

## CHAPTER 2

### **Ever Ready Company (Holdings) Limited**

#### **The Company**

22. Ever Ready Company (Holdings) Limited, formerly known as The Ever Ready Company (Great Britain) Limited, is a public company with an authorised share capital of £15m, of which £13.11m has been issued, £12.91m of this being in ordinary shares\*. Of its 25 operating subsidiary companies 13 are incorporated and operate in England. The company's foreign subsidiaries operate in Sweden, Norway, Ceylon, Nigeria, Portugal, USA, South Africa, West Germany and Italy. For management purposes the home and overseas subsidiaries are divided into five manufacturing and trading divisions. These comprise an international division; a consumer products division for the manufacture and sale of battery systems, torches, handlamps, cycle lamps and battery chemicals and components; an engineering division for the design and manufacture of special purpose machinery, machine tools and aerospace equipment; an industrial division for the manufacture and sale of electrical accessories, circuit-breakers, motor control gear and light fittings; and an electronics division dealing with the design, manufacture and marketing of mobile radio equipment, search and rescue beacon equipment and emergency and hazard lighting. Group turnover increased from £60m in 1972 to £71m in 1973. Battery and allied activity, which accounted for 93 per cent of the group world wide turnover in 1972, decreased to 86 per cent in 1973, the major reason for this decrease being the effect of the acquisition of J A Crabtree & Co Limited in 1972, a subsidiary company manufacturing electrical accessories, circuit-breakers and motor control gear.

#### **Historical development**

23. The company was formed as a private company in 1901 as the American Electrical Novelty and Manufacturing Company Limited to acquire a small business for the marketing of electrical novelties imported from the USA, the dry batteries for which were manufactured on the company's premises in this country under the brand name of 'Ever Ready'. A similar business existed in the USA but since about 1904 there have been no connections between the two companies which have developed independently. Today, the American 'Eveready' company is part of Union Carbide Corporation.

24. In 1906 the company's name was changed to The British Ever Ready Electrical Company Limited and in 1913 it was registered as a public company as The New British Ever Ready Company Limited. The company was constituted in its present form in 1920 with an authorised share capital of £500,000. From 1920 to the outbreak of the second world war the company concentrated on the production of high tension and low tension dry batteries for valve radio,

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\* The market value of the equity was reported to be £48.3m on 13 May 1974.

and batteries for portable lighting, together with the equipment (handlamps, bicycle lamps, torches and radios) for which its range of batteries was used. The company believes that its 'notable success in low cost production' made it difficult for its competitors to remain in business and during this period led to the acquisition by the company of 17 small to medium sized battery manufacturing companies. From 1923 to 1939 trading profits rose from £60,000 to over £500,000.

25. During the second world war major demand was for batteries for military purposes and the company was encouraged to develop the layer cell battery for telecommunications equipment. This type of battery later became one of the most successful products in the post-war years as the source of power for portable radios. Between 1945 and 1965, in a period of growing demand, the company consolidated its position as the leading United Kingdom manufacturer and supplier of primary batteries. The main reason for the growing demand was the increase in radio listening and the increase in the proportion of dry battery operated radio sets. The company had developed the first 'All-Dry' batteries for valve radios and achieved further success with the introduction of layer cell batteries in the power pack range, for radios. During this period most of the company's United Kingdom competitors ceased production of batteries in the home market, being unable to take advantage of the various scale economies which existed in the industry.

26. Until recently the business of The Ever Ready Company (Great Britain) Limited was partly that of a holding company, holding shares of operating subsidiaries and associates, and partly that of an operating company manufacturing primary batteries, battery materials and components, and portable lighting products. With effect from 1 March 1974 the structure of the group was reorganised so that The Ever Ready Company (Great Britain) Limited became solely the holding company for the group under the name of Ever Ready Company (Holdings) Limited reflecting its changed status. A new wholly-owned subsidiary was at the same time set up under the company's previous name, The Ever Ready Company (Great Britain) Limited, to take over the production of primary batteries and portable lighting equipment in the United Kingdom. References in this report to 'Ever Ready' are to the present holding company or to its predecessor.

#### **The present position: United Kingdom**

27. From 1965 onwards the company has faced substantial changes in the markets in which it had previously achieved considerable export success. Developing countries have encouraged local manufacture and as a result the company has set up manufacturing plants in Ceylon, Nigeria and Jamaica. Exports by Japan and other Far Eastern countries and increasing competition from European producers led to a decision by the company to set up a plant, as fully automated as possible, to maintain its position in world markets and to counter imports from 'cheap labour' countries.

28. The decision referred to above resulted in the establishment of the Tanfield Lea complex at Stanley in County Durham, at a capital cost of £13m, where production commenced in 1967. A recent decision has been taken for the

commencement of a third battery plant at Tanfield Lea, to be operational in 1976, at an estimated cost of over £3.5m during the next two years. Appendix 1 gives details of certain of Ever Ready's factories and the processes used in the manufacture of zinc carbon batteries.

29. The growth in the demand for round cells (for which the Tanfield Lea factory was intended to cater) is a relatively recent development and, according to the company, is indicative of the difficulties facing a battery manufacturer supplying batteries for equipment often designed and manufactured overseas. There has been an increasing tendency for imported radios (which are understood to form the bulk of radios used in this country) to be designed for use with round cell batteries of the U2, U11 or U12 size rather than for use with layer cell batteries of the PP range. The company estimates that the United Kingdom market is increasing at the rate of about 3 per cent per annum and that increased radio listening will result in a steadily increased demand for round cell types. In addition there is an increasing demand for electric motor powered equipment such as battery-operated shavers, tape recorders, toys and other equipment where high current drain is involved. In this field the company says that its High Power range of batteries is proving extremely successful.

