TI SLAVES AND OGDEN TI USERS GROUPS OFFICERS

TI SLAVES		OGDEN TI USERS GROUP	
PRESIDENT---ALEX SCHAFF	487-3704	----LORAINE WADMAN	825-7650
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ASST.LIB.---MIKE BOSEN		----------MEL BRAGG	393-9605
NEWSLETTER EDITOR FOR BOTH GROUPS		----MEL BRAGG	393-9605

DECEMBER 1992 NEWSLETTER

TI SLAVES

OUR NEXT MEETING IS DEC. 19TH 1992 AT 9:00 am. WE MEET IN THE DISABLED AMERICAN VETERANS HALL AT 273 E. 800 S. PLEASE BE THERE PROMPTLY.!!

OGDEN TI USERS GROUP

OUR NEXT MEETING IS DEC 5TH AT 9:00 am AND OCT 15TH AT 7:00 pm.
WE MEET AT THE OGDEN MUNICIPAL AIRPORT IN THE FIRST BUILDING JUST EAST OF THE NEW TOWER.

FESTWEST "NORTH" 93 DOOR REGISTRATION IS $5.00 FOR BOTH DAYS. IF YOU WOULD LIKE TO PRE REGISTER YOU CAN SEND YOUR $5.00 ENTRANCE FEE TO THE FESTWEST "NORTH" 93 COMMITTEE 1396 LINCOLN APT B OGDEN,UT 84404. THEN YOUR BADGE WILL BE MADE UP AND WAITING FOR YOU WHEN YOU ARRIVE..

Slaves & Otiug
1396 Lincoln APT B
Ogden, Utah 84404

THE OGDEN TI USERS GROUP

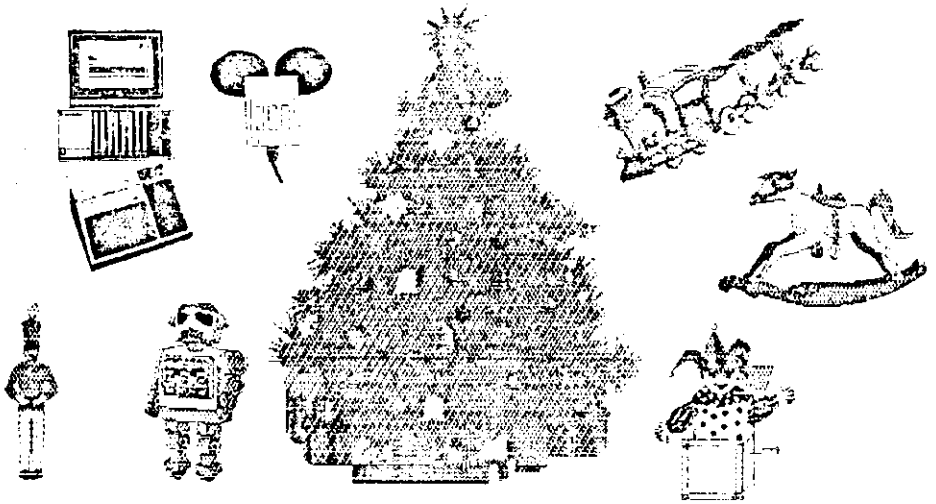
and

THE SLAVES USERS GROUP

SALT LAKE AND VALLEY

DECEMBER 1992 NEWSLETTER

MERRY CHRISTMAS



What's Happonin'

By
Joe T. Mararone
Past-President TI SLaVes

That's right I'm the not the head honcho anymore! Congratulations, Alex Schaff, our new president. All the Officer's are new, well almost all new, Mel is still in. Congratulations go out to:

Jack Baxter - Vice-president
Steve Richardson - Sec./Treasurer
Dave Berry - Librarian
Mike Boson - Assistant Librarian
Mel Bragg - Newsletter Editor

Too bad you still get to read me! I told Alex I'll do it till he is ready to take over. However, I can't tell you what to expect at this month's meeting. Come and find out, like I will.

FestWest '93 "North"

The promotional video is under production. You get to see yours truly and many of the FestWest committee in action! (*Big deal!*) It is a BIG deal you get to see Jack Baxter act! Jack may have found his niche in life. Some may say the part was type-casted.

For you "out of town'ers", planning to attend FestWest '93, I'm going to tell you my opinion (and that of my wife's) of the various restaurants in Salt Lake City that are in walking distance from the Howard Johnsons' Hotel. Before I begin, I'd like to qualify my qualifications, for this review. I work in downtown Salt Lake and my wife did too for many years. We've personally eaten at most of these places. The following restaurants are not in any given order. Ready, get set, here goes:

