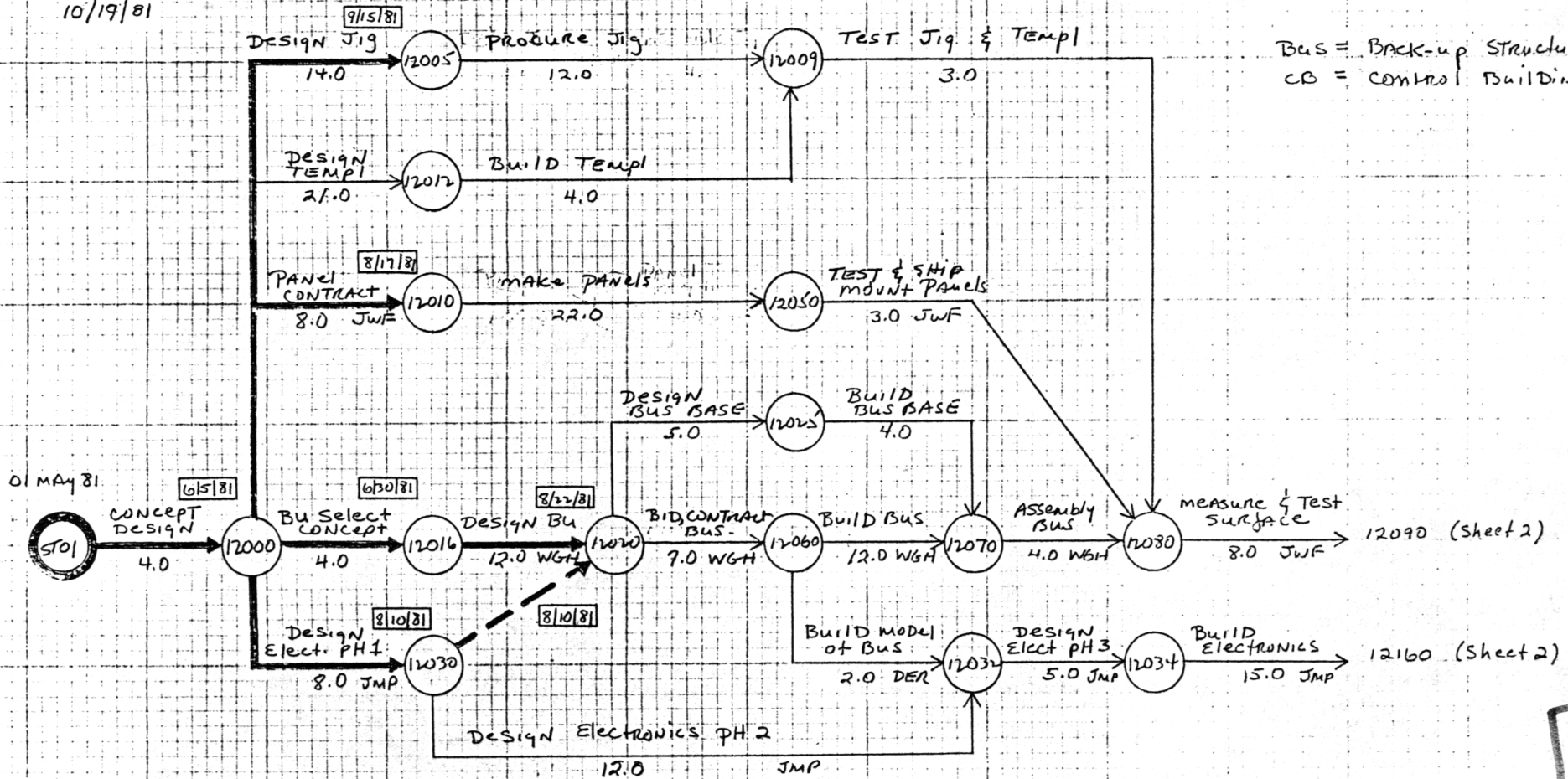


12 METER MILLIMETER WAVE TELESCOPE  
MEMO No. 89

12 M ANTENNA  
10/19/81

Bus = Back-up Structure  
CB = Control Building



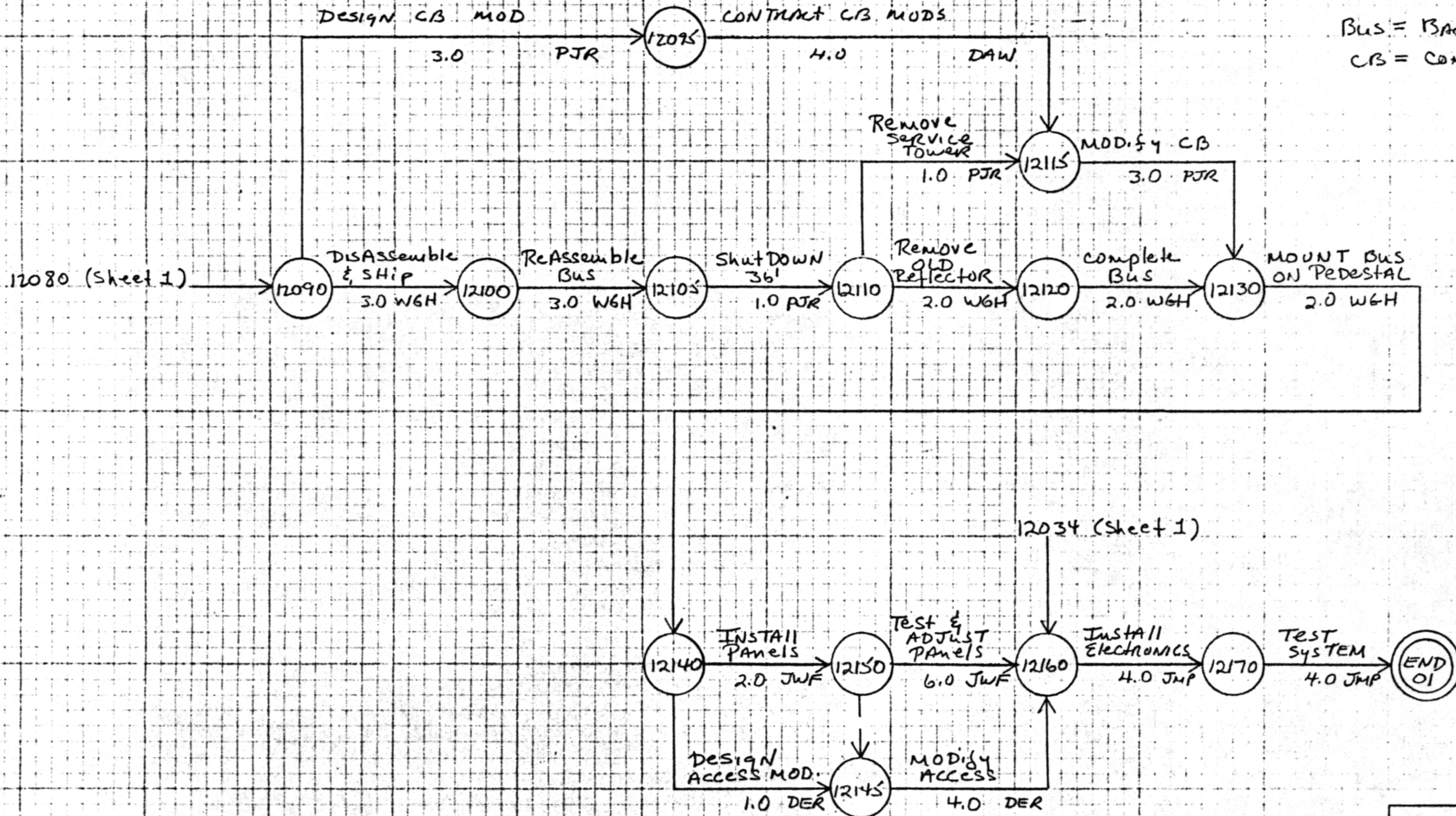
Sheet 1 of 2  
Rev: 0,1,2,3,4,  
5

#89

12 M ANTENNA

10/19/81

Bus = Back-up Structure  
CB = Control Building



Sheet 3 of 3  
Rev: 0, 1, 2, 3, 4,  
5

ACTIVITY TIME STATUS REPORT

PROGRAM PROJECT 19OCT81 REPORT DATE. 12M TELESCOPE PROJECT.  
12M ANTENNA UPGRADING PROJECT.

