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#### KNOXVILLE BLUE RIBBON TASK FORCE

#### REPORT TO THE MAYOR

#### APRIL 9, 1987

#### I. PURPOSE

The Blue Ribbon Task Force was appointed by Mayor Kyle Testerman in October, 1986, to examine the services and organization of the City of Knoxville Fire Department and to make recommendations for solutions to manpower, equipment and facility problems which might be identified.

Specifically, the charge given to the Task Force by the Mayor included answering the following questions:

- A. Whether existing personnel and other resources are being used in the most efficient and effective manner;
- B. Whether uniformed and civilian staffing -- including scheduling, assignment, deployment and supervision -- is adequate;
- C. Whether appropriate management practices are being used to foster employee motivation, productivity and effectiveness;
- D. Whether the current organizational structure assists or hinders the effectiveness and efficiency of the Department;
- E. Whether changes are necessary in the management, organization, staffing and operations of the Department; and
- F. Whether professional consulting services and/or other services available to the city should be used to assist the City of Knoxville in implementing any desired changes in, or future development of, the Fire Department.

This report, consisting of the findings and recommendations of the Blue Ribbon Task Force, addresses all of the points raised in the Mayor's charge.

#### II. SCOPE AND METHODOLOGY OF STUDY

#### A. Organization and Staff Assistance

The Blue Ribbon Task Force, at its initial meeting, set out to learn as much as possible as quickly as possible about Fire Protection and the Knoxville Fire Department in particular. While a few of the members have a background in firefighting and/or municipal government, the majority of the Task Force members were not acquainted with the specifics of the operation of an urban fire department.

To assist this process, staff of the City's Department of Public Safety, Lt. Phil Keith and Ms. Judy Martin, prepared an exhaustive compilation of statistics and background information on the Fire Department. In addition, Mayor Testerman requested assistance from the Municipal Technical Advisory Service of the University of Tennessee, and Jim Finane, Special Projects

Consultant, was assigned to assist the Task Force in its work. Lisa Gillenwater of the City's Office of Information and Public Affairs was also assigned to assist the Task Force with scheduling, communications and clerical support.

The Task Force also drew on the expertise of the three members of the group who were familiar with municipal government and fire departments: Chairman Stuart Bayne, head of the Fire Science Technology program at Roane State Community College; Ms. Mintha Roach, Executive Secretary of the City's Civil Service Merit Board; and C.L. Overman, Executive Director of the Municipal Technical Advisory Service.

#### B. Data Collection

Since October, 1986, the Task Force has collected information using three different methods: (1) review of prepared documents, readings and submissions from staff assisting the Task Force, members of the Fire Department, and members of the Task Force; (2) oral interviews with members of the Fire Department, other city staff, and fire personnel from other cities; and (3) briefings by experts in the field at Task Force meetings.

Following is a brief outline of the scope of these three activities:

- (1) Review of Documents. The Task Force received information from all divisions of the department, from Public Safety and MTAS staff, and from members of the Task Force on organization, budget, workload, duties, pay rates, station location, training programs, inspections, fire prevention and other topics.
- (2) Oral Interviews. A variety of interviews were conducted by the Task Force, ranging from one-on-one interviews by one Task Force member with one firefighter, to Task Force meetings with multiple employees. Interviews have been both public and private/confidential. Nine of the department's stations were visited by one or more members of the Task Force, and most of the other stations have been visited informally. All divisions of the department have been involved in discussions with the Task Force. Approximately 25% of the staff of the department have been interviewed by one or more Task Force members.
- (3) <u>Briefings</u>. Since October, 1986, the Task Force has been briefed on a number of fire protection topics by Jim Finane (MTAS), Phil Keith (Public Safety), and Stuart Bayne, Chairman of the Task Force. In addition, at the city's expense, Chief T.S. Walls and Deputy Chief Herb Davis of Newport News, VA, spent one day briefing the Task Force on the operations and experiences of the Newport News Fire Department.

Throughout this process, the Task Force has been assisted by many members of the Knoxville Fire Department, including Chief Bruce Cureton, a number of his deputies and assistants, and numerous firefighters of every rank from all three shifts. The Fire Department personnel have been very forthcoming and more than willing to assist the Task Force, and without their help this report would have been impossible to complete.

