WORKSHOPS

Workshop 1(a) MANAGEMENT OF EMPLOYED LABOUR

Chairman and Recorder - C.J.M. Steele (AETM)

Individual Museum Experience

Each museum was invited to describe its experiences in managing employed labour. Comments may be summarised as follows :-

AETM has carried out about 12 projects, mainly maintenance under the R.E.D. Scheme. Special tools, equipment and labour skills were required. Supervision was attempted on a part time basis and this proved difficult. Projects involved such activities as painting the depot, installing irrigation system, painting cast iron etc. It was found the time of three months was insufficient for the tasks planned. It is difficult to carry out intricate tasks without a foreman. The foreman should ideally be a museum member. It was important that the foreman could also handle the necessary paper work. Employing members also runs the risk among the remaining membership of some dissent about the rates of pay, and can also involve considerable strains among the committee due to the additional administration. It might be concluded that work done by a conscientious member is likely to be more valuable than that done by casually employed labour.

MOTAT has an unemployment scheme proceeding. The employed labour is used for general activities such as carpentry etc. Expert supervision is required, and tasks must be well defined. Some labourers do not wish to work. Unemployment labour is not used on car restoration work. Prisoners on light sentences have also been used for certain activities such as excavation and cement work. These have been successful, probably because a gaol supervisor is in charge.

SPER has used unemployment labour for track lifting on the former Sydney tram system. Several members were able to spare time to check on activities. The gang consisted of 4-5 men, with the most able being appointed foreman. The gang was paid by a self-employed member who was able to find time to carry out this function. Lessons were learned and the effort felt to have been worthwhile. Some tax, insurance and administrative difficulties were experienced.

THS have run a labour scheme at Ferrymead. The foreman was selected on a merit basis, but the Ferrymead manager was available to provide general oversight. Despite this, detailed problems still existed. Members could work on the scheme to ensure better supervision. Advantages were considered to outweigh disadvantages.

WTM had considered the merits of entering an unemployment scheme but had decided not to proceed because of the cost. In this case, labour only would have been provided and WTM would have had to pay for tools and equipment.

TTMS described use of labour from a court system in which minor sentences given to delinquents in Tasmania can be expiated by working in community schemes on Saturday mornings without pay. Security can be a problem in such schemes.

TMSV indicated that it had had work carried out by the CMF as an exercise. In those circumstances, good supervision by a representative of the museum was still required.

BTMS is aware from Bisbane City Council experience of the difficulties it would have in supervising unemployed labour. They have a resident caretaker who would be able to assist with supervision.

BTPS has had experience only with Ballarat Council employees in having work carried out.

Conclusions

The following conclusions were summarised from the discussions:-

(1) Museum committees should clearly define the nature of tasks to be performed in a given time.

(2) Outside employed labour should only be used on "heavy" or "rough" jobs.

(3) If members can be employed somewhat more detailed and intricate work can be performed, as workmanship and security will be better.

(4) As close as possible supervision of outside employed labour is necessary, preferably by a museum member with both technical and administrative competence.

Workshop 1(b) MANAGEMENT OF EXTERNAL FUNDS

Chairman - R.T. Wheaton (AETM)

Recorder - C. Andrews (AETM)

Four basic questions were considered in the analysis of this topic for discussion. The first task was to consider the functions of the manager. It was agreed that essentially a manager was the individual who could proverbially be called the "meat in the sandwich" in that he was responsible to the authority providing the funds and also to the members and employees of the Museum with the consequent possibility of conflicts of interest.

The next question raised related to the additional legal and or moral responsibilities that could be involved as a result of receiving such funds compared with the use of "normal" museum funds. It was thought that the main problem here concerned the need to ensure that the funds were used efficiently, and the work carried out was of adequate quality. Also it was probable that all accounting work associated with such a project would need to be subject to some degree of additional external audit to the normal requirements of the museum. As an example reference was made to labour employed under the R.E.D. scheme and the responsibilities associated with the preparation of pay packets, wages records and workmen's compensation premiums.

The issue of problems arising from the control of such funds was raised and the concensus of opinion in this regard was that the control would depend a great deal on the particular purpose for which the funds were allocated. In one example cited the project was completed subject to prior approval and an account for the costs involved forwarded to the financing authority which remitted the amount accordingly. Some difficulties were encountered in respect to part subsidies where moneys had to be spent before receiving the allocation, and there was also the liquidity problem of interim finance due to the administrative time-lag before the receipt of the reimbursing cheque. A question also raised related to who should be ultimately supervising the project, the museum society or the financing body.

The final question considered the additional organisational skills that would be required as a direct result of the receipt of external funds. In the use of such funds for employing additional labour, there was the need for adequate supervisory expertise to ensure that all work was carried out in a practical and efficient manner. There was also the need for professional expertise on the management side, in the administration of finance and the preparation and planning for specific projects i.e.: accounting, engineering etc. If such skills were lacking from an organisation they would need to be obtained at additional expense, which could prove prohibitive in some instances.

Workshop 1(c) PREPARATION OF ASSISTANCE SUBMISSIONS

Chairman - I. Mison (MOTAT)

Recorder - T. Atherton (BTMS)

This subject had been very ably spoken on only minutes before the workshop by Mr. David Williams, Deputy Town Clerk of the Salisbury Corporation, therefore not leaving a great deal to be discussed by the workshop.

It was unanimously agreed that all applications for subsidies or grants must be very well documented and that the main points must be established in the first few pages otherwise the reader would probably lose interest and dismiss the whole proposition.

Invitations should be issued and periodically followed up to members of councils and/or boards and governmental agencies to inspect either sites or present facilities. Plenty of publicity and back-up material must be available to support claims of respective applications.

Also noted was the fact that there seemed to be a general drying up of available money all around the world for our type of projects and that what money was available was subject to increasing competition for its distribution. BTMS advised that in Queensland there were government subsidies ranging from 33-1/3 to 50% depending on the project.

BTPS advised that they had recently obtained a $50,000 grant for their new barn and workshop facilities from the Victorian Government.

The subject of bequests was raised by WTM and THS said that their members were encouraged to make provision in wills etc., and noted that this had borne fruit in one instance. Other COTMA members indicated that they had not received bequests.

The need to show prospective funding authorities that something was under way and that the respective societies are willing and prepared to help themselves was noted. Schemes on paper only were not viewed with much favour.

Workshop 2(a) MAINTENANCE AND EXCHANGE OF ARCHIVAL MATERIAL

Chairman - K. Stodden (TMSV)

Recorder - R. White (AETM)

It was generally accepted that archival collections included both documents and photographs and objects of tramway significance.

The collection of each museum was usually related to the aims and objectives of the particular museum (e.g. the B.T.P.S. has material mostly to do with the Ballarat tramways).

Present Policies

Representatives of individual museums were asked to summarise the current state of archival activities. Comments are summarised as follows: -

BTMS : Anything to do with tramways and railways is kept. A copy of the archives list is sent to the Public Library.

