PACIFIC TELPHONE COMPANY

NORTHERN CALIFORNIA AREA

MOBILE CENTRAL OFFICE

SONOMA, CALIFORNIA

SEPTEMBER 29, 1957

Sonoma, California - Mobile Dial Switching Central Office Installation

File: 640.0 General

San Francisco, October 10, 1957

H. L. KERTZ, ASSISTANT VICE PRESIDENT, San Francisco:

We cut our first mobile dial switching central office into service on September 29, 1957, at Sonoma, California.

The mobile unit is located on leased property about 3.3 miles from the existing central office and is on our toll route to Santa Rosa in the community of Aqua Caliente. We transferred 240 lines and 564 main stations from Sonoma Main to Sonoma Wyman (Mobile office) with the cut. At that time we were holding 26 orders for primary service and carrying a 47 main station overload in Main office. We were also limiting sales to party lines. The mobile unit provides the same service as subscribers in the Main office receive. With a small growth job in Main office we expect to care for demand in Sonoma Exchange until early in 1960.

Our mobile office program was started in the Northern California Area on September 20, 1955, when the Plant Extension Engineer requested that an emergency mobile unit be made available. A number of emergency situations made the need for these units obvious; an earthquake at Tehachapi, a fire at Valley Ford and later a fire at Bodega Bay and one at Sharp Park. We also need them for National Defense or housing development demand which we cannot predict in time for permanent installations. The use of these units to supplement existing services to relieve unfilled orders and furnish regular dial service in the shortest time is our major objective.

We designed these units based on mobile offices built by other Bell System companies. The trailer is a standard semi-type manufactured by the Highway Trailer Company of Wisconsin. The outside measures: 37 ft. long, 8 ft. wide and 12 ft. 7 in. high. This size allows us to move the trailers on California State Highways without a special permit. They are painted Bell System "Du Lux" green.

The central office equipment was manufactured by the Stromberg-Carlson Company and installed at their plant in Rochester, New York. The complete unit was shipped "piggyback" by rail to the Western Electric Company at San Leandro, California. The transportation department uses a standard truck tractor to move the trailer as required.

Our mobile units are a complete central office equipped with 600 lines and 800 terminals. The normal utilization capacity serves 725 main stations, special circumstances may vary the capacity accordingly. We can serve 1, 2, 4 and 8 party flat rate subscribers,

with code or full and semi-selective ringing features. No coin box facilities are provided. Seven digit numbering, intercepting, service codes and CAMA features are available. The mobile unit may be assigned as a community dial office, a district office in a multi-office exchange or used to supplement either. It is compatible with No. 5 crossbar and step-by-step equipment. Trunk circuits are provided to work on composite or loop signalling and with recording or toll switching trunks. Numbers are assigned on a terminal per station basis. The subscriber line loop is 1200 ohms.

We purchased five complete mobile units. In addition to the Sonoma installation, we plan to use Unit No. 2 at Anderson, No. 3 at Folsom and No. 4 at Modesto (Salida). No. 5 will be held for emergency assignment. We will rotate each unit through the emergency standby period.

FPCL:jlw

Chief Engineer

Attachments - Photographs

PICTURE NO. 1

Mobile Unit on Location

1. Mobile Unit in place on concrete slab near Sonoma - Santa Rosa Highway.

2. Front end of trailer is jacked up and tractor removed. Picture No. 2 shows cribbing in place under trailer.

3. The large double door at rear is used for an equipment entrance.

4. Note service pole on left with wooden guard over A.C. power conduit. Service meter is on the back side of pole. A power drop runs from pole to service entrance at front of trailer.

5. Telephone entrance cables will be buried from pole riser to a wooden pull box near the front end of trailer.

PICTURE NO. 2

Looking at Mobile Unit from Side Street

1. Note cribbing in place under front end. The rear end is also supported on cribbing. The wheels will be removed and stored while unit is on location.

