

VI. RESEARCH, DEVELOPMENT, AND ENGINEERING

A. Description

The objective of work under this category is to reduce postal operating costs, improve service and improve employee working conditions through the application of modern technology. It consists of three major program areas as follows:

1. Research and development;
2. Construction engineering; and,
3. Industrial engineering.

Funds available and requested for this category in fiscal year 1968 total \$22.495 million or approximately three-tenths of 1 percent of total postal funds for the same period.

RESEARCH AND DEVELOPMENT

The Department's research and development program is directed toward the development, test, and evaluation of new and improved equipment, systems, techniques, and facilities for performing postal tasks. In the past this program has provided designs for basic letter, parcel, and sacked mail handling equipment now being used to process the mail. Currently, new systems and equipment with which to further modernize the postal service are under development. Some of these are:

- (a) Equipment to read typed or printed addresses on letter mail and to control the sort of mail pieces by mechanical sorting units on the basis of the data read;
- (b) Mail containerization systems and equipment to reduce manual handling and transportation costs;
- (c) Improved techniques and equipment for high-speed stamp detection and canceling and automatic facing of letter mail pieces;
- (d) Equipment to automatically separate mixed mail pieces by type or physical characteristics for like processing; and,
- (e) Improved sacked mail handling equipment to further reduce manual handling of bulk mail in postal plants.

Most of the research and development work now underway is performed by industry, other Government agencies and universities under some 80 active research and development contracts. We are currently expanding the contract research and development program and increasing our in-house capability to perform research and development to accelerate the rate at which improvements in postal technology can be effected.

CONSTRUCTION ENGINEERING

Construction engineering activities performed under the research, development, and engineering category provide the technical services necessary to secure new and improved space and mechanized processing systems for operational use. The work includes technical planning and preliminary design of major facilities, final design of fixed mechanized systems, facility construction and mechanization installation supervision and assisting in the phase-in of new major facilities.

Major facilities are generally those having in excess of 50,000 square feet of space and having mechanization. There are currently some 150 such facilities either under construction or in some stage of design. In addition, the construction engineering group is supporting several hundred other projects which include extension and modernization of existing buildings and mechanized systems, air conditioning, installation of improved lighting and related activities.

INDUSTRIAL ENGINEERING

Industrial engineering activities are also included in this category. These activities are designed to effect economies, improve safety, and improve working conditions through the development of facility and equipment design and use criteria and the conduct of field industrial engineering analyses. Some 125 such surveys are planned over the next 5 years. The surveys are to be conducted by joint teams of industrial engineers from the Department, professional industrial engineers secured under contract and postal operating personnel.

B. Services provided

The research, development, and engineering category provides the Department with technical services necessary to:

1. Develop new and improved systems, techniques, and equipment for performing postal tasks;