

SAFETY REVIEW PANEL

FINDINGS & RECOMMENDATIONS

JANUARY 1987

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

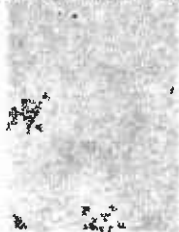


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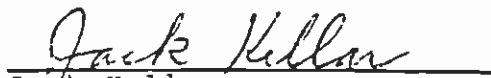


SAFETY REVIEW PANEL

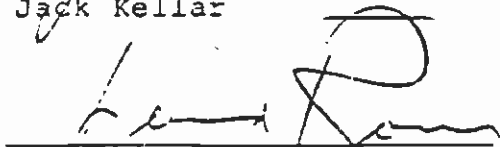
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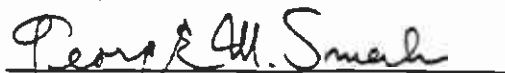

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**SAFETY REVIEW PANEL
EXECUTIVE SUMMARY**

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EXECUTIVE SUMMARY

This section contains the findings and recommendations agreed to by the full Safety Review Panel in their public meetings of Friday, November 20 and Saturday, November 21, 1986 held at SCRTD offices in Los Angeles.

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EMPLOYEE COMMENTS AND ATTITUDES

FINDINGS

1. Some employees state that the current Drug and Alcohol Policy should be clearer and tougher.
2. Division managers are not always available at times when operators check in and out.
3. RTD services are spread too broadly to be covered by its management resources.
4. Shortage of operators results in excessive overtime and potential fatigue.
5. Early retirement aggravates shortage of operators; so does abuse of sick leave policy.
6. Some employees state that schedules do not always provide enough recovery time.
7. Some employees perceive that the Rail project causes management to give inadequate attention to bus operation.
8. Abuse of sick leave may be causing part of the operator shortage.

EMPLOYEE COMMENTS AND ATTITUDES

RECOMMENDATIONS

- RTD should adopt a stricter Drug and Alcohol Policy, with no exceptions: anyone found with alcohol or any sort of drug should be dismissed. At the same time, the Employee Assistance Program should be very strongly emphasized and those persons with drug, alcohol, or other problems should be given maximum encouragement to avail themselves of the help provided.

- Upper levels of management at the division level should arrange their hours to be available when the maximum number of operating personnel are present.

- RTD should seriously consider cutting back on its service to fit within the management resources available, or enlarge the resources to fit the need.

- The operating staff must be enlarged. More resources must be devoted to the training process to accomplish this growth.

- The early retirement program should be reevaluated; incentives should be given to help retain experienced employees. The sick leave policy should be reviewed and tightened to cut abuse.

- RTD should establish a regular practice to gain input from operators and road supervisors in the scheduling process. Schedules should be reevaluated for feasibility at least annually.

- There should be a regular review of the management structure to ensure that proper and adequate attention and personnel are assigned to manage the bus operation.

SELECTION AND EMPLOYMENT

FINDINGS

1. By hiring only part-time bus operators, RTD excludes those applicants with the greatest potential for being successful operators. Also, this increases the training and administrative load.
2. Selection tests are rejecting too many applicants.
3. Interviewers need more training.

SELECTION AND EMPLOYMENT

RECOMMENDATIONS

- Employ full-time bus operators as well as part-time operators.
- Provide specialized training to better enable interviewers of applicants for bus operators to evaluate attitudes, responsibility, and emotional stability.
- Further development to provide more appropriate selection tests is needed.

TRAINING AND INSTRUCTION

FINDINGS

1. The number of instructors is insufficient for the evident workload.
2. Not all instructors are fully qualified, e.g., on the routes and equipment.
3. Each instructor is currently responsible simultaneously to more than one manager, and the training function is divided and uncoordinated.
4. This confused chain of command, combined with inadequate leadership and failure to evaluate performance, tends to make the instructors complacent.
5. Some operating procedures are incorrectly stated in the rule book and handbook; still others are needed.
6. Accident follow-up policies are almost never observed in a timely fashion.
7. Preventive programs for high accident lines are seldom carried out.

TRAINING AND INSTRUCTION

RECOMMENDATIONS

- Increase the number of instructors.
- Improve/enhance instructor training.
- Reorganize to establish a clear, direct chain of command.
- Update, revise, and enhance Standard Operating procedures covering operator tasks. Distribute them, with refresher training, to each bus operator, supervisor, and instructor.
- A performance observation ride must be made with any bus operator who has had an accident by an instructor no later than the following workday.
- Instructors must initiate preventive refresher programs within 30 days on identification of any line that is found to have a high accident rate.

SERVICE SUPERVISION

FINDINGS

1. Road supervision is the weak link in RTD service control with only one mobile supervisor for every 80 buses in peak service and little direct supervision to direct and assist the supervisors themselves.
2. The number of road supervisors is insufficient for the evident workload.
3. Not all supervisors are fully qualified on the routes and equipment.
4. The next level of supervision, those who supervise the supervisors, is also inadequately staffed.
5. This inadequate leadership, combined with failure to evaluate performance, tends to make the road supervisors complacent and results in low productivity and slow reaction to changing operating conditions.

6. Training for radio and street supervisors is minimal. Existing manuals are detailed as to institutional requirements and paper work but are shallow in guidance for judgmental tasks. Standard procedures by which bus operators are to be judged are inadequate. Lacking such standards weakens the violation citation process, and breeds laxity as well as confrontation with the unions.
7. Follow-up for periodic reaffirmation of comprehension and compliance with standards of behavior and performance is now more reactive than preventive.
8. Systematic observation of service as experienced by the users and the bus operators is lacking.

SERVICE SUPERVISION

RECOMMENDATIONS

- Increase the number of supervisors and supervisor districts.
- Improve/enhance supervisor training.
- Increase the number of managing supervisors.
- Develop and publish tested Standard Operating Procedures covering more operator tasks. Distribute them with refresher training to each bus operator, supervisor, and instructor.
- Develop, test, and document a variety of strategies for team and independent action by radio dispatchers and road supervisors to mitigate service delays. Distribute them, with refresher training, to all supervisors.
- Introduce substantial use of preventive supervision to deter violations by bus operators and to alert management to developing problems with both discipline and regularity of service.

-- Establish a new service observation function to monitor field performance of service, providing input data for updating running time and identifying long term changes in operating problems to senior managers.

ACCIDENT REPORTING AND INVESTIGATION

FINDINGS

1. National Safety Council defensive driving program now used by RTD is inappropriate for professional bus operator training.
2. During the initial training of bus operators, the actual practice driving time is sometimes less than RTD standards.
3. Some division managers lack sufficient experience and knowledge to evaluate and make decisions concerning accidents.
4. In cases of non-chargeable accidents, the division manager may never even discuss them with operators.
5. Operator violations are not processed consistently because of poor identification procedures, and, therefore, an operator's poor performance may not be properly documented.
6. Some division managers have not developed good rapport with their operators because of insufficient contact with them.

7. Shake-ups consume a great deal of instructor time, thereby, adding to their already over-burdened workload.

8. Inadequate coordination between Safety and Transportation Departments is hampering implementation of improved procedures.

ACCIDENT REPORTING AND INVESTIGATION

RECOMMENDATIONS

- Develop and implement defensive driving program specifically addressing RTD bus operating problems.
- RTD should find a way to meet its standards.
- Develop and implement a program to train division managers to make decisions concerning accidents.
- Division managers must discuss non-chargeable as well as chargeable accidents with the involved operator.
- RTD should develop a more positive way to readily identify which operator is on which bus at any given time.
- Division managers must improve the quality of management and supervision skills and increase the amount of their time available to operators.
- Plan should be developed to more efficiently deal with shake-ups.
- Safety Department should be better coordinated with Transportation Department.

ADMINISTRATION OF DISCIPLINE

FINDINGS

1. In a recent sample, Drug and Alcohol violation was the most frequent cause of discharge of bus operators.
2. The bus operators' union, although a party to the Drug and Alcohol abuse program which established penalties, continues to appeal cases ~~of~~ which are of questionable merit.
3. The system of demerits as currently used is ineffective.
4. Some discharge reinstatements agreed to by management are of questionable merit.

ADMINISTRATION OF DISCIPLINE

RECOMMENDATIONS

- More firmness and consistency are required of management in the application of discipline.

- The Drug and Alcohol Policy must be firmly administered and strictly enforced.

- Rules must be enforced. Poorly advised past precedents must not be repeated.

- Greater cooperation is required from the bus operators' union in the administration and enforcement of the Drug and Alcohol abuse program.

ACCIDENT STATISTICS

FINDINGS

1. Traffic Accident Monthly Summary Report issued by the RTD appears to be the most accurate data report available.
2. Comparison of accident data between transit systems is invalid for numerous reasons, for example, climate, geography, traffic congestion, and differing interpretations of accident definitions.
3. Accident statistics published by the U. S. Urban Mass Transportation Administration are not based on industry standards, and, therefore, are not comparable between transit systems.
4. The RTD does not currently use its accident data to analyze types of accidents and problem locations for development of preventive programs.
5. The RTD has at least three different internal systems for tracking accident data with no coordination among them.