WTM: Anything from any N.Z. tramway is retained. An archivist is appointed. A filing system is being set up.

SPER: Has an archivist who collects anything Australian - some materials have been transferred to more relevant museums. It is intended to microfilm documents on microfiche. It is aimed to copy all photos - to hold reserve copies. Considers its present role partly as a"receiving depot" for later distribution to regional museums.

AETM: Has not organized inventory in great detail.

THS : Material not of particular relevance is immediately sent to the appropriate group. Originals of photos and documents go to a government authority and two copies are retained.

TTMS: Government tramway records have been lent for photocopying by the museum. The mammoth archival job lacks continuity of one single archivist.

WATM: Gathers all bus and tram information.

BTPS: Has S.E.C. records locked away until good, secure display can be arranged. Publicity about the museum usually produces a response of items from the public.

Types of Collections

Two categories of items were recognised, those of interest to the general public and those of interest to the historian.

It was considered that an archivist should be appointed with control of access and safety of the collection.

The Archivist should consider the uniqueness of an item. Is it as important as having a good general example? From public point of view the unique is very little known, whereas a common item has greater significance.

The question was raised as to whether museums should allocate funds for buying archival materials. None do so at present.

Safety of Collections

There is a serious risk of vandalism, theft, fire and water damage. Initially items may be stored in various members' homes to avoid excessive concentration of materials in one location. Ideally, items should be maintained in an on-site air conditioned environment which was waterproof, dustproof, sunproof and theftproof. Museums would find this very difficult to achieve.

Photographs are very hard to preserve. It is important to use copies for display and to have back-up copies in case of loss. Changes of displays will contribute to longer life of items.

A warning was noted that forwarding items to State archival or museum organisations did not necessarily ensure preservation. Lack of storage space has meant that some have either selective or random sampling accession policies. Their policies should be checked before making material available.

Insurance companies are probably not interested in cover of archival material. There is probably little point in insuring it anyway.

Exchange of Archival materials

It was considered desirable to set up a library system for lending archival material. An inventory of materials could be available for the information of other museums.

It would be well to follow the guidelines of the Museums Commission for future action.

Display of Archival material

It was agreed that Museums had some responsibility to try to put representative archival materials on display. It seemed inappropriate to hide everything from view of the present generation for the sake of preservation for the future.

Workshop 2(b) DEVELOPMENT OF AUSTRALIAN TRANSPORT BIBLIOGRAPHY

Chairman - K.S. Kings (TMSV)

Recorder - R.T. Wheaton (AETM)

It was considered that the listing prepared by M. Breydon (TMSV) should be upgraded by the inclusion of the two returns which had been received as a result of it having been circulated. The result should be circulated by means of a COTMA Memorandum for all member societies for perusal and elaboration.

The listing should be initially restricted to books, booklets and magazines and that the memorandum request that all replies to be received by a date to be fixed to enable an amended compilation to be tabled at next years' conference.

The question of microfilming records and the indexing of photographic records etc., should be subject to further discussion at the next Conference. A similar position would also apply to general archival material i.e. drawings etc.

The field of parliamentary papers, Hansard references, University theses, pamphlets etc., was considered to be an extensive one and it was decided that the matter would be referred for further discussion next year as to how they could be indexed. In addition, it was also decided to investigate during the year, for reporting to the next conference, the means by which the location and availability of material could be indicated by a coded index.

Workshop 2(c) FURTHERING INTERNATIONAL COMMUNICATIONS

Chairman - W. Kingsley (COTMA)

Recorder - G. Jordan (BTPS)

Discussion was circulated around the International Association of Transport Museums (IATM). This organisation was formed in 1968 when it was formed as a branch of the International Association of Museums which affiliates museums throughout the world. IATM has 128 museum members around the world. In addition to meetings and/or conferences (similar to COTMA), it also acts as an exchange between different organisations.

The IATM appears to produce publications on a similar basis to Trolley Wire, Tramway Topics etc., but covers wider varieties of topics. If COTMA were to join IATM, news in our abovementioned magazines could be sent to IATM for inclusion in their publications. Before this can be done publishing and copyrights must first be checked out.

Do Transport Museum Specialists overseas want to know what developments are occuring in Australian Tramway Museums? The workshop came to the conclusion that they would.

MOTAT are members of IATM. SPER were uncertain whether they were at the present time, but have been. Representatives of both these

organisations felt it is worthwhile to belong to IATM.

Consideration was given to whether COTMA or the separate COTMA affiliated museums should join IATM.

It was recommended that only COTMA join IATM on behalf of all its affiliated museums. COTMA will find out how it will be possible to obtain enough copies of IATM publications to distribute to its members. MOTAT representatives stated that through IATM publications their museum has acquired some technical gains and skills.

In conclusion, the affiliated COTMA museums would stand to gain a great deal from membership of IATM, and would become better known throughout the world.

Workshop 3(a) DAY-TO-DAY AND LONG TERM PER-WAY MAINTENANCE

Chairman - T. Atherton (BTMS)

Recorder - W. Kingsley (COTMA)

Delegates to this workshop discussed a wide range of technical problems. The following points were noted as being of special importance:

1. Track needs to be on good ballast, lifted well above sub-grade and be well drained.

2. In concreted track there is no electrolysis problem if concrete completely surrounds the rails.

3. Regular inspection of the whole length of track, looking for joint failures, subsidence of subgrade, loose bolts, is essential.

4. Where new subgrade is placed across boggy or high water table ground, heavy compaction only brings water to the surface.

5. Good level track provides a better (smoother) ride for single-truck cars (less oscillation) and for bogie cars (less twisting).

6. Old sleepers under bitumen must fail and can best be repaired by complete excavation by hand around the rails, removing the old sleepers if possible, realigning the rails, and re-setting in concrete of 25 to 36 MPa strength vibrated with many hands on star stakes or by sausage vibrators.

7. Lack of tie-bars, especially in special work, can be overcome by using old rail welded transversely across the gauge.

Workshop 3(b) ROUTINE TRAMCAR MAINTENANCE

Chairman - M. McAulay (SPER)

Recorder - R. Gilbert (BTPS)

Air Systems

Recognising the importance of braking and the dependence in the majority of cars on the air system for this function, attention was initially given to air system maintenance.

Inspection requirements for reservoirs were observed to vary between museums. MOTAT, observing that one of their tanks had recently failed a pressure test, indicated that tanks below 5 cubic feet were not subject to inspection. In N.S.W., most regulations affecting trams had been deleted and tanks were not inspected. Air tanks in service stations are noted to be inspected annually in New South Wales and South Australia. WTM hydrostatically tests air tanks before trams enter service after overhaul, and indicated this worked out to be about a two year cycle. AETM indicated that as its trams had been restored, the tanks had been hydrostatically tested by the State Transport Authority at Hackney Depot. BTMS stated its equipment was subject to inspection by the Machinery Department and some items have failed their test. They advanced the Queensland standard as a good starting point for consideration.

