

Improvements add to distilling efficiency

There was more done to DU-2 during its first shutdown than the expected routine maintenance. Tech and Engineering Departments had worked up several projects to improve efficiency (i.e.: save fuel) and they were anxious to put them into practice.

Craftsmen and foremen, under the overall direction of George Mateer, Engineering Projects supervisor, completed several projects during the shutdown. They were fighting the same deadlines maintenance personnel were, and coordination between the two groups, and Operations, was essential.

A new boiler being completed in Utilities will relieve Distilling of the need to generate some of the steam it used to make as a by-product. The pipes previously used for this purpose were converted for use as crude preheaters.

This will save fuel because it will take less heat down the line to raise the crude to the boiling temperatures required for the fractionating process.

Other heat savings are being made as well, by the addition of another crude-to-flasher bottoms (asphalt) exchanger.

Distilling shutdown

Even refinery goes on diet

For three weeks the refinery was on a diet -- so to speak.

As Don Belliss, process manager of Distilling put it, "The Distilling Units are the mouth and throat of the refinery -- all crude passes through here first before feeding the rest of the refinery."

Between April 19 and May 11 the Distilling Unit No. 2 (DU-2) complex was down for scheduled maintenance. That left the distilling chores to DU-1, but it's an older and smaller complex than DU-2, so overall refinery crude throughput had to be reduced and the refinery adjusted to its "diet".

A good deal of coordination had to be accomplished to assure the refinery didn't starve during this period, however. Economics and Scheduling was the pivotal point in this effort, juggling with such variables as crude receipts, feed stocks required by other re-

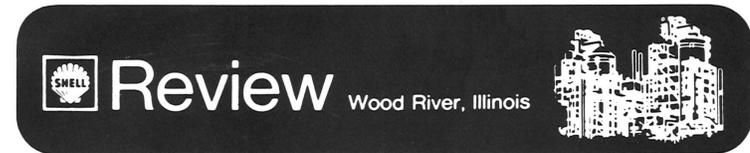
finery units and product demand.

This is done by running it through a series of exchangers and ultimately air coolers. The additional exchanger allows further utilization of the asphalt's heat and results in less loss of heat to the atmosphere in the air coolers. Again, a better use of heat, and more fuel savings down the line.

Two of the biggest furnaces in Distilling were prepared for the installation of furnace "optimizers". That makes three in all, now. These optimizers will serve two purposes. First, they help control the amount of air entering the furnace so that fuel is burned in the most efficient manner.

Second, they serve as automatic monitors of the gases going out the stack. The monitors detect if a furnace is acting up, and the optimizer corrects the problem before visually offensive smoke is produced.

Other revisions to lines, valves and related equipment were also made during the shutdown to facilitate the tie-in of other projects planned for future completion.



VOL. 37, NO. 5

WOOD RIVER REFINERY

MAY, 1974

Refinery making Unleaded

In last month's issue it was announced that Shell will be marketing by July 1 a new, unleaded gasoline as required by Environmental Protection Agency (E.P.A.) regulations. It's already in production at the Wood River Refinery and into the distribution system.

The new gasoline, called Super Regular Unleaded, is taking the place of Super Regular (low lead). Octane will be between Regular and Super Shell.

Small amounts of lead antiknock fluids have long been added to gasolines to increase the octane ratings. But it has been decided that small amounts of lead will destroy the effectiveness of catalytic converter systems being installed in 1975 model automobiles.

The government, therefore, has directed that the new

gasoline contain less than .05 gram of lead per gallon (one part per 60,000). Because of the possibility that traces of lead may get into the gasoline between the refinery and the customer's gas tank, Wood River is shipping it from the refinery at less than .01 gram per gallon (one part per 300,000).

Making this unleaded gasoline with a high octane is causing some operational adjustments throughout the refinery.

In order to retain high octane and good driveability characteristics, the various components making up Super Regular Unleaded have to be fractionated, or refined, to a greater degree.

For example, the catalytic reformers (in Aromatics) which are making a compo-

nent for Super Regular Unleaded must be run at a higher severity to gain some of the octane previously achieved by adding lead. The octane goal is achieved this way, but it takes more fuel to run the reformers and more catalyst is used, too.

The making of any quality gasoline requires the blending of a number of different components and then putting in an additive package. Eliminating lead from the product makes this blending more difficult.