ACCIDENT STATISTICS

RECOMMENDATIONS

- Develop a sectionalized notebook containing full descriptions of criteria and definitions for data submitted under each reporting system so that compilation of data can be verified.

- Coordinate all statistical reporting systems so that data supplied under each are compatible.

- Improve RTD system for tracking accurate accident data so that internal comparison of accident rate change from year to year can be accomplished.

- Develop analytical reports on a periodic basis from RTD accident data base for division manager use in developing and tracking accident prevention programs.

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

SAFETY REVIEW PANEL

BACKGROUND DISCUSSION PAPERS

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These are working documents developed by individual Panel members from their individual or group research using task teams of not more than three Panel members. They were all prepared in the period August 22-November 19, 1986, for use in reaching the consensus of findings and recommendations which is presented in the Executive Summary.

These papers are included here as discussion and explanatory appendices.

CHAPTER I - EMPLOYEE COMMENTS AND ATTITUDES
(Part I, by Charles W. Thomas)

Findings and Recommendations

Based upon our work assignment, George Smerk and I collaborated on a questionnaire (See Page I-2) to ascertain employee views toward Safety, Discipline and Alcohol and Drug Abuse. The questionnaire design is a combination of open and close type questions. The open questions were used to get an in-depth answer from the respondents instead of a yes or no. (Some of the open responses will be discussed later in the report.)

The results of this report came from the mechanics and drivers of Division 10. The questionnaire was administered to three mechanics and twelve drivers on September 19, 1986. The methodology used was to interview each respondent individually, privately explain the purpose and scope of the interview, require honesty, and promise anonymity. None of the respondents declined to be interviewed under these circumstances.

The mechanics were chosen at random by shop management. Some of the drivers were chosen by management, others were chosen because of their curiosity, and still others requested to be interviewed at the urging of fellow respondents. To my knowledge, none of the respondents prompted other respondents.

On September 18, 1986, the questionnaire was reviewed by the president/business agent of the mechanics and drivers. Neither of them had any reservations about the questionnaire nor administering it to their members.

RTD SAFETY REVIEW PANEL
QUESTIONNAIRE

DISCIPLINE

1. Have you every been disciplined for a safety-related offense? _____ If so, what was the offense? _____
2. What was the penalty? _____
3. Do you think the penalty has made you more safety conscious? _____
If so, in what way? _____
If not, why not? _____
What would make you more safety conscious? _____
4. Do you think RTD makes an effort to emphasize safety? _____
If so, in what way? _____
If not, what should be done? _____
5. On a scale of 1 to 10, with 10 being the highest (100%), how often do you think about working safely during your average work day? _____

OTHER COMMENTS: _____

DRUG USE

6. Do you know the penalties for violation of RTD's Drug & Alcohol Policy? _____ What are they? _____
7. Have you ever been disciplined for violation of RTD's Drug & Alcohol Policy? _____ If so, what was the offense? _____
8. As a result of the action of RTD, have you changed your opinion about drugs/alcohol on the job? _____
If so, how? _____
If not, why not? _____
If not, what would make you conform to RTD's policy? _____
9. What is your estimate of the number of fellow employees' who do not honor RTD's Drug & Alcohol Policy? _____ (%)
10. What do you think can be done to get employees to conform to the Drug & Alcohol Policy? _____
11. Do you think RTD's Drug & Alcohol Policy is fair? _____
If not, why not? _____
What benefits do you think EAP has? _____

OTHER COMMENTS: _____

PART-TIMERS

12. Were you hired as a part-timer? _____ If yes, what were the motivational forces which kept you here until you became full time? _____
If no, what do you believe are the motivational factors which keep part-timers here until they become full time? _____
13. What other inducements/benefits do you think should be available for part-timers? _____

OTHER COMMENTS: _____

14. DEMOGRAPHICS

- a. Age of respondent _____; b. Years of service with RTD? _____; c. Years of safe driving (no accidents) _____

Although the survey was not designed to be a statistically accurate model, it was designed to give the Committee some insight to the issues of Safety, Discipline and Alcohol and Drug Abuse as viewed by the RTD employees. To that end, I believe the survey has done its job.

Results of Questionnaire

Number of drivers questionnaire administered:	12
Average Age of Respondents (years):	41
Range of Age of Respondents (years):	24-54
Average Number Years of Service as RTD Driver (years):	8.3
Range of Years of Service with RTD as a Driver (years):	2.5-18
Average Number Years of Safe-Driving Award:	6.4
Range of Years of Safe-Driving Award:	2-12
Number and Percent of Drivers' Responses who were Part-Time Drivers:	5 (42%)
Average Time Served as Part-Timer (months):	18.6
Range of Time Served as Part-Timer (months):	3-27

The largest group, Discipline/Discharge with a 29.2% response, had the belief that the fear of losing one's job is the prime method for getting conformance to RTD's Alcohol and Drug Abuse Policy.

Mandatory and Random Testing were 25% of the responses given as a way to curb drug abuse. Many employees expressed not liking the random testing but viewed that as the only way to curb drug use.

The next largest group, 20.8%, emphasized that RTD had not done enough to warn the employees of the hazards of drugs to the users. They believe that RTD should hold seminars, issue reminders, and generally educate the employees to the ills of drug use. It was illustrated that the Division barbecues get more publicity than drug abuse.

The fourth group, 12.5%, stated that some employees do not enter the EAP because of a lack of anonymity. They cite the identities of employees entering the program are immediately known. Further, those who complete the program and return to work are "marked men/women." Management treats rehabilitated employees with little regard.

Of the remaining response, 8.3% of the opinions were they had no recommendations and 4.2% of the opinions believed that embarrassment of entering rehabilitation or discharge would get them to conform.

For Question 1, 11 (or 73%) of the respondents stated that they had not been disciplined for a safety-related offense. The remainder, 4 (or 27%) had discipline ranging from a written warning to two days suspension. In each of the four instances,

the employees stated that it was not the penalty that made them more safety conscious about their particular violation; but, it was the accident/violation itself which made them more alert.

When Question 4 on RTD Safety Emphasis was asked, 60% responded yes and cited as examples, safety posters, instruction follow-up, safety awards, weekly safety meetings, and daily reminders in the shop. Forty percent stated no or a combination of yes and no. This group agrees that RTD does the above things in the name of safety. However, they say there is no substance and cite no follow through on safety-related repairs and laxity in allowing equipment with safety defects to enter service.

Question 5 had only two respondents (13%) who admit that they thought about safety less than 90% of their working day. One respondent stated 60-70% of his working day, the other stated about 50% of his working day. The latter stated that roll-out pressures caused him to forego safety practices.

Although Question 6 received a 93% yes response, when asked if they knew the penalties for violating the RTD Alcohol and Drug Abuse Policy, most said firing for cocaine use but were unsure about marijuana--stating 10-40 day suspensions.

The only question which received a 100% no response was Question 7, when asked had they been disciplined for violating the Alcohol and Drug Abuse Policy. However, at least 30% (5) stated they know or knew someone who is/was a user on the job (persons who had been caught and fired).

Question 9 was designed to get an insider's sense of what the extent of drug and alcohol use may be. According to the group interviewed, alcohol use on the job is almost non-existent. The average estimate of drug use is 8%. Five respondents (or 30%) gave an estimate of 10% drug use on the property. A story released on September 17, 1986, by the Los Angeles Times stated that 11% of RTD drivers screened were found to have drugs in their systems. This information may have biased some of the employee estimates.

Question 10, which asked what could get employees to conform to the Alcohol and Drug Abuse Policy, is an open question. Thus, a variety of answers were forthcoming.

Results of Question 10

<u>Responses</u>	<u>Number</u>	<u>Percent</u>
Do Not Know	2	8.3
Make aware of dangers; educate employees to hazards.	5	20.8
Mandatory & Random Testing	6	25.0
Discipline (Discharge)	7	29.2
Improve EAP Anonymity	3	12.5
Embarrassment	<u>1</u>	<u>4.2</u>
	24	100.0
	====	=====

NOTE: Total greater than number of respondents due to some respondents giving more than one answer.

Question 12 is self-explanatory and was the basis for determining the results on part-timers.

Questions 12a and 12b were designed to get responses from the part-timers themselves or to get the understanding from the full-time employees of the motivational forces which kept them at RTD until they made full time.

<u>Responses (12a and 12b)</u>	Part	Full	<u>Total</u>	<u>Percent</u>
	<u>Time</u>	<u>Time</u>		
College Student	-	1	1	5.9
Second Income in a Family	-	2	2	11.8
Good Pay/Good Benefits	3	3	6	35.3
Ultimately Good Job/Better Future	1	3	4	23.5
Job Prestige/Like Job	1	1	2	11.8
No Other Work Options	-	2	2	11.8
	5	12	17	100.1
	====	===	====	=====

Of the five part-timers, three indicated until they made full time status, they had a second part-time job to make ends meet.

