach Leaves . See Leaves	
Sunflower Oil. See Oils, Animal Fish etc.	
Sunn Hemp (Vegetable Fire)	H
Sweet Spirits of Nitre. See Nitre Sweet spirits of	

Tallo	H
Tampico Hemp (Vegetable Fibre)	H
Tar, all kinds	H
Tar Oils and their liquid products (other than in bottles)	H
Tarpaulins	H
Tarpaulin papers	H
Tarred Cloth . See Cloth, Tarred	
Tarred Felt. See Felt	
Tarred Paper. See Paper	
Tarred Rope. See Rope, Tarred	
Tarred String. See String, Tarred	
Tarred Twine . See Twine , Tarred	
Tartar Eentic . See Poisons	
Tea Seed Oil. See Oils, Animal , Fish etc.	
Teasles, See flowers, dried	H
Terebene	H
Tetralin	E.H.
Tetra Nitro Aniline	E.H.
Tetro Nitro Methyl Aniline	H
Tetro Nitro Napthalene	EH
Textile Materials, Oiled	H
Rhermit	E.H.
Thistledown (Vegetable fibre)	H
Thorium Nitrate	E.H.
Thus	H
Thyme (See Herbs)	H
Toddy (Vegetable Fibre)	H
Telu Balsam. See Balsams	
Toluene	E.H.
Toluol. See Toluene	
Tow of all kinds	H
Tree Cotton (Vegetable Fibre)	H
Trion-esyl Phosphate	H
Tri Nitro Aniline	E.H.

Tri Nitro Benzene	E.H.
Tri Nitro Benzole . See Tri Nitro Benzene	
Tri Nitro Naphthalene	E.H.
Tri Nitro Phenol	E.H.
Tri Nitro Toluene	E.H.
Tri Nitro Tolu. See Tri Nitro Toluene	
Tri Sodium Phosphates in barrels (American)	H
Trotter Oil. See Oils, Animal, Fish etc.	
Tula Fibre	H
Tung Oil, See Oils , Animal., Fish etc.	
Turkey Red Oil	H
Turpentine	H
Turpentine Substitute	H
Tutty Powder, See Zinc Powder	
Twine Tarred	H
Tri Nitro Apisole	E.H.
Unmanufactured Rubber , if stored with other goods (other goods means all kinds)	H
Unslaked Lime, See Lime, unslaked	
Uranium Nitrate	
Varnishes (other than Litho Varnish) - F.P. below 24.4° C	E.H.
F.P. not below 24.4°C	H.
Vaseline . See Petroleum Jelly	H
Vegetable Black	H
Vegetable Down See Down, Vegetable	H
Vegetable Fibres of all kinds	H
Vegetable Horse , Hair (Vegetable Fiber)	H
Vegetable Oils. See Oils Animal , Fish etc.	
Vegetable Silk (Vegetable Fibre)	H
Vegetable Wool (Vegetable Fibre)	H
Vetriol See Sulphuric Acid (Concentrated)	
Vodka, See Spirit , Potable	H

Wagner Lockheed No.21	h
Wanger Lockheed No.21 B (if having an Oil base)	H
Waste of all kinds (excluding waste silk and tea waste)	H
Waste , Celluloid	E.H.
Waste Oily or Greasy	E.H.
Waterproofed cloth using an oil based solution	
Water proofing solutions - F.P. below 24.4° C	E.H.
F.P. between 24.4°C and 65.5°C	H.
Was of all kinds	H
Whale Oil. See Oils, Animal , Fish etc.	
Whisk (Vegetable Fibres)	
Whisky. See Spirits , Potable	
White Lead. See Poisons	
White Phosphorous	E.H.
White Spirit	H
Wood Alchohol	E.H.
Wood Fibre	H
Wood Flour	H
Wood Meal	H
Wood Oil. See Oils, Animal, Fish etc.	
Wood Shavings, See Shavings, Wood or paper	
Wood Spirit	E.H.
Wood Wool	H
Wool Grease	H
Xylene - F.P. below 24.4° C	E.H.
F.P. not below 24.4°C	H.
Xylol. See Xylene	
Xylonite	E.H.
Xylonite Solutions	E.H.
Yellow Phosphorous	E.H.
Yucca Fibre	H

Zacaton (Vegetable Fibre)	H
Zinc Richromate	H
Zinc Chlorate	E.H.
Zinc Chloride. See Poisons	
Zinc Cyanide See Poisons	
Zinc Dust (Metallic)	E.H.
Zinc Dust Sulphate	H.
Zinc Peroxide	E.H.
Zinc Powder	E.H.

SCHEDULE OF CHARGES TO BE LEVIED FOR HIRE OF FIRE APPLIANCES AND (FORCE) TO RENDER INTER STATE HELP

(See para 5 under 30 Miscellaneous)

Occasion when the Fire Force & Fire Equipment may attend free of cost or otherwise, should be as follows :-

(a) Within Jurisdiction

- (i) Special services free of charge in all cases of human and animal rescue works from fires accidents or other emergencies for any length of time
- (ii) Special services other than above to be charged for at all times on slab system for the total period the fire equipment is out on duty.

(b) Outside Jurisdiction

- (i) Special services in all cases of attending fires, accidents or other emergencies and rescue works to be charged on a slab system for the full time the fire equipment is out on duty.
- (ii) Special services other than above also to be charged for all times on slab system for the total period the fire equipment is out on duty.

Note : 1. Time of duty to be reckoned from the time the fire unit leaves garage to the time it returns thereto.

2. mutual arrangements regarding levy of charges or otherwise may be brought about between neighbouring authorities.

Formula for Hire of Fire Fighting Equipment may be as follows :-

- (a) Purchase cost of equipment = X (to be rounded up)
- (b) Life of equipment = Y years
- (c) Annual depreciation = X divided by Y
- (d) Monthly depreciation = X divided by 12 Y
- (e) Depreciation per ay = X divided by 12 x 3

- (a) Charges to be levied within jurisdiction Depreciation per day plus 20% and maintenance charge (excluding consumption of fuel, oil, etc.).The figure to be rounded upto the nearest 5th of 10th digit as the case may be Say Z.

The charge of Rs. Z to be levied for the first 4 hours or a fraction thereof and 50% of this charge should be levied for every subsequent two hours or a part thereof.

- (b) Charge to be levied at twice the rate applicable outside jurisdiction within Jurisdiction, viz = 4Z (for the first eight hours or a fraction thereof) :-

50% of this rate, should be levied for every 4 hours or a fraction thereof.

In addition to above charges, extra charges should be levied for the actual consumption of fuel, oil, etc and also for the services of the members of staff who attend.

Charges for the members of staff who attend should be calculated at the rate of a day's wages worked out on "pay plus dearness pay" for every 4 hours or a fraction thereof. 50% of this may be credited to the department and the other 50% paid to individual members for their work.

In such cases, a reasonable sum may be collected as deposit immediately on completion of the job and the hire charges etc. worked out on the above formula may be adjusted against it in due course.

GENERAL RULES TO BE FOLLOWED Of COMPETITION DRILLS

(See para 8 under 30 Miscellaneous)

- (i) Fire Trailer Pump.
- (ii) Extension Ladder with rescue.
- (iii) Tactical Medley.

1. Crew

The crew shall consist of six members i.e. one Leading Fireman (who shall be incharge), One Driver/ Operator (No.6 of the crew) and four fireman. Officers may also particulars in the drill competition forming any member of the crew.

2. Uniform

The crew shall wear the uniform that is normally worn at the time of attending fire calls i.e. Helmets, Fire Tunics (with rank marking where necessary), Trousers, Gum Boots, Belt with Axe and Belt Lines.

3. Judges

The Panel of Judges will consist of the Chief Officer of the host State and four other Principal Officers to be decided by the Committee. the decision of the judges shall be final and binding.

4. Method of Work

- (a) Although the general principles as laid down in the Drill Manual for the Fire Services in India will be observed, the crew may not strictly follow the drills as laid down there, during the Competition stage, the aim being to finish the work as quickly as possible using all men at the Command of the Leader. No. 6 of the crew will however remain as Driver/ Operator.
- (b) The teams completing the frills with the minimum timing (including penalties) shall be awarded trophies and prizes.
- (c) In the event of a tie, the timing of the performance will be taken into account to arrive at decision and in the event of a further tie, the tam concerned shall perform the drill again.
- (d) The terms taking part in the competition should submit the list of names of the crew sufficiently in advance and within the specified period. Substitutes will be allowed only in case of injuries/sickness and that too with the approval of the Judges.
- (e) Non-compliance with any of the general rules may result in disqualification.
- (f) A team not completing the drill or in the event of failure to complete it within the Schedule time, shall be disqualified.
- (g) Each State or Service may send only one team for each drill which may include two reserves against any sickness or accidental injury.

- (h) The use of non-standard equipments will not be permitted. unless otherwise specified.
- (i) All doors and lockers of appliances will be kept closed prior to the commencement of the drill.
- (j) The Host State will provided standard equipments for the drills, including Delivery hose, Suction hose, ropes and lines and such other equipments. as would be necessary.

5. Penalties

- (a) Penalties as specified against each drill to be noted carefully by members of the crew. Commitment of any of them will lead to the addition of the timing of the performance by the corresponding timings, as indicated against each.
- (b) Touching the gears and equipments after the final whistle is blow (whether intentional or un-intentional) shall result in a heavy penalty, as mentioned under the schedule of penalties.
- (c) The appliance striking against a stationary object while driving it into position shall result in disqualification of the team.
- (d) Any team trying a foul start (before the whistle is blown) will be warned twice and if it is repeated a third time, it will be liable to disqualification and it may not be allowed to compete.

FIRE TRAILER PUMP DRILL COMPETITION (SCHEDULE TIME 3 MINUTES)

1. Preliminary

The drill shall consist of getting two lines of hose to work from Trailer Pump drawing water form a static tank/Dam, knocking down two targets and “Making up”.

2. Appliances and Equipment

- (a) **Trailer Pump*** -A Trailer pump shall be placed in a marked position with all jacks lowered, towing eye facing the target and towing bars folded. The suction inlet should have the blank cap (chained) fitted, hand tight.
- (b) **Suction Hose** –Two 4 Suction hose, each of 8 ft length shall be kept on the trailer pump on the brackets provided for the purpose with the straps opened up. The suction on the off side brackets shall have the metal strainer fitted.
- (c) **Suction Wrenches**-A pair of suction wrenches of the conventional type i.e. the one with a semi-circular bent with an eye, to suit the coupling of the suction hose shall be placed alongside the delivery hose in the place marked and should be used for tightening the intermediate and intake joints.
- (d) **Manila Line** –A two inch short line about 50ft long shall be kept in a coiled position alongside the delivery hoses in the position marked and shall be used, one half for securing the suctions. viz a clove hitch at the strainer and on half hitch at the intermediate joint and a round turn and two half hitches on the near

side rear stay of the trailer pump and the other half for lowering the suction into the water. The line shall remain taut between the round turn and two half hitches right upto the clove hitch.

- (e) **Delivery Hose** –Length of delivery hose(2 ½ size lengths if each of 50’ or four length if each of 75’ with couplings shall be kept on ground in the marked position, tightly rolled with female coupling inside.
- (f) **Branches** –Two short (emergency) branches with 5/8” nozzles shall be kept alongside the hose on the ground, in the marked positions.
- (g) **Water Source** –A static Tank/Dam full of water shall be arranged at the rear of the pump. 2 ft behind the starting line.
- (h) **Target** –The target shall be a board 18” square, painted white and should be hinged to a stand so that the board will fold up when struck by jet from the branch. Hitting the target in this manner shall be termed “Knocking down the target”. The top of the target shall be 3 ft. 8 ins. from the ground. The board shall be balanced upright by a counter weight at the bottom. Two targets shall be kept 7 ft. apart at a distance of 180 ft. from the starting line.

1

3. Starting Line

A starting line shall be marked at the rear of the pump 3 paces from the suction inlet and the crew shall be on this line at start of the competition.

4. Drill

The crew shall fall-in on the starting line with No. 1 on the left in such a way that Nos. 3 & 4 are in line with the nearside the off side deliveries respectively of the pump. The trailer pump engine shall be kept started with all other equipments in their proper places.

The drill shall commence with the blowing of the first whistle by the starter and the time shall be reckoned from the time the first whistle is blown. Immediately the whistle is blown, the crew shall start work which will be as follows :-

On the whistle the crew will couple up two lengths of suction hose and connect it to the inlet of the pump. All joints are to be tightened up properly using wrenches correctly. (i.e. the curve of the wrench should follow the curve of the coupling). The suction hose should be secured by the Manila line, gently lowered into the water, tank/dam, pump primed. water drawn and then delivered. Cooling control cock should then be opened.

Simultaneously two deliveries with three length of 50 each or two lengths of 75 ft. each shall be laid out connecting them to the two deliveries of the pump and fixing the branch at the end of the third hose in each case. The jets shall then be directed on to the two targets, knocking them down. When both the targets are knocked down, a (second) whistle will be blown by the leader of the team which shall be the signal for “Making up”. The engine of the Trailer pump should then be shut down petrol cock closed, cooling control cock closed, suction disconnected, brought back and replaced in their original place on the trailer pump. the Manila line and suction wrenches should also be put bank in their proper places from where they were taken out. The Manila line should be soiled up. the delivery hose lengths should be disconnected from the

¹ *Trailer Pump of 100 g.p.m. (1800 Litres/min) capacity, as per I.S. Specification NO. IS: 944-1966.

	having “knocked down Target”- per fault	1 sec.
13.	Failure to shut down engines on “Make –up”	1 sec.
14.	Failure to close petrol Cock	1 Sec
15.	Failure to close Cooling Control Cock, if provided	1 sec.
16.	Failure to replace suction Hoses in proper place	2 secs
17	Failure to replace suction Blank Cap (hand tight)	1 sec.
18	Failure to close Delivery Volves properly – per fault	1 sec.
19	Failure to put back wrenches in proper place	2 secs
20	Failure to “Make up” Manila Line Properly	1 Sec
21.	Failure to put back Manila Line in proper place	1 sec
22	Under running delivery hose before disconnecting - per fault	2 secs
23.	Failure to under run hoses properly – per fault	2 secs
24.	Failure to roll up hoses properly - per fault	2 secs
25.	Failure to replace hoses in proper place – per fault	2 secs
26.	“Throwing” rolled hose – per fault	2 secs
27	Failure to deep braches in proper place	2 secs
28	Trying to rectify faults after third whistle – per fault	3 secs.

