

The



76-10

Emblem

FEBRUARY, 1959



Cover story page 15

**Accounting at the Speed of Light
The "650" and Scheduling
Something New in Timetables**

EMPLOYEE		WORK RUN		DATE		PAY TIME		AMOUNT		GRI		GRI		DAYS		TIME DETAIL		MISCELLANEOUS	CREDIT
NO.	NAME	NO.	NO.	MO.	DAY	HR.	MIN.	AMOUNT	AMOUNT	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.		
1	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
2	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
3	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
4	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
5	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
6	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
7	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
8	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
9	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
10	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
11	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
12	000	000	000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	

Computing, Sorting, Collating, Recording Go On in the Accounting Department by Machines Infinitely Faster and More Accurate than the Human Mind and Hand

EVEN BEFORE YOU ENTER the room you are aware of an almost continuous whirring, rumble, and humming of machinery. And

DANNY CROOKS, Supervisor in charge of the electronic accounting force, wires a board for the "408" accounting machine. He explains that differing operations require different wiring set-ups.

as you look around, you see dozens of metallic objects. Some of them are large, cabinet-like affairs; others are relatively small and resemble typewriters or adding machines. All of them appear rather formidable with their numerous electrical switches and mouth-like openings. The larger ones, while they are inactive, might make you feel a bit uneasy. You don't know why. Then they come to life, and you feel as if some quiet but powerful giant has awakened. You watch a machine perform, and you get the feeling that it has a mind of its own.

Then you realize that these machines are very near to being able to think. They are the MTA Accounting Division's army of 36 IBM machines which, under the command of Treasurer William W. Wakelee, are used extensively in accounting and computational work





KEY PUNCH AND VERIFIER SECTION of the IBM room. Here's where the electronic accounting processes begin, because only IBM cards, punched with information from original records by these girls, can be used by IBM machines. Each card is punched by one girl and verified by another. Standing at rear is the Key Punch Supervisor, Norma Weiss. Others, from left, are Helen Reoch, Wanda Taylor, Judy Ransom, Edna Cleveland, Marie Baker, Mary Russell, Dorothy Biedes, Doris Faught, Wanda Amburgey, Carol Purcell, and Lena Rodriguez. All are Key Punch-Verifier Operators.

for recording, compiling, classifying, sorting, and calculating huge quantities of numerical data, literally at the speed of light!

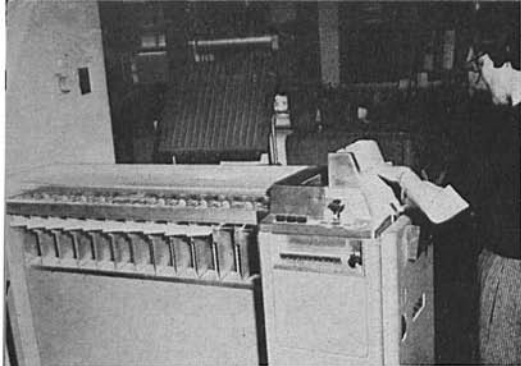
You begin to wonder what these various machines do, and how they do it, and what the 20-or-so machine operators do to and with these metal "creatures."

You make a few quiet inquiries, and almost before you know it you are getting a combination tour and lecture by IBM Supervisor Danny Crooks. He explains the uses of the equipment.

"This is a key punch machine," he tells you, pointing to an object that looks like an incomplete typewriter. "It's the fundamental machine in IBM processing. Basically, it records, in code, information taken from some form or card that

has been filled in by hand. However, the information is first converted into numerical form, and then "punched" into IBM cards by the key punch. The basic information now appears on the IBM cards as a bunch of holes, or punches. There are 80 vertical columns on the card, and one punch in a given column stands for a number, depending upon where it appears in the column. For example, the 7th, 8th, 9th and 10th holes in your paycheck stand for the four numbers of your employee number, which stands for you. Letters can be indicated by two or more punches in a column."