#### B. Comparisons with Other Cities

As part of the background information prepared by the Public Safety staff, the results of a survey of 12 comparable Southeastern cities' fire departments, originally compiled in 1982, was presented to the Task Force. It was decided that this information should be updated to obtain the latest comparisons possible. As a result, a survey was mailed to each of the 12 fire departments who had been surveyed in 1982. The information requested included staffing, classification, compensation, number of fire stations, organization, work schedule, ISO rating and budget information. Of the 12 cities surveyed, 10 responded. The information provided by these 10 cities appears throughout the body of this report in the form of references to the cities' operations and tables comparing these cities to Knoxville. A copy of the survey instrument is included with this report as Appendix A.

#### IV. PROBLEM AREAS IDENTIFIED

After meeting with Fire Department personnel and being briefed on all aspects of the department's activities through individual and group visits to many of the department's stations and offices, the Task Force formulated a list of problem areas and discussed possible solutions. Based on these discussions, the Task Force identified five broad areas where problems existed in the Knoxville Fire Department. The five areas are as follows:

- o CLASSIFICATION, COMPENSATION, TRAINING AND PERSONNEL EVALUATION
- O EQUIPMENT, AND DEPLOYMENT OF EQUIPMENT AND PERSONNEL
- o MANAGEMENT AND ORGANIZATION
- o MANPOWER UTILIZATION
- O PROBLEMS OUTSIDE THE DEPARTMENT

In the following pages, these problem areas are discussed in detail, and the Task Force's recommended solutions are presented.

#### A. CLASSIFICATION, COMPENSATION, TRAINING AND PERFORMANCE EVALUATION

(1) PROBLEM: The current personnel classification system is outmoded for the needs of a modern fire department.

Classification of employees in a fire department is frequently accomplished using a military model, with ranks such as private, sergeant, lieutenant and captain denoting either increased supervisory responsibilities or, more frequently, tenure. The current system in Knoxville reflects this tradition, with its ranks of Firefighter or Private, Assistant Mechanical Operator, Mechanical Operator and Captain before reaching the ranks of Assistant and Deputy Chief and other specialized officer classifications. The major drawback to this system

in Knoxville and other cities is that it does not tie rank to skills or job performance, but rather results in a rigid structure where there is a required chain of command based on time-in-grade. When a tenure situation occurs such as exists in Knoxville, where the average employee has 20 years of service, the entire system fails to reward performance or even time on the job, because there are no vacant higher level positions which can be filled by promotion. This has produced a situation where some Privates in the Knoxville department have been in that same classification for over 20 years, when in fact these men could likely qualify for a Captain's position, given their experience.

Similarly, when promotion to a higher rank is the only method available to reward performance and increase pay, the tendency over time is to have more "officers" and fewer rank-and-file employees. This is true for Knoxville: Captains outnumber Privates, and there are 18 Deputy or Assistant Chiefs in the department. Because promotion is viewed primarily as a pay increase, there are individuals who are "supervisors" or "management" in rank only, but not in responsibility, training or point of view.

While there are no simple solutions to classification and constructing a workable career development path, there are examples of systems which are more flexible than Knoxville's and are tied to training requirements and periodic testing. The Blue Ribbon Task Force did not have the time, resources or expertise to develop a comprehensive career development program in the six months of its existence to date. Such an effort must involve professional consultants, working closely with the department and the Civil Service Merit Board over an extended period.

The Task Force did, however, identify at least one city in the 10 cities surveyed which has the type of career development program which the Task Force envisioned for Knoxville. This city is Newport News, VA. Newport News has a classification system which recognizes time-ingrade as a necessary prerequisite to promotion and pay increases, but ties job classification solely to job duties, while linking compensation to competence and performance within a classification. This system accomplishes both goals by classifying most working firefighters as simply "Firefighter", but then provides a 9-step pay scale from "Firefighter 2nd class" through "Senior Firefighter", which can theoretically be reached in 6 years. The pay difference between the minimum and maximum on this scale is 62%, and progression is based on passing scores on a series of standardized State tests very similar to those recently promulgated by the State of Tennessee, as well as on demonstrating specific proficiencies, including supervisory abilities.