EXTENSION LADDER DRILL COMPETITION WITH RESCUE
(Schedule time – 2 ½mts)

Preliminary

The drill shall consist of extending and pitching an Extension Ladder to the second floor, rescuing a casualty (dummy), carrying it down, lowering it on to a stretcher and “Making-up”

Appliances & Equipment :

²

***(a) Fire Tender/Motor pump[#]**

A fire tender or a motor pump with an Extension ladders shall be stationed in a marked position at a distance of 75 ft. from the drill tower.

(b) Extension Ladder –

A 35 ft. wooden extension ladder (trusted type) shall be kept on the fire tender properly secured.

(c) Stretcher

A stretcher shall be kept on the fire or Motor Pump. alongside the ladder properly secured by leather straps.

(d) Casualty

A dummy shall be kept on the second floor for rescue work (Fireman’s lift)

Starting line

² *Towing tender for trailer pump for Fire Brigade Use (IS: 947-1960)

[#]400 g.p.m. (1800 litres/min), Motor Fire Engine, as per I.S. Specification No. 945-1960i

Starting line shall be marked at least 75 ft. away from the Drill Tower and the front wheel of the Fire Tender shall be on this line at the start of the competition.

Drill

The crew shall be in mounted position, each member of the crew being in his respective seat. The engine shall be started and all doors properly closed.

The drill shall commence with the blowing of a whistle by the starter and the timing is reckoned from the time the first whistle is blown the crew shall start work which will be as follows :-

On the whistle, the vehicle shall be moved forward to any spot as desired by the leader of the team. As the vehicle stops., the crew shall dismount, unship the ladder, carry it to the drill tower. extend and pitch it to the second floor in such a way that the head of the ladder is above the horizontal mark on the Drill Tower. this mark shall be at a height of 25 ft from the ground. the leading Fireman will then climb the ladder. step on to the second floor and start rescue work. He will pick up the casualty (dummy) and by the "Fireman's Lift" bring down the casualty to a stretcher. which will be brought to the foot of the ladder by two members of the crew. When the casualty has been lowered to the stretcher, a (second) whistle shall be blown by the leader of the team which will be the signal for "Making up". the stretcher with the dummy will however be carried away by the two stretcher bearers to a marked place 20 ft away from the tower where the casualty will be taken off from the stretcher, gently placed on the ground, the stretcher made up and carried back to the appliance from where it was taken and properly strapped up. The ladder shall not be left unattended while the leading Fireman is ascending or descending.

When the ladder is made up. it should be shipped on the appliance and the head etc. properly secured.

After all the gears are made up and restored on the appliance, the crew will mount. take up their respective seats and close the doors when the vehicle will be driven back to the starting line. As the rear wheels of the appliances cross the starting line, a (third) final whistle will be blown by the starter.

The total time taken for the drill shall be from the time the first whistle is blown to the third and final whistle.

Penalties as indicated on page 278 will be imposed for the faults mentioned therein and will be added to the actual time taken for the drill in deciding the final placings.

N.B. - For conversion into metric units, please read as follows:-

Position of Fire Tender/Motor Pump-Distance of 75 feet=24 meters.

Ladder-35ft=10.5 meters.

Mark on drill tower- 25 ft = 7.8 meters(app.)

Position of Stretcher- 20 ft = 6 meters.

EXTENSION LADDER DRILL COMPETITION – FAULTS & PENALTIES

- | | |
|---|----------|
| 1. Dismounting before the vehicle is stopped – per fault | 2 Secs. |
| 2. Allowing the ladder to fall on the ground at any stage of the drill – per fault | 10 Secs. |
| 3. Lowering the head of the ladder heavily against the drill lower. | 5 Secs. |
| 4. The heading the ladder grazing against the wall of the drill tower while extending or lowering – per fault | 2 Secs. |
| 5. Failure to pitch the ladder above the horizontal mark on the tower | 2 Secs. |
| 6. Failure to maintain the safe working angle. | 2 Secs. |
| 7. Leaving the ladder unattended while the leading Fireman is ascending or descending – per fault | 3 Secs. |
| 8. Propping the stretcher on the ground at any stage of the drill- per fault | 3 Secs. |
| 9. Failure to open up stretcher properly | 2 Secs. |
| 10. Rough handing of dummy while rescuing or lowering on to stretcher or ground – per fault | 3 Secs. |
| 11. Dummy slipping off from shoulders while carrying down. | 30 Secs. |
| 12. Failure to keep stretcher properly and in its place on “Make-up” - per fault | 2 Secs. |
| 13. Dropping the ladder heavily on the gallows while shipping | 3 Secs. |
| 14. Failure to engage pawls after housing | 2 Secs. |
| 15. Failure to secure the ladder properly – per fault | 2 Secs. |
| 16. Trying to mount a vehicle which is in motion – per fault | 1 Sec. |
| 17. Doors of Fire Tender not properly closed – per fault. | 2 Secs. |
| 18. Trying to rectify faults after the third whistle is blown – per attempt. | 3 Secs. |
| 19. Running with the stretcher bearing the casualty on it. | 3 Secs. |

TACTICAL MEDLEY DRILL COMPETITION*

Preliminary

The drill shall consist of hauling up a branch and line of hose to the second floor using an Extension Ladder, rescuing a casualty (dummy) by Fireman’s life, working a Trailer pump to draw water from a Tank / Dam situated at a minimum distance of 75 ft. from the Drill Tower, knocking down a Target and “Making up”.

Appliances & Equipments

- (a) **Fire Tender** –A fire tender (towing vehicle) with an Extension ladder and a large trailer pump (400 galls / minutes) hooked up. Shall be stationed in a marked position at minimum distance of 75’ from the Drill Tower.
- (b) **Extension Ladder** –A 35’ wooden extension ladder (thussed type) shall be kept in position on the fire tender properly secured.
- (c) **Trailer Pump** –A large trailer pump (400 g.p.m/1800 litres /minutes) shall be looked on to the fire tender. The pump inlet should have the blank cap (chained) hand tight. Towing bars shall be kept folded and all three jacks raised and tightened with the safety pins in position. The safety pins should also be chained.

- (d) **Suction Hose** –Two 4” suction hose, each of 8 ft. length shall be kept on the Trailer pump on the brackets provided with the straps opened up. The suction on the off side brackets shall have the metal strainer fitted.
- (e) **Suction Wrenches** –A pair of suction wrenches of the universal type shall be kept in the lockers of the towing vehicle and should be used for tightening the intermediate and inlet joints of the suction.

3

- (f) **Manila Line** –A two inch short line about 50 ft, long shall be kept in a coiled state in the locker of the Fire Tender near the suction wrenches for suction work and a 2” long line (100 ft) for hauling up the hose with branch.
- (g) **Delivery Hose** –Lengths of delivery hoses (2 ½) three lengths if each of 50’ or two lengths if each of 75’ with couplings shall be kept in the locker of the Fire Tender, Hose shall be rolled tight with the female coupling inside.
- (h) **Branches** -One short (emergency) branch with 5/8” nozzle shall be kept in the locker of the Fire Tender.
- (i) **Casualty** –A dummy shall be kept on the second floor for rescue work (Fireman’s Lift).
- (j) **Water Source** –A static tank/dam full of water shall be provided at a minimum distance of 75 ft from the drill tower.
- (k) **Target** –A target of the type mentioned I ‘Fire Trailer Pump Drill” shall be kept at a distance of 20 ft from the drill tower in line with the branch on the second floor.
- (l) **Starting Line** –A starting line shall be marked at a distance of 75’ away from the drill tower and the front wheel of the fire tender shall be on this line at the start of the drill.

Drill

The crew shall be in the mounted position each member being in his respective seat, and the engine shall be started up.

The drill shall commence with the blowing of the first whistle by the starter and the time shall be reckoned from the time the first whistle is blown. the crew shall commence work as soon as the whistle is blown which shall be as follows :-

On the whistle, the vehicle shall be moved forward to any spot desired by the leader with the crew in their seats and all doors properly locked. As the vehicle stops, the crew shall demount, set the pump, couple up two lengths of suction and connect it to the inlet of the pump, using the suction wrenches for tightening of all joints and using the short manila line for securing the suction with a clove hitch at the strainer end, an half hitch at the intermediate joint and round turn and two half hitches at the near side rear stay , of the pump, gently lowered into the Water tank/ dam prima the pump run out the delivery line (three lengths of 50 ft. each or two lengths of 75 ft each) and only start delivering the water as soon as the branch man is ready on the second floor and the order “ water on” is given. Simultaneously the ladder should be unshipped. the ladder extended and pitched to the second floor of the drill tower so that the head of the ladder is above the horizontal mark on the Drill Tower. (This mark shall be at the height of 25 ft from the ground) As soon as the ladder is pitched the leading fireman shall go to the second floor by climbing the ladder taking with him one end of the long line (Manila) after trying a vow line. A second and third fireman shall also follow the leading fireman to the second floor and start hauling up the hose and branch on which the appropriate knots have been tied i.e a rolling hitch on the hose 18’ to 20’ away from the branch and a clove hitch on the branch folded over the hose and near the female coupling. In the meantime the leading fireman shall rescue the casualty (dummy) by the fireman’s lift. When the branch has been hauled up to the second floor and is in position, the order “Water on” will be given by the branch man, the jet will be directed on the target and as soon as the target is knocked down the second whistle shall be blown by the leader of the team which shall also be the signal for making up. The second whistle shall not be blown by the leader of the team which shall also be the signal for making up. The second whistle shall not be blown. until the dummy is carried down and the target

*NO schedule timing for this drill has been fixed. since it is a Tactical Medley Drill Competition

knocked down. The ladder shall not be left unattended whenever any one is ascending or descending the ladder. The casualty carried down shall be lowered on to a stretcher which should be kept on the ground in a place, properly marked for the purpose.

On the second whistle, by the leading of the team, which is the signal for "Making up", all gears should be made up and stowed on the appliance in their respective places from where they were taken out. The hoses on the ground should be under run but the hose taken to the second floor need not. They should be rolled up neatly on the female coupling and re-stowed in the locker of the Fire Tender. The Trailer pump engine should be shut down, petrol cock and delivery valve closed. suction blank cap fitted on the pump inlet hand tight, the suction hoses replaced on the bracket from where they were taken out, jacks raised and properly tightened with the safety pins placed in position and the trailer hooked on to the appliance properly. The rope should be coiled neatly and put back in the locker of the Fire Tender alongwith the suction wrenches. When the ladder has been made up it should be shipped on the Fire Tender and the head etc. properly secured. When all gears have been made up, the crew shall mount the appliance and take their seats in their respective places, the doors properly closed and the vehicle moved back to the starting line. As the wheels of the Trailer Pump crossed the starting line a third and final whistle shall be blown by the starter.

The total time taken for the drill shall be from the time the first whistle is blown to the time of the third and final whistle.

Penalties as indicated in pages 9-10 will be imposed for the faults mentioned therein and added to the actual time taken for the drill in deciding the final placings.

N.B. –For conversion of the figures into Metric Units, please refer to the same for the Trailer Pump Drill and the Extension Ladder Drill with rescue.

Manila Line – 2" size 10ft. length = 50 mm size of app. 30 metres.

TACTICAL MEDLEY DRILL COMPETITION – FAULTS & PENALTIES

1	Dismounting before vehicle is stopped – per fault	2 Secs
2	Failure to apply hand brake of T.P. when set at the water source.	2 Secs
3	Dropping of suction couplings on the ground while connecting and disconnecting – per fault.	3 Secs
4	Suction Coupling not tightened with wrenches –per fault	2 Secs
5	Suction improperly secured with rope-per unit	2 Secs
6	Manila Line loose between stay & strainer	1 Sec.
7	Allowing the Extension Ladder to fall on the ground at any stage of the drill per fault.	10 Secs
8	Barging the head of the ladder heavily against the drill tower.	5 Secs
9	The heading of the ladder grazing against the wall of the tower, while extending / lowering	2 Secs
10	Failure to pitch the ladder above the horizontal mark on the drill tower.	2 Secs
11	Failure to maintain the safe working angle.	2 Secs
12	Leaving the ladder unattended while a member of the crew is ascending or descending – per fault	3 Secs
13	Dropping of delivery hose couplings while laying out or making up- per fault	3 Secs
14	Dropping of branch pipe (at any stage)- per fault	3 Secs
15	Excessive dragging of delivery hose –per fault.	2 Secs
16	Improper carrying of Line to second floor.	2 Secs
17	Improper knots on delivery hose for hauling up- per fault	2 Secs
18	knots on hose at wrong place.	2 Secs
19	Failure to open cooling system. if provided	2 Secs
20	"Water on" signal before connecting branch.	1 Sec
21	Bursting of delivery hose due to sudden high pressure – per fault.	2 Secs

22	Rough handling of dummy while rescuing and lowering on to stretcher – per fault	3 Secs
23	Dummy slipping off from shoulders while carrying down.	30 Secs.
24	Disconnecting branches and delivery hose coupling before whistle for “Make up” by the leader of the team, inspite kof having knocked known the target –per fault.	1 Sec.
25	Failure to shut down engine of T.P. on “Make up”	1 Sec
26	Failure to close cooling control cock, if provided	1 Sec
27	Failure to replace Suction in proper place	2 Secs
28	Failure to replace suction blank cap (hand tight)	1 Sec
29	Failure to use safety pins on T.P. stays when raised and tightened prior to hocking on to the towing vehicle – per fault	2 Secs
30	Failure to release hand brake of T.P. prior to booking on to the growing vehicle	2 Secs
31	Failure to put back wrenches in proper place.	2 Secs
32	Failure to make up manila line properly.	2 Secs
33	Failure to put back manila lines in proper place – per fault	2 Secs
34	Failure to engage pawls after housing the ladder	2 Secs
35	Dropping the ladder heavily on the gallons while shipping	3 Secs
36	Failure to secure the ladder properly – per fault	2 Secs
37	Under-running delivery hose before disconnecting	2 Secs
38	Failure to under-run delivery hose properly	2 Secs
39	Failure to roll up hoses properly	2 Secs
40	Failure to replace hoses in proper place – per fault	2 Secs
41	“Throwing” rolled hose –per fault	2 Secs
42	Failure to keep branch in proper place	2 Secs
43	Failure to close locker door/doors – per fault	2 Secs
44	Mounting the appliance while it is in motion – per fault	1 Sec
45	Carelessly leaving Extension ladder or T.P. at place of work and not making up	5 Secs
46	Trying to rectify faults after third whistle – per fault	3 Secs

**REPORT OF SUB-COMMITTEE ON ASSESSMENT OF REQUIREMENT OF
FIRE FIGHTING EQUIPMENT AND ORGANISATIONAL STRUCTURE OF
FIRE SERVICES**

(See para 13 under 30 Miscellaneous)

ANNEXURE III

**REPORT OF SUB-COMMITTEE NO. 2 ITEM NO. 15 AND ITEM NO. 17 ASSESSEMENT OF
REQUIREMENTS OF FIRE FIGHTING EQUIPMENT ORGANISATION STRUCTURE OF
FIRE SERVICES**

1. A Sub-Committee constituted of the following members met in the afternoon of 7th December, 1976 in Committee Room ‘C’ at Vigyan Bhavan.

