

READING PRINTED BAR CHARTS

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1990 April 16

**General Comments:**

Schedules are based on activities, each having defined predecessors and successors and a duration. In addition, "constraints" can be used to force activities to occur in relation to defined dates (for example, the activity "choose PMT manufacturer" is constrained to occur on August 10). The scheduling process takes this information, and generates calendar dates for each activity:

early start      date before which the activity cannot start, because outputs produced by predecessor activities will not be ready before then.

early finish     date equal to early start plus duration.

late finish      latest date that the activity can finish without delaying its successor(s) to the point that the end of the project is delayed.

late start       date equal to late finish less duration.

From these dates, total float is calculated as the time interval between early start and late start (or early finish and late finish).

**In the bar charts:**

early dates are shown as      EEEEEEEEE  
late dates are shown as      LLLLLLLLL

because the dates are shown on the same line, possibilities are:

float > duration              EEEEEEEEE+++++LLLLLLLLL  
0 < float < duration        EEEEE/EEEELLLLL  
float = 0                      /EEEEEEEE  
float < 0 (constrained),  
    |float| < duration        LLLL/EEEEEEEE  
    |float| > duration        LLLLLLLL-----EEEEEEEE

Progress data is input as the actual date started and (usually) percent complete for each activity underway, and the "data date". Progress data is shown as A, with the E's and L's showing the "remaining duration", hence:

data date                      \*

partially achieved            AAAAAAEEE/LLLLL

out-of-sequence progress     AAAA    EEEEEEEEE+++++LLLLLLLLL

The program allows storage of a "target" schedule, against which progress can be measured. In the charts, two bars are shown: the top line is the presently-calculated schedule, and the bottom line is the target schedule.

DESCRIPTION OF "CRITICAL ACTIVITY" LIST

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Choice of activities to include in the listing:

first level selection: (734)

early start less than 1 Jan 91  
or  
actual start greater than 1 Jan 90

second level selection: (372)

total float less than 25 days  
or  
"C02 > 00

The selected activities are then sorted by: ( 77)

subproject  
actual start  
early start  
total float  
activity number

Data shown in sheets:

ACTIVITY ID

ORIG DUR original duration

REM DUR remaining duration

PCT percent complete

CODE name of group leader (or occasionally  
other person responsible)

EARLY START (note that a suffix A means actual start, and that  
suffix \* means the date is constrained)

LATE FINISH

TOTAL FLOAT