Ho Ho Gourmet - Good Chinese good, reasonable.
"Windows on the Square" - at Weinstocks: Okay if you like eating around dry goods.
Nino's - Good and reasonable Italian.
L'Abeille - in the Marriott Hotel Best happy-hour deal in town.
Food court - at the Cross-Roads Mall. Many eating, okay, establishments, 7 to be exact, almost considered fast food.
The ZCMI Mall also has several eateries.
Dead Goat Saloon - Beer mostly.
Fortune OK Japanese food, mid-range in price.
Mikado - good Japanese food, mid-range in price.
Ginzey's - good exotic sandwiches.
The Red Apple -Good, cheap, sandwich and soup place.
Brackman Brothers Bagels - good sandwiches on, what else, bagels. Also has a decent sour dough pizza.
Lamb's Restaurant - good, historic, and reasonable lunches. Dinners are higher priced.
Benihana of Tokyo - Japanese, obviously, you don't get what you pay for. More reasonable food, but less frills around.
Marie Callender's - great pies, food's OK.
Sam's Express - excellent soup, salad and sandwiches. A little higher priced but worth it!
Cedars of Lebanon - good and different lunches.
Baci Trattoria - good, mid-priced to high Italian.
Judge Cafe - good pastas, Jazz basketball team hangout.
American Grill - good lunches.
Asakusa Sushi - Salt Lake's best Japanese food.
China Village - Salt Lake's best (it was anyway) Chinese food. Reasonable.
Market Street Grill - very good sea food, mid-priced.
Le Parisien - good, but not too expensive European foods.

Fast Foods

Yes, junkies Salt Lake has them all: *McDonalds, Burger King, Sizzler*..., many are in easy walking distance. Pizza too.
Local Fast food/diner places include: *Crown Burger, Dee's Family Restaurant, Denny's, JB's*..
Now there's more restaurants than I've indicated. Some are really not in walking distance or I or my wife have never eaten there.
Here's my suggestions for your weekend.
Friday night... HO HO Gourmet.
Saturday...breakfast...JB's (right in Howard Johnson's)..........
lunch...Ginzey's..........
dinner...Lamb's Restaurant
Sunday...breakfast...Dee's Family Restaurant
lunch...Sam's Express
dinner...(you haven't left yet?) Le Parisien
Keep in mind if you like pizza, anytime is pizza time. If you like sit down, Pizza Hut is best. Delivery, Domino's is better.
When you are in town you will notice an extraordinary number of blondes and Fat people. So...

PIG OUT!

Remember, When in Rome...

SALT LAKE HISTORY

Salt Lake was founded on July 24, 1847, by a group of Mormon pioneers. (Mormons are members of the Church of Jesus Christ of Latter-day Saints.) The pioneers, led by Brigham Young, were the first non-Indians to settle permanently in the valley. The founding group numbered 148 consisting of 143 men, three women and two children.

The Mormons came to the valley in search of a region where they could practice their religion, free from hostile mobs and persecution. When Brigham Young first saw the valley, he said, "This is the right place."

On the very day of arrival, the pioneers began tilling the soil and planting crops. Within a few days, plans were drawn for Great Salt Lake City, named after the salty inland lake which dominated the desert to the west. Out from the center of the city, now Temple Square, blocks were arranged on a grid pattern in 10 acre squares and separated by streets 132 feet wide - "wide enough for a team of four oxen and a covered wagon to turn around."

In 1848, more emigrants came to the valley. But a late frost, drought, and a plague of crickets nearly destroyed the harvest. Flocks of seagulls consumed the crickets and enough of the crop was saved to enable the settlers to survive the winter of 1848-49. In gratitude, the seagull was later designated Utah's state bird.

Many of the pioneers were European converts to Mormonism. During the decade that followed, they brought their culture, languages, and skills to building Salt Lake City into a cosmopolitan center.

When the Mormons first arrived in the valley, the region was part of Mexico. A treaty signed in 1848 ceded it to the United States, and in 1850, the "State of Deseret" became Utah Territory. (Deseret means honeybee, a symbol of industriousness. Utah was named after the Ute Indian tribe.)

Construction on the Mormon Temple was begun in 1853, but the capstone of this magnificent structure was not put into place until 1892. The temple was built with granite blocks which, until a branch railroad line was run into Little Cottonwood Canyon, were individually hauled by ox and wagon from the canyon to the building site.

The California gold rush brought emigrants through Great Salt Lake City and [illegible] soldiers were stationed here in the 1850s and during the Civil War. Trade with these sojourners brought to the Mormons a measure of prosperity, although agriculture continued as the mainstay.

In 1869, the transcontinental railroad was completed by the driving of the Golden Spike at Promontory Summit, some 80 miles northwest of Salt Lake City. Utah was thus connected to the East and West. Many people traveled by rail to see the "City of the Saints." Some stayed to make and to lose their fortunes in mining. From the 1860s to the 1920s hundreds of copper, silver, gold, and lead mines were opened in the nearby canyons including Bingham Canyon. Gigantic smelters were later built to refine the ore. Some mine owners built large gracious homes along South Temple, once known as Brigham Street.

The 1890s were a decade of change. The Mormon Church officially ended the practice of polygamy. In 1896, Utah became the 45th state and the fourth to extend the vote to women. Salt Lake City was its capital. "Great" was dropped from the name in 1869.

Salt Lake began to [illegible] in the early 1900s. The State Capitol and many other [illegible] buildings were built. [illegible] trolleys, [illegible] popular shopping [illegible], were installed to transport people living in the Avenues, Capitol Hill, [illegible] Park and Sugar House areas to downtown. These were gradually replaced in the 1930s by buses and the last street car line was discontinued in 1941.

Eagle Gate, which had served to mark the entrance to Brigham Young's estate, was reconstructed to allow traffic flow. City parks were built, sewer systems and street lighting were installed, and streets were paved. Between 1900 and 1930 the population of the city nearly tripled.