#### **Developments in overseas countries**

30. The company has subsidiary companies manufacturing zinc carbon dry batteries in Germany, Italy, South Africa, Ceylon and Nigeria, and distributing companies in Canada, Portugal, Sweden and Norway. Berc International Limited also acts in the United Kingdom as a distributor in export markets. An associated company, Ever Ready (Ireland) Limited in which Ever Ready (Holdings) Limited has a 38 per cent interest, manufactures and sells zinc carbon batteries in Eire; another associated company in Jamaica (Berc Caribbean) has recently started production.

31. Ever Ready's interest in battery manufacture in Germany originated with the acquisition in 1927 of a controlling interest in a company manufacturing zinc carbon batteries in Berlin, Cologne, Danzig and Czechoslovakia. The factories were either destroyed, damaged or expropriated during the second world war. Subsequently Ever Ready invested substantial capital in the German business and set up two production units in Cologne and Berlin under the names of Daimon GmbH and Daimon Werke GmbH respectively. In 1970 a new factory was opened at Ossendorf and the factories in Cologne and Berlin were closed.

32. The company acquired a 51 per cent interest in its Italian subsidiary Superpila SpA in 1960. The South African subsidiary, Eveready South Africa Limited, in which the company holds, directly or indirectly, 61 per cent of the shareholding, was acquired in 1945. The company in Ceylon, Berc Ceylon Limited (51 per cent interest) was formed in 1967, and the Nigerian company Berc Nigeria Limited (65 per cent interest) in 1963.

33. In 1972 sales of zinc carbon batteries manufactured by overseas members of the Ever Ready group (including associated companies) amounted to £23.7m. The bulk of these sales were by the German, Italian and South African subsidiaries.

34. Ever Ready (Ireland) Limited, incorporated and operating in Eire, was formed in 1933, acquiring from Ever Ready (Great Britain) Limited the exclusive right to carry on in Ireland the manufacture and sale of dry batteries under the Ever Ready name. In 1964 an agreement was entered into under which the British company undertook to provide the Irish company with technical assistance and special plant and machinery. The Irish company was also granted sole distribution rights for Ever Ready branded products in the Republic of Ireland. The British company is represented on the board of the Irish company and has a 38 per cent interest in the issued share capital of £104,000.

35. Ever Ready (Great Britain) Limited has a 25 per cent interest in Mallory Batteries Limited (see paragraphs 97-99). Ever Ready told us that the link between Ever Ready and PR Mallory and Company Inc goes back to the second world war when the Government subsidised the production in Ireland of zinc mercuric oxide batteries for military purposes. PR Mallory and Co Inc owned patent rights in relation to such batteries and Ever Ready said it was asked by the Government, as part of the war effort, to assist PR Mallory in production. Following upon this co-operation, Ever Ready in 1946 agreed with PR Mallory to participate in the formation of a new company, Mallory Batteries Limited, to be incorporated in the United Kingdom and to develop and exploit in Europe and Africa the 'Mallory' battery, which was a zinc mercuric oxide battery. Each party held 75,000 shares of £1 each. A further agreement was entered into between Ever Ready and PR Mallory and Co Inc in 1958, the effect of which was to terminate the 1946 agreement and to increase the issued share capital of Mallory Batteries Limited to 300,000 shares of £1 each; PR Mallory subscribed for the whole of the additional 150,000 shares and thus came to hold a 75 per cent interest in Mallory Batteries Limited. Ever Ready is represented on the board of Mallory, in proportion to its shareholding, by two directors, one of whom, the chairman of Ever Ready, is vice-chairman of Mallory. Ever Ready states that the function of the company's two directors on the board of Mallory includes protecting the company's investment and ensuring, so far as practicable, that so long as Ever Ready relies on Mallory for its requirements of mercury batteries, Ever Ready will not be prejudiced in its ability to market a full range of primary batteries\*.

36. The 1958 agreement provided *inter alia* for the parties (PR Mallory and Ever Ready) to co-operate with a view to the business of Mallory Batteries Limited being developed not only in the United Kingdom but also on the continent of Europe. The agreement also provided that Mallory would, if so requested, supply Ever Ready with batteries under Ever Ready's brand names for sale through Ever Ready's usual trade channels or organisation.

37. In 1967 PR Mallory formed a Belgian subsidiary, NV Mallory Batteries SA as a joint company with Ever Ready on the same 75:25 per cent basis. Ever Ready also has a 25 per cent interest in a Dutch subsidiary of NV Mallory Batteries SA.

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\* The value of the shareholding in Mallory was shown in Ever Ready's books at £570,508 at the end of 1971-72; the amount of dividend receivable by Ever Ready was £25,500 for 1971-72 (£37,500 in 1970-71).

### The supply of reference products

38. In Ever Ready's opinion, for the foreseeable future, the zinc carbon dry cell battery will continue, both in British and overseas markets, to be the most important form of portable electricity because of its flexibility and its relative cheapness. The company's policy is, therefore, to continue the development of zinc carbon batteries, mainly of round cell construction. The company has established itself in the sealed nickel cadmium market, is at pilot production stage in mercury batteries (which are reference products), is carrying out extensive development work on alkaline manganese batteries and is investigating other electro-chemical systems which appear to offer commercial possibilities.