Danny then points to a machine which looks like the one used on *The \$64,000 Question*. "This is a sorter. Its function is to separate



SORTER is capable of arranging up to 1,000 cards a minute either alphabetically or in order of number. One use is to arrange labor cards according to employee number. Operator: Sato Kurahashi.

COLLATOR will bring together ("collate") cards from decks already arranged in like order, such as paychecks and deduction slips; or it will select certain cards from a deck. Operator Al ("Pat") Patterson has a stack of cards to sort.



Accounting By Electronics

certain cards from the main pile, or deck. Sorting is done one particular column at a time. The machine separates from the deck and places together those cards which have a hole in the same place—indicating the same number—within that column.

"Here," Danny indicates another machine, "is a reproducer. It will make duplicate cards, or it will condense onto one card part of the data from other cards. The nature and amount of the data reproduced are determined by electrical circuits between the holes of the master card and the mechanism which will punch the new condensed cards.

"This is an accounting machine—also known as a tabulator or a printer," he continues, showing you another large piece of equipment. "It will summarize, add, and subtract data in the cards fed to it, and will convert these data back into typewritten form."

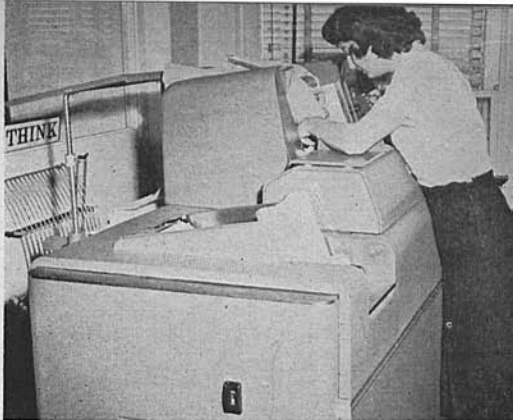
Danny pauses before a large glass-enclosed room. You look and see what appear to be three machines, side by side. But there are not three machines; there is one! "That machine is our latest addition: the 650 data processor. We got it in mid-December. It has three parts: the power unit, the 'memory' and calculating unit, and the card-reading and card-punching unit. The '650' does our mathematical work: storing, summarizing, adding, subtracting, multiplying, dividing, and totaling data which have been punched into cards and fed

to it. It can store, on a magnetic drum, 20,000 digits. It can add two 10-digit numbers in less than 5/10,000 of a second! And, it can receive more than 1,000 'instructions' (in the form of punched holes) from the cards fed to it. It is kept in this enclosed room, which is air conditioned, because of its intricacy and sensitivity. It simply won't function properly if the temperature exceeds 90°."

About this time you begin to wonder how the "650" makes these calculations. "It's not a simple method," Danny tells you; "but it's not as complicated as you might think. The machine multiplies by adding: 8×7 would mean that the number 8 is added 7 times. To divide, the machine subtracts: $25 \div 5$ would be performed by subtracting 5 from 25 until zero — or less — is reached. The number of subtractions gives the answer, and the remainder, if there is one, is converted into decimal form in a similar manner. The machine will also give totals and sub-totals, if asked to by the punched cards.

"All of these machines — and a few others which perform similar tasks — are used to process data which are gathered and recorded each day for such items as time cards, payroll sheets, farebox and cash turn-in cards, and reports of mileage and fuel consumption. Information of this kind is essential if the company is to know how much to pay its employees, what various costs are, and what earnings are," Danny concludes.

How are these machines put to specific use by MTA? Let's look at a particular case: the processing of farebox and turn-in cards. Fare-



ACCOUNTING MACHINE, often referred to as "the 408," has many applications, including preparation of paychecks, deduction cards, and such daily reports as revenue reports, bus mileage for each bus, extra men's mark-up, cash receivers' audits, etc. Operator: Margie Wynne.

