

Tonya Corley, a Georgia-Pacific lab technician, observes an edge-crushing test on a small square of cardboard mounted on a special press. The test is part of the lab's quest for the perfect package.

## **Technology helps** researchers search for perfect package

NORCROSS, Ga. — Tom Santelli does terrible things to card-

Equipped with machines that would look at home in a horror movie torture chamber, researchers led by Santelli squeeze boxes, shake them silly and subject them to wild temperature changes, all in search of the per-

fect package.

"We believe we can take any package challenge from our cus-tomers and meet their need," said Santelli, the director of Georgia-Pacific Corp.'s new pack-age technology and development

Whether insulated cartons to whether insulated carrons to ship McDonald's hamburgers, brightly decorated 12-packs of Lone Star beer or heavy over-night envelopes for the U.S. Post-al Service, a cardboard box these days serves as much more than a

simple brown wrap-around.

Businesses are demanding packaging strong enough to protect their products, light enough to make shipping cheaper and made of recyclable material. With the popularity of ware-house-style stores that sell straight out of the carton, boxes sometimes even have to be portable billboards.

Aided by advances in computer technology, paper making com-panies have invested millions of dollars in research laboratories dollars in research laboratories and evolved over the past decade from a "hatchet and saw" approach to manufacturing packaging, said William Cullison, executive director of the Technical Association for the Pulp and Paper Industry.

"Everyone has moved forward

"Everyone has moved forward and there are new applications of technology moving to the fore-front.," said Robert D. Leahy, a spokesman for International Paper Co., which has a huge package innovation facility in Middletown, N.Y.

"It's exciting for us because it's a billion dollar market," Santelli said. "Everybody has to put their product in some kind of pack-

To keep perishable food fresher during shipping, for example, Georgia-Pacific is using a process similar to laminating that coats the carton with a high-performance insulating material, Santelli said.

of orange juice spilling from the sides of tear-open containers, Inhappen," he said.

### Shake, rattle, roll, all in day's work for box testers

Here's how some of the testing at Georgia-Pacific's \$5.5 million research center works.

Boxes are designed on computer screens, which are connected to large cut-ting tables that automati-cally shape and perforate the cardboard.

To measure stacking strength, finished boxes are placed between a metal sandwich to be squeezed with up to 50,000 pounds of pressure while an electronic graph elerts a technician to the moment the nician to the moment the cardboard buckles.

Strength also is tested at a bank of smaller machines, where one-inch cardboard squares are bent under watchful eyes.

Across the room, a halfdozen boxes are strapped to a contraption that re-sembles the front of a loco-motive. At the touch of a the boxes shake and rattle in a simulation of a bumpy train ride.

Elsewhere in the laboratory, boxes sit for hours in huge freezers to determine how well they insulate products from arctic tem-peratures. With the flick of a switch, researchers can change the climate in the room to simulate the trop-ics, even making it rain.

ternational Paper has pioneered a plastic cap and spout on card-board beverage cartons, Leahy

Leahy said experiments are under way to develop food containers made completely of recycled paper that won't contaminate the products. If successful, food could be packaged in recycled cardboard.

"We can't do it now because the FDA (Food and Drug Administration) won't allow it, but it

# **American Pacific Bank** springs into global spot

AUMSVILLE -- American Pacific Bank of Aumsville—on the verge of collapse just a few years ago — is about to leap into the global marketplace.

Under the leadership of an enigmatic Hong Kong have

enigmatic Hong Kong business-man, the bank is about to ag-gressively pursue an expansion

In the past 16 months, the bank has:

Introduced a secured credit-card program, which has helped the bank's deposits grow by 53 percent. The bank earns a cool net interest of 9.875 percent with little risk: Deposits over 70 percent of outstanding

Introduced a residential construction loan program, which lends money only to contractors who have pre-sold their projects. This has helped in-crease the bank's assets by 250 percent.

And in the next 24 months, the bank plans to open a branch in Portland and begin offering export consulting services to Oregon businesses interested in doing trade with the Pacific

"I've got quite a bit of respect for his business acumen," Cecil for his business acumen, 'Cecil Monroe, Oregon's top banking regulator, said of Fai Heng Chan, American Pacific's primary shareholder and chief executive of-

When Chan, 47, approached the board of directors of then Santiam Valley Bank in 1986, the bank was a losing proposition.

For five of the six years that it had been in business, it had lost money. Regulators were swirling like vultures over the bank's books. And the board of directors were desperately grasping for a savior.

Chan acquired controlling

"If I'm proven right, you will see 10 years down the road, China will be if not the biggest - the second biggest importer of American products.

"Any company that wakes up to this and knows how to take advantage of it . . . will do very well."

Fai Heng Chan

American Pacific Bank

interests in 1987. And since then, he's been meticulously restructuring the bank into what he sees as a conduit for business beween Oregon and his home base in Hong

Chan, who immigrated to Canada in 1984, renamed the bank American Pacific in 1988 and took it public on the Vancouver stock exchange.

