

Chemical News Via Audio Tapes: Chemical Industry News*

W. E. HANFORD, R. E. MAIZELL,** and M. CHERNOFF
Olin Corp., New Haven, Conn. 06504

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Tape coverage of *internal* R&D news now has a broader scope with improved features. A new tape series covering *external* news of broad interest has been initiated. The use of tape in the company's Continuing Education Program is discussed as are future plans for expanding the audio tape program.

A new means for the dissemination of chemical information from a research and development laboratory was described in a previous communication.¹ This paper describes how a series of tapes covering *internal* R&D news has progressed and developed to cover a broader scope with improved features. In addition, it describes the initiation of a new series of audio tapes covering *external* news of broad interest and the role of audio tapes in a Continuing Education Program. Plans for the continuing development of this program are outlined.

INTERNAL TAPES

Audio cassette tapes are used to keep key executives and others within the company informed of activities and achievements via a monthly issue of a half hour tape. Approximately 15 minutes are devoted to internal R&D highlights, and the remainder of the tape features the story of a particular project.

Since this concept was first described, certain changes and improvements have been made in this internal R&D news series. They are:

1. A "Did You Know" feature is included on some tapes. This feature, written in the same informal style, is designed to acquaint listeners with particular facilities and services available to company staff. Some of those already described are new analytical tools, information tools, and facilities such as the microbiological laboratory, custom glass shop, the Patent Department, and the like.
2. The controlled audience has been increased substantially, from 55 to over 80, to assure that all key individuals are properly informed. Some of the additions resulted from declared interest on the part of certain personnel, while other persons were added by virtue of their positions.
3. A distinctive label and polyolefin case were designed to enhance the appearance of the cassette and improve handling and mailing.
4. To maintain listener alertness, the announcing is now done by more than one voice. This avoids monotony.

EXTERNAL TAPES

Based on the favorable acceptance of this internal R&D audio news presentation, a completely new series has been initiated. It is devoted entirely to external chemical news and is derived from reports and developments in literature published outside the company. The 15-minute tape is issued about every other month at this time, but more frequent presentations are contemplated. The purpose of this series is similar to that for the internal news series—to make it easier for management and research people to keep abreast of new developments in chemical fields.

Material covered in the external news series stresses unique news of broad interest to chemical R&D people and their business counterparts. Emphasis, therefore, is on chemical R&D and those aspects which seem to relate both to technology and to the business. Unique sources of information would include reports of company personnel who attend outside meetings and symposia, a special research study for which the company has paid an outside organization, and news other than that which would be found in the general chemical news media which many people already read. In particular, developments which occur abroad, especially in Europe and Japan, are emphasized, as well as interdisciplinary sources. The sources used are unique to our people, and they involve paraphrasing or reporting what has appeared in outside sources.

As an aid to listeners, we try to distinguish as clearly as possible between (1) chemical news which is abstracted or paraphrased, and (2) those items of chemical news which occasionally provoke editorial comment. Each news item is preceded by a "headline" announcement followed by a concise "ad lib" summary of the news item. At present, a script is not prepared but this may become necessary as plans to upgrade quality develop. A kind of "table of contents" is included with each cassette. This gives the list of stories, approximate listening time in seconds, and indications of where further information may be obtained.

Costs for the construction of this new external news series, in time and dollars, on an experimental basis, are as follows:

1. Selection of material and editing of it. This takes about 13 technical man-hours per month, although we expect this figure to increase as we increase the quality and scope of the input.
2. The recording or announcing. This takes two hours for each month's issue of the tape.

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** To whom correspondence should be addressed.

3. Related clerical tasks consume about three hours.
4. Electronic duplication, packaging and labeling take about 10 hours.

Thus, there are 15 technical hours and 13 nontechnical hours per month, for a total of 28 hours. Total costs for labor are about \$225.

Costs for materials include, for example, the blank cassettes, packages, and mailing labels, and are about \$1 per tape per month. Thus, material costs for 90 users total \$90 per month.

Therefore, our total monthly costs run about \$315.

OTHER USES OF AUDIO TAPES

Beyond the two series of tapes which are generated by our staff, most of the lectures presented under the company's Continuing Education Program are also taped. The R&D unit also makes use of other audio forms of information. We have a very extensive library of tapes from outside sources which are heavily used in connection with our Continuing Education Program. All the ACS Short Courses available on tape are on hand, as well as the IEEE "Soundings." We are considering the purchase of additional tapes of a training nature, particularly as regards the management aspects, such as the Xerox course on Effective Listening.

PLANS

Plans for the future call for broadening the internal news series to include taped interviews with key personnel outside the R&D group, such as the Vice President for Sales, and others in interesting positions. Also in the planning stage is the development of nonproprietary versions of these internal tapes to be made available to colleges and universities to acquaint the academic community with the kind of work done in industry. Since Olin, like other chemical companies, often invites members of the academic community to speak or consult on research in the university laboratories, there is a measure of reciprocity in this effort. A series of this type will, of necessity, have to be carefully edited because of the proprietary data involved.

Audio tapes for specific instructional purposes are still planned. They are intended to remind the researcher of how to use, for example, a technical information tool, an automated microfilm reader, or an analytical instrument.

Another area where great utility for audio tapes is fore-

seen, both in and out of the company, is the rapid reporting of research results. For example, papers presented at meetings and symposia could be made available more quickly in audio form than in printed form. This has already been done on occasion with some papers at ACS and AAAS meetings, and the practice is expected to become more widely used. Recording papers on tape prior to meetings can be very helpful to the speaker, to the program chairman, and the audience since it would ensure a well presented, carefully timed, crisp oral presentation.

To upgrade the mechanical quality of both our news series, a capital investment of approximately \$5,000 is being considered for quality recording units, a high speed tape duplication unit with associated equipment, and supplies. We will also be looking for unique information sources on the market that may be useful as sources of input to our external series.

CONCLUSION

We are happy to report that our efforts to date in this medium have been extremely well received, particularly by the key people to whom the tapes are directed. We are attempting to get additional information by means of questionnaires but the results are not sufficiently complete to report at this time.

Some of the specific comments we have received are as follows: "Technical personnel find the cassettes especially useful and informative during these busy days..." "They supplement what I don't have time to read or catch something I missed or perhaps re-emphasizes some item whose import I didn't appreciate." "They provide a very easy and useful method of passing the news on to other interested people in our organization." "Convenient way to get latest technical information."

While the use of audio-visual materials may be a better choice for presenting certain information, or for some audiences, until the use of this medium becomes more feasible for us, replies such as those above have encouraged us to redouble our efforts to improve and expand our work further with audio tapes. We hope to be able to present the results of our continuing efforts at a future meeting.

LITERATURE CITED

- (1) Hanford, W. E., DeShong, E. L., Chernoff, M., and Maizell, R. E., "The Industrial Chemist and Chemical Information: The Human Ear as a Medium," *J. Chem. Doc.* 11, 68-9 (1971).