The Great Depression brought construction to a standstill, but the boom sounded again during World War II. Many war industries and military installations revitalized the economy. War workers and soldiers spent their money in the city's restaurants, ballrooms, theaters, and shops.

During the 1960s commercial and service centers were built in the suburbs, drawing business away from downtown. To help counteract this movement, the Mormon Church invested $40 million in the development of a downtown shopping mall. The ZCMI Center [illegible], named after Zion's Cooperative Mercantile Institution, a [illegible] Salt Lake [illegible].

The downtown [illegible] hotels, office buildings and shopping [illegible] older buildings were [illegible]. City-wide beautification projects [illegible] the downtown community.

Salt Lake [illegible] in the 1980s. Development included the Salt Palace Convention Center expansion, the Salt Lake International Center, the University of Utah Research Park and the Triad Center.

The 1990s have great promise in store. Salt Lake City International Airport has constructed a new parking structure and loading zone to serve the growing needs of Salt Lake travelers. A new runway is planned to accommodate increased traffic with Salt Lake's award-winning [illegible] service. Plans [illegible] Salt Lake's [illegible] promising future."

SKI RENTALS

FROM

Utah Ski Rental & Sales
Downtown Location
Near All Hotels

134 West 600 South
Salt Lake City, UT 84101
(801) 355-9088

OPEN

7:30 A.M. to 8:00 P.M. Monday - Saturday
7:30 A.M. to 6:00 P.M. Sunday

Free Custom Fitting with Shuttle Service To and From Your Hotel

For your convience, we will pick you up at your hotel, custom fit your boots and skis, and deliver you back to your hotel.

Overnight Tuneups & Repairs with Free Hotel Pickup and Delivery

Snowboard Rentals and Sales
Clothing Rentals and Accessories

Including bibs, jackets, gloves, goggles, hats and ski racks. If you came to town unprepared don't worry. We have everything you need to ski!

Ski On
Top-Of-The-Line Equipment

Rossignol, Pre, Atomic, K2, Kastle, Dynastar
Salomon, Nordica, Scott, Marker

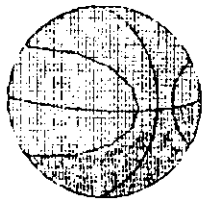
Rental Rates

Packages	1st Day	Each Add'l Day
Economy (No Discount)	8.00	8.00
Recreational	12.00	10.00
Sport	17.00	15.00
High Performance	22.00	20.00
Junior	7.00	7.00

Rent For Six Days And Get The Seventh Day Free.
Airline Rates And Group Rates Available.

10% DISCOUNT ON SKI RENTAL
with Hotel and/or Car Rental Verification

7 DAY WEEKEND

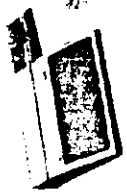


If you're looking for a vacation spot where you can have it all, try Salt Lake City. FestWest "north" 93, where you can make new friends, meet the people that keep the Orphan TI Computer alive.
While in Salt Lake City, try our SKIING, NBA BASKETBALL, HOCKEY, TOURS of many interesting sites to see.

You'll find it all right here, served with the flavor of the old west.

FestWest "NORTH" 93

We've got something for everyone.



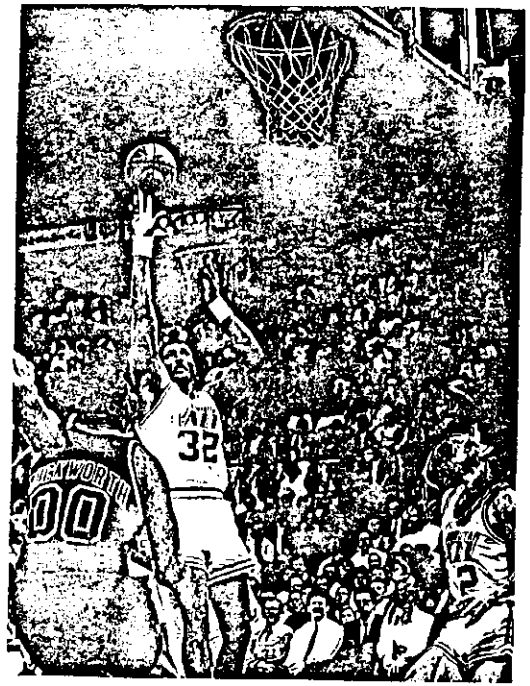
FestWest "NORTH" 93 Committee
1396 Lincoln Apt #B
Ogden, Utah 84404

EVENTS HAPPENING AT THE TIME OF

FestWest "NORTH" 93

FEB 6-MAR 31 Theatre,-The Jungle Book, City Rep, 7:30 pm, $6.50-$8.50. (532-6000)
FEB 10-14 Utah Boat Sports & Travel Show, Salt Palace, Wed-Fri 3pm-10pm,, Sat 11 am-10 pm, Sun 11 am-6pm. (534-4777)
Feb 10-27 Theatre-O Pioneers, Pioneer Theatre Company, Univ. of Utah, 8 pm. (581-6961)
Feb 12-20 Dance-Billy the Kid, Vespri and Equinoxe, Ballet West, Capitol Theatre, 8 pm, $10-$35. (355-ARTS))

