



THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY
CUSTOMER OPERATIONS-BAY SECTOR
CUSTOMER SYSTEMS ENGINEERING

DRAFT 5-31-73

CUSTOMER CALIFORNIA STATE POLYTECHNIC COLLEGE DATE FINAL 6-1-73
ADDRESS SAN LUIS OBISPO TEL. 546-0111
CITY SAN LUIS OBISPO MARKETING REQUEST DATED 12-21-72
DIVISION SOUTHERN DIST. CODE SE PARCEL 075
CUSTOMER SYSTEMS ORDER NO. 5741-3 TYPE DIAL 701-B CENTREX 1 CH (ATSS NET.)
REQUIRED FOR SERVICE DATE 9-1-73 ATTENDANT FACILITY NO 1B CONSOLE
DIAL LINE CAPACITY AS ORDERED BY CUSTOMER ADMIN. 930. DORM. 1280. INTERIOR 40

DISTRICT MANAGER - CUSTOMER SERVICE, SAN JOSE, CALIF.

CHANGE SWITCH QUANTITIES IN ORDER TO MEET DUE DATE.

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CITY: SAN LUIS OBISPO

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GENERAL

GENERAL FEATURES

1. DIRECT INWARD DIALING (DID) TO ALL PRIMARY STATIONS.
2. NETWORK INWARD DIALING (NID) TO ALL PRIMARY ADMINISTRATION STATIONS.
3. STATION TRANSFER BY THE ATTENDANT ON DID CALLS AND CALLS TO THE LISTED NUMBER.
4. TWO POSITIONS OF UNIVERSAL CONSOLE WITH RELEASE LOOP OPERATION AND KEY PULSING.
5. STATION IDENTIFICATION OF DOD CALLS BY PRIMARY STATIONS BY PEX A100.
6. DIAL CONFERENCE CIRCUIT.
7. NIGHT SERVICE IS PROVIDED. OPERATION OF THE "NITE" KEY CAUSES THE LISTED NUMBER AND NETWORK LISTED NUMBER CALLS TO BE ROUTED TO FIXED STATIONS (ASSIGNED BY LOCAL TRAFFIC).

DIAL EQUIPMENT

1. THREE CLASSIFICATION OF DIAL LINES.
 - A. PRIMARY - ADMIN. - THESE LINES HAVE NO RESTRICTIONS.
 - B. PRIMARY - ADMIN, DORM. RESTRICTED FROM LEVELS 6, 7, 8
 - C. INTERIOR - INTRA PBX CALLING ONLY. NO ATTENDANT ACCESS.

ROUTING OF CALLS (CENTREX SERVICE TRUNK GROUPS)

1. INCOMING - ALL INCOMING CALLS TO THIS CENTREX COME VIA TWO DID CENTREX SERVICE GROUP FROM THE SAN LUIS OBISPO MAIN #5XB. 1-INTER-LOCAL, 1-TOLL SWITCHING.
2. OUTGOING - TRAFFIC WILL LEAVE THIS PBX ON TWO TRUNK GROUPS. ONE WILL BE USED FOR PRIMARY STATIONS AND ATTENDANT-CENTREX A100, FLAT, NON-ESSENTIAL. ONE WILL BE USED FOR ATTENDANT ACCESS ONLY-CENTREX A100, FLAT ESSENTIAL.

NUMBERING ARRANGEMENT

1. THE LISTED NUMBER FOR CALIFORNIA STATE POLYTECHNIC COLLEGE IS 546-0111.
- 2. PRIMARY ADMINISTRATION STATIONS WILL BE NUMBERED 20XX-29XX, 46XX, 47XX
- 3. PRIMARY DORMITORY STATIONS WILL BE NUMBERED 30XX-39XX AND 41XX-45XX
4. INTERIOR STATIONS WILL BE NUMBERED 40XX.
5. THE ATSS NETWORK LISTED NUMBER IS 628-0001.