Of the two who did not work a second part-time job, one, a single parent, did not work in the interim, the other had a spouse who worked full time.

Question 13 tried to find out what other benefits or privileges should be available to the part-timers.

<u>RESPONSES (Question 13)</u>	<u>PART</u> <u>TIME</u>	<u>FULL</u> <u>TIME</u>	<u>TOTAL</u>	<u>PERCENT</u>
Get Rid of Part-Timers	1	-	1	7.1
None; O.K. as is	-	1	1	7.1
Same Benefits as Full Time	1	3	4	28.6
No loss of Seniority & Benefits ⁽¹⁾	2	-	2	14.3
Medical for Families	3	-	3	21.4
Do Not Know	<u>-</u>	<u>3</u>	<u>3</u>	<u>21.4</u>
	7	7	14	99.9

(1) Respondent wanted all benefits to continue from plateau in part-time service. Current practice--benefits and seniority begin anew when employee becomes full time.

It is interesting to note that of the four responses to the Other Comments question, three responses were that there should be no part-timers; one response was from a full timer and two responses from part-timers.

Question 11 was designed to elicit employee opinions about the fairness of the RTD Alcohol and Drug Policy. Two-thirds of those sampled believed that the policy is fair; one-third responded yes and no or no.

The yes/no answers totaled 13% and reasoned that drug testing is an invasion of privacy and abuses their rights; unfair because all drugs are not treated equally, i.e., marijuana users can get

help through rehabilitation while other users are summarily discharged. This group could offer no alternate solutions and viewed the policy fair with the stated caveats (one respondent reasoned that cocaine, PCP, etc., users need help more than marijuana users because the "hard drugs" are more addictive and, without a job, the hard drug user has only one alternative to feed his/her habit--crime. Thus, by not treating all drugs equally, i.e., the opportunity for rehabilitation, RTD could be adding to the junkie population).

The remaining respondents, 20%, stated no to the question of policy fairness. The reasons were as follows:

- o RTD not compassionate toward employees with drug problems (it's a sickness--not a disease).
- o The EAP counseling is ineffective. Employees need a hospital setting where they can totally "withdraw" from drugs.
- o EAP interested in amount of money the employee has before help is offered.
- o The equity issue of marijuana vs. cocaine, et al.

The above responses were received from 15 respondents; 20% representing maintenance, 80% operators. The group has an average age of 40 years and an average length of service of 8.2 years.

Recommendations

Finding 1: Street Supervision appears to be extremely thin, causing supervisors to be in a reactive mode rather than proactive mode for observing and preventing safety infractions.

Recommendation 1: Increase level of supervision effort.

Finding 2: There appears to be a heavy overtime requirement placed on operators to the point of working seven days per week for over one year, possibly causing drug use for relaxation.

Recommendation 2: Immediately develop a program for hiring to authorized operator levels.

Finding 3: The manpower factor for operators has been reduced from 1.32 to 1.27, which may cause daily run shortages.

Recommendation 3: Review the manpower factor.

Finding 4: The recent retirement change of "25 years and out" has exacerbated the manpower situation.

Recommendation 4: Immediately develop a program for hiring to authorized operator levels.

Finding 5: Hirees with a paucity of work experience have a more difficult time adjusting to expected operator performance levels.

Recommendation 5: Consider developing remedial driver training program for hirees with a paucity of work experience to improve their ability to become good employees.

Finding 6: The comprehensive Drug and Alcohol Abuse Policy introduced on August 21, 1986, by the General Manager, needs to be fully understood by all implementing supervisory personnel to be fully effective and understood by all employees.

Recommendation 6: The policy should not be introduced via the "trickle down" method. A training program should be developed and presented to supervisory personnel, thus ensuring only ONE interpretation of the policy.

Finding 7: There is a widespread perception that the operator schedules lack sufficient time for proper operation. The reason is primarily an excess of passengers.

Recommendation 7: Develop a program for checking schedules under current operating conditions with input from operators.

Finding 8: Comprehensive Alcohol and Drug Abuse Policy provides for operator continuing in-service up to three (3) hours beyond incident before screening (6.3.3.3).

Recommendation 8: Consider revising that section. Safety is the prime consideration. It should not be compromised for passenger convenience.

Finding 9: The development of the two rail systems requires much attention of the senior staff; hence, insufficient attention may be given to bus operation.

Recommendation 9: Review the operating management structure to ensure that adequate attention and personnel are assigned to the bus operation.

Finding 10: Transit Police are RTD employees, as are operators and others.

Recommendation 10: The role of Transit Police should be protecting RTD employees. Observation of violations by Transit Police of RTD employees should be forwarded to employee supervision for action.

Finding 11: Some equipment safety-related items may not be complete for in-service vehicles.

Recommendation 11: A safety item check program should be developed to ensure vehicle safety items are complete before vehicles are released for service.

Finding 12: The anonymity of employees entering the EAP may not be as secure as possible.

Recommendation 12: Review the procedures for EAP and add safeguards to ensure employees anonymity to the greatest extent possible.

Finding 13: The psychological motivation for using drugs are widely known; however, the physical damage to the individual is discussed very little.

Recommendation 13: Develop an awareness program for RTD employees, warning them of the physical hazards of drugs through seminars, posters, paycheck reminders, etc.

Finding 14: During the siege upon RTD by the news media, the riders have begun hurling editorial-like insults at the drivers, thus increasing their stress levels.

Recommendation 14: during this period, RTD should periodically praise employees for their ability to continue safe, courteous and dependable service to their customers, in spite of the banalities of the press.

Finding 15: A review of the new hire operator training schedule indicates generally good coverage of the techniques and areas necessary for a complete training program.

However, one area, in my opinion, which requires additional coverage is splitting headways in Phase II - The splitting headway lesson plan is key because it provides the new operator the actual conditions in which he/she will be operating. The operator trainee comes face-to-face with the need to operate safely; the operator trainee is confronted with being courteous towards passengers; the operator trainee is required to keep the schedule. Thus, the headway splitting lesson is sobering to the operator trainee.

It is this writer's opinion that a single day of headway splitting is insufficient. Although I view that it is in the proper position in the training program, I find there is just not enough of it.

Essentially, the headway splitting lesson accomplishes at least three goals. First, it communicates to the instructional staff and the trainee how he/she has grasped the techniques developed in the previous 12 days of training. Second, headway splitting provides the instructors with the trainees' weaknesses prior to Phases III and IV. Third, it provides the trainees the full experience to assess whether they really can handle the job.

Headway splitting is no simulation. It is the "real world" in which the trainee must operate.

Recommendation 15: Therefore, after completing the theory of driving and before line instruction and the final examination, I suggest that the trainee be subjected to a "dose of the real stuff." Therefore, I recommend that the headway splitting lesson be increased from one day to a minimum of three days. Recognizing that additional training days are costly, additional days can be included in the existing outline by converting the on-street operations, e.g., Lesson 38 to headway splitting lessons and adding a single day.

This change will greatly enhance the RTD training program and provide a plateau from which sobering assessments can be made.

Finding 16: The Safety Training Department's Managers and Supervisors appear to be dedicated, hard-working and enthusiastic about the training mission. Although some of them have come up through the ranks, they supplement their training skills learned through experience and rote with classes from local universities

and colleges. This action is laudatory and further supports the observation of dedication.

It is the opinion of this writer, that in addition to the above, the training department is in need of a professional trainer. A professional trainer is a person who has received a degreed education in training, teaching with experience. This observer believes it is essential that a resource person be available in the training department who can review and structure training programs from a professional viewpoint.

Recommendation 16: Training in transit at RTD, as well as the industry generally, has grown from simple week long sessions to complex month and longer training seminars. Thus, to adequately address the rigors and complexities of longer, more intense, multi-disciplined training, professional techniques and skills must be employed.

Much of the materials used for training are of the "cut and paste" variety. That is, material received from other transit properties on a particular subject are reviewed and the "best" questions, lesson plans, etc., are used in their plans. This is not to say a review of industry materials and practices is not reasonable. This method often produces a "quiltwork" approach to training, when a sequential or building block approach is more effective in training.

Thus, training professionals can provide a certain quality to the development and revision of training plans that is not currently available in the Operations Training Department.

CHAPTER I - EMPLOYEE COMMENTS AND ATTITUDES
(Part II, by Dr. George M. Smerk)

General

The following ~~of~~ impressions and information are the product of a series of interviews conducted in Los Angeles on September 18 and 19, 1986. The interviews included management personnel on all levels, specialized staff, union officials, and bus operators and bus mechanics at Division 10 and Division 15.