12M001  
ANT012

RUN DATE 19

LEVEL DETAIL

SORTED BY PRED,SUCC

| PRED EVENT | SUCC EVENT | CY. CD. | ACTIVITY DESCRIPTION     | TIME EST | SLACK PRIM. SEC. | EARLY START | DATES FINISH | LATE START | DATES FINISH | SCHED. | DEPT' |
|------------|------------|---------|--------------------------|----------|------------------|-------------|--------------|------------|--------------|--------|-------|
|            | ST01 S     |         | BEGIN                    |          | .0               | A01MAY81    | A01MAY81     | 01MAY81    | 01MAY81      |        |       |
| ST01       | 12000      |         | CONCEPT DESIGN           | 04.0     | .0               | A01MAY81    | A08JUN81     | 01MAY81    | 08JUN81      |        |       |
| END01      |            | E       |                          |          | .0               | 24NOV82     | 24NOV82      | 24NOV82    | 24NOV82      |        |       |
| 12000      | 12005      |         | DESIGN JIG               | 14.0     | 9.0              | A08JUN81    | A15SEP81     | 08JUN81    | 17NOV81      |        |       |
| 12000      | 12010      |         | PANEL CONTRACT           | 08.0     | 3.0              | A08JUN81    | A17AUG81     | 08JUN81    | 08SEP81      |        | JWF   |
| 12000      | 12012      |         | DESIGN TEMPL             | 21.0     | 10.0             | A08JUN81    | 03NOV81      | 17AUG81    | 15JAN82      |        |       |
| 12000      | 12016      |         | SELECT CONCEPT           | 04.0     | .0               | A08JUN81    | A30JUN81     | 08JUN81    | 30JUN81      |        |       |
| 12000      | 12030      |         | ELECTRONICS DESIGN PH 1  | 08.0     | 6.0              | A08JUN81    | A10AUG81     | 08JUN81    | 22SEP81      |        | JMP   |
| 12005      | 12009      |         | PROCURE JIG              | 12.0     | 9.0              | A15SEP81    | 09DEC81      | 17NOV81    | 15FEB82      |        |       |
| 12009      | 12080      |         | TEST JIG & TEMPL         | 03.0     | 9.0              | 09DEC81     | 31DEC81      | 15FEB82    | 09MAR82      |        |       |
| 12010      | 12050      |         | MAKE PANELS              | 22.0     | 3.0              | A17AUG81    | 22JAN82      | 08SEP81    | 15FEB82      |        | JWF   |
| 12012      | 12009      |         | BUILD TEMPL              | 04.0     | 10.0             | 03NOV81     | 02DEC81      | 15JAN82    | 15FEB82      |        |       |
| 12016      | 12020      |         | DESIGN BUS               | 12.0     | .0               | A30JUN81    | A22SEP81     | 30JUN81    | 22SEP81      |        | WGH   |
| 12020      | 12025      |         | DESIGN BUS BASE          | 05.0     | 10.0             | A22SEP81    | 27OCT81      | 02DEC81    | 08JAN82      |        |       |
| 12020      | 12060      |         | BID, CONTRACT BUS        | 07.0     | .0               | A22SEP81    | 10NOV81      | 22SEP81    | 10NOV81      |        | WGH   |
| 12025      | 12070      |         | BUILD BUS BASE           | 04.0     | 10.0             | 27OCT81     | 24NOV81      | 08JAN82    | 05FEB82      |        |       |
| 12030      | 12020      |         | DUMMY                    | 0000     | 6.0              | A10AUG81    | A10AUG81     | 22SEP81    | 22SEP81      |        |       |
| 12030      | 12032      |         | DESIGN ELECTRONICS PH 2  | 12.0     | 26.0             | A10AUG81    | 03NOV81      | 15FEB82    | 11MAY82      |        | JMP   |
| 12032      | 12034      |         | DESIGN ELECTRONICS PH 3  | 05.0     | 23.0             | 24NOV81     | 31DEC81      | 11MAY82    | 15JUN82      |        | JMP   |
| 12034      | 12160      |         | BUILD ELECTRONICS        | 15.0     | 23.0             | 31DEC81     | 20APR82      | 15JUN82    | 29SEP82      |        | JMP   |