CAPACITY

1. IN ORDER TO PROVIDE FOR NUMBER RESERVATIONS, CHANGES AND REASSIGNMENTS, ADDITIONAL LINES AND NUMBERS ARE PROVIDED. HOWEVER, THIS SYSTEM IS ENGINEERED TO SERVE A CAPACITY OF
→ 930 PRIMARY ADMIN. STATION LINES, 1280 PRIMARY DORMITORY LINES, AND 40 INTERIOR LINES. NUMBER ASSIGNMENTS SHOULD BE MADE BY THE TELEPHONE COMPANY AND MUST TAKE INTO CONSIDERATION THE LOADING AND BALANCING OF EACH LINE FINDER GROUP AND CONNECTOR HUNDRED. BANDED GROUPS, HEAVY, LIGHT, AND MEDIUM USERS, SHOULD BE EVENLY SPREAD THROUGHOUT THE CONNECTOR HUNDREDS.

DIALING PLAN

- | | |
|----------------------------------|----------------------|
| 1. EXTENSION TO EXTENSION | 4 DIGITS |
| 2. ATTENDANT TO EXTENSION | 4 DIGITS |
| 3. LOCAL OUTGOING FROM EXTENSION | "9" + 7 DIGITS |
| 4. LOCAL OUTGOING FROM ATTENDANT | "9" + 7 DIGITS |
| 5. TOLL OUTGOING FROM EXTENSION | "9" + 7 OR 10 DIGITS |
| 6. TOLL OUTGOING FROM ATTENDANT | "9" + 7 OR 10 DIGITS |
| 7. C.O. OPERATOR FROM EXTENSION | "9" + 0 |
| 8. C.O. OPERATOR FROM ATTENDANT | "9" + 0 |
| 9. EXTENSION TO ATSS NETWORK | "8" + 7 OR 10 DIGITS |
| 10. ATTENDANT TO ATSS NETWORK | "8" + 7 OR 10 DIGITS |
| 11. EXTENSION TO ATTENDANT | "0" |
| 12. ATSS NETWORK TO ATTENDANT | 628-0001 |
| 13. EXTENSION TO CONFERENCE CCT. | "7" |
| 14. ATTENDANT TO CONFERENCE CCT. | "7" |

LISTED NUMBER INCOMING CALL ARRANGEMENT

FOR LISTED NUMBER CALLS, 546-0111, THE SAN LUIS OBISPO MAIN No. 5XB OFFICE WILL ROUTE ON THE MNX CODE 546, (DELETE THE FIRST THREE DIGITS) AND OUTPUTS FOUR (4) DIGITS. THE DIGIT "0" WILL FIND ALL TERMINALS BUSY AND STEP TO THE 11TH. ROTARY POSITION. THE CALL IS THEN ROUTED TO THE ATTENDANT VIA THE CALL DISTRIBUTOR, THE TRUNK FINDER, THE ATTENDANT LOOP, THE POSITION CIRCUIT, AND THEN TO THE ATTENDANT CONSOLE. THE CALL APPEARS ON AN ATTENDANT LOOP CIRCUIT ON THE CONSOLE AS A 60 IPM FLASH ON THE SOURCE LAMP ASSOCIATED WITH THE LOOP BUTTON. THE ATTENDANT ANSWERS BY DEPRESSING THE LOOP BUTTON AND THE SOURCE LAMP CHANGES FROM FLASHING TO STEADY. THE OPERATOR ANSWERS THE CALL AND SHE EITHER DISPOSES OF THE CALL HERSELF OR ESTABLISHES THE CONNECTION TO THE REQUESTED EXTENSION NUMBER OVER THE SAME INCOMING TRUNK CIRCUIT.

DIRECT INWARD DIALED CALLS

FOR DIRECT INWARD DIALED CALLS, 546-20XX THRU 29XX, 30XX THRU 39XX, AND 41XX THRU 47XX, THE SAN LUIS OBISPO MAIN No. 5XB OFFICE WILL ROUTE ON THE MNX CODE 546. (DELETE THE FIRST THREE DIGITS) AND OUTPUTS 4 DIGITS 20XX-29XX, 30XX-39XX, AND 41XX-47XX, FOR CALLS TO STATIONS.

