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2600 Magazine PO Box 752 Middle Island, NY 11953 U.S.A.

WARNING: MISSING LABEL

The Monthly Journal of the American Hacker

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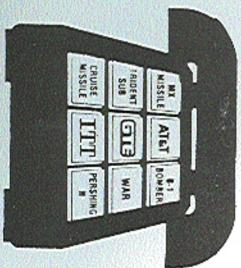
### Reach Out and Touch a Nuclear Weapons Contractor

carrier for "dial-i" service. Be sure to make so stready), asking you to pick a long-distance sending you a special ballot (if it hasn't done the nuclear weapons industry. all long relatance phone companies with ties to munities to join in boycotting not just AT&T but couraging individuals, organizations and comthe right choice. Nuclear Free America is an-Your local telephone company will soon be

manally less than \$10. contractors, and, of these, all out MCI and others are wholly or partly-owned by military con-nuclear alternative for a nominal charge -no ties to the Department of Defense. All the long-distance service, you can still switch to a weapons. Even if you have already selected a Mestern Union are profitting directly from the available in the United States, only Alinet has Of the major long-distance telephone companies production or teating of aucleur

from NFA, 325 East 25th St. Baltimore MD 31318.1 tives available nationally. (Available for \$1 files both the nuclear and non-nuclear alterna-Touch a Nuclear Meapons Contractor," which pro-America's new flyer entitled "Reach Out and for more information, write for Nuclear Free

to let him know your reasons for doing so. Medison Ave. New York, NY 10072; 212-644-1000) to call or write AT&T Chairman James Olson (550 P.S. II you do switch from ATAT, please be sure



Ruclear Meapons Contractors The Top 50

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Compiled by Nuclear Dept. of Energy. of Defense and the data from the Dept. on Fiscal Year 1984 Free America based

> realize the peterdials. don't have to understand the specifics to alone, But, as we said last mouth, you CASAGOS, take heart. You me not programs that are can on them, like specific articles about computers and the beneficiened and befilled by our rather For Basic of you who've been

computer applications can create—and space to the many things that powerful subject. But we'll continue to devote bangary, as shoulfe as see can bet on the Our COSMOS article this month is

Salvesto

readers will recognize themselves in this certainly isn't. We think many of our we've reprinted, phone phreaking, publication, the subject of the poem or disalf sounds cother amount for our featured in this words's issue. While that to have the wark of a talented folk artist subject in our issue. We're quite happy As always, there's more than one

And for those of you who still haven't

dealing with this projor problem of the merged. But this still ought to be a big help to anyone who's had tenable mentioned, in fact, have since been last year. One or two of the componies repaid access that was activally released devoted some space to an article on phone call (legally, that is), we've Figured and have to make a long distance

human may even pick up. machine (5167512600). Occasionally, a let us know so we can do something about it. Leave a movage on our happened to a couple of readers, please shape it's in when it gets to you. If your payers are out of order, which hav and comments. And, since we've started reach our readers and what kind of we're curious as to how long it takes to sending 2600 out as second class mail. As always, we welcome your letters

please do. We now pay for articles we Box 99, Middle Island, NY 11953. prost, so that suight be incentive for some of you. Send submissions to PO And if you have articles to send us,

### STAFFBOX

Editor and Publisher Eric Corley 110

Office Manager Fran Westbrook

Tish Valter Koch Cover Art

Silent Switchman, and the usual anonymous bunch Lex Luthor, Bill from RNOC, David Buderman, Mike Salerno Emmanuel Goldstein, Chester Holmes, The Kid & Company Writers: John Drake, Paul Estey, Dan Foley, Mr. French

Editor Emeritus: TSH, (making new waves) Cartoonists: Dan Holder, Mike Marshall

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## The Ballad of

recitation should be prefaced with this overworked integriation. Any reading of this character of my story are not to be attributed to the real person, but are strictly figurents of my actions and motivations concerning the main are in essence true. However, the rest of the got his name and calling himself around the world and the little anecdotal passages about how he attributed a real person's name. The real Captain story about an imaginary person to whom I have Crunch is a phone treak and computer hacker story about a real person. Or, rather, a lictitious "The Ballad of Captain Crunch" is a lictitious

And get all our phone calls for free.

is the man that they call. CAPTAIN CRUNCH Of those other brave heroes of old. But alone, at the top of the list of those names And the infamous wild Dalton bunch. You sing of Doc Holliday and old Jesse James The Lone Hanger and Tonto and Zorro and all The third with the heart of pure gold, fou tell of your Richin Hood legand.

Now perhaps you might laugh at this curious

And well you may ask how it is that he came He sounds like no prince among thieves. Well, he robbed from the rich, the richest there to be reckoned with such greats as these

And were not for him, we'd be bent 'neath a Though he took not a ponny of plunder

We never could get out from under

His target—The Phone Company His old trusty gun was a soldering one His weapon—an Apple computer Stop a coach and cry, "Stand and deliver!" His bullet, it was an i. C. IT wasn't his style to go buckle his swash He carried no longbow or quiver. He never went armed with a pistol or sword

> Out of old Army surplus I.C.'s. In order to rip off Ma Bel Applying the knowledge we picked up in college And make beepers and tooters to fool their Wa'd bread-board electronic circuits And less polite nicknames as well

And broke into their internal system, And we all got P.C.'s and modens Or give us a new code to bust And scrambled their data and fied up their frunk A game between Ma Bell and us. For us, it was mostly the challenge lhey'd close down a loophole, or put up a block.

And did all kinds of shit that just pissed 'ent

An old clerical error by Ma Bell had left him But Twas more than a game for the Captain With feelings that were less than kind. He had a real ave to grind. hey'd harrassed him with buts for long distance

He took up the blue-boxers' trade And 'twas only after they shut off his service or calls that he never had made

He learned the trade well, and soon made his

When he found that the switching code locks Jould be broke with a tone from a whistle that

And never get charged for the call Give the whistle a blast, dial the number he And before the phone rang at all, He would dial up an 800 number In a Captain Crunch cereal box.

And talked to himself round the world! Via satellite, cable, and microwave relay propped a dime, and his signal he hurled from a pay phone in Grand Central Station that still stands as a legend today. discovered where his talent lay. You might say that he'd found his true calling remember the time that he pulled off a feat

## Captain Crunch

Don't know what he looked like or where he But I counted him friend, just the same. I never knew his true name. called home.

A juncture of trunk lines from provinces north Was a central Canadian exchange, With a side effect that was most strange: Through a quirk in the system that Bell never Now, the North Manitoba Compection

At the North Manitoba Connection.

And I met him along with the rest of that crew

And his tireless quest for perfection

All I knew was his voice and his renegade soul

As the ultimate free conference carri Those who knew how could use the exchange If they even know of it at all)

And converse with whoever was there. You could dial up a code any time, day or night I was the permanent floating blue-boxers

With membership from everywhere lifere was logy from Fargo, and "Sparks" from Detroit

And we'd bullshit for hours, swap jokes, or talk And the Swenson boys out of St. Paul.

Or just listen, say nothing at all



It was sometimes so crowded, you just couldn't

And hints of new products as well He had access to codes and computer net links Now, Lenny, he was our inside man An R&D tech at Ma Bell. But one night, at a quarter to three, There were only the three of us on the exchange the Captain, and Lenny, and me.