Shri S. C. Chatterjee	Convener
Shri A. S. Kulkarni	
Shri R. S. Sundaram	
Shri S. M. Bharucha	
Shri B. R. Mehta	
Shri Jagan Mohan	
Shri S. K. Dheri	
Lt. Co. R. M. Rajan	

2. The following officers were also present at the meeting :-
Shri H. S. Gahlaut, Deputy Chief Fire Officer, Delhi Fire Service
Shri S. P. Batra, Station Fire Officer, Delhi Fire Service
Shri P. N. Mehrotra, Fire Adviser, Ministry of Home Affairs.

3. The note appended at Appendix-IV to the Agenda and the paper at Appendix –V to the Agenda were thoroughly examined and discussed. The Sub-Committee unanimously approved of the suggestions made in these two documents with the following changes.

- (a) **Funding** : A recommendation may also be included that special project for the development of fire services may be taken up under the UNDP.
- (b) **Organisation** : The designation of Sub Fire Officer may changed to read as Assistant Station Fire Officer.
- (c) The scale of Assistant Divisional Officers in each operational Division should be specified as “one or more Assistant Divisional Fire Officers so that no Assistant Divisional Fire Officer shall have to command more than 5 Fire Stations.”
- (d) **Retainer for Volunteers** : Only a monthly retainer should be recommended Reference to any Separate allowance for attending to individual fire calls may be deleted.
- (e) **Uniform** : The exact scale of issue of uniform may be specified.
- (f) **Appliances and Equipment** : The portable pump for volunteer fire stations may be specified as 90 – 120 Litres per minute or higher capacity as required by local conditions.

- (g) **Water Sources :** Provision of water sources for tall buildings, above 15 m in height should also be included in the recommendations.
- (h) Residential accommodation should be made free for all ranks.

Sd/-
(S. C. CHATERJEE)

Sd/-
(B. R. MEHTA)

Sd/-
(A. S. KULKARNI)

Sd/-
(JAGAN MOHAN)

Sd/-
(R. S. SUDARAM)

Sd/-
(S. K. DHERI)

Sd/-
(S. M. BHARUCHA)

Sd/-
Lt. COL. (R. M. RAJAN)

The Committee feels that the present syllabus of the College, vis-a-vis examination system needs through revision. It also feels that instead of running lower or elementary courses, College should “run more number of senior courses i.e. Station Officers, Divisional Officers and Fire Prevention Officers courses etc.

ASSESSMENT OF REQUIRMENT OF FIRE FIGHTING EQUIPMENTS

(See para 13 under Miscellaneous)

The Standing Fire Advisory Committee had made certain recommendations regarding the assessment of requirements of fire fighting equipment for the various State Fire Services. These recommendations were primarily based on population. The Committee had, however, recommended that in industrial cities and area of high fire risk, the scale and type of additional fire fighting appliances should be determined by an actual survey of the area to be protected and that generally a fire station should be available for every four square miles of the area to be covered. As regards the type of appliances, the Committee had recommended pumping appliances only.

Considering the general problem of shortage of water for fire fighting, almost throughout the country and the inconvenient and out the way location of the natural sources of water in most of the places it is necessary that the type of fire appliances which should be provided at the fire stations in cities / towns should be standardized as follows :-

- (a) Water tender carrying 2k700 litres water and fitted with 1800 litres per minutes pump should preferably be mid-ship mounted. In addition to the 1800 lpm pump, the appliances should also carry a 275 lpm portable pump conforming to IS 642 and other ancillary gear.
- (b) Extra heavy water tender carrying 9000 litres of water and fitted with suitable outlets for connection to 75 mm and 100 mm suction inlet of pump.
- (c) Rescue tender built in all metal station wagon, or a one tonne chassis. The appliance should carry light rescue equipment for immediate use by the first turn out crew.
- (d) Ambulance – This may be normal ambulance fitted with two stretchers, It should , carry, besides normal first aid equipment, an oxygen resuscitator.

Each fire station should normally have a compliment of 2 water tender pumps, one extra heavy water tender, one light rescue tender and one ambulance. However, Where the

fire station have to be located at closer distances the light rescue tender and ambulance may be restricted to selected fire stations only.

The number of fire stations should be determined on the basis of response time.

In high hazards areas, a response time of a maximum of 3 minutes should be aimed at, In other areas, the response time should not exceed 5 minutes, For determining the response time, actual runs by fire appliances should be conducted during peak hours of traffic in various parts of the district for which the fire cover is to be provided. The location of fire stations should then be plotted on the map on the basis of these tests.

For Metropolitan cities, divisional fire service HQ and fire service command HQ, it is also necessary to provide a bulk of special appliances like emergency tender, a light van, extra heavy water pumping appliances (in certain selected cases only), turn table ladders, hydraulic platform, control post van, canteen van, hose laying tender and the like.

In certain special cases, specialized fire fighting appliances, like foam crash tender or dry powder truck may be necessary at the fire station. This depend upon the predominant fire risk which a particular fire station may be required to cover.

While on the question of assessment of requirements of equipment, it is also necessary to consider the provision of command cars and motor cycles for officers of the rank of Divisional Officers and above and for each fire station respectively.

Mobile workshops should also be provided in each Divisional HQ in the state / Union Territory Each fire service should also have at least one publicity van for fire prevention propaganda.

D. ORGANISATIONAL STRUCTURE OF FIRE SERVICES RESTRUCTURING OF FIRE SERVICES ORGANISATION IN INDIA

It is an undisputed fact that all aspects of organization of fire services must be given simultaneous and equal attention, so as to make these services really effective. Unfortunately non of the Fire Authorities in India have been bale to achieve it so far. Some of the reasons for this situation are :-

Lack of appreciation of the minimum essential requirements of fire services for ensuing their operational efficiency and for maintaining the efficiency at optimum level.

Heterogeneous character of fire services' organization in the country, resulting in multiplicity of Fire Authorities.

Lack of appreciation of the need for maintaining an efficient fire services' organization .

Lack of resources.

2. Based on recommendations of SFAC, the Government of India, has repeatedly impressed upon the State Governments to take over the fire services from the Local Bodies and to maintain them as separate departments of their respective States. But, only partial success has been achieved I this direction during the past eighteen years. It is matter of regret that even in the States where the fire services constitute a separate department. they lack in essential facilities.

3. Various aspects of fire services' organizations are discussed below and suggestions are offered for formulation of recommendations by the SFAC with a view to ensure

uniformity in the organization and expeditious development of fire services throughout the country.

Legislation

4. As far back as the year 1958, the Government of India had requested all State Governments to take over the fire services within their respective states and to maintain them as a separate department. A model fire Force Bill was drafted in the Ministry of Home Affairs in consultation with the Law Ministry and after it had been examined the SFAC, it was forwarded to all State Governments for enactment by their respective Legislatures. This course of action had to be adopted because of the Constitutional position. Several reminders were issued to the State Governments and, following the Fire Protection Seminar, organized by the Ministry of Home Affairs, in November, 1974, the home Minister himself addressed all Chief Ministers on the subject. But, the desired result has not been achieved so far.

5. It is suggested that SFAC may consider recommending Central Legislation (with the concurrence of State Governments). The Central Act may then be implemented by the State Governments who may frame their own rules, based on model rules which may be supplied to them as guide. If necessary, the Government of India may consider transferring the subject of fire protection to the Concurrent List in the Constitution of India.

6. In addition to the Fire Service Act. It is also essential to have suitable Legislation on measures for the prevention of Fires. It is suggested that SFAC may consider recommending a Central Legislation on this subject also (with the concurrence of State Governments). This Act may also be implemented by the State Governments who may frame rules, based on model rules, which may be supplied to them as guide. It is further suggested that the proposed Fire Prevention Act may cover all aspects of fire prevention, including enforcement of Safety Codes and the National Building Code of India, 1970, in so far as it relates to fire safety.

Funding

7. Some of the important reasons for maintenance of fire services by State Governments are :

Safeguarding the life and property of people from uncontrolled fire.

Protecting the assets created through the implementation of successive Five Year Plans.

The achievements of Planned development must be protected if full benefit has to be derived from them. In the absence of adequate measures for the prevention and control of fire in various establishments. Which have been created as a result of Five Year Plans, the entire property may be destroyed in case of fire. bringing the efforts to nil. It is universally recognized that plant and machinery and more prone to fire with the passage of time i.e., with ageing.

To prevent loss of national wealth by fire.

8. It is, therefore necessary that effective fire protection must be organized by each State Governments, who should shoulder this responsibility in the same manner as they do for Law and Order. Bulk of the funds for the establishments and maintenance of fire services must, therefore, come out of the consolidated funds of the respective State Governments. However, in view of the fact that all aspects of fire service organization must be developed simultaneously, it may not be possible for the state Governments to find sufficient funds for the fire services out of non-planned expenditure. Since one of the main objects of developing fire services is to

consolidate the gains accruing from the Five. year Plans. It is natural that establishment and maintenance of fire services should be treated as a 'plan' subject and all necessary expenditure for this purpose should be accepted as a Planned expenditure of the State Governments.

9. Many State Governments have expressed their willingness to raise loans for the development of their fire services. The General Insurance Corporation of India has agreed to subscribe to the State loans, as and when they are raised for the development of fire services. But, Reserve Bank of India has fixed a ceiling for the raising of public loans by each State Governments. This loan prevents the State Governments from raising loans for the development of fire services. It is, therefore, suggested that the Committee may consider recommending to the Government that the State Governments may be permitted to raise loans for the development of fire services over and above the normal ceiling fixed for them by the Reserve Bank of India.

Organisation

10. It is estimated that over 70% of India's population lives in villages. An idea of the proportion of major towns and villages can be had from the fact that in West Bengal, there are only 16 district headquarter towns. In many States, a large area in each city town has thatched houses/huts clustered together. In most States, almost all houses in the rural areas have thatched roofs and they built close together. Considering this condition, it is futile to depend upon a few fire stations in the cities / towns to be able to fight fires in the rural areas or in the areas within the city / town which resemble the rural areas, in so far as the type of construction of houses is concerned. The fire protection organization has, therefore, essentially to cover the entire territory of each State. In other words, it has to reach down to the village level. It would be difficult to find resources for fire protection organization at this mass scale. Full public involvement is, therefore, essential, It is suggested that the fire services in each State should be so organized that they would be able to enforce effective fire prevention measures and would also be able to fight fire anywhere within the State without such loss of property. While recommendations for the establishment of fire prevention wings in fire service are given later in this note, the fire fighting organization should cover.

- (a) **Full time paid fire station** –These fire stations should be restricted to district headquarter towns and such other towns/areas where the fire risk is abnormally high. Properly designed fire stations buildings should be provided for such fire stations and fire fighting appliances and equipment should be provided as per scales recommended later in this note. Personnel for manning these stations should be full time paid staff.
- (b) **Retained fire station** –These fire stations should be established in all sub divisional headquarter towns and other towns having lesser fire risk. These fire stations should be similar to those mentioned at (a) above, but only a skeleton full time paid staff should be provided at these stations. Such staff should be limited to one Station Fire Officer, one Leading Fireman per watch for the watch room and one driver per fire appliance/ ambulance per watch. The remaining staff should be drawn from retained personnel who should be paid watch. The remaining staff should be drawn from retained personnel who should be paid a fixed monthly retainer and a small allowance for attending for attending each fire call.
- (c) **Volunteer fire stations** –These fire stations should be established in each Block Development Centre so that no separate building would be necessary. The equipment should comprise one or two 90-120 litres per minute capacity portable pumps which could be kept in the office of Block Development Officer and a hand operated siren should be provided for raising the fire alarm when necessary. Sufficient volunteers

should be trained for manning the portable pumps and fighting the fire as and when required. The Block Development Officer's jeep may be used for transporting the fire pumps till such time as it is possible to provide a separate transport vehicles for this purpose. Each of these pumps complete with accessories should cost between Rs.5000 and 6000 only.

- (d) **Rural fire posts** - One or more rural fire post/ posts should be established in each inhabited village. The number of such posts should be determined by the Size and lay out of the village. Simple fire fighting equipment. like barrel mounted hand operated pump, ceiling hooks and fire beaters should be provided at each of these posts. The entire equipment for each fire post would cost less than Rs. 2000 which could easily be financed by the respective Gram Panchayats. Training in the observance of fire precautions and fire fighting should be given to as many villagers as possible. so that they could fight fires on self-help basis within their own villages.
- (e) **Fire retardant treatment of thatch** –To reduce the incidence of fire in the villages and in large areas having thatched buildings within the cities, method of treating the thatch and other combustible material, with a view to make them fire retardant, should be propagated. The method has been developed by the Fire Research Division of CBRI who are willing to train anyone in its application. The State Governments may arrange to put up exhibition huts/houses in which treated thatch is used. The idea should catch up quickly and people would then treat the thatching material before constructing their houses.

