U.C. students design New-look bus shelters
Keeping AC Transit clocks correct
A timely part of District operations

To AC Transit, time is for keeping.
Being on time is a matter of great concern because people depend on AC Transit buses to take them where they want to go, when they want to be there, and on schedule.

To make certain the correct time is kept by all employees, there is one "master" clock from which all other clocks and watches on the property are set. The master clock is set by Pacific Telephone time.

That clock, an otherwise undistinguished electric wall clock, hangs in the Central Dispatch office at Emeryville.

Every evening, about 11 p.m., a dispatcher phones the telephone company to get the precise time. He then adjusts the master clock, if necessary.

This precise time then is phoned to each operating division where their clocks are adjusted, but only if necessary. Road supervisors also set their watches by the master clock and double-check the time at division offices.

In fact, there are two clocks at each division—one inside the dispatch room and the other in the gillie room where operators wait to go out on assignment. Supervisors check both clocks against their watches.

Finally, each operator sets his own watch by the gillie room clock and runs his schedule accordingly. Once every year each watch is checked for accuracy by an expert jeweler. A passenger could get the correct time from an operator. Or he could just call Pacific Telephone.

Richmond exceeds Safety goal again

Richmond Division operators, who got into the habit of breaking the safe-driving goal during 1970, continued their winning ways into 1971.

The monthly goal for each division is 13,250 miles per accident. During January, Richmond operators averaged 19,899 miles per accident.

The Richmond drivers topped the monthly goal ten times last year, and might have made it 11 except that June was not included because of the work stoppage that month.

Students design bus shelters for riders

Students at University of California have involved themselves in area-wide community improvements by designing creative, yet practical bus shelters for AC Transit.

The unique program is a new endeavor for the transit industry, with students and a bus system working together on a project to benefit public transit riders.

AC Transit, with the aid of federal funding, expects to build 100 bus shelters over the next 10 years, offering weather protection for its patrons.

As a class project, undergraduate students in the Department of Architecture, College of Environmental Designs, designed and built models of shelters which they felt met a high degree of visual excellence, while staying within a limited budget. Construction costs estimated by students ranged from $330 to under $3,000.

Designs were judged by a jury consisting of representatives of city planning agencies whose approval AC Transit must obtain before shelters can be erected at heavily-used bus stops.

Four designs were chosen by the judges and at least one will be picked at a later meeting for construction of a prototype.

To supplement construction and maintenance costs, students gave consideration to designs involving the use of advertising, at locations where it would be permissible and effective. Daniel Solomon was professor in charge.

Community involvement

New look in bus shelters-City planning officials, architects and transit representatives at left judge models of bus shelters, designed by students in Architecture 102A at University of California. Below, from left, Paul R. Case, who was among finalists with individual units, placed together in stair form. Lawrence Leong, center, showed an umbrella-type hexagon design, while Antone Cepenich made use of corrugated galvanized metal for his design. Advertising displays are optional. On cover, Gary Lee illustrates a "garden feeling" Oriental-type shelter.
Accidents involving AC Transit buses have declined steadily over the past 10 years, a look at statistics has disclosed.

Figures compiled by Safety Engineer G. G. Wadsworth showed total District accidents have decreased 11.11 percent since the property went into business more than a decade ago.

The accident count for 1970 was 1878, compared to 2,113 accidents in 1960 and 2,366 in 1961, first full calendar year AC Transit was in operation. The 1970 figure, however, does not take into account the number of accidents that might have occurred during the 19 days the property was closed by a June strike.

The total showed a decrease of 14.8 percent compared to 1969, Wadsworth said. Projecting an average full month of normal operations in June, the reduction would have been 9.3 percent, he added.

Drivers study rerouting proposals

Volunteer classes were being held this month at all three divisions to explain to bus drivers AC Transit's preliminary proposals for realignment of lines to serve BART stations.

Classes were set up by the Training Department to explain rerouting plans and to obtain comments and suggestions from the "man behind the wheel."