2. Front entrance is through the door shown.

PICTURE NO. 4

Interior View Showing all Equipment Line Up

1. Note fluorescent lights on ceiling and linoleum on floor.

2. Vertical strap iron supports used during transportation have not been removed from relay can covers.

PICTURE NO. 5

Looking from Rear to Front of
Mobile Unit

1. Horizontal side of CDF looking toward front.

2. AC power panels on right hand wall.

3. Note heater at center top.

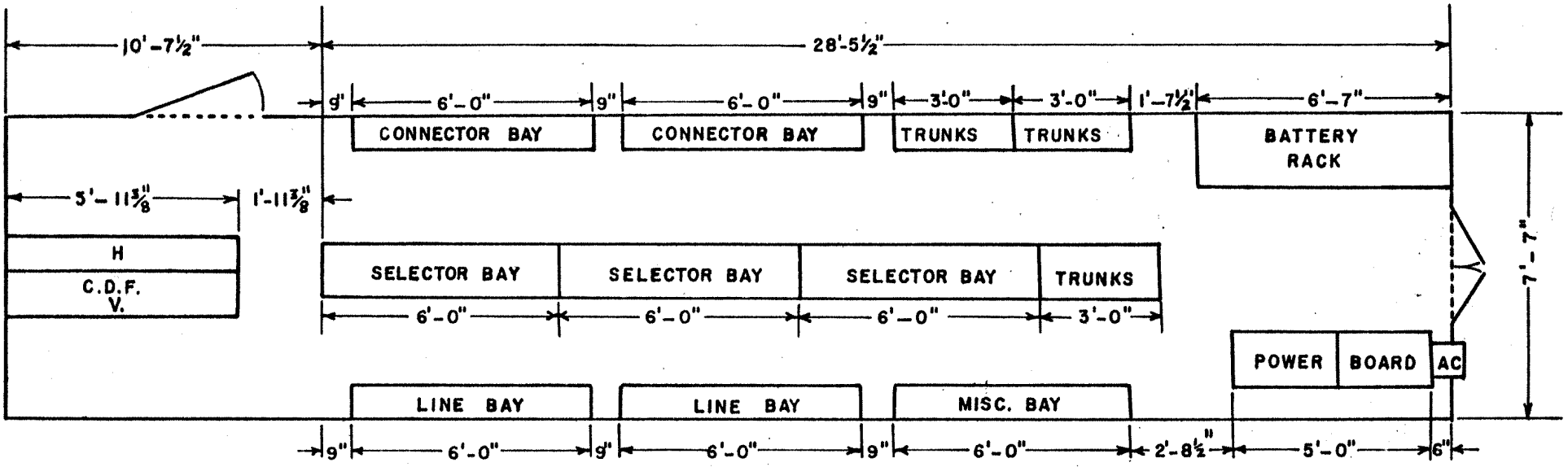
PICTURE NO. 6

Looking Toward Rear

1. Notice compact arrangement of equipment bays.

2. On the next page you will find a typical equipment layout.

PACIFIC TELEPHONE CO-MOBILE DIAL OFFICE



TYPICAL FLOOR PLAN LAYOUT

C O P Y

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MOBILE DIAL OFFICES

These Mobile Dial Offices were designed to assist us in meeting service requirements brought about by sudden growth, emergencies, etc. They will work with No. 5 crossbar or step-by-step, and can serve either as a separate central office unit or as an addition to an existing office.

Stromberg-Carlson "XY" (5xS type) equipment was used because at the time these units were engineered by the Northern California Area, the Western Electric Company 355 5xS equipment was allocated. Also, the XY equipment provides a greater main station capacity in the available space. Postpay coin service is provided for emergency use only.

These units can be placed in service by the Plant Department without the help of the Western Electric. All that the unit requires is power and access to outside plant. Commercial power is normally used but one of our standard emergency generators could be substituted.

These units give us the flexibility we need to economically meet sudden demands for service. They allow us to provide service sooner than with a normal central office job. They also provide an interval for growth fluctuations to level off so that when our permanent installation is made, it can be engineered for maximum economy. The relative low cost of placing these units in service, plus temporary deferment of the capital expenditure for a permanent installation make these units attractive.

We plan to schedule these mobile units to be in one location from 12 to 18 months. On growth jobs we expect to park the trailer on a concrete slab, but for an emergency, the trailer can be parked anywhere. The trailer, being weatherproof, can be stored in the open. It is insulated and equipped with a heater for cold weather.

The units meet California Highway restrictions and can be moved without special permit. The standard tractor units operated by the transportation department provides motive power.

C O P Y

MOBILE DIAL OFFICE

Trailer	- Standard semi-type manufactured by Highway Trailer Company of Wisconsin
Equipment	- Stromberg-Carlson XY (Step-by-Step Type)
Capacity	- 600 lines, 800 terminals - Estimated utilization capacity, 725 main stations
Size	- Outside dimensions, 37' long, 8' wide, 12'7" high
Weight	- Total - 41,000 lbs. including tractor - (Maximum allowable under California state law, 45,000) Equipment only - 24,000 lbs.
Cost	- $135,000
Ringing	- Code - full - semi-selective (optional connections)
Class of service	- 1, 2, 4, 8 party flat rate
Coin Box Service	- Postpay only
Optional features	- 7 digit numbering, intercepting, service codes, access to CAMA office
No. of Units ordered	- 5 complete trailers
Motive power	- Standard tractor as used by transportation department (not included with trailer)
Moving	- Can be moved on California highways without special permit