A similar program exists for the officer ranks, but access to a promotion to an officer grade is dependent upon the needs of the department, rather than the need to grant an individual a pay increase, since pay increases (to a point) are less dependent on rank than on performance.

- o The Task Force recommends that work should begin immediately on the task of building a Career Development program for the department. The Task Force also strongly recommends that the system in place in the City of Newport News, VA, be used as a model and/or point of departure for the Knoxville system. The Knoxville Career Development program should include a one-classification "Firefighter" class with multiple skill levels and pay levels within the class, tied to regular perfomance evaluation, skills testing, and achieving and maintaining physical fitness standards.
- o As part of a Career Development program, Knoxville should adopt the State of Tennessee apprenticeship program classification system as a system to test the skill level of all positions in the department.

## (2) PROBLEM: Compensation of some classes of Fire Department employees is below the average for comparable departments.

In collecting salary information from the 10 city survey, the Task Force found that there is a wide gap between the average pay by position in the Knoxville department compared to the other 10 cities. Table 1. shows these comparisons.

TABLE 1.

AVERAGE MONTHLY SALARY BY POSITION KNOXVILLE AND 10 SOUTHEAST CITIES

| Position        | 10 Cities<br>Average | Knoxville | Knoxville<br>Rank | Knoxville % of Average |
|-----------------|----------------------|-----------|-------------------|------------------------|
| Firefighter     | \$1,549              | \$1,187   | 11th of 11        | 77%                    |
| Engineer *      | 1,837                | 1,534     | 7th of 8          | 84%                    |
| Captain         | 2,157                | 1,702     | 8th of 10         | 79%                    |
| Assistant Chief | 2,733                | 1,972     | 7th of 7          | 72%                    |
| Deputy Chief    | 3,128                | 2,149     | 11th of 11        | 69%                    |
| Chief           | 4,013                | 2,617     | 7th of 7          | 65%                    |

<sup>\*</sup> Compared to Knoxville Mechanical Operator

As indicated by Table 1, there is a substantial difference between the pay of Knoxville firefighters when compared to the 10 Southeast cities surveyed. While there are clearly pay differences, comparisons with other cities should be used with caution: job classifications, duties and pay ranges vary considerably. The figures presented in Table 1 represent an attempt to compare position classification and pay across 11 fire departments, and comparing pay based solely upon job title without considering duties and responsibilities may be misleading.

#### RECOMMENDATION:

- o As part of establishing a new classification and career development program, the pay rates of department personnel should be adjusted to levels comparable to other cities in the Southeast. Any pay increase should be tied to the implementation of the recommendations of this report regarding a new classification and career development program, manpower utilization and deployment of personnel and equipment.
- (3) PROBLEM: Training has been generally neglected by the department with potential impacts on safety of employees, ability to suppress fires and supervisory and management capabilities.

As the Task Force conducted interviews with various members of the department, one fact became obvious: the department does not conduct nor require enough training to consistently maintain the skill levels required for optimum performance by the department. Previously, training was conducted for one hour per day on every shift in every station. This practice has been either discontinued or not enforced to the point where daily training, as a rule, does not occur. At the same time, since the department is having difficulty with maintaining staffing levels as a result of operating too many fire stations, there exists a belief that fire companies cannot be released to be trained at the department's training facility on Prosser Road. In reality, each time the department receives an alarm, other units are prepared to redeploy to cover the territory or assignment of the responding unit. If a company were assigned to report to the Prosser Road facility for training, the same type of re-deployment should occur.

Training should be viewed in exactly the same light as responding to a call for service: as an essential component of fire protection. Responding to actual fires cannot be relied upon to maintain firefighting skills since Knoxville has a relatively low number of actual fires. Without actual fires to hone firefighters' skills, training becomes even more important.

While lack of training does not necessarily imply that Knoxville firefighters are deficient in skills, the current low level of training suggests that skills deficiencies are a possibility. What should be undertaken is a Training Needs Assessment which would identify firefighters' current skills, and identify those areas where more training is needed, based on objective standards developed by the

International Fire Service Training Association (IFSTA), a recognized source for fire training standards and instructional materials.