39. Sales of reference goods by Ever Ready in the United Kingdom from 1968 to 1973 were as follows:

	1968-69 £'000	1969-70 £'000	1970-71 £'000	1971-72 £'000	1972-73 £'000
Sales of batteries manufactured by Ever Ready ... ..	12,088	12,580	15,757	20,410	20,891
Sales of factored batteries .....	381	410	477	545	563
<b>TOTAL UK</b> ... ..	<b>12,469</b>	<b>12,990</b>	<b>16,234</b>	<b>20,955</b>	<b>21,454</b>

Factored batteries include mercury batteries supplied by Mallory to Ever Ready under Ever Ready's label (see paragraph 42); two types of large capacity single cell zinc carbon batteries supplied by Ever Ready (Ireland) predominantly for industrial use; and two battery types supplied by a British subsidiary of a French manufacturer. Sales of batteries by Ever Ready include sales of batteries manufactured by Ever Ready for other battery manufacturers under the Exide, Mallory, Ray-O-Vac and Vidor labels (see paragraphs 54 and 55). During the same period exports of reference types by Ever Ready were:

Year	£'000
1968-69 ... ..	7,410
1969-70 ... ..	8,295
1970-71 ... ..	6,357
1971-72 ... ..	5,939
1972-73 ... ..	6,833

### Battery types

40. A full list of the reference battery types supplied in the United Kingdom under the Ever Ready label for public use is given in Appendix 2. The following table gives figures by volume of the company's total production of zinc carbon round cells and layer cells for incorporation into dry batteries and sale within the United Kingdom and by export:

Year	'000
1962-63 ... ..	1,130,291
1968-69 ... ..	1,133,391
1969-70 ... ..	1,209,270
1970-71 ... ..	1,037,928
1971-72 ... ..	1,123,599
1972-73 ... ..	1,160,502

It should be noted that the figures given above are for 'cells' and not finished 'batteries' which may consist of a number of 'cells' (as in the case of the PP range of transistor batteries which generally consist of six cells), or which may

consist of one unit cell (such as the round cells in the U2, U11, U12 and U16 sizes). Such unit cells are referred to commonly as 'batteries', although that designation is strictly speaking incorrect.

41. The volume of home sales of Ever Ready batteries by main battery types is shown below:

								1971-72 000's	1972-73 000's
<i>Battery type</i>									
Single Round Cell	...	...	...	...	...	...	...	278,366	290,946
Multiple Round Cell	...	...	...	...	...	...	...	26,885	20,522
Layer and Combined	...	...	...	...	...	...	...	49,256	45,479
								<hr/> 354,507	<hr/> 356,947
Single round cell batteries include	...	...	...	...	...	...	...	SP2 SP11 HP2 HP11	HP7 U12 U16 HP16 etc
Multiple round cell batteries include	...	...	...	...	...	...	...	800 1289 SP996 991 8 etc	
Layer and combined batteries include	...	...	...	...	...	...	...	PP3 PP7 PP8 PP9	PP11 B126 B154 B136 etc

Over 80 per cent of home sales of Ever Ready batteries in 1971-72 were accounted for by sales of seven battery types; and of nearly 60 battery types supplied by Ever Ready over 30 had home sales of less than 1 million.

### Mercury batteries

42. Ever Ready supplies the following types of mercury batteries purchased from Mallory under the Ever Ready label:

Hearing aid types	...	...	...	...	...	...	RM1H RM13H RM312H RM400H RM401H RM575H	RM625H RM640H RM675H MP675H
Photographic types	...	...	...	...	...	...	PX1 PX14 PX23	PX625 7H34
Electronic applications	...	...	...	...	...	...	RM12R ZM9C TR132N	TR133N TR164

In addition, Mallory supplies Ever Ready under the Ever Ready label with three types of silver oxide batteries for hearing aids and five types of alkaline manganese batteries. (Silver oxide and alkaline manganese batteries are not covered by the reference.) Purchases from Mallory of mercury and alkaline manganese batteries increased from £89,000 in 1962-63 to £412,000 in 1971-72.

### Changes in the pattern of demand

43. During the years 1962-63 to 1971-72 a significant change in the pattern of demand was evident and production of round cells by Ever Ready in the period rose by 78 per cent, whilst in the same period the production of layer

cells for incorporation into batteries has decreased by 27 per cent. The company has given a number of reasons for this change; these include an increase in the use of lower voltage equipment; an increase in radio listening with the development of cheaper transistor radios; the production of equipment by radio and other manufacturers designed to be powered by round cells; and the development by battery manufacturers of battery types for use in particular equipment, in particular the development of the HP (High Power) range for use in heavy duty applications.

44. During the period 1930-60 dry batteries were mainly used in torches, handlamps, cycle lamps and radios. However, at that time valve radios required such large and heavy dry batteries (or a combination of dry and wet batteries) that the market was limited for portable radios. Since 1960 the development of cheaper transistorised equipment, coupled with the growth in radio ownership and listening, has increased demand for lower voltage and lower-priced batteries. Transistorised equipment and micro-circuiting have also brought on to the market battery-operated motorised appliances for which the HP range of batteries is suitable and which to some extent supplant mains powered or mechanical appliances.

45. The company said that its expertise in the manufacture of layer cell batteries suitable for transistor radios meant that it was well placed to supply batteries to meet the increasing demand from sales of transistor radios in the 1960s, and its sales of the smaller layer cell power pack batteries (PP3, PP6 and PP7) increased substantially until about 1968 when sales began to decline. The reasons for this decline were the increasing dominance of Japanese transistor radios on the home market designed to be operated by round cells, whilst British manufacturers restricted manufacture to higher priced quality radios designed to be powered primarily by the PP9 battery. Sales of the latter have shown a steady increase each year. There has also been a tendency for sales of the smaller PP3 to increase recently. As valve radios became obsolete sales of batteries specifically for this use have declined until they are now minimal.