REPRODUCING PUNCH, here operated by Laura Hinze, has a number of technical IBM applications of interest only to the expert. One simpler application is to punch employee number and department into cards concerning each employee; for example, badge number and division number in operators' paychecks.





TYPEWRITER PUNCH, operated by Helen Reoch, is a combination standard typewriter and punch machine. Typewriter unit is used for typing checks, invoices, letters of transmittal, and all accounts-receivable items. Simultaneously, punch unit converts into holes the letters and numbers printed by typewriter. Either unit may also be used independently.

Accounting By Electronics

box cards, filled in daily by Operators, give farebox readings before and after a run to show the value of the coins and the number of the tokens dropped into the box by riders. Turn-in cards show the value of the money and number of tokens turned in by the Operator after his run. These two reports are the basis for determining company earnings!

According to Danny, the following sequence of events occurs.

1. Farebox card information (the Operator's badge number, beginning and ending farebox readings, etc.) is punched into an IBM card. The information now appears as holes, in the appropriate columns. Information from the turn-in card is also converted into a punched card.

2. The verifier keys these IBM cards again, to ensure that they were properly punched — that the correct information is on the cards.

3. All of the farebox cards go to the sorter, where they are separated by farebox number and arranged in the proper sequence, so that . . .

4. The collator can make certain that the end reading of a farebox card agrees with the beginning reading of the subsequent card.

5. The IBM cards are then rearranged — this time by Operator number. The entire stack of farebox and turn-in cards goes to the "650," which accumulates the values, including token values, of the fares received and the cash turned in by each Operator. The machine reads both sets of cards, and, by comparing the fares and the turn-ins, determines the overage or shortage for each Operator. It then punches, for the Operator concerned, a new card for these amounts.

6. These over-and-short cards go to the tabulator, which prints and totals, according to Operator, the over-and-short report for that day.

The "650" also will compute total revenue, and will break down this total by division and line number, as "instructed" by the punched turn-in cards. It will also make cumulative revenue totals — or sub-totals — on a monthly and yearly basis.

With the completion of these steps, Accounting knows how much money was earned on a given day and how much was turned in for each line.

That's quite a bit of data-juggling in anyone's business! But it's another means of keeping MTA's procedures speedy and up to date.

The "650" and Schedule Making



THE "650" DATA PROCESSOR, our newest, is a lightning fast computer with a "memory." From her operating manual, Helene Bates is setting the controls on the console unit for a calculator operation. In this console is the computer. At left is the power unit, which transforms building current into high-voltage direct current for use in electronic circuits. (See also photo on next page.)

IN ADDITION to processing various accounting records, the "650" computer plays a vital, and somewhat unique, role in schedule making. Its importance can easily be seen by comparing pre-IBM procedures with present ones. According to Superintendent of Schedules and Statistics George F. Goehler, for a major line — with about 500 one-way vehicle movements and ten time points — the Schedule Maker would in the past calculate and write about 5,000 passing times. It would take more than a day for just this detail work. With punched cards it now takes less than three hours of key punch and machine operators' time. Moreover, errors due to mental fatigue are reduced, and the Schedule Maker has more time for creative thinking.

This electronic process of scheduling transit lines was developed in 1951 by Superintendent Goehler and Treasurer Wakelee. Currently, MTA is one of the few transit companies which use electronic computers for this purpose.

To see how schedules are developed, and the role played by the "650," let's have Mr. Goehler outline, in simplified terms, the steps which are followed:

"Basically, schedule making involves determining how many passengers ride a particular line during given time periods; and then determining how many vehicles are needed, and when, in those time periods, in order to accommodate all the passengers. How is this done?"

(Continued on next Page)



READ-PUNCH UNIT of the '650. Helene is feeding cards into the "read" side. When she starts the machine, it sends information to the power unit, which converts the information into data in a form which can be used by the computer. The computer sends the results of its calculations to the "punch" unit, which punches a card showing the calculation results. This card is then fed into the oblong opening at right, whence it is available for further accounting needs.