A letter also was sent to all bus drivers from General Manager Alan L. Bingham, summarizing rerouting proposals and the guidelines on which plans were developed.

The District's intent is to provide service that will maximize the use of public transit, whatever mode is used, retaining present riders and attracting new passengers from their cars.

The letter specified AC Transit would like to take advantage of driver experience and personal contacts with patrons, to help in determining opinions regarding future transit requirements.

Steam bus project

For AC Transit
Nears completion

AC Transit directors got their first look "under the hood" of an experimental steam bus this month. The directors were taken on a tour of a Berkeley shop where the steam system is being built and where it will be tested and installed in one of the District's buses.

The tour was led by William Brobeck, president of William M. Brobeck and Associates, the firm building and installing the engine.

Financed through a U.S. Department of Transportation grant awarded last June to the California State Assembly, the experimental model is scheduled for delivery to AC Transit on September 1, 1971, ready for revenue service.

Brobeck's steam engine—capable of propelling a regular AC Transit bus at speeds up to 55 miles per hour—is scheduled to be tested on Mar. 15. The engineer's steam generator has been undergoing operational tests since mid-December.

After hook-up of the generator and the engine, further tests will continue into summer, with installation planned for July.

The first day of actual street operational testing of the steam bus should be about Aug. 1, followed by a month of "debugging" before the vehicle is transferred back to AC Transit.

Brobeck told directors operation of the bus will be almost exactly the same as operation of a normal diesel bus. The major difference, the engineer said, will be in the virtually silent operation of the engine and the almost total absence of any odor.

The basic engineering principle behind steam engines, Brobeck explained, is to convert water to steam at about 850 degrees Fahrenheit and 800 pounds per square inch pressure.

Water is turned to steam by being forced through 1430 feet of tightly wound tubing surrounded by hot gases from a firebox. Leaks are virtually impossible and the danger of a boiler explosion is nil.

The steam then goes into the combustion chamber of a normal engine. There it moves a piston which, in turn, rotates a drive-shaft and the wheels.

As the steam leaves the chamber, it passes through four condensers around the engine and the almost total absence of any odor.

The steam then goes into the combustion chamber of a normal engine. There it moves a piston which, in turn, rotates a drive-shaft and the wheels.

HOW IT WORKS—Engineer William Brobeck, center, points out details of the steam generator to AC Transit Board President Ray Rinehart.

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Transbay Transit Terminal.
The exercises include weight-lifting and five dancing groups.

Sixty years ago, George Zieg­ensfuss retired.

Three transit veterans, with more than 90 years of service among them are retiring from AC Transit.

Nearly 50 of the 90 years have been recorded by George W. Ziegensfuss, the District’s supervisor of claims.

George, called "Ziggy" by his many friends, was born April 18, 1885, at Mission San Jose in what now is Fremont.

Ziggy attended a business college in San Jose and saw service in France in World War I as a convoy mechanic, helping to ferry locomotives out of the combat zone.

Returning to the Bay Area in 1919, he began work for the San Francisco-Oakland Terminal Railway on May 3, 1921. (The name wasn’t changed to Key System until Jan. 1, 1924.)

He served in a variety of jobs, including streetcar conductor, motorman, dispatcher, switcher, and clerk, until early in World War II, when he moved to the Claims Department.

Married Feb. 28, 1926, Ziggy and his wife, Edna, will celebrate their 45th anniversary this month.

The Ziegensfusses have no definite plans in retirement. "There probably will be some trips," Ziggy says, "but we don’t expect to lead an hilarious life."

This, however, is from a man who was an active skier until his doctor ordered him off the slopes a dozen years ago. But, if George couldn’t ski, he still could dance and keep up regular exercises. The exercises include weight-lifting and the dancing includes active membership in five dancing groups.

Travel figures in the plans of Mrs. Marie Freestone, a ticket seller at the Transbay Transit Terminal.

Mrs. Freestone and her husband, Albert, who retires soon from his job at Oakland Army Base, intend to move to Medford, Oregon.

