and eventually the staff of the companies in order to determine the circumstances of each complaint. They were all provincial residents who had a good farming experience and had at least completed two years of agronomy or agricultural engineering at the university.

● (1740)

The talks with farmers took place immediately after the crops, when those surveyed had the time to discuss their problems with the facts still fresh in their memory.

Of the 80 cases reviewed in detail, the great majority of those surveyed complained that they could not immediately find spare parts when they needed them. The most significant findings of this study in depth were, I believe, that the dealer was wholly or partly responsible in about half the cases.

The typical remark of the interviewer in this case was that the parts ordered by the dealer were not the right ones; that the dealer had not ordered the parts or had been slow in ordering them; that the dealer had not advised the farmer when he received the part.

In 5 of the 80 cases reviewed, it was found that the farmer has no cause for complaint. In 7 other cases, the farmer was found partly responsible. Of the 69,000 questionaires sent across the country over 55 per cent were returned, which is a wide response for a postal survey.

Besides, about 48 per cent of those who answered complained of having had much difficulty in obtaining parts in the past two years. As regards the manufacturer's problem, it seems at the present time that all big factories have to keep in stock a number of various parts most of which account eventually for few sales every year.

Massey-Ferguson pointed out that the number of various parts in stock in North America had increased from about 68,000 in 1958 to more than 100,000 in 1967. Out of that total, 30,000 parts had not been bought even once in 1966. Of the 54,000 parts for International-Harvester farm implements kept in stock in Canada, almost half had been ordered only once or not at all during the previous year.

The International Co. pointed out that about 60 per cent of the parts in stock were for machines not manufactured any more. Massey-Ferguson pointed out that tractors' and combines' parts remained in stock at least 15 years after the company had stopped manufacturing the machine and that spare parts were still available for many machines not manufactured for 20 years. Considering the particular problem spare parts posed for manufacturers, the tremendous number of parts to be kept in stock, the very small number off sales in a year, the high storage costs and the unpredictable fluctuations of the demand for such parts, it is obviously hard for the companies to decide how many parts should be kept in stock and where.

For instance, should Massey-Ferguson double its stock of all parts of which fewer than 50 were sold in 1966, they would have to increase by $7.2 million their total inventory of spare parts. Considering the estimated 15 per cent in interest, storage and maintenance charges, annual costs would amount to about $1 million.

While this figure exceeds only slightly 4 per cent of the total number of parts sold by the company, it would represent 55 per cent of the annual sales of that type of parts.

[Mr. Corriveau.]

Of course, each firm must set up the best way of distributing costs for surplus stocks according to the advantage they would gain if they were able to supply spare parts as required. Since farmers insist on the possibility of getting maintenance parts as required, all firms are interested, from a competitive viewpoint in satisfying this demand.

According to testimonies before the commission, most if not all major manufacturers of farm implements have been making a concerted effort for the past few years in order to improve the quality of their spare parts service.

Almost everywhere now, computers are used to set up a careful list of available parts so as to ensure that new parts are ordered as soon as stock for a given part begins to decrease more rapidly than expected.

Moreover, several farm implement manufacturers are trying to improve the level of parts services in their agencies. Agents are individual businessmen and take their own responsibilities concerning the quantity of parts to stock. However, manufacturing firms can exercise a strong influence on these decisions, which they have done so far apparently. A number of firms have given some details on the direction that they give their agents regarding the systematic stock control and forms to use in the stocking of parts.

Moreover, most firms offer their dealers special premiums to push them into storing fast-selling parts before the so-called use period. Several firms suggested the establishment of special arrangements for the return of parts, in order to lessen the risks for the dealer who stocks parts never requested. In spite of these efforts, the commission's report clearly indicated that the dealers' quality and competence often leave much to be desired. It seems in the best interest of the firms to reduce the number of marginal or ineffective dealers, and intensify their efforts to improve the quality of service provided by the remaining ones.

A number of farmers and farm organizations have submitted a proposal that dealers should stock a larger number of parts. Such a proposal does not seem promising as a means to solve the part-stocking problem. We need only look at the data supplied by Massey-Ferguson on the trade of parts in North America. In 1966, this company had 2,643 dealers on this continent. It was keeping in stock a little under 99,000 various parts, but out of this number only 1,561 parts sold more than 3,000 units a year. So, if the individual dealers were keeping in stock all the parts for which the average sales in a year amounted to 1.1 unit or more per dealer, the company would stock only these 1,561 parts, that is less than 2 per cent for all the various parts figuring in the inventory. On the other hand, when a dealer keeps in stock parts whose annual sale amounts to one unit or less, he runs the risk of having some of these becoming obsolete and left on his hands. On the whole, the stocking and distribution costs of spare parts would be much higher.

With regard to seldom required parts, the analysis suggests that the most profitable formula would be to stock parts in a central place and to rely on the swiftness of