

## Computers/Communications

*You think that the local telephone company has a monopoly? Well, not anymore.*

### How to bypass your friendly phone company

By Charles Siler

**T**HESE DAYS, anybody can become a phone company. McDonnell Douglas Corp., the aerospace firm, qualifies as the nation's 20th-largest phone company with its far-flung telecommunications network. Meanwhile, everybody from commercial landlords to cable television operators is creaming customers from the poor telephone companies. "We may still have a legal franchise, but it's in name only," says Robert Eckenrode, vice chairman of Nynex Corp.

Hamstrung as they are by high business rates aimed at subsidizing universal residential service, the telephone companies are easy targets. Nowhere are the pickings easier than in the emerging industry of providing bypass services that cut out the local phone company. This involves stringing up a city with fiber-optic cable that connects companies to long-distance carriers and undercutting the local company on access charges.

Sound easy? Though the industry is in its infancy, local bypass is already a \$400 million business growing at 22% a year. Twelve cities from New York to Orlando and Chicago to Boston are wired with 774 miles of fiber, and another three cities and 215 miles are planned by the end of this year.

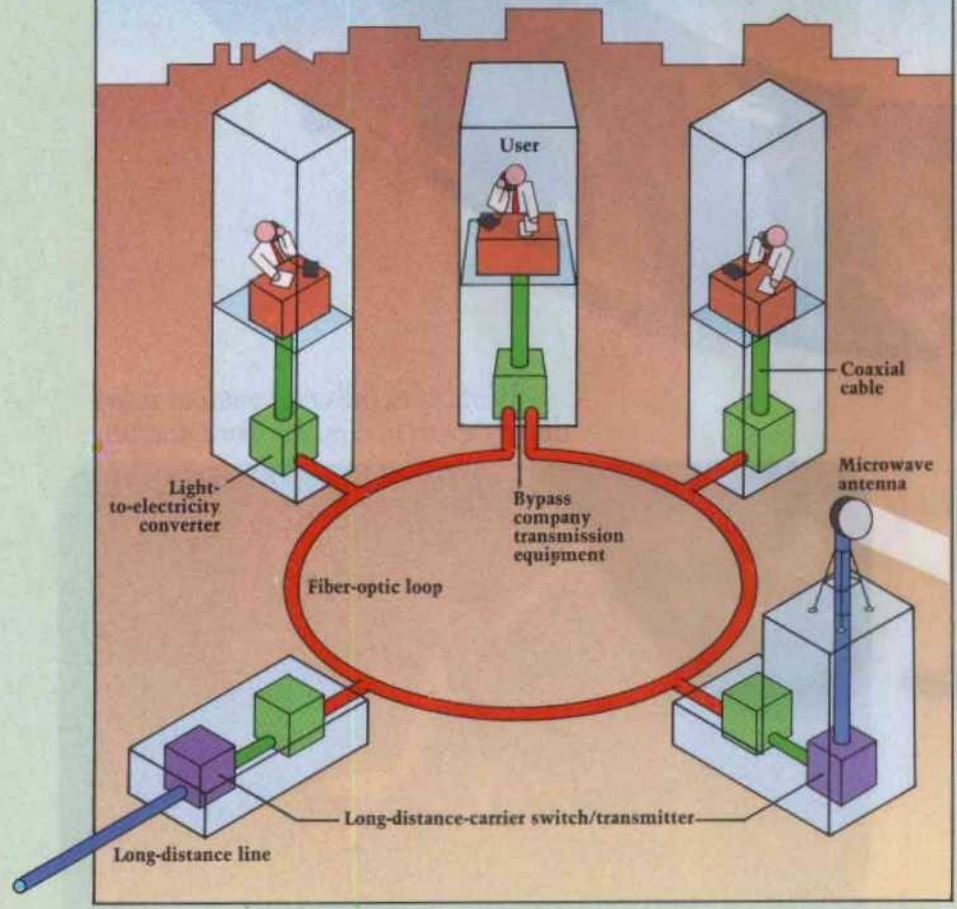
By 1995 bypass could be a \$2.5 billion business. Though most of the bypassers are skimming profitable business customers, residential bypass is an even greater potential threat to telephone companies since it could be handled by cable tv operators using the existing coaxial cable that now connects 60% of U.S. homes. Fear of residential bypass is a powerful incentive for phone companies to speed their plans to wire the nation with optical fiber (FORBES, Aug. 7).