The shortage of manpower and its potential impact on safety was perhaps the most salient of the issues that were raised in the interviews. This was viewed as a serious problem and one that might lend itself to a less-than-safe operating environment by virtually everyone interviewed. The reason there were insufficient operators was blamed on a number of causes. The "25 and out" policy was seen as a culprit, and SCRTD management at our first meeting in August had indicated that a bad estimate had been made of what ridership would be after a substantial fare increase in 1985. The overtime and the long hours worked, while appreciated by those receiving increased pay, were also condemned as beating down the spirit of those involved. Working long hours with no days off causes fatigue and a lessening of morale. Potentially, fatigue could lead to unsafe operation.

Discussions with operators and some others made strong the belief that top management was at fault for the operator shortage and was apparently doing nothing to correct the situation; the number of operators leaving SCRTD through attrition always seemed to be

greater than those coming into the pool of drivers. There was also much criticism of the new crop of part-time drivers who were viewed, perhaps not always fairly, as being mostly welfare cases and not up to the standards of more senior drivers. There was an impression that drivers feared public appreciation of the driver's professionalism and skill was being eroded.

The opinion of the drivers, admittedly not a scientific sample, is that "it is hell out here." Particularly resented was the lack of change for a break at the end of a run. There was strong sentiment that schedules were unrealistic and were being made by people who never left the downtown office and that management did not care and was only trying to save money. The drivers felt that the scheduling people were totally out of touch. The drivers would really appreciate being represented in the process of scheduling, so that they could provide input; not being paid attention to has created bitterness on the part of drivers. Drivers and others noted the stress factor in schedules that were too tight plus taking risks in driving to try to be on time.

Whether or not there was enough supervision was an interesting issue. It was noted by several interviewees that drivers may get away with virtually anything they want because of the relatively sparse level of on-the-street supervision; such things as dropping part of a route, using other than proper streets, and a variety of other activities were considered commonplace. This apparent lack of on-the-spot supervision, even though it may appear to be relatively unconnected with safety, could give the

SCRTD a black eye in the connotations it has for management being truly vigilant on the lookout for use of drugs.

It was clear from discussions with mechanics and operators that there was a good deal of pride in the work and that there is a much different attitude between the two groups toward the matter of stress and strain. Based on a very small sample, the mechanical staff does not appear to be terribly strained, and had relatively good tools and facilities with which to work. There was only some minor stress in making sure enough buses were ready for the morning and afternoon rush hours. Some mechanics stated that the lack of bus operators meant that not all the runs could be filled and that relieved some pressure. There was hope that problems would not be too severe as the fleet aged.

The drug policy was a matter of some skittishness in discussion with operating personnel and mechanical staff. No one wanted to talk too much about it or admit that they thought there was much of a problem. The general statement was, "Well, the SCRTD is a cross section of Los Angeles." No one admitted to knowing too much about the policy, although it was clear that they knew more than they wanted to say. Several indicated that they thought that a person caught with drugs would be suspended. A consensus from interviews with mechanics and bus operators was that the penalty for drugs should be stricter, as was the notion that the original contract should be lived up to in which somebody caught with drugs was simply fired. That was clear cut and easily understood; the new policy's particulars appeared to raise more

questions than it answered. There was consensus, however, that the EAP program was a good idea and that it was truly helpful for a variety of problems beyond anything connected with drugs and alcohol.

There is a question about the policy in which an operator may continue driving after an accident as long as they are tested within three hours of an accident in which a specified amount of material damage was estimated to have been done. The three-hour overtime span in which it was possible for the operator to continue operating a bus could have had implications and possibilities in light of the firestorm of press coverage, especially if the person tested positive.

A possible area of interest and trouble was the issue of finding probable cause for a drug test in the absence of any move toward mandatory random tests. Aberrant behavior or other probable cause is a highly subjective matter and there was some discomfort with this. Also troublesome was the judgement required on an accident of a thousand dollars or more. This is probably not as difficult as the former policy of accidents with a value of \$2,000 or more. Virtually any kind of accident today would have a value of a thousand dollars for repairs so that may be ^amoot point. In any event, subjective judgement on some key factors is a potential cause of problems.

The issue of training was raised. The number of people coming from the driver training program was deemed to be insufficient and, as noted above, the new trainees were seen as rather poor in

comparison with older trainees. The part-time work schedule was seen to be a problem because it cut down the incentive for some really good people to take a job as a bus driver. Because of the way the part-time work is carried out, it is evidently not attractive to first rate people who just want to work part-time (such as college students trying to earn their way, or mothers trying to boost family income while their children are at school) because the extra board work is too unpredictable. It was suggested that much more training is needed of less-than-great trainees on the basics of how to deal with other people and how to deal with a regular work situation.

Specific Findings and Recommendations

Finding 1: The recruiting program of the SCRTD is narrowly focused on selection of people whose names are submitted through California's WINCOD program. This narrows the spectrum of people from whom SCRTD can select operators and rules out many persons who would find being a bus operator to be an attractive position. Moreover, it has been suggested that WINCOD people are harder to train, many offer substantial discipline problems, and are apt to have problems with attendance. Excellent operators have been found through this program but a broadening of the basis of selection would seem to give SCRTD a broader reach to potential operating employees. The likelihood of WINCOD candidates requiring more effort of SCRTD's limited training resources is also strong, straining those resources and making it more difficult to provide the number of drivers needed.

Recommendation 1: SCRTD should select its candidates for operator's positions from a broader base with no more than one third from the WINCOD program.

Finding 2: Selecting people only for part-time jobs to begin with also greatly reduces the possibilities for operator recruiting at SCRTD. It also means that more persons have to be trained to provide a given level of service.

Recommendation 2: Hire only a given portion of new operating personnel on a part-time basis, emphasizing the search for persons who truly are looking for part-time work.

Finding 3: There is apparently some confusion on the part of employees on the SCRTD drug and alcohol policy, especially on the apparent marijuana policy. Some employees see the policy as unjust.

Recommendation 3: The policy on drugs and alcohol should be strict and contain no exception; this should be stressed to all employees regularly in print and in training and retraining programs. At the same time, the EAP program should be stressed as strongly as possible and the strongest possible effort made to encourage those with drug or alcohol problems to avail themselves of the help provided.

Finding 4: In addition to training on the basics of actual operation of transit vehicles, there is a need for training on how to be a good employee and how to get along with people.

Recommendation 4: The basics of being a good employee (on time, careful in work, courteous, dedicated, etc.) should be constantly stressed. Special attention should also be paid to training operators on the best methods of dealing with the public and for combating stress in difficult situations.

Finding 5: Top management at most of the divisions overlap during the main hours of the working day. Apparently there is little upper level management available at certain other times, particularly those times when operators are checking in and checking out. This makes it difficult or impossible for operators to have an opportunity to talk with top management to

discuss problems or just to get to know upper management personnel better. The practice also limits the opportunity for managers to get to know the operating staff.

Recommendation 5: Division managers and assistant managers should adjust their schedules so that they are present at the principal hours of operator check-ins and check-outs.

Finding 6: The "25-and-out" policy of early retirement seems good on the surface, but is probably as good a way to lose the seasoned people in the organization as it is a true benefit to employees.

Recommendation 6: This policy should be reviewed carefully and incentives provided to retain senior employees.

Finding 7: There is a basic shortage of operators that appears to be chronic. The constant shortage of operators demands that operators work extensive overtime as well as missing days off; it is raising the frustration level of the operators, acts to elevate stress in an already stressful situation, and is having a deleterious effect on operator morale.

Recommendation 7: Sufficient operators should be hired to take care of attrition and build a small surplus of drivers for the extraboard. This should be accomplished within eight months. Hiring more full-time drivers will also help provide adequate personnel to meet the service requirements with fewer people.

Finding 8: There are a limited number of street supervisors but a large number of persons considered to be supervisory personnel. It is easily possible for a driver to get away with going off route or any other activity, including taking drugs, drinking, or just goofing off without being discovered by a supervisor.

Recommendation 8: Careful consideration should be given to the number and deployment of supervisory personnel to ensure adequate coverage of the system by road supervisors. A standard should be set to provide a level of supervision so that no road supervisor is more than 10 minutes from any part of the SCRTD system.

Finding 9: Supervisors and others whose judgement is necessary in accident and drug and alcohol situations are not adequately trained to judge accident costs, values or to recognize aberrant behavior.

Recommendation 9: Lowering the accident cost testing trigger to \$1,000 probably means that virtually every accident will be cause for a drug test, so accident valuation training is probably not necessary. Divisional management and supervisory personnel should be trained on how to recognize aberrant behavior, deal with it, and handle the problem of demanding drug testing.

Finding 10: A large number of people from the ranks of both operators and management stressed that the schedules are too tight. Morale suffers and the degree of stress imposed upon operators may grow intolerable.

Recommendation 10: There should be significant input by operators into the process of scheduling in order to cast the most realistic schedules possible. There is need to monitor existing conditions affecting schedule by soliciting information from drivers. The results should be shared with scheduling personnel to assure realistic schedules. Each route should be judged at each scheduling period. The contribution of road supervisors should also be sought in the scheduling process.

