

## Appendix B-6

### Method for effective and proper expediting

The principles are as follows:

1. The man who finds his name on the notice board starts an action.
2. A back date (past date) shall be set as the date that a desired thing is required.
3. The difference between back dates shall be taken as a sequence of priority.
4. In each process, an item whose schedule changes as the result of a delay of its own making shall be crossed out with a diagonal line to indicate how many times it has been changed.
5. The expediting board shall be put on wall where every person can see it.

## Method for effective and proper expediting

### 1. Recognition (or Principle)

- (1) Any person is uneasy when seeing his name posted visibly on a board.
- (2) He feels stress and pressure to complete the allocated work when he sees his name, allocated work, and date on a board.
- (3) He also feels stress and pressure relating to the preceding and succeeding processes when these are highlighted with his name on the work allocation board, that is, started work is colored yellow and, the finished work is colored red.
- (4) The allocation of work and its priority only become persuasive to a person, and achieve the positive cooperation of the person under consideration, when the priority is well-balanced over the whole organization.
- (5) Work allocation contents should not be vague, but should include a detailed order of processes.

### 2. Format Using the Above Principle And Expediting

- (1) The "Expediting" format in Fig. 1 is used as example.
- (2) The following is an explanation of how to fill each column of the format in and how to operate it for expediting:

**Item No. Column:** Fill in this column with Item Nos. 1,2,3,...every time to prepare the Format for convenient control. The Item No. shall be revised when the Format is remade.

The existence of the Item No. makes it possible to omit calling up the item description or part number each time one has to make contact or an arrangement concerning expediting.

**Registration No.:** Fill in this column with the Registration No., which consists of a symbol representing the group of a number of expediting items (e.g. A,B,C,...) and numerals; for example, B01, D11, etc. The Registration No. shall be something that enables the collective recognition of expediting items.

Moreover the List No. Group Column at the bottom of the expediting sheet ( Figure 1 ) is provided and filled in with a symbol and number representing a group of a higher level. A sample of a completed expediting + sheet (See Figure No. 2) shows the case group number is 12A. This group number is convenient to use when, for example, work can only start if all of the items listed in the expediting sheet with a specific group number are gathered, or when a concise expediting order is required. (It is especially convenient when several dozen to hundreds of items must be collected.)

The group number makes it possible to briefly set an order and to get a handhold to complete the

expediting of a group without a slip when the order, as shown below is set; namely, "Complete the work item listed up in group with No. \_\_\_ till a certain day in a certain month for the purpose of properly starting the succeeding process, which requires the result of the work belonging to \_\_\_ group." (e.g., assembly start)

**CL Column:** This column is used to classify items by filling in the column with an importance classification (e.g. A,B,C,...) which indicates especially important items in the same group.

**Item/Parts No.:** Fill in this column with the item's description or its parts number to be expedited or completed.

**Draft Date:** the day when the problem or task was proposed. This column can be used for other purposes.

**Original Required Date:** Fill in this column with the dates of the originally planned schedule when the action or parts items of the group have to be finished. (The date, which is required from the master schedule, should be written in. This date may be a back date, namely, a past date.)

**Applied Effective Serial No.:** This column is used for any mass-production products and filled in with their serial numbers, or applicable lot, or serial numbers. This can be used for other purposes.

**Remark/Condition:** Fill in this column with a remark, or the necessary conditions required to quickly expedite. It may be left blank when not required.

**Action/Process Column:** The following example (See attached Fig. 2) explains how to fill this in:

- A. The planned finishing dates for some actions/processes are allocated here. Namely, first write the process item followed by the name of the person in charge of the process in parentheses. Then write the estimated completion date in the upper right. Links between processes are shown with — (dash) marks or → (arrow) marks.
- B. When the real finishing date comes to differ from the estimated finishing date, the old estimated finishing date is crossed out with a diagonal line and the new one is written in. Items or processes with the greatest number of revisions of the estimated finishing date require the most attention.

The manner in which the old schedule is crossed out with a diagonal line and the new one is added shall be adopted to emphasize it. Delay of a preceding process may often force a delay in the subsequent process.

- C. In practice, following the above rules, the allocated action or process may be colored with, say, yellow when started, and with red when completed.

When one process takes a long time, the process concerned may be colored with a red

triangle when half of the process has been completed.

By these methods, the length of the remainder of the process, the length of the image and changes can be instantly read out and selective adjustment of expediting or instruction can be performed quickly.

**Date Needed:** Fill this in with the date when the item or part is required for the present to be complete. For items whose necessary date has already passed, the past necessary date is filled in. In other words, it is intended that the degree of necessity of the item shall be represented by the difference between dates before and after the present day.

Conventional classification of promotion such as "urgent," "special express," and "express" can not identify fine differences in priority. If the situation changes today, the classification of "urgent," "special express," and "express" must be altered. Such a method can not cope with the complex and three-dimensional control of expediting.

The date put in this column differs from that put in column vi), Original Necessary Date, in various ways. For instance, in a situation in which the total schedule is delayed from the original schedule, the date in this column shows the date when the item is required to be finished and handed over even from the viewpoint of an adjustment of the operational schedule. So even if it is a past date, it is filled in as the necessary date in order to keep the priority.