| 12050      | 12080      |         | TEST & SHIP MOUNT PANELS | 03.0     | 3.0              | 22JAN82     | 15FEB82      | 15FEB82    | 09MAR82      |        | JWF   |
| 12060      | 12032      |         | BUILD MODEL OF BUS       | 02.0     | 23.0             | 10NOV81     | 24NOV81      | 27APR82    | 11MAY82      |        | DER   |
| 12060      | 12070      |         | BUILD BUS                | 12.0     | .0               | 10NOV81     | 05FEB82      | 10NOV81    | 05FEB82      |        | WGH   |
| 12070      | 12080      |         | ASSEMBLY BUS             | 04.0     | .0               | 05FEB82     | 09MAR82      | 05FEB82    | 09MAR82      |        | WGH   |
| 12080      | 12090      |         | MEASURE & TEST SURFACE   | 08.0     | .0               | 09MAR82     | 04MAY82      | 09MAR82    | 04MAY82      |        | JWF   |
| 12090      | 12095      |         | DESIGN CB MOD.           | 03.0     | 1.0              | 04MAY82     | 25MAY82      | 11MAY82    | 01JUN82      |        | PJR   |
| 12090      | 12100      |         | DISASSEMBLE & SHIP       | 03.0     | .0               | 04MAY82     | 25MAY82      | 04MAY82    | 25MAY82      |        | WGH   |
| 12095      | 12115      |         | CONTRACT CB MODS.        | 04.0     | 1.0              | 25MAY82     | 22JUN82      | 01JUN82    | 29JUN82      |        | DAW   |
| 12100      | 12105      |         | REASSEMBLE BUS           | 03.0     | .0               | 25MAY82     | 15JUN82      | 25MAY82    | 15JUN82      |        | WGH   |
| 12105      | 12110      |         | SHUT DOWN 36FT           | 01.0     | .0               | 15JUN82     | 22JUN82      | 15JUN82    | 22JUN82      |        | PJR   |
| 12110      | 12115      |         | REMOVE SERVICE TOWER     | 01.0     | .0               | 22JUN82     | 29JUN82      | 22JUN82    | 29JUN82      |        | PJR   |
| 12110      | 12120      |         | REMOVE OLD REFLECTOR     | 02.0     | .0               | 22JUN82     | 06JUL82      | 22JUN82    | 06JUL82      |        | WGH   |
| 12115      | 12130      |         | MODIFY CB                | 03.0     | .0               | 29JUN82     | 20JUL82      | 29JUN82    | 20JUL82      |        | PJR   |
| 12120      | 12130      |         | COMPLETE BUS             | 02.0     | .0               | 06JUL82     | 20JUL82      | 06JUL82    | 20JUL82      |        | WGH   |
| 12130      | 12140      |         | MOUNT BUS ON PEDESTAL    | 02.0     | .0               | 20JUL82     | 03AUG82      | 20JUL82    | 03AUG82      |        | WGH   |
| 12140      | 12145      |         | DESIGN ACCESS MOD.       | 01.0     | 3.0              | 03AUG82     | 10AUG82      | 24AUG82    | 31AUG82      |        | DER   |
| 12140      | 12150      |         | INSTALL PANELS           | 02.0     | .0               | 03AUG82     | 17AUG82      | 03AUG82    | 17AUG82      |        | JWF   |
| 12145      | 12160      |         | MODIFY ACCESS            | 04.0     | 2.0              | 17AUG82     | 15SEP82      | 31AUG82    | 29SEP82      |        | DER   |
| 12150      | 12145      |         | DUMMY                    | 0000     | 2.0              | 17AUG82     | 17AUG82      | 31AUG82    | 31AUG82      |        |       |
| 12150      | 12160      |         | TEST & ADJUST PANELS     | 06.0     | .0               | 17AUG82     | 29SEP82      | 17AUG82    | 29SEP82      |        | JWF   |
| 12160      | 12170      |         | INSTALL ELECTRONICS      | 04.0     | .0               | 29SEP82     | 27OCT82      | 29SEP82    | 27OCT82      |        | JMP   |
| 12170      | END01      |         | TEST SYSTEM              | 04.0     | .0               | 27OCT82     | 24NOV82      | 27OCT82    | 24NOV82      |        | JMP   |

