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 **REEEEEEEE**
- Late dates are shown as **LLLLLLLL**

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

- float > duration: **REEEEEEEE+---+LLLLLLLLL**
- 0 < float < duration: **EEEEEEEEEELLLL**
- float = 0: **EEEEEEEE**
- float < 0 (constrained), |float| < duration: **LLLLEEEEEE**
- |float| > duration: **LLLLLLLL---EEE---E**

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: **AAAAAAAA/LLLL**
- out-of-sequence progress: **AAA/EEEEEEEE+---+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
- actual start greater than 1 Jan 90

second level selection: (372)
- total float less than 25 days
- "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