NBA Basketball
Utah Jazz and Atlanta Hawks
FEB 13 7:00 pm at the Delta Center
Ticket Office (801)355-DUNK



HOCKEY
Salt Lake Golden Eagles
play Peoria
Feb 10 & 12 7 pm
at the Delta Center
Ticket Office (801)532-GOLD

TI FEST WEST "NORTH" '93
SALT LAKE CITY HOTELS (a partial list)

The following five are a short walk distance:

Howard Johnson (Host Hotel), 122 West South Temple
Rates $55 single/double, $65 triple/quad. Airport shuttle.
Reservation phone = 1 800 654 [illegible]

Red Lion Hotel, 255 South West Temple
Rates $[illegible].00 and $[illegible].00 Deluxe room. Airport shuttle
Reservation phone = 1 800 547 [illegible]

Marriott Hotel, 75 South West Temple
Rates $[illegible].00 single, $1[illegible].00 double. Airport shuttle
Reservation phone = 1 [illegible] 228 [illegible]

Double Tree Hotel, 215 West South Temple
Rates $79.00 per day. Airport shuttle
Reservation phone = 1 800 528 0444

Shilo Inn, West Temple at Second South
Rates $53.00 per day. Airport shuttle
Reservation phone = 1 800 222 2244

The following are a short driving distance:

Quality Inn/Airport, 5575 West Amelia Earhart Drive, and
Quality Inn/City Center, 154 West 600 South
Rates $73.00 both. Airport shuttle
Reservation phone = 1 800 521 [illegible]

Best Western Olympus Hotel, 161 West 600 South
Rates $65.00 single, $75.00 double. Airport shuttle
Reservation phone = 1 800 528 [illegible]

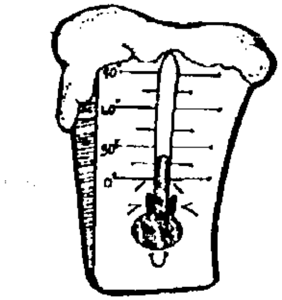
Clarion Hotel, [illegible] South Main Street
Rates $74.00 to $104 Suite. Airport shuttle
Reservation phone = 1 800 [illegible] [illegible]

Little America Hotel and Towers, 500 South Main Street
Rates $59.00 lower to $95.10 Tower. Airport shuttle
Reservation phone = in Utah 1 800 662 5888
other States 1 800 453 9450

Days Inn, 1900 West North Temple
Rates $46.00 single, $51.00 double. Airport shuttle
Reservation phone = 1 800 [illegible] [illegible]

Airport Hilton, 5151 Wiley Post Way
Rates $79.00 single, $89.00 double. Airport shuttle
Reservation phone = 1 800 [illegible] [illegible]

Salt Lake Hilton, 150 West 500 South. Airport shuttle
Rates $[illegible] to $1[illegible].00 single, $[illegible].00 to $171.00 double
Reservation phone = 1 800 [illegible] [illegible]



For those with Campers, Trailers or Motor Homes:

[illegible] World, [illegible] East [illegible] South, [illegible]
Reservation phone = (801) [illegible]

Camp [illegible] V I P, 1350 West North Temple
Reservation phone = (801) [illegible]

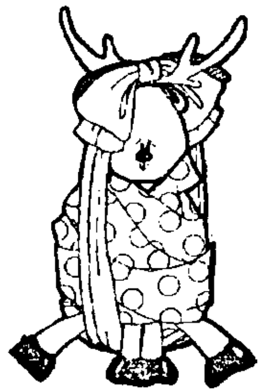
[illegible] Trailer Park, [illegible] [illegible] Street
Reservation phone = (801) [illegible]

K O A Campground Salt Lake City, [illegible] West North Temple
Reservation phone = (801) [illegible]

We are advised by our Salt Lake City contact that [illegible] available at this time [illegible] rates, but there [illegible] several other conferences [illegible] in mid February [illegible] is the middle of the [illegible] season. In other words, [illegible] reserve your rooms at the earliest [illegible] have to stay [illegible] away from the TI FEST WEST '93 location. The quoted rates are for the [illegible] time frame and should remain [illegible] with early reservations.

There are 5 to [illegible] Howard Johnson [illegible] the Hotel Manager reports that people [illegible] the hotel, there are no hookups there [illegible] your Motorhome or Trailer. Make sure that it is winter [illegible] for at least 30 below zero, the weather could get [illegible]

[illegible] want to [illegible] [illegible] remember [illegible] [illegible] FEST WEST [illegible]



TRANSPORTATION

▶ **AIRLINES/AIR SERVICES**

America West Airlines, Salt Lake International Airport, P.O. Box 22005 AMF, Salt Lake City, UT 84122, (800)247-5692. The nation's eighth largest major airline serving throughout the mainland U.S., and across the Pacific.

American Airlines, AMF Box 22902, Salt Lake City, UT 84122, (800)433-7300. "Something Special in the Air" Continental U.S., Hawaii, Canada, Mexico, Central and South America, Caribbean, Europe and Japan.

Barbers International, Inc., Box 22360 AMF, 2370 West 300 North, Salt Lake City, UT 84122, 539-7700. Utah's largest air charter and aviation management company. Coast to coast non-stop jets to single and twin engine aircraft. All based at Salt Lake International Airport.