"All my life I've been in securities and investment banking in Hong Kong," Chan

said recently while sitting in American Pacific's conference room in the Bank of America Financial Center in downtown Portland. That's where the Aumsvillebased bank now operates its construction

lending and secured credit card offices.
"The obvious thing was to buy a vehicle, buy a bank and, hopefully, one day restruc-

You can use the organization to assist Americans doing business in Asia and assist Asians doing business in America."

### Banker plans to cash in on Hong Kong

Fai Heng Chan's plans for American Pacific Bank have ex-cited analysts on Wall Street.

Emanuel and Company of New York recommended

New York recommended recently that investors buy American Pacific because the bank is expected to earn \$275,000 in 1992 and \$800,000 in 1993.

The "buy" recommendation came despite American Pacific's \$101,000 loss in 1991. The "implementation of a savvy strategic plan will transform American Pacific Bank into a new global entity," the report said.

Emanuel and Company especially liked the bank's new emphasis on fee income and on a conservative, secured lending strategy. According to the report, the bank's assets have grown by 250 percent since grown by 250 percent since Chan took over. Deposits have increased at an annual rate of

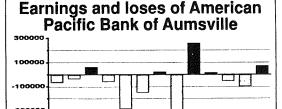
American Pacific's secured credit-card assets now are in-creasing at an annual rate of 50 percent and are projected to nearly triple by the end of 1993, according to Emanuel and Company.

The company also was impressed with Chan's hopes of promoting trade with Asia.

Chan said he wants to cater

his export expertise to mediumsized companies in Oregon and the United States.

"Those middle-market companies . . . . they can offer a tremendous amount to the Asian community," Chan said. "At the



same access the larger companies have. What we can offer them — and they can't get elsewhere — is this tremendous connection with Asia and else-

\*(year to date)

Chan has more than 20 years of experience as a businessman in Hong Kong, where he once owned a brokerage firm. Al-though he loved Hong Kong and didn't want to leave, he said, he moved to Canada in 1984 at the urging of his wife. She feared the impending take-over of Hong Kong by the Com-munist Chinese in 1997.

Great Britain will return the island to China upon the expiration of a 100-year lease. China, however, has promised talist system for at least 50 years after 1997 and has been pumping billions of dollars into the island's economy.

"The 1997 situation has been turned into a positive, rather than a negative," Chan said. "We hope that 1997 will come tomorrow. A case in point is that real estate in Hong Kong has skyrocketed 100 percent in

"This is against the whole trend in the United States. The Hong Kong stock market has gone up something like 45 percent in value and is rated one of the best stock markets in the

"Right now Hong Kong companies are pouring money into China. Right now China is

Sam Ward, USA TODA

### Trading information

American Pacific Bank trades under the AMPBA symbol on the

NASDAQ exchange. The bank has 1,872,454 outstanding shares. The bid price is \$2.75 a share. The offer price is \$3 a share. Stocks traded at a high of \$5 a share and a low of 63 cents a share in

pouring money into Hong Kong. So the situation has turned around 360 degrees after June 4, 1989," when China's leaders crushed a fledgling democratic

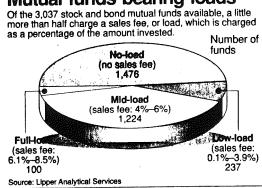
Despite the violent crushing of the student democracy move-ment, China's coastal economy still is bursting with growth according to a recent issue of Fortune magazine. Shengzhen

China's special economic
zone just north of Hong Kong
is the fastest growing region in the world.

"That area is going to get more rich," Chan said. "People will have much more consuming power. And if I'm proven right, you will see 10 years down the road, China will be if not the biggest - the second biggest importer of American products

"Any company that wakes up to this and knows how to take advantage of it . . . will do very well.'

# Mutual funds bearing loads



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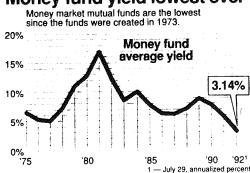
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FYI

f you have suggestions or questions about business news, contact Business Editor Dan Bender at 399-6738.

### Money fund yield lowest ever



Source: IBC/Donoghue's Money Fund Report

#### Your Money

#### Throngs flood city to buy stocks

BEIJING — Scuffles broke out Saturday as throngs of Chinese gathered in Shenzhen for a chance to buy new shares on the southern city's stock exchange.

China's fledgling stock market — less than 2 years old — consists of exchanges in Shenzhen and Shanghai, which have just several dozen issues altogether.

Although the market is comparatively tiny, enthusiasm is enormous. Tens of thousands began lining up Friday at more than 300 locations in Shenzhen to buy applications to purchase some of the shares to be issued in coming weeks.

Five million application forms go on sale today; 10 percent of those holding forms will be chosen by lottery to be able to buy up to 1,000 shares apiece.

Each application form costs 100 yuan, or about \$18 - about half the average person's monthly income.

- From AP wires