In addition to training in fire suppression and prevention, there also appears to be a critical need in the Department for supervisory and management training. In any organization where supervisory and management positions are filled only through promotion, developing management skills is frequently neglected. As noted in other recommendations in this report, there is a critical need for improving the management skills of the Department. A first step in this direction would be the development of a program of supervisory skills training for all first-line supervisors, management training for all ranks above Captain, and fire command training for all officers who are in a position which would require them to direct a multiple-unit response to a major fire incident.

#### RECOMMENDATIONS:

- o Conduct a Training Needs Assessment to identify the current skill level of firefighters, skills which are deficient in firefighters, and design a training program to teach to those skills.
- o Re-institute mandatory daily in-station training.
- o Develop a mandatory program of Supervisory Skills training and Fire Command training for all first-line supervisors, and a mandatory Management training curriculum for all ranks above Captain.

# (4) PROBLEM: The Department is top-heavy; the current organization of the Department is too complex and contains too many layers of classification and supervision.

The longevity of the members of the Department and the classification and pay structure have both combined to produce pressure for promotions to ever-higher rank. When over 50% of the Department have over 20 years of service and the only option for a pay increase is a promotion, it is understandable that the Department has more officers than comparable organizations of its size. Because of this pattern, Knoxville, while comparing favorably with the 10 Southeast cities surveyed in fire department personnel per 1,000 population, has a cost per capita for firefighting which exceeds all but one of the survey cities, despite the fact that the pay for Knoxville personnel is lower on a position-by-position comparison. Personnel and costs per capita are shown in Table 2:

TABLE 2.
PERSONNEL AND COSTS PER CAPITA
KNOXVILLE AND 10 SOUTHEAST CITIES

| Category                   | 10 Cities<br>Average | Knoxville | Knoxville % of Average |
|----------------------------|----------------------|-----------|------------------------|
| Total Personnel/1,000 Pop. | 2.22                 | 2.09      | 94.14%                 |
| Firefighters/1,000 Pop.    | 1.90                 | 1.82      | 95.79%                 |
| Per Capita Expenditures    | \$71.17              | \$85.05   | 119.50%                |

While some of the additional cost per capita can be attributed to the operation of an excessive number of fire stations and the additional equipment and increased overhead required by that deployment pattern, a significant factor is the increased cost of administration attributable to the 18 Assistant and Deputy Chiefs who are part of that cost in the Knoxville Department. Some of the individuals in these classifications are in fact "over-filling" a position which would normally merit a lower classification and pay scale, since promotions in the Department are not always connected to job responsibilities.

#### (a) Retirement Incentives

Throughout the Task Force's conversations with department personnel, there was one recommendation which both officers and firefighters mentioned: the need to bring new, younger firefighters into the department. While bringing "new blood" into the department is clearly needed, without increased turnover there will be few positions available to fill. One action which could generate more vacancies in the department would be to provide retirement incentives for those personnel who are eligible to retire. Currently, 23% of the department

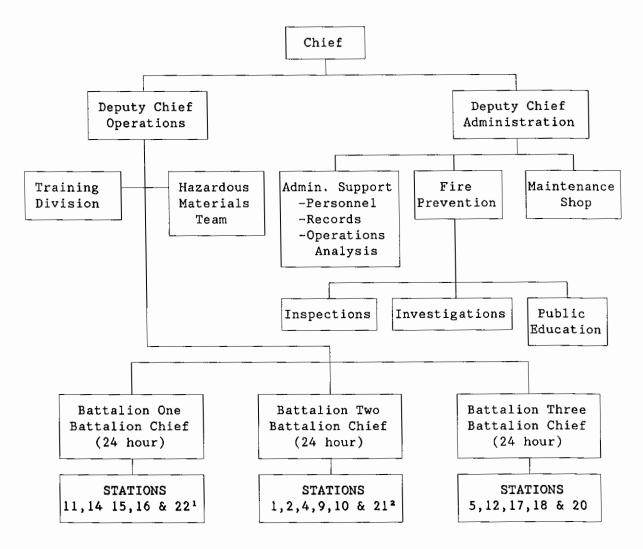
is over age 50, the minimum eligible retirement age. Another 28% will reach retirement age in the next five years. If half of these individuals were to retire in the next five years, approximately 100 vacancies would then be available to hire entry level firefighters and correct the current top-heavy staffing pattern. It is the judgement of the Task Force that, given the exceptionally large percentage of the department who are either eligible or will soon be eligible to retire, that the natural turnover rate in the next 2 to 3 years will be high enough to allow for the orderly, but steady, replacement of retirees with new recruits. The city may wish to consider providing limited medical insurance, termed "Medi-gap" coverage, to cover the period between retirement and eligibility for Medicaid coverage.