### Standardisation of battery sizes

46. Since 1960 the trend has been towards the design of battery-operated equipment using unit round cell batteries, the consumer buying the appropriate number of round cells and fitting them himself. This development provided the opportunity for the company to obtain economies of scale with long fully automated production runs and was the principal factor which led to the establishment of Tanfield Lea in 1967. The following figures illustrate the increase in production of the two popular round cell types of battery now manufactured at Tanfield Lea:

					<i>Index of Sales 1971-72 by volume (1962-63 = 100)</i>	
U2 size	...	...	...	...	Home	203
					Export	161
					Total	177
U11 size	...	...	...	...	Home	387
					Export	951
					Total	494

47. The company stated that as a manufacturer of a secondary product it has little influence over standardisation of battery types. Changes in the pattern of demand, referred to above, came about mainly as a result of decisions by the manufacturers of the equipment in which batteries are used. The company does not, however, recommend for new equipment any battery which has shown a constant decline over a period of years, but suggests substitutes. The company issues a handbook *Battery Engineering Data* and a leaflet *Batteries for modern electronic equipment* to give information for designers of battery-operated equipment (see paragraph 79).

48. The company stated that its policy towards obsolescence was determined by the fact that equipment may still be used for a number of years after it has become obsolete and that the user will still require batteries to operate it. The company considers that it has an obligation to the public not to cease production of a battery if the absence of a suitable alternative battery would cause substantial hardship.

### **Distribution**

49. The company's distribution arrangements for reference products vary with the type of customer. For two large national customers, representing about 11 per cent of turnover, deliveries are normally made direct to their central warehouses. For wholesalers (26 per cent of turnover) deliveries are direct to customers' warehouses. For other retailers, representing the remaining 63 per cent of turnover, deliveries are made by the company's van sales service to individual retail outlets.

50. Ever Ready's van sales organisation is based on an area sales office in each of the seven areas into which the United Kingdom has been divided for the purpose. The area sales offices are also the company's major stockholding points for national, wholesale and van sales customers. Apart from area managers and assistants and one or more general representatives for each area, the company employs a total of 268 van salesmen and 30 supervisors. The van sales service provides a weekly call on major outlets and fortnightly, monthly or seasonal calls on other retail outlets depending on requirements.

51. The company regards its van sales organisation as a highly efficient and economical means of distribution with certain advantages for the company, the retail trade and the consumer. Amongst these are frequent stock replenishment reducing the average time batteries are on retailers' shelves; speedy distribution and delivery in times of shortage or crisis; 'in store' merchandising which saves the retailers' time and displays the goods to best advantage; availability of low volume lines which wholesalers are not prepared to carry; the provision of information to consumers and prompt replacement in case of defects; finally, the company says the van service enables the company to work more economically since two-thirds of the sales to retailers are on the basis of cash on delivery.

52. Manufacturers or their distributors normally supply battery using equipment without batteries to retailers, who fit the battery at the time of sale. The company's sales of batteries as original equipment are in general confined

to electric clocks using the C11 battery, accounting for 50 per cent of sales of this battery type, to gas ignition devices for natural gas which account for 25 per cent and 20 per cent of the sales of the HP2 and HP11 battery types respectively, and to electrical test equipment using certain specialised types of batteries.

### Discounts

53. The company's list prices are the retail prices which it recommends or, in the case of hearing aid batteries, suggests. Discounts are allowed off list prices to various customers or categories of customers as described in paragraphs 55, 56, and 58 to 60.

### *Sales to other battery manufacturers*

54. Under the terms of an agreement with Electric Power Storage Limited (Chloride) Ever Ready supplies its full range of zinc carbon batteries to Chloride for resale under the Exide Drydex brand name. An agreement entered into in November 1972 and running for 4 years replaced a similar agreement made in 1967. A requirement of the 1967 agreement that Chloride would not obtain its supplies of batteries and torches from a source other than Ever Ready and that Chloride would not sell goods of this description made by any other manufacturer was not repeated in the 1972 agreement. The latter provides that Ever Ready will supply such primary batteries and other articles as Chloride may order.

55. Ever Ready supplies Mallory Batteries Limited with a limited range of zinc carbon batteries for sale under the Mallory brand name, and Crompton Parkinson Limited with a small quantity of low volume battery types. Ever Ready also supplies ESB Industrials Limited with a range of zinc carbon batteries for resale under the Ray-O-Vac brand name\*.

56. The customers referred to in paragraphs 54 and 55 above are supplied at negotiated rates of discount which are in excess of Ever Ready's highest rate of discount to wholesalers.

57. Total sales to these four battery manufacturers for the period 1969 to 1973 are as follows:

Year	Total 'Own Label'	£'000	Total Ever Ready Home Sales
1969-70	1,016		12,580
1970-71	1,348		15,757
1971-72	1,724		20,410
1972-73	2,200		20,891

These sales were mainly to Chloride.

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\* Ray-O-Vac has not manufactured batteries in the United Kingdom since September 1972. See paragraphs 175-178.

