STATE AND SOCIETY

Physics Book Publishers— Their Mood is Bullish

A PHYSICS TODAY survey of several leading physics book publishers indicates that the industry, despite rising costs and stiffer competition, expects to gross from 10 to 30% more in 1967 than it did last year. The publishers, including McGraw-Hill, John Wiley, Academic Press, W. A. Benjamin, Prentice-Hall and Harper & Row, were almost unanimous in agreeing that greater student enrollments, expanded US and overseas markets and the general inflation makes the physics book market a healthy and growing one.

Thomas Dembofsky, editor in chief for science and mathematics at McGraw-Hill, said he expected his company's sales of physics books to reach \$2 million in 1967 as against \$1.5 million in 1966. "We are doing a better job on mail sales, libraries, book stores and markets outside the typical university," said Dembofsky. "Our sales are about 30% overseas for our intermediate and advanced physics books." Another publisher said he expects his 1967 physics receipts to reach about \$2.25 million as against just under \$2 million in 1966. "The physics book business has been a healthy one since the mid-1950's," he noted. "Not only is there more interest in physics per se, but the interdisciplinary market is growing constantly." "We are very bullish," said Peter Dickinson, sales manager for Benjamin. "And we are extremely excited about the physics market. Not only are there more students, but there is more money around to buy books. Students are much more affluent than professors generally believe."

A publisher specializing in advanced physics books attributed his 25% average annual growth rate in sales to increased graduate-school population as well as the accelerated rate of research. "Books are rapidly outdated. The sale of a given title has not increased as much as the sale of more new titles. We have done a great deal better on books in mathematical physics. About 40% of our

RESONANCES

Physics students should not be drafted, says the American Institute of Physics Committee on Physics and Society. In a letter to Selective Service chief Lt. Gen. Lewis Hershey, committee chairman John Wheeler, summarizing the views of the committee, noted "At the very time the country's needs have called for more physicists there has been a deterioration of the manpower situation in physics The number of physics majors and graduate students who might be drafted is small in comparison to the 150 000-200 000 men inducted per year. It nevertheless would be a significant fraction of the pool of developing physics talent. The present and foreseen shortages of physicists argue against interrupting the flow of newly-trained physics talent and the contributions they will make to the nation's scientific and technological growth. They also argue for using trained physicists in the most effective manner possible. We believe that these ends will be best accomplished by allowing properly qualified physics students to begin their graduate training and to complete it without interruption by military service.

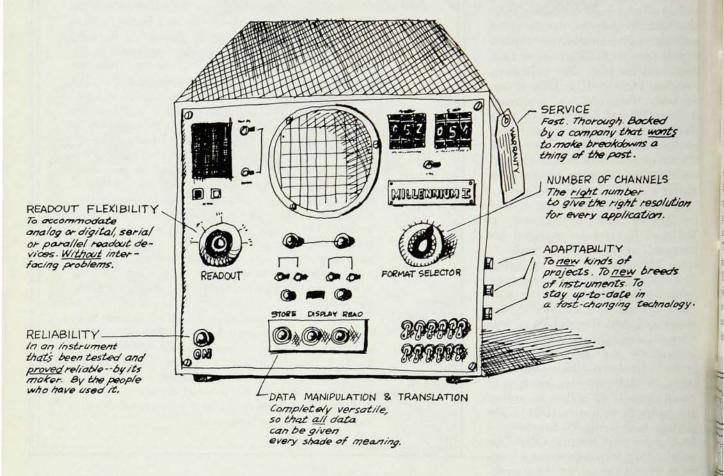
"In order that the supply of trained manpower in physics be maintained and that full utilization be made of those physicists at all levels that are now being produced . . . we recommend that physics [and astronomy] be included among the disciplines for which deferments are declared to be in the national interest. . . ." The views of the committee received the unanimous endorsement of the AIP governing board.

business is overseas." Another major publisher of books to foreign countries noted, "The overseas market is increasing more rapidly than the home market. As the standard of living rises in Europe and Asia, more people get a university education. And as English increasingly becomes the international language, we end up by selling a lot more physics books in places like Japan, South America and India."

