

considered sales engineering, delegating detailed planning and scheduling as secondary functions of operation. If one concedes that the distributing organization is the one that usually and naturally originates projects involving the whole plant organization, then it becomes obvious that a research and master planning and scheduling function must have a close and sympathetic relation with the distributing organization, hence the choice of the name "Sales Engineering" for this major function.

3. The sales engineering function presents at least three distinct phases:

- (a) Field research.
- (b) Technical assistance.
- (c) Master planning and scheduling.

4. It should be recognized that the major function of sales engineering is to analyze, plan and schedule future projects and that the planning and scheduling of current projects is a function of the operating divisions.

FIELD RESEARCH ACTIVITIES

As a field research function, sales engineering should make its services available for all parts of the plant organization. Some specific things it can usually include in its research activities are:

1. PRODUCTS:
 - To be added
 - To be eliminated
 - Changes
 - Standardization
 - Present uses
 - New uses
 - Seasonal factors
 - Territorial factors
 - Trade reactions
 - Competitive products
2. MARKETING POLICIES AND METHODS:
 - Present trade channels
 - Potential trade channels
 - Trade customs
 - Trade reactions
 - Competitors' activities
 - Standardization
 - Containers and packing
 - Quotas and statistics
 - Prices and margins
 - Present markets and volumes
 - Potential markets and volumes
 - Assistance to customers
 - Salesmen's training
 - Warehouse and branch locations
 - Trade organizations
3. GENERAL RESEARCH:
 - Administrative and management problems
 - Research for all operating departments

TECHNICAL ACTIVITIES

The personnel of sales engineering should be such that it can be of technical assistance to the entire business organization. While sales engineering utilizes and contributes to the entire resources of the business organization, it is essential that no duplication of effort be brought about by the segregation of this major function; in fact, this segregation of sales engineering should invariably tend to diminish duplication of work.

The range of research and other activities involved in sales engineering is indicated by the following synopsis; it is possible that in a large organization some of them may assume such importance as to be recognized as separate functions:

PRODUCTS:

- Types and Sizes
 - Selection
 - Standardization
 - Approval
- Materials
 - Suggestion
 - Approval
- Finishes
 - Suggestion
 - Standardization
 - Approval
- Markings
 - Selection
 - Standardization
 - Approval
- Packing
 - Wrapping
 - Put-ups
 - Containers
 - Suggestion
 - Standardization
 - Approval

ADVERTISING:

- Furnish data on
 - New products
 - Product changes
 - New uses
 - New markets
 - Trade reactions
 - Competitors' activities
 - Prices
 - Trade customs
 - Seasonal factors
 - Territorial factors

SELLING:

- Prices and Margins
- Salesmen's Compensation
 - Investigation of methods in practice
 - Suggestions for alternative methods
- Selling Equipment
 - Salesmen's
 - Design or selection
 - Dealers
 - Suggestion
 - Design
- Seasonal Factors
- Territorial Factors
 - Determine limits and causes therefor
 - Suggest methods of overcoming
- Trade Resistance
 - Determine causes
 - Suggest methods of overcoming

- Economic Factors or Trends
 - Ascertain
 - Report probable influence
 - Suggest methods of overcoming

SALES SERVICE:

- Ascertain deficiencies
- Suggest remedies
- Suggest other service activities

MARKETS OR SALES FIELDS:

- Report changes
- Discover new markets
- Suggest new policies or methods

COMPETITORS' ACTIVITIES:

- Watch and report
- Suggest methods of combating

TRADE ORGANIZATIONS:

- Report activities
- Report probable effect on sales policies
- Determine possibilities of cooperation

LEGISLATION:

- Watch and report
- Suggest necessary action

MERCHANDISE STOCKS:

- Regularly check and report
- Suggest necessary action

PATENTS AND COPYRIGHTS:

- Watch and report
- Suggest necessary actions

STATISTICS:

- Suggest necessary compilations
- Analyze and report changes or trends
- Interpret and suggest necessary action

COMPLAINTS:

- Analyze
- Compile records
- Suggest necessary action

MASTER PLANNING AND SCHEDULING

Sales engineering should become the coordinating function of the entire business. In this field it can

relieve the administrative and managerial executives of many of their most troublesome and time-consuming problems. In this activity sales engineering should strive to be months ahead of any of the operating divisions. Only thus can the purchasing, financial, personnel and production divisions have adequate time to plan for their respective activities.

The synopsis below is only to suggest some of the steps in a master plan and schedule. The variations necessary to meet the problems of specific industries are almost infinite.

NEW PRODUCTS:

- Plan
 - Types
 - Sizes
 - Materials
 - Finishes
 - Markings
 - Packings

NEW AND OLD PRODUCTS:

- Plan and schedule initial requirements
- Plan and schedule yearly and monthly requirements
- Plan and schedule general marketing policies and methods
- Plan and schedule sales service activities
- Plan and schedule general advertising policy
- State seasonal and territorial limitations
- Plan and schedule general activities of each division affected by project to establish order of work and definite responsibilities
- Plan and schedule warehouse distribution
- Plan dealers' selling equipment
- Plan salesmen's selling equipment

Willard E. Freeland, Chairman, Winchester Repeating Arms Co., New Haven, Conn.; G. H. Kerr, E. I. duPont de Nemours Company, Wilmington, Del.; Henry T. Noyes, Art in Buttons, Inc., Rochester, N. Y.; Charles E. Percy, Joseph & Feiss Co., Cleveland; A. B. Rich, Dennison Manufacturing Co., Framingham, Mass.; Sanford E. Thompson, Thompson & Lichtner Co., Boston; F. R. Wallace, Street & Finney, New York; John A. Urquhart, W. H. McEwain Co., Boston; H. S. Person, Managing Director, Taylor Society.

A PECULIAR compulsion and challenge lies upon modern sales managers—a challenge to grow in personal vision and ability to the new levels called for by the great stimulation of production brought about by the war's abnormal consumption. The new high levels of consumption must not slump; the new high standards of living and purchasing created by war wages must be maintained rather than lowered. . . . The sales task before America can only be accomplished by an increase of technical knowledge concerning the difficult art and science of management. This increase of knowledge must be of the broadest kind, and include a sound understanding of not only the more practical parts of sales management, but also study of public temper, psychology and economics. The salesmanship and sales management of pure bombast and sheer energy, so familiar in past years, will not suffice. (J. George Frederick, *Modern Sales-management*, p.viii.)