11. Once the State Governments take over the fire services and organise them as a separate department, the area covered by any single fire service department will be too large and unmanageable, unless the entire State is sub-divided into smaller commands for purpose of administrative, technical and operational control of the fire services. For this purpose, it will be necessary to divide each State into several zones, each zone being termed as a "Fire Service Command". The zoning should be done in such a way that no fire service command should have more than 30 full time and retained fire stations in it. Each command should be further sub-divided into 3 fire service divisions so that each division would have a maximum of 10 full time and retained fire stations in it.

12. Each fire service command should be commanded by a Chief Fire Officer, who should be assisted by Deputy Chief Fire Officer. At the division level, the Officer-Charge of a division should be of the rank of Divisional fire Officer and he should be assisted by an Assistant Divisional Fire Officer.

13. besides the structure given in the foregoing para for the operational wing of the fire service, establishment of other bureaus is necessary for handling other aspects of the Service. The following bureaus are recommended :-

- (a) Headquarters Bureau
- (b) Communication and Alarm Bureau

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- (c) Fire Prevention Bureau
- (d) Community Relations Bureau
- (e) Training Bureau
- (f) Research and Development Bureau

14. The structure, intended purpose and justification for each of these bureaus are given below:-

(a) **Headquarter Bureau** –This bureau should be headed by a Principal Staff Officer, who should be an uniformed officer of the rank of Deputy Director/ Chief Fire Officer, the only difference being that the Deputy Director will be the senior most amongst all the Chief Fire Officers and the Principal Staff Officer.

The Headquarters bureaus should have six divisions under it as follows :-

- (i) Administration
- (ii) Finance
- (iii) Planning
- (iv) provisioning
- (v) Technical
- (vi) Workshops

Each of the above divisions should be headed by an uniformed officer of the rank of Divisional Fire Officer and should have its own sub-divisions and sections, as necessary. Functions of various divisions in Headquarters are given below :-

- (i) **Administration** –This division will look after the general administration of the fire services, lay down and execute all plans and programmes under the guidance of the Director handle all matters connected with recruitment, personal records, promotion, retirement etc., and such other functions as may be assigned to it.
- (ii) **Finance** –The recurring and non-recurring expenditure for any State fire services will be substantial. At the same time, enforcement of the fire prevention Legislation will also result in abnormal increase of work and accounting for the fees etc; which will be recovered on various items. A full-fledged division for handling all financial matters will, therefore, be necessary.
- (iii) **Planning** –It is necessary that execution of all schemes for future development of various aspects is planned in a systematic manner. this includes the design of future fire stations, appliances and equipment, other buildings for the department and so on. A separate division is, therefore, necessary for planning, which will work in close coordination with technical division and Research and Development Bureau.
- (iv) **Provisioning** –A large quantity of appliances, equipment, uniform clothing and spare parts for fire appliances and general purpose stores will be required for the fire services, It is essential to create a separate division for forecasting future requirements and taking necessary action for procurement, proper storage and distribution of stores and equipment.
- (v) **Technical** –Before the appliances, equipment, and other stores could be purchased, it would be necessary to lay down specifications for the guidance of the provisioning divisions. It would also be necessary for the fire services to actively participate in the preparation of national standards and building codes, keeping in view the interest of the Service. The technical division would look after this work, so as to relieve the other divisions of this responsibility and to achieve better coordination and result.
- (vi) **Workshops** –Prompt repair and maintenance of all fire service equipment is of utmost importance, It is specialised job and must be attended to be specially trained staff. A workshop division should, therefore, created in each fire service.

This division should have two sub-divisions – a centrally located workshop and a fully equipped mobile workshop for each fire service division.

- (b) **Communications and Alarm Bureau** –Means of communications and fire alarm system are essential for the operational efficiency of any well organised fire service. With a large number of control rooms and watch rooms, it will be necessary to maintain substantial quantities of communication equipment in a serviceable condition at all times. Functions of the communication and alarm bureau will embrace not only the maintenance of equipment, but also planning and provisioning of the equipment and its installation.

Each State Fire Service should have one central control room in the fire service HQ, one control room in each command HQ, one control room in each fire service divisional HQ and a watch room at every full time and retained fire station.

The communications and fire alarm bureau should be headed by a Chief Fire Officer assisted by a Deputy Chief Fire Officer. It should have three main divisions and nine sub-divisions as given below :-

- i. **Operations Division** –Sub-Divisions under this division should be :
One central control room, command control rooms at the scale of one per command, divisional control rooms at the scale of one per division and fire station watch rooms at the scale of one per full time and retained fire station.
 - ii. **Maintenance Division** –Its sub-division should be :-
Installation, central tele-comm workshop and mobile tele-comm workshop (at the scale of one per division)
 - iii. **Administration Division** –Sub-divisions under this division should be :-
Establishment, tele-communication, planning and tele-communications provisioning.
- (c) **Fire Prevention Bureau** –Consequent to the enactment of fire prevention Legislation, it would be necessary to set up an efficient machinery for its enforcement. It would also be necessary for the fire services to scrutinise all plans for new buildings within the municipal limits of each city/town in the State from fire safety angle and to inspect such buildings, when ready with a view to recommend the issue of occupancy certificate.

In addition to the enforcement of fire prevention Legislation and other duties connected with inspection of buildings etc. the fire services would also have to launch a mass campaign for the prevention of fire all over the State. including both, the urban and the rural areas.

To enable the fire services to discharge these functions, it is suggested that a Fire Prevention Bureau should be established in each State Fire Service. Such a bureau should have a limited number of highly trained personnel on its staff, whose functions should be clearly demarcated. They should function with the assistance of operational staff at the fire stations, for routine work only. the community Relations Bureau, which is being recommended later in this note, would also play a very important role in assisting the Fire Prevention Bureau in the achievement of their objective.

The Fire Prevention Bureau should be headed by Chief Fire Officer, assisted by a Deputy Chief Fire Officer. It should have three divisions under it. each of which should be headed by a Divisional Fire Officer, assisted by an Assistant Divisional Fire Officer and supported by such other staff as may be necessary. Its divisions should be :-

- (i) Individual Building Division
 - (ii) Fire Licences for ware houses Division
 - (iii) Fire Licences for Industries Division
 - (iv) Renewal of Occupancy Certificates Division
 - (v) Other miscellaneous Inspections Division
 - (vi) Complaints Division
 - (vii) Inspection Division
 - (viii) Prosecution Division

- (d) **Community Relations Bureau** –With the increase in fire prevention activities on a State wide level. it would be necessary to prepare and disseminate simple and effective literature on fire prevention measures and to arrange talks to different groups of people in various walks of life. so as to arouse fire consciousness. In order to make the task of the fire services easier and more readily acceptable to general public, it would also be necessary to create a machinery for improving the image of the Service in the mind of the common man. A Community Relations Bureau, is, therefore, suggested for this purpose.

This bureau should also be headed by a Chief Fire Officer, assisted by a Deputy Chief Fire Officer and should have the following divisions under it :-

- (i) Publications Division
 - 1. Public Relations Division
 - 2. Audio Visual Division
 - 3. Photography Division

Other divisions may be added as and when the need arises.

Each of the above division should be headed by a Divisional Fire Officer, assisted by an Assistant Divisional Fire Officer and such other staff as may be necessary.

- (e) **Training Bureau** –The head of the Training Bureau should be an officer of the rank of Chief Fire Officer who should be assisted by a Deputy Chief Fire Officer and such other uniformed and non-uniformed staff as may be necessary to handle the various training activities. The bureau should have 7 divisions under it as follows :-

- i Administration Division
- ii Library & Documentation Division
- iii Junior Course Divisio
- iv Senior Course Division
- v Specialised Courses Division
- vi Training & Visual Aids Division
- vii Sports & Welfare Division

- (f) **Research & Development Bureau** –This Bureau should also be headed by a Chief Fire Officer assisted by a Deputy Chief Fire Officer, It should have six Divisional under it as given below :

- i Data Processing Division
- ii. Research into Technical Literature & Documentation Division
- iii Operational Research Division
- iv Evaluation of new equipment Division
- v. Development of new equipment Division
- vi Testing of new equipment before acceptance Division

Each of these divisions should be headed by a Divisional Fire Officer, assisted by an Assistant Divisional Fire Officer and such other staff as may be necessary.

Fire Stations

15. Operational efficiency of any fire service depends, to a large extent, upon the location of fire stations in relation to the entire area which is required to be protected and also the design of the fire stations. It has been observed that in most cases the minimum essential features of fire station and their relative locations are not taken into account and the station building is designed in a haphazard manner, without adequate protection to the fire appliances. In most cases, the fire stations are simply housed in rented buildings with temporary sheds open on four all sides, erected for fire appliances. In its second meeting, the SFAC had made certain recommendations about the minimum dimensions for each essential feature of fire station, based on 24 hours' continuous duty system, and the shift duty system. Although the recommendations still hold good. they are not being followed. The Committee may therefore consider reiterating that all fire stations must conform to recommendation of SFAC. The Committee may also evolve model designs for a full time paid fire station and a retained fire station, based on the three watch system of duty.

16. More often than not, only one fire station is provided in a town, Very often, this single fire station is located either on the outskirts of the town or outside the town, which delays the response of appliances to any fire incident which may occur at the farther end of the town. It is suggested that, for all high hazards and closely built up areas, response time of a maximum of 3 minutes should be aimed at end, for all other areas, the response time should not exceed five minutes. Fire appliances should actually be run during peak traffic hours to determine the approximate locations of fire stations from where the area allotted to it can be covered within this time limit.

17. It is also the practice in many fire brigades to have the fire service headquarters combined with one of the fire stations. This practice often comes in the way of finding a suitable location for the fire station itself. It may be recommended by this Committee that all divisional, command and fire services headquarters should be located in independent buildings.

Appliance & Equipment

18 In so far as the city/town fire brigades are concerned, diesel chassis are decidedly superior to petrol chassis for the fabrication of fire appliances. The Committee may therefore recommended that all mobile fire and rescue appliances should be built on diesel chassis.

19. Considering acarcity of water sources for fire fighting purposes in almost all parts of the country, it may by recommended that the following types of appliances should be standardised for fire fighting :

- (a) Water tender pump, carrying 2700 litres water and fitted with 188 litres per minute pump preferably mid-ship-mounted and carrying an additional 275 litres per minute portable pump, conforming to IS 642.
- (b) Extra heavy water tender, carrying 9,000 litres of water and fitted with suitable outlets for connection to 75 mm and 100 mm suction in inlets.
- (c) It is also suggested that the following scale of appliances may be recommended as standard scale for each fire station :
 - a. For each full time paid fire stations :
 - (i) Water tender pump [see para 19(a)] above –2 Nos.
 - (ii) Extra heavy water tender [see para 19(b)] above –1 No.
 - (iii) Ambulance –1 No.
 - b. For each retained fire stations-same scale of appliances as for the full time paid stations.
 - c. Volunteers fire stations –
 - Portable pumps of 90- 120 litres per minute capacity with 40 mm dia hose, in convenient lengths, and other ancillary equipment –1 set.
 - a. For each rural fire post
 - (i) Hand operated rotary pump, mounted on 200 litres capacity barrel on trolley wheels –1 No.
 - (ii) Ceiling (fire) hooks – 2 Nos.
 - (iii) Fire beaters – 2 Nos.

20. The following scale of hose may be recommended for each mobile pumping appliance -

- (a) RRL hose, conforming to type II of IS : 636, size 63 mm dia, in 22.5 m or 30 m lengths according to local preference, and fitted with pressure die-cast light alloy coupling instantaneous conforming to IS 903.720 m
- (b) Controlled percolation hose coated on both sides, or unlined canvas hose in 30 m lengths and fitted with pressure die-caste-light alloy instantaneous coupling conforming to IS 903-240 m

21. Fifty per cent of each type of hose should be carried on the fire appliances at all times and the remaining fifty per cent should be kept as reserve at the fire station for replenishing the wet hose after use.

22. In addition to the appliances mentioned above, one or more of the following specialised appliances should be provided at selected fire stations or fire service divisional headquarters, according to local circumstances :-

- (a) Turn table ladders – 45 m
- (b) Turn table ladders – 31 m
- (c) Hydraulic platform – 31 m
- (d) Hydraulic platform – 21 m
- (e) Light rescue tender
- (f) Emergency tender
- (g) Extra heavy pumping appliance of not less than 10,000 litres per minute pumping capacity

- (h) Hose laying tender
- (i) Lighting van
- (j) Control post van
- (k) Canteen van
- (l) Mobile workshop for repair of fire appliances
- (m) Mobile workshop for tele – comm equipment
- (n) Breakdown van

23. Each fire station should also be equipped with a motor cycle.

24. Each Officer of the rank of Divisional Fire Officer and above should be provided with a command car and each Assistant Divisional Fire Officer should be provided with a motor cycle.

25. Each mobile pumping appliance should be equipped with two sets of compressed air breathing apparatus; each foam/crash tender should be issued with two sets of compressed air breathing apparatus; each light rescue tender should be equipped with 4 sets of compressed air breathing apparatus; each turn table ladders should be equipped with four sets of compressed air breathing apparatus; and each emergency tender should be equipped with six sets of compressed air breathing apparatus. In addition, each operational officer from Sub Officer upwards should be equipped with a personal breathing apparatus set.

26. A minimum of 500 litres of foam compound should be recommended to be stocked at every fire station and two foam making branches. each with a pick up tube, size-2, conforming to IS 2097 should be recommended per mobile pumping appliances.

27. In cities having high rise buildings (buildings over 15 m high) one pneumatic jumping cushion should also be provided for the city.

Maintenance of fire appliances and equipment

28. Prompt maintenance of all fire appliances and equipment is a must for any fire service. Any delay in essential repair to fire appliances jeopardises the operational efficiency of the Service. This fact is seldom realised and it is left to the Officer in-charge of the fire services to try and get the fire appliances repaired through external agencies., which results both in unnecessary delays and expenditure. It is, therefore, suggested that the committee may recommend that every State Fire Service must have its own well equipped and well manned central workshop, for on the spot repair of fire appliances, should also be recommended for each fire service divisional headquarters.

