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THE TAGOMA

Published by The TACOMA 99ers USERS GROUP P.O. BOX 42383 -- TACOMA, WA 98442 ******************************

Volume 5

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JANUARY 1988

No. 1

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Can you believe it is the end of the year already. By the time you get this newsletter, we will be into the New Year already. I would like at this time to say I hope everyone had a very joyous holiday and hope your New Year will be happy and prosperous.

Looking back at a few things that have taken place this past year, we had a couple of good swap meets at Midway, a club picnic in July, the Eastside Community Faire, the TI fair in Seattle and other events that have taken place, I think some of our members have been quite active in our Club work this year. Also is the Computer Room which was open most every Saturday with a lot of help from members. Some times Joe Nollan filled in when the schedule was short. Many thanks to all for the participation this year. Lets be sure we keep this club active in the new year.

Being that our club has our business meeting the first meeting of the month, we will have our annual election of officers the first meeting in January which will be January 7th. The following were nominated at the officer/board meeting:

President - Frank Ashburn Vice Pres. - Walt Todd Secretary - Larry Hawk Treasurer - Ron Prewitt Librarian Dob Haum

We will also accept nowinations from the floor if you have someone in mind who you want to see as an officer.

Would like to be sure that any visitors or new members to know that we are glad they came to our meeting and would like any idea or help contribution they may have for the club. Please be sure that we want you to keep coming to our meetings. If you have any questions or have a problem with equipment or program, be sure and ask someone. There should be enough talent around to help out with most anything.

I have been looking through some of the newsletters that we receive every month. There are many very good articles and small usable programs or routines that most of us could use sometime. Be sure to check these out of our book library and look them over. There are envelopes full of them available every meeting.

I guess I will have to cut it short for now. Hope all of you had very good holidays and a good New Year.

Till next time, Vern Schrotenboer

Tacoma 99ers HONOR ROLL

For the period ending Dec. 25th

The following members have contributed time and effort in support of User Group sponsored activities. This is to express appreciation for their contribution.

COMPUTER STATION Construction

DON HUDVEN

COMPUTER ROOM for DEC.

JOE NOLLAN - 5th DICK DAUM - 5th

BOB MILLER - 12th JOE NOLLAN - 12th

TOM KING - 19th

NEWSLETTER

VERN SCHROTENBOER BOB HAUN JOE NOLLAN ART DANIELS

from the fibrary Desk. . .

I HOPE EVERYONE HAD AS GOOD A CHRISTMAS AS I. THOSE OF YOU WHO DIDN'T MAKE THE XMAS PARTY MISSED A VERY PLEASANT EVENING. SHOULD HAVE BEEN THERE. I HOPE THE NEXT YEAR BRINGS YOU ALL THAT YOU WISH. (A NEW VERSION OF THE TI-99 WITH 1000 MEGABYTES, TRIPLE 3 INCH DRIVES AND INSTANT DATA PROCESSING. ALL TO BE GIVEN AWAY FREE TO DEDICATED 99ERS!) HOWS THAT FOR WISHFUL THINKING?

IT WAS ESPECIALLY NICE TO SEE CAL AND HIS LOVELY WIFE LOU AT THE MEETING. IT'S BEEN A WHILE SINCE CAL HAS BEEN ABLE TO MAKE IT. HOPE HE CONTINUES TO IMPROVE AND GETS UP TO SEE US MORE OFTEN.

I HAVEN'T GIVEN OUT TOO MANY GROUCH WORDS LATELY SO I'LL START OFF THE NEW YEAR WITH ONE OF MY ROUTINE GRIPES. PEOPLE ARE NOT RETURNING THE LOANER DISC AGAIN! I KEEP THREATENING TO CHARGE THEM AND NEVER HAVE. I GUESS IT'S ABOUT TIME THAT WE DO. RIGHT NOW, DISCS # 3, 14, 15 & 16 ARE MISSING AS ARE DOM DISCS # 2, 4, 10 & 13. WE CAN'T KEEP THE LIBRARY FUNCTIONING IF THE DISCS AREN'T RETURNED. WE HAVE ONLY A LIMITED NUMBER AND THEY ARE NEEDED! PLEASE!!!