Computer controlled blending facilities, when completed, will aid in coming up with just the right combinations on a day-in-and-day out basis. It isn't just a matter of coming up with the final product that will meet Shell's quality standards. The goal is to meet these standards (and those of the E.P.A.) in the most economical way.



COORDINATION between skillful hands and eyes -- not to mention a little help from his friends -- enables Allan Hosto, crane-man, to make a difficult maneuver at the DU-2 shutdown.

run at that level for any period of time. It was a good job."

According to Don Waters, engineering shutdown coordinator, all planned maintenance went pretty much according to schedule. He said, "It was a tight schedule, though, there was no time for lagging; that crude supply had to be cut back in on time.

"Everyone did a tremendous job. There was great cooperation and hard work on the part of all the craftsmen, and we appreciated the good attitude of the operators, too."

DU-2 came back on stream Saturday, May 11. Just like the rest of us -- it's hard for a healthy refinery to stay on a diet very long.



SKULL SESSION. Glenn Lash (left) and Dale Moore discuss the status of the shutdown and plot their next move. Glenn is an operations foreman in Distilling and Dale the operations shutdown coordinator.

Bloodmobile

June 10 and 11

Sign up now

The precise timing of the shutdown was influenced by the government's crude allocation program. Because the government had directed Shell to sell crude to other refiners, Wood River's supply had already been reduced during this period.

The Distilling shutdown was an around-the-clock, seven-days-a-week effort. In addition to the efforts of the Distilling operators, all crafts were involved.

Those operators not seeing to the needs of the shutdown at DU-2 were at DU-1 helping nudge its output up to 90,000 barrels per day. Belliss said, "That's got to be the highest sustained output of DU-1 in years." Moore added, "It must be at least ten years since it's

Compute your provident fund

Employees who are members of the Shell Provident Fund have been furnished their 1973 annual statements, which contain data necessary for computing the value of their individual accounts.

The Provident Fund is made up of three parts: Thrift Fund, Equities Fund and Shell Stock Fund. The statement shows balances as of December 31, 1973 in three ways -- cash in the Thrift Fund, units of participation in the Equities Fund, and cash as well as whole and partial shares of Shell stock in the Shell Stock Fund.

To compute the cash value of your Provident Fund account, it is necessary to convert units and shares to cash

figures. Year-end values of Equities Fund units and Shell stock are included at the bottom of the Provident Fund statement. However, current Shell stock prices may be obtained from most daily newspapers. Up-to-date unit values of the Equities Fund are also posted regularly on Company bulletin boards.

Employees can learn more about the Provident Fund from their copy of the Company's benefits booklet, "Shell and Your Benefit Plans." Section six covers such topics as who may join, how each fund operates, provisions for making withdrawals and federal income tax.

ANNIVERSARIES



Truman Hargiss
Engr. Field
35 years



Sonny Little
Engr. Field
35 years



Everett O'Dell
Engr. Field
35 years



Al Wallace
Engr. Field
35 years



Charley Rose
Engr. Field
25 years



Bill Wallace
Engr. Field
25 years

Brenda Peat is a Shell scholar

A college scholarship is not the easiest thing to come by these days; there's a lot of competition. And that goes for the fifty scholarships sponsored by the Shell Companies Foundation, Incorporated.

But Brenda Peat, daughter of Jim Peat, senior engineer in Engineering Services, out-excelled at least 725 other high school senior children of Shell employees, pensioners or deceased employees to earn one of the coveted scholarships.

Winners were selected by the National Merit Scholarship Corporation (NMSC) based on students' performance on tests when they were fall-semester juniors, and on their leadership and citizenship attributes. NMSC administers all phases of the program which provides a renewable award from \$500 to \$1,500 a year for up to four years of full-time undergraduate study.

Brenda's activities and honors include: National Honor



SHELL SCHOLARSHIP. Ed Ballman, refinery manager, presents a certificate of achievement, emblematic of the scholarship, to Brenda Peat. Her father, Jim Peat of Engineering Services, beams proudly.

Society, Illinois State Scholar, Scholar Quiz Team captain, yearbook co-editor, Thespians, chorus, Madrigal Chorus, and Girls' Barbershop Quartet.

She also has found time to participate in Junior

Retired operator says...