### *Retailers*

58. The standard discount off list prices is 25 per cent but discounts based on annual turnover are allowed to established retail customers, on a scale ranging from an effective rate of 26.9 per cent to an effective rate of 32.5 per cent. At present the company looks for turnover in excess of £1,000 per annum before granting discount of above 25 per cent. Certain larger customers and multiples enjoy special discounts for quantity purchases in excess of an effective rate of 32.5 per cent. In all the above cases delivery is free through Ever Ready's van sales service, and is made to customers' individual branches (a number of customers have several hundred branches). Ever Ready negotiate special terms with two large customers, who take supplies in bulk and arrange their own distribution. Ever Ready told us that discounts are related both to turnover in previous years and also to estimated turnover for the current year. Whenever turnover does not reach the estimated total for which preferential discount has been granted, or if existing turnover declines below the accepted level for any rate of preferential discount, the terms are reviewed. The opportunity to rectify the situation is usually given but if, after a further period, no improvement in turnover is made, the preferential discount is either reduced or withdrawn, depending on the level of the turnover and the preferential discounts which have been allowed.

### *Wholesalers*

59. The standard discount to wholesalers is list less 25 per cent less 15 per cent, an effective discount of 36.25 per cent. Special discounts are allowed to large wholesalers, ranging from an effective rate of 37.1 per cent to 39.4 per cent dependent on turnover.

### *Initial equipment manufacturers and suppliers*

60. Where initial equipment manufacturers fit Ever Ready batteries they usually buy in bulk and 'in recognition of this and of the promotional value' they usually receive a discount of list less 25 per cent less 20 per cent, equivalent to an effective rate of discount of 40 per cent. Importers of radios and other battery using equipment receive discounts which Ever Ready states reflect the large quantities involved and the convenience of bulk deliveries.

### *Rebates*

61. In a few cases the company has given deferred rebates, subject to the achievement of a previously agreed annual sales target, to certain large customers, but it told us that it is in the process of discontinuing such rebates. We were informed of three cases where deferred rebates of 1 per cent were still being granted in 1971-72. In these cases turnover in 1971-72 ranged from about £60,000 to about £150,000.

62. The company informed us that the discounts referred to in paragraphs 58-60 above which are for zinc carbon batteries did not 'automatically apply to mercury batteries unless turnover is substantial'. For mercury batteries the basic discount to the retail trade is list price (ie suggested or recommended prices) less 25 per cent. The maximum wholesale discount is equivalent to an effective discount of 39.4 per cent and this is also allowed to initial equipment manufacturers, other than hearing aid manufacturers, who receive 42.6 per cent.

63. All customers are allowed settlement discounts at  $3\frac{3}{4}$  per cent for payment within 7 days and  $2\frac{1}{2}$  per cent for payment within 28 days. Carriage and packing is free for orders of £10 or more net.

## Prices

### *Determination of price levels*

64. The company states that the principal factors taken into account when determining selling prices are the following:

- (i) production costs, which vary between different types of batteries; for example, according to the quality of the manganese dioxide mix;
- (ii) the extent to which different types of zinc carbon batteries may be replaced by others within a range, size or series;
- (iii) competitors' prices for zinc carbon batteries and for batteries in other systems (eg mercury or alkaline manganese);
- (iv) the particular application or usage, eg highly specialised or obsolescent batteries where economies of production are not realised and where the customer is prepared to pay premium prices for the special advantage he obtains.

The company's pricing policy is aimed at the 'stabilisation of price levels especially of the prices of its popular products' so that the company and the consumer may 'continue to benefit from low costs of large-scale automated production'.

65. There are some variations in the ratios of list price to standard factory cost. These are discussed in paragraph 268 and paragraphs 309 to 312.

66. As the largest United Kingdom producer of zinc carbon batteries, the company considers in advance the likely behaviour of both competitors and consumers before raising prices, bearing in mind the importance to it of maintaining volume and low cost production. The company says that 'in practice, other manufacturers choose to follow the prices set by the company . . . and none of its United Kingdom based competitors has raised prices for any popular types of batteries . . . before the company has raised the prices of its own brands'. The company adds that its competitors are 'only too relieved to adjust their selling prices when the company increases prices'. However, Ever Ready points out that its competitors' main chance of increasing market shares would be if the company were to raise its prices beyond reasonable levels; under those circumstances Ever Ready does not believe that its competitors would be likely to raise prices to the same extent. In making price changes the company therefore 'pays special regard to what the market will be likely to bear and to whether this move may be seized upon by a competitor to the company's disadvantage'.

67. The company informed us that when the Price Commission approved price increases in ten battery types in June 1973 (see paragraph 70) all Ever Ready's competitors increased their prices in line with Ever Ready. Although the company has no means of knowing the exact dates on which its competitors notified these increases, it believes that it was within 2 or 3 weeks.

### *Price changes*

68. The company provided schedules showing price changes of zinc carbon batteries since 1962 of 57 battery types, of which 51 types are now included on the company's published list of recommended prices. The schedules show that the prices of three of the HP range were reduced in 1964 and 1965 shortly after their introduction. Between the years 1962-69 increases are recorded as follows:

<i>Year</i>	<i>Number of batteries increased in price</i>
1963	1
1964	2
1965	0
1966	1
1967	13
1968	7
1969	30

The above table includes types the prices of which were increased on more than one occasion. During this period there were no price increases in respect of 13 batteries, including the following battery types then popular: HP16, SP11, D23, PP1 and PP3; of the three HP batteries referred to above, two were cheaper at the end of the period than at the beginning, and one was the same price.

69. A general increase in the prices of the company's zinc carbon batteries came into effect on 20 May 1970 following the report of the National Board for Prices and Incomes of May 1970\*. The prices of the majority of batteries were again increased in November 1970. In June 1971 the prices of nine batteries were increased and this was followed by 22 price increases in February 1972.