You don't have to be Alexander Graham Bell to succeed in the local bypass business. Metropolitan Fiber Systems Inc., founded just last year, already has bypass networks in more major cities than any non-Bell competitor. Met Fiber's privately held parent is Peter Kiewit Sons' Inc., of Omaha, a construction and mining company with revenues of \$4.9 billion last year. Kiewit, which owns 80% of Met Fiber, learned about telecommunications by stringing long-distance fiber for US Sprint and others. But by 1986 that business started to slow down

Robert Mansfield

#### Keeping the phone company out of the loop

All you need to get into the bypass business is a shovel, optical fiber and some big companies that need to communicate. Bypassers typically bury fiber-optic loops beneath main streets in downtown business districts. The loops link customers and long-distance carriers through optoelectronics in basements. Customers use bypassers to get lower long-distance access charges and to back up phone company lines.







*Anthony J. Pompliano, chief executive of Metropolitan Fiber Systems*  
**Taking customers from the phone companies one city at a time.**

David Carter

and Kiewit ran into Chicago Fiber Optics Corp., a startup looking to build a downtown fiber network in Chicago.

Kiewit constructed the Chicago network in 1987 and then last year formed Met Fiber to go national with the concept. Already, Met Fiber is in Chicago, Baltimore, Boston, Minneapolis and Philadelphia, with San Francisco, Los Angeles and Houston due to turn on by year-end. The company plans to be in 15 cities, including New York, Washington and Atlanta, by the end of next year. Total construction bill: \$100 million through the end of next year. Though revenues this year are a measly \$5 million, Metropolitan Fiber's hope is that cash flow will start to support future construction by 1992.

The bypassers' sales pitch to big corporate telecommunications users is simple: We provide a backup to the telephone company in the unlikely event that its lines are knocked out by some disaster, and we help you save on your phone bill. By stringing fat cables full of optical fibers in prime downtown business districts, the bypassers can offer less expensive links to long-distance carriers like AT&T, MCI and US Sprint. Their costs are lower than the phone companies' and they aren't compelled by law to pro-

vide universal service.

These are no ordinary phone lines, but rather high-capacity, unswitched, digital leased lines that carry streams of digitized voice and data simultaneously. (Customers who get their own dedicated lines are actually reserving bandwidth on a high-speed trunk shared with others.) To create a leased line between, say, Philadelphia and Los Angeles, you need three pieces—a link between your office building and the building where your long-distance carrier has its connection point; the transcontinental link; and the local link on the other coast. The leased line business, which enables companies to set up private networks, is a \$7.1 billion business growing at 6% a year.

The savings on local bypass can be substantial. In Chicago, for example, Illinois Bell charges \$751 a month for a dedicated leased line and Met Fiber charges \$675. These so-called T1 lines are high-speed circuits that carry 1.5 million bits of data per second or 24 times the capacity of an ordinary copper phone line.

Met Fiber is scarcely alone in the bypass business. Merrill Lynch's Teleport Communications Group will have revenues this year of about \$35 million, mostly from its two net-

works in the telecommunications-intensive cities of New York and Boston. Teleport, headquartered on Staten Island, plans to have three more cities wired by year-end. Also, Diginet Inc. of Milwaukee has networks there and in Chicago, and has big growth plans.

Today the bypassers sell leased lines, but eventually they want to handle switched calls, expanding their market beyond big corporate customers. Switches are expensive. Bypassers would like to pay the phone companies to do the switching, but the phone companies will never willingly do that. Why not? Because it means rejiggering phone prices. Now, the cost of switching a call is bundled together with the costs of carrying the call from the customer to the switch and from the switch to the long-distance carrier.

"The local switched market is something we are most interested in," says Anthony J. Pompliano, chief executive of Met Fiber. Bypassers have been trying to persuade telephone companies and regulators to unbundle local services, but have had little success.

Bypassers are betting that in the long term, they will play a key role in the future deregulation of the nation's telecommunications business. The telephone companies want to get into everything from equipment manufacturing to selling long-distance calls. If, as many observers expect, the gates of competition are thrown open entirely within the next decade, opportunities will open up for bypassers. Say that Nynex could sell phone service to customers in California or that AT&T could offer local phone service. Every phone company would then need to arrange local access around the country. The bypass networks could become those local links.

So far, the bypassers have taken only an infinitesimal bite of the phone companies' business, but the Bells are taking them very seriously. To fight back, the Bells are gradually getting rid of regulatory shackles. In some states, such as California, Bells can cut private line prices to meet competitors like Metropolitan Fiber without prior regulatory approval. Pacific Bell, getting ready for the debut of Teleport and Metropolitan Fiber in San Francisco, reduced the cost of its high-capacity digital services by an average of 40% in March.

Once again, technology has accomplished what Congress and Judge Greene could not. It has created natural competition and lowered the cost of communicating. ■