#### (b) Reorganization

Partially as a result of the unusually large number of Assistant and Deputy Chiefs, and partially through neglect, the department's organizational structure has been skewed to accomodate the classification of its personnel. A simplified organization, based on the organization of a number of the 10 survey comparison cities, is detailed in Table 3. This organization provides for two Deputy Chiefs and three 24-hour Battalion Chiefs, which would require a total of nine Battalion Chief positions. The other significant changes recommended include:

- Establishment of a Hazardous Materials Team, with at least one firefighter on duty on each shift who is trained in hazardous materials response, assigned to a vehicle which would carry the appropriate equipment.
- Placing the Training Division under the supervision of the Deputy Chief for Operations.
- Strengthening the management and administration of the department by replacing uniformed firefighters with civilian specialists in such areas as personnel and payroll, finance and budgeting, records, and management and operations analysis.
- Eliminates four stations and four engine companies, as described in the following section of the report.

TABLE 3.
RECOMMENDED ORGANIZATION CHART



<sup>&</sup>lt;sup>1</sup> Station 22 would be located at Central & Woodland

<sup>&</sup>lt;sup>2</sup> Station 21 would be on Chapman Highway

- o Retirement incentives should not be necessary to promote turnover among senior personnel of the department.
- o Based on an organizational study, reorganize the department to reduce the number of senior officers, improve administrative support, and facilitate better management.
- (5) PROBLEM: The department has not enforced the physical fitness standards which were developed and adopted for the department.

On July 1, 1986, the department adopted a set of physical fitness standards for all personnel which were developed under contract by the Advanced Research Resources Organization of Bethesda, MD, specifically for the department. General Order 86-03, issued July 1, 1986, presented the physical fitness standards which were required, provided a 12-week program of conditioning exercises which would assist in meeting the standards, and set forth a testing program. At the end of 90 days, all department personnel were to be tested. Any personnel who did not pass the tests (which are graduated for age and sex) would receive an oral reprimand. Every 90 days thereafter, all personnel would be tested, and the disciplinary action prescribed for not passing the tests would become progressively more severe.

Given the sometimes extreme physical demands placed upon police and firefighters, good physical conditioning is recognized as essential to protecting public safety personnel from injury and disability. Recognizing this fact, the City of Knoxville has developed physical standards for both the Police and Fire Departments. However, even though officially adopted by the Fire Department, there has been no testing, no follow-up, and no disciplinary action taken by the department to implement the physical standards.

#### **RECOMMENDATIONS:**

- o Enforce the currently-adopted physical standards uniformly.
- o Set aside time in firefighters' daily work schedule for physical conditioning.
- (6) PROBLEM: The department is limited in its ability to select and recruit the best personnel available by rules which restrict all promotional opportunities to current employees.

Under current civil service rules applicable to both the Police and Fire Departments, any position above the entry level which becomes vacant must be filled by promoting a current employee. While this is clearly advantageous to existing employees, who certainly should be considered for any vacancy, it also handicaps the department by

artificially restricting the pool of otherwise-qualified applicants. This is particularly significant at the officer level, where specialized or extensive experience in another city would clearly qualify an applicant.

Another handicap which the department carries is the fact that there are virtually no positions in the prevention, education and administration functions which are not filled by uniformed firefighters. In most of the 10 Southeast cities surveyed, specialized civilian positions such as data entry clerks, administrative officers, computer operators, planners and office managers are frequently found in jobs filled in Knoxville by uniformed firefighters. These positions could more appropriately be filled by specialized civilian employees at a reduced cost.

#### RECOMMENDATIONS:

- o Revise Civil Service rules to open all positions in the department to applicants from outside the department.
- o After thorough study, reclassify some administrative jobs from uniformed to an appropriate civilian classification.

