

P. 157 Times

= Received a copy x
would like to
discuss with you
was.

Minutes of the Meeting of Apparatus Department Purchasing Agents
Held in Schenectady September 22, 1948

Present:

Messrs. W. H. Bobear	N. S. Tilman
H. F. Briggeman	J. J. Walsh
D. W. Buchanan	E. S. Waters
K. C. Denton	G. D. White
W. R. Files	R. A. Woehr
S. D. Langley	N. Currie, Jr. - Part-time
D. D. Lawson	T. F. Garahan - "
J. W. Livermore	D. M. Guest - "
H. O. Loucks	C. H. Linder - "
M. Rodman	L. D. Miles - "
K. G. Roth	P. O. Vogt - "
W. R. Simmons	

Discussed with you was
48-18

Cost Reduction Through Purchase Analysis

Mr. W. H. Bobear opened the meeting with a brief review of the purchase analysis activities to date. He stated that at the rate of cost reductions reported for the first half of 1948 the total for the year would be \$3,525,000 or 1.1% of material input. The reports from each Purchasing Agent were summarized and the percentage of savings to material input ranged from .3% to 9% as follows:

2 purchasing units reported	.3%
4 " " "	.4%
3 " " "	.5%
1 " " "	2.8%
1 " " "	3.0%
1 " " "	4.8%
1 " " "	9.0%
1 " " "	.0%

These figures show the need for better effort and the employment of adequate talent to accomplish results more in line with the opportunities present in volume of material input and varieties of applications of materials and parts. A bogey figure of 5% or \$15,000,000 was recommended. Each Purchasing Agent was requested to study carefully, analyze and appraise the possibilities of purchase analysis in the lines of apparatus served by him; such appraisals will then be taken up with Management and discussed.

Mr. Bobear advised that the morning's program would show some of the successful methods used to carry on purchase analysis work, including the type of organization used.

Mr. L. D. Miles presented some typical cases of value analysis which he has gathered from various divisions of the company. The first case presented was the study made of the cold control by the Control Division of the Apparatus Depart-

ment. The manufacturing cost, through the process of purchase analysis and the excellent cooperation of the personnel in the Control Division, has been substantially reduced and is still in the process of testing, etc., lower-cost parts.

Mr. Miles presented samples showing possibilities; for instance, a small rubber moulding formerly moulded at a cost of \$2.40 per M was made by the extrusion process at a cost of \$.85 per M. A phosphor bronze spring at \$14.74 per M was changed to stainless steel with better properties at \$9.12 per M. A small shaft with a material cost of \$.03 showed a shop cost of \$1.07 and, with the cooperation of the manufacturing group, the process was changed so that the \$1.07 shop cost was reduced to \$.15.

Similar samples of cost reductions were discussed. It was emphasized that buyers should feel free to recommend and suggest changes. The need for parallel education of engineering, planning and purchasing personnel in value analysis was stressed.

Mr. Miles suggested a method by which a part is analyzed to determine whether it is worth its value by enumerating the following points:

1. Is it worth the money for its intended use?
2. Does its use contribute to the value of the product?
3. Does it need all of its features for its intended use?
4. Is there anything better for its intended use?
5. Can a usable part be made by a lower cost method?
6. Can a standard or a vendor's standard be found that is usable?
7. Does its material, labor, overhead and profit appear reasonable in relation to each other?
8. Will another dependable supplier provide it for less?
9. Can our competitors buy it for less?

Mr. K. G. Roth, Control Divisions, discussed methods used in pursuing cost reduction by purchase analysis procedures. He informed the group of the kind of people who served on the committee in his Purchasing Section and explained that he had solicited the engineers for cases on which to work and that the work to date had been recommended by the engineers and was proving fruitful. The work supplements that which is performed by the regular Cost Reduction Committee and the purchase analysis group worked as much as possible through the Cost Reduction Committees. There are so many projects on which both groups can work without conflict of effort.