The "650"

(Continued from Page 7)

"At several peak points, where there is relatively heavy loading and unloading of passengers on a given route, traffic checks are made. These checks determine: (1) The number of passengers carried, during 20-minute periods, at the check points. (2) Running times — or the amount of time needed — for vehicles between check points.

"The passenger data (1) are punched into IBM cards, along with information on vehicle capacity. The cards are then fed to the '650.' The '650' first computes typical passenger loads; then, comparing data on passenger loads and vehicle-capacity, the machine can compute headways (i.e., the number

and frequency of vehicles needed per time period).

"Since headways are established at peak points, they must be extended throughout the rest of the trip in order to determine a complete schedule. This extension is done by the '650,' which also adds layover and recovery time. The '650' can then calculate the times at which return trips should start in order to provide optimum service at peak points on the return run.

"Running-time information is also punched into IBM cards. The passenger-data card (indicating the number of passengers carried per interval and the headways needed to accommodate them) and the running-time card are brought together through the collator, and the information is then condensed by the reproducer into one card: the trip card.

"The trip card thus contains information as to when and how often vehicles must leave certain points to arrive at various peak points at the proper times. Trip cards, therefore, are the basis for Operators' paddles and for eventual timetables.

"Some trip-card information also goes into Supervisors' and Information (S&I) Schedules. But before this schedule can be made, the '650' must rearrange the trip-card data. This is so because the data for the Supervisors' and Information Schedule must be in a pattern different from that which appears on the paddles. The 408 accounting machine, which prints the original S & I schedules, is not able to transfer punched data from one position on the IBM card to a different position for printing. Hence, the '650' must perform this job—again proving its versatility and value in solving complex problems of our changing times."



UCLA STUDENTS at ticket office, Kerckhoff Hall, read MTA poster with map showing transit service to campus. One student reads timetable from stack on ledge.

Bruin Timetable with 3 Lines Part of Merchandising Program

FIRST OF ITS KIND ever to be developed by MTA or its predecessors (so far as could be ascertained) is the "Bruin" timetable, which went into effect Feb. 2.

Schedules of *all* lines providing direct service from all areas to UCLA are shown on a single timetable, along with a specially drawn map. The map shows direct lines

New UCLA Timetable

as well as ten connecting lines use of which would involve but a single transfer to or from the university. The uniqueness lies in the fact that a single timetable shows all the lines serving a specific area.

Timetables are shown for the Los Angeles-Westwood-Santa Monica via Wilshire Blvd. Line (83W), the Santa Monica-Westwood via Brentwood Shuttle Line (83B), and the Los Angeles-UCLA-Pacific Palisades Line (76).

"Production of this timetable is a fine example of the results being obtained in our merchandising and business development program through the cooperation of all MTA departments," declared Executive Director Ralph P. Merritt. "Need for such a timetable was discovered in talks by MTA with UCLA and Westwood Village Chamber of Commerce officials, who were worried about relieving the serious parking situation on the campus. The timetable is one of a chain of links in our program.

"This program is geared to the basic policy that ridership can be built up where good transit service is available," Mr. Merritt pointed out. The program envisages:

1. Determining where needs and desires exist for new or improved service, or where need exists for informing the public as to currently available service.

2. Developing local community support for transit through Chambers of Commerce, civic organiza-

EFFECTIVE FEB. 2, 1959



Subject to Change Without Notice
Issue 1.

LOS ANGELES
METROPOLITAN TRANSIT AUTHORITY
General Offices
1060 South Broadway
Los Angeles 15, California
Information: Richmond 7-4455.

COVER of UCLA timetable.

tions, and business and governmental leaders.

3. Distributing timetables and other informational pieces in areas where service promotion is to be inaugurated. These printed pieces are distributed to supermarkets, banks, Chambers of Commerce, travel agencies, and occasionally to homes.