Economics. Publishers were eager to point out that costs have risen at least as rapidly as sales, that profit margins were sinking and that the cost squeeze had hurt several houses within the recent past. "Costs have been growing despite our attempt to take every advantage of cheap com-

position," said one publisher. "We try to offset higher costs with higher prices but there is a limit on what we can charge at any one time." Many book houses try to come up with a profit that is equivalent to an author's royalty. This royalty can range anywhere from 10 to 20% of a publisher's net receipts on a book with the exact percentage open to negotiation. Profit and loss breakeven points in sales average about 5000 copies for physics texts and about 2000 copies for reference books and monographs. These figures can vary widely depending on printing process, printing location and extent of promotion. "The promotion on some introductory physics books is very costly, with a staff of 50-100 people involved," noted a sales man-

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ager. "On a first printing of say, 40 000, you hope only to break even."

All the book houses agree that increased competition is a major factor in limiting sales. The number of really active physics publishers has grown rapidly in the last few years, and many companies have introduced a much harder sell than they had 15 years ago. "The pie is being cut smaller as more publishers bring out more physics books," said another sales manager. "No one has a corner on good authors Consequently you are any longer. going to see fewer Halliday and Resnick's selling at 100 000 a year and more titles selling at 20 000."

Increased competition has redounded to the benefit of authors, who are demanding and often getting higher royalty rates. Many publishers complained that not enough physics books are written to supply the demand. "There are not the great gaps that existed five or ten years ago," said one, "but we still have broad areas for which we are seeking authors." As a consequence, most houses employ numerous field editors who attend American Physical Society meetings,



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visit campuses and keep the grapevine alive. "If a physicist is writing a manuscript," said Dickinson, "you can be sure there will be a half dozen publishers who know about it. Each author now has an opportunity to talk to publishers' representatives not only for ways to organize his book but also for the best business deal. This makes life tough for the publishers."

The more successful books are now invariably commissioned. Publishers have grown in sophistication in the last ten years and have better grasp of the need for a book, of the size of the market and of potential authors. "You can't just write a book any longer," noted an editor. "An introductory physics text is going to compete with many extremely good ones and must be well written and well illustrated." Increased collaboration between author and publisher has resulted in an improved product, say the publishers. "Physics books are being better written and easier to sell," was the general comment.

European Physical Society Slated to Operate in 1968

A federation of European national physics organizations with provision for individual membership will probably come into existence in 1968 (PHYSICS TODAY, Aug. 1966, page 89). Louis Cohen, secretary of the British Institute of Physics and the Physical Society, reports to PHYSICS TODAY that a steering committee of the proposed European group "after considerable discussion had produced a draft resolution which has been sent to some 12 national societies for consideration, The Council of my own Institute and Society have accepted the constitution with certain financial provisos, and the other countries . . . are expected to do so shortly.

"It still remains for us to put the question of support to our members formally but informal soundings have shown a considerable degree of support. There are problems in our participation; for example, our membership (at 12 000) is at least as great as the total of all other European societies.

"We are, however, fully convinced that we should participate fully in this venture and feel that the resultant rationalization of conferences, publications and information flow will be for the general good."

Radiation Dynamics Sells First Tandem to Argonne

Radiation Dynamics has sold an 8-MeV tandem accelerator to Argonne National Laboratory at a price of \$1.1 million, the first such machine sold by the company. With this sale, nuclear specialists say that for the lower end of energy range of the common-usage tandem, physicists can now go out and get competing bids on devices to meet their needs. This RDI sale follows several similar ones in recent months, including a single-ended 4-MeV device to Argonne, another 4-MeV accelerator to NASA Goddard Space Flight Center and one 300-kV machine to Kohlsmann Instrument Co. RDI is now engaged in a stiff fight with other manufacturers to win a tandem contract from Ohio University.

The RDI accelerator achieves its high voltage through a number of electrical power conversion stages. Starting with 220-volt or 440-volt, three-phase power, it makes 12-kV and then 150-kV radio-frequency power (130 kHz) and by rectification produces its eventual high-voltage direct current.

Radiation Dynamics spokesmen as well as physicists familiar with the Argonne operation disclosed that the tandem sale proved exceedingly difficult to consummate. RDI, which had never built a tandem before, had been trying to break into the market for over two years, at a time of tightening government research support. Moreover, their single-ended machines are generally 25-30% more expensive than other facilities of comparable energy. Argonne, it is said, had to take a gamble with a relatively untried device and had also to withstand intense bidding of other firms.

The RDI tandem is expected to give Argonne a very powerful tool for research in neutron physics. The principal advantage of the RDI devices, say nuclear physicists, is their current capabilities, approximately 0.280 milliamperes in the tandem and, in many of the single-ended devices, often greater by a factor of ten over other facilities of comparable energy. The