29. these recommendations should also include stocking of necessary fast moving spare parts in the workshop so that essential repair is not delayed.

Manpower

30. The necessary supervisory ranks have already been mentioned earlier in this note under 'Organisation'. The committee may consider recommending that crew for various types of appliances may be provided at the following scales for each watch :-

Name of appliance	Sub Officer	Leading fireman	Driver Operator	Fireman	Total
Water tender pump	Nil	1	1	4	6
Extra Heavy water tender	Nil	Nil	1	1	2
Turn table ladder and Hydraulic platform	1	1	1	3	6
Pump escape	Nil	1	1	4	6
Light rescue tender	Nil	1	1	2	4
Emergency tender	1	1	1	4	7
Crash tender / foam tender	Nil	1	1	2	4
Ambulance	Nil	Nil	1	1	2

31. The manpower at each fire station may comprise :-

Station Officer –1

Sub Officer –1

Leading Fireman (one per watch – for watch room duty) –2

Crew for the appliances –as per scale given above.

32. For the control rooms at fire service headquarters and the command and divisional headquarters, the following manpower may be recommended :-

Central Control Room - 1 Divisional Officer, 4 Station Officers (one per watch and one reserve) and 8 Sub Officers (2 per watch and 2 reserve)

Command Control Room- 1 Assistant Divisional Officer, 4 Sub Officers (1 per watch and 1 reserve) and 8 Leading Fireman (2 per watch and 2 reserve)

Divisional Control Room - 4 Station Officers, 4 Sub Officers (one per watch and one reserve) & Leading fireman (2 per watch & 2 reserve)

Duty System

33. It is recommended that a standard 3 watch duty system should be introduced in the fire Services, in which the first watch should be on duty for 24 hours at a stretch. On being relieved by the second watch, the first watch should be on 24 hours off duty and again come on duty for 8 hours on the third day. Similarly, the second watch, on being relieved by the third watch should remain off duty for 24 hours, and come on 8 hours duty on the third day and so on. this system would appear to be more expensive. but, considering the fact that extra manpower would be required for fire prevention duty and water sources inspection and maintenance it is actually more economical, because the personnel of the day duty watch will be in addition to the watch on normal operational duty and could be employed for fire prevention water sources, inspection and other miscellaneous duties, thereby economizing on manpower and utilising them to the maximum advantage.

34. One third of the total strength of each rank, except Chief Fire Officer and above should be provided as leave/training reserve. The need for this reserve is obvious.

Retained Fireman

35. It has been recommended that retained personnel, should be employed for manning the retained fire stations, except for skeleton staff which should be full time paid staff at such stations. It may be recommended that each retained fireman should be paid a monthly retainer of Rs. 100 and in addition, an allowance of Rs. 5 per call, which he may attend.

Mobilisation of retained personnel may be left to the Director of Fire Service of the state, because this will depend upon local circumstances, In some states, it may be possible to have the retained personnel of 12 hours shift duty at the fire station, while in other states it may be not be possible to do so. In such cases, a system of raising fire alarm may be worked out to ensure prompt attendance by the retained personnel.

Status of Fire Service Personnel – Fire Service Ranks

a. The fire service ranks should be as follows :

Director of Fire Services
Deputy Director of Fire Services
Principal Staff Officer/ Chief Fire Officer
Deputy Chief Fire Officer
Divisional Fire Officer
Assistant Divisional Fire Officer
Station Officer
Asstt. Station Officer
Leading Fireman
Driver and
Fireman

37. It is suggested that suitable pay scales for each rank may be included in the fire services legislation, which has been recommended earlier. So that uniformity could be achieved throughout the country.

38. All operational officers of the rank of Asstt. Station Officer and above should be paid a call allowance on a sliding scale for being required to be available on call round-the-clock. This allowance need not be paid to the remaining staff, because they will be working in watches and not will be required to be available on call round-the-clock.

Recruitment

39. Normal recruitment of fire service personnel should be at two levels.

- (a) Fireman's level –Candidates for recruitment at this level should have passed matriculation or Higher Secondary Examination with Science subjects.
- (b) Asstt. Station Officer's level–Candidates for recruitment at this level must be Science Graduates.

40. The advantage of adopting this system of recruitment will be that officers of the rank of Asstt. Station Officers and above can be detailed for training in the Post-Graduate Course in Fire Engineering, which is proposed to be conducted at the National Fire Service College, Nagpur and ultimately the average standard of officers in the Service will be raised. This system will also enable all senior ranks to be filled in by promotion from within the service in due course of time, which is highly desirable.

Uniforms

41. SFAC has made certain recommendations in the past for issue of various items of uniform to fire service personnel of various ranks. the committee has also recommended that normal working dress for all fire service personnel should be trousers and tucked-in-shirts. This may be reiterated. However, the committee has not made any positive recommendation about the scale of issue of uniform and has left it to the individual Fire Authorities to decide the scale for their fire service personnel. This practice again creates difficulty and leaves much to be desired in many cases. The committee may reconsider recommending the minimum scale of uniform, which would ensure a smart turn-out by all personnel.

42. The fire tunic recommended earlier by this committee for all operational ranks is either not being issued or the design of the tunic is not suitable. It is therefore suggested that the Committee may recommend a standard pattern of turn-out clothing for all fire service personnel throughout the country. This clothing should comprise of the following items. :-

- (a) FRP helmets, conforming to IS 2/45-1969 in colors as recommended by the Standing Fire Advisory Committee earlier, i.e. yellow for ranks up to Station Officer and white for Assistant Divisional Fire Officer and above, Rank markings on the helmets should conform to the recommendation already made by the SFAC. Each helmet should essentially be fitted with a protective neck curtain and a sliding visor.
- (b) A turn-out coat made out the thick water proof canvas of Navy blue colour. The coat should be lined on the inside with a woolen liner and fitted with zip fastener along its entire front. A flap overlapping the Zip fastener should be provided all along its length. It should be retained in closed position by snap-fasteners. Length of the coat should up to the knee of the wearer. Rain coat type pockets should be provided in the coat for keeping belt line and small gear, as necessary, shoulder flaps should also be provided for rank marking and for carrying a coiled rope on the shoulder.
- (c) Thigh-length gum boots for all ranks up to and including Sub Officers. The boots should have mild steel mid-soles and protective steel toe-caps. A warm lining should also be provided on the inside of boots. All officers of the rank of Station Officer and above should be issued black leather Wellingtons, which should also have mild steel, mild steel, mild-soles and a protective toe caps.

Rank Markings

43. Rank markings have already been recommended by the SFAC earlier. Same markings may continue to be in force in all fire services throughout the country.

Protective Clothing

44. Two sets of heat/flame resistant protective clothing should be carried on each mobile fire and rescue appliance. The number of such sets should be increased to four for each emergency tender.

Where the fire station is required to lower the risk of acid /Ammonia, protective suits for these should also be carried on each mobile fire and rescue appliance.

Training

45. It has already been recommended above in this note that a Training Bureau should be established in each State Fire Service. The functions of the Training Bureau are obvious. The Committee may consider recommending the following courses should be conducted by each state Fire Service for the personnel.

- | | | | |
|-----|---|---|--|
| (a) | Fireman Recruits' Course | - | Duration – 6 months |
| (b) | Asstt. Station Officer Recruits' Course | - | Duration – 6 months |
| (c) | Driver Recruit's Course | - | Duration – 6 months |
| (d) | Leading Firemen;s Course | - | Duration – 3 months |
| (e) | Breathing Apparatus Course | - | Duration – 2 weeks |
| (f) | Fire Prevention Course | - | Duration – 3 months |
| (g) | Other specialised Courses | - | as and when necessary,
including training in radio
telephony and control / watch
room procedures. |

46. In addition to the above courses, the following assessments should also be carried out by the Training Bureau -

- (a) Assessment of technical proficiency of all operational personnel up to and including the rank of Station Officer-three to six working days per batch.
- (b) Assessment of standard of maintenance of fire appliances. This should be carried out with (a) above, or where this is not practicable because of distances, by a team visiting the outlying fire stations.
- (c) Assessment of the state of physical efficiency of all ranks up to and including the Station Officer. This should also be carried out with (a) above.

47. If any serving member of the operational staff fails to qualify in the assessment of his technical proficiency and physical fitness, he should be told about it and recalled for a check to the training school after three months.

48. Asstt. Station Officers and above should also be detailed for appropriate courses at the National Fire Service college, Nagpur.

49. Besides the Courses of instruction and assessment of technical proficiency and physical fitness, field training of all operational ranks should be arranged through conduct of field exercise in different types of occupancies such exercise may be arranged at least once a week at fire station level and at least once in three months at division level.

50. An exercise involving various divisions in each command should be conducted by the Chief Fire Officer of the concerned command once every six months.

51. A major exercise involving all operational commands and communications and Alarm Bureau should be conducted by the Director once a year.

52. The field exercise will o a long way in familiar ising all operational ranks with the procedures and operational techniques and will at the same time enable the officer to find out shortcomings.

53. Planned tours of the area covered by each fire station should be arranged periodically with a view to make all stations personnel familiar with topography, sources of water supply and special hazards in their area.

54. All operational personnel should be given special training in map reading. A large size map of the district and the town where the fire station is located should be displayed in the watch room of each fire station and a smaller version of the same should be provided on the watch room console and near the seat of the Officer-in-charge on each fire appliance. This will ensure more efficient mobilisation of fire appliances.

Communications and Alarm System

55. The following minimum facilities are recommended for each State Fire Services :

- (a) A central control room at the Fire Service Headquarters.
- (b) A command control room in each Fire Service Command Headquarters.
- (c) A divisional control room in each Fire Service Divisional Headquarters.
- (d) A watch room in each fire station.
- (e) Mobile station on each fire appliance.
- (f) Walkie-talkie R/T sets on each fire appliance.

56. The equipment which should be provided at and the functions of each of the above facilities are given below :-

- (a) Central Control Room - This control room will be a monitoring and information centre for the entire fire service. the main purpose of this control room will be to keep the Director of Fire Services posted of the operational position in all commands under him and to enable him to mobilise the resources of any of or all commands for dealing with a serious emergency which may be beyond the resources of any particular command.

The following equipment is recommended for the central control room :

- (i) At least two auto-telephones
- (ii) A set of automatic recorders for recording all communications which may be transmitted / received from / at the central control room,/ either over the line communication system or over the radio telephone network.
- (iii) A separate PBX form internal communication within the headquarters, with direct lines to the Fire Service Command control Room. IG, Police Department and the Secretary to the Municipal Services Department.
- (iv) A high frequency 100 W radio telephone set for instant communication with each command control room, plus an identical reserve set.
- (v) A transistorised radio receiver, operating on batteries, on the same frequency as the H.F. radio telephone set.
- (vi) A large size wall map with lights to indicate all fire stations in the States. Each of the lights should be capable of being controlled individually from any position on the console.

(b) **Command Control Room** –The purpose of the command control room is to provide a monitoring and the information facility to the Chief Fire Officer of the Command, so as to keep him informed of all fire and other emergency incidents within his command to mobilise the resources of any or all Divisions within his command in the incidents cannot be controlled by the resources of any single Division. The following equipment is recommended for each command control room :

- (i) A three position console for line communications between the command control room and each of the 3 fire service divisional control room within the command.
- (ii) At least two auto-telephones.
- (iii) A set of automatic recorders for recording all communications which may be transmitted / received from/ at the command control room, either over the line communication system or over the radio telephone net-work.
- (iv) A separated PBX for internal communication within command headquarter and direct lines to each of the 3 fire service divisional controls within the command and the Police Departments.
- (v) A 100 W high frequency radio telephone set, operating on the same frequency as the central control room set along with an identical reserve set.
- (vi) A transistorised radio receiver, operating on batteries, on the same frequency as the high frequency radio telephone set.
- (vii) A large size wall map of the area under the command with lights to indicate all fire stations, with in the Command, similar to the one in command control room.

(c) **Fire Service Divisional Control Room** –This will be a monitoring and information centre for the Division so as to keep the Divisional fire Officer informed of all fires and other emergency incidents within his Division and to enable him to mobilise the resources of any or all fire stations within his Division, as may be necessary. The following equipment is recommended for each fire service Divisional control room :

- (i) At least two auto telephones
- (ii) At set automatic recorders for recording all communications which may be transmitted / received from / at the divisional control rooms.
- (iii) A separate PBX for internal communication within the Divisional headquarter and for all non-operational communications.
- (iv) A 100 W high frequency radio telephone set, operating on the same frequency as the command control rooms set plus an identical reserve set.
- (v) A PBX for instant communication with the Police Department, Water Works, other essential services and internal communication.
- (vi) A large-size wall map of the area covered by the Division and other adjoining Divisions
- (vii) A transistorised radio receiver, operating on batteries on the same frequency as the HF radio set.

- (viii) A 50 W VHF radio telephone set, in addition to HF set, along with an identical reserve set.
- (ix) A separate transistorised radio receiver on VHF frequency.
- (d) **Fire Station Watch Room** –The purpose of the fire station watch room is to ensure expeditious receipt of fire calls and dispatch of appliances to the scene of incident. It also facilitates the dispatch of additional assistant to the fire ground and establishment of contact with all essential services, whose assistance may be necessary for successful fire fighting and rescue operations.

The following equipments recommended for each watch room :

- (i) A single position console with facilities for receiving fire calls, either directly from the public or from the divisional control room as may be necessary in each case and for contacting Police and other essential services, as may be necessary.
- (ii) It will also have an illuminated grid map of the area covered by the fire station with controls for lighting up any particular grid from the console.
- (iii) Necessary switch for operating the fire bells and public address equipment (with the microphone on the console)
- (iv) A 50 W VHF radio telephone set on the same frequency as the VHF set in the divisional control room.
- (v) A transistorised radio receiver, operating on batteries, on the same frequency as the VHF radio set.
- (vi) Facilities for non-operational communications should be provided through an independent telephone in the fire station office.
- (e) **Mobile Radio Telephone Stations on Fire Appliances** –Each mobile fire appliance, including each Command car and motor cycle, should be equipped with a 25 W mobile VHF radio telephone set with a choice of 2 frequencies –(1) for communication with the fire station watch room and (2) for fire ground communication with walkie – talkie sets.