4. Releasing information to the press, television, and radio to intensify the sales impact.

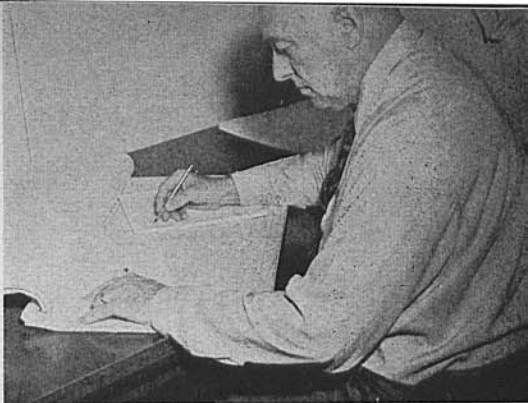
5. Advertising in local newspapers the specific service provided for the area served by the newspapers.

In the case of the UCLA service, the problem was to make residents of the Westwood Village area aware of the service that is already there. In addition to production of the new timetable described above, other steps in the merchandising program included:

1. Arranging with the proper parties to have UCLA distribute the timetables at the Administration Building and in the student office at Kerckhoff Hall. Similar arrangements were made for distribution in Westwood Village at the Chamber of Commerce, the Bank of America, and the Security-First National Bank.

2. Preparing 50 posters 12 $\frac{1}{2}$ by 21" in size, showing the specially drawn UCLA timetable map in large size, and indicating where timetables may be obtained. These posters were placed on 12 bulletin

CAROLYN STRICKLER, of Public Relations, drew an original cartoon for timetable to catch eyes of UCLA students.



ARTHUR J. GRODE, Schedule Maker, prepared schedules for UCLA timetable.

boards on the campus and at 25 strategic locations throughout the Village.

3. Placing ads in the Westwood papers, including the campus newspaper, the *Daily Bruin*, pointing out the advantages of using MTA service to UCLA.

4. Recommending to UCLA authorities that the new editions of student guide books include a public transportation section, accompanied by the timetable map. Recommending also that the campus map, in new issues, show where the bus station is located.

"Let's not forget, also," Mr. Merritt pointed out, "that the best campaign in the world is of little permanent value unless the utmost in courtesy is accorded to all who use the service or seek information concerning it. Once UCLA students and Westwood Villagers find out that our employees go all out to help them and to give them a pleasant ride, MTA will gain new friends and passengers. Let's make it a point, also, as employees of MTA, to tell people we meet — even our friends of long standing — what service is available. A word to the wise is often sufficient."

West Valley Freeway Flyer Up 177% in Ridership

FROM A BEGINNING total of eight daily trips and a weekly ridership of 1,300 passengers to a current total of 20 daily runs and 3,600 passengers a week—this is the success story of the West Valley Freeway Flyer, Line 35!

Established Aug. 25 as a peak-hour limited-stop through service connecting Reseda, Tarzana, Encino, Sherman Oaks and Studio City to downtown Los Angeles via Reseda Blvd., Ventura Blvd., and the Hollywood Freeway, Line 35 originally consisted of four morning inbound trips and four evening outbound trips for commuters to and from downtown Los Angeles.

But the idea of the Flyer took hold, and patronage increased steadily to 10, 11, 13, and (Oct. 6) 14 daily trips. On December 1, a Shoppers' Special service was established for Valley residents who wished to travel to downtown Los Angeles in the late morning or early afternoon. Today, Line 35 consists of 15 commuter trips (seven inbound and eight outbound) and five shopper trips (two in the morning and three, outbound, in the afternoon), for an impressive total of 20 trips—an increase of 150%! Ridership has increased 177% over the first week's patronage!

This great and rapid growth is, however, only half the story. More noteworthy is the fact that, according to a survey conducted recently by our Operating Division, more than half the passengers utilizing this Flyer service had not used the bus before the inception of Line 35.

According to General Manager Cone T. Bass, these figures show that the public will use transit more frequently if the service fits their needs.