I WANT TO CONTINUE THE DISC OF THE MONTH PROGRAM, BUT, I NEED SOME IDEAS. IF YOU LIKE THE IDEA, GIVE ME SOME THOUGHTS ABOUT WHAT YOU'D LIKE ON THEM. IT'S A GOOD WAY TO GET THE TYPE OF PROGRAMS YOU WOULD LIKE AT SOME AWFULLY LOW PRICES. SO SOUND OFF.

ORDERING PROGRAMS IS EASY. I'LL HAVE A COFY OF THE CATALOG WITH ME EACH MEETING, IF YOU DON'T HAVE ONE. LIST THE PROGRAMS YOU WISH (IN NUMERICAL SEQUENCE PLEASE) AND GIVE ME YOUR LIST. IF YOU DON'T MAKE THE MEETING, CALL ME AT HOME AND I'LL PUT THEM TOGETHER FOR YOU. I NEED ABOUT 3 DAYS LEAD TIME. IF YOU WANT THEM BEFORE THE NEXT MEETING, COME OUT AND PICK THEM UP. IF YOU WISH, CALL AND I'LL TRY TO SET A TIME FOR YOU TO COME OUT TO MY PLACE AND SPEND SOME TIME WITH YOU. IT'S A GOOD WAY TO CHECK OUT SOME OF THEM TOO. PLEASE INCLUDE YOUR NAME AND PHONE NUMBER PLUS YOUR CONFIG. (SSSD, SSDD, DSDD OR WHATEVER) ON YOUR LISTING, SO I CAN SET IT UP FOR YOU. IF YOU DON'T, IT'S POSSIBLE YOU MIGHT GET THEM IN THE WRONG FORMAT AND NOT BE ABLE TO USE THEM..

I'M GOING TO BE ASKING FOR SOME HELP THIS YEAR. I WILL BE ASKING FOR VOLUNTEERS TO REVIEW DISCS AND PROGRAMS AND MAKE THE WRITE UPS FOR OUR CATALOG. I DON'T HAVE THE TIME TO DO IT ALL. THIS WILL ALSO APPLY TO PROGRAMS BEING TURNED IN FOR CREDITS. NO WRITE UP OR DOCS, NO CREDITS. GIVE ME A HAND AND HELP MAKE THE LIBRARY BLOOM AND GROW.

HAVE A GOOD HAPPY NEW YEAR AND LOTS OF PRODUCTIVE FUN WITH YOUR COMPUTER. MAY YOU NEVER CRASH A PROGRAM!

BOB HAUN - 584-3938

OOPS and what else is NEW

by Joe Nollan

My article in the last newsletter on permanent color changes suffered a hiccup in the formatting process resulting in an error in the formula used to determine the value for foreground and background colors. It should look like ((F-1)*16)+(B-1). In english the formula is, take the foreground color and subtract one then multiply this by sixteen, add to this result the background color and subtract one. In hex it is the decimal value of a two byte word where the first byte represents the foreground color and the second byte representing the background color using the E/A color chart. I hope this clears things up.

I want to thank Don Hudven for his efforts building the computer stations. These are a basic cube with the console and speech synthesizer on the bottom with a shelf just above for the TV monitor and are enclosed at the top so they can be stacked. They are being built to facilitate setting up basic systems by making it easy to carry the equipment from the storage area to the tables. Just slip the console forward onto the table and it's ready with the TV at the proper height. Thanks again Don. Note: Our group sets these up on Saturdays for the public's use in cooperation with the Parks Department.

I installed the new drive into the club's system so we are back up and running with two DSDD drives again. The old drive has a problem in the electronics and suffers from drift. I have called around and everyone agrees it is not feasible to repair from a cost standpoint. It seems to work OK as a single sided drive but can't read or write side two.

During the Holiday season I'm hoping to find the time to complete the LOAD SYSTEM program which will let you make a menu driven LOAD program for your disk of programs which can be a combination of E/A-5 and X-Basic. It can also be used to load and run a program or make a LOAD program for a single E/A-5 program to run from X-Basic. I'm writing some DOCS for it now and should have a rough draft version at the meeting.

We got a good response to a sheet of paper for DEMO ideas or questions that was passed around. I'll be looking for someone to demonstrate the programs that I'm not familiar with to avoid the blind leading the blind syndrome. Asking the questions is the important part of learning the answers.