And he told us, "They've made a new

Or be surgically placed in your head On a miniaturized personal phone Said I, "I'd remove it to go on vacation!" And the unit's so small, it could fit in your ear Till we each could have one of our own. The bandwidth's been squeezed and the lines Description

How the hell could you turn the thing off? You could never hang up, leave the phone off the "George Orwell's 1984 is at hand! Then he said, with a sputter and cough, A pregnant moment of silence.

that would be itlegal!" he said

It would be more like 'Big Mother'!" Or be out of the reach of Big Brother Except that with old Ma Bell at the controls,

My God!" says Lenny. "What on Earth can we As only the Phone Company can, Smile, and kiss it goodbye! mey il put ads on TV, shove it down all our You might as well take what's left of your to give the contraption a try. "Once they convince the American public privacy

"No such luck!" replied Lenny, "They've got the That creature of legend that lunks And makes sure the damn thing never works?" in the bowels of a system as complex as this Have you ever heard of a greinlin?

Says the Captain. "I have a plan!"

But the Captain said, "Oh, but they will They've run all the kinks through the mill hey finished a field trial, did not see a glitch.

# Getting the Most Out

companies. The procedure for placing a long wrong everything you now know about phone educate them. Thus this attempt to inform the various companies are doing very little to eader what now exil lives at the other end of his evel of a good proportion of the public, and the distance call is now above the understanding The axing of good ole Ma Bell has rendered

with the carrier, as in the past. They will your local operating company (LOC), which in complete the call and pass the billing back to possible to place a long distance call using any of not have to have previously set up an account the "alternate" carrier, you pick up and dias turn bills you for the call. So to place the call via the carriers who will complete it for you. You do Omin + 1 + area code + number In areas that are now equal access, it is

different carrier for that call. There are a zillion codes should be fairly consistent here are some of the major once whose access title Mon-n-Pop camers in different areas, but The nnn is magic: it allows you to select a

220: Wastern Union — consistently bad audio 90%

288: AT&T — you know the story 222: MCI— duplexey lines sometimes

333: U.S. Telecom— reasonably ok

444: Allint — a major reseller of others' services 488: ITT — bad audio, useless for moderns

777: 6TE Sprint— usually good quality—rivals

some calls at all, especially real short ones. And considers that this two-stage billing process calls this way. The fun part starts when one as much as a 6-month lag time between when involves a lot of red tape and paper shuffling, and door and demand your firstborn for making your existing account. Note that all this is perfectly you make the call and when you get the bill for it legal and nobody is going to come pound on your ones usually want an access code and a prehere is a chance that you won't get billed for poorly designed software. This can often lead to the alternate (i.e. not AT&T) carriers often have carriers will complete casual calls. The smaller referred to as a "casual caller". Most of the major camer who "doesn't know who you are", you are When you complete a call this way, via a March, 1987

> given company, you won't be able to take advantage of any bulk rates they offer for their crown customers.

resulting chaos will have many effects, one of are going to choose AT&T because it's what along. The majority of people aren't going to again, but this policy is pushing the process as your 1+ carrier so you don't have to learn carriers. They want you to pick one and set if up you can "tenex" dial, i.e. 10nnn, through other ballots, nowhere do they mention the fact that attempting to suppress knowledge of this. Notice which may be free calls for the customers, and billing process is going to become, and the bocome casual callers, the more snarled up the want to deal with shopping around for carriers, AT&T and eventually everything will work right the little carriers will fold and get sucked up by invalved in getting the billing properly straighten up their acts, disable casual calls and the carriers and LOCs being toroad to either best quality anyway. However, the more people anything new. Now, it's already highly likely that completed, that the local Bell companies are ase business, or knuckte under completely mey've come to trust, and their lines are still the that when you get your equal access carrier It is likely that for this reason, i.e. all the mess

consumer awareness group dedicated to helping you shouldn't even bother trying. It's apparently number, but only under duress. They will not give other neat info. The LOCs will give out this service numbers, billing structure, and lots of your area, with their access codes, customer complete for you, and talk to the special 800-332-1124, which AT&F will happily notuding what ones serve your central office, so out any information about other carriers, free of charge, a fist of all the carriers which serve people out with equal access. They will send you access, if not from your local company? You call een made a universal company policy, which is So where can you get more into about equal

parsed as the beginnings of area codes, 3-digi this. First off, you might ask, why 10nnn? Well. think about it, other numbers could be mist could have been 11 mm too, but it wasn't, If you Let's get into some of the technical aspects of

### expansion (haw!). Some of the carriers won? carrier codes also leave plenty of room for of Equal Access because it's real easy to determine the length of a valid authorization code from this since well. This mechanism introduces a security hole,

customer numbers. from in their database, as well as regular Carriers can hold numbers to not complete calls the resulting bill from this; but it usually doesn't you dialed it from home. It is unclear who gets is, it happily completes the call for you as though carner usually has no idea of what a public phone same process for public phones. And since the equal access, the central offices do this exact take them long to fix it. It's conceivable that the lot of fun is that in areas that have recently gone it's doing this search, you get silence. What's a bulk rates apply, and a few other things. White Structures and hardware, so it takes some time to notice that this process takes longer for some of figure out if it knows who the calling number is, the carriers. The carriers have differing database the carrier and lets the carrier deal with it. You'll your number and the number you want to call to office simply passes the entire packet containing recordings to the effect of "invalid access code complete casual calls, and may even give Basically when you dial this way, your central

jetting around to using the # key as sort of an

witch if you dial 10nm#. The LOCs are finally

his will also usually connect you straight to the

And as if this wasn't enough, carriers that do

end-of-dialing" feature, so you can reach the

dialing 102880+ the number you want. Already

they're admitting that AT&T is better than they

dialed. Carriers that don't do this will sometimes something happens right after the last digit is

tell you to dial "operator-assisted calls"

fixed, will handle 1+ calls from them this way as authorization code to use. Some carriers, in places where the public phone bug has been have an account with the carrier already and an use your own billing. It also requires that you equal-access style calls from friends phones and switch, which gives you a tone. You are expected as usual, and you'll be connected to the carrier's then off the call goes. This is so you can complete to enter your authorization code at this point, and I Onnn 0+ instead of 1+, the office will hand it off Some carriers also handle 0+ calls, if you dial

> immediately upon being dialed and look like authorization codes, but go of

digit hasn't been defined. Many of the carriers eventually either hear ringing or nothing it that working if # has no further effect; you'l may start a call to an office. You can tell if it's cancel or recall. Some carriers use \* for this digits have already been dialed then # is a regular

these. Another # should bring the tone back; if dial # and the tone breaks, you may have one of and other things. If you get the switch and then their customer service offices, various test tones rave special sequences you can dial there to get the carrier's switch is useful, because they often number or 950-something. Being able to get to switch directly without having to dial a local