It was resolved that consideration should be given to establishing standards for museum air systems at the 1978 Conference.

Subsequently, frequency of drainage of tanks was discussed. MOTAT and SPER advised that they drained their tanks at the end of each day. The AETM drains its tanks in the much drier St. Kilda environment bimonthly. Cars owned by the THS are fitted with automatic drains and lubricators.

Maintenance equipment

The desirability of acquiring specialised tools for maintenance purposes was discussed. SPER representatives observed that they had carried out a wide range of activities without specialised tools and suggested that heavy investment in specialised tools was unwarranted. Where specialised tasks were to be attempted, it was important to obtain the tools before the job was tackled. One museum drew attention to circumstances in which the tools had not ultimately been secured until the work was virtually completed, rendering them redundant. WTM suggested that if a short term specialised job is to be done and special tools are required, it may be better to contract the job out.

It was agreed that the matter basically revolved around the need for good work planning and hence good equipment planning for its implementation.

Car wiring

It was agreed there was a need for a good standard of wiring in trams as in other parts of the museum. Reference was made to the electrical section of the Expert Panel on Museum Safety Standards, published elsewhere in these Proceedings. It was resolved to request further discussions of this topic at the next conference.

Maintenance discussions

It was suggested that a greater proportion of workshop time might be set aside for maintenance discussions at the 1978 conference.

Workshop 3(c) HORSECAR OPERATION

Chairman - A. Cooke (TMSV)

Recorder - P.C. Kahn (SPER)

Operating Experience

Initially, delegates who had horsecars were asked to summarise the experience of their organisation.

THS - had a problem obtaining a horse. However, once obtained it was fairly simple to train. The horse can be affected by other vehicles in the early stages of service. The future operations of THS at Ferrymead will include horse vehicles as part of the scene. The horsecar is currently being restored.

BTMS - had difficulty obtaining horses for two occasions of special operations on former Brisbane tram track, capable of walking on hard pavements and pulling a loaded car. The two occasions proved successful both in patronage and publicity, particularly from passing motorists. The BTMS had not considered use of horsecar at Ferry Grove but could possibly do so subject to suitable ballast, etc.

TMSV - found that the horses became very well trained and anxious to go, being milkman's horses. TMSV first trained horses with a long harness, then graduating to a standard length harness. One problem has been to train the horse to ignore bell sounds, as it tends to move automatically. The TMSV originally considered horsecar operations as a substitute function prior to full electric operation, but now would continue horsecar service after electrification.

The TMSV found the Bylands operation very successful - one to two man operation with a half hourly service, fares 40¢ adult, 20¢ child. It was felt that there could be a 25% increase in persons visiting the museum through horsecar operation rather than static museum.

AETM - displayed a horsecar at St. Kilda but did not own it. As it had very fine wheel profiles it was readily inclined to leave the track. The brake rigging was missing. It was not intended to operate the car.

WTM expected to obtain ex-horsecars from the Kelburn cable car line when new cars are delivered.

Care of the horse

At Bylands the caretaker looks after the horse, food costs not known. Information is readily available on care of horses. A local veterinary surgeon checks the horse every six weeks. Food is varied (not all grass). Advisory information on horses is available from local officers of the Department of Agriculture.

The attitude of the R.S.P.C.A. was usually quite agreeable to horsecar operation, however fringe animal protection groups can be a problem.

Operation away from the museum

If the opportunity is available to use the horsecar on existing tramway trackage, it may be worthwhile to do so. Transport costs can be very high for the horse and car. Horsecar service can be distracting to passing motorists as both TMSV and BTMS found with street operation on reserved track, and vehicle accidents were observed as a result. The TMSV advised the local police and local council about proposed operations - BTMS took similar action. BTMS had to clean grooves and surrounding area of track for car and horse and also evidence of horse after operation ceased.

Other details

It was suggested that it is cheaper to own one's own horse - much cheaper. One matter to watch in operation is the grades. Various brake shoes are available, cast iron, cast brass, wood. TMSV found that brake shoes were wearing as the shoes on the car were only holding-brakes in cable-car days (having been a cable trailer).

Emergency procedures particularly if the horse gets out of control were discussed. TMSV suggested the need for a quick horse release system, whereby the driver could pull a pin to let the horse go.

Workshop 4(a) ENFORCEMENT OF MEMBER SAFETY STANDARDS

Chairman - W. Daniells (BTMS)

Recorder - T. Atherton (BTMS)

COTMA - enforcement of standards

The workshop commenced by considering whether COTMA would be able to oversee or enforce safety standards upon member museums. It was agreed that COTMA had been set up as a consultative co-ordinating body rather than an administrative one. However, any accident within one museum reflects on the remainder. There is a need for a moral commitment to safety standards and it would be helpful to move towards standardisation of procedures. It was agreed that enforcement of standards by COTMA was impractical, but constructive criticism between museums could be helpful.

Effect of local regulatory standards for safety

Some aspects of museum operations are already well controlled by local safety regulations, but actual tramway operations may not be. Where there are no adequate local standards, it may be worthwhile for COTMA museums to draw up uniform standards and then if necessary they can be submitted to relevant local authority. It was suggested the Expert Panel on Tramway Safety Standards might examine this in more specific detail.

It was noted that SPER had drawn up its own rules for operation' after Sydney tramway operation ceased as rules which had formerly controlled the NSWDGT had lapsed. It was indicated that regulatory bodies had not expressed interest in perusing these rules.

It was agreed there were three levels of safety responsibility -

(a) Broad policy guidelines which could be encouraged by COTMA

(b) Specific standards relating to each museum operation and

(c) Individual understanding of standards by members at each museum.

It was agreed to draw up and submit to the Council a policy statement for adoption by COTMA (see minutes elsewhere in the Proceedings), and that individual museums should agree to draw up standards and instructions to meet their own circumstances as a matter of moral obligation.

Museum Member Compliance - Role of Safety Officer

It was agreed to recommend that each museum appoint a Safety Officer to oversee safety standards. WTM already has such an officer responsible to the General Manager, with the power to enforce compliance with established standards. It was felt such an officer should have the back-up of a committee who cover all the relevant areas of museum operations.

Education of members is essential. It is not possible for the safety officer to continually oversee all operations, and motivation of members towards safety should be encouraged. Lectures from outside bodies on aspects of safety were seen as essential. It was felt that once museum management had a well developed respect for safety standards, the remaining members would follow the example set by their officers.

It was agreed that the Safety Officer must have the power to stop a dangerous operation. Choice of personality should be one factor considered in appointing an effective Safety Officer.

Workshop 4(b) ESTABLISHMENT OF OPERATING SAFETY STANDARDS (INCLUDING FIRST AID)

Chairman - M. Skinner

Recorder - R.L. Jenkins

Safe-working of cars

It was agreed that safe working procedures were essential (a) to avoid collision and (b) to avoid confusion amongst the public.