Finding 11: Radio dispatchers are not necessarily drawn from the ranks of bus drivers. This has caused unhappiness on the part of bus drivers because they feel that the radio dispatchers are not fully cognizant of the problems that occur out on the street.

Recommendation 11: Radio supervisors should be drawn from the ranks of drivers, or should have six months to a year of operating experience before taking the radio supervisor position.

Finding 12: Service is spread too broadly through out the region for the current resources of SCRTD to operate or manage.

Recommendation 12: Service should be concentrated where most needed until the resources are available to provide service that may be properly managed and operated.

Finding 13: Morale among drivers is very low. Contributing factors are the regular stress of driving, schedules deemed unrealistically tight, excessive overtime, and the current notoriety in the press concerning drugs and valid driver's licenses.

Recommendation 13 : SCRTD management, working with the unions, should act to correct this danger. Some of the previous recommendations should help. A program of positive reinforcement should be adopted with positive actions and publicity to inform the drivers that their efforts are appreciated and recognized. Fitness centers should be installed at each division as part of a program to relieve stress, build health, and engender better attitudes of operators and maintenance personnel among themselves and about themselves.

CHAPTER II - SELECTION AND EMPLOYMENT

by Leonard Ronis

Findings

The process of screening applicants for the bus drivers' job is critical in determining whether the transit system will be hiring people who will have the physical and psychological makeup that enables them to learn how to handle the job, to adjust to the job pressures, and to operate successfully without having accidents. This task has been subjected to much research during the past 75 years, however, none of the research has produced results that have been significant and useful in a practical sense. As a result, those who are responsible for selecting candidates for professional driving positions must exercise their best subjective judgement, using criteria derived from years of experience in employing and working with professional drivers.

The SCRTD employment screening process is similar to that of large transit systems elsewhere, however, before discussing its various steps, comment must be made on a factor which affects it significantly even before it starts.

SCRTD does not select applicants for full-time jobs. Because of an unusual clause in the UTU labor contract, since December 1, 1982, part-time operators have been offered the first opportunity to fill full-time positions when they become available, and with the part-time staff equal to 15% of the number of drivers, for all practical purposes it gives them exclusive entry to all of the full-time jobs.

We are told that this issue is now being discussed by the union and management, but it must be resolved, and quickly. It may actually be the most significant causative factor behind the recent accident experience.

People who have families to support, children to educate, and homes to buy are not going to be interested in a part-time job (which may last two years or more before it becomes full time) and will seek employment elsewhere, particularly in an area like Los Angeles where jobs are plentiful; and these are precisely the kind of people who are most likely to become more stable, reliable, accident-free drivers.

The process of hiring full-time operators should be separated from that of hiring part-time operators. They should be treated as two separate classifications. Part-time operators who wish to become full-time operators should be given the opportunity to apply and qualify, but they should have no preferential treatment. Qualified applicants who are seeking full-time jobs and who are not interested in part-time work should be given an equal opportunity.

The following are comments on the steps of the screening procedure:

1. The application form, like those in use elsewhere, is somewhat limited in its ability to extract information about the applicant and his/her background because of legislative and court rulings intended to ensure equal opportunity.

No Changes are suggested.

2. Driving record is checked for the previous five-year period and applicants are carefully weeded out if they have poor accident records or convictions for driving under the influence of alcohol or drugs or of negligent, reckless or speed exhibition driving.

This screening appears to be satisfactory.

3. The written test used at SCRTD is one which was internally developed and which has not been statistically validated against samples of drivers with and without high accident records. SCRTD staff indicate that the test is "content valid" in that it measures information, the knowledge of which would assist applicants in performance of the job duties when employed. (However, such information can be taught in the training program.)

Sixty-six (66) out of every 100 applicants fail this test. (Sixty-one fail Part 1 and five fail Part 2.) Such a result would indicate either that the test is simply much too difficult, or that the people in the sample of population which is taking it have extremely low reading ability and very little knowledge of traffic rules.

If the first is true, many potentially successful drivers are being discarded. If the second is true, it supports the previous comment relating to part-time drivers, indicating that those in the labor market with the greatest potential to become successful drivers have been discouraged from applying and are therefore not in the group tested.

Several years ago UMTA funded a study at the University of Chicago which resulted in a "transit operator selection inventory." Using data on bus drivers in Boston, Chicago, Cleveland, Atlanta, Pittsburgh, Washington, and Orange County, the test was validated against several criteria including: tenure (indicating stability and success on the job); performance indices (accidents, misses, sick days); supervisory assessments of performance on the job; and training school assessments. The resulting correlations indicated a significant improvement over chance selection.

The SCRTD staff indicated that they do not use this test because they feel it will eliminate potential future supervisors.

Experience of transit systems who have used the test varies. Some, like Chicago and Philadelphia, have experimented with it and have discarded its use, stating that they felt it was selecting the wrong kind of people for bus driving jobs. Others, like Cleveland, are continuing to use the test. Thomas Griess, PH. D., who heads the employment testing program at Cleveland RTA feels that it provides significant clues to the probable emotional stability of the driver candidates and therefore favors its continued use.

On the other hand, the former Chicago Transit Authority Personnel Director, Frank King, who was a member of the advisory committee that assisted in development of the test, considers it a failure. He believes that the criteria were

faulty, that potentially desirable candidates are rejected by it, and that many of those who successfully passed it do not have some of the basic skills (like reading and writing) to adequately perform the job. Mr. King suggests that Seattle has developed a video taped battery (non-discriminating) which has been used with some success in several western transit systems. It may be desirable for SCRTD to experiment with using this test.

Although there are no simple solutions, some improvement is needed in this area of the selection process.

4. A patterned appraisal interview is conducted by a transit operations supervisor and a personnel analyst to determine, within the boundaries of legal limitations, whether in their subjective judgement the applicant can become a successful bus driver. The candidates' responses are rated on a standard scoring sheet in four areas: (1) experience, training, education; (2) knowledge and abilities; (3) interpersonal skills; (4) communication skills. Although it is evident that much effort is made to make the evaluation of this interview objective and unbiased, it would appear that most of the information could be obtained more objectively with a written test.

It would be more important to evaluate the candidates' attitudes, responsibility, emotional stability, and sensitivity to others as determinants of their fitness for

this kind of work. This information can best be obtained by interviewers with extensive psychological training, and for this reason it is recommended that at least one psychologist be employed to do the interviewing.

5. The medical exam appears to be quite complete including screening for any evidence of drug use. The vision tests also include the "Titmus" peripheral vision test. Standards have apparently been developed specifically to meet the requirements of the bus drivers' job. These have evidently been supported by the opinions of "high acclaim specialists." The medical standards are also in conformance with those of the California Department of Motor Vehicles.
6. The check on any possible criminal history is made through the California Department of Justice. Staff indicates that if applicants do not have driving records for five (5) years in California, their driving and criminal records are checked in other states where they may have resided.
7. Reference checks are performed to screen out applicants who may falsify their applications.
8. A "physical setting" test is performed to determine if applicants' physique enables them to handle the bus properly and to have a full field of vision for safe driving. Although the rating on this test may be somewhat subjective, it eliminates only one person in 100, and has the practical value of enabling the applicant to experience and the

examiner to view the applicant in the true physical setting of the job.

9. The final step of the screening process is the training program. Three (3) out of four (4) persons who enter training are able to complete it successfully and become operators. This is a relatively high level of success and it does attest to the effectiveness of the previous screening in selecting brighter than average, trainable students.

In summary, after reviewing the employment screening process, it is my opinion that:

First, it is important to change the labor contract provision that effectively requires applicants to become part-time employees for approximately two years before they can get a full-time job. This is a major deterrent to obtaining applicants with high potential for success.

Second, it is suggested that SCRTD experiment with using other driver selection tests. It may be able to improve the selection process.

Third, I would recommend that the interview process be strengthened by employment of a psychologist to enable more careful screening of the candidates' psychological makeup.

Recommendations

1. SCRTD must begin to employ full-time operators, and should do so in sufficient numbers to eliminate apparent continual operator shortages.
 - o Union contract will have to be modified to accomplish this.
 - o Personnel Department must be given authority to hire and train enough operators to eliminate shortages.

2. The operator selection program should be strengthened by the employment of a psychologist.
 - o The interviewing program can be improved by using interviewers with professional psychology training.
 - o The testing program should be studied and decisions may be made on the appropriateness and validity of tests for selecting operators.

(Note: operators, as distinguished from supervisors.)

CHAPTER III - TRAINING AND INSTRUCTION--ACCIDENT REPORT AND INVESTIGATION

by Paul Kadowaki

Findings and Recommendations

A. Instruction Department

Finding: Instructors are divided into two groups, El Monte Instruction Training Center and 12 divisions, and they report to different authorities.