Anyway, if # breaks the tone, an additional digit

rave magic digit sequences that would otherwise

of the public, and the above the understanding level of a good proportion a long distance call is now "The procedure for placing

get billed for the call whether he wakes up or not AT&T is so retuctant to hand them supervision up after 6 or 7. So if you listen to your brother's ast right and is now dead to the world, you will phone ring 20 times because he went out drinking rings takes; assuming that most people will give started yet. These are usually the time that 8 tells your local office that the called party has picked up. The alternates, although they may be planning to install this through agreements with group sheet. AT&T is still the only one that can return called-end supervision, i.e. the signal that This is sort of a cheapo compromise, but since they use timoouts to determine if billing should be the LOCs and AT&T, have not done so yet, so the alternates, as one may see from the consumer Call timing and billing is a very heavy issue with

doing very little to educate various companies are

(continued on page 14)

equipment, their hands are sort of hed. But

# the telecom informer BY DANFOLEY

Updated Equal Access List

so the owner of the phone line gets the are often "fixed" so that you can't make back to you. Also, third party this from a hotel phone, it will never get other earners may not catch up with you are tree though. Sometimes calls on make phone calls on other carriers. entering 10XXX (where XXX is the using just that one to make calls. By distance carrier, you aren't stuck with bill, not you. In response these phones payphones handle these calls incorrectly for several months. However if you try Don't be fooled into thinking that these carrier code of your choice) you can Once you pick an equal access long

End of Non-1+ LD Dialing

well for years, but as loyal 2600 readers as the second digit. This plan worked equivalent letter combination, therefore dial neither the 0 nor the 1 has an code has to be either a 1 or a 0 (i.e. 212, know, many downtown urban areas PENnsylvania-5600) none had a 0 or a town or area which it covered (as in 0 or 1 as the second digit (on a telephone codes were not allowed to use either the 516, 201, 703). Central office exchange came from), the second digit of an area Plan Area, also known as area codes. an area code or 1+). According to the calling area is second largest in the US. (where the acronym NPA-Numbering North American Numbering Plan will disappear on November 1st, 1987. A when they named exchanges for the to Atlanta. Any number can be dialed about 70 miles in diameter, second only (Northern VA) or 301 (Maryland). The area code or instead either 703 202 is dialable either using 202 as the exchange/area code. Every number in distance calls by the second digit of the distinguished between local and long the old ESS programming back which from any phone "locally" (i.e. without few CO's in 301, 202, and 703 still allow not require I+ dialing for long distance Page 8 March, 1987 The last area of the country that did

> broken into 213 and 818, and New York measure is ineffectual, as was City into 212 and 718. demonstrated when Los Angeles was for long distance. Now even this area codes). As this practice spread, it exchanges). In the mid-70's (the exact every damn exchange they could get became necessary to get rid of the ESS the second digit (they used Canadian three years of 2600) Los Angeles (213) date is published somewhere in the last their hands on (especially as companies leading up to? Yup, the teleos needed building ... Well, you see what I'm in the 70's along with a huge expansion back which allow users to avoid the I+ had the first exchanges with a 1 or a 0 a liked their own Centrex or PBX the growth of the skyscraper office in American business's bureacracy and proliferation of computer and data lines switchover to ESS. Also, with the and the phone company couldn't dare areas had old inefficient X-bar switches. million, as often downtown business Code full was nowhere near over 6 6,400,000 numbers (but read on before about 8\*8\*10 = 640 exchanges handling number combinations (which is a lot, shut down an area for even a day to do a and second digits couldn't be 0 or 1). you think I'm exaggerating), as the first used up all possibly allocated three

Newly Direct Dialable Countries

dialable at this time too. Tonga was selt-governing region of Denmark. able to dial the Faeroe Islands via Faeroe Islands, like Greenland, are a Denmark (1+45+42) but no longer. The Marshall Islands are 692. You used to be Malta is 356, Micronesia is 691, and the exotic corners of the globe. Using 298 as announced effective March 13, 1987, boxes or bogus cellular ROMs, AT&T longa (676) may also become direct Facroe Islands. Greenland is now 259, your country code you can reach the hat it was adding routing to even more For those of you trying out your blue

Design

drop us a line communicate your message, cards, newsletters, printing in short, anything to mailing services... with design, flyers, business When you need a hand

Coram, NY 11727 12 Whitfield Lane UPPERHAND

## still more on the world of cosmos

about everything the COSMOS expert would care of the Letters Editor. You have the right to reading this, you still have questions, write to us of COSMOS should also be included. If, affor nood to know should be here, while everything attempting to tackle the subject. Now, we beginners need to get an idea of the capabilities approach it with more of an eye to detail. Just have created more questions than answors in to control your phone line. However, we seen to the factous program used by the phone company We've run articles in the past about COSMOS.

### by Bill from RNOC Legion of Doom

what their status is, COSMOS is used by many departments now. It was originally for use in the central office facilities, COSMOS gives COSMOS is a database program used by various telephone companies to keep track of or keeping track of both wires and paper telephone numbers are currently available and rame room and loop assignment center (LAC) offormation such as: how many cables or

complete the orders. The people who use it do. most. Keep in mind that COSMOS docsn't billing is most likely what attracts hackers the COSMOS can theoretically be completed without COSMOS. The fact that a service order placed in details are in order a service order is input into entered into a billing computer. Once the billing from the business office, the request for service is When someone orders a new telephone line

### Dispelling COSMOS Myths

Massachusetts to one in New Jersey. Each 800 (Bell Uperating Company) computer system is You cannot get from a COSMOS system in

in earlier versions there were two commands— Maintenance Operation System) from COSMOS this is no longer done. transferring data tape from COSMOS to LMOS LMOS and LMOSH which were used in You cannot get onto LMOS (Loop

now supported by Bell Communications Research COSMOS was born in the early 70's COSMOS is system which would alleviate paperwork—thus (BELLCORE); COSMOS can now run on several Bell Labs set out to design a mechanized

Page 10 March, 1987

types of computers. The DEC PDP 11/70 and the Further ahead COSMOS may be run on big latest version. When generic 17 comes out it will operating system. On AT&T 3820, COSMOS is PDP 11/45 (no longer used) run COSNIX as the the Sperry CCI, and some Pyramid supermini will run on the following superminis: AT&T 3B20 only run on UNIX-based COSMOS systems. It running under UNIX (5.0.5). Generic 16 is the mainframes, but that idea is just on paper now

be able to tell it from any other UNIX system. It you have entered a valid login and password does not prompt you for a wire center (WC) unti-If you find UNIX based COSMOS you will not

\*\*\*\*\*\*\*\*\*\*\* Total succept

Welcome to DOSMOS system 3111

Cosses 16.0.3 Unix 5.0.5

Data line trouble call: 611

Data tase unfo call: 555-1212

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(--- and you're in!

God rest its soul) In this first section I am dealing with CUSNIX

では、大田田田の

TISS NUMB IBLEAS BY DE STATE SAID I AMARIAN THE LONG TAKE TERROR OF OF-DI-BL.

STERIOR ALL PROPERTY - , SCRI IS UP AND MANUAL.

THE ROLL BY

What does this all mean?

the options for a specific TTY are kept in a file the TTY command. The system console is TT00 1196. You can also get your TTY number by using logged in on. TTY rumbers range from TT01-That is the teletype (TTY) that the user

(continued on page 15)

As our last goodbyes, they were said

### The Ballad

Leave them in the phone booth on 12th Street We'll show those bastands what for! "Lenny, help me get into their system. The results from the latest field test. from the trash bin, go get the old print-outs. so we'll have to go in the back door. The entry code's secret, that much I know

And I will take care of the rest!"

Then he dropped out of sight for a couple of

We heard nothing from Lenny as well, Till the phone rang one night with a call from his

With his nose where it didn't belong, Seems they found him one day after work in the With a pretty sad story to tell.