#### B. EQUIPMENT, AND DEPLOYMENT OF EQUIPMENT AND PERSONNEL

### (1) PROBLEM: Current fire station location and deployment could be improved.

One of the information items which was requested in the survey of 10 comparable cities' fire departments was the number of fire stations which the cities operated. The results of that question are shown in Table 4:

TABLE 4.
FIRE STATIONS
KNOXVILLE AND 10 SOUTHEAST CITIES

| City              | Population | No. of Stations | Population<br>per Station |
|-------------------|------------|-----------------|---------------------------|
| Baton Rouge, LA   | 219,000    | 19              | 11,526                    |
| Charlotte, NC     | 322,000    | 24              | 13,417                    |
| Greensboro, NC    | 156,000    | 16              | 9,750                     |
| Montgomery, AL    | 178,000    | 14              | 12,714                    |
| Newport News, VA  | 160,000    | 8               | 20,000                    |
| Orlando, FL       | 128,000    | 10              | 12,800                    |
| Portsmouth, VA    | 104,000    | 9               | 11,556                    |
| Roanoke, VA       | 100,000    | 13              | 7,692                     |
| Shreveport, LA    | 206,000    | 12              | 17,167                    |
| Winston-Salem, NC | 132,000    | 19              | 6,947                     |
| KNOXVILLE         | 175,000    | 19              | 9,211                     |

Compared to these ten cities, only 2 have a population/fire station figure lower than Knoxville. While there may exist a number of reasons which argue for a higher number of fire stations in Knoxville, the only valid test for a particular fire station location pattern is to provide an adequate response time to fire alarms. In Knoxville's case, the response time is very good: observed response time in a study conducted in 1981 and 1982 was 3.6 minutes.

The problem in Knoxville with maintaining 19 fire stations is that the department's manning strength has been gradually reduced over the years since this particular station location pattern was fixed (the last addition or change in the location pattern was in 1979; there have been no major changes since 1967). As a result, there are times when the staffing is inadequate to fully man all of the 25 engines which call for 4-man crews.

When considering reductions in engine companies or stations housing these companies, it is advisable to examine the average number of alarms which would have to be handled by a newly-relocated or consolidated engine company. In Knoxville the number of alarms answered by an engine company in a year varied from a high of 534 to a low of 108 alarms in 1985. This translates to a highest workload of 1.5 calls per day to a lowest workload of 2 calls per week. Of these calls, approximately 9% were actual structural fires; another 36% were grass, trash or automobile fires. This yields a highest workload figure for an engine company of one actual fire every 1.5 days, and one structural fire every 8 days, and a lowest workload of one actual fire every 8 days, and one structural fire every 36 days. These are very modest statistics when compared to many urban fire departments which experience both alarms and fires at 10 times the rate per engine company.

The conclusion that can be reached from these statistics is that if response times could be maintained at the current level, the number of fire stations and engine companies could be reduced without causing an excessive workload for any single engine company. It is apparent that most of the other Southeastern comparison cities provide adequate distance coverage and response time with far fewer stations, at least as roughly measured by their ISO ratings of "3" or lower. The best example is Newport News, VA, which operates a fire department for a city with approximately the same population as Knoxville with only 8 fire stations, in a city that is bisected by a major railroad and two freeways, has a downtown street pattern that was laid out before 1800, and includes one of the largest shipyards in the country.

After examining the alarm distribution, the information from other cities, and the data prepared by the city in 1982 as part of a fire station study, the Task Force concluded that Knoxville could provide the same level of fire protection with a reduced number of fire stations and engine companies. Specifically, the Task Force found that it would be possible to close 6 of the 19 existing fire stations,

substitute for the former ladder trucks, while also serving as the primary response pumper for the station from which it operates. The problem with this arrangement is that the department's response to a residential fire alarm requires two pumpers and one "ladder" truck. The squads respond as a ladder truck to all residential alarms in their part of the city. This seems reasonable until compared with another department policy, which calls for the use of a 75' aerial or tower on any structural fire in a building of more than 2 stories. With a building of 2 stories or less, a 40' ladder of the type carried by the squads is not needed, while any buildings which are taller require a 75' aerial.