As to why the West Valley Freeway Flyer has been so successful, Mr. Bass stated:

“Basically, the answer lies in the fact that a good product—in this instance, fast dependable service, and schedules that are convenient to commuters—was made available to Valley residents. Also, it should be pointed out that before the establishment of Line 35, the only public transportation between Reseda and Los Angeles was a local service which required a transfer. The Flyer service is a limited-stop, express, direct service requiring no transfer. This fact results in a saving—between Reseda and downtown Los Angeles—of 18 minutes' travel time, plus the time needed to make the transfer.

“Furthermore,” Mr. Bass concluded, “the public was *informed* of the availability of this new service. When a good product exists, and people know that it exists, they'll use it. It's as simple as that.”

WEST VALLEY FREEWAY FLYER loading during p.m. rush at 6th & Hill Sts.



Commendations



W. J. GREEN

Operator of the Month For Feb.: W. J. Green

"TO EVERY anxious passenger, he gave a pleasant answer. Strangers in the city . . . surely appreciated his helpfulness as well as his sense of humor . . . Anyone who wanted to know where to get off heard him say, 'I'll let you know. I'll call you!'"

"As I left, I asked, 'Are you always like this to the passengers?'"

"Sure!" he answered. 'It makes my work easier!'"

On the basis of this letter (quoted here only in part) from a passenger, a panel of judges selected W. J. Green for the February Operator-of-the-Month award—an MTA check for \$50.

Mr. Green began his transit career in 1934 as Conductor for the Los Angeles Railway Co. He cur-

Honored in January

THE OPERATORS listed below received, in January, one or more commendations, mostly through letters written by the general public. Congratulations to:

E. B. Adams, W. D. Adkinson, S. M. Alexander, D. J. Allan, J. R. Anderson, S. R. Anstine, D. J. Ballard, N. P. Beauchamp, H. C. Boyle, W. G. Brewer, N. B. Brooks, A. R. Brown, Manuel Burgess, R. A. Camunas, L. A. Chadd, H. A. Chaudoir, Gus Cholas, H. S. Christie, R. R. Clark, F. H. Clearwater, J. F. Cooper, R. A. Crabill.

A. A. Davison, C. G. Deguire, Leroy Devers, J. R. Dingley, J. A. Donovan, A. P. Drazin, R. D. Drusky, E. A. Evans, Harvey Evans, E. J. Filek, N. B. Frederick, Oscar Gibson, J. S. Goins, W. R. L. Goodman, A. G. Grebling, D. E. Grimm, W. Y. Guntharp.

H. R. Harrington, R. S. Harsche, G. P. Hayes, T. D. Heaney, P. B. Hill, L. L. Huntley, John Ingram, L. D. Jensen, W. E. Jones, L. W. Larson, C. B. Lewis, B. T. Lynum, Clyde Mason, G. S. Mattern, L. W. McComb, C. H. McCracken, A. C. Moore, H. W. Morrissey, H. C. Nields, H. G. Norie, H. N. Oehm.

A. C. Panzariello, E. G. Pike, V. C. Prettyman, E. G. Quincey, R. R. Rideout, R. C. Rodriguez, R. B. Schaefer, J. E. Schiff, A. L. Searls, W. G. Shafer, R. E. Shea, Albert Singleton, E. E. Smith, W. E. Steers, J. W. Stevens, M. B. Stewart, G. J. Stoddard, T. V. Swanson, J. R. Thompson, E. T. Thornton, A. F. Valdez, E. A. Voline.

R. M. Walton, J. A. Warren, W. S. A. Weary, J. E. Wharton, M. L. White, O. C. White, B. B. Williams, B. F. Williams, E. H. Williams, J. C. Williams, C. W. Wisler, E. E. Wright, B. B. Zimmerman.

rently operates on Line 5 (Eagle Rock-Hawthorne) out of Division 13.