Mr. Roth also stated that the Purchasing Section will have representation on the Cost Reduction Committees. He explained that the questions raised in the committee were carried to engineering, methods or whichever groups had to supply the answer. Frequently, the buyer is required to supply the answer by obtaining data from outside manufacturers; there should be no hesitancy in having members of the committee or interested engineers contact outside manufacturers through the Purchasing group.

At present the Control purchase analysis group consists of five men whose experience covers Planning and Wage Rate, Factory Supervision, Cost, Engineering and Purchasing. Mr. Roth introduced Mr. D. M. Guest, a member of the purchase analysis group in the Control Division.

Mr. Guest demonstrated the type of work and approach the committee is using in obtaining cost reductions. The steps taken to reduce the "A" control relay from \$22 to \$12 manufacturing cost were covered in detail. It was demonstrated that a properly-manned, coordinated purchase analysis group can cooperate effectively and can use the existing knowledge in the organization to accomplish results.

Mr. M. Rodman, Motor and Instrument Divisions, presented a booklet prepared by the Purchasing Section at West Lynn showing the price breaking point reference for the use of people who order in the factory. This booklet shows how quantity extras can be minimized. Copies will be sent to all of the Purchasing Agents.

Mr. Bobear requested each one of the Purchasing Agents to have a study made consisting of an analysis and appraisal of possibilities for intensifying the purchase analysis effort in their respective divisions.

Personnel and Training Courses

Mr. Bobear reported that 138 people have now completed the Purchasing Training Course and asked the Purchasing Agents present whether or not they found the course of value. It was unanimously agreed that the text and the course had received hearty acceptance and that the course was beneficial in stimulating enthusiasm in the work and training personnel in the principles and fundamentals of purchasing work. It was voted that the course would be extended to more people and that training continue.

The Purchasing Agents were requested to advise Mr. D. W. Buchanan of the number of people who will be selected to take the course and the starting dates so that additional copies of "A Guide to Purchasing" can be prepared as required.

Mr. Bobear requested the Purchasing Agents to look over the promising young men in their respective operations and see that opportunity is afforded these men to utilize fully their abilities and, if opportunities are not available in the local organizations, to advise him. Assistance will be secured in placing promising young men; Mr. Bobear requested a list of these promising young men.

It was emphasized that the Purchasing Section should attempt to leave men on jobs long enough for them to become well-versed and, in fact, specialists on groups of commodities handled. It is the objective of good organization to train and make available men who will handle lines with complete knowledge of facilities, price levels, costs, methods of manufacture and methods of marketing in the particular groups of commodities assigned to them.

Talk by Mr. N. Currie, Jr.

Mr. Currie pointed out the increased importance of the purchasing opportunity and responsibility with the decentralization of the Apparatus Department into product lines and the delegation of purchasing authority. Business conditions show some tightening up and it is becoming increasingly important for us to be competitive so that the matter of prices, quality and service, as affected in the buyer's market which may come, will be very important in establishing our position in product lines. Mr. Currie stated that cost reduction activity of the Purchasing Agents should be carried on with increased vigor and that Purchasing Agents by no means should limit

their responsibilities to merely placing orders, but should be vitally concerned with purchase analysis and obtain the support of their Management in this activity.

In his talk Mr. Currie pointed out that the Purchasing Agents have a responsibility in assisting and controlling inventory by reducing the replenishing time and by employing good purchasing procedures. He also directed the attention of the group to the use of expendable pallets for incoming materials. This factor should be considered in negotiating contracts with regular suppliers and should be exploited as much as possible. He recommended that the exchange of information be made on cost reductions resulting from purchase analysis and that this be forwarded to Mr. Bobear for whatever action seems desirable from a standpoint of further use in the company.

Talk by Mr. C. H. Linder

Mr. Linder discussed briefly the subject of training and personnel and the history of what had happened in the past in developing leaders. He stressed the necessity for special effort in training personnel for future leadership. The following three points were highlighted in this respect:

1. Select good personnel.
2. Insure that personnel is given every opportunity to acquire complete knowledge of the job.
3. Provide prospects with rounded experience in related activities.

He also discussed the various educational programs which are being utilized for training people, and stated that these programs increased the level of effectiveness and developed leaders.