Timetables and despatchers can be used to avoid confusion amongst the public. Telephone, radio, signal and staff systems can be used to avoid collision.

An operating handbook is considered desirable. While it is not practicable to have universal handbook for all museums, uniform minimum standards could be incorporated into a handbook.

All operating museums represented were using a system of penalties (including suspension from traffic duties) to back up safety measures.

A lengthy discussion took place on who should drive trams. A very vocal group (consisting principally of delegates from operating museums) insisted that only members who have spent time working on vehicles, track, overhead etc., should operate trams. It was felt by these delegates, that by working on these items, members became more aware of the condition and the operational characteristics of the exhibits. This, they felt, was particularly important if faults developed during operating periods.

This scheme was also considered to act as an incentive to encourage non-active members to become more active.

Safe operation amongst the public

In addition to previous comments (above), it was felt that each museum group should give careful specific consideration to safe operational standards amongst the public in the light of conditions that exist at their own museum site. Questions that need to be asked include whether the public is well informed as to proceedings and practises at the site. If not, consideration should be given to the need for a public address system and the adequacy of information signs.

First Aid

Delegates felt that ideally all traffic staff should be trained in First Aid. First Aid training is readily available, but many people seem apathetic towards it.

Conclusion

Quote from BTPS delegate:- "The key to safety is vigilance".

Workshop 4(c) PREVENTION OF DAMAGE TO EXHIBITS AND VEHICLES

Chairman - R. Gilbert (BTPS)

Recorder - P. Rendall (THS)

This workshop looked at five major areas -

1) Static Displays of archival and small relic material

It was thought that modules of photographs and other material should be displayed where appropriate. The emphasis was thought to be

best directed at simplicity and clarity, and, where possible the display should be behind glass or perspex to give maximum viewing with least risk of physical damage. It was also suggested that the application of a feather duster on a regular basis would improve the displays.

2) How far do we let the public go in the Depot?

It proved hard to come to any consensus of opinion, largely due to the varied uses our depots get put to (e.g. restoration, storage of derelict vehicles, storage of valuable equipment) and the size and space available for access. It was thought by some that guided tours of the area usually provided the public with valuable insights into the condition of unrestored vehicles and the maintenance and restoration of exhibits.

3) Trams - Do we permit public access to static vehicles?

It was thought that in some cases it was worthwhile to permit visitors to examine non-running vehicles, particularly when these were notably different to cars in service. Delegates thought that signposting and labelling could assist in public appreciation of vehicles.

4) Trams in Traffic

Do we adopt normal traffic practices, or do we develop a guided tour approach? It was thought that crews should adopt the "guided tour" approach, which has advantages from 3 major view points. Firstly the public relations approach since people who are "involved" by the crews are less likely to cause thoughtless damage. Secondly people are able to ask and have answered questions and be told the history of the museum and vehicles. Thirdly, an involved crew is able to keep a closer watch on the travelling public.

5) The Benefits of Guided Tours

As is seen in the comments on the use of crews, the involvement of the public by using guides and crews is seen as a good thing. It gives the museum some control of the visiting public, it enables us to inform them more personally, and it is often safer to have people guided through some areas e.g. power houses (where practical) depots and workshops.

General Discussion

In the general discussion, there was emphasis that museum members should not hesitate to discipline children, particularly when they are engaging in dangerous or destructive behaviour.

It was suggested that there be an orientation point somewhere in the museum e.g. AETM's entrance bookshop and signboard - slides or videotape - to introduce people to the museum and to inform them about some of the do's and dont's. A good museum handbook may be helpful as explanation sometimes stops unwanted investigations. Exhibits should be rotated - variety lessens boredom. The provision of some operable displays (destination blinds, gongs, non-powered controllers) enables people to push, pull and wind, hopefully without damaging more valuable exhibits.

By involving people through personal contact and clear signs we may manage to minimise the extent of damage.

Workshop 5(a) FIRE SAFETY

Chairman and Recorder - R. Silcock (THS)

Initially the workshop examined the following draft safety programme for tramway museums, prepared by delegates from the Tramway Historical Society, Christchurch :-

"FIRE SAFETY PROGRAMME FOR TRAMWAY MUSEUMS

STAGE ONE : Fire Prevention

Ban smoking - explain to members why.

Improve housekeeping - regularly clean out work areas - remove waste, particularly oily rags, from buildings e.g. waste takers - remove shavings from around woodworking machines or have machines vented.

Welding practice should be developed to minimise hazards from slag, molten metal, sparks etc. Develop practice of maintaining a fire watch for at least 30 minutes after work has been completed.

Do not overload electrical wiring - Turn off at switchboard all appliance points when building not in use.

Dangerous goods i.e. petrol, kero, meths, paint etc. should be removed from buildings where trams are housed or restored and kept in special inflammable liquids stores detached at least 30 feet from other buildings.

Fire load to be reduced. The fire load of a building is the amount of combustible fuel stored therein. Old newspapers for fund raising drives and combustible wood and upholstered tram parts should not be stacked or stored in tram barns with tramway vehicles.

STAGE TWO: Spreading the Risk

Do not put all your "eggs" (trams) in one "basket" (barn) unless the "basket" has adequate fixed fire protection i.e. an automatic sprinkler system. Until tram barns are sprinkler protected trams should be spread out and kept in separate buildings, in this way fire damage will not necessarily close down operations. Consult insurance company for fire separation of buildings.

STAGE THREE:

First Aid Fire Fighting Appliances should be provided. These are hand extinguishers, bucket pumps and hose reels. These provide basic fire protection for small fires discovered soon after ignition by persons in occupation in the building. In commercial premises they give basic protection for 25% of total time - much less in the case of weekend operated museums. Appliances should be clearly marked, easily accessible and in sufficient numbers to be within close range of all parts of the building (N.Z. - 1 x 10 litre extinguisher per 250 m^2; 1 hose reel or bucket pump per 500 m^2).

STAGE FOUR: Fixed Fire Protection

There are two basic forms of fixed fire protection.

a) An automatic fire alarm system
b) An automatic sprinkler system

How do you decide which type of system is suitable for your operation? Automatic fire alarms in the simplest form are considerably cheaper than automatic sprinkler systems. However, from New Zealand experience (see attached chart) it has been found that automatic fire alarms are only suitable in buildings where slow fire growth is likely to be experienced. Unfortunately this does not include tram way museum operations which generally include buildings which will experience very rapid fire growth. For an automatic fire alarm to be effective it must have a connection to a local fire brigade and have an adequate water supply for the fire brigade to take water from for fire fighting operations. Without these an automatic fire alarm is a waste of money. Automatic fire alarm systems may be suitable for museum operations where the museum is in a stage 2 situation and has spread its risks by placing its assets in a number of different buildings. In such buildings where it is appropriate to place an automatic fire alarm system, it is strongly recommended that roof vents and curtain boards be used to divide the building up into areas not greater than 180 m^2. Curtain boards pond the heat beneath the roof and the roof vents open to allow heat, smoke and gas to escape to atmosphere. This assists the fire brigade by limiting the internal spread of the fire and aids fire fighting by clearing smoke and gas from the building.