He and his wife, Naomi, have lived for the past seven years in La Puente, where they are buying their home.

New Faces

MTA WELCOMES the following new employees, who joined the company between December 28, 1958, and January 31, 1959.

ACCOUNTING

Key Punch Operators: Judy Ann Ransom*, Mary Snyder*.

PLANNING

Janitresses: Emogene Prine, Laura Sumlin, Odessa Wiggins.

Janitors: Roman Morales, David Parra, Jr., Tom Salter, Jr., Edell Shepherd, Wilbert Smith, George Williams, Jr., Hilliard Woodcox.

TRANSPORTATION

General Clerk (Scheduling): Arthur Issoglio.

PBX Operator: Bernadette Brisco.

Operators: Lawrence Applebee, 11**; Donald Armack, 2; Alfonso Arredondo, 2; Sidney Baer, 2; George Briggs, 6; Billy Brown, 7; Mario Carione, 3; Burley Carlisle, 7; Robert Carter, 20; Roy Cousins, Jr., 11; Adolphus Cox, 2; Frank Delgado, 11; Walter Deuber, 7; Albert Dominguez, 8; Kee Gok Dong, 2; Homer Edson, 1; Russell Frazelle, 11; Walter Fujimori, 20; Robert Gray, 11; Donald Gregory, 8; Mario Grisanti, 10; Richard Hamilton, 6; Robert Harrie, 11; Harold Haynes, 6; Charles E. Jack, 3; Harry Johns, 8; Delbert Jones, 7; Jack Jones, 11; Robert Jordan, 6; Alan Kauffman, 7; Wayne Kohl, 9; Billy Krech, 6; Arthur Lennen, 6; Carmelo Marino, 11; Raymond Miller, 2; Thyrius Munford, 6; Thomas Naughton, 7; Dennis Osby, 6; Richard Parker, 11; Donald Pickett, 8; Alphas Pitt, 9; Cornelius Plenert, 8; Richard Richardson, 6; Abe Roberts, 11; Dwight Smith, 6; Robert Somers, 8; Charles Southworth, 11; Dee Sparks, 8; Frank Spinella, 5; Leo Spinella, 5; George Stafford, 8; Johnny Thompson, 2; Richard Thompson, 6; Carroll Tinker, 11; Louis Warner, 8; Samuel Willis, 7; Richard Wilson, 6; George Wright, 6; Matthew Young, 2.

MAINTENANCE

Carman: Roger Mendivil, 15.

Cleaner-Operator: Augustine Estrada (re-employed), 8.

Clerk-Typist: Margaret Danna.

Janitors: Joseph Davis, 7; James Mims, 9; Dennis Rhodes, Jr., 11.

Mechanics "B": Vincent Carione, 20; Mitsuo Hayashida, 3; Victor Rodriguez, 5. *Mechanic 2nd Class:* Masao Tengan, 10.

In Memoriam

Barnes, Helen E., wife of retired Motorman and Work Trainman Fred Barnes; Dec. 31; survived by her husband.

Dietz, George W., 52, Clerk, Division 7; Jan. 29; survived by his wife, Ruth.

Farr, Harley M., 70, retired Safety Operator and Trainman; Jan. 27; survived by his wife, Laura.

Hanley, William D., 76, retired Conductor and Mail Clerk; Jan. 24; survived by his wife, Bertha.

Uecker, Edward H., 54, Assistant Controller; Jan. 25; survived by his wife, Elsie.

Walker, Ralph J., 70, retired Senior Stock Clerk; Jan. 31; survived by his wife, Jewell.

Woolman, William H., 54, Operator, Division 12; Jan. 25; survived by his wife, Myrtle.

Retirements

MTA WISHES to extend a "Farewell and Good Luck" to the following employees who retired from service in November and December. (There were no retirements in January.)

Best wishes to:

Operators *Chester W. Lebcher* (Long Beach) and *Erwin P. Linkroum* (Van Nuys), 41 years of service each.