That's it for now, see you next month.

DISCLAIMER

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SOME QUESTIONS FOR 99-4A SUPPORT FIRMS

Before thanking any company for it's "support" for the 99/4A world, you may want to ask them a few questions.

For one thing, most 99/4A oriented companies are not doing business or providing new software and hardware for the TI-99/4A for charity - most if not all receive a reasonable (if not overly impressive) profit. Hence, there is no reason to "thank" them unless they are truly dedicated to the 99/4A world, and not just in it for the short-term profits. As long as there is a market for 99/4A software and hardware, people will start companies to serve it.

In the meantime, there is no reason your wallet should be raped in the name of "support". 99/4A companies can and should be rated by a number of criteria — the same used to rate any business of this type. Otherwise, bad businesses will be perpetuated a lot longer then they should be, and their practices will drive more and more people away from the 99/4A world. On the same scale, not noting good businesses may keep them in obscurity until they die a silent death, or leave to another market.

Since no Better Business Bureau exists for software companies, consumers are forced to ask the tough questions themselves.

Before you buy anything from a software or hardware firm, or a dealer of 99/4A products, you should ask them a few questions about them. Only by encouraging quality support for the 99/4A will there be any support worth having.

Now, for the questions...

- 1. DOES YOUR COMPANY USE A 99/4A TO KEEP IT'S RECORDS OR DO YOU CONSIDER IT NOT ENOUGH OF A "SERIOUS" COMPUTER?
- 2. WHAT KIND OF WARRANTY DO YOU OFFER FOR YOUR PRODUCTS?
- 3. DO YOU REPLACE DEFECTIVE PRODUCTS FREE OF CHARGE?
- 4. DO YOU HAVE A TELEPHONE NUMBER WHERE YOUR COMPANY MAY BE REACHED FOR QUESTIONS DURING THE DAY? IN THE EVENINGS WHEN MOST PEOPLE ARE HOME?? ON THE WEEKENDS???
- 5. DO YOU PROVIDE UPDATES FOR YOUR SOFTWARE/HARDWARE AT A REASONABLE COST?
- 6. ARE YOUR UPDATES TRULY UPDATES OR MERELY BUG FIXES?
- 7. DO YOU SPECIALIZE IN 99/4A PRODUCTS OR IS IT JUST A PROFITABLE BACKWATER FOR YOUR FIRM?
- 8. ARE YOU PLANNING ON NEW PRODUCTS FOR THE 99/4A IN THE SHORT TERM? WITHIN A YEAR?? DURING THE NEXT TWO YEARS???
- 9. WILL YOU BE SUPPORTING THE MYARC GENEVE 9640?