Me too: 100,000 miles on Shell oils

"Last month you asked if anybody thought their car could pass 100,000 miles and still be going strong? Well, I'm here to say I've got a 1968 Buick with 102,000 hard miles on it, and it's still running great."

Dare we ask the obvious? Have you been using Shell lubricants? "Absolutely! Wouldn't use anything else. Oh, once in a long while, when I'm travelling where they don't sell Shell products, I've used something else. So I guess I couldn't honestly say Shell is the only oil ever used in the car -- but it's 99 and 44/100ths percent pure Shell."

This absolutely unsolicited testimonial came from D. B. Ward, retired (1963) operator from Aromatics.

D. B. goes further, saying, "When I said hard miles, I meant it. A couple years ago the wife and I covered 26 western states, including mountain ranges, pulling a 19-foot trailer. I told her that would probably do the old buggy in, but it barely noticed the strain."

Over 100,000 and still going strong on Shell products, eh? What's the repair picture been? D. B. said, "The bearings have never been touched and the heads have never been removed. I think Shell has the best oil made -- and you can print that."

OK, we will.

Sports and shorts

Family Picnic

Keep Saturday, June 29, open because that's the day of the annual SRA Family Picnic, and it's going to be held at the Chain of Rocks Fun Fair Park again. All SRA members, including pensioners, and their families are invited to join the fun which includes rides, bingo, and special prices for refreshments (soda, ice cream and beer).

Activities start at noon and run to 6 p.m. All rides are reduced 30 percent, but for a mere \$1.50 you can purchase a pass that enables the holder unlimited free rides during the period of the picnic.

Pack up the kids, a picnic basket, and have a ball!

Bluegrass belle

The magic of bluegrass music was featured in the most recent issue of the company-wide *Shell News*. Wilburn Williams, pipefitter 1st, has first hand knowledge of this magic as his daughter, Teresa, is a member of just such a group -- in this case all teenagers. If you'd like to see and hear Teresa and her friends, drop by the bluegrass festival in Delhi, Illinois, June 8 and 9.

Bowling season results

It was a long season (starting last August) and a number of tough hurdles had to be made, but Engineering Field, Wednesday SRA league champion, captured the refinery bowling championship by defeating Alkylation, champion of the Monday league, in a tough roll-off.

Engineering Field had previously defeated the Misfits and Alkylation had defeated Dispatching to capture top prize in their respective leagues. Individual season records were:

	Monday League	Wednesday League
High average:	Bob Garner 198	Jack Cherry 193
High series:	Bob Garner 696	Dick Keeler 757
High game:	Jack Ridinger 289	Jess Grover 258
Team high series:	Dispatching 3234	Misfits 3182
Team high game:	Extraction 1133	McAfoos 1133

(individual scores are scratch - team scores are handicap)

Quote of the month

"(Expletive deleted!) I've been following Garner for twenty years and never quite finished ahead of him. I finally got 'em." That was Jack Cherry, foreman in Asphalt, on beating out Bob Garner, operator in Alky, for high average honors in the Wednesday SRA league. Congratulations, Jack, but did you see Bob's average in the Monday league?!

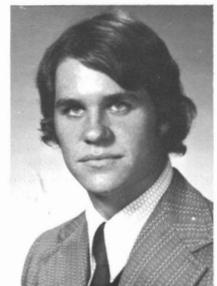
Keep on rollin'

Howie Schmitz and Charlie Towne, both formerly of the Wood River Research Lab and now both in MTM R&D in Houston, are still doing it. Both were active in the Mileage Marathon while here at Wood River, and they took their share of honors (Charlie won his weight class here last fall in a rental car).

Now they are doing it in Houston. In a contest open to all Houston and Harris County drivers, Charlie got 27.2 and Howie 26.4 miles per gallon in normal city traffic to capture the top two prizes. Both drove identical Mazda four-door sedans.

Scholarship Winner

Steve Williams, son of Dale Williams, glassblower in Research, has been awarded a \$2,000 journalism scholarship at DePauw University. Steve will be a senior there this fall. As his school's winner, Steve will get first hand experience for ten weeks this summer on an internship program with the St. Petersburg, Florida Times. Steve is a member of the Dean's List; Sigma Delta Chi, journalism honorary; president of his fraternity and editor of the campus newspaper.



Steve Williams

Two refinery pensioners spend...