Delta Air Lines, P.O. Box 22157, Salt Lake City, UT 84122, 532-7123, (800)221-1212. International air carrier with over 162 daily flights from Salt Lake City to 222 cities worldwide.

Hudson General, P.O. Box 22065, Salt Lake City, UT 84122, 539-2805. General aviation and airline servicing.

Million Air Salt Lake City, 303 North 2370 West, Salt Lake City, UT 84116, Mailing Address: AMF 22063, Salt Lake City, UT 84122, 359-2085. Service of corporate/private aircraft: refueling, catering, rental cars, parts, maintenance, charter, sales and flight instruction.

Morris Air Service, 260 East Morris Avenue, Salt Lake City, UT 84115-3200, 4-MORRIS (466-7747)/(800)4-MORRIS. Salt Lake City, Los Angeles, Orange County, San Diego, San Jose, Oakland, Seattle, Anchorage, Las Vegas, Phoenix, Portland, Orlando, Cancun, Puerto Vallarta, Mazatlan, Hawaii.

Salt Lake Air Cargo, Inc., 4404 West 2100 South, Salt Lake City, UT 84120, Mailing Address: AMF Box 22238, Salt Lake City, UT 84122, 975-7772. Air Freight Pickup and delivery service, freight forwarding, U.S. Customs exam facility.

Salt Lake City Airport Authority, AMF Box 22084, Salt Lake City, UT 84122, 575-2400.

SkyWest Airlines, AMF 22151, Salt Lake International Airport, Salt Lake City, UT 84122, 575-2509/(800)453-9417/(800)443-4952 for groups. Regional air carrier operating as "The Delta Connection." SkyWest offers nearly 50 flights a day to 22 destinations throughout the West.

Trans World Airlines, 136 South Main, Suite 410, Salt Lake City, UT 84101, 363-0624 Sales Office/(800)221-2000 Reservations. Scheduled airline departures to the East, serving over 100 North American, European and Mideast destinations.

▶ **AUTOMOBILE RENTAL/LEASING/SERVICES**

AAA Auto Club of Utah, 560 East 300 South, Salt Lake City, UT 84102, 364-3615. Emergency road service, worldwide travel, reservations, maps and tour books, personal accident insurance, fee-free travelers checks.

Advantage Rent-a-Car, 2375 West North Temple, Salt Lake City, UT 84116, 531-1199/(800)777-5500. Over 60 locations throughout the Southwest. Special insurance, weekly, monthly and one-way rates are available.

Airways Rent-A-Car, 2297 South Main, Salt Lake City, UT 84115, 486-5717/(800)346-0222. Free mileage, low rates, out-of-state rentals, pick-up/drop-off service available, convenient downtown and airport locations.

Avis Rent A Car, AMF Box 22186, Salt Lake City, UT 84122, 575-2847/(800)331-1212. Open 24 hours, Avis features GM cars and super value rates.

Budget Rent A Car, 3033 New Terminal Drive, AMF Box 22112, Salt Lake City, UT 84122, 298-1460/(800)237-7251. Two convenient Salt Lake locations plus Ogden, Provo and Park City. Current model economy to luxury cars, also trucks.

Dollar Rent-A-Car, 3861 Terminal Drive, Salt Lake City, UT 84122, 575-2580/(800)421-9849. Low daily and weekly rates with free mileage. Call for additional holiday, group and insurance rates.

General Rent-A-Car, 1380 West North Temple, Salt Lake City, UT 84116-3225, 595-0111/(800)327-7607. Unlimited miles on all cars. Economy to luxury and four-wheel drives. Special rates for business and travel industry.

Hertz, 775 North Terminal Drive, Salt Lake City, UT 84116, 575-2683/(800)654-3131. Open 7am to 3pm, 7 days a week. For special group/convention and tour rates, call (800)654-3131.

Hertz, Salt Lake City Marriott Hotel, 75 South West Temple, Salt Lake City, UT 84101, 355-8427/(800)654-3131. Airport location open 24 hours. For special group/convention and tour rates, call (800)654-0058.

National Car Rental, Box 22249 AMF, Salt Lake City International Airport, Salt Lake City, UT 84122, 539-9200/(800)227-7368. Special weekly, holiday and weekend rates featuring GM cars from compact to passenger vans and 4-wheel drive.

Pariens Car Rental, 1974 West North Temple, Salt Lake City, UT 84116, 596-2596/(800)527-3631. Full line of sedans, vans and four-wheel drive vehicles. Open 7 days a week.

Rent-A-Wreck, 741 South State Street, Salt Lake City, UT 84111, 359-9900/(800)594-8976. New and used cars, trucks and vans offered at competitive rates. Free pickup/delivery, open 7 days a week and holidays.

Snappy Car Rental, 1973 West North Temple, Salt Lake City, UT 84116, 363-1003. "Be happy, rent from Snappy!" We deliver the car where you are!

Supersonic Car Wash, 672 South West Temple, Salt Lake City, UT 84101, 328-0730.

Thrifty Car Rental, 35 South 2400 West, Salt Lake City, UT 84116, 595-6677. Open 24 hours a day, 7 days a week. Complimentary shuttle to and from the airport.

U-Save Auto Rental, 1195 South Main Street, Salt Lake City, UT 84111, 521-5555/(800)944-0555. Clean, affordable cars with free mileage, low daily, weekly or monthly rates for business and travel. Pick-up/delivery available.