- 10. IF THE ANSWER TO #9 IS YES, WILL YOU CONTINUE PRODUCING PRODUCTS FOR THE 99/4A?
- 11. DO YOU PROVIDE EXTENSIVE, CLEAR DOCUMENTATION FOR YOUR PRODUCTS?
- 12. DO YOU MAKE AN ATTEMPT TO PACKAGE THEM AS PROFESSIONALLY AS POSSIBLE WITHIN YOUR MEANS, OR DO YOU USE THE LEAST EXPENSIVE PACKAGING AVAILABLE TO MAXIMIZE PROFIT?
- 13. DO YOU ATTEND CONVENTIONS WHENEVER POSSIBLE TO SHOW YOUR PRODUCTS AND EXPLAIN THEM TO USERS?
- 14. DO YOU DO ANY CONSUMER PRODUCT RESEARCH, OR DO YOU JUST PRODUCE SOMETHING AND EXPECT CUSTOMERS TO BUY IT?
- 15. DO YOU KEEP A MAILING LIST OF USERS TO SEND THEM FUTURE PRODUCT RELEASE INFORMATION?
- 16. IF THE ANSWER TO #15 IS YES, DO YOU SELL THE LIST TO OTHER FIRMS?
- 17. IF #15 AND #16 ARE YES, DO YOU GIVE USERS THE OPTION OF NOT HAVING THEIR NAME SOLD?
- 18. DO YOU WRITE RETURN LETTERS TO INQUIRIES OR COMPLAINTS, OR DO YOU RESPOND WITH A FORM LETTER?
- 19. DO YOU HAVE A CATALOG OR SOME OTHER LIST OF YOUR PRODUCTS?
- 20. IS YOUR PRICING METHOD CONSISTANT OR DO YOU HAVE DIFFERENT PRICES FOR DIFFERENT CUSTOMERS?
- 21. DO YOU SUPPORT LOCAL DEALERS BY SELLING IN SMALL QUANTITIES?
- 22. DO YOU DO BUSINESS EXCLUSIVELY THROUGH DISTRIBUTERS?
- 23. DO YOU ADVERTISE AT ALL IN 99/4A PUBLICATIONS? IF YES, WHICH??
- 24. DO YOU HELP SUPPORT A USER GROUP LOCAL TO YOUR FIRM? IF YES, WHICH ONE??
- 25. DOES YOUR FIRM PRODUCE PRODUCTS DIFFERENT IN CONCEPT FROM THOSE THAT CAN BE FOUND IN MOST PUBLIC DOMAIN LIBRARIES? IF YES, NAME SOME.
- 26. DOES YOUR FIRM COPY-PROTECT ALL OF IT'S SOFTWARE? SOME?? NONE???
- 27. DOES YOUR FIRM SPECIALIZE IN ANY ONE TYPE OF SOFTWARE OR HARDWARE, OR DO YOU PRODUCE A BROAD RANGE OF PRODUCTS?
- 28. DOES YOUR FIRM MAKE ITSELF AVAILABLE FOR QUESTIONS ON BBS'S OR TELECOMMUNICATION NETWORKS? IF YES, WHICH ONES??
- 29. DOES YOUR FIRM DO ALL IT'S OWN PRODUCT DEVELOPMENT OR DOES IT USE INDEPENDENT AUTHORS? IF IT USES INDEPENDENT AUTHORS, ARE THEY BOUND BY CONTRACT TO FIX BUGS?? NAME SOME OF THEM AND THEIR WORK.
- 30. ARE YOUR MANUALS WRITTEN BY WRITERS OR PROGRAMMERS?

The evolution of a failure

THE STORY OF IBM

by Chris Bobbitt

The story of IBM's efforts in the microcomputer industry is a story of a company's in ability to adapt to a marketplace. In short, IBM has ultimately been a failure in imposing its will on the computer industry. This story is a parable of the dangers of corporate gigantism, and an illustration, yet again, of how a properly motivated David can knock off a Goliath any time and anywhere.

IN 1982 IBM Placed its seal of approval on the microcomputer industry with the introduction of the IBM PC. Micros had been in constant use, particularly in small businesses and by professionals and farmers since the introduction of CP/M in 1977 by DRI. The early microcomputers, by the standards of today (which have in no part been set by IBM, but I'm getting ahead of myself now), were clunky and slow. They used little graphics or sound (this was reserved for "home" computers like the Apple II, Atari 400, commodore 64 and TI-99/4), but were very functional. Visicals, the forerunner of all spreadsheets(now considered an indispensable tool by all businesses), was invented and propagated on such machines. Word processors, databases, and telecommunications flourished years before IBM ever sold a single computer for less than \$25,000. Until 1979, basically, the computer industry was IBM and every— one else. By 1982, it was IBM, everyone else, and Apple, Atari, texas instruments, Radio Shack, etc.

It was at this point that IBM decided to make their own entry into the micro world. like a dinosaur sensing its own extinction unless moved to action, IBM set up an "entreprenurial corporate unit", basically a company within a company, to design and build a computer aimed at small businesses and individuals. this machine, by corporate dictum, was to "brake no new ground". The designers succeeded with flying colors, later to the ultimate dismay of the very corporation that sponsored it. They basically designed a machine that was obsolete 3 years before it was introduced. most aspects of the machine were basically a retrogression to an earlier era. IBM used strictly off-the-shelf components that they could purchase cheaply (the better the profit margin, my friend), and an obsolete design based on a horrible misfit of a chip manufactured by Intel, a then half bankrupt microprocessor house. The only saving grace of the chip was that it had "16-bits". This made the IBM PC, as it was dubbed, the second widely available 16-bit machine, the other was based on a strange chip called the 9900, by TI, which was so off the wall and unique in its design approach that normally conservative computer system designers couldn't make heads or tails of it, even though it was the most innovative chip ever released at that time. It was a chip that only a hard boiled techie could love, and has since been relegated to same. The 9900 later became a commercial failure, due to TI's inability to sell to anyone but the government, but that's a different story.