Spill out every thing he'd done wrong. And threatened to send him to jail if he didn't

But they wrong out of him every secret And who knows what they threatened to do? Now Lonny was never the strongest of men. technique,

The North Manitoba Cornection. And their very first act was to be to shut down Every blue-boxer's trick that he knew, lurned their energies in our direction. Then they fired his ass, left him out on the street

How important these little things are. That news hit us hard. It's surprising to find Twas as if they had buildozed the house you grew up in.

Or shut down your favorite bay.

And us phone freaks were hemits, for the most

Except within our own little clan And the Exchange was the bridge 'tween our personal islands.

Our one link with our fellow man.

And more than one throat was constricted with One voice, then another went dead. Just a feeling of gloom in the air. We didn't talk much; there was not much to say, then one at a time, as the lines each were cut The entire contingent was there. On the evening the shutdown was scheduled,

(continued from page 5)

And the silence replied in a voice that I knew Though I knew that no one could have heard. To the silence, I whispered, "Forever farewall! Or a man with a dead telephone. By the deaf, or survivors of nuclear blast, With a silence can only be known Well, "forever is so strong a word!" Then abruptly, my phone became silent,

"Hey Captain! My God! Where are you? How you

And how did you manage to tap in my circuit After they pulled out the line?" And where've you been gone all this time? Better not ask how I am," he replied,

Suffice it to say that I've fixed it so that When they locked you out, they locked me in!" And better not ask where I've been

No longer reside on your plane, "You might say that I'm no longer a part of your

But the trillion connections twixt billions of

A meld of computer and mind. You could say I'm the Phone Company's And now I am part of that system: Form a system complex as man's brain

Gotta go now, can't keep this line open much

And I'll see to it they toe the line!

And things worked out just as they should in a way it is fitting, the way he would choose apped into the system for good! te's gone to blue-boxers' heaven: And I sat in the dark, a dead phone in my hand. And his voice faded out to a hiss, et alone contemplating on this:

When the newfangled thing first came out. Perhaps you subscribed to the personal phone Well, you know the rest of the story. The facts are no longer in doubt.

But now you all know, that was just Captain Or hung up in the middle of calls, And the thing never worked, or would scream in

Grabbing old Mother Bell by the balls!

2600 March, 1987 (continued on page 22)

## PRINTABLE LETTERS

## An Envelope Please

But 2600 isn't exactly Newsweek twelve items or less! waiting in the express line with my Inquirer and TV Guide while I was magazine rack next to the Irrational consider 2600 to be an underground or After all, it costs money to publish either! I haven't seen 2600 on the issues without envelopes. You may not a charity to phone phreaks. However, illegal publication, and perhaps it isn't. do object to the new policy of mailing 2600 and your group isn't operating as don't object to the price increase

envelopes. 2600 to come to my mail drop in Big Brother. I want future issues of it will be away from the prying eyes of do by mailing 2600 in envelopes where minimize the amount of paperwork some pencil-pushing bureaucrat has to to write a short novel already! Let's have enough material on my activities cannot afford to add any fodder to my surveillance and harassment. I for one material to the authorities for possible report recipients of "subversive" postal clones have been known to personal privacy and freedom, a 2600 FBI file. Hoover's Henchmen probably subscriber can't be too careful. The Administration era of decreased all for it. However, with the Reagan have "Freedom of the Press," and I'm in this country we are supposed to

to the original style? I bet it would be format did. How about changing back well into a 3-ring notebook like the old looks great! Unfortunately, it doesn't fit About the new format of 2600: it

years. It just goes to show that you is a jerk! He was literally stealing from most of us already knew; that Cheshire Dead" by Cheshire Catalyst in the his fellow phone phreaks for three January 1987 issue confirms what The article "TAP: The Legend is

> among thieves? days. What ever happened to honor can't find an honest criminal these

number is 212-569-5459. Avenue and 40th Street. His phone Bank" that he worked for is Republic Osband and the "Large Manhattan National Bank, located at 452 Fifth up with the name Richard Cheshire? His real name is Robert "Ozzie" By the way, where did you ever come

Discreetly.

everybody who receives 2600 had a file interests as far as we're concerned become so bogged down that it would opened on them for that reason alone, bureaucrats. Think about it. If And that would be in everybody's best never be able to function efficiently the bureaucratic machinery would the notion of minimizing paperwork for First of all, we never would support

people who read 2600 that should worry about being "watched" are worry about. You would be amazed if those that are already being organizations that subscribe. The only you saw the kinds of people and not enter into it. "watched". In other words, 2600 does Seriously, reading 2600 is nothing to

Eitherway, "they" know you're getting something about it. is not the case, call us so we can do customers should receive 2600 no or delayed in the post offices. Domestic about 2600, we really don't see what later than the 20th of the month. If this whether or not it's being manhandled it. What we're more concerned about is has our return address on it will make. difference getting it in an envelope that Assuming "Big Brother" knows

magazine in an envelope even though obligation to our subscribers for getting this costs us extra. We consider it an We will continue sending your

gave us—that's simply an answering And about that phone number you

> been changed remotely by outside influences. Retributive hacker justice, seems, the outgoing message has messages. More often than not, it machine that Cheshire set up in a friend's apartment to send and receive

### Comments...

Dear 2600:

incompatible with old-style "3-ring binder" format. How do I add to my complete collection of back copies? New format is very readable. But

read all the mag, so you don't have to beginnings up front. necessary for cheap tabloids. We all bribe" us by putting all article "Continued on page XX" is perhaps

Am I really the only life subscriber?

method of filing. We'd appreciate suggestions from readers on this. around, it shouldn't be hard to devise a Since the new format is easier to carry impossible. We could drill holes in the cents a piece, which is the first-class new format but then we'd have to print with our old size is currently rate. At the same time, a 24 page issue rates. We simply cannot afford 39 more in order to qualify for reduced our magazine must be 24 pages or postage requirements are such that less on a page to accompdate the holes. incompatibility. But second-class We are quite aware of the

their \$260 has earned them the right inevitable. And, no, you're not the only renew again. never to be bothered with having to they are all quite happy knowing that lifetime subscriber. We have a few and a magazine sometimes make them possible. But the realities of laying out We avoid "jumps" whenever

## And More Comments...

Dear 2600:

format. First, I miss the large format. Its have a few comments on your new

reference purposes. The new format them all), 2600 should be filed for As stated in your first issue (I have simple. I also miss the loose-leaf holes makes this very difficult. the page-numbering made referencing arge pages were easier to read, and

and supporter of 2600, would not like printing more information. I just don't undertaken. For one, it's expensive. A icel 2600 has mass-market appeal. dollars which could be better spent for me except use up my subscription this method of distribution to be where a flashy cover is important for sold at newstands or bookstores and accepted magazine, maybe even mpulse sales). Imyself, as a subscriber ancy three-color cover does nothing 2600 to become a widely distributed I think I see your intentions: you want

columns as necessary, and keep the the old formet! Just add new pages and To sum up my opinions, bring back

by printing cellular telephone this simple formula: requencies that can be derived from P.S. You wasted four valuable pages