Station Master *William L. Blakely* (L.A. St.), and Operators *Thomas J. McKee* (L.A. St.) and *Frank O. Evans* (El Monte), 39 years each.

Operators *Nicholas LaBorde* (Ocean Park) 37 years; *Joseph Potts* (El Monte), 32; *Aksel Pederson* (Long Beach), 30; *John T. Pettit* (El Monte), 25; *Albert S. Mason* (Long Beach), 17; and *Ernest R. Edwards* (Long Beach), 16 years of service.

Cleaner *Earl C. Gilbert* (West Hollywood), 15 years.

Operators *George E. Mitchell* and *I. H. Brennaman* of Long Beach, 14 and 13 years, respectively.

Information Clerk *Elsie Thomas* (6th & Main), 13 years of service.

PURCHASES AND STORES

Junior Stock Clerk: Rodney Shadle*.

*Temporary employee.

**Division where employed.

20 New Buses Arrive

PAT GOGGINS, Secretary to Supt. Frank H. Markley, of Macy Garage, points to the new "FREEWAY FLIER" head sign on one of the 20 new buses that went into service in February. It was the first time that this inscription had been lettered on a head sign — a fact which shows, says Pat, that "Freeway Flyers are here to stay" — although the appearance of this head sign in the photo does not mean that these new coaches are all necessarily used in Flyer service.

Purchased at a cost of \$540,000, or \$27,000 each, the new 45-passenger, interurban-type buses have been assigned to four lines: three coaches to the Long Beach-Riverside Line (59); 13 to the Los Angeles-Pomona-San Bernardino Redlands Line (60); three to the Riverside-Arlington-La Sierra Line (62); and one to the Riverside-Santa Anita Race Track Line (57).

The new coaches are based at the Riverside Division.

This assignment released a number of the 48-passenger, 5100-class coaches for use in the areas for which they were originally intended, including the Pasadena Oak Knoll (70) and Short (71) lines; and the West Los Angeles Line (83)—although these lines are still not 100% equipped with the 5100-class coaches.

The 20 new buses arrived already painted in the distinctive MTA colors, and equipped with light green needlepoint upholstery, tinted-glass windows, thermostatically controlled heating and ventilation, interior baggage racks, and baggage compartments underneath the floor. Numbers are 2025 to 2044, inclusive.

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New Radio Dispatching System to be Installed

INSTALLATION of a complete new radio dispatching system, to replace the present inconvenient dual set-up, is under way and will probably be completed and in operation about June 1, according to Superintendent of Electrical Department Leland E. Dye.

"The present systems, under which the former LATL mobile units are on one frequency and former MCL units on another, make prompt transmission of messages or instructions often difficult, and require relaying messages from one Dispatcher to the other," Mr. Dye pointed out.

"Under the new system, all mobile units will be operated on the same frequency and there will be only one dispatching center," he continued. "Moreover, there will be a minimum of interference from other stations because of the operation of the new equipment on what is called a 'narrow band channel,' and because of the use of the latest devices to screen out unwanted transmissions."

The Dispatcher's office will be at Transportation Department headquarters at 12th and Sentous Sts., in Division 20. The Dispatcher will have the option of transmitting from a directional microwave antenna to be placed on the roof of the Transit Authority Building, 1060 S. Broadway, and aimed at an automatic transmitter on Mt. Modjeska, east of Santa Ana; or of

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using a wired circuit to a transmitter on Mt. Washington, in the Glendale area. The Mt. Modjeska beam, generally speaking, will be used to reach mobile units in the south and west; the Mt. Washington station, to reach units in the main Los Angeles area, as well as in the north and east.

An entirely new frequency, as well as new call letters, will be assigned by the Federal Communications Commission, according to Mr. Dye. All 85 mobile units will be changed over as fast as possible, but while this is being done, it will be necessary to keep the existing dispatching equipment in operation, he stated.