Each appliance should also carry at least one walkie-talkie set (radio telephone set) for fire ground communications with the fire appliances.

Water Supply

57. Standardisation of the types of fire fighting appliances, as suggested earlier in this note will automatically ensure adequate water for fire fighting within the urban areas. However, fire fighting in industries may require additional water resources. To meet this requirement, the industrial managements should be made responsible to make necessary provision of stored water within their premises. This may be included in the proposed Legislation.

58. for towns covered by volunteer fire stations. it would be necessary to ensure that sufficient water would be readily available for fire fighting. For this purpose. all

available natural sources of water may be surveyed and tapped. In addition, storage tanks should be constructed at suitable location within the towns where volunteer fire stations are to function.

59. For war time needs only, additional storage tanks will have to be provided in almost every town which falls within the vulnerable area as may be declared by Government of India from time to time. It would be desirable to pre-plan the locations of such storage tanks in each town covered by the fire services. The actual construction of tanks may be taken up in the case of an impending emergency.

Mutual Assistance

60. Where ever fire services are maintained by defence installations, railways and industries plans should be drawn up in advance for mutual assistance between all such organisations and the State Fire Services with the cooperation of all concerned. Such plans should aim at eliminating all possible delays in rendering assistance at the time of any emergency. All concerned with implementation of the emergency plans must be made fully familiar with their operation and periodical exercises should be conducted to remove snags, if any, Such mutual assistance should be rendered at 'no charge' basis

61. Mutual assistance plans should also be drawn up between neighbouring State Fire Services on a 'no charge' basis.

Welfare

62. The committee may consider recommending the following minimum welfare measures are recommended for fire services personnel :

- (a) All fire service personnel, up to the pay limit specified in the Act, should be covered by the Workmen's Compensation Act.
- (b) In addition to the Workmen's Compensation Act, all uniformed fire service personnel, should be insured at Government cost.
- (c) Residential family accommodation should be provided for all fire service personnel. Such accommodation should be free of cost for officers of the rank of Sub Officer and above and against payment for all ranks who are required to perform duties on a three watch system.
- (d) A benevolent fund should be established in each fire service. The donations collected on the occasion of the Fire Service' Day, through the sale of pin flags, should form the nucleus of this fund. It should be augmented by compulsory subscriptions from all members of the Service on a sliding scale. The Government should also contribute an amount equal to the subscription raised by members of the Service.
- (e) Fire Services should be authorised by their respective State Governments to organise charity shows, fetes, fairs, etc. for raising funds for the benevolent fund.
- (f) In addition to rendering minimum assistance to any member of the fire service, or his family, in distress the benevolent fund should also have provision for giving loans to its members to the extent it is possible.

- (g) Recreation facilities-indoor and outdoors should be provided at each fire stations.
- (h) Prompt medical attention should be available to all members of the fire services and their families, free of cost.

APPENDIX 30 'D'

RECOMMENDED ORGANISATIONAL STRUCTURE OF FIRE SERVICES

(See para 14 under 30 Miscellaneous)

All aspects of organisation of Fire Services must be given simultaneous and equal attention so as to make these services really effective. Unfortunately, none of the Fire Authorities in India have been able to achieve it so far. Some of the reasons for this situation are :-

- Lack of appreciation of the minimum essential requirements of Fire Services for ensuring their operational efficiency and for maintaining the efficiency at optimum level
- Heterogeneous character of Fire Services' organisation in the country, resulting in multiplicity of 'Fire Authorities.
- Lack of appreciation of the need for maintaining an efficient Fire Services' organisation.
- Lack of resources.

2. Based on recommendations of SFAC, the Government of India, has repeatedly impressed upon the State Governments to take over the Fire Services from the Local Bodies and to maintain them as separated departments of their respective states. But, only partial success has been achieved in this direction during the past eighteen years. It is a matter of regret that even in the States where the Fire Services constitute a separate department, they lack in essential facilities.

3. With a view to bring about uniformity in the organisation of Fire Services all over the country and also with a view to achieve the minimum desirable standard of efficiency in the Fire Services, the Standing Fire Advisory Committee makes the following recommendations.

Legislation

4. The Central Government may enact Central Legislation with the concurrence of State Governments on the following :

- (a) Organisation of Fire Services and
- (b) Fire Prevention, covering all aspects of fire prevention, including enforcement of Safety Codes and the National Building Code of India. 1970 in so far as it relates to fire safety.

5. The Central Acts may be implemented by the State Governments who may frame their own Rules, based on model Rules which may be supplied to them as guide.

Funding

6. Some of the important reasons for maintenance of Fire Services by State Governments are :

- Safeguarding the life and property of people from uncontrolled fire.
- Protecting the assets created through the implementation of successive Five Year Plans. The achievements of Planned development must be protected if full benefit has to be derived from them. In the absence of adequate measures for the preventions and control of fire in various establishments, which have been created as a result of Five Year Plans, the entire property may be destroyed in case of fire, bringing the efforts to nil. It is universally recognised that plant and machinery are more prone to fire with the passage of time, i.e, with ageing.
- To prevent loss of national wealth by fire.

7. It is, therefore, necessary that effective fire protection must be organised by each State Government, who should shoulder this responsibility in the same manner as they do for Law and Order. Bulk of the funds for establishment and maintenance of Fire Services must therefore, come out of the consolidated funds of the respective State Governments. However, in view of the fact that all aspects of Fire Services' organisation must be developed simultaneously and expeditiously, it may not be possible for the State Governments to find sufficient funds for the Fire Services. To consolidate the gains accruing from the Five Year Plans, it is natural that establishment and maintenance of Fire Services should be treated as a Plan subject and all necessary expenditure for this purpose should be accepted as a planned expenditure of the State Governments.

8. Many State Governments have expressed their willingness to raise loans for the development of their Fire Services. The General Insurance Corporation of India has agreed to subscribe to the State loans, as and when they are raised for the development of Fire Services. But, Reserve Bank of India has fixed a ceiling for the raising of public loans for the development of Fire Services. It is, therefore, recommended that the State Governments may be permitted to raise loans for the development of Fire Services over and above the normal ceiling fixed for them by the Reserve Bank of India.

Organisation

9. Keeping in view the absolute necessity to cover the entire territory of each State, to reach down to the village level, and also the difficulty in finding adequate resources for fire

protection organisation at this mass scale, full public involvement is essential in fire protection. It is recommended that Fire Services in each State should be so Organised that they should be able to enforce effective fire prevention measures and would also be able to fight fire anywhere within the State without much loss of property. The fire fighting organisation should cover :

- (a) **Full time paid fire station** –These fire stations should be restricted to district headquarter towns and such other towns / areas where the fire risk is abnormally high. Properly designed fire station buildings should be provided for such fire stations and fire fighting appliances and equipment should be provided as per scales recommended later in this note Personnel for manning these stations should be full time paid staff.
- (b) **Retained fire stations** –These fire stations should be established in all sub-divisional headquarter towns and other towns having lesser fire risk. These fire stations should be similar to those mentioned at (a) above, but only a skeleton full time paid staff should be provided at these stations. Such staff should be limited to one Station fire officer, one Leading Fireman per watch for the watch room and one Driver per fire appliance / ambulance per watch. The remaining staff should be drawn from retained personnel who should be paid a fixed monthly retainer and a small allowance for attending each fire call.
- (c) **Volunteer fire stations** –These fire stations should be established in each Block Development Centre, so that no separate building would be necessary. The equipment should comprise one or two 90-120 litres per minute capacity portable pumps which could be kept in the office of the Block Development Officer and a hand operated siren should be provided for raising the fire alarm. when necessary, sufficient volunteers should be trained for manning the portable pumps and fighting the fire, as and when required. the Block Development Officer's jeep may be used for transporting the fire fighting equipments till such time as it is possible to provide a separated transport vehicle for this purpose. Each of these pumps, complete with accessories should cost between Rs. 5,000 and Rs. 6,000 only.
- (d) **Rural Fire Posts** –One or more rural fire post / posts should be established in each inhabited village. The number of such posts should be determined by the size and lay out of the village. Simple fire fighting equipment, like barrel mounted hand operated pumps, ceiling hooks and fire beaters should be provided at each of these posts. The entire equipment for each fire post would cost less then Rs. 2,000 which could easily be financed by the respective Gram Panchayats. Training in the observance of fire precautions and fire fighting should be given to as many villagers as possible, so that they could fight fires on self-help basis within their own villages.
- (e) **Fire retardant treatment of thatch** –To reduce the incidence of fire in the villages and in large areas having thatched buildings within the cities, training in method of treating the thatch and other combustible material with a view to make them fire retardant, should be propagated. The method has been developed by the Fire Research Division of CBRI who are willing to train anyone in its application. The State Governments may arrange to put up exhibition huts/ houses in which treated thatch is used. The idea should catch up quickly and people would then treat the thatching material before constructing their houses.

10. For the purpose of fire protection. each State should be divided into several Zones, each Zone being termed as a “Fire Service Command” The zoning should be done in such a way that no Fire Service Command would have more than 30 full time and retained fire stations in it. Each Command should be further sub-divided into 3 Fire Service Divisions, so that each Division would have a maximum of 10 full time and retained fire stations in it.

11. Each Fire Service Command should be commanded by a Chief Fire Officer, who should be assisted by a Deputy Chief Fire Officer, At the Division level, the Officer-in-charge of a Division should of the rank of Divisional Fire Officer and he should be assisted by an Assistant Divisional Fire Officer.

12. Besides the structure given in the foregoing para for the operational wing of the Fire Service, establishment of other bureau is necessary for handling other aspects of the Service. The following bureaus are recommended :-

- (a) Headquarter Bureau.
- (b) Communication and alarm Bureau.
- (c) Fire Prevention Bureau
- (d) Community Relations Bureau.
- (e) Training Bureau
- (f) Research and Development Bureau.

13. The Structure, intended purpose and justification for each of these bureaus are given below :-

- (a) **Headquarter Bureau** –This bureau should be headed by a Principal Staff Officer who should be an uniformed officer of the rank of Deputy Director/ chief Fire Officer, the only difference being that the Deputy Director will be the senior most amongst all the Chief Fire Officers and the Principal Staff Officer.

The Headquarters bureau should have six divisions, under it as follows :-

- (i) Administration
- (ii) Finance
- (iii) Planning
- (iv) Provisioning
- (v) Technical
- (vi) Workshops

Each of the above divisions should be headed by an uniformed officer of the rank of Divisional Fire Officer and Should have its own Sub-divisions and Sections, as necessary. Functions of various Divisions in Headquarters are given below :-

- (i) **Administration** –This division will look after the general administration of the Fire Service, lay down and execute all plans and programmes under the guidance of the Director, handle all matters connected with recruitment, personal records, promotion, retirement, etc. and such other functions as may be assigned to it.
- (ii) **Finance** –The recurring and non-recurring expenditure for any State Fire Service will be substantial. At the same time, enforcement of the fire prevention Legislation will also result in abnormal increase of work and accounting for the fees etc. which will be recovered on various items. A full fledges Division for handing all Financial Matters, will, therefore, be necessary.

- (iii) **Planning** –It is necessary that execution of all schemes for future development of various aspects is planned in a systematic manner. This includes the design of future fire stations, appliances and equipment, other building for the department and so on. A separate Division is, therefore, necessary for planning, which will work in close coordination with Technical Division and Research and Development Bureau.
 - (iv) **Provisioning** –A large quantity of appliances, equipment, uniform clothing and spare parts for fire appliances and general purpose stores will be required for the Fire Services. It is essential to create a separate Division forecasting future requirements and taking necessary action for procurement, proper storage and distribution of stores and equipment.
 - (v) **Technical** –Before the appliances, equipment and other stores could be purchased, it would be necessary to lay down specifications for the guidance of the Provisioning Division. It would also be necessary for the Fire Services to actively participate in the preparation of national standards and building codes, keeping in view the interests of the Service. The Technical Division would look after this work, so as to relieve the other Divisions of this responsibility and to achieve better coordination and result.
 - (vi) **Workshops** –Prompt repair and maintenance of all Fire Service equipment is of utmost importance. It is specialised, job and must be attended to by specially trained staff. A Workshops Division should, therefore, be created in each Fire Service. This Division should have two Sub-divisions – a centrally located workshop and a fully equipped mobile workshop and a fully equipped mobile workshop for each Fire Service Division.
- (b) **Communications and alarm Bureau** –Means of communications and fire alarm system are essential for the operational efficiency of any well organised Fire Service. With a large number of control rooms and watch rooms, it will be necessary to maintain substantial quantities of communication equipment in a serviceable condition at all times. Functions of the communications and alarm bureau will embrace not only the maintenance of equipment, but also planning and provisioning of the equipment and its installation.

Each State Fire Service should have one central control room in the Fire Service HQ, one control room in each Command HQ, one control room in each Fire Service Divisional HQ and a watch room at every full time and retained fire station.

The communication and fire alarm bureau should be headed by a Chief Fire Officer, assigned by a Deputy Chief Fire Officer. It should have three main Divisions and nine Sub-divisions as given below :-

- (i) **Operations Division** –Sub Divisions under this Division should be :-
One central control room. Command control rooms at the scale of one per Command , Divisional control rooms at the scale of one per Division and fire station watch rooms at the scale of one per full time & retained fire station.
- (ii) **Maintenance Division** – Its Sub divisions should be :-
Installation, central tele-communication workshop and mobile tele-communication workshops (at the scale of one per Division)

- (iii) Administration Division – Sub-divisions under this Division should be: Establishment, tele-communication, planning and tele-communications provisioning.
- (c) **Fire Prevention Bureau** –Consequent to the enactment of fire prevention Legislation, it would be necessary to set up an efficient machinery for its enforcement . It would also be necessary for the Fire Services to scrutinize all plans for new buildings within the municipal limits of each city / town in the State from fire safety angle and to inspect such buildings. when ready with a view to recommend the issue of occupancy certificate.