▶ **BUSES-CHARTER/RENTAL**

Grey Line Motor Tours, 553 West 100 South, Salt Lake City, UT 84101, 521-7060. Sightseeing tours-historic Salt Lake, Kennecott Copper Mine, Escorted park tours Yellowstone, Grand Teton, Bryce, Zion and Grand Canyon.

Lake Shore Motor Coach Lines, 430 East 1130 South, Provo, UT 84603, 328-3361 (Salt Lake), 373-0327 (Provo). Large, well-maintained fleet of charter motorcoaches. City tours, shuttles, transfers, tour group transportation.

Le Bus, 542 South 2165 West, Salt Lake City, UT 84104, 975-0202/(800)366-0288. Nationwide/local charter motorcoaches. Intermountain West's largest carrier.

Lewis Bros. Stages, P.O. Box 510247, 569 West 500 South, Salt Lake City, UT, 84151-0247, 359-8677/(800)826-1844. Top quality full service ground transportation operator. Locally owned and operated by the Lewis family since 1914.

▶ **LIMOUSINE SERVICE**

Bonneville Limousine Service, 36 East 700 South, Salt Lake City, UT 84111, 364-6529. Limousines, town cars, vans. Utah's largest limousine service since 1968.

Canyon Transportation, Inc., 179 East Main, #200, Sandy, UT 84070, 255-1841/(800)255-1841. Four-wheel drive transportation, serving all Wasatch Front ski resorts. We specialize in Snowbird, Alta, and Little Cottonwood Canyon.

Super Express Shuttle Service, P.O. Box 22437, Salt Lake City, UT 84122, 250-4600/(800)321-5554. Door-to-door transportation and airport shuttle. Serving the Wasatch Front, including all ski areas. Salt Lake's most professional shuttle service.

▶ **PUBLIC TRANSPORTATION**

Utah Transit Authority, P.O. Box 30810, Salt Lake City, UT 84130, 262-5626/287-4636. Serving Utah Valley, North Tooele Valley, Salt Lake, Davis, and Weber counties. Local and inter-city transit services. Trolley and ski service. Also provides transportation for disabled people unable to use the regular bus system. Phone 287-4433 for further information.

▶ **TAXI SERVICE**

Little Cottonwood Express, P.O. Box 126, 1555 Lower Iron Horse Loop Road, Park City, UT 84060, 364-8472/(800)356-7384. Airport van service to all ski areas along the Wasatch Front. Chauffeured town cars and luxury limousines.

Wasatch Mountain Service, 1248 Governor's Way, Woods Cross, UT 84087, 295-4666/(800)365-8511. "Custom on all transportation" via van, station wagon, or 4x4 suburban. Shuttle service, sightseeing, and airport transfers. State-wide service.

Yellow Cab Company, 435 South 600 West, Salt Lake City, UT 84101, 521-2100/(800)826-4746. Serving the Valley, ski resorts and entire Wasatch Front. Courteous 24 hour service, package delivery, commercial accounts.

▶ **NOTE: THE AREA CODE FOR UTAH IS (801)**

TI FEST WEST "NORTH" '93 COMMITTEE
1396 Lincoln Avenue, Apt B
Ogden, Utah 84404

Tentative Schedule
(as of 1 Dec 92)

Location: Howard Johnson, 122 W. South Temple, Salt Lake City, Utah

Friday 11 Feb '93

12 Noon = Open for Vendor set ups
5 PM = Public registration and Hospitality room opens till 9 PM
7 PM = Vendor bargaining (VENDORS ONLY)
8 PM = Update of Vendor Porum by Vendors

Saturday 12 Feb '93

DOOR PRIZES EACH HOUR BY TICKET (must be claimed within 2 hour period)
8 AM = Displays Open. Registration, Hospitality room, all day.
9 AM = Seminars start
6 PM = Displays/Seminars closed
7 PM = Social
8 PM = Vendor meeting

Sunday 13 Feb '93

8 AM =Displays open until 3 PM
Registration open until Noon
Hospitlity room open until 5 PM
9 AM =Hourly door prizes until 2 PM
2 PM =Grand Prize Drawing
3-6 PM =Removal/Clearance of area
4 PM =FEST WEST '94 planning meeting
8 PM =FEST WEST '93 Closed

Registration Fee will be $5.00/adult (over 10) for all weekend or portion thereof.

TI FEST WEST "NORTH" '93 COMMITTEE
1396 Lincoln Aveenue, Apt B
Ogden, Utah 84404

TI FEST WEST "NORTH" '93, hosted by Utah will be TI Computers' gathering of the minds. This will show everyone that the TI 99 4/A is alive and well and getting better all the time. Come and see what the best of the best have to offer.

TI FEST WEST "NORTH" '93 will be held at the Howard Johnson Hotel in Salt Lake City, Utah, 12-14 February 1993. We have a block of 40 rooms set aside for your convenience. Call in your reservation early 1-800-654-2000, advise them you are attending 'FEST WEST' for the confirmed price of $55.00 single and double and $62.50 for quad rooms.

Please let all your members know of this event. We would like to have you include this bulletin in your newsletter. If there are members of your users group that haven't been around for a while, call them, let them know of the TI FEST WEST "NORTH" '93. This is a good chance to tell them you have missed seeing them at your meetings lately. It is a good way to get reacquainted.