It would be appropriate to mention here that hydrant and hose systems attached to a substantial water supply are by themselves considered merely first aid although they may be considered as an adequate water supply in buildings protected by automatic fire alarm systems.

WARNING

Do not be sucked in by smooth talking fire protection salesmen who advocate smoke detection as a means of fire protection. In New Zealand this is approximately 10 times more expensive than protection by conventional heat detectors. In addition, they are unsuitable for tramway museum operations as they have to be de-sensitised to the point where they are little faster than the conventional fusible heat detector (see Figure21).

Automatic sprinklers are undoubtedly the ultimate in fire protection for tramway museums. Automatic sprinkler systems give 24 hour protection and ensure that all your fires are little ones. At worst in a sprinkler protected tram barn it could be anticipated that one vehicle will be seriously damaged by fire with minor damage to adjacent vehicles. An automatic sprinkler system consists of a network of pipes with regularly spaced outlets which are operated by the actuation of a heat sensitive device - the sprinkler head. There is one sprinkler head to approximately every 100 sq. ft of floor space. The sprinkler system for a tram barn is classified as ordinary hazard group III and requires a water supply of not less than 135,000 litres. This water may be taken from a towns main supply, elevated tank supply or pump and tank supply and is fed through a sprinkler alarm valve into the sprinkler system pipework.

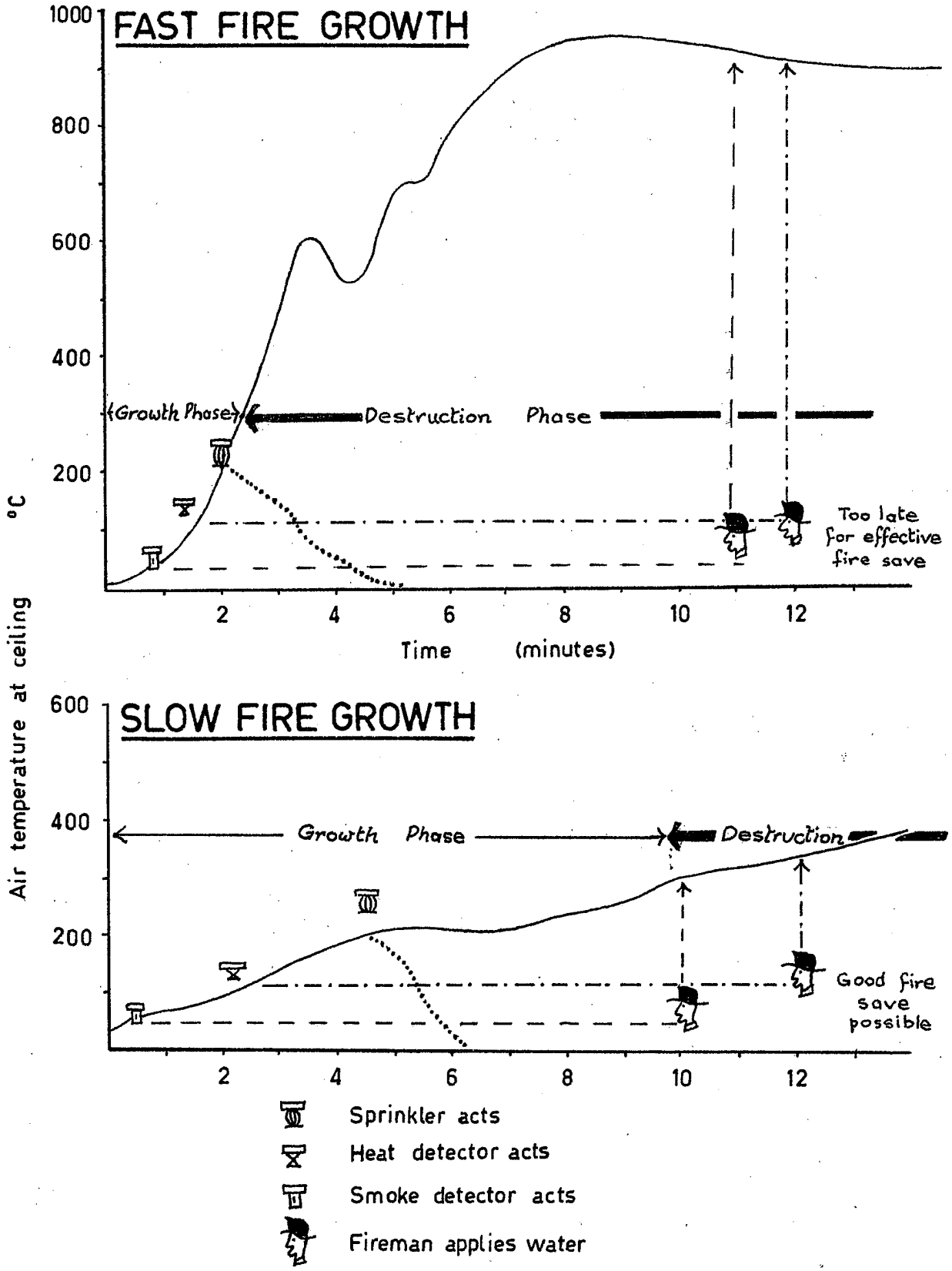

Fig. 21 - Effect of differing responses of fire detection equipment in situations of fast or slow fire growth.

Sprinklers are costly. It has been suggested that the cost of an automatic sprinkler system is roughly equivalent to carpeting a building. At Ferrymead, we have to some extent got around this problem by removing old sprinkler pipe work from buildings which are about to be demolished. Sprinkler pipework consists of range pipes i.e. those pipes up to 50 mm in diameter which have the sprinkler heads and distribution pipes - those pipes which lead back to the valves and from which the range pipes are fed. At Ferrymead we carefully measured all range pipes and numbered them and then pieced them together like a jigsaw. So far we have only needed approximately 100 ft of special distribution pipework to be fabricated commercially. All this sounds easy, however, a sprinkler system is a complicated piece of engineering and the pipework must be designed hydraulically, therefore, it is strongly recommended that museums canvass sprinkler companies' drafting offices for new members!

It is understood that the method in New Zealand of extracting sprinkler pipework from abandoned buildings is not possible in Australia. This matter should be very carefully explored with the sprinkler companies emphasising as has been done in New Zealand that although tramway museums are run on a commercial basis all labour is voluntary and what profits are made are used to defray running costs and further preservation work. All possible methods including the use of the news media should be used to relax sprinkler companies attitudes towards the re-erection of old sprinkler pipework in tramway museums.

Failing success in this area, it is physically possible for all sprinkler pipework and alarm valves to be fabricated from readily available pipe fittings, check valves and stop valves. It is only the sprinkler heads that are of a special nature.

Remember only an automatic sprinkler system with an adequate water supply will give your tramway museum the degree of fire protection which will ensure that your venture is not destroyed by fire."