Recommendation: Reorganize Instruction Department

- o All instructors to report to same authority.
- o A functional priority list should be established to control work assignments for instructors at divisions.
- o Additional instructors are needed.
 - Increase pool of operator/extra instructors.
- o Some functions of instructors should be reassigned to other departments:
 - o Contacting sick employees
 - o Accident Review Board
 - o Calling/contacting witnesses
- o Reschedule division instructors to more productive hours.
- o Improve the training of instructors to assure proper quality of instruction.

B. Standard Operating Procedures

Finding: Some SCRTD SOP's are ambiguous and have incorrect information and statement.

Recommendation: Revise and update SOP's

- o Provide professional staff to accomplish this.
- o Make certain that all instructors and operators are trained in SOP's.
- o Assure comprehension and compliance.

C. Division Managers

Finding: Some division managers lack in general knowledge of the SCRTD system and in actual experience to discuss, review, and critique the performance of operators.

Recommendation: Division managers must improve the quality of management and supervision.

- o Accident reports must be reviewed and interviewed by division managers (this may not be delegated) on same day that accidents occur (24 hours a day, seven days a week).
- o Employees must not be permitted to return to work until a decision is made concerning chargeability of accident and if charged, until employees complete necessary retraining.
- o All violations must become part of permanent record.
- o System-wide shakeups should not be more than one in three years. (Contract matter that SCRTD and Union must negotiate.)

D. TOS Supervisors

Finding: There is no instruction outline nor guide to the program.

Recommendation: A formal professional supervision training program should be adopted.

E. Bus Operator Training

Finding: SCRTD relies on and teaches a Defensive Driving Course developed by outside agencies.

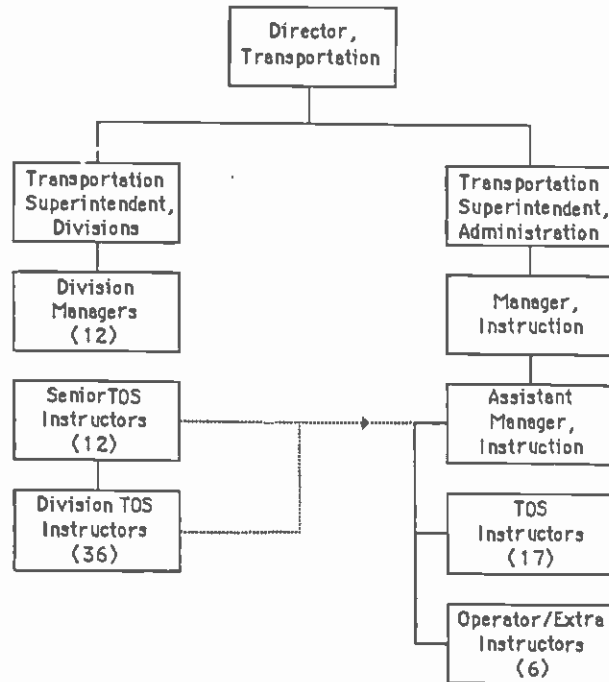
Recommendation: SCRTD should consider development of its own defensive driving program to stress its particular problem areas.

F. Safety Department

Finding: Procedures supplied by the Safety Department are not followed.

Recommendation: Restructure the role of the Safety Department to be monitoring safety and compliance with SOP's. The procedure and training for safety are responsibilities of the individual user department.

- o The Instruction Department was reorganized this year (1986) into two separate groups.



- o This reorganization has caused a lack of coordination and instead created two distinctly separate groups.
 - A similar separation exists between instructors of different divisions.
- o Instructor refresher training has not been conducted for some time.
 - Having two superintendents causes more difficulty in coordination of instructional activities.

Instructor manpower shortage.

- o Instruction positions are not kept constant.
 - Vacations, sick, etc. are not filled
- o Ten instructors are lost to 1st Level Accident Review Board for four to eight hours at least twice each week.
- o Instructors are visiting off-sick employees.
- o Instructors are making telephone interview/fact-finding calls with witnesses.
- o Insufficient number of pool instructors to fill all vacancies.

Accident follow-up rides are not made as scheduled.

- o SCRTD instructors claim that each accident is followed up by the next day.
 - Checking the records indicated that this is not done. For example, a check of the records indicated that an accident which occurred in January 1984 was not followed up until February 11, 1984. This operator had two more accidents, in November 1984 and January 1985 for which the record for the follow-up rides was dated February 11, 1984, clearly incorrect.

Instructors are not all trained on each program and are not qualified.

- o SCRTD received delivery of forty articulated buses over six years ago. Some instructors have not yet received training on articulated buses, nor are they qualified to drive them.

There are no published standard operating procedures for these buses.

- o Some instructors did not know the number of scheduled days of training for a bus operator.
- o There are no planned preventive programs.
 - Too busy with catch-up rides.
 - Manpower shortages.

Instructors have no set priorities or productivity checks.

- o Division managers do not check instructors' daily routines.
- o Instructors are complacent without leadership.

Standard Operating Procedures (SOP's)

- o SCRTD issues trainees the Operator Rule Book and the Operator Handbook.
 - o The rule book and handbook each attempt to explain the proper operation of SCRTD vehicles, precise moment of and how to perform various maneuvers. SCRTD intends to teach trainees and bus operators the SOP's so that they may operate their vehicles safely, and in a uniform manner.
 - o A review of the SOP's indicated that SCRTD needs to update and revise certain crucial SOP's, for example:
 - Ambiguous
Example: Mirror adjustment
 - Incorrect information
Example: Maneuvering point reference for turning after clearing an object is shown as front wheel, but should be rear wheel.
 - Improper statement
Example: Overhang of articulated bus is incorrectly described for left turns.

Division managers

- o Lack in general knowledge of RTD system.
- o Lack in actual experience to discuss, review, and critique the performance of operators.
- o Division managers do not interview employees on day of accident.
 - o They review accident report on the following day.
 - o They base decision of chargeability of accidents on the report which explains the circumstances of how the accident occurred.
 - o They do not interview the employee. Division managers refer questionable and avoidable cases to the 1st Level Accident Review Board.
 - o Division managers never personally get involved in the 1st Level Review Board.
 - o Thus, Division Managers may never see the employee who has been involved in accident.
- o Division managers do not check instructor performance and productivity.
 - o They assume that instructors are doing what they are supposed to be doing.
 - o Division Managers lack expertise to correct instructor errors.
- o Division managers' handling of violation tickets
 - o They do not act on violations consistently.

- o They fail to supervise dispatchers who are also alleged to discard some violations issued by TOS.
- o Division Managers are also alleged to discard violation tickets issued by TOS. Employee work record thus may understate employee's performance shortcomings.
- o Division managers' misuse of instructor manpower
 - o They send instructors out to visit employees off-sick while their work is behind.
 - o Instructors are making telephone interviews with witnesses. This should be claim department work.
- o Most Division Managers need to improve at development rapport with their bus operators.
 - o No plans for employee motivation or incentive programs.
 - o Some Division Managers are seldom seen in the train room where bus operators are.
- o There are too many shakeups to keep abreast of under the prevailing administrative procedures.
 - o Division Managers and instructors cannot keep up with the administrative procedures.
 - o Often, Division Managers and instructors cannot keep up with the changes in personnel.
 - o The present arrangement is not only costly, but causes instructors to fall behind in their work and some operators to be inadequately prepared for their new assignments.

TOS Supervisors

- o The Supervisor Training Program consists of field practice for seven weeks and one week of exams and some management theory programs.
 - o There is no instruction outline nor guide to the program.
 - o Field supervisors do not have lesson plans; therefore, it becomes the trainees' responsibilities to ask questions in order to learn the job.
 - o Training results depend on who the trainer was.
 - To compensate for that shortfall (variation), trainees are assigned to all districts with as many different supervisors as possible. This is costly and still yields inconsistent results.
- o There are no appreciable numbers of supervisors assigned to CBD or other key activity points (e.g., El Monte Station) to monitor operators' performance.

For example:

 - o Observed buses running three abreast on Olive Street as though none would yield.
 - o Observed line instructor wearing earphones and listening to radio or tape.
 - o Observed improper maneuvering of bus when curbing, turning.
- o TOS performance and productivity
 - o Low production when compared to supervisor's potential capability.

- o No requirement by management in the number of preventive supervision checks made by TOS's.
- o TOS's no longer enter employee badge numbers on their violation tickets.
 - o TOS's do not make a positive ID because:
 - TOS suspects that drivers are known to exchange shirts to misrepresent badge numbers (in reality, there are other means of cross-checking available).
 - Some embroidered badge numbers are not clearly legible.
 - Some shirts do not have badge numbers.
 - o Manpower is insufficient for the area served by SCRTD.
 - o Buses display block number which does not readily identify the operator, rather than run number. If the Maintenance Department needs block number, then another sign box should more positively identify the operator.
 - o Supervisor guides would be much more useful if they showed run number rather than block number. Only one operator is assigned any one run number on a given day, whereas several operators may be assigned the same block number.