If the past date is as a rule not accepted even in this column, it may happen that all items are treated as "urgent" and all necessary dates become today or tomorrow.

**ECD (Estimated Completion Date)** Fill this in with the date when the work is estimated to be finished. To change it, the old date is crossed out with a diagonal line and the new one is filled in. This column indicates that the corresponding item requires much attention if there are a great number of diagonal lines and date changes.

**Model/Project:** Fill this in with a description of the model or the name of project. When many projects are progressing simultaneously, using this column to identify the project to which the expediting sheet belongs makes it possible for a small number of people to perform well-balanced expediting of many projects.

**List No. Group:** This column makes it possible for items to be grouped into a List Group No. \_\_.

**Person in Charge of Expediting:** Fill this in with the name of the person in charge of the expediting List No. Group.

### 3. Supplementary Explanation

#### (1) Method Software

Software for the method does not yet exist.

It is expected that software which will employ the ideas shown in this book using feeling or writing in by hand.

Although the software may exclude the fine manipulation of hand writing such as large letters, small letters and erasing, more excellent ideas may be expected than in case of hand writing.

By considering this idea, new wisdom in software is expected.

- (2) The merit of using software is considered to be as follows: Whereas only one new hand or computer written sheet can be posted in one place, several sheets from a computer can be posted in several places.

When a large expediting board has been set on the wall in several places, it is considered that the concerned people may easily recognize and adjust their due by themselves. As a result, important and total matters may become easy.

In this case, the software development tasks shall be:

- First, to provide the proper size of display or notice easy to be seen by the people in charge;
- To consider how they recognize his/her name and the problems in the shown information and respond to them;
- To consider how a person recognizes his/her due and action;  
and how does he/she combine and adjust them by positive action?

In this time, various devices become necessary regarding:

- (a) how a principle mentioned in 1 (1) of the objective of the Notice Board, "People will have the tension and consideration to act by seeing their own name posted visibly on a expediting board" must be taken into account; and
- (b) what kind of notice board is appropriate for the purpose, its size, construction location, and so on.

**Fig. 1 Action Expedition Sheet Format**

**Expedition sheet**

Item No.	Cont. No.	Class	Item or Part No.	Orig. Date	Orig. Need Date	Serial	Note Cond	Action/Process	Need Date	Est Comp Date		
Aircraft	List No. group		Expeditor									

Fig. 2 Filled in Example of Action Expedite Sheet

### Expedition sheet

ITEM NO.	Dist. No.	Class	Item or Part No.	Orig. Date	Original date completed	Serial	Risks and Constraints	Action/Process	Need date	EST. Comp. Date
								<ul style="list-style-type: none"> <li>• MARK THE STARTED PROCESS IN YELLOW FELT PEN</li> <li>• MARK THE FINISHED PROCESS IN RED FELT PEN</li> </ul> <p style="text-align: center;">DELETE BY CROSS LINE IN EACH CHANGED SCHEDULE</p>		
1	B1	A	DTC OF PANEL	12/25	1/30	01	APPROXIMATE MATERIAL ORDER	REGU- IREMENT (JOHN) $\xrightarrow{1/28}$ $\xrightarrow{1/29}$ $\xrightarrow{1/30}$ BASIC MATTER (STEVE) $\xrightarrow{1/31}$ IDEA CREATION (JERRY) $\xrightarrow{2/1}$		
2	B1-1		MATERIAL ESTIMATION (1ST TIME)					MAKE DTC COMPARISON (JIM) $\xrightarrow{1/2}$ ASSY ESTIM. (MARY) $\xrightarrow{1/4}$ ESTY- MATE (ALICE) $\xrightarrow{1/6}$ EVALU- ATE (MIC) $\xrightarrow{1/7}$		
								REQUEST MTL QUAT (DICK) $\xrightarrow{1/2}$ OBTAIN ESTIM (ERIC) $\xrightarrow{1/5}$		
								RESULT OF PTC TRADE (DRAFT) (JERRY) $\xrightarrow{1/2}$ DESIGN MEETING (JOHN) $\xrightarrow{1/3}$		
								PLAN PNG (LARRY) $\xrightarrow{1/2}$ P-PNG (LARRY) $\xrightarrow{1/4}$ MAKE PNG (NIKE) $\xrightarrow{1/5}$		
3	B1-1'		MATERIAL ORDER				ADVANCED ORDER	FIND THE REQ (DICK) $\xrightarrow{1/2}$ OBTAIN QUANTITY (DICK) $\xrightarrow{1/3}$ NEGOTIATION (DICK) $\xrightarrow{1/4}$ DELI- VERY (DICK) $\xrightarrow{1/20}$		
4	B1-2		JIG ORDER				ADVANCED ORDER	DESIGN JIG (TERRY) $\xrightarrow{1/10}$ MAKE JIG (RED) $\xrightarrow{1/15}$		
5	B-1	CONTINUE						START ASSY (ERIC) $\xrightarrow{1/25}$		
								NO NEED TO BE SAME DAY $\xrightarrow{2/10}$ $\xrightarrow{2/25}$		
								THIS DIFFERENCE IS THE BIGGER, THEREFORE THE NEED IS STRONGER		
Aircraft	List No. group	Expedite								
P-1	12A	ESAKI								