In addition to the enforcement of fire prevention Legislation and other duties connected with inspection of buildings, etc the Fire Services would also have to launch a means campaign from the prevention of fire all over the State, including both, the urban and the rural areas,

To enable the Fire Services to discharge these functions, it is suggested that a Fire Prevention Bureau should be established in each State Fire Service, Such a bureau should have a limited number of highly trained personnel on its staff. whose functions should be clearly demarcated. They should function with the assistance of operational staff at the fire stations for routine work only.

The community Relations Bureau, which is being recommended later, would also play a very important role, in assisting the Fire Prevention Bureau in the achievement of their objective.

The Fire Prevention Bureau should be headed by a Chief Fire Officer, assisted by a Deputy Chief fire Officer, It should have three Divisions under it, each of which should be headed by a Divisional Fire Officer assisted by an Assistant Divisional Fire Officer and supported by such other staff as may be necessary. Its Divisions should be :-

- (j) Individual Building Division
- (ii) Fire Licences for ware houses Division
- (iii) Fire licences Division
- (iv) Renewal of Occupancy Certificates Division
- (v) Other miscellaneous Inspections Division
- (vi) Complaints Division
- (vii) Inspection Division
- (viii) Prosecution Division

(d) **Community Relations Bureau** –With the increase in fire prevention activities on a State wide level, it would be necessary to prepare and disseminate simple and educative literature, on fire prevention measures and to arrange talks to different groups of people in various units of life, so as to arouse fire consciousness. In brief to make the task of the Fire Services easier and more readily acceptable to general public, it would also be necessary to provide a machinery for improving the image of the Services in the mind of the common man. Community Relations Bureau is therefore, suggested for this purpose.

This bureau should also be headed by a Chief Fire Officer assisted buy a Deputy Chief Fire Officer and should have the following Divisions under it :

- (i) Publications Division
- (ii) Public Relations Division
- (iii) Audio Visual Division

(iv) Photography Division

Other Divisions may be added as and when the need arises.

Each of the above Divisions should be headed by a Divisional Fire Officer, assisted by an Assistant Divisional Fire Officer and such other staff as may be necessary.

(e) **Training Bureau** – The head of the Training Bureau should be an officer of the rank of Chief Fire Officer who should be assisted by a Deputy Chief Fire Officer and such other uniformed and non-uniformed staff as may be necessary to handle the various training activities. The bureau should have 7 Divisions under it as follows :-

- (i) Administration Division
- (ii) Library & Documentation Division
- (iii) Junior Course Division
- (iv) Senior Course Division
- (v) Specialised Courses Division
- (vi) Training & Visual Aids Division
- (vii) Sports & Welfare Division

(f) **Research & Development Bureau** – This Bureau should also be headed by a Chief Fire Officer, assisted by a Deputy Chief Fire Officer. It should have six Divisions under it as given below :-

- (i) Data Processing Division
- (ii) Research into Technical Literature & Documentation Division
- (iii) Operational Research Division
- (iv) Evaluation of new equipment Division
- (v) Development of new equipment Division
- (vi) Testing of new equipment before acceptance Division

Each of these Divisions should be headed by a Divisional Fire Officer, assisted by an Assistant Divisional Fire Officer and such other staff as may be necessary.

Fire Stations

14. Fire Stations should be so located that a maximum of 3 minutes' response time would be achieved in all high hazard and closely built up areas and a response time of not more than 5 minutes would be achieved for all other areas (this does not include rural areas). Fire appliances should actually be run during peak hours to determine the approximate locations of fire stations from where the area allotted to them can be covered within the above time limits.

15. proper fire station building and associated facilities should be provided for all full time and retained fire stations, Recommendations made by the Standing Fire Advisory Committee at its 2nd Meeting, concerning the minimum dimensions for each essential feature of a fire station, should be taken as a guide for this purpose.

16. The practice to combine the Fire Service Headquarters with one of the fire stations should not be insisted upon. All Divisional Command and Fire Service Headquarters should be located in independent buildings.

Appliances and Equipment

17. It is recommended that mobile fire and rescue appliances should be built on diesel chassis. The following types of appliances should be standardised in Fire Services :

- (a) water tender pump carrying 3000 litres water and fitted with 1800 litres per minute pump preferable mid-ship mounted and carrying an additional 275 litres per minute portable pump conforming to IS 642
- (b) Extra heavy water tender, carrying 9000 litres of water and fitted with suitable outlets for connection to 75 mm and 100 mm suction inlets.
- (c) The following scale of appliances is recommended as standard scale for each fire station :
 - (a) For each full time paid fire station –
 - (i) Water tender pump [see para 17(a)] above – 2 Nos.
 - (ii) Extra heavy water tender [see para 17(b)] above – 1 no.
 - (iii) Ambulance – 1 No.
 - (b) For each retained fire station –
Same scale of appliances as for the full time paid stations.
 - (c) For each volunteer fire station –
Portable pump of 90 – 120 litres per minute capacity with 40 mm dia hose, in convenient lengths and other ancillary equipment – set.
 - (d) For each rural fire post
 - (i) Hand operated rotary pump, mounted on 200 litres capacity barrel on trolley wheels – 1 No.
 - (ii) Ceiling hook – 1 No.
 - (iii) Fire heaters – 2 Nos.

18. The following scale of hose is recommended for each mobile pumping appliance

- (a) RRL hose conforming to type II of IS : 636 size 63 mm dia in 22.5 m or 30m lengths, according to local preference and fitted with pressure die-cast light alloy instantaneous couplings conforming to IS 903 – 720 m.
- (b) Controlled percolation hose, coated on both sides or unlined canvas hose in 30 m lengths and fitted with pressure die-cast light alloy instantaneous couplings conforming to IS 903-240 m.

19. Fifty per cent of each type of hose should be carried on the fire appliances at all times and the remaining fifty per cent should be kept as reserve at the fire station for replenishing the wet hose after use.

20. In addition to the appliances mentioned above, one or more of the following specialised appliances should be provided at selected fire stations or Fire Service Divisional headquarters, according to local circumstances :-

- (a) Turn table ladder – 45 m
- (b) Turn table ladder - 31 m
- (c) Hydraulic Platform - 31 m
- (d) Hydraulic Platform - 26 m or 22 m
- (e) Light rescue tender

- (f) Emergency tender
- (g) Extra heavy pumping appliance of bot less than 10, 000 letres per minute pumping capacity
- (h) Hose laying tender
- (i) Lighting van
- (j) Control post van
- (k) Canteen van
- (l) Mobile workshop for repair of fire appliances
- (m) Mobile workshop for tele-comn equipment
- (n) Breakdown van.

21. Each fire station should also be equipped with a motor cycle.

22. Each officer of the rank of Divisional Fire Officer and above should be provided with a common car and each Assistant Divisional Fire Officer should be provided with a motor cycle.

23. Each mobile pumping appliance should be equipped with two sets of compressed air breathing apparatus; each foam/crash tender should be issued with two sets of compressed air breathing apparatus; each light rescue tender should be equipped with 4 sets of compressed air breathing apparatus; each turn table ladders should be equipped with four sets of compressed air breathing apparatus; and each emergency tender should be equipped with six sets of compressed air breathing apparatus. In addition, each operational officer from Sub Officer upwards should be equipped with a personal breathing apparatus set.

24. A minimum of 500 litres of foam compound is recommended to be stocked at every fire station and two foam making branches, each with a pick up tube size –2 conforming to IS 2097 are recommended per mobile pumping appliances.

25. In cities having high rise buildings (buildings over 15 m high). one pneumatic jumping cushion should also be provided for the city.

Maintenance of Fire Appliances and Equipments

26. Every State Fire Service must have its own well-equipped and well-manned central workshop for meeting the important requirement of prompt maintenance of all fire appliances and equipments. In addition to the central workshop, a mobile workshop, for on the spot repair of fire appliances should also be provided for each Fire Service Divisional Headquarters.

a. With a view to obviate all delays, necessary fast moving spares should be stocked in the workshop.

Manpower

28. In addition to the supervisory ranks which have already been recommended above under Organisation' it is recommended that crew for various types of appliances may be provide at the following scale for each watch :-

Name of appliance	Sub Officer	Leading fireman	Driver Operator	Fireman	Total
Water tender pump	Nil	1	1	4	6
Extra Heavy water tender	Nil	Nil	1	1	2
Turn table ladder and Hydraulic platform	1	1	1	3	6
Pump escape	Nil	1	1	4	6

Light rescue tender	Nil	1	1	2	4
Emergency tender	1	1	1	4	7
Crash tender / foam tender	Nil	1	1	2	4
Ambulance	Nil	Nil	1	1	2

29. The manpower at each fire station may comprise :-

Station Officer	- 1
Asstt. Station Officer	- 1
Leading Fireman (per watch –for watch room duty)	- 2
Crew for the appliances	- As per scale given above

30. For the control rooms at Fire Service Headquarters and the Command and Divisional Headquarters, the following manpower is recommended :-

Centrla Control Room	-	1 Divisional Officer, 4 Station Officers (one per watch and one reserve) and 8 Assistant Station Officers (2 per watch and 2 reserve)
Command Control Room	-	1 Assistant Divisional Officer, 4 Assistant Station Officers (1per watch and 1 reserve) and 8 Leading Firemen (2 per watch and 2 reserve)
Divisional Control Room	-	4 Station Officers, 4 Asstt. Station Officers (one per watch and one reserve) and 8 Leading Firemen (2 per watch & 2 reserve)

Duty System

31. It is recommended that a standard 3 watch duty system should be introduced in Fire Services, in which the first watch should be on duty for 24 hours at a stretch. On being relieved by the second watch, the first watch should be on 24 hours off duty and again come on duty for 8 hours on the third day. Similarly, the second watch, on the third day andesine. this system would appear to be more expensive, but considering the fact that extra manpower would be required for fire prevention duty, water sources inspection and maintenance. It is actually more economical, because the personnel of the day watch will be available in addition to the watch on normal operational duty tan could be employed for fire prevention water sources inspection and other miscellaneous duties, thereby economizing on manpower and utilizing them to the maximum advantage.

32. One-third of the total strength of each rank-except Chief Fire Officer and above should be provided as leave/ training reserve. The need for this reserve is obvious.

Retained Fireman

33. It has been recommended that retained personnel should be employed for manning the retained fire stations, except for skeleton staff which should be full time paid staff at such stations. It is recommended that each retained fireman should be paid monthly retainer of Rs. 100 and, in addition, an allowance of Rs. 5 per call, which he may attend. Mobilization of retained personnel may be left to the Director of Fire Service of the State, because this will depend upon local circumstances. In some States. It may be possible to have the retained personnel on 12 hours shift duty at the fire station while in other States, it may not be possible to do so. In such cases, a system of raising fire alarm may be worked out to ensure prompt attendance by the retained personnel.

Status of Fire Service Personnel – Fire Service Ranks:

34. The Fire Service Ranks should be as follows:-

Director of Fire Services
Deputy Director of Fire Services
Principal Staff Officer/ Chief Fire Officer
Deputy Chief Fire Officer.
Divisional Fire Officer
Assistant Divisional Fire Officer
Station Officer
Assistant Station Officer
Leading Fireman
Driver and
Fireman.

35. It is suggested that suitable pay scales for each rank may be included in the Fire services legislation, which has been recommended earlier, so that uniformity could be achieved throughout the country.

36. All Operational Officers of the rank of Asstt. Station Officer and above should be paid a call allowance on a sliding scale for being required to be available on call round-the-clock. This allowance need not be paid to the remaining staff, because they will be working in watches and not be required to be available on call around-the-clock.

Recruitment:

37. Normal recruitment of Fire Service personnel should be at two levels:-

- (a) Fireman's level - Candidates for recruitment at this level should have passed matriculation or Higher Secondary Examination with Science subjects.
- (b) Assistant Station Officer's level - Candidates for recruitment at this level must be Science Graduates.

38. The advantage of adopting this system of recruitment will be that officers of the rank of Asstt. Station Officers and above can be detailed for training in the Post-Graduate Course in Fire Engineering, which is proposed to be conducted at the National Fire Service College, Nagpur and ultimately the average standard of Officers in the Service will be raised. This system will also enable all senior ranks to be filled in by promotion from within the Service in due course of time, which is highly desirable.

Uniform:

39. The pattern of uniform already recommended by the Standing Fire Advisor Committee may continue to be followed. It is emphasized that all ranks in the Fire Services should wear trousers and tucked-in-shirts during summer months. The colour of uniform for winter is recommended as navy-blue. Scale of various items of personnel clothing recommended to ensure a smart turn-out by all personnel, is given at Attachment I at the end of these recommendations.

40. In addition to the uniform recommended above, the following turn-out clothing should also be issued to all Fire Service Personnel throughout the country:-

- (a) FRP helmets, conforming to IS 2745-1969 in colours as recommended by the Standing Fire Advisor Committee earlier, i.e. yellow for ranks up to Station Officer and white for Assistant Divisional Fire Officer and above. Rank markings on the helmets should conform to the recommendation already made by the SFAC. Each helmet should essentially be fitted with a protective neck curtain and a sliding visor.

- (b) A turn-out coat, made out of thick water proof canvas of Navy Blue colour. This coat should be lined or the inside with a woolen liner and fitted with zip fastener along its entire front. A flap overlapping the zip fastener should be provided all along its length. It should be retained in closed position by snap-fasteners. Length of the coat should be up to the knees of the wearer. Rain coat type pockets should be provided in the coat for keeping belt line and small gear, as necessary. Shoulder flaps should also be provided for rank marking and for carrying a coiled rope on the shoulder.
- (c) Thigh-length gumboots for all ranks upto and including Asstt. Station Officers. The boots should have stainless-steel mid-soles and protective steel toe-caps. A warm lining should also be provided on the inside of boots. All officers of the rank of Station Officer and above should be issued black leather Wellingtons, which should also have stainless-steel mid-soles and protective toe-caps.

Rank Markings:

41. Rank markings already recommended by the SFAC should continue to be in force in all Fire Services throughout the country.

Protective Clothing:

42. Two sets of heat/flame resistant protective clothing should be carried on each mobile fire and rescue appliance. The number of such sets should be increased to four for each emergency tender. Where the fire station is required to cover the risk of acid/ammonia, protective suits for these should also be carried on each mobile fire and rescue appliance.