FREQUENCY-869.97+

CHANNEL=(FREQUENCY-869.97)/.03 CHANNEL\*.03)where: CHANNEL=1

Frequency=870 to 889.95 Mhz

them a couple of steps, doesn't it? print out a list. Seams like we've saved calculate them. After all, what would frequencies were instead of having to they do with the calculation? Probably, happy with it because, for the first time, considered that a waste, others were hey could actually see what the valuable pages. And, while some Correction: we only wasted three Bernie S

this to be a great way to attract new here. We have experimented with a concerned, 2600 does have a future rew and had positive results. We find As far as distribution at newstands is

(continued on page 1

# Equalling the Access (continued from page 7)

completed or not, so you won't get erroneously own records of what call and what carrier and if it meant what. But in general, you should keep your or long lists of what person to person name trying to yell through non-accepted collect calls billed by a silly timeout. concerned, and avoids pissing off operators by applications as far as message passing is moderns, this could have some interesting With the advent of 9600 baud voice-grade a real short call that is answered quickly, either notice that it's likely that you won't get billed for

days but there's a lot of equipment still out there and return its dialitone. This is less common these access, 2600 would often reset the local switch them. In the early days of carners before equal and therefore may be employing good old single frequency trurks, i.e. 2600 Hz will disconnect warned-over AT&T stuff from a few years ago this latter-generation switching equipment is sort of like roulette between satellite equipment you're really talking on, bocause it's So if you use Alinet, you can never tell whose bulk rates and resells the service to the customer. microwave, or landline and who owns it. Some of Long Lines for their own use. Allnet, for example equipment; they also often lease lines from AT&1 eases equipment and time from other carriers at Carriers often use their own switching

examine their billing structures carefully. You can then choose the one that's cheapest for a given money goes is to sign up with all the carriers, and dialing. Probably your best bet as far as saving on your phone and don't know about tenex people who attempt to make long distance calls call will not complete. This is great for confusing so if you pick up and dial 1 + area + number the condition where you do not have a default carrier, you to sign up]. However, no-pick is the they got selected for you they will probably want into from them in the mail anyway, because if create an account for you may get a packet of rates from this carner unless you call them up and default on 1+ dialing. You still won't get bulk will wind up with any random carrier as your the ballot, you get tossed into a lottery and you sounds like. If you simply don't pick one or return called 'no pick', and is not exactly what it another valid option that isn't on the ballot. It is When you select your default carner, there is

> yet tried to market a program that will do this for do this, however, it is supposing that nobody has call at a given time. You may need a computer to

may be unlimited tree calling via their equipment come up with a 6 to 8 digit valid code, one thing might even offer you a job, a side benefit of which about it. They'll thank you in the long run and if you find some algorithm which allows you to and then you'll have to deal with bogus billing. So with fraud. Someone may even find your code and this carrier is going to have a lot of problems you might do is call the carner and tell them you can, then it's clear that someone else can, and see if you can break their security easily. If you are interested in purchasing service from it is often interesting to play around with a carrier probably come after people who do it. However, authorization codes is illegal and they will software have largely eliminated this as a major the idea. Note that abuse of other peoples problem, but it took a few years for them to get authorization codes and improvements in the valid codes to be picked out very quickly. Longer and a valid one would error out. This allowed 111 or Onner \*m. Most of the carriers have fixed sequence would return silence and allow recall the problem in which an invalid code plus some take the form of invalid called area codes, like having to dial an entire number. These usually the caller if the code was valid or not without dialed after a trial authorization code, will inform only security hole that carriers have to deal with. There are often magic sequences that, when Post-parse, or 10mm0+ dialing, is not the



## cosmos: the universe unfolds

called /ETC/LINES.

which system they wish to enter. An 11/70 Circuit System). A DK allows users to select hooked up to a DATAKIT usually has 60 TFY's MUX=DK indicates DATAKIT VCS (Virtual DZ11 is an asynchronous 8 or 16 line mux DZ11; these are less expensive than the DJ11. A asynchronous, 16 line multiplexers, 02 is a of multiplexers. DJ is a DJ11 mux. These are MUX =: POP 11/70's can have different types

at a moderate level. pulls sent are equal to the DELAY number. Many nulls (control-or) to be sent before each line. The many nulls slow down 300 band so they are kept time to print without slowing down CRTs. Too they can receive. Nulls will give the printers more users log on to COSMOS with printing terminals (as opposed to 96) These printers carnot always print as fast as DELAY =: This word specifies the number of

program called /BIN/LCASE when a user logs UPPERCASE. This is achieved by running a UPLOW converts lower case and echos it in UPLOW: COSNIX uses only upper case

back (full duplex). ECHO: Indicates that the computer will echo

sample /ETC/PASSWORD file: PASSW0 file but has some differences. Here is a password) file. This is similar to the UNIX COSNIX, like UNIX, has an /ETC/PASSWD LOGIN: Indicates that you just logged on.

・ のでは、これでは、これでは、これできるできる。

CONTENDADADADA TA CARRANTES ALBACTEROS ALBACTES (1904), (1904) Beckforth Street, and the Committee of the Street, and the Str 06/95/75C90C0000004104TV TO LOG SHOOT DELICATION を表現の関係のできた。またでは、大阪を178年に1886日の東京と1880年まで 日本 東京の第一日に行いるはいのかけないな

(1=full access, 2=shell user, restricted access). user (Y for yes, nothing for no), 6) user group number, 4) description fields (unused), 5) dialup follows. The fields are separated by colons : in home directory, 8) path, 9) path... username, 2) encrypted password, 3) user the password file. The fields are as follows: The fields of a COSNIX / ETC/PASSWD are as

only user who can execute the change of COSMOS database manager (DBM), 0:1 is the computer maintenance center (MIMC) or the The COM accounts are used by the min-

> password command. As in UNIX, almost never left that way. /ETC/PASSWD can be left unprotected but is

(continued from page 10)

rate, and privileges (in some cases) can access them. It also specifies duplex, baud his file lists the TTY numbers and which users COSNIX has another file called /ETC/LINES

25-10,13289-FewSew; Dw, Etta, Ur, Inc. 10, 101.01-5 TO MILES SAFANCIAN PROPERTY SENTENCES, UNION, MILES AND 5-1,16175-1941,694,604-296,5040,9114-18,69-9 1-2,150PS-PCGT18041CF81,80-0,1-2,04,3614/03,465538

MESSAGE tty your prompt will be an asterisk. If system console) stating that someone just ECHO there, then it's for half duplex users only. allows all users. If a line doesn't have the word eature of COSNIX will pick it up. the /ETC/LINES file is changed, a security logged on with privs. It you login with privs on a MESSAGE will write a message to 1100 (the user has an asterisk after the group name then it ndicates which users access which TTYs. If a The first field is the TTY number. USERS=

DISNIA proupts | BJT n. everage user 100 - super core figures the ASICARSAS 100 - super core figures the ANALONS

/USR/COSMOS directory. COSMOS commands are kept in the can access which COSMOS commands The /ETC/MATRIX.S file says which users

A COSMO 1809-CATEBOOK-TRANSACTION PROMISSION FILE DESCRIPTION OF SECOND GERALD FER 15.4.E. OF 11-25-85

IN LIST OF FRAIL'S WARES AND CATEROON ABSOLUTES WITH SHOW

SECRETARISM AND A

COP RESIDENT DENIES (LAC)

69× 85.

/ REDIT CHARE ADOLES AND TENER HE WEL \$300 Bitts

tree ballinger

1.00 Kills \$31/435 14133.E

2 TH 20 HORSE t = 0 means (SE MATRIX TO DETERMINE TRANS, FIDENDES)
 t = 1 means are houseaching and reserving.

CALEBOAY.