Discussion

A fire within any COTMA museum would almost certainly result in the museum becoming a total loss in present circumstances.

Considerable discussion ensued on the possibility of installing automatic sprinkler systems. It became evident that at least in Australia, these remain the property of the sprinkler firm. Installation by other than these firms would negate insurance advantages, even if the system were correctly designed and the fittings could be obtained and fitted to the appropriate standards. Where a mains water supply was not available, an additional cost for tanks, pumps and motors would be incurred. It was suggested that COTMA seek advice from local Australian sprinkler installation firms on behalf of all museums to investigate the possibility of securing a system suitable for their needs.

Delegates agreed that regular fire drills were necessary, that the correct type of extinguishers should be on hand and members should know how to use them. All operating vehicles should be fitted with fire extinguishers.

It was suggested that each museum invite a representative of their local fire authority to the museum for an inspection. Apart from any useful advice, it can be helpful if fire officers have some idea of the layout of the museum in case they are called to it.

Workshop 5(b) ELECTRICAL SAFETY

Chairman - N.H. Gipps (TMSV)

Recorder - J. Hudson (BTMS)

As a result of the workshop discussion, the following guidance standards were developed :-

1. A.C. SUB-BOARDS

Circuits on sub-boards should be identified and also fuse ratings and type of fuse. Each sub-board should have a main control switch.

2. LIVE LINE WORK

Working on live conductors is not considered to be safe practice in a museum situation, and the section to be worked on should be isolated and earthed between the point of supply and the work site. It is necessary to earth both sides of the work site if there are live conductors beyond it, or A.C. conductors passing above the trolley wire.

3. ROLLING STOCK ELECTRICAL WORK

Work on rolling stock should involve primary and secondary isolation i.e. isolation of both car and power supply. The car should have notices fixed at both ends identifying the man in charge of work on the car.

If two separate sections e.g. electrical and mechanical are involved, both names should be given.

SUB STATION OPERATION

It is desirable to separate operating staff from the sub station equipment by using remote control equipment. Only properly trained operators should be employed within the sub station itself.

When isolation of feeders is carried out, locks should be used and the operator identified on the danger notice attached to the switch or circuit breaker.

PERSONNEL TRAINING - ELECTRICAL WORK

Anyone working on electrical work should be as highly trained as possible.

Workshop 5(c) CONSTRUCTION SAFETY

Chairman - C. Perfect

Recorder - P. Rendall

Discussion on this topic was based on the broadest meaning of construction, that is covering track laying, overhead erections and did not solely relate to buildings.

It was apparent from comments made that whilst outside contractors had been used for some works such as the erection of the structure of buildings and earthmoving, most of these tasks are handled by museum members, often inexperienced, because of economic constraints imposed by limited funds.

In initial stages of building a museum, this "do it yourself" requirement has resulted almost universally in "improvisation" both in construction systems and type of equipment and methods used.

Whilst improvisation could be managed in a safe manner the group felt that there was a danger of less safe procedures and equipment being used than would have been the case if the right machinery for the job had been used.

As museums continue to expand the nature of tasks to be undertaken increased and the likelihood of any techniques being reused in a short time becomes more remote. This leads to difficulties in museum personnel becoming familiar and experienced in that area of work, particularly where improvised methods are used.

It was considered by the group that each museum should have its own safety standards perhaps based on safety procedures set by COTMA.

However, it was also agreed that this type of rule has to be promoted by the executive of the museums both by their own actions and by the publication and enforcing of them.

Various individual systems of signs and methods of providing security to power supplies was commented on including standardisation of warning systems where necessary.

In conclusion it was felt that in the initial stages of museums, safety emphasis was extremely important in view of the inexperience of members and type of methods and materials used in construction.

This situation tends to change with age as members become used to working together, with better equipment and better qualified personnel. However, safety training was needed at all stages of development.

Workshop 6(a) DEVELOPMENT AND USE OF PUBLICITY

Chairman - R. White (AETM)

Recorder - G. Ford

The workshop discussed four topics as follows:

Is there a danger of over-publicity generating more traffic than a museum can handle?

It was generally agreed that there is no danger in over-publicity provided that it is planned for. To have a large number of people descend on a museum and have no operators is both bad public relations and dangerous to the exhibits and the public.

It was also agreed that publicity leads to requests for charter operations. BTPS reported that they already operate such services during the week quite successfully. Other museums also reported on successful week day charters, however it was stressed that it is important that adequate preparations and precautions be taken - these to include actions to be taken in the advent of a derailment i.e. special team of members; hire of local crane etc., local crane hire company to be given details of equipment needed to rerail each type of tram.

Should all aspects of operations be advertised? How?

Discussants concluded that in paid advertisements, you are required to get your message over in the way that appeals most to the public eye and at minimum costs. The advertisement should not be crammed with information but simply put over the message of where and when the trams operate. This method is the best for most advertising.

Secondary advertising such as publicity brochures, leaflets etc., can give more information about the museum, static displays etc. For special display, an advertisement including this fact should be used instead of the normal one and should be larger.

It was unanimously agreed that word of mouth is the best publicity, therefore the publicity brochures visitors take with them are also most important.

SPER drew attention to its "Thank you for visiting brochures" given to visitors to the museum. The BTMS also presented their information brochure, given to all visitors to take away. Advertising of phone numbers in the telephone book and elsewhere was discussed. Some museums preferred members' numbers to be prominently shown and others the museums number. The BTPS said they have had no problems caused by advertising the museum phone number on brochures while the BTMS said that for security reasons, members' numbers were promoted, but that the museum number is still listed in the phone book. It was agreed that this facet of advertising is up to each museum.

Other methods raised involved advertising the museum on the back of tickets, and letter box distributions of brochures in selected areas. Informing schools towards the end of the year is a good way of obtaining week day visits as the teachers are usually looking for places to take children at that time of the year. The participation in "Services Booklets" sold by "Lions" and other groups, to raise monies for charities is good,

although it means that the museum is required to give free rides to people who buy the books and only receives publicity in return. The BTMS pointed out that these are illegal in Queensland and AETM pointed out they were under investigation in S.A.

Is there an inexpensive, but effective way of advertising?

The BTMS said that it is easy to obtain all the free publicity you require from the press simply by treating the press correctly. Their method was borne out by the fact that in 10 days in January 1977 the BTMS received coverage by more than 14 media outlets just for the handing over of a cheque at the opening of a small display.