ACTIVITY BAR CHART

PROGRAM 90CT81 REPORT DATE. 12M TELESCOPE PROJECT.  
PROJECT 12M ANTENNA UPGRADING PROJECT.

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RUN DATE 81

| PRED<br>EVENT | SUCC<br>EVENT | CY<br>CD | DESCRIPTION              | A - ACTIVITY COMPLETE<br>* - ACTIVITY DURATION | P - PACING ITEM<br>- - ACTIVITY FLOAT | .FINAL<br>.DATE | DEPT    |         |         |
|---------------|---------------|----------|--------------------------|--|---------------------------------------|-----------------|---------|---------|---------|
| ST01          | 12000         |          | CONCEPT DESIGN           | AAAA   |                                       | 08JUN81         |         |         |         |
| 12000         | 12005         |          | DESIGN JIG               | AAAAAAAAAAAA                                   |                                       | 15SEP81         |         |         |         |
| 12000         | 12010         |          | PANEL CONTRACT           | AAAAAAAA                                       |                                       | 17AUG81         | JWF     |         |         |
| 12000         | 12012         |          | DESIGN TEMPL             | *****-----                                     |                                       | 03NOV81         |         |         |         |
| 12000         | 12016         |          | SELECT CONCEPT           | AAA  |                                       | 30JUN81         |         |         |         |
| 12000         | 12030         |          | ELECTRONICS DESIGN PH 1  | AAAAAAA  |                                       | 10AUG81         | JMP     |         |         |
| 12005         | 12009         |          | PRGURE JIG               | *****-----                                     |                                       | 09DEC81         |         |         |         |
| 12009         | 12060         |          | TEST JIG & TEMPL         | : ***-----                                     |                                       | 31DEC81         |         |         |         |
| 12010         | 12050         |          | MAKE PANELS              | *****-----                                     |                                       | 22JAN82         | JWF     |         |         |
| 12012         | 12009         |          | BUILD TEMPL              | : ***-----                                     |                                       | 02DEC81         |         |         |         |
| 12016         | 12020         |          | DESIGN BUS               | AAAAAAAAAAAA                                   |                                       | 22SEP81         | WGH     |         |         |
| 12020         | 12025         |          | DESIGN BUS BASE          | : ****-----                                    |                                       | 27OCT81         |         |         |         |
| 12020         | 12060         |          | BID, CONTRACT BUS        | : PPPPP  |                                       | 10NOV81         | WGH     |         |         |
| 12025         | 12070         |          | BUILD BUS BASE           | : ****-----                                    |                                       | 24NOV81         |         |         |         |
| 12030         | 12032         |          | DESIGN ELECTRONICS PH 2  | *****-----                                     |                                       | 03NOV81         | JMP     |         |         |
| 12032         | 12034         |          | DESIGN ELECTRONICS PH 3  | : ****-----                                    |                                       | 31DEC81         | JMP     |         |         |
| 12034         | 12160         |          | BUILD ELECTRONICS        | : *****-----                                   |                                       | 20APR82         | JMP     |         |         |
| 12050         | 12060         |          | TEST & SHIP MCUNT PANELS | : : ***--                                      |                                       | 15FEB82         | JWF     |         |         |
| 12060         | 12032         |          | BUILD MODEL OF BUS       | : ***-----                                     |                                       | 24NOV81         | DER     |         |         |
| 12060         | 12070         |          | BUILD BUS                | : PPPPPPPPP                                    |                                       | 05FEB82         | WGH     |         |         |
| 12070         | 12080         |          | ASSEMBLY BUS             | : : PPPP                                       |                                       | 09MAR82         | WGH     |         |         |
| 12080         | 12090         |          | MEASURE & TEST SURFACE   | : : PPPPPPP                                    |                                       | 04MAY82         | JWF     |         |         |
| 12090         | 12095         |          | DESIGN CB MCD.           | : : ***-                                       |                                       | 25MAY82         | PJR     |         |         |
| 12090         | 12100         |          | DISASSEMBLE & SHIP       | : : PPP  |                                       | 25MAY82         | WGH     |         |         |
| 12095         | 12115         |          | CONTRACT CB MODS.        | : : ****                                       |                                       | 22JUN82         | DAW     |         |         |
| 12100         | 12105         |          | REASSEMBLE BUS           | : : PPP  |                                       | 15JUN82         | WGH     |         |         |
| 12105         | 12110         |          | SHUT DOWN 36FT           | : : PP   |                                       | 22JUN82         | PJR     |         |         |
| 12110         | 12115         |          | REMCVE SERVICE TOWER     | : : P  |                                       | 29JUN82         | PJR     |         |         |
| 12110         | 12120         |          | REMOVE OLD REFLECTOR     | : : PP   |                                       | 06JUL82         | WGH     |         |         |
| 12115         | 12130         |          | MODIFY CB                | : : PPP  |                                       | 20JUL82         | PJR     |         |         |
| 12120         | 12130         |          | COMPLETE BUS             | : : PP   |                                       | 20JUL82         | WGH     |         |         |
| 12130         | 12140         |          | MOUNT BUS ON PEDESTAL    | : : PPP  |                                       | 03AUG82         | WGH     |         |         |
| 12140         | 12145         |          | DESIGN ACCESS MOD.       | : : *--  |                                       | 10AUG82         | DER     |         |         |
| 12140         | 12150         |          | INSTALL PANELS           | : : PP   |                                       | 17AUG82         | JWF     |         |         |
| 12145         | 12160         |          | MODIFY ACCESS            | : : ****-                                      |                                       | 15SEP82         | DER     |         |         |
| 12150         | 12160         |          | TEST & ADJUST PANELS     | : : PPPPP                                      |                                       | 29SEP82         | JWF     |         |         |
| 12160         | 12170         |          | INSTALL ELECTRONICS      | : : PPPP                                       |                                       | 27OCT82         | JMP     |         |         |
| 12170         | END01         |          | TEST SYSTEM              | : : PPPP                                       |                                       | 24NOV82         | JMP     |         |         |
|               |               |          |                          | 01SEP81  | 01JAN82                               | 01MAY82         | 01SEP82 | 01JAN83 | 01MAY83 |