All day on a golf course without clubs

Pensioners do a wide variety of things during their "retired" years: they travel, fish, work around the house or on new jobs, loaf, golf, and any number of other activities.

Whether you're a pensioner or not, if you've spent any time at Belk Golf Course in Wood River, chances are you've seen two Wood River Refinery pensioners out there -- but not with golf clubs in their hands.

Luther Middleton, formerly an Alky zone foreman, and Robert Solomon, retired operator from Lube, are grounds keepers at the Belk Park course during the April to November golf season. Here are their stories:

Luther Middleton

Luther retired in February, 1967, after spending 33 years

and 3 months on a two-week temporary job. "That's right," said Luther. "When I hired on they warned me that after about two weeks they'd probably have to lay me off."

"I was lucky, though, and two weeks stretched into 33 good years. There were 17 of us hired that day. I was the last to leave -- all the others were either laid off, or quit, died or retired before me."

For three years after retiring, Luther "just loafed and did a little travelling." When the Belk course was about to open, the superintendent asked Luther to help plant trees around the course. If you've ever been stymied by one of the many new trees on the course, you have Luther Middleton to thank because he

planted about 90 percent of them.

Luther, who doesn't play golf himself, admits to having learned a good deal about the game from his grounds keeping duties -- particularly its effect on that strange animal, the golfer.

He said, "I've seen all kinds of golfers out here. Some take it easy and get real relaxation out of the game, and that's as it should be. Others get so hepped up they practically run to the next shot and then swing so hard you'd think they were going to throw their backs out."

"And there's some pretty colorful language to be heard from time to time. Depending on the wind and weather conditions, not to mention how loud a golfer is bellowing, you can hear things a long way off. Most of the time golfers are pretty well mannered, though."

During the winter and at times he's not at the course, Luther and his wife Lilah tend to their 10 acre "ranch" just south of Belk Park. "If I were a golfer I'd say I was just a 9-iron from the course," said Luther, "but since I'm not, I'll say I'm just a quick jaunt away on my trail bike."

Robert Solomon

After 25 years in operations at the refinery, Robert retired in November, 1969. Most of the time during the golf season you'll find him behind the

wheel of a tractor pulling the grass cutter, but on bad weather days Robert also acts as repair and maintenance man at the course.

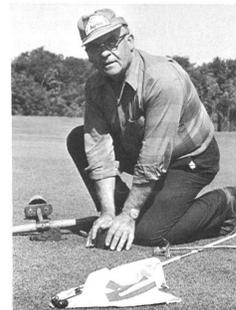
The normal day starts about 7 a.m. and runs to 3:30 which, not surprisingly, Robert prefers to the shift work he was on for many years. He said, "It's really something out here early in the morning. You'd be surprised how much wild life there is on a golf course before the golfers invade it."

"Especially here at Belk -- we see squirrels, skunks, groundhogs, all kinds of birds, and even snakes coming out of those woods over there. And what with our four big lakes there are wild ducks and big ol' bull frogs, too. We don't bother them and they don't bother us everyone's happy."

One of the sidelights both Robert and Luther enjoy about the grounds keeping job is the chance to see old, and new, Shell friends.

Robert said, "Quite a few pensioners play golf out here and its fun to see them again and to shoot the breeze. Not only that, I've had a chance to meet a lot of pensioners and current Shell employees that I never had a chance to meet before since we worked in different parts of the refinery."

Robert and his wife Mary have lived in Wood River since 1945. They share an interest in collecting primitives and anti-



CAUGHT IN THE ACT. Luther Middleton is the one responsible for all those "impossible" pin placements around the course. Here he changes the cup to an even more difficult spot. Why should he care? He doesn't even play golf!

ques. "Nothing of any value," said Robert. "Just old household items like bowls and utensils and an occasional clock or some such. We enjoy the history of them. They're conversation pieces."

Although he says he played a little golf when he was younger, Robert doesn't get out all that often anymore. He said, "Once in awhile Mary and I will play four or five holes in the evening."

"But believe it or not after you've been running around a golf course since sunup, it doesn't look all that inviting at dusk."



GRASS CUTTER. Robert Solomon guides his tractor-pulled mowers all around the course to keep the fairways and roughs trimmed nicely so you keep out of trouble.