They pointed out that it is important that a press release be short, and written in simple language and in such a way that it can be used "as is" without the necessity to rewrite or edit it. Releases for events which will have occurred by the time the publicity is used should be written in 3rd person, past tense. Pre events publicity should be 3rd person, or 2nd person, future tense. An important requirement is to get the press on your side by providing good refreshments for them and inviting the "News Editor" in the case of radio and T.V. stations and the "Chief of Staff" in the case of large newspapers, or their representatives. In all cases of publicity, these are the people you send the press release to inviting them to send a representative if they themselves cannot attend. It is only on very important occasions Editors and Managers are invited to attend. These invitations would be additional to those to the Chiefs of Staff etc. It is also advisable to build up a list of reporter contacts - usually one per outlet - who can be contacted anytime (obtain unlisted home numbers from these people when they offer them to you. Do not ask unless you are sure you will not offend!). These people will be useful if you need publicity in a hurry. Always send them press releases, as well as to their chiefs. They will then usually get the job. Send them personal invitations to functions also.

At "press" functions always provide plenty of everything even though all might not be able to stay. Excess food and drink can always be sold to members so there will be no loss. Running out of supplies however, creates ill will.

Suggested ways of obtaining press coverage for operations generally

(a) Letters to the Editor, (possibly being reinforced by an article or photo elsewhere in the paper. Your "tame" reporter will arrange this!)

(b) Radio and T.V. stations - community services.

(c) Local free papers - these people are always after items of local interest.

(d) Company newsletters etc.

(e) Social clubs/notice boards etc.

(f) Human interest stories for newspapers.

(g) Having a gimmick is always a good method of obtaining instant publicity.

How can we relate publicity methods to the interests and abilities of members?

It is important to find out what skills and special interests members have and then use them to the museum's advantage. Any press contacts members have are vital advantage.

Examples of skills used well are those of the TMSV members who prepare exhibitions and displays and the AETM's use of members' drafting ability for signs etc. Questionnaires and personal visits with inactive members are the best way of finding out about their skills.

It is also important that the public be made aware of the fact that we, the operators, are not professional transit people. It is important that the voluntary aspect of our museums is stressed. The BTMS pointed out that they have found that meeting the visitors at the gate, introducing yourself and giving a brief run down on the museum first is the most effective way of achieving this. Their special circumstance of having only guided tours of the museum lends itself to this.

In conclusion, the best way to get publicity is to appoint a member interested in this field as a publicity officer.

Workshop 6(b) THE ROLE OF STATIC DISPLAYS BEFORE AND AFTER OPERATION BEGINS

Chairman - J.C. Radcliffe (COTMA)

Recorder - L. Richardson (WATM)

It was considered essential for displays to be prepared and erected on some suitable site before museum operation physically commenced. It is vital to show the history of tramways utilising special skills of members. Security of exhibits is important.

After operations commence, the public is less likely to view the display material but it was considered to be a museum responsibility to continue maintenance of displays.

It was generally considered that displays at outside functions were not worthwhile based on return for effort.

SPER - has given up displays at model railway exhibitions.

WTM - has arranged display in a city Savings Bank office which was well lit at night. This generated great interest with free handouts. WTM will continue to arrange annually this type of display.

BTMS - has arranged an exhibit at ARHS Railway Museum with good return through money and interest by people.

It was considered that a single display could be used interchangeably before and after operation commenced and at outside functions with basically the same exhibit with some simple alterations appropriate to each particular venue. Generally it was considered one-day displays were not worth the effort.

TMSV arrange displays to cater generally for all age groups, whereas AETM has attempted to present displays to appeal to both adult and child groups.

Animated displays were considered to be very desirable for best results with static displays. An animated display for operation by public e.g. working of controllers - needs great care to avoid injury.

Desirably, someone should be on duty to supervise viewing of exhibits but it was realised this can be labour intensive. Some suitable form of fencing was considered essential for protection of static display material although it was thought that this may cause an unsatisfactory reaction by the viewing public due to restrictions. This in fact can be minimised by:-

(a) Displaying exhibits in sliding glass door display case fitted with quality lighting.

(b) Ensuring that exhibits, particularly photographs, are of good size with clear labelling, and

(c) Avoiding excessive use of photographs.

Construction of exhibits should be very sound to avoid injury to public. Drapes made of dyed hessian have been found to be suitable.

Mounting of photographs on board - e.g. caneite - should be by use of tacks of approximately 20mm length to avoid dropping out at a later date. Other methods of mounting include use of rubber cement, milliners glue and double sided cellulose tape.

It is essential for quality professional lettering to be used. Captions should be brief but fully descriptive. Additional support information may be used in a supporting brochure.

Workshop 6(c) BOOKSHOPS - THEIR DESIGN AND OPERATION

Chairman - I. Stewart (MOTAT)

Recorder - R.T. Wheaton (AETM)

It was considered that the bookshop should ideally be situated at a natural congregating point and be available for ready access by visitors during their visit to a museum. It should also be located adjacent to the exit to encourage visitors to obtain a momento of their visit. Use of a flow-through principle of visitors was considered desirable.

Books and other publications should be protected against damage by persons inspecting them whilst deciding whether they would make a purchase. It was noted that one museum has one copy of a magazine in a plastic cover for perusal, whilst keeping the other copies separately where they cannot be handled by the public. Similarly books of a more expensive price or limited market are kept behind the traffic and made available for inspection only on request. It was considered essential to have books above the mauling hands of young children.

The counter was considered to be primarily a cash and wrap area with a glass cabinet being used for small items e.g. tie-pins.

It was also considered desirable to have a completely separate rack for free give-away materials which would be clearly marked "free".

Advertising of books on vehicles, including possible use of roof boards was considered essential. Such advertisements could be in appropriate period style.

The recording of book sales could tend to be unduly complex involving a lot of work with little net results. The ideal method of recording sales was to use a cash register and have periodic stock-takes as required. Bin cards would be the basis of determining the point of reorder and quantities ordered.

The extent of goods offered for sale would be determined by experience and observation of clientele. This would vary between museums. Drinks and limited sweets (prepacked, non-perishable) were a desirable additional line.

Finally, it was observed that -

(a) The building may be best built initially without windows for purposes of security, but this depends on location and general security of the museum as windows could allow display.

(b) Visitors should be encouraged to enter the bookstore.

(c) The bookstore should be provided with a feather duster to clean books etc.

(d) Bulk storage of books, drinks etc., should be separate from public sales areas.

(e) If the bookshop can be merged with the public display area, it could be advantageous from an operational view point as well as achieving the object (b) above.

Workshop 7(a) TRAINING, ROSTERING AND MANAGING OPERATING CREWS

Chairman - P.C. Kahn (SPER)

Recorder - R. White (AETM)

Current Practice - Crew Training

SPER - A chief driving instructor is in charge of training crews. On-road driving instructors train individual drivers. Conductor and theory examiner uses the SPER handbook as the basis of instruction for a written examination. Training sessions are held twice a year. Drivers have to be 21 years and have one year's service as a conductor. Conductors have to be 18 years. They work 3 trainee days under supervision. Specific training is given in methods of working from the footboard.