The net result is that the 40' ladders are seldom if ever used, and the response of the squads to residential fires as a "ladder" truck is useless. In fact, a firefighter on one of the squads admitted to a Task Force member that the 40' ladder on his squad had never even been taken off the truck, either for training or a fire, since the vehicle was delivered over two years ago.

A more appropriate solution would be to equip every engine company with a 24' to 36' ladder mounted on a roller rack above the hose bed of the truck. With such equipment, response to residential alarms in two story-or-less buildings could be reduced to two engine companies, since both would have the capability to set a ladder if needed.

A further engine modification which could benefit the department's capabilities would be the combination of powered aerial ladders with pumpers. Termed a "quint", describing its 5 different capabilities, such units are used by many other departments, including Newport News, VA, one of the 10 comparison cities. If a quint carries a minimum of 100 feet of ladders (including the powered aerial), it qualifies for ISO rating purposes as a pumper and also receives credit as a ladder truck, while capable of being operated by much less than the 8 firefighters which would be required for two separate units.

#### (b) Self Contained Breathing Apparatus (SCBA)

Federal OSHA rules require that all firefighters who are exposed to smoke or toxic gases in firefighting must be equipped with a self-contained breathing apparatus, or "air pack" as they are commonly referred to. The Knoxville Fire Department does not always meet this standard, since there are normally only two air packs on an engine, and if three men of a four man crew are required to enter a burning structure, one must do so without protection. It is has also been brought to the attention of the Task Force that the department does not enforce the rule that smoke exposure requires the use of an air pack. Both of these problems should be remedied immediately.

#### **RECOMMENDATIONS:**

o Investigate the possibility of replacing selected full-size pumpers with "mini-pumpers"; eliminating the squad concept and mounting

- smaller ladders on all pumpers; and replacing pumpers paired with an aerial with a combination pumper/aerial.
- o Enough air packs (SCBA) should be available on every engine to provide one for every crew member; use of this equipment should be mandatory where smoke or toxic fumes are present.

#### C. MANPOWER UTILIZATION

(1) PROBLEM: There is no pre-planning or fire master planning in the department at any level.

#### RECOMMENDATIONS:

- o Every station should be responsible for pre-planning all commercial and high-risk occupancies in their geographic area.
- o Fire Master Planning should be conducted at the departmental level for the entire city.
- (2) PROBLEM: Prevention, education and inspection should be the concerns of the entire department, not just the Fire Prevention division.

#### RECOMMENDATIONS:

- o A voluntary home inspection program, conducted by firefighting units, should be instituted.
- o The commercial inspections workload should be shared between firefighting units and the full-time inspections staff.
- o Fire prevention education responsibilities should be shared with all department personnel.

#### D. MANAGEMENT AND ORGANIZATION

- (1) PROBLEM: Staffing shortages frequently appear around major holidays and during the Summer months; annual leave and sick leave are not well managed.
  - o Improve management and scheduling of annual leave, sick leave and work scheduling.
- (2) PROBLEM: The department's records system is inadequate for all types of information.

#### **RECOMMENDATIONS:**

o Install a computer-based records system that would include all inspections, fire incidents, hydrants, equipment and personnel records.

- o Adopt the TFIRS fire incident reporting system, as recommended by the State, to provide comparability with other cities in Tennessee and nationwide in fire statistics.
- (3) PROBLEM: Overtime pay in the department is not based on a consistently-applied set of regulations; evidence exists of special exceptions which allow some personnel to collect overtime while others are prohibited from doing so.

- o All overtime worked should be treated as required by the Fair Labor Standards Act.
- o No personnel should work "regularly scheduled" overtime, or be afforded special consideration for the opportunity to collect overtime compensation.
- o The city should revise its overtime pay policy to conform to FLSA in allowing payment of compensatory time off <u>in lieu</u> of cash payments for overtime.
- (4) PROBLEM: The overall management of the department needs improvement.