Training

43. It has already been recommended that a Training Bureau should be established in each State Fire Service. The functions of the Training Bureau are obvious. It is recommended that the following courses should be conducted by each State Fire for its personnel :-

(a)	Fireman Recruits' Course	--	Duration – 6 months
(b)	Asstt. Station Officer Recruit's Course	--	Duration – 6 months
(c)	Driver Recruits' Course	--	Duration – 6 months
(d)	Leading Fireman's Course	--	Duration – 3 months
(e)	Breathing Apparatus Course	--	Duration – 2 weeks
(f)	Fire Prevention Course	--	Duration – 3 months
(g)	Other Specialised Courses	--	As and when necessary, including training in radio telephony and control/watch room procedures.

44. In addition to the above courses, the following assessment should also be carried out by the Training Bureau :-

- (a) Assessment of technical proficiency of all operational personnel up to and including the rank of Station Officer – three to six working days per batch.
- (b) Assessment of standard of maintenance of fire appliances. This should be carried out with (a) above, or where this is not practicable because of distances, by a team visiting the outlying fire stations.
- (c) Assessment of the state of physical efficiency of all ranks up to and including the Station Officer. This should also be carried out with (a) above.

45. If any serving member of the operational staff fails to qualify in the assessment of his technical proficiency and physical fitness, he should be told about it and recalled for a check to the training school after three months.

46. Asstt. Station Officers and above should also be detailed for appropriate courses at the National Fire Service College, Nagpur.

47. Besides the courses of instruction and assessment of technical proficiency and physical fitness, field training of all operational ranks should be arranged through conduct of field exercises in different types of occupancies. Such exercises may be arranged at least once a week at fire station level and at least once in three months at Divisional level.

48. An exercise involving various Divisions in each Command should be conducted by the Chief Fire Officer of the concerned Command once every six months.

49. A major exercise involving all operational Commands and communications and Alarm Bureau should be conducted by the Director once a year.

50. The field exercise will go a long way in familiarizing all operational ranks with the procedures and operational techniques and will at the same time enable the officers to find out shortcomings, if any, and to take timely remedial action to prevent recurrence of mistakes/shortcomings.

51. Planned tours of the area covered by each fire station should be arranged periodically with a view to make all station personnel familiar with topography, sources of water supply and special hazards in their area.

52. All operational personnel should be given special training in map reading. A large size map of the district and the town where the fire station is located should be displayed in the watch room of each fire station and a smaller version of the same should be provided on watch room console and near the seat of the officer-in-charge on each fire appliance. This will ensure more efficient mobilization of fire appliances.

Communications and Alarm System:

53. The following minimum facilities are recommended for each State Fire Service:-

- (a) A Central Control Room at the Fire Service Headquarter.
- (b) A Command Control Room in each Fire Service Command Headquarter.
- (c) A Divisional Control Room in each Fire Service Divisional Headquarter.
- (d) A Watch Room in each Fire Station.
- (e) Mobile Station on each Fire Appliance.
- (f) Walkie-Talkie. R/T sets on each Fire Appliance.

54. The equipment which should be provided at and the functions of each of the above facilities are given below:

- (A) **Central Control Room:** - This control room will be a monitoring and information centre for the entire Fire Service. The Main purpose of this control room will be to keep the Director of Fire Services posted of the operational position in all Commands under him and to enable him to mobilize the resources of any or all Commands for dealing with a serious emergency which may be beyond the resources of any particular Command.

The following equipments are recommended for the Central Control Room:-

- (i) At least two auto-telephones.
- (ii) A set of automatic recorders for recording all communications which may be transmitted /received from/at the central control room, either over the line communication system or over the radio telephone network.
- (iii) A separate PBX for internal communication within the headquarters, with direct lines to the fire services command control room in Police Department and the concerned Secretary to the Government.
- (iv) A high frequency 100 W radio telephone set for instant communication with each command control room, place as identical reserve set.
- (v) A transistorized radio receiver, operating on batteries, on the same frequency at the H.F. radio telephone set.
- (vi) A large size wall map with lights to indicate all fire stations in the state each of this lights should be capable of being controlled individually from the central control.

- (B) **Command control Room** :- The purpose of the command control room is to provide a monitoring and information facility to the Chief Fire Officer of the command, so as to keep him informed of all fire and other emergency incidents within his command, to mobilise the resources of any or all divisions within his command, if the incidents cannot be controlled by the resources of any single Division. The following equipments is recommended for each command control room. –
- (i) A three position communication line between the command control room and each of the 3 fire service divisional control rooms within the command.
 - (ii) At least two auto-telephones.
 - (iii) A set of automatic recorders for recording all communications which may be transmitted/received at /from the command control room either over the line communication system or over the radio telephone system.
 - (iv) A separate PBX for internal communication within command Headquarters and direct lines to each of the 3 fire service divisional controls within the command and the police department.
 - (v) A 100 W high frequency radio telephone set, operating on the same frequency as the central control room set alongwith an identical reserve set.
 - (vi) A transistorised radio receiver, operating on batteries , on the same frequency as the high frequency radio telephone set.
 - (vii) A large size wall map of the area under the command with lights to indicate all fire stations, within the command, similar to the one in central control room.
- (C) **Fire Service Divisional Control Room** :- This will be a monitoring and information centre for the Division so as to keep the Divisional Fire Officer informed about the fire and other incidents within his division and to enable him to utilise the resources of any or all fire stations within his division as may be necessary. The following equipments recommended for each fire service Divisional Control Room :-
- (i) At least two auto-telephones.
 - (ii) A set of automatic recorders for recording all communications which may be transmitted/received from/at the Divisional Control Room.
 - (iii) A separate PBX for internal communication within the Divisional Headquarters and for all non-operational communications.
 - (iv) A 100 W high frequency radio telephone set operating on the same frequency as the H.F. radio sets.
 - (v) A PBX for instant communication with the Police Department, Water works , other essential services and internal communications.
 - (vi) A large size wall map of the area covered by the Division and other adjoining Divisions.
 - (vii) A transistorised radio receiver, operating on batteries on the same frequency as the H.F. radio set.
 - (viii) A 50 W VHF radio telephone set, in addition to H.F. set, alongwith an identical reserve set.
 - (ix) A separate transistorised radio receiver on VHF frequency.
- (D) **Fire Station Watch Room** :- The purpose of the fire station watch room is to ensure expeditious receipts of fire calls and despatch of appliances to the scene of incident. It also facilitates the despatch of additional assistance to the fire ground and establishment of contact with all essential services, whose assistance may be necessary for successful fire fighting and rescue operations.

The following equipments are recommended for each watch room :-

- (i) A single position console with facilities for received fire calls, either directly from the public or from the Divisional control room, as may be necessary in each case, and for contacting Police and other essential services, as may be necessary
- (ii) An illuminated grid map of the area covered by the fire station with controls for lighting up any particular grid from the console.
- (iii) Necessary switch for operating the fire bells and public address equipment (with the microphone on the console).
- (iv) A 50 W VHF radio telephone set on the same frequency the VHF set in the divisional control room.
- (v) A transistorised radio received, operating on batteries, on the same frequency as the VHF radio set.
- (vi) Facilities for non-operational communications should be provided through an independent telephone in the fire station office.

- (E) **Mobile Radio Telephone Stations on Fire Appliances** :- Each mobile fire appliance, including each Command car and motor cycle, should be equipped with a 25 W mobile VHF radio telephone set with a choice of 2 frequencies (1) for communication with the fire station watch room , and (2) for fire ground communication with walkie-talkie sets.

Each appliance should also carry at least one walkie-talkie set (radio telephone set) for fire ground communications with the fire appliances.

Water Supply

55. Standardisation of the types of fire fighting appliances as recommended earlier, will automatically ensure adequate water for fire fighting within the urban areas. However, Fire fighting in industries may require additional water resources. To meet this requirement, 8335 water within their premises . This may be included in the proposed legislation.
56. For towns covered by volunteer fire stations it would be necessary to ensure that sufficient water would be readily available for fire fighting. For this purpose, all available natural resources of water may be surveyed and tapped. In addition, storage tanks should be constructed at suitable locations within the towns where volunteer fire stations are to function.
57. For war time needs only, additional storage tanks will have to be provided in almost every town which falls within the vulnerable areas as may be declared by Government of India from time to time. It would be desirable to pre-plan the locations of such storage tanks in each town covered by the Fire Services. The actual construction of tanks may be taken up in the case of an impending emergency.

Mutual Assistance

58. Wherever Fire Services are maintained by defence installations, railways and industries, plans should be drawn up in advance for mutual assistance between all such organisations and the State Fire Services with the co-operation of all concerned. Such plans should aim at eliminating all possible delays in rendering assistance at the time of any emergency. All concerned with implementation of the emergency plans must be fully familiar with their operation and periodical exercises should be conducted to remove snags, if any. Such mutual assistance should be rendered at 'no charge' basis.

59. Mutual assistance plans should also be drawn up between neighbouring State Fire Services on a 'no charge' basis.

Welfare

60. Following minimum welfare measures are recommended for Fire service personnel :-
- (a) All Fire Service Personnel, up to the pay limit specified in the act should be covered by the workmen's Compensation Act.
 - (b) In addition to the Workmen's Compensation Act, all uniformed Fire Service personnel, should be insured at Government cost.
 - (c) Residential family accommodation should be provided for all Fire Service Personnel. Such accommodation should be free of cost for officers of the rank of Asstt. Station Officer and above and against payment for all ranks who are required to perform duties on a three watch system.
 - (d) A benevolent fund should be established in each Fire Service. The donations collected on the occasion of the Fire Services Day, through the sale of pin-flags, should form the nucleus of this fund. It should be augmented by compulsory subscriptions from all members of the service on a sliding scale. The Government should also contribute an amount equal to the subscription raised by members of the Service.
 - (e) Fire Services should be authorised by their respective State Governments to observe Fire Service Week every year for raising fund for the benevolent fund .
 - (f) In addition to providing monetary assistance to any member of the Fire Service or his family in distress the benevolent fund should also have provision for giving loans to its members to the extent it is possible.
 - (g) Recreation facilities- indoors and outdoors- should be provided at each fire station.
 - (h) Prompt medical attention should be available to all members of the fire services and their families free of cost.

ATTACHMENT I

RECOMMENDED SCALE OF ISSUE OF UNIFORM FOR ASSTT. STATION OFFICERS AND ABOVE

S.No.	Article	Initial issue	Periodicity of issue
1.	Shirts, Khaki Cellular full sleeves	4	Once a year
2.	Trousers, Khaki Drill	4 pairs	Once a year
3.	Shirts, Khaki Lustalin or terrycot	1	Once a year
4.	Tunic, Khaki, drill, open collar (for ceremonial occasions)	1	Once in 3 years
5.	Tie Maroon (for ceremonial occasions)	1	Once in two years
6.	Socks, Khaki , Woolen	2 pairs	Once a year
7.	Peak cap, Khaki , serga or barathia	1	Once a year
8.	Boots, leather, brown, Jodhpur pattern with Plain toe cap	1 pair	Once a year
9.	Turn-out coat	1	Once in 3 years
10.	Black leather wellington knee boots	1 pair	Once in 3 years
11.	FRP helmets	1	As and when required
12.	Lenyard, maroon, plaited with thunder-bold chrome plated whistled	1	Once a year
13.	Belt, Khaki, webbing	1	As and when required
14.	Raincoat with hat cover	1	Once in 3 years
15.	Buttons, large and small, white shinning, metal with markings	2 sets	Once in three years
16.	Badges of ranks, as applicable, as per SFAC recommendations	2 sets	Once in 3 years
17.	Epauettes, white metal, for turn-out coat	1 set	Once in 3 years
18.	Shoulder titles, white metal	2 pairs	Once in 3 years
FOR ALL OTHER RANKS			
1.	Shirts, Khaki, cellular, full sleeves	4	Once a year
2.	Trousers Khaki drill	4 pairs	Once a year
3.	Shorts , Khaki , drill	2 pairs	Once a year
4.	P.T. Vests, white cotton, “V” necked, half sleeves	2	Once a year
5.	Socks khaki Woollen	2 pairs	Once a year
6.	Boots ankle leather black	1 pair	Once a year
7.	Thigh length gum boot black	1 pair	Once in 3 years
8.	Turn-out coat	1	Once in 3 years
9.	Fire helmet	1	As & when required
10.	P.T. shoes canvass brown	1 pair	Every six months
11.	Overall Khaki Drill	2	Once a year
12.	Barrel Khaki Woollen	1	Once a year
13.	Lanyard Maroon plaited with thunder-bolt chrome platted whistle (for leading fireman)	1	Once a year
14.	Belt Khaki webbing	1	As & when required
15.	Darry	1	As & when required
16.	Ground sheet water proof	1	As & when required

S.No.	Article	Initial issue	Periodicity of issue
17.	Raincoat with hat cover	1	Once in 3 years
18.	Kit Bag/Trunk Steel	1	As & when required
19.	Blankets	1	Once in 4 years.
20	Jarsy Khaki woollen	1	Once in 2 years
21.	Cap badge	1	Once in 3 years
22.	Shoulder titles white metal	1 pair	Once in 3 years
23.	Badges of ranks for leading firemen and driver operators	1 set	Once in 3 years
The following additional items are recommended for winter for Assistant Station Officers and above.			
1.	Shirts white superior	3 Nos	2 every year
2.	Tunic Navy Blue serge open collar	2 Nos.	1 every year
3.	Trousers Navy Blue serge	2 pairs	1 every year
4.	Tie, Navy Blue	1 No.	1 every year
5.	Boots, leather black, Jodhpur pattern with plain top cap	1 pair	1 pairs every year
6.	Socks, black woollen or nylon	2 pairs	2 pairs every year
7.	Peak cap navy blue, serge or berathia	1 No.	1 No . every year.
For Other Ranks			
1.	Coat woollen navy blue, closed collar double breasted	2 Nos.	1 every alternative year
2.	Trousers woollen navy blue	2 pairs	1 pair alternative year
3.	Socks, black woollen	2 pairs	2 pairs every year
4.	Barret, navy blue woollen	1 No.	1 every year.