This is a good time for a great vacation for a family to visit Salt Lake City, and if you are a skier, this is the middle of the season, so bring them with you and have the time of your life. There are so many things to do and see in Salt Lake, such as the Salt Lake Hockey team meets Peoria at 7 on the 10th and 12th. There will be a Utah Boat, Sports and Travel show at the Salt Palace etc. With all the Mall shopping and visiting the downtown sights, while you are browsing the vendors or attending a seminar, your family will also be enjoying something new and you can still see more in the evenings.
If there is any way we can be of help, do not hesitate to write to the address listed above or call us on the SALT FLATS BBS, (801) 394-0064 for more information.

Pre-registration form is on the bottom of this letter. We have included a list of hotels etc. in case Howard Johnson is filled, plus a tenative schedule.

REGISTRATION FOR 'FEST WEST' NORTH '93

NAME	NUMBER AND NAMES IN GROUP
ADDRESS	TI USERS GROUP NAME
CITY STATE ZIP	
TELEPHONE NUMBER	HOTEL (If known)

REGISTRATION FEE IS $5.00 PER PERSON FOR BOTH DAYS

What is AMS, and Why is it Here?
A monologue by Chris Bobbitt

The Introduction

A wise man once said true wisdom can be attained by learning from your mistakes. Considering the number of mistakes I've made over the years, at least I can say I've had ample opportunity to become wise.

The largest "mistake" I made in the 10 years Asgard Software has been in existence was Press. It wasn't a complete mistake - I'm not going to apologize for the vision Charles Earl and I shared of what a word processor should be. I will readily admit, however, that the way we went about developing it and marketing it was all wrong.

Lots of little mistakes became apparent in my quest to discover What Went Wrong. Soul-searching aside, one of the biggest reasons was actually technical. Contemplation of the technical problem led to both a fundamental realization of, and appreciation for, The Problem.

The Problem

Press was designed to be the ultimate in modular code - the program would literally load individual functions into memory as needed, and reuse the space when the functions were no longer needed. In this way, it had more in common with mainframe programs than software for home computers. This level of modularity is what would have made Press possible - and without it Press was impossible.

As you may have already guessed, the fact we couldn't get this "Memory Manager" to work was the reason that Press didn't work. A large part of this was due to the fact that memory is scarce on the 99/4A. In order to work, Press needed all the memory it could get - so the Memory Manager was written to take advantage of all sorts of other types of memory: supercarts, the Mini-Memory and even some RAM-disks (such as a Rambo-equipped Horizon RAM-disk). While this was fine in theory, in practice it was a mess.

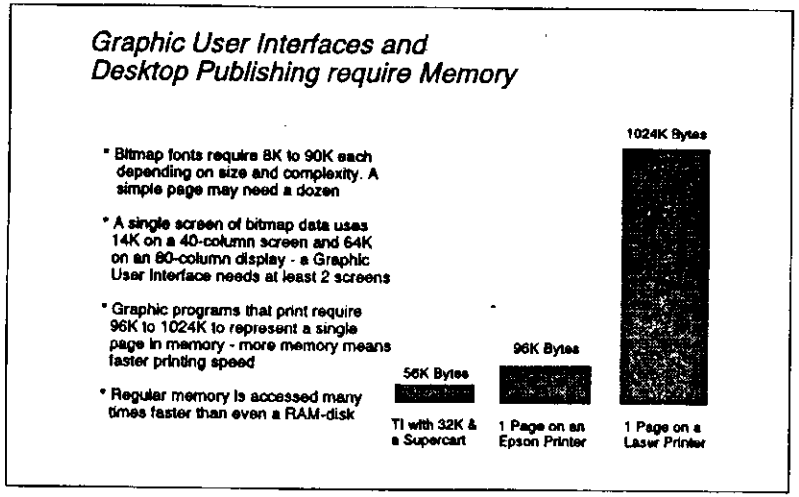
Because of the complexity of using some of these devices as memory for programs and data, more code was devoted to accessing memory beyond the standard 32K than all of the other code in the Memory Manager combined. Because only a small number of features could be implemented on a standard 32K 99/4A, and taking advantage of memory beyond the 32K resulted only in reams of buggy program code, Press collapsed under its own weight.

While it would have been possible to make a version of the program that ran in the standard 32K, we had promised the program would do much more, and neither Charles nor I really wanted to release a program that only did half of what we told everyone it would do for 2 years - so the project died, and The Problem first slapped us in the face:

"The 99/4A desperately needs more memory accessible to programs"

Our experience proved that the only real program-accessible memory for the 99/4A is the 32K card, and to a degree a supercart/Mini-Memory. You have to face it, while 32K was a lot of memory in 1979, not a single PC program today will run in it. Heck, 64K became standard in 1982 when the Commodore 64 was released. The average PC or Mac sold today is equipped with 4096K of RAM. The average PC word processor requires 640K to run minimally, and the next generation of word processors will no longer run in less than 1024K.

To illustrate how memory requirements have ballooned in the last decade, take a look at the following chart:



Desktop publishing was chosen as an example because, with the advent of programs like **Page Pro 99**, it has become one of the most popular things the 99/4A is used for. As someone who develops graphics software, I've been painfully aware of the 99/4A's memory limitations for years - especially as we've tried to expand the capabilities of our programs.