AETM - Training is done in outside hours as well as "on the job" Conductors are required to be members for 6 months before training: Motormen, who are restricted in number, are invited to train after considerable working experience in the museum, with a minimum of 2 years. The Operations Manager is in charge of the training scheme and decides when trainee conductors and motormen can go solo on permanent roster. Practical training of motormen usually extends over at least six months. Written exams for all conductors and motormen are set biennially for license renewal to cover the museum both morally and legally. The State Transport Authority does not wish to accept responsibility for training tram crews, arguing that its own operations in this area are now so restricted that it is unlikely to have any more expertise on the older AETM cars than the AETM itself does.

TMSV - Horse car driving is learned by doing it in public traffic.

Ferrymead - Trainees are conductors for 6 months before motorman training. Trainees drive in public traffic under supervision. Theory is examined orally. A medical certificate of fitness is required every two years. Examined orally by Ministry of Transport.

BTMS - To be trained by the B.C.C. with the endorsement added to the driving licence. Rules and Handbook being written. B.C.C. rules for minimum ages of 17 for conductors, and 21 for drivers. Likely to be two classes of driver: handbrake, and airbrake classes.

WTM - Does not insist on previous service as conductor, for driver training.

MOTAT - Time spent by the trainee in the workshop is regarded as a test of interest. Emergency stopping of trams is given important priority in training. Drivers are not encouraged to touch electrical equipment unless properly qualified.

BTPS - Conductor training - a practical one-day course. Driver training - motor licence required, minimum age of 21. Driver training with MMTB in St. Georges Rd. 40 hours at Ballarat under supervision, then examined in Melbourne.

MMTB - 3 days in driving school
12 days on road under supervision
2 days in school for conductors
6 days on road under supervision
3 months on probation.

No practical exam in cutting out motors etc.

WATM - Intend using Perth Tramways training notes. Hard work to be a prerequisite to driver training.

Rostering of Crews

AETM - 3 monthly roster; attempt to consider individuals
Ferrymead - Attempts to keep crews together on steam tram.
WTM - 3 monthly roster
BTPS - Monthly roster
SPER - 6 monthly roster. Traffic officer, 2 crews, 1 bookshop attendant.

Uniforms

SPER - Uniforms are a conscious attempt to be different from the former D.G.T. or the present P.T.C.

Conclusion

It was acknowledged that there should be a desire to have an air of professionalism, but there is a need to keep bureaucracy subdued. There is also a need to have as high a standard of competency as possible for safety's sake. Where there is no formal authority to lay down standards, it is in the museum's own interest to set its own high standards rather than risk having them imposed by an unsympathetic and unrelated authority at a later date.

Workshop 7(b) MEMBERSHIP - RECRUITMENT, COMMUNICATIONS, RIGHTS, RESPONSIBILITIES

Chairman - W. Jessup (BTPS)

Recorder - R. Merchant, (SPER)

The comments expressed by participants can be summarised as follows :

Recruitment

Membership is not pushed but is available to all persons showing interest in the museum and first contact is by brochure or personal visit to museum.

Concession membership is not general but junior, student, pensioner and/or family membership is offered by some groups.

Communications

Member communication is usually by local newsheet. Three groups have Board meetings which are open to members. Copies of Board meeting minutes pinned to a depot notice board or summarised in the newsheet are communications methods used by two museums.

Board decisions and the reasons for these decisions should be communicated to members.

There must be an opportunity for interested workers who may not desire to hold office to express opinions.

Although the governing body must approve programmes and set work schedules, there must be suitable communications to pass the required information to the working member.

Rights

Members should be given as much information and consulted (where practicable) as much as possible, subject to the rules, etc., of the group. Disciplinary action (where applicable) should be taken with extreme care subject to civil law and museum rules and regulations. Circumstances warranting disciplinary action are quite limited in a voluntary organisation.

Responsibilities

These are dependant on the individual member. Membership surveys are a good method of obtaining feedback from members not often seen or heard. All members, however, must acknowledge that they have responsibilities to the visiting public, and should be cognisant of their responsibilities towards their fellow members. Some members occasionally appear to consider their involvement in the museum as one of proprietary interest without regard to others, an attitude of mind which can lead to unncessary unpleasantness.

Workshop 7(c) PUBLIC CHARGES - THEIR EQUITABLE DETERMINATION

Chairman - J. Carter (BTMS)

Recorder - T. Atherton (BTMS)

Current charges

Panel members were asked to detail the April 1977 charges. These are set out as follows:-

AETM, Adelaide - (Operating)

Charges $1 Adult - 40¢ child - entrance and unlimited number of rides inclusive.

BTMS, Brisbane - (Not operating but guided tour)

Charge 40¢ Adult - 20¢ child - $1 family ticket
(any number of children)

BTPS, Ballarat - (Operating)

All day $1.00 - 30¢ Adult - 20¢ child
(Recently increased from 20¢ adult - 10¢ child.
Soon to be increased again?)

MOTAT, Auckland - (Operating)

$1.00 entry - Rides 10¢ Adult - 5¢ child.

STRPS, Sydney - (Operating)

40¢ Adult

THS, Christchurch - (Operating)

Adult $1 Admission general area
Children 60¢ Admission general area.
Then extra small charge for ride on tram.

TMSV, Melbourne - Horse Tram Operation

40¢ Adult - 20¢ Child - Admission and Ride.

TTMS, Hobart - (Not Operating)

No charge.

WTM, Wellington - (Operating)

30¢ Adult - 15¢ Child per ride.

SPER, Sydney - (Operating)

25¢ Adult - 15¢ Child per ride - $1 all day ticket -
also 50 cents family trip.

WATM, Perth -(Not Operating)

No charge.

What the money is used for

Delegates were then asked to consider whether they had to charge, why they did so, and what the money was used for.

TMSV - "Sunday Entertainment Act" requires that they must pay fee of $5.00/Sunday to charge, rather than accept donation for a ride. Some patrons do not pay on the strength of this - Could cause difficulties in respect to fines and loss of face if Inspectors of Act were to receive complaints.

SPER - Similar situation - need to charge admission fee to include fare on tram. In the unlikely event of a government grant stipulating that entry fee be free, a charge could still be made to ride to cover operating costs. Estimate approx. $1 per trip to cover costs. This is calculated on previous year's financial figures, then charges are set, including per-way and long term maintenance provisions.

AETM - Accounting System determines charges in effect - have several accounts which cover a wide range of museum activities with surplus going to capital works. A notional cost of $5.00 per round trip covers inputs to deferred maintenance provisions such as track work, vehicle maintenance etc. Costs revised at time of annual budget.

WTM - Set up yearly budget and channel profit into capital works.

BTPS - 25% of revenue goes to tramcar maintenance - need 25¢ only per trip to cover costs.

Comparisons with other types of museums

Delegates considered that our museums, because of the different kind of display presented justified the charges such as they are. Museum patronage (or lack of it) is a good indication of value for money (or otherwise).

Participation of visitors in the museum's activities (e.g. riding trams) alone presents advantages of value above other museums with static or glass cased exhibits.

An explanation of where the money goes to the public goes a long way to making the public part with their cash without complaints and with a sense of purpose. It also helps in extracting donations once the public realises the costs involved.