Retraining

- o SCRTD/UTU contract, Article 27, Section 14
 - o Appeal process is too long. This leads to lax discipline.
 - o Decision on chargeability is not made on day of accident. It should be.
 - o Employees continue to operate while going through the appeal process, without correction of their errors which caused the accidents.
 - o Due to long wait for individualized remedial instruction, one-on-one retraining program loses its effectiveness.
- o Instructor manpower causes delays of the retraining program
 - o El Monte Training Center at times postpones the requests made by Division Managers for their employees.
- o Follow-up rides
 - o Instructors are busy doing catch-up observation rides and fall short on preventive performance rides.
 - o Accident follow-up rides are not made the next day as stated in the RTD procedure manual.
 - o Rides after shakeups are constantly behind schedule.

Bus operator training

- o It is stated that trainees receive two-trainee-to-one-instructor ratio during out-of-service practice driving, but this system runs into problems when other ongoing and obligatory programs take place at the same time.

- o Training buses must be returned to garage earlier than specified by training schedules so that Maintenance can meet revenue service bus schedules. Thus training becomes incomplete.

- o Defensive driving programs are purchased from outside agencies.
 - o National Safety Council Defensive Driving class which is oriented to automobile driving.
 - o "Transit Bus Defensive Driving" film provided by an insurance carrier.
 - o SCRITD should consider development of its own defensive driving program to stress its particular problem areas.

Safety Department

- o Procedures supplied by the Safety Department are not followed, apparently because they were not accepted by the Transportation Department, who apparently had inadequate participation in their development. Procedures would be better promulgated by the department that must implement them.

CHAPTER IV - SERVICE SUPERVISION
by George Krambles

Findings

Operation control is the quality control process whose function is to overcome in real time deviations from normal scheduled service. It is as importantly related to safety as it is to on-time performance of buses. The key components of operation control are: supervision provided by people on foot or in radio cars out on the streets wherever buses run, and supervision provided by radio monitoring at an operation control center. As to operation control on SCRTD, following are our principal findings.

A) The radio dispatch is staffed for existing duties and workload. Automated vehicle location and schedule adherence monitoring is planned to be introduced. It will involve new radio equipment and is expected to change duties of the dispatchers, but it is not clear what the net result may be on staffing or on the quality of bus service.

Routine generation of incident reports is a significant consumer of staff man hours that need to be applied to mitigation of problems at a more creative level. While the planned radio system (TRS) will automate much paperwork, there is danger that, because of the technical feasibility of doing so, some of the information brought in will be unessential or of low priority even if interesting. This could dilute dispatcher attention from the more urgent business of solving operating irregularities, passenger and personnel problems, and clearing accidents.

The radio dispatch office deals adequately with its part in replacing disabled coaches and clearing accidents, although at times with lengthy delay or missed trips. Smoothing out irregular service from whatever cause is, however, quite inadequate. It is expected that the future TRS radios will improve detection of late or missing trips, but to get benefit of that information procedures for correcting such irregularity will need to become much more effective than they now are.

B) The street supervisor (TOS-Vehicle) component is the weak link in SCRTD operation control. Having only one mobile supervisor for every 80 buses in peak service is too low for the evident workload. As a consequence, some simple delays blossom out to 45-60 minutes waiting for a radio car to get to the scene, a frustrating experience when it occurs to riders and drivers on routes where there may not be another bus due for an hour!

The TOS-Vehicle is the lowest (first) level of supervision out on the streets. The next level of supervision, those who supervise the supervisors, is also inadequately staffed. As a result, there is little backfeed to assure management of uniformity of supervisor performance, efficient allocation of supervisor hours, and prompt recognition of changing operating conditions. More supervision could reduce service irregularity, reduce operator overtime, and improve safety, employee morale and passenger satisfaction.

C) Apart from the work of the radio and street supervisors, there is a gap in information available at more responsible levels of management. The Transportation, Schedule, Planning, and Public

Relations Departments all have need for regular systematic observation of the strengths and weaknesses of SCRTD bus service as it is experienced by the riding public and the bus operators.

D) Training and development programs for radio room and street supervisors are minimal. There are few supervisor meetings to clarify new directives, identify changing operating conditions, and exchange experiences (for example, with strategies that work and those that do not).

Manuals now are detailed as to institutional requirements and the paper work, but are shallow in much needed judgmental and creative aspects. Standard operating procedures by which performance is to be judged as acceptable are needed. The violation citation process which depends on such standards is weak and causes undesirable laxity as well as confrontation with the unions.

Follow-up for periodic reaffirmation of comprehension and compliance with expected standards of behavior and performance is largely reactive rather than preventive. Commitment to more substantial amounts of preventive supervision would keep procedures updated as well as alerting management to developing problems such as deteriorating discipline and worsening regularity of service.

Recommendations

Over the next two or three years or as rapidly as personnel can be selected and trained, the components of service supervision which are in the field should be augmented. The level of radio room (TOS-Communication) staffing of the control center seems adequate for presently anticipated needs even with some growth of the bus system and with the anticipated addition of some computer-aided dispatching, under the planned TRS enhancement, provided that the amount of hand-processed paperwork is sharply reduced. Some specific suggestions follow.

A) Enhance procedures for dealing with operating problems

Create, test, document, and implement a variety of more effective strategies for action to correct or mitigate observed delays. This kit of procedural tools should include those which can be executed between the bus operator and the radio dispatcher; others between the bus operator and the street supervisor; and still others by joint action involving both radio and street supervision.

B) Increase the number of supervisor districts and the level of manning

Increase number of radio cars on duty (from present 26 toward a target of about 40) in the field together with the TOS-Vehicle (and Senior TOS-Vehicle) personnel. Consider the assignment of some TOS-Vehicle with portable radio but without car at key control locations such as in the CBD and at El Monte. It is probable that at least 5-10 such posts should be actually more productive than a

radio car in the same location. Ideal locations for such point supervisors are where the problems of a number of routes can be detected and dealt with, such as busy intersections or terminals.

C) Improve training and expand duties of street supervisors

One objective of increasing personnel in this function is to make time available for more advanced training and better communication among street supervisors and their managers.

Another goal is to make available 25%-30% of street supervisor time normally for random systematically assigned "preventive supervision" service checks. These would include, but not be limited to, checks such as proper curbing, door operation, speed, schedule adherence, lane changing, destination signs, operator uniform, staying on route, service ends of lines, passenger passup, making connections with wide headway lines, general defensive driving, etc., etc.

Finally, in periods of extreme workload such as storms or accidents, preventive checking can be deferred to expedite handling of emergencies.

D) Add service observation function

Establish a service observation function reporting to the AGM for Operations to serve as monitors of field performance of service. This small activity would include perhaps only two persons. It is suggested to be manned by management trainees, ideally having a professional educational background, and having successfully completed driver and supervisor training.

Specific areas for observation should be assigned by the AGM based on complaints or concerns. Findings, which should resemble an ongoing extension of this ad hoc team study, should be forwarded to appropriate management for consideration and action.

CHAPTER V - ADMINISTRATION OF DISCIPLINE
by Leonard Ronis

Findings

A Review of a Sample of Discharges and Appeals

In order to gain insight into employee problem areas and to evaluate the effectiveness of the discipline program in dealing with such problems, I agreed to study a sample of recent discharge cases and to analyze both the initiation of discharge action and the nature and results of subsequent appeals.

On request, SCRTD made available to me the records of forty (40) discharge cases which were heard at first, second, or third levels of the appeal process. The information proved to be most interesting.

Reasons for the forty (40) discharges may be summarized as follows:

Absenteeism or AWOP	6
Misses	10
(of which two refused referral to the EAP program)	
Accident related	2
Drug or alcohol related	15
Excessive demerits	2
Falsification of sick leave	2
No drivers' license	1
Failure to report arrest or show up at hearing	1
Failure to complete assignment	1
(coupled with strange behavior)	

The greatest number of discharges is the result of drug and alcohol violations. The next greatest causes for discharge, missing, and absenteeism, may also be related to drugs and/or alcohol, but our evidence on that is only circumstantial (such as refusal to accept referral to the EAP).

Of the forty (40) persons discharged, 32 discharges were upheld and eight employees were reinstated either with or without penalties.

In appealing the discharges, the Union consistently argued for leniency in application of rules, and in the drug related cases, although the Union was a participant in the establishment of the alcohol and drug abuse policy, and in the development of the employee assistance program, they pressed management to reinstate violators and employees who refused to seek help in the EAP, appealing 5 of the 15 drug and alcohol related cases all the way to the third step of the appeal process.

Examination of the eight (8) cases which ended in reinstatement at the second step produced the following information of interest:

1. The SCRTD has a system of demerits which triggers automatic discharge when an operator reaches 95 demerits, however, it is apparently customary to reduce the demerits by 40 from 95 to 55 to "give the employee a second chance" whenever he reaches 95 "Almost without regard to the worthiness of his record." Thus, the two discharges for accumulation of demerits were both reinstated, even though one had accumulated enough demerits to twice warrant discharge.