70. Following a notification of proposed price increases to the Price Commission, which approved them, the prices of ten zinc carbon battery types were increased on 11 June 1973. The application was on the basis of treating all zinc carbon batteries as related products and of recovering increased allowable costs of £828,000 by price increases on the ten battery types. The increases as a whole represented an increase in revenue of  $4\frac{1}{4}$  per cent, but price increases on individual round cell batteries of  $\frac{1}{2}$ p amounted to from 8 to 14 per cent. A second notification of proposed price increases to the Price Commission in December 1973 which were also approved resulted in further price increases on 21 battery types, yielding additional revenue of £575,000, or 2.4 per cent.

71. The company 'suggests' retail prices for mercury hearing aid batteries which are supplied to it under the Ever Ready label (see paragraph 42). Mercury batteries for photographic equipment and electronic applications, supplied by Mallory in the same way, are distributed for sale at the retail prices recommended by Mallory for the same products under the Mallory label. With one or two exceptions which have arisen as a result of the standardisation by Mallory of its range of mercury batteries (see paragraph 144), the prices recommended in June 1972 were unchanged until March 1974.

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\* NBPI Report No. 148 of May 1970.

72. The practice of Ever Ready 'suggesting' retail prices for hearing aid batteries arose when Mallory ceased recommending retail prices for its mercury hearing aid batteries in August 1968. At that time the Ministry of Technology agreed that Ever Ready might 'suggest' retail prices for batteries of this type. Ever Ready states that by undertaking the supply of mercury batteries in this way the company opened up new channels of distribution for these batteries with the result that they became more readily available to the public. The company is of the opinion that some, at least, of these additional outlets would have been unwilling to stock these batteries had they been deprived of the administrative convenience which the company says the suggesting of retail prices provided. The company says that the Ministry of Technology accepted the view that retailers needed guidance in setting the price for these items and, since Ever Ready's selling and distribution channels differed from those of Mallory, agreed that Ever Ready should be permitted to suggest prices.

73. When Mallory commenced quoting trade prices to wholesalers for mercury hearing aid batteries in August 1968, Ever Ready fixed its suggested retail prices for these batteries at levels such that, with Ever Ready's standard discount to wholesalers of 25 per cent less 15 per cent (ie an effective discount of 36.25 per cent), Ever Ready's net prices to wholesalers would be approximately equal to Mallory's. At the end of 1970, when Mallory increased its wholesale prices by approximately 15 per cent, Ever Ready increased its suggested retail prices by approximately 20 per cent.

#### **Research and development**

74. The company says that, as the leading British producer and the leading world exporter of zinc carbon batteries it must be in the forefront of all major developments which are capable of being marketed successfully as 'portable electricity'. The company's research and product development activities are undertaken in its central research and development laboratories employing 220 persons of whom 60 are graduates. Work involves fundamental electro-chemical studies particularly in the fields of carbon, manganese, zinc and corrosion, and chemical engineering associated with mixing, grinding, metal casting and rolling, etc. The unit evaluates and specifies other materials used in zinc carbon batteries, is responsible for quality control procedures, carries out extensive quality audits on the companies' and competing products and investigates battery using equipment and user habits to obtain a basis for evaluation of its products. The unit is also responsible for the continuous development of the zinc carbon battery and for the evaluation, and where desirable, the development to laboratory production stage of other electro-chemical systems. In addition to its central R & D laboratory the company maintains an Engineering Development establishment employing over 100 people. Its main function is the design and development of special purpose machinery for zinc carbon battery manufacture, but it is involved in the evaluation of process plant generally, and the setting up of pilot production lines for new processes and products. Expenditure on research, product and process development in 1971-72 was about £825,000 or about 3 per cent of turnover in reference goods.

75. Ever Ready states that continuous development work has constantly improved the performance of its zinc carbon batteries and has held down costs.

Amongst the improvements carried into effect as a result of the company's R. & D work are the use of the paper lined cell for a variety of battery types and the leak-resistant wedge seal. Work which led to the successful introduction of the HP series of batteries gives the customer better value for money in operating motorised appliances and heavy duty equipment. Over the period 1950-72 the company claims that the average increase in performance of the round cell batteries is between 60 and 90 per cent according to type. Over the same period the storage life of round cell batteries is stated to have been increased by about 100 per cent. Other developments have included the introduction of the metal jacket for some round cell and other batteries.

#### **Promotion, advertising and information for the consumer**

76. The main purpose of Ever Ready's advertising is stated to be to inform the consumer of the advantages of 'specific usage' batteries, such as the HP range for heavy duty equipment and other batteries for more specialised applications. The company's market research has indicated that 'the degree of knowledge of consumers about battery types and about the advantages of different types for different usages is very low'. It is, therefore, the company says, in its own and the consumers' interest to increase this knowledge, since if the consumer obtains satisfaction and value for money from the company's products the consumer will tend to replace like with like rather than turn to competitive products.

77. The company believes that consumer education can best be achieved through media advertising but that the retailer can also be expected to advise customers on the appropriate battery to purchase; there are other means of communicating correct battery use (see paragraph 332). Total advertising and merchandising expenditure on reference goods and reference type goods exported amounted to £150,000 in 1970-71 of which £7,000 was accounted for by media advertising; in 1971-72 the corresponding figures were £291,000 and £145,000 respectively.