#### RECOMMENDATIONS:

- o All personnel at or above the rank of Captain should participate in a mandatory curriculum of management training.
- o A long-range planning function should be established, either in the Fire Department, or under the Public Safety Director.
- o The department should develop performance measures which should be used to evaluate the effectiveness and efficiency of the department's operations.
- o Consideration should be given to consolidation of some administrative functions with the Police Department under the supervision of the Public Safety Director.
- o Internal communications between the Department's management and the rank and file needs to be improved, possibly by securing professional assistance in Organizational Development and Communications from a qualified consultant.

#### E. OTHER ISSUES

(1) PROBLEM: The water system in some parts of the city is inadequate for firefighting.

#### **RECOMMENDATIONS:**

o The city should work with KUB to upgrade the water system in those parts of the city where the system is inadequate for firefighting.

# ABSTRACT KNOXVILLE BLUE RIBBON TASK FORCE REPORT TO THE MAYOR APRIL 9, 1987

The Blue Ribbon Task Force appointed by Mayor Kyle Testerman in October, 1986, has completed its charge as defined by the Mayor and has prepared this report to communicate to the Mayor and the City its findings and recommendations regarding the operation of the Knoxville Fire Department.

#### FINDINGS:

- o The Insurance Services Office fire insurance rating for Knoxville is good: Class 3. This rating would, in all likelihood, not change if the recommendations of this report were implemented.
- o The average response time of the Fire Department for emergency calls is very good: less than 4 minutes. The average response time would still be under 4 minutes if the recommendations of this report were implemented.
- o The management and leadership of the Fire Department needs improvement. The lack of effective management has compounded and contributed to the other problems facing the department.
- o The lack of a meaningful career development program has led to promotions to higher grades to provide pay increases for some, while most firefighters have no opportunity for advancement. The pay of Knoxville firefighters is well below the average for comparable Southeastern cities.
- o The Fire Department has not hired any new personnel in 10 years. The average age of the department is 45, and the average length of service is 20 years. When combined with the pattern of promotions for pay increases, this has produced a department with 18 Deputy or Assistant Chiefs and a shortage of firefighters.
- o There are too many fire stations and too many engine companies for the workload. When coupled with a staff shortage, this results in crew sizes of 3 or less men per company in some cases.
- o There is a serious lack of training, both in firefighting skills and management, in the department.
- o Equipment is not replaced regularly, and some equipment is lacking or inappropriate for its intended purpose.
- o Organizational communications, organizational development and human relations programs are deficient.
- o The Firefighting Division's time is not well-utilized. Firefighting staff do not participate in fire prevention, inspection or public education programs.
- o As a result of all of these problems, morale, initiative and motivation have suffered.

- o A Career Development program should be developed, following the model provided in this report, which reduces the number of classifications, develops rate ranges within a pay grade, and ties pay to a rigorous system of skills testing and performance evaluation.
- o Six fire stations should be closed, two new stations constructed, and four engine companies eliminated.
- o The department should enter into Mutual Aid Agreements with surrounding full-time and volunteer departments. The department should also institute a formal call-back policy to recall firefighters in a multiple-alarm situation.
- o All engine and aerial/tower companies should be staffed with four personnel.
- o The management of the department must be improved so that it can properly direct, supervise and motivate the department's employees, and manage the department's records and administrative functions.
- o Training in basic and advanced firefighting, fire command, company officer and all levels of management skills should be significantly increased.
- o Firefighting personnel should be involved in fire pre-planning, inspections, prevention and education programs.
- o Replacement of equipment should be regularly scheduled; pumper, ladder and aerial functions should be combined on multi-purpose trucks when the opportunity arises; more self-contained breathing apparatus (air packs) should be provided on response vehicles.
- o The department should be reorganized with fewer Chief positions and fewer layers of supervision.
- o The water system in outlying areas of the city should be upgraded to urban fire protection standards.
- o The physical fitness standards adopted by the department should be enforced.
- o If all of the above recommendations pertaining to the qualification and performance of the department's personnel are implemented, the pay scale for the department should be increased to a level comparable with other Southeastern cities.

The Task Force wants to stress the fact that all of the problem areas identified are closely inter-related. The recommended solutions are equally inter-related: the recommendations should be viewed, and implemented, as a package. Piecemeal solutions, as the past 10 years have demonstrated, will not solve these problems. Success will require the commitment of the department, the Mayor and the City Council, working together over a period of years, to make the improvements recommended.