The Freestones own ten acres near that Southern Oregon community. They hope to build a home there and to operate a small farm.

For Marie, the move will be “back home” since she came to California originally from Klamath Falls.

Marie started with Key System on Dec. 18, 1950, as an operator out of Richmond. After three years she became a train conductor until the trains stopped running in 1958. Then it was back to buses as an operator out of Emeryville until she became a ticket seller in 1962.

Another 20-year veteran who retires March 1 is Franklin D. Caillat, 70, of 1856 Green St., Apt. 4, San Francisco.

Caillat, a mechanic, dates his service from July 25, 1950, although he did have three years with Key System just after World War II.

Operators to aid Oakland police

AC Transit operators, who consistently have been cited for community aid by reporting fires, street crimes and other occurrences, have formally become part of the Oakland Police Department’s “Radio Alert Program.”

Cards have been placed in all District buses, reminding operators what to look for in cases of street crimes, burglaries, fires or major accidents.

Drivers in turn report incidents to Central Dispatch, which notifies appropriate authorities.

December figures show decrease

East Bay revenue and passenger riding were down in December, compared to the same month a year ago. Transbay revenue showed a slight gain.

Total passenger revenue for the month was $1,253,062, down $74,907 or 5.64 percent below the $1,327,969 collected during December, 1969. East Bay revenue was down $75,182, from $747,861 dropped in fare boxes a year ago, to $672,679. Transbay revenue for December was $580,373, an increase of $275 or .05 percent above revenue of $580,108 collected in the same month in 1969.

Commute book sales totaled $253,244, up 3.0 percent above sales of $245,757 made during the month of December, 1969.

AC Transit buses carried 4,197,068 passengers during December, down 145,417 or 3.35 percent below the 4,342,485 carried during the same month a year ago. East Bay buses carried 3,010,134 passengers, down 136,729 or 4.34 percent below the 3,146,854 who rode in the same month one year earlier. On transbay lines, patronage for the month totaled 1,186,934, down 8,697 or .73 below December, 1969.

Operating costs during the month were $1,827,278, up $237,198 or 14.92 percent above year-ago expenses of $1,590,080. The District operated 2,114,882 miles of service, an increase of 18,026 miles or .86 above the December, 1969, mileage of 2,096,856.

Total income of $1,999,882 covered operational costs, but left a deficit of $22,613 in meeting full bond debt requirements.

The transit industry nationally showed a decrease in revenue passengers of 6.85 percent.
Actions of the Board

At an adjourned regular meeting Jan. 27, the Board of Directors:
- Authorized advertising for bids for petroleum products, on motion of Director Copeland.
- Authorized a public hearing on Feb. 24 on grant application for new diesel buses and fuel injectors, in compliance with new federal regulations, on motion of Director Copeland.

At a regular meeting Feb. 10, the Board of Directors:
- Authorized participation in American Transit Association project, with other transit systems, on study of vandalism and passenger security, on motion of Director Copeland.

Transbay commuting Doubles in 10 years

Transbay commuting by bus has nearly doubled since AC Transit went into business 10 years ago, according to a study made by the University of California’s Institute of Transportation and Traffic Engineering.

While use of bus transit has grown 98.4 percent since 1960, use of cars for transbay commuting has increased 30.3 percent, the traffic check disclosed.

Buses now are carrying more than half the travelers crossing the bridge during commute traffic peaks, putting public transit out in front in popularity, economical efficiency and better use of road space, Alan L. Bingham, general manager, said.

The figures include riders carried by both AC Transit and Greyhound. The transit district’s own commute hour business has jumped 75.4 percent since 1960 and is up 8.3 percent since October, 1968.

During the 6:30 to 8:30 a.m. period on the bridge, 495 buses are bound to San Francisco with 17,585 passengers during an average work day. Buses run every 8.9 seconds between 7:30 and 8 a.m. and every 14.5 seconds from 6:30 to 8:30 a.m.

At the same time, 14,883 cars are crossing the bridge with 21,765 passengers — a load factor of 1.46 riders.