ORGANIZATION UNIT: Manager Commodity A Jobbers. LEDGER ACCOUNT: Manager Commodity A Jobbers SCOPE OF EXPENDITURES: Supervision and Direction of Sales of Commodity A to Johbers VARIATION FROM STANDARD: \$8,333 per month Fixed Cost and 11.5 per cent Variable Cost

SALES		ACTUAL COST		STANDARD COST		VARIATION TO DATE			
Month	To Date	Month	To Date	Month	To Date	Good		Bad	
						Amount	Percent	Amount	Percent
1,000,000	1,000,000	122,333	122,333	123,333	123,333	1,000	.0010		
1,000,000	2,000,000	126,333	248,666	123,333	246,666	· .		2,000	.0010
750,000	2,750,000	98,583	347,249	94,583	341,249			6,000	.0022
1,000,000	3,750,000	128,333	475,582	123,333	464,582		-	11,000	.0030
` 750,000	4,500,000	100,583	576,165	94,583	559,165			17,000	.0038
1,000,000	5,500,000	128,333	704,498	123,333	682,498		,	22,000	.0040
500,000	6,000,000	76,833	781,331	65,833	748,331		·	33,000	.0055
1,000,000	7,000,000	129,333	910,664	123,333	871,664			39,000	.0058
	Month 1,000,000 1,000,000 750,000 1,000,000 750,000 1,000,000 500,000	Month To Date  1,000,000 1,000,000  1,000,000 2,000,000  750,000 3,750,000  750,000 4,500,000  1,000,000 5,500,000  500,000 6,000,000	Nonth         To Date         Month           1,000,000         1,000,000         122,333           1,000,000         2,000,000         126,333           750,000         2,750,000         98,583           1,000,000         3,750,000         128,333           750,000         4,500,000         100,583           1,000,000         5,500,000         128,333           500,000         6,000,000         76,833	Month         To Date         Month         To Date           1,000,000         1,000,000         122,333         122,333           1,000,000         2,000,000         126,333         243,666           750,000         2,750,000         98,563         347,249           1,000,000         3,750,000         128,333         475,582           760,000         4,500,000         100,583         576,165           1,000,000         5,500,000         128,333         704,498           500,000         6,000,000         76,933         781,331	Month         To Date         Month         To Date         Month           1,000,000         1,000,000         122,333         122,333         123,333           1,000,000         2,000,000         126,333         248,666         125,333           750,000         2,750,000         98,583         347,249         94,583           1,000,000         3,750,000         128,333         475,582         125,333           760,000         4,500,000         100,583         576,165         94,583           1,000,000         5,500,000         128,333         704,498         123,333           500,000         6,000,000         76,833         781,331         68,833	Month         To Date         Month         To Date         Month         To Date           1,000,000         1,000,000         122,333         122,333         123,333         123,333         123,333         245,666           750,000         2,750,000         98,583         347,249         94,583         341,249           1,000,000         3,750,000         128,333         475,582         123,333         464,582           760,000         4,500,000         100,583         576,165         94,583         569,165           1,000,000         5,500,000         128,333         704,498         123,333         662,498           500,000         6,000,000         76,833         781,331         65,833         748,331	Nonth   To Date   Month   To Date   Month   To Date   Amount	Nonth   To Date   Month   To Date   Month   To Date   Amount   Percent	Month   To Date   Month   To Date   Month   To Date   Amount   Samuration   Samu

Exhibit J

closing entries dependent upon the current expenditures of the month, before making a statement.

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In accordance with the methods I am describing to you to-night, all that you have to know to make an operating statement is the amount of the debit and credit charges for the month subdivided according to the organization units responsible for the transactions out of which they have grown.

The setting of standards by means of which any particular month's operations may be judged is merely a matter of a computation of Fixed Cost and Variable Cost according to Exhibit H on the basis of the volume of business done, the price received for the product, and that paid for materials and labor. How these adjustments are made will be shown in connection with the next exhibit.

This covers the three basic principles which should underlie any method of management through which the chief executive can exercise effective control:

- I. The expression of all results in common terms, that is, so that the statement of the chief executive is literally merely a copy of the last lines of the statements of those to whom he has delegated responsibilities and duties, added together.
- 2. The classification of expenditures according to responsibility for each transaction out of which they have grown, as distinguished from the nature of the expenditure itself
- 3. The establishment of flexible standards which are readily adjusted to changing conditions in volume of business, price of product, and cost of material and

The rest of what I shall say will be with reference to the application of these principles.