ATSS NETWORK LISTED NUMBER INCOMING CALLS

FOR ATSS LISTED NUMBER CALLS, 628-0001, THE LOS ANGELES 4-WIRE SWITCHER WILL OUTPUTS 4 DIGITS. THE FIRST DIGIT "0" WILL FIND ALL TERMINALS BUSY AND STEP TO THE 11TH. ROTARY POSITION. THE INCOMING TRUNK WILL HOLD THE SELECTOR OFF-NORMAL FOR A SHORT INTERVAL TO PERMIT ANY ADDITIONAL DIGITS RECEIVED TO BE ABSORBED. IT THEN ROUTES TO THE ATTENDANT VIA THE CALL DISTRIBUTOR, THE TRUNK FINDER, THE ATTENDANT LOOP, THE POSITION CIRCUIT, AND THEN TO THE CONSOLE. THE CALL APPEARS ON AN ATTENDANT LOOP CIRCUIT ON THE CONSOLE AS A 60 IPM FLASH ON THE SOURCE LAMP ASSOCIATED WITH THE LOOP BUTTON AND THE SOURCE LAMP CHANGES FROM FLASHING TO STEADY. THE OPERATOR ANSWERS THE CALL, AND SHE EITHER DISPOSES OF THE CALL HERSELF OR ESTABLISHES THE CONNECTION TO THE REQUESTED EXTENSION NUMBER OVER THE SAME INCOMING TRUNK CIRCUIT.

ATSS NETWORK INWARD DIALED CALLS

FOR NETWORK INWARD DIALED CALLS, 546-20XX THRU 29XX, THE LOS ANGELES 4-WIRE SWITCHER WILL OUTPUTS 4 DIGITS 20XX THRU 29XX, FOR CALLS TO ADMINISTRATION CENTREX STATIONS.

INTERCEPT

A 7A MECHANICAL ANNOUNCEMENT SYSTEM WILL BE PROVIDED TO INTERCEPT ALL VACANT SELECTOR LEVELS OR CONNECTOR TERMINALS. THE EQUIPMENT WILL BE ARRANGED TO RETURN "NO CHARGE" SUPERVISION ON INTERCEPTED CALLS.

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TRANSFER OF DID, NID, OR LISTED NUMBER CALLS BY ATTENDANT

STATION TRANSFER BY THE ATTENDANT OF ALL DID CALLS AND CALLS TO STATIONS PLACED BY THE ATTENDANT (LISTED NUMBER CALLS) IS PROVIDED. WHEN THE STATION USER MOMENTARILY DEPRESSES THE SWITCH HOOK, THE INCOMING CALL TO THE EXTENSION IS AUTOMATICALLY TRANSFERRED TO THE ATTENDANT LOOP ON THE CONSOLE. THE ATTENDANT LOOP ASSOCIATED SOURCE LAMP FLASHES AT 120 IPM AND THE DESTINATION LAMP LIGHTS STEADY. AFTER THE TRANSFER REQUEST HAS BEEN RECEIVED BY THE ATTENDANT, THE MANNER FOR COMPLETING THE CALL IS THE SAME AS IN THE LISTED NUMBER INCOMING CALL ARRANGEMENT.

DIAL "0" CALLS - STATION USER

EXTENSION USER DIALS "0". CALL APPEARS ON ONE OF THE ATTENDANT LOOP CIRCUITS AND LIGHTS THE ASSOCIATED SOURCE LAMP ON THE CONSOLE WHICH FLASHES AT 120 IPM. WITH EACH ATTENDANT TRUNK THERE IS AN ASSOCIATED ATTENDANT OUT SELECTOR. THE OPERATOR COMPLETES THE CALL OVER THIS ATTENDANT OUT SELECTOR IN THE SAME MANNER AS IN THE LISTED NUMBER INCOMING CALL ARRANGEMENT.