When it came time to find an operating system for this machine, IBM went to a small company called Microsoft, whose major claim to fame at the time was its Microsoft-Basic the standard for basic languages now and then. Microsoft was told to get an operating system fast, but not to tell anyone who it was for. Bill gates, president of microsoft, approached RDI (then second largest software company in the world after Visicorp-maker of Visicalc), and asked them to do a custom operating system for an unspecified manufacturer within 3 months. Dr. Kildall of DRI basically told him to take a number since he was busy porting CP/M to 20 or so machines at the time. Gates' response was to dust off a CP/M clone that had been lying on a back shelf since 1978, purchased for \$4000 from 2 brothers in Oregon, rename it MS-DOS, and offered it to IBM. IBM's response was "we don't care what it is as long as it works". Thus was born MS-DOS, and the source of Microsoft's fortune since.

The IBM PC was released in the early part of 1982 to generally bad reviews. Most of the computer magazines of the time were run by people who had a good knowledge of the computers, and they recognized the PC for what it was - a real piece of garbage (or at least nothing compared to your average S-100 system). Despite the efforts of a number of anti-establishment heroes of the early computer revolution, this was to become the standard, at least until recently.

while the computer press wrote the machine off, the big business press went wild over it. Companies who had never dreamed previously of purchasing a computer for less than \$300,000 were now given the green light to buy a machine for, gosh, individual users, for about \$3,000. a popular phrase of the time, "No one was ever fired for buying IBM", took on new significance as suddenly the Fortune 500 set woke up and realized that micros could do things, useful, productive things. A small company, called "Lotus Development Corp.", sensed an opportunity and introduced a Visicalc

knock-off called "Lotus 1-2-3" for the PC, and the machine took-off. Soon every big accounting company in New York had hundreds of the things, and were wildly recommending their usefulness to their big clients. Within 2 years, all the early critics of the machine were either out of business, or sold out to the new faith. A standard was born!

The seeds of the PC's rise were later its doom. While the PC itself was a machine of marginal, even poor capability, it had what is known as an "open architecture". Since all the components for the machine were easy to find as well as technical information for it, by 1984 there were hundreds of devices on the market to correct the many shortcommings of the machine. With an infusion of cash, the failing Intel took-off and produced the 8086 (thus was born the IBM PC XT) and then the 80286 (introducing the IBM PC AT). While the other chips corrected the many problems with the 8088 (which reportedly was so ill-designed that it had bugs in the built-in controlling software that sometimes made a program never run the same each time), they basically expanded upon a design ideology that was reaching its physical limit of expansion.

Another difficulty was rising in the east; the far east actually. Because the compo; nents of the IBM PC were basically low-technology items in the scale of things, the "clone" was born. This is a machine that is basically a copy of the IBM PC. Because many of the makers of the clones included things as standard that were optional fixed for the problems with the PC ereies (such as faster memory and processors) it soon bacame apparent that the IBM PC family was technically inferior to its imitators (not too diffucult a thing to be actually). Because components were standardized so much and the construction process downright simple, the only real basis of comparison between machines became price, not quality, features, or technology. As a result, within a 2 year period most computer component production in the United States fled overseas where it was cheaper to build the machines. The IBM standard had a stranglehold on 70% of the market, and the only way to compete for this 70% was if you were cheaper than the other guy. Hence was born the "competitiveness" issue so popular recently in political circles. IBM basically stabbed the American high-tech industry in the back. Production shifted almost completely overseas in response to a more price sensitive situation (early computers were almost always completely constructed in the U. S.. As a matter of fact the last micro to be wholely made over here was the TI99/4A in Lubbock). Between the years of 1982 and 1985, more than 50,000 jobs in the high-tech industry fled overseas because of the "IBM standard"

So, a number of simultaneous events were happening. The IBM standard was apporaching the limits of its inherent expandability, production was rapidly shifting off-shore as the basis of competition became price, and the number of clone manufactures jumped from 10 to 500. At the same time, IBM's market share dropped from 50% of the micro market to 25%, and their profit margin fell in half due to competition. If this wasn't bad enough, the Fortune 500 crowd soon became familiar enough with micros so that they sere now unafraid to by clones that were technically superior - so much so that the catchphrase today is "You may be fired for buying IBM!". Even the U. S. government was purchasing Zeniths, Compaq, and WP clones! The last nail in the coffin was struck by a small competitor of IBM, Apple.