2. Three (3) drug and/or alcohol violators were reinstated. One had been removed from his run after demonstrating "disoriented" behavior and had been found to have a high level of impairing drugs in his system. This was the second time he had been tested and found in violation, but because the union insisted that the drug and alcohol policy had not been in effect the first time he was caught and because he had not been given a mandatory referral to the EAP, the hearing officer reversed the discharge providing the employee agreed to seek help from the EAP and understood that he would be subject to random testing.

In another case, both the division manager and the assistant division manager had ordered an operator to have a urine test. The operator refused and was discharged. The second level hearing officer indicated that such insubordination could not be condoned, but agreed with the union contention that there was not sufficient cause for the request for the test and he reinstated the operator with a 15-day suspension. Lacking the results of the urine test, he had no objective evidence on which to contradict the original action by two high ranking members of supervision.

Conclusions:

1. The statistics indicate that a high percentage of discharges are the result of drug and/or alcohol violations.

Misses and absenteeism which may also be drug related are the next two largest causative factors.

2. Although the management upholds more than 2/3 of the discharges in the appeal process, there are serious questions about the merits of the remaining 1/3 who were reinstated.

3. The union makes a strong effort to get discharged employees reinstated, carrying many clear cut drug and alcohol abuse cases to the third appeal level.

(It is my personal observation that their dedication to preserving members' jobs carry them too far and that their duty to preserve a safe environment for their members and for the public should motivate them to discriminate more carefully in determining how far to press an appeal.)

4. Management must improve their firmness and consistency in the application of discipline.

- o The drug and alcohol policy must be firmly administered. It will not be taken seriously if employees believe that they or their union can get around it by technical maneuvering and/or pressure.
- o If a rule requires a discharge after a given number of demerits, it should be enforced. Past mistakes should not be continued forever just because they are precedents.

Recommendations

1. More firmness and consistency are required of management in the application of discipline.

- o The drug and alcohol policy must be firmly administered and strictly enforced.
- o Rules must be enforced. Poorly advised past precedents must not be repeated.

2. Greater cooperation is required from the union in the administration and enforcement of the drug and alcohol abuse program.

- o The welfare of the public and the employees requires that abusers of drugs and alcohol either be assisted to correct their problem or be discharged so that they can no longer endanger their fellow employees or the public.

CHAPTER VI - SAFETY STATISTICS EVALUATION REPORT

by Donald Dzinski

Chief Jack A. Kellar

INTRODUCTION

In reviewing the large amount of safety data made available to the panel, it became apparent that there is no shortage of statistics nor interpretations of these statistics to form conclusions. The question the Panel focused on, therefore, is how reliable and useful is the data generated and published in different forms and can, or perhaps more importantly, should the data be compared to that of other systems. Another question of major importance is whether this data in its raw form should be used to draw conclusions.

RESEARCH

In its investigation of the available data, the Panel interviewed staff of the following agencies:

- o Southern California Rapid Transit District (SCRTD)
- o Urban Mass Transportation Administration (UMTA)
- o American Public Transit Association (APTA)

Statistical data reviewed included the following:

- o UMTA Section 15 reports - FY 82 to FY 86
- o SCRTD accident data - FY 85 and FY 86
- o California Statewide Integrated Traffic Report System (SWITERS) for Los Angeles County - FY 85 and FY 86

Other documents reviewed included the following:

- o Urban Mass Transportation Act of 1964 as amended;
Section 22 - Safety authority
- o Uniform System of Accounts and Records and Reporting Systems
(UMTA Section 15) part 405 - Reporting Manual, June 1986
- o APTA Survey on Transit Accident Data Reporting Procedures

FINDINGS

In reviewing the available data as well as numerous news articles on the subject of SCRTD bus accidents, the Panel members charged with safety statistics evaluation determined that various data reports were being used to make operating comparisons of SCRTD to transit systems in other cities. It also noted that no comparisons were being made of SCRTD accident statistics to statistics of other transportation alternatives available to the riding public of the Los Angeles Metropolitan area. The Panel, therefore, spent considerable time not only investigating the validity of the data, but also attempting to determine the value of comparison between cities rather than between modes. In its efforts, the Panel developed the following findings:

1. UMTA Section 15 Annual Reports contain a disclaimer both on the inside front cover and in Chapter I stating that "It is impossible to achieve complete accuracy and consistency of the reported data. Users of the report, therefore, should be careful not to draw unwarranted conclusions based solely on the data contained herein."
2. UMTA Section 15 officials stated that "When comparing Section 15 data, conclusions cannot be drawn without looking beyond the numbers to discover why there is a difference." In other words, the data is not comparable.
3. Section 15 data reported to UMTA (Form 405) should not be based on claims filed; however, SCRTD reported estimated accident data based on total claims because the SCRTD accident data bank was not structured to produce the specific data required on Form 405.

4. Prior to FY 86, SCRTD accident data reported to UMTA Section 15 was based on total claims discounted by 29%. This caused inflation of SCRTD Section 15 accident data.
5. SCRTD has at least three different internal systems for tracking accident data with no central control. This results in three sets of figures.
6. An APTA survey from 1980 indicates that not all transit systems record the same incidents as accidents. Specifically, out of 134 respondents, 99 did report traffic accidents which did not result in property damage while 35 did not. In addition, 75 systems did report passenger accidents resulting from traffic accidents in the first event while 59 did not. As a result of this type of incompatibility of accident data, APTA reached a conclusion that accident data of its members could not be compared.
7. UMTA has never surveyed Section 15 respondents to determine how the accident definitions are being interpreted.
8. Based on review of traffic accident data for Los Angeles County, not all traffic accidents resulting in property damage only are reported. To a law enforcement agency, therefore, the SCRTD accident data base can not be compared to any other data base for validity.
9. SCRTD does not currently use its accident data to analyze types of accidents and problem locations for development of preventive programs.

CONCLUSIONS

1. Traffic Accident Monthly Summary Report issued by SCRTD appears to be the most accurate accident data report available for determining traffic accidents and frequency rates for SCRTD buses.
2. Comparison of transit system accident data is invalid for numerous reasons including climate, geography, traffic congestion, and differing interpretations of accident definitions.
3. A Daily News (Los Angeles) survey of the transit systems reporting the three highest accident rates to UMTA Section 15 indicates that all three used claims data to generate Section 15 accident data.
4. Comparative accident rates over the past four fiscal years indicate the following figures from SCRTD and UMTA Section 15:

FY	SCRTD		UMTA - SECTION 15	
Miles (x1000)	Acc/Rate**		Acc/Rate	
83	1029.4	5140	4.9	7601 7.38
84	1061.6	5645	5.1	8091 7.62
85	1058.2	5386	4.9	7837 7.41
86	1026.6	4613	4.4	*4517 4.40

* Accident figure based on accidents in the claims file and not an estimate based on 29% of claims reported as accidents to UMTA in prior years.

** Rate based on miles operated reported by SCRTD on internal traffic accident summary.

Recommendations

The Panel makes the following recommendations to the SCRTD to assist it in improving its capabilities for accident data collection and analysis:

1. SCRTD should coordinate all of its statistical reporting systems so that data supplied under each are compatible.
2. SCRTD should develop a sectionalized notebook containing full descriptions of criteria and definitions for data submitted under each reporting system so that compilation of data can be verified.
3. SCRTD should continue to improve its system for tracking accurate accident data so that internal comparison of accident rate change from year to year can be accomplished.
4. SCRTD should develop analytical reports on a periodic basis from their accident data base for division manager use in developing and tracking accident prevention programs.

SUMMARY

In its review of the various accident reporting systems in existence, the Panel noted that there was a lack of reliable statistics available on an industry-wide basis. In addition, there appears to be a tendency to compare statistics for improper reasons. For example, the news articles reviewed showed several comparisons of SCRTD accident statistics to those of transit systems in other cities, even though several major reasons exist for these types of comparison being invalid. The UMTA Section 15 reporting system cites many of these reasons in its disclaimers, including such things as climate and geography. More importantly, it has been learned that despite an apparent standard definition in Section 15, reporting is inconsistent for many reasons.

In reality, the Panel was also unable to find out why more valid comparisons were not being made, such as how SCRTD accident statistics compare to auto accident statistics in the Los Angeles area. An attempt was made to draw such comparisons. While it appears SCRTD statistics are better than highway users in general, the data for highway accidents is also incomplete so no reliable comparisons can be drawn. It is, therefore, with this in mind that the Panel recommendations include the idea that the SCRTD concentrate on improving its ability for self-comparison. Its riding public can be rest assured that SCRTD does in fact provide a much safer form of transportation than the local

alternative, the auto, even though its buses operate in perhaps the most congested metropolitan area in the country, yet another reason to avoid comparison to other cities.

This report on the validity of SCRTD Safety Data was prepared by Jack Kellar, Chief - Southern Division, California Highway Patrol, Los Angeles, California, and Donald J. Dzinski, Director - Safety and Program Development, American Public Transit Association, Washington, D. C.