ACTIVITY TIME STATUS REPORT

PROGRAM 19OCT81 REPORT DATE. 12M TELESCOPE PROJECT.  
 PROJECT 12M ANTENNA UPGRADING PROJECT.

12M001  
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RUN DATE 19

LEVEL DETAIL

SORTED BY EXP.DATE

| PRED<br>EVENT | SUCC<br>EVENT | CY.<br>CD. | ACTIVITY<br>DESCRIPTION  | TIME<br>EST | SLACK<br>PRIM. SEC. | EARLY<br>START | DATES<br>FINISH    | LATE<br>START | DATES<br>FINISH | SCHED. | DEPT |
|---------------|---------------|------------|--------------------------|-------------|---------------------|----------------|--------------------|---------------|-----------------|--------|------|
| 12020         | 12025         |            | DESIGN BUS BASE          | 05.0        | 10.0                | A22SEP81       | <del>27OCT81</del> | 02DEC81       | 08JAN82         |        |      |
| 12020         | 12060         |            | BIC, CONTRACT BUS        | 07.0        | .0                  | A22SEP81       | <del>10NOV81</del> | 22SEP81       | 10NOV81         |        | WGH  |
| 12060         | 12032         |            | BUILD MGDEL GF BUS       | 02.0        | 23.0                | 10NOV81        | 24NOV81            | 27APR82       | 11MAY82         |        | DEF  |
| 12025         | 12070         |            | BUILD BUS BASE           | 04.0        | 10.0                | 27OCT81        | 24NOV81            | 08JAN82       | 05FEB82         |        |      |
| 12012         | 12005         |            | BUILD TEMPL              | 04.0        | 10.0                | 03NOV81        | 02DEC81            | 15JAN82       | 15FEB82         |        |      |
| 12005         | 12005         |            | PROCURE JIG              | 12.0        | 9.0                 | A15SEP81       | 09DEC81            | 17NOV81       | 15FEB82         |        |      |
| 12032         | 12034         |            | DESIGN ELECTRONICS PH 3  | 05.0        | 23.0                | 24NOV81        | 31DEC81            | 11MAY82       | 15JUN82         |        | JMP  |
| 12009         | 12080         |            | TEST JIG & TEMPL         | 03.0        | 9.0                 | 09DEC81        | 31DEC81            | 15FEB82       | 09MAR82         |        |      |
| 12060         | 12070         |            | BUILD BUS                | 12.0        | .0                  | 10NOV81        | 05FEB82            | 10NOV81       | 05FEB82         |        | WGH  |
| 12050         | 12080         |            | TEST & SHIP MGUNT PANELS | 03.0        | 3.0                 | 22JAN82        | 15FEB82            | 15FEB82       | 09MAR82         |        | JWF  |
| 12070         | 12080         |            | ASSEMBLY BUS             | 04.0        | .0                  | 05FEB82        | 09MAR82            | 05FEB82       | 09MAR82         |        | WGH  |
| 12034         | 12160         |            | BUILD ELECTRONICS        | 15.0        | 23.0                | 31DEC81        | 20APR82            | 15JUN82       | 29SEP82         |        | JMP  |