Shell films capture international awards

"The Revealing Eye," Shell's film on the development of high-speed and time lapse photography--allowing scientists to study phenomena not normally seen by the human eye--was selected for a special award at the 9th Chicago International Film Festival.

Judges at the festival voted a Plaque for Cinematography for the film, which presents a wealth of historical and unique sequences from archives all over the world, many of which are being seen by the public for the first time.

The film reflects Shell's interest in science and technology, and points the way to the future, where technologists

will continue to help the scientists who serve mankind.

In addition to the Chicago award, "The Revealing Eye" was also recognized for excellence by the 21st Annual Columbus Film Council of Columbus, Ohio, as were Shell's "Undersea Oasis," which deals with how marine eco-systems form around artificial reefs; and "Oil," which covers the history of the petroleum industry and explains how it shaped the way we live in just a little more than a hundred years.

All three films--along with numerous others in the Shell Film Catalog--are available on a free loan basis from the Shell Film Library at Indianapolis.

Order your desk diary

Shell's Desk Diary, the winner of many awards, is again being offered to Shell employees.

The 1975 diary, to be published for the 16th year, will combine a desk calendar with full-color photographs and illustrations emphasizing shells as a constantly recurring theme in the culture of mankind.

Available at \$1.50 per copy, the diary will be mailed in time for presentation to friends, re-

latives and acquaintances as Christmas gifts.

Deadline for orders is August 1. Because the number printed is based on orders received, you should place your order early to assure prompt delivery.

Checks or money orders should be made payable to Shell and sent to F. H. Roberts, Room 1536, One Shell Plaza. Names and full mailing addresses should accompany each order.

RETIREMENTS



Guy Turnbeaugh
Hydroprocessing
37 years



Otto Heigert
Engr. Field
34 years



Marshall Slocumb
Refinery Lab
33 years



Bert Bertagnoli
Hydroprocessing
28 years



John Katrenich
Engr. Field
20 years

'Those glasses saved my eye'

There's an old saying: "A miss is as good as a mile." Maybe so, but a near miss can go a long way to illustrate the wisdom of using proper safety equipment.

Such a near miss took place at the recent Distilling-2 shutdown.

Dale Leady, boilermaker, was preparing to weld on a nozzle in the skirt of a vessel. It was an overhead weld in a confined space. Dale had his hood on, in the up position. He had just positioned the welding electrode and was getting ready to bring his hood down when the electrode accidentally touched the wall of the vessel.

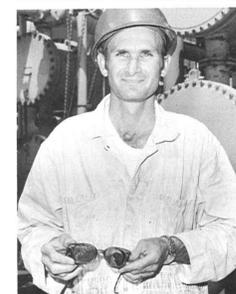
A piece of molten metal dripped down and landed right in the middle of the right lens of the safety glasses Dale routinely wears when on the job. Dale said he could see the

metal beginning to melt the glass lens less than an inch in front of his eye.

He quickly removed the glasses and watched as the intense heat of the metal immediately snapped the lens into a spider web of cracks.

Dale said, "There's no doubt about it, those safety glasses saved my eye. That metal was red hot and in a flash just dropped down on me. It would have landed right in my eye."

The thought of molten metal dropping into one's eye isn't a very pleasant one. Dale Leady, most of all, is thankful it didn't happen to him. Next time the situation calls for his wearing safety glasses you can be sure he's got them on. What about you?



MAKE YOUR OWN LUCK. Boilermaker Dale Leady holds the glasses that saved his eye. He was lucky, but made his own luck by wearing the glasses in the first place.

Fred Hess
SAFETY SUPERVISOR

Shell president speaks out

"How come business doesn't explain itself better?" asks a U. S. Chamber of Commerce publication. "It is hard to understand why U. S. business, which has brought the art of marketing to a level admired by competitors the world over, does not explain itself better to the American public."

The answer, of course, is simple. Business, preoccupied with problems connected with meeting the competition and serving the U. S. consumer, hasn't tried hard enough.

In view of widespread criticism, however, business—especially the petroleum industry—is having to adopt across-the-board changes in the standard communications procedures, from handling of routine matters to communication of overall objectives.

In Shell this has been graphically illustrated by the

recent drive to explain to the American public our company's views on corporate profits.

Reacting to anti-industry headlines in daily newspapers, Shell President, Harry Bridges, sat down at home the Sunday before the Super Bowl and wrote the first full-page newspaper ad countering charges that the industry is enjoying "windfall profits" from the energy problem.