THE CHARLES AND SPECIAL MENT AND PROPERTY.

8000

March, 1987

Page 15

## what cosmos can do to you

189-881

\$102 (9317h) Jan 5

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The second second second	
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T. TOBECH	6
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*	
	-

means that family can use the command and a 0 referencing them with command names. A t means they can't. user group numbers, then makes a table cross-The /ETC/MATRIX.S file gives the different

### Prafixs and brief descriptions:

be completed together. the one being worked with. The two orders should indicates that there is another ORD pertinent to order (0RD), the option A0 can be used. This AUC Associated order. When creating a service

and the TAS will be disconnected. and the customer picks up, he will have priority have priority. If the TAS is on the customer's line allows one location, the customer's house, to has an extension of the customer's line. A BL telephone answering services (TAS). The TAS 81: Bridge Lifter: These are used with

that one line's calls get placed on the bill of BTN: Billing Telephone Number: This indicates

characters. This option can only be used with would be, for the most part, listed by three way, call waiting, etc.) on a line. These features an option which can define the leatures (three electronic or digital offices CCF: Custom Calling Features, COSMOS has

COSTOR CRULING REATINGS TABLE!

S.40 District 90 Sec. 40 SCHOOL STORY SAULT LEADING 072\*2/28035 一 関係の対象の

switches. identifier code on the different electronic/digital COSMOS. The codes following the switch names (1ES, DMC, SES, etc.) would be the feature SAM is the feature identifier code in

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OU WEING PITS	MENCAL SUM DRINGS THE
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\$ \$ g	823-638 64T183	2 5
N ME	58	M M
EN CREATE STATE A CP is the miss which con-	381/463 459-63	2511753 753-53

from the central office (CO) to the customer's e Pair: A CP is the wire which goes

service category. It varies from place to place (Dial Tone First coin line). The CS is a general CS: Class of Service: RES, BUS, PBX, DTF

specific ORD should be completed by. 00: Oue Date: A DD is simply the date a

working, before a lineman goes to the customer's before the DD. This will ensure that the line is should be completed. It is usually a day or two work on the Main Distributing Frame (MDF) FOD: Frame Due Date: This is the date when all

start lines are mostly used by PBX customers. the tip (lead) to ground to get a dial tone. Ground dial tone. If a line is ground start you must touch meaning when you pick up the phone you get a start/Loop start. A normal line is loop start officials have essential service [4] Bround bornbing of small Middle Eastern country) Usually doctors, coin phones, and government when lines are tied up (i.e. flood, hurricane indicates a good chance to get a toll call through one of the first restored. Essential service also crash (electronic), the customer's line would be switch were to break (electro-mechanical) or priority service list, in case of emergency, if the Essential service means that the customer is on a location. [3] Essential service/Mon-essential lead. This means the sleeve will be run into their fancy equipment such as a PBX will have sleeve is part of a subscriber trunk. A grounded sleeve tone/Rotary, [2] Sieeve lead/Mo sloeve. A sleeve indicates the line is busy. Customers who own to all types of switching equipment. [1] Touch FEA: Features: These are time features common

to the TN in question. line specified after the HF is busy calls will hunt WF: Hunt From: This indicates that when the

## -and what you can do to it decides that when the line of the given TN. So the given TN.

is busy calls will hunt to the given TN. LUC: This is the location of either the CP or OE IT: Hunt to: This indicates that when the line

done right away. This is normally used when a ORD is on a priority completion list and should be customer has a service failure. the different types. OC HOT indicates that the treatment for an ORD. I am not fully familiar with DC: Order Class: An OC represents special

changes are hard wired and not kept in memory small network of electronic components with memory which holds the attributes of the line. In electro-mechanical offices an OE is a switch, in electronic offices there is a line card piece of equipment that a line takes up in the OE: Office Equipment: An OE is the physical

characters (up to 25), but is usually the 01 order's name. It is indefinitive but follows a followed by 6 numbers (ORD 01123456) certain standard. It can be any group of 080: Order Number: An ORD is the service

specific ORD does, whether it's a new line or just OT: Order Type: An OT signifies what a

equal access choice by its 3 digit code. Some white hardly used, will display the customer's systems use the alpha code, while most use the a change made to an old one. PIC: Primary Independent Carrier: This option.

equal access 10XXX codes double purpose as the PIC codes are the same as but covers most of the big ones. This list serves a NOTE: This is not a complete list of camers

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it kept in COSMOS. PL information is usually distance connection. A PL name can be up to 25 exchange (FX), or WATS, or just any type of long System). kept in TIRKS (Trunk Integrated Record Keeping characters and has little other information about up between two CO's. It can be a foreign PL: Private Line: A PL is a special circuit set

up a line owned by TELCO (Telephone Company cannot be achieved with an OE. When you look circuit, usually a PL, requires something which will look like this: instead of a cable pair, it will have house cable. It SE Special Equipment: SE is used when a

SE HSE, CBL ST MY. DATE 04-10-87

number, plain and simple. TN: Telephone Number: This is a telephone

Javou worl When a COSMOS database is set up, different stuck to, but they are a good idea (organization, IN's are asssigned TT's. They do not have to be IT: Telephone number Type: This is not rigid

are dialtone first coin. 10F is an official TELCO residence and measured business. DTF and DFA example: 1FR, 2FR, 4FR are 1, 2, and 4 party line flat rate. 1MR and 1MB are measured This is the COSMOS equivalent of an LOC. For US: USOC (Universal Service Order Code):

CP--the wire which runs to the customer Essentially, a phone line is comprised of a

(continued on page 20) 00 March, 1987 Page I

see quite a few other magazines go to a halfway decent newstand, you'll reaching out in the same way. does not mean we're "selling out" or trying to get mass-market appeal. If you never thought was obtainable. This provide them with knowledge that they know of our existence. We in turn will readers who would otherwise never

## An Experience to Share

Dear 2600:

followed all my calls for 11/2 months. Number Recorder on my line. They had hacking out codes and put a Dialed personal disks. MCI had caught me pirated programs, and a number of about 20 phreak/hack disks, 300 pack. Among those 300 disks were computer, printer, modem, monitor, 350 disks, but left the Apple IIc power room and taken everythingdiscover that the cops had raided my after my 16th birthday, I came home to One bright day last March, a week

calls (exchange hacking). MCI's computer, and annoying phone with 9 counts of various crimes including phone fraud, accessing of trial were hell. I was originally charged never getting any of my stuff back, etc. The next 2 months of waiting for my Juve, having to pay immense fines, informally threatened with going to lawyers scared me to death. I was My first meetings with probation and

were done. remain on probation until these items codes I used. I also had to serve 80 charges" of having to switch the 22 hours of community service and bills and the rest were "service \$479.32, \$29 of which were phone counts and had to pay a fine of for his services. I got off on most of the lawyer and ended up paying nothing As it turned out I used a county

(they missed quite a few). I did pay the minus 11 disks of phreak/hack stuff I got all of my computer stuff back

> officer was easily deceived. community service but my probation completed about 15 hours of what it should have been. I actually fine which was a hell of a lot less than

hope that none of you have to go through what I did in those first 2 resolution was (not very harsh). I do of being caught and what the end worth it. I wrote to give you my account all and all I've got to say it was well just got off probation last week and