TWO-WAY POSITION CIRCUIT

TWO-WAY POSITION TRUNKS ARE TERMINATED ON THE CONSOLE. EACH CIRCUIT HAS A FRONT AND REAR SELECTOR ASSOCIATED WITH IT. THESE TRUNKS MAY BE USED BY THE ATTENDANT TO ORIGINATE CALLS AND TO PLACE DELAYED CALLS.

CONFERENCE CALLS

ONE FIVE BRANCH CONFERENCE CIRCUIT WILL BE PROVIDED AND ASSOCIATED WITH THE CONSOLE. STATION USER DIALS CONFERENCE CODE "7". IN SETTING UP A CONFERENCE CONNECTION, FIVE CONFEREES MAY BE CONNECTED IN THE FOLLOWING GROUPS: ONE C.O. TRUNK OR NETWORK TRUNK AND FOUR CENTREX STATIONS, OR TWO C.O. TRUNKS OR NETWORK TRUNKS AND THREE CENTREX STATIONS, OR FIVE CENTREX STATIONS. ON AN INCOMING CALL TO THE CONFERENCE CIRCUIT, THE CONFERENCE KEY WILL FLASH AT 120 IPM AND CHANGE TO 30 IPM WHEN ANSWERED.

TIE LINES

THERE IS ONE GROUP OF TWO-WAY REPEATING TIE TRUNKS ARRANGED FOR CCSA SERVICE TO THE FOUR (4) - WIRE No. 5XB SWITCHER IN LOS ANGELES. THE CCSA LINES WILL BE DIAL PULSE OPERATION, A10D IDENTIFICATION, AND ARE REACHED VIA ACCESS CODE "8" FOR BOTH PRIMARY STATIONS AND ATTENDANT.

INCOMING CCSA CALLS TO STATIONS AND ATTENDANT ROUTE VIA NID SELECTORS.

A KEY IS PROVIDED IN THE CAMPUS SECURITY BUILDING WHICH MAKES ALL LEVEL "8" TRUNKS BUSY.

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TRUNK BUSY INDICATION

PROVIDE 120 I PM TONE ON ALL EQUIPPED SELECTOR LEVELS.

GROUP AND TERMINAL ASSIGNMENT

GROUP AND TERMINAL ASSIGNMENT IS PROVIDED IN EACH LINE FINDER GROUP. THIS PERMITS ANY TELEPHONE NUMBER (STATION) TO BE ASSOCIATED WITH ANY LINE FINDER GROUP AND TERMINAL. UNDER THIS ARRANGEMENT, THE BALANCING OF LINE FINDER GROUPS IS POSSIBLE WITHOUT NUMBER CHANGE.

ESSENTIAL SERVICE LINE

A SEPARATE DIAL CENTRAL OFFICE TRUNK GROUP IS PROVIDED FOR ATTENDANT ACCESS ONLY. IT WILL NOT BE DENIED ORIGINATING SERVICE IN THE CENTRAL OFFICE WHEN LINE LOAD CONTROL IS INVOKED.

PLANT TEST CIRCUITS

ALL SPECIAL PLANT TEST CIRCUITS WILL BE ASSIGNED IN THE 25XX SERIES.

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FEX A100 ARRANGEMENT

GENERAL

CENTREX CU AUTOMATIC IDENTIFIED OUTWARD DIALING (A100) PROVIDES:

- 1 - ALL PRIMARY STATIONS ORIGINATING CALLS THROUGH THE CENTREX SERVICE GROUPS WILL BE IDENTIFIED BY THE A100 EQUIPMENT BY STATION NUMBER.
- 2 - ALL ATTENDANT ORIGINATED CALLS THROUGH THE CENTREX SERVICE GROUPS WILL BE IDENTIFIED BY THE A100 EQUIPMENT AND BILLED TO THE LISTED NUMBER 546-0111.
- 3 - IN THE EVENT THE A100 EQUIPMENT FAILS TO OBTAIN THE CALLING STATION LINE NUMBER OR ATTENDANT BILLING NUMBER, THE CENTRAL OFFICE WILL BE ARRANGED RETURN REORDER.