Talk by Mr. T. F. Garahan

Mr. Garahan endorsed the efforts now being made on purchase analysis and urged increased activity in this field. He stressed the desirability and necessity for obtaining proper Management support of it. He stated that this definitely offers a fertile field for cost reductions.

Mr. Garahan also discussed the subject of palletizing incoming material, endorsed the program and pointed out that a definite plan is being arranged for promoting the installation and use of expendable pallets for both incoming and outgoing shipments.

General Conditions and Price Levels

Mr. Bobear stated that the industry supply situation continues to be spotty and steel gives no sign of easing up at all in the months immediately ahead. At the moment this one item--steel--is the chief bottleneck to greater industrial production in the United States.

The purchasing people can watch with a great deal of interest what happens to business and forecast from these everyday movements what the indicated future might be. Currently, it seems that retail sales trends for the fourth quarter may indicate which way business might swing.

If sales fail to come up to expectations on top of the heavy pressure exerted by the heavy farm marketing on agricultural prices, the lowering of retail sales together with the decrease in agricultural prices would form a double-barreled pressure on the commodity price level which could conceivably precipitate a substantial deflationary movement. However, if present business levels are maintained, a major general price break is out of the question.

He also stated that further large appropriations by Congress and heavy stock piling by the Government could further complicate the Purchasing Agents' problems and, in the event of greater military preparations, could throw us back into a war economy.

The weighted price index for General Electric shows that since one year ago prices have increased 13.9 points. The present index stands at 179.8 as compared with the 1941 average of 100. In the last month prices have increased 5.2 points. The foregoing would seem to indicate that the buying policy should be conservative and confirm the soundness of our inventory policy. We should aid every effort for greater turnover of inventory and the maintenance of minimum stocks which should not be increased now at present high price levels. In the event of a downward trend in prices and reduced business activity, we would minimize our losses by having as small an inventory as is practicable to maintain continuous production.

Steel

Procurement of adequate steel supplies is still critical. Steel plates and sheet steel are the most difficult items. It was pointed out that in order to maintain operations in many of our divisions it has been necessary to resort to the procurement of both sheets and plates on a conversion basis and to purchase from warehouses--both of which are done at premium prices.

The effect of the voluntary steel allocations was discussed and Mr. Bobear reported that as of the first part of September approximately 10% of total steel has been voluntarily allocated amounting to about six million tons as follows:

3,000,000	tons per year	-	freight cars
160,000	"	"	- Atomic Energy Commission
350,040	"	"	- warm air furnaces
59,000	"	"	- factory-made steel houses
1,230,000	"	"	- armed services and their suppliers
198,360	"	"	- oil field tanks and equipment
240,000	"	"	- barges
30,840	"	"	- anthracite mining equipment
480,000	"	"	- oil tankers
24,000	"	"	- construction to the National Advisory Committee on Aeronautics

The voluntary allocations have been screened by the Office of Industry Cooperation, OIC, a branch of the Commerce Department. This branch presents requirements to the steel companies and the allocations of sheet steel are made on the basis of ingot output and for steel plates on the basis of rolling capacity. These allocations have resulted in cutbacks of our regular steel allotments and have built up a backlog of orders at the steel mills from time to time.

Five additional programs are being studied now which will probably be cleared in time for the steel industry to fit them into steel mill production schedules by January 1. These programs and the estimated tonnage are as follows:

372,000	tons per year	-	bituminous coal equipment industry
514,608	" " "	-	mining machinery industry
25,000	" " "	-	builders of home, farm and commercial heating storage tanks
300,000	" " "	-	makers of containers for liquid petroleum gas
250,000	" " "	-	makers of terminal petroleum storage tanks, including bulk storage

At the present time over 30% of steel plates are on voluntary allocation and in the talk stage now there is a possible request by the Maritime Commission for more plates for ship construction.

It was pointed out that any certified, voluntarily-allocated steel at the present time would not add any tonnage to the allotments which we are now getting from the steel companies, but would be deducted from the allotments. There is an advantage wherever we get certification on an order to pass it along to the steel mill because such certification would probably help delivery in that it would be considered in any delivery pushbacks and would, in effect, be a priority order.