The Sultan

something you can erase later. And it something you really believe in or history. Keep us posted. We care. you'll probably find yourself reliving is never "worth it" unless it's you brag about this to lots of people, Getting caught at something illegal

## Words of Agreement

Dear 2600:

getting my first issue of 2600 punched). Keep up the good workbad it doesn't come three-hole with your new format (except it's too rresh, ionized air. (December 1986) was like a breath of Just a quick note to tell you I agree

### Words of Caution

efforts to allow us all to enjoy the ride moving ahead...thanks for all your something that I also felt a part of reading cover-to-cover, that I felt as thanks for being there...thanks for though your excitement/pride was "surprise" and I found, after quickly The mailman brought me your

there). "Rub the lamp...call out the (given the very creative people out Tell it like it really is...like it can be remain true to your present direction. subject/readers. It is my hope that you mainstream approach to its product/will 2600 somehow move into a One worry did creep into my mind

(continued on page 23)

# 2600 marketplace

contact me by writing: Software, PO Box 73 other application software. Readers can utilities, and various word processing and diagnostic programs, business software, products including the latest games. At present my PC library approximates 110 ANYONE having an IBM PC or competible. Uniondale, NY 11553 I'O LIKE TO TRADE PC software with

224A Washington St. #9, Lynn, MA 01902. Send your replies to Mr. Oscar Statuto, it, this is for "informative" purposes only! box. Of course, as you might have guessed WANTED! I am a beginning phone AND OPERATION OF THE BLUE BOX someone could help me in designing a blue enthus last and would greatly appreciate it if

on a Zenith Z-100 running MS-DOS. WANTED: A decent modern program for use PO Box 752, Middle Island, NY 11953 Contact Manny @ 2600, (516) 751-2600 or

System Practices and other such paraphernalia. Write to Bill, c/o 2600, PO DOCUMENTATION on electronic & digital Box 7528, Middle Island, NY 11953 trade/purchase. Also looking for Bell PBX's and switching systems. Willing to

2895, Brocklyn, NY 11202 have and name your price. Mr. B., P.O. Box Please describe the type of info that you CELLULAR TELEPHONE INFORMATION which has not yet been published in 2600. WANTED. I will pay a modest fee for info

INSTRUCTIONS FOR THE CONSTRUCTION two modems labeled Dataphone Channel MANUALS OR INSTRUCTIONS NEEDED for

and DAS 8298L1A, SERIES 5, 84 MG 04 Send info to: P.O. Box 50346, Raleigh, NC labeled DAS 8298 L1A, SERIES 4, 81MG3 83 MG 12. The boards on the inside are DATA MTG, SD-10247-01-J23, SERIES 1 says: 44A2 Series 1, Data Mounting, SD-Interface. One has label on the outside that 1D247-01-J23 and the other says: 44A2

measures/TSCM in the trade parlance, 425 Private Eye is into Electronic Counterequipment he can buy cheap! Gastamp from 2600 readers who have electronic PRIVATE INVESTIGATION wants to near F Street, San Diago, CA 92101 (619)

allow 4 weeks, to: Pete G., Post Office Box copies sent via UPS or US Mail. \$100 TAP BACK ISSUES—complete collection, 463, Mt. Laurel, NJ 08054 (payable to PEI). Cash sent same day, others includes delivery. Send cash, check or MO schematics. Approx. 400 pages of quality val. 1-83 plus supplemental reports and

Magazine. Got something to sell? Looking people please, no businesses! making it too long) and we'll print it! Only send us whatever you want to say (without place! And it's free to subscribers! Just waiting for A rather new service of 2600 HEY YOU! This is the chance you've been for something to buy? Or trade? This is the Deadline for April Issue: 4/5/87.

which makes it all work. from anywhere, and the OE is the equipment premises. The TN is the network address dialable

### Modifiers

TH: \$TN, MS. HT. TT OE: CDF, CS, FEA, PIC, US

080: A0, D0, FD0, OC, OT

### CP stehts

SF: Spare, unused WK: Working pair, in use

RS: Reserved for future assignment

sloppy work on the part of TELCO UK: Unknown. This is rarely used, and shows

01-9: Defective cable

02: ground ring side B3: ground tip side

M: cross battery

05c open ring side (ring side not connected) DB: open tip side

07: open both sides

Bit ground both sides

99: unbalancod voltage

a circuit RC: Pending connect. The CP is being added to

removed from a circuit. P0: Pending disconnect. The CP is being

OF: Official TELOO line. WK: Working, in use.

recordings... T8: Test line. Used on loop, terminations,

25 NNX-0000 UND: Unique. Used for special numbers, such

customer changes old number due to a problem looking up the line to not disclose information such as crank calls. The NP informs people NP: Nonpublished number, used when SF: Spare, willing, and ready (for assignment)

UK: Unknown, someone spilled coffee on the AV: Same as SF. Sooms rather silly to me

MOUNT MOUNT

recording there will be an operator to announce a 00: Disconnected number. Instead of a

intercept. "The number you have reached has change in solvice. DM: Disconnected machine (recorded)

deen disconnected... CO: Changed number, operator intercept

CM: Changed number, machine intercept Fage 30 March, 1987

emoved from a circuit. PD: Pending disconnect, the TN is being

PC or PD, it will have a regular status (WK, SF DM, etc.) also.) (In all cases if a facility (TN, OE, CP) is either

An OE status is the same as both a CP or a TN

### OT \_order types:

is being removed CD: Complete Disconnect. An existing circuit NC: New Connect. A new circuit is being built

changed (new TN, different FEA, etc.). CH: Change. An existing circuit is being

too familiar with them. F and T; From and To. These are AO. I'm not

These are used when bills are left unpaid! SS and RS: Suspension/Restoral of Service

### T—Intended number types:

group numbers (i.e. NNX-2000, NNX-2600 Business line. Usually thousand, or hundred

0: Official TELCO line. Usually NNX-99XX or 6: Coin line, usually in the 9XXX range

VNX-00XX rumbers Test line: Usually NNX-99XX or NNX-00XX

NNX-1222, NNX-1212, NNX-1234, etc. numbers which can be both residence or business ines. The numbers are usually catchy— 6: Good. This as far as I can tell is assigned to

i.e. NNX-9089 or NNX-7689, etc.) X: Other, basically your run of the mill number

range (i.e. NNX-1000 to NNX-1099) Q: Centrex numbers. Usually a hundred group

OT, OC, DO, FDD, and ORD in an SOL ORD if its type is a new connect. You can specify SOL it says OT NC. This will only print out an use the SUL command. On the Hunt line of the To get a listing of orders in COSMOS you can

### WILLIAM DINK THE RAY BY LIVE BALL Ğ

000000 7

DATE OF THE SAME

## to know about cosmos

S0I command to list out an order. out what's happening. You can use the IVIII or the status codes, but there is an easier way to find writer's initials. Fin not that familiar with ORD numbers. The column headed All has the ORO The column called CKT-ID has the telephone

### E 000 M(Mar/17)

### WHICH MAN RESIDENT TOWN M. SCHOOL 1884 19 84

AND STATES OF CHANGE OF CRITICAL STATES OF CRITICAL

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Markette and the state of the s 13 KI-76 THE BUT HOUSE THE RESTORAGE

THE CARLO

network of computers including COSMOS, WM Assignment and Control System). FACS is a implemented in conjunction with FACS (Facility (work manager), LFACS, and others. FACS(YES) states that the order was