78. Promotional effort is concentrated on 'in store' merchandising, principally through the van sales team with a view to facilitating recognition of the products, allowing ease of selection by the customer and obtaining display at the point of sale. In 1971-72 merchandising costs accounted for less than 1 per cent of the company's turnover in reference products. The cost of operating depots and the van sales service amounted to about 7 per cent of total sales carried out through the depot and van sales system in 1971-72, that is excluding sales where deliveries are made direct to customers' branches or central warehouses.

79. Amongst the promotional literature which the company has submitted is a pamphlet, *Batteries for Modern Electronic Equipment*, compiled to assist designers in the choice of batteries most suited to the needs of new equipment. The leaflet includes details of the typical use of zinc carbon, mercury and alkaline manganese batteries, dimensions, contact arrangements, current range and weight. A more lengthy book, *Battery Engineering Data*, gives technical information for designers of battery operated equipment, covering 41 types of zinc carbon battery supplied by Ever Ready.

80. The company's catalogue, which is available to retailers, is fully illustrated and produced in colour. The section on batteries is divided into the following parts for ease of reference:

- High power batteries;
- Transistor batteries;
- Lighting batteries;
- Special purpose batteries;
- General purpose batteries;
- Batteries for photographic and electronic application;
- Alkaline manganese batteries;
- Mercury batteries for photographic, electronic and hearing aid applications.

Each of the batteries listed as suitable for the various applications is illustrated in full colour, together with specifications and the method of packing. Certain of the batteries are listed in more than one part of the catalogue. For example, the HP7 is included in the section dealing with high power batteries for 'motorised' use and continuous high current drain applications, as a transistor round cell battery and as a general purpose battery. Similarly the SP2 and SP11 are shown as transistor round cell batteries, for lighting and for general purposes. The section on high power batteries makes clear that these are for motorised and other continuous high current drain applications such as tape recorders, shavers, motorised toys and gas ignition systems. The batteries themselves are distinguishable by their colour, by the wording appearing on them and in some cases by their distinctive shape and electrical contact arrangements.

81. High power batteries are predominantly orange in colour and carry the words 'High Power Battery', although during the latter part of our inquiry the wording for two of the round cell high power batteries, the HP2 and HP11, was altered to read 'High Power Motor Battery'. At the same time a free leaflet, addressed to the consumer, was issued. This leaflet emphasised that these batteries were for use in motorised equipment in which application, the leaflet claimed, they gave 'at least five times the life of Ever Ready standard batteries'. Single round cell batteries, the SP2 and SP11, are blue and white in colour and carry the word 'battery'. Layer cell transistor batteries are distinguishable not only by their shape and socket connections but also by the words 'Power pack'. The remainder of the batteries are predominantly blue in colour; they are either of distinctive shape or the application is clearly marked, eg for handlamps, electric cattle fences, radios (for valve radios), gaslighters and transistor clocks. A range of five alkaline manganese batteries (supplied by Mallory under the Ever Ready label, see paragraph 88) is illustrated in the catalogue but their use is not mentioned. Mercury batteries, also supplied by Mallory, are illustrated under sections dealing with photographic, electronic and hearing aid use.

82. At the point of sale batteries are either retailed from racks or stands, or may be displayed on retailers' shelves. In some cases the larger selling lines remain in the cartons in which they are supplied in batches of 24; in this case the public may be assisted by the indication of the use of the battery appearing on the cartons, although in the case of the HP7 (recommended for transistors, motorised applications and general purpose use) no such indication is given, other than the phrase 'for longer life', which is commonly used by the company in connection with other batteries.

### **Competition from imports**

83. The company considers that there is little doubt that competition in the United Kingdom dry battery market from imports from EEC countries will be intensified over the next 10 years. Reduction of the import duty against other members of the EEC from 12½ per cent\* to zero by 1977 will, the company believes, undoubtedly increase competition from those countries. The company has produced figures to show that the United Kingdom market for dry batteries is the largest in the EEC. It believes that European manufacturers are already taking the first steps in what appears to the company to be 'a serious attempt to obtain a significant market share in the United Kingdom'. Design and production methods adopted by equipment manufacturers, over whom the company says it has little influence, have resulted in the increasing standardisation of batteries into a relatively small range of round cell batteries. The effect of this in relation to international competition, the company states, is to strengthen the position of large scale battery manufacturers who are able to exploit the advantages of economies of scale.

84. Ever Ready said that because it is a specialised manufacturer it is particularly vulnerable to competition from non-specialist foreign battery manufacturers who might be prepared to subsidise loss-making operations in earlier years in the United Kingdom in order to secure a worthwhile share of the market.

85. The company considers that there are at least three major battery manufacturers in the EEC (Philips/Matsushita, Varta and Leclanché) who, over a period of time, are likely to become increasingly important competitors in the United Kingdom market. These companies are all members of large international industrial groups, with a wide range of products other than primary batteries.

86. To withstand this competition the company relies on its efficient United Kingdom and world-wide marketing organisation; on economies of distribution afforded by the van sales system and economies of scale in the production of round cells at Tanfield Lea; on its range of products including layer cell transistor batteries for which it says there is considerable demand and which are not readily manufactured by overseas competitors; on the advantages of its central research and development organisation in developing new types of battery; and on maintaining and improving its existing range of batteries.

### **Competition from non-reference battery systems**

87. The company points out that there is little competition between the two classes of reference products, zinc carbon and mercury batteries. The advantage of the mercury cell is its small size with the result that its major applications

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\* Equivalent to an effective rate of protection of about 20 per cent. Partly offsetting the effects of the reduction of the import duty against members of the EEC will be the higher common external tariff which certain countries outside the EEC will have to face with respect to imports into the United Kingdom.

are for hearing aids, photographic equipment and certain specialised electronic uses. In larger equipment, where higher capacity is required, the cost of mercury would make the price of a mercury battery prohibitive.