Aluminum

Mr. H. O. Loucks indicated that fourth quarter requirements for aluminum were covered and that it is desirable to have orders on the books six months in advance of required delivery in order to obtain position in the mill schedules. Aluminum is very critical and, on sheets and strip, our suppliers are now four weeks behind in delivery on our schedules with no prospect of improving this situation.

Inventory and Critical Items

Some of the Purchasing Agents indicated that they felt that the effort to reduce inventory was being carried to extremes and that there are a number of cases where quantity extras were being paid in order to obtain small supplies. They indicated that they had had little opportunity to exercise any responsibility in decisions as to whether or not material should be purchased in different quantities, and there were some indications that our operations may definitely be affected later because our position with our suppliers may be jeopardized. Statements were made that express shipments were being authorized in order to keep production going where inventory is already too low.

It was pointed out that careful judgment should be used in making decisions on critical items and the consensus of opinion was that the Purchasing Agent was in a very difficult position and was faced with a relentless policy of inventory reduction on the part of the production group. In many cases now the orders do not even come to the Purchasing Sections until it is too late to place the orders without extra costs for quantity or delivery. Mr. Bobear agreed to discuss this matter with Mr. Garahan.

Incoming Shipments - Palletizing

Mr. P. O. Vogt discussed the use of expendable pallets for incoming and outgoing shipments and advised that within the next three weeks complete information with blueprints will be sent to Purchasing Agents so that they can take up this matter with suppliers in an effort to further the use of pallets.

It was pointed out that Fort Wayne is now receiving castings from Elmira on pallets and have reduced the unloading time to a matter of minutes as compared with the former hours of labor. In addition, the handling cost of the castings in the factory has been materially reduced.

Trial Order and Test Reports

Mr. Bobear discussed an inquiry from the Engineering Section Heads' Committee as to whether or not the issuance of Trial Order and Test Reports would serve any real purpose to the purchasing group. At the present time only Schenectady and Erie Works Laboratories operate on this system. The engineering group feels that the Laboratory Activities Report, issued by Mr. John Horn, and the Task Force Report, issued by the Engineering Section Heads' Committee, eliminated the necessity for Trial Order and Test Reports.

The engineering group feels that the Trial Order and Test Reports hold limited value to the Laboratory. Most of the Purchasing Agents agreed that most of these reports were used very seldom and in those instances where they were kept voluminous files were accumulated of very questionable value.

Mr. Bobear agreed that he would arrange to have copies of the Laboratory Activities Report sent to each of the Purchasing Agents and would determine for the purchasing group at a later date whether it was felt necessary to reestablish Trial Order and Test Reports.

Advance Ordering

The subject of advance ordering of material was discussed. The concensus of opinion indicated that the group would like to have the Purchasing Department continue to issue their recommendations in published form and that the issues be made on a prescribed cycle basis--that is, at least once every three months.

Mr. Bobear agreed to discuss this matter with the Purchasing Department and publish the results.

Estimated Requirements

A new schedule for accumulating estimated requirements will soon be published. In the meantime, it was pointed out that all estimates should be made on a very conservative basis in order to minimize the possibility of losses on long-range commitments for critical items. Some of the estimates made within the last year were discussed and it was pointed out that they have generally been high.

Cost and Stock Sheets

A discussion of the use of Cost and Stock Sheets in Apparatus Purchasing Divisions indicated that their use varies widely. They are generally used for standardization purposes and for general information as to the kind of material stocked and the location. In some plants the maintenance and accuracy of the Cost and Stock Sheets is questionable.

Mr. Bobear reported that this whole subject is now being reviewed as a result of the activity of the Standards people and reports will be issued as they become available. It is expected that this situation will become active and that the Purchasing Agents will have an opportunity to contribute to the thinking and use of Cost and Stock Sheets.

D. W. EUCHEANAN

10/1/48

cc: WF Weishaar - Oakland Works