## USE OF STANDARDS' IN JUDGING MANAGERIAL EFFECTIVENESS

Exhibit I-Unit Operating Reports

This is an operating statement for an organization unit; that is, a certain group of responsibilities and duties. The "Sales" we get in the usual way by adding the sales book. The "Actual Cost" we get as just explained by adding the corresponding column in the voucher register book. We do not have to wait for journal entries to be made, the ledger to be posted, or for a trial balance to be taken off

With reference to the "Standard Cost": Turning to Exhibit H we find that the Fixed Cost of this organization unit (the line identified by (G) in the left column) is \$8,333 per month and the Variable Cost is 11.5 per cent of the sales. You will note that these figures have been filled in on the third line of the heading of this

Dealing with the "Standard Cost" for the month of August, by which we mean the total standard costs for the volume of business done in August, we find that the sales for the month were \$1,000,000 and that 11.5 per cent of this is \$115,000, to which we must add the Fixed Cost of \$8,333 giving us a total for the month of

Sales Per cent Variable Cost	Month \$1,000,000	To Date \$7,000,000 .115
Variable Cost	\$115,000	\$805,000 66,664
Total Cost	\$123,333	\$871,664

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The "To Date" can be computed by adding the standard for the various months or by taking 11.5 per cent of the sales to date and adding eight times the monthly fixed cost, as is done in the example given.

The "Variation to Date" is the difference between the actual and the standard cost

Actual Cost	\$910,664
Standard Cost	871,664
Variation	\$30,000

You will notice that the "Variation to Date" is given under two headings, "Good" and "Bad" (meaning good results or bad results), both with respect to amount and with respect to its effect upon the per cent of Variable Cost. The way the per cent of Variable Cost is determined is by dividing the sales to date into the amount of the variation to date.

## \$7,000,000)\$39,000

.0056

The conventional departmental or unit operating statement shows the month's costs as compared with the preceding month and the same month last year; thus:

August \$129,333. Previous month \$76,833. August last year \$117,256.

August \$129,333. One twelfth last year \$131,256. The difficulty with all such conventional reports is:

I. The conventional statement lacks a standard based upon the particular conditions of the month in question. In Exhibit I the standard is modified to meet the actual conditions of the month in question.

- 2. The conventional statement has no definite bearing upon profit and loss. Exhibit J shows definitely the effect upon profit or loss; in other words, August results increase the loss by \$30,000, or one-half of one per cent on the entire volume of sales.
- 3. Each conventional statement is independent of every other statement; they have no collective significance. Exhibit I is one of a series of statements, all of which when listed and added together constitute a statement for the business as a whole.
- 4. Even should we grant for the sake of argument that the previous month, the same month last year, or

tional statement constitute a standard, there is no subdivision of the item of which the standard is composed The details for all statements like Exhibit J are shown on a corresponding sheet like Exhibit G.

The question has been raised whether the present Variable Cost ascertained in accordance with the formula here presented is really constant, as is assumed to be the case in setting standards for different volumes of business on the basis of Fixed Cost and Variable Cost previously determined.

The answer is that it is not if we mean to the last dollar and cent, but for practical purposes it is

Take for example Exhibit G and let us run down the

Jobbers discount is obviously constant in that it is itself a per cent of sales. The same is true with reference to bad debts, rebates and allowances. While the actual will vary, the standard is constant.

The managers and territorial supervisors as part or the fixed expense will not vary, but the other salary items will vary according to the sales from the minimum to the maximum figures shown, and these variations will not be in direct proportion to the increase or decrease in sales. Assume, for example, that sales increase and we find it necessary to put on an additional stenographer and bookkeeper. The additional stenographer and bookkeeper will probably suffice for an additional \$100,000 of sales, and therefore the cost expressed in terms of per cent of sales will be a little higher when we first put them on than it will be at the end of the period when the sales have so increased that we have to put on still other additional clerks. This is true of a number of the items.

On the other hand, in practical experience you will find that the various items seldon shift at the same point; so that, taking any organization unit of considerable size, you will find that the Variable Cost arrived at in the manner here described stays virtually at a constant per cent of the fluctuating sales, provided, of course, that the manager of the department is on the ich and keeps his expenses at a minimum, a thing which the use of standards of this kind stimulates him to do.

The very making of standards in this way forces a manager to think through his problem and to see his expenses in terms of results.

Let us assume, however, that after making the standard he finds it impossible to keep within it. This simply forces him to go to the chief executive, explain wherein the standard is wrong, and have a new standard made. one-twelfth of the total for the last year of a conven- This he will do the moment that he sees his costs are

<sup>1</sup> Naturally a statement made in this way, say on the third of the month, is checked say on the twentieth of the month when all of these things have been done.