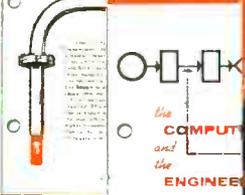


The *Lenkurt* **DEMODULATOR**



15th ANNIVERSARY

This month the Demodulator celebrates its 15th anniversary. Over the years, the format and policy of the publication have changed in many ways, just as the industry it serves has changed. This issue is a report to our readers: the current status of the Demodulator, and where we expect to go from here.

Multichannel transmission or carrier telephony was a new technique to the telephone industry in the early 1950's. Operating companies were vitally interested in this new method of sending numerous telephone conversations over a single pair of wires. But reliable sources of information were not readily available.

During those first years the independent telephone industry turned to Lenkurt as the major supplier of carrier equipment—and as an authority on the subject. Accepting the responsibility, the company established the *Demodulator* in March 1952.

Three key sentences appeared on page 1 of the first issue, summarizing the intent of the publication to:

"... bring you information about carrier systems, related products, and the Lenkurt factory and organization."

"... provide information for which there has been no regular channel in the past."

"... tell you about new equipment, special problems of carrier operation, interesting installations, forthcoming products, new literature, current delivery schedules, and price changes."

Policies have changed—you won't find delivery schedules in today's issues—but the goals have remained the same: to regularly inform the readers of important developments in telecommunications with informative and easy to understand articles.

From Carrier To . . .

The monthly periodical has expanded from articles on carrier techniques into many related subject areas. It is now necessary to consider Lenkurt's service to areas outside the telephone industry, including work with the military, public utilities, railroads, broadcasters, and others. Current articles may concern basic components, complete systems, or new techniques in communications.

The first *Demodulator* issues were usually two part: a simple explanation of a technical subject, and an article describing a specific piece of equipment.

The treatment of these subjects was not in a vocational or "how to" treatment, but did attempt to be educational. It was considered important to stress the value of carrier techniques, relating sometimes highly technical information in an understandable way. The articles

were written so that the reader need not have specialized knowledge to comprehend the material and to include enough specific information to be helpful to the reader in his daily work.

Another guideline of the early *Demodulator* articles stated that there should be no simple treatment of the subject in readily available standard reference books. In other words, no purpose was served in rewriting material already available to the industry—the *Demodulator* attempted to be an original source of specialized and useful information.

Some of the subjects of that first year indicate how this was achieved. They included: "Transmission of Signals Over Carrier System Channels," "A Brief Discussion of Frequency Division Multiplexing," "A Discussion of 'Levels' and 'Powers' in a Carrier System," and so forth.

It should be noted that microwave radio was gaining interest at about the same time. Lenkurt was the first to introduce telephone-engineered microwave radio systems to the industry, and

as the market for these new products widened, so did the scope of the *Demodulator* articles.

Throughout the history of the *Demodulator*, its goals have remained basically the same. Policy has shifted away from direct descriptions of individual products, except as examples of a particular technique or installation. In response to readers' needs, the publication has attempted to stay abreast of the sometimes rapid technological changes in telecommunications, and at the same time keep the industry informed in special areas of interest.

The *Demodulator* reader has always been an active participant. Through letters and personal comments, the staff is made aware of the interests of its readers. Suggestions come regularly for new article subjects, and it is always obvious from the calls for reprints which past articles have satisfied a popular need.

In recent years, the scope has widened considerably. It is not uncommon, for example, to find articles deal-



Figure 1. Demodulator Editor plans illustrations with artist. Lenkurt's art department completes the illustrations for each issue, designs page layouts, and prepares material for two-color off-set printing.

ing with laser communications, information theory, or communications satellites interspersed between such expository treatments as the traveling wave tube, the use of compandors, or microwave for TV transmission.

Circulation

Originally, the *Demodulator* was sent to some 4000 selected representatives of the telephone industry. It was fairly easy to know their interests in subject matter. But, as the circulation grew from that first few thousand to over thirty thousand subscribers, the interest levels broadened too. At a point it became necessary to question if such a large and diverse readership could be served satisfactorily by one publication.

In 1965, circulation policies were tightened to include only those individuals employed by companies or agen-

cies operating fixed communications systems, and to educational institutions. At the same time, each reader was contacted by survey card, with a request for more accurate information defining his position in the telecommunications industry.

These two steps not only allowed closer control over distribution, but assured the staff of a specific audience when preparing articles of timely interest.

The accompanying charts illustrate the growth of the *Demodulator* (including the Spanish version, *El Demodulador*, published since March 1956), the status of our readers, and where they work.