MDF WDRK REQ(YES)—this means that frame

completed the appropriate work. MOF COMPL(NO)—the trame has not

has not completed its work. LAC COMPL(NO)—the loop assignment content

proper places. I'm not quite sure how that works EST[03-30:16] is the time the order was input RCP(NO) has to do with forms being sent to the

to COSMOS: March 30th at 4pm. the CP and DE meet. LBC is the location at the MDF (frame) where

COMES SPRINGERS CO. A. P. LE. THE NAME OF THE PARTY MANAGE OF THE STREET, THE ST MATCH STOTIS PLEASINGS COSMIT IS WIRE STREET, THE SAME SAME IN 284 MHT (CD) PE SEE 752 SECREPAND ONLY

H 28 TJ (tr) CDASAGO ACC MIRE IS. IF HER OF

> location of the computer. TTY tells you what TTN COSMOS version and WHERE gives you the TTY and which WC. WHAT gives you the WHO tells you which users are logged into which An example of the three Ws of COSMOS

little) in COSMOS. Bell Labs humor. This is a little joke (very

26# ARG (cr)

- AMORROSHH!! PROCESS KILLED

command you can scan for test lines. On the hund lest is specified. This makes it easy to scan for ine the NNX or 511 is specified and a status of Using the LTN (List Telephone Number)

Service Services

14 61, 1934 12/25/21 M

IN SENIS IN MERCIN MONTHS AND ADDRESS OF

Mark Water 

Set No.2 STATE OF THE STATE SALAN PARAMETERS からの あるのか 四十二十四日 東京中央部 2000

which can be helpful when 'scanning'. The REMARKS column holds information

(W. C. Helds) To get a list of WC's, you can type WCFLDS

8

tape drives. Nevertheless, it makes a good linish S To article. never execute, unless you have access to the The last command is one which you should

0, 1, 2 or E ENTER? E (cr)

260 108 (07)

\*\* LOS TAPE EXROR--- END PRESENT AND START WEN TAPE

Telecom Informer (constrained from page 8) around the country to accept 676 as implementation was delayed. assigned 676 last year, but onga haven't been resemded even yet ranslations for local central offices

### Captain Crunch

It's been a few years since they closed the (continued from page 11)

And the ten dollar Japanese phone. We've since seen divestifure, Sprint, MCI When the Captain set off on his own.

But I know he keeps vigil, and I know he keeps When I ring up his phone, a recorded voice says. This number's no longer in service."

And I know he still makes Ma Bell norvous.

And now sometimes when listening to answering

A voice will come through to me, faint, but Or sometimes when I'm on hold OSUBCI.

And you'd think it was leak-through from some A voice I remember of old, other line.

But I know that he's talking to me It's old Captain Crunch keeping watch on Ma

The soul of the Phone Company. Page 22 March, 1987

> coffochouse, The Minstrel Show. NJ. He also plays concerting, banjo, recorder, as Folk Project, and manager for that organization's He's a board member and past president of the acclaim through the performances of Bill Staines. Jake and 10-Ton Mollyhas achieved nationwide well as many other instruments. His Ballad or Mike Agranolf is a folk singer from Boonton,

Boanton, NJ 07005. Write to Mike Agranoff, RD 4 Box 45 Oak Hills, Heroes, is available for \$6.00 postage paid His collection, Jake, the Captain, and Other

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nothing to do with phones. December for something that had absolutely Crunch, John Draper, was arrested in Tale As many of you know by now, the real Captain

pass, or give back money. Washington DC also magnetic strip and either demand money, let you manufacture take Bay Area Repid Transit has this kind of a system. cards you insert into machines that read a (BART) cards in San Francisco. These are the According to police, Draper was helping to

S11,500 bail pleaded not guilty to charges of forgery, conspiracy, and computer fraud. He's free on Draper, who was arrested with two others, has

appears they'll have to do it again BART to change the system once and now it widely circulated among crackers. This caused BART system. In fact, several colleges in it's become a sort of sport to try and outwit the California had contests, the results of which were According to the San Francisco Bay Guardian.

the probable prison term involved. if convicted of this, it would relegate the Captain nothing clever or ingenious about the latter and, the general public, as he's being accused. There's another system, if that's in fact what he did. We to the status of a common thief, not to mention hope, however, that he wasn't selling torgenes to We're happy that Captain Crunch cracked

greedy. That's a waste of a real talont. phreaks going to jail for being stupid and/or We don't want to see hackers and phone

access to the long distance telephone network one phone, ISN 11? entered the case because Draper allegedly used sophsticated electronic equipment" to gain free hat's a pretty fancy way to describe a touch By the way, we're told that Pacific Bell has

(continued from page 18)

minds without restrictions." power that comes from new now to control what comes forth...let magic forces...let Uncle Sam figure out information in the hands of young excitement of fresh ideas and the raw 2600 readers enjoy the thrill and

Ben Harrol

Now why didn't we say that?

### A Response

Dear 2600:

good. Thanks for the extra effort to Cheshire Cat. Also, thanks for the fine TAP article by improve it, and keep up the good work. Your new format for 2600 looks

and that we are ripping-off the work of others by doing so. each) for copies of back issues of TAP complaint that we charge too much (\$2 We must respond to Arab 149's

When you don't copyright your work, it actually want this to happen. can copy and distribute it. And it implies that you either don't care or alls into the public domain and anyone (1) No issue of TAP was copyrighted

contributed articles to it. (2) We advertised in TAP and

subscription fees to TAP. And we lost customers were ripped-off of falsely accused us of being in cahoots because of this. A few people even substantial credibility and business as dozens of Consumertronic's several of our publications. We, as well (3) We highly recommended IAP in

competed with us to sell TAP back And no staffer, to our knowledge any former TAP staffer for doing this wrote TAP as to our intentions, and we did we ever receive any objection from resale of TAP back issues. At no time staffers. And we openly advertised the notified mutual acquaintances of TAP (4) Before selling copies of TAP, we

economies of numbers. Orders for TAP (5) Arab 149 does not understand the

> contrast and reduction must be made charge \$160 for copies of all 91 back compared to making 100 copies. More back issues average about two issues copy. Constant changes in copier issues, Also, TAP issues are difficult to work means more money! Also, we per order. There's a lot more work as TAP issues have many different tedious job! \$2 per issue is reasonable! formats and print densities. It's a involved per issue in making one copy

much for information that was difficult, situation is much worse today than it and oppression? The personal freedom costly and risky to acquire, and risky to time you feel that you are paying too wrongdoing. We need your support to people had the balls to protest and fight government and big business rip-offs making business. We support you acquire this invaluable and unique ourselves and children with it. Please continue! Think about that the next was in the sixties when a lot more information during a time of increasing 2600, and a few others, where would realize that but for Consumertronics, (6) Consumertronics is a profit

Alamogordo, NM 88310 2011 Crescent Dr. Consumertronics John J. Williams

More on ICN

Dear 2600:

found in the February '87 issue of Consumer Reports: Here is something about ICN that I

inrough." cations Network. Among other things, company, Independent Communi-5 percent of its customers' calls go injunction against a second flat-rate ICN must now disclose that fewer than recently obtained a temporary "In Wisconsin, the attorney general

anyone know ANI for Montana? I also have one question—does

Montana