That ad, and another which followed, ran in local newspapers across the country. The message was: 1973 earnings were not excessive.

Bridges said, "Our current profit level can only be considered excessive if our 1968 profit level was excessive. And yet during 1968 our return on capital employed was approximately equal to the average of all manufacturing industries in the United States."

Shell's 1973 return on total capital of 9.2 percent was actually about 1½ to 2 percent below a projection for all manufacturing in the U.S. -- based on Federal Trade Commission data.

At a Houston press conference prior to the first ad, Bridges explained why Shell had decided to take the advertisement route in getting its story to the public.

He said, "News these days, unfortunately, as far as the oil industry is concerned, means someone taking a shot at us. Although the media is always very cooperative in asking our views on what has been said against us, inevitably there is a 24 hour delay or more. Our reply usually ends up in the financial section and, therefore, our view does not really get the prominence of the attack that is being made on us."



Work clothes

As do many people at the refinery, junior draftsman Jo Ann Boren wears appropriate clothing for the work situation. However, on Jo Ann the difference from one situation to the next is a little more striking. Here she is at the drawing board and going out into the plant.

New Shell film popular attraction

"This Land," the Shell film which traces the development of the North American continent from a lifeless expanse of rock until the coming of man, is one of the most popular in the Shell Film Library.

The Library, based in Indianapolis, currently has 900 prints of "This Land" with an ultimate goal of 1,300 prints, and yet demand continues to exceed inventory. In the first six months after its release (November 1973 through April 1974) there were 17,417 showings of the film to a total audi-

ence of 677,869, not including special showings such as at the Smithsonian, the Field Museum of Natural History in Chicago and various geological societies.

By a skillful blending of animated maps and museum dioramas, along with on-location footage of places in modern day America that still retain their prehistoric appearance, the building of the continent and the development of life are depicted. The film also explores the vast natural resources of North

America -- the precious metals and rare minerals, coal and oil and how they were formed.

"This Land" looks at the building of our continent from the viewpoint of science, giving some insight into the ways geologists have been able to reconstruct and understand events that occurred beyond the reach of human history.

If you are interested in how your group can borrow "This Land" or one of the many other outstanding films in the Library, write to the Shell Film Library, 1433 Sadler Circle W.

Drive, Indianapolis, Indiana 46239. There is no charge -- only that you pay the return postage.

But plan ahead, supply is limited and you will have to wait your turn or pick an alternate film.

CLASSIFIED ADS

- For Sale**
Riding lawn mower. Tractor type. 32 inch swath. 8 hp. Needs some work. \$50. Dick Dreith. 314-878-4972.
Complete automobile engine. 289 inch Ford with 2 barrel carb. Recently overhauled. Jim Saurwein. 618-377-6347.
1969 Camaro 350. 3 speed. AM/FM stereo radio and tape. \$1650. Jim Grizzle. 618-259-0258.
1957 Chevrolet. A classic 2 door sedan. Good condition. \$650. Dave Rook. 618-254-1997.
Window air conditioner. GE 5000 BTU. J. N. Brewster. 618-259-0343
Music makers. Mono tape player. \$35. Ideal electric guitar and amp. \$40. Jim Grizzle. 618-259-0258.
Soup to nuts. Kitchenette table and two chairs; gas floor furnace; hot water heater; gas water boiler; nanny goat and baby billy goat. H. Kuhlman. 618-888-2427.

Wanted

- Experienced adult baby sitter.** Five days a week at your home for a 15 month old. Will drop off baby in a.m. and pick up in afternoon. Generally in route from Staunton to refinery. Patty Banovz. After 5:30 p.m. 618-466-6236.
Your blood. American Red Cross Bloodmobile. June 10 and 11. Sign up at Employee Relations.

On the job



BARNEY MYLER, operator 1st in Aromatics. "Would you like to see the one that got me first place in my grade school's cutest-grin contest?"



BOB RALSTON, electrician 1st. "I like being an electrician because it improves your looks. Watch, I grab ahold of this here, and ... see how my eyes light up?" (Only kidding folks.)



JON HAYES, research photographer. "Hey! Watcha doin'? I thought I was supposed to take your picture."

Review

Wood River, Illinois

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Bill Gibson, editor

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