In 1982 Apple had 40% of the computer market. By 1984 it had dropped to 12%. However, through this period Apple's profitability trebled, and it introduced a machine that was so obviously technologically superior that it has become a legend, the Macintosh. While never having the success of the PC in big business, the Mac founded an industry. Electronic publishing (the art of using a computer to combine words and text on a page in typeset quality), and a niche in art departments, newspapers, and small businesses all over the country. While software development for the Mac never began to approach that of the IBM world, what has been produced is so obviously of high quality that John Dvorak of the industry newspaper, infoworld, which is dominated by IBM standard, was so moved to declare that "all innovative software being produced today is on the Mac". The Mac has a profitable niche market that is expanding to other areas as users in big business have begun to realize its utility elsewhere, showed the possibilities of graphics, sound, and ease of use, this was the straw that broke the camels back so to speak. The basic IBM PC lacks all those things.

By 1986 it was obvious that the IBM standard was going to fade into oblivion, and IBM with it if IBM's profits were any indicator. As a matter of fact, in late 1986 IBM posted its first loss ever, including during the great depression. All due to the failure of its micro standard. "SOMETHING HAD TO BE DONE!" was heard throughout the hallowed halls of the corporate bureaucracy. IBM had stepped on its cape. It had discovered that even the largest computer company in the world cannot ignore a basically technology driven market forever. The reaction was the birth of the rumors of a "clone killer".

These rumors materialized a few weeks ago with the introduction of the PS/2 series of computers. Within the next 18 months, it will become laughably obvious how much of a failure IBM is. If the PC was IBM stumbling, the PS/2 is the outright fail. The PS/2 is IBM's attempt to imitate the Mac.

The net affect of the PS/2 series is to raise the costs of producing a clone of it dramatically. Since it uses proprietary technology called "gate arrays" (which cost anywhere between \$20-100,000 each to produce), it effectively raises the cost of producing a clone out of the reach of 99% of clone manufacturers. However, the PS/2 is never going to have to worry much about clones. In fact, it is a failure on arrival.

IBN will sell thousands of them to large corporations, but for the foreseeable future no company is ever again going to dominate the microcomputer market so. As the PC standard get older and its limitations get more obvious, the number of companies producing computers will rise, while clone makers will drop like flies. By the fact that IBM has used so much proprietary technology, the new companies by neccessity will produce non-IBM machines. For the first time since 1981, computer companies will be owned by engineers again, and will look to the future, and not the past. The types of computers available will increase dramatically. There will again be several different popular chips available on the market supporting hundreds of operating systems.

One thing is for sure, though, many of the machines will run PC software, even though they not resemble a PC in the least on the inside or out. All will run clones of PC software. The number of niche markets will rise dramatically as again computers will be marketed specifically to particular market segments. The total effect of all this is the verticalization of the marketplace. The world, as we know it, will never be the same.

Oh yes, the PC has a future, but the same future afforded other abandoned computers — ignominity and the eventual death of major support. If you buy a PC now, you are either crazy, or you really don't care about support. If the latter is the case, then you can be proud to be known as an "orphan". The joke is definately on you if you bought a PC to escape that possibility!!!!!

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These are some of the many questions that should be asked of any software or hardware firm doing business in the 99/4A world. If they are a legitimate outfit, they shouldn't be afraid to answer these.

No business can be on the consumer's side all the time, but consumers have a right to know how businesses stand on these issues and others.

A business that produces software or hardware for the 99/4A is responsible to it's customers just as any other pusiness serving any other community. Hence, if a business is not a good citizen, maybe lit isn't the kind of business we want or need supporting the 99/4A.

This was brought to you by Asgard Software, the people who really believe in "Serving the TI Community".



MEETINGS - 1st and 3rd THURS. - 8 p. m.

South End Pool Building - 482 E. 56th Street - Macona, WA