There are now more than 31,000 regular subscribers to the *Demodulator*—the English edition goes to over 100 foreign countries; the Spanish version

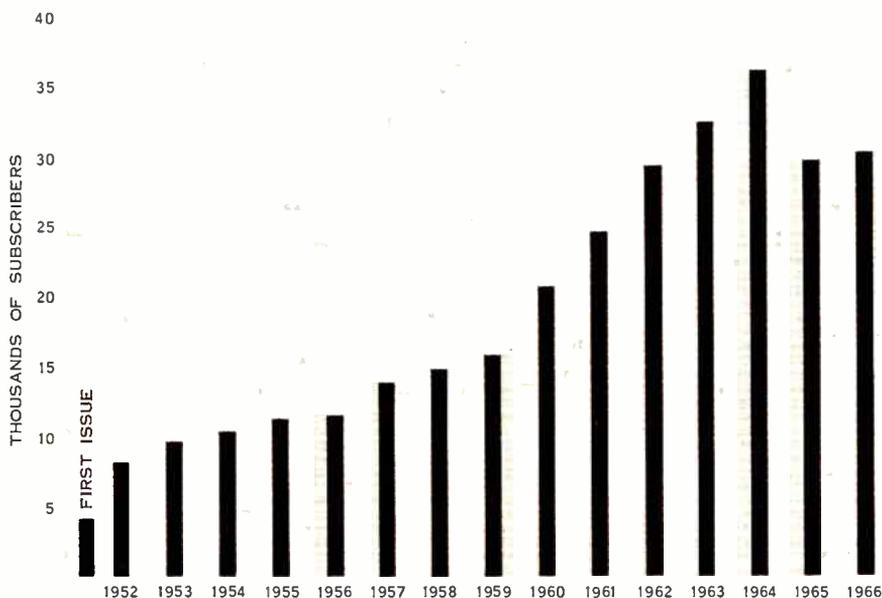


Figure 2. Circulation of the *Demodulator* grew from 4000 subscribers in 1952 to over 30,000 by the end of 1966. Drop in circulation shown in 1965 resulted from mailing list survey.

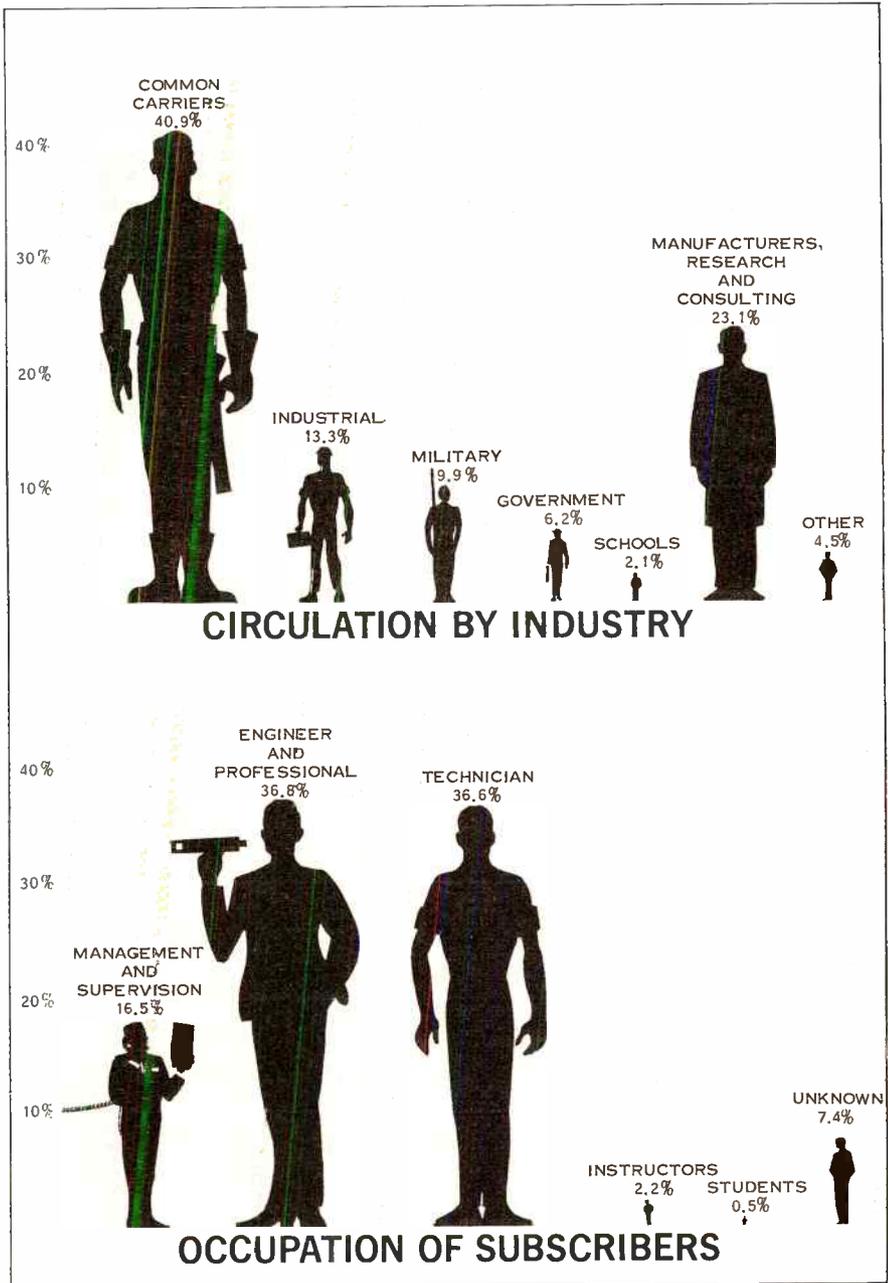


Figure 3. The Demodulator is circulated to technical personnel employed in various industries involved in the development and operation of point-to-point communications systems.