88. The major markets for zinc carbon batteries are in radio, lighting and motorised equipment. Alkaline manganese batteries (which are not reference products but which are supplied by Mallory to Ever Ready under the Ever Ready label) are said by the company to be more directly competitive with zinc carbon batteries than any other system and in this country are available in sizes which are dimensionally and electrically interchangeable with Ever Ready's zinc carbon types HP2, HP11, HP7, HP16, D23 and the PP3. Because of their high initial cost they are, however, stated by Ever Ready to be more suited to the more expensive and continuously used equipment, their principal advantages being higher current drain capabilities, level discharge curves and good storage life. Ever Ready says that in the United Kingdom the price differential between alkaline manganese batteries and their nearest zinc carbon equivalents in the HP series is wider than in the United States, but that the marketing effort given to its HP series in the United Kingdom has been primarily responsible for inhibiting the growth of alkaline manganese batteries in this country. The advantages of alkaline manganese batteries over zinc carbon batteries in general applications (such as lighting, radio or motorised equipment) have to be weighed, the company says, against price. As an example the company cites the MN1300 alkaline manganese battery which is unlikely to be competitive with the SP2 zinc carbon in general applications since the price of the MN1300 is stated by Ever Ready to be 5.75 times greater and the life only approximately double. However, with increasing volume production the company says 'the cost will decrease and it could become a competitor to the zinc carbon battery over a wider range of applications'.

89. Nickel cadmium rechargeable dry batteries are manufactured by Ever Ready in sizes equivalent to the HP2, HP11, and HP7 and in nine other sizes for which there is no zinc carbon equivalent. Nickel cadmium batteries of equivalent size are interchangeable electrically with zinc carbon batteries. The company states that for consumer products such as radio, tape recorders, torches and toys there is virtually no competition between the two systems. Whilst the zinc carbon battery is cheap, convenient and adequate for such uses, the nickel cadmium battery is expensive\* and requires a charger built into the equipment. There is, however, some competition between zinc carbon and nickel cadmium batteries in the higher price electric shaver and in photoflash equipment, industrial equipment such as walkie-talkies and alarms systems, hedge trimmers, food mixers, calculators, powered tooth brushes, portable TV receivers, and portable electrically powered tools. The company does not believe that there will be any competition between nickel cadmium and mercury batteries for hearing aids; such cells, the company says, would last for barely a day on full charge and the provision of spare charged cells and the necessity for daily recharging are unlikely to appeal to users. The company supplies some nickel cadmium 'button' cells. These are not interchangeable with hearing aid types and are purchased from a continental producer.

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\* The price of Ever Ready's HP11 was 8p in May 1973, exclusive of VAT. Ever Ready's nickel cadmium equivalent was priced at £1.67 at that time. In addition the cost of a charger, as part of the equipment, has to be considered.

90. The company says that there are other systems which are competitive with zinc carbon batteries to various limited degrees. These include zinc air cells, air depolarised cells, magnesium cells and, subject to development work, lithium cells and sealed lead acid secondary batteries. Ever Ready believes that at least over the next ten years the demand for zinc carbon batteries for their traditional applications will continue, but that there will be competition from other systems particularly in newer uses.

#### **Recommendation of retail prices**

91. It is the company's policy to recommend retail prices for all its battery types (except hearing aid batteries for which retail prices are 'suggested' as explained in paragraph 72), for the guidance of its retail customers, the great majority of whom are small to medium sized electrical goods shops carrying a large inventory. The company says that, as its price list includes a large number of low-priced popular batteries, it considers the practice of stating recommended retail prices assists the retailer and protects the consumer. Since June 1972 the publication of a net trade price list has been discontinued.

#### **Manufacture of mercury batteries**

92. At the start of our inquiry the company informed us that it had decided to give consideration to producing more items in the range of primary batteries which it supplied. Research and development work had, therefore, been carried out on other systems including nickel cadmium (see paragraph 89), alkaline manganese and zinc air batteries. Research had also been carried out into the production of mercury batteries, the other class of reference goods, which are presently supplied to Ever Ready under its own label by Mallory. The company told us that experience of the kind necessary to manufacture mercury batteries takes time to acquire. Its research team had not derived much assistance in this from its established skills in the zinc carbon field.

93. The potential market in mercury batteries is, the company said, limited to those applications requiring a size of less than 5ml in battery volume, in effect restricting the market to batteries for hearing aids, photographic use and certain electronic applications. The company has yet to be satisfied that the market conditions are such that it could expect to achieve the volume of sales at home and abroad to justify the expenditure involved in setting up the type of plant which would be economic. The decision was taken to go into pilot production of mercury batteries in the belief that demand for these batteries will increase in the United Kingdom and European countries following wider use of 'miniaturised' equipment for which these batteries are required. Demand would also increase following the adoption by the National Health Service of a behind-the-ear hearing aid. Eventually, if market conditions are suitable, and it can be demonstrated that the substantial investment involved will be viable then the company will consider whether or not to go into full-scale production. But the company points out that currently it has other and higher priorities of capital expenditure for the immediate future. The company said that, as the leading supplier of portable electricity, it had no intention of leaving a profitable part of the market to competitors and performing a purely wholesaling function in relation to that product.

94. Pilot plant production has been limited to the 675 cell for test market purposes only.