Figure 4. Demodulator staff processes over 4000 additions and 1600 address changes to the Addressograph mailing list each year.



to 30 countries, mostly in Central and South America.

Many Requests

In addition to the regular monthly mailing of the *Demodulator*, hundreds of requests are received yearly for back copies of specific articles. Instructional articles are used extensively by many firms as training aids and text for company-sponsored schools and seminars. Many requests come from university and college instructors, and copies are frequently distributed through public relations offices or handed out at meetings and conventions. Often, bulk orders are received from professional organizations for their members.

File copies of the *Demodulator* are sent regularly to numerous company and educational institution libraries, and binders containing issues going back many years are seen on the desks of many communications engineers.

Many times each year articles from the *Demodulator* are reprinted with our permission in other professional and trade publications both in this country,

and abroad. In the United States they frequently appear in communication industry periodicals, and other trade magazines with specialized interests in communications.

In addition to the regular Spanish translation done by our staff, articles have been reprinted in Italian, German, French, and Danish.

Attempts are always made to fill requests for back issues, but it is not always possible. This becomes especially acute when a new subscriber wants to establish his own reference file with several years of previous editions.

Reprint Books

To fill this need, and to provide a convenient reference source for all readers, the first *Demodulator* reprint book was compiled in 1959. The cloth-bound book included 32 of the best and most popular articles, and was sold at cost. In six years, thousands of these books were bought by readers throughout the world.

A second edition, expanded to over 700 pages and including 74 articles, was



Figure 5. Demodulator staff members spend many hours in Lenkurt's technical library researching material for articles.

published early last year. Intended as a valuable addition to any reader's permanent library, the book includes authoritative information on multiplex technology, microwave radio, digital data transmission, semiconductor devices, and general communications subjects. Over five thousand copies of the popular new reprint book have been purchased by *Demodulator* readers.

Subjects Picked

At least twice a year the *Demodulator* staff meets to discuss subjects for the next six months. Acting on the stimulus of readers' letters, and their own personal contact with the industry, the staff reviews a variety of ideas and potential

subjects. Always there is the attempt to integrate the varied interests of thirty-one thousand subscribers (the actual number of *readers* is estimated at two or three times that) into a meaningful schedule.

The *Demodulator* staff writer will take about six to eight weeks to complete an article. The first few weeks are necessary to familiarize himself with the subject, followed by the actual writing. Members of the company's technical staff carefully review each manuscript before it is ready to be set in type. Two-color offset printing is done in Lenkurt's own facility.

The *Demodulator* audience is by no means a passive one: nearly 700 letters are received each year, many involving technical questions and requests for additional information on specific subjects. The office processes over 4000 additions to the mailing list each year, removes some 2500 others of people who fail to notify us of their new addresses, and changes addresses for about 1600 people. Reprint book sales are handled through the office, and orders for other materials such as the *Demodulator* binders are processed.

Where Do We Go From Here?

The Lenkurt Demodulator will continue to respond to the needs of the industry, as it has for 15 successful years—ready to report contemporary techniques or follow innovation. The language will be concise and understandable, the information authoritative. By continually promoting better understanding of communications technology, we hope to keep your good will.

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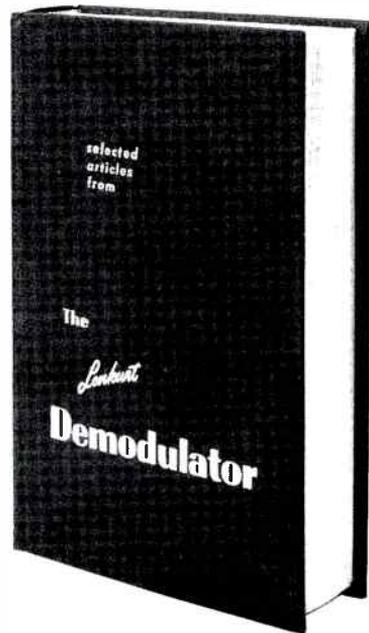
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THE LENKURT DEMODULATOR is a monthly periodical circulated to technicians, engineers, and managers employed by companies or government agencies who *use and operate* communications systems, and to educational institutions. Job title, company affiliation, and nature of business must be indicated on subscription requests. Each issue features an instructive article on a subject dealing with the science of telecommunications. Permission to reprint articles may be obtained by writing THE EDITOR.

World Radio History