Why do 99/4A programs need extra memory? Very simply: to allow more data and more program functions to be in memory at once.

What is the difference between extra memory and a RAM-disk? While this is discussed in more depth below, the answer is also simple: RAM-disks are really only faster disk drives. *While they can hold programs and data, this information is only accessible when a program physically loads a piece of it from the disk. With more real memory, the program itself can be much larger, and more data can be stored in memory where it is accessed quickly before it has to go to the relatively slower disk drive.* As fast as they are, RAM-disks are slow compared to storing data in memory. More memory also allows programmers to write large programs that contain lots of data (such as a Graphics User Interface) without frequently referring to a disk drive.

In essence, more memory is needed so that more complex things can be done - and a RAM-disk is only a partial substitute at best for more memory.

So, now that we knew The Problem (the lack of real memory for 99/4A programs), The Search was on for The Solution.

The Search

After discovering The Problem we decided to evaluate all of the memory devices available for the TI-99/4A to see if any of them were The Solution. Our experience helped us to define the criteria any memory system should meet before it was usable as "real memory":

1. It had to offer memory within the normal programming area. This is so that it would be easier to adapt existing programs to take advantage of it.

2. It had to offer memory in usable "chunks" that were large enough to store a significant amount of program code and data, yet small enough where a single bank of RAM didn't take all of the standard memory area.

3. It had to offer a lot more memory than the standard 32K - the more the better.

4. It had to be invisible to, or at least not conflict with standard hardware and software.

5 It had to usable by average programmers - and not just super hackers.

6. It had to be inexpensive.

In our opinion, the ideal memory system would also:

7. Be invisible to the programmer - he or she would simply write a large program and let the memory card figure out how to fit it into memory.

To make a long story short - none of the memory devices on the market met these conditions. Supercarts and the Mini-Memory were limited to a certain amount of memory at a certain location. The only device that even offered a glimmer of the kind of memory needed was the **Rambo**, and it was both inflexible and a programmers nightmare to work with. All other RAM-disks also failed on one or more points.

After an exhaustive search, we decided that if we wanted to write more sophisticated software, we had no choice but to build a device that offered the capabilities we needed.

Using the Geneve and the un-released TI-99/8 as models, which both could be expanded to 2048K, Asgard Peripherals (the hardware division of Asgard Software) began a two-year odyssey of exploration, frustrating dead-ends, and back-tracking before we were able to construct a memory system that met the six criteria above, and could (with some work) even meet the last condition - a memory system that was invisible to the programmer.

The Solution?!

It's funny how sometimes the hardest questions have the simplest answers. In searching for a solution we almost entirely re-invented the wheel before we realized that TI had already done it for us. We discovered that they had built, and continued to produce, a single chip that did most of the work of expanding the memory of the 99/4A.

Variations of this device (known as a "Memory Mapper") are found in virtually every 9900-family computer product TI ever built and sold, with the exception of the 99/4A. A variation is even used in the Geneve and the TI-99/8.

The 99610 memory mapper (its original designation) is elegant in its simplicity. It takes the 16-bit address space of the 9900 processor and turns it into a 24-bit address space. In other words, it makes the 9900 think it has up to 16Mb (or 16384K) of memory instead of 64K. It does this by allowing a programmer to put 4K banks (or blocks) of memory anywhere within the normal address space of the 9900 processor.

The jist of this is that at a stroke this single chip met all of our first six conditions.

Besides offering memory within the normal programming space, it also offers it in 4K blocks that are easily manipulated. Further, it turns out, most software written by TI was also designed to work with blocks of the same size - and so it would be a lot easier to adapt existing TI software (Extended BASIC, etc.) to take advantage of mapper memory than any other kind of memory.

The mapper obviously allows for a lot more memory than 32K, but just as importantly, to the computer a memory card using the mapper is no more non-standard than a 32K card - and won't conflict with any device except those that try to provide 32K to the computer.

A final advantage of the mapper is that, for programmers, it is about the simplest way to use memory beyond 32K. Assembly programmers only need a few lines of code and other programmers a single command to push blocks of memory in and out of the 32K area - or even potentially have it done for them automatically (depending on the language).

After discovering the mapper it was only a matter of time before we built a prototype, the AMS, that would provide up to 512K of RAM to the 99/4A accessible through the mapper.

What is the Asgard Memory System?

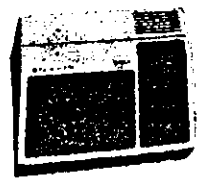
- A family of fully compatible memory cards for the Peripheral Expansion Box
- Fully compatible with all existing TI software - works as a 32K card to regular programs
- Transparent to all disk controllers and some RAM-disks, as well as all other devices
- Provides memory to 99/4A in 4K banks - exactly what TI specified for the 99/4A & 99/8
- For AMS aware programs, provides additional memory on demand up to 16Mb in a few machine cycles
- Easy to adapt existing software and languages to take advantage of it - if it works with a Supercart it can work with AMS

AMS 128K-512K
Available now

AMS 1Mb-16Mb
Available Q2 '93

The AMS also met our sixth criteria - it is a cheap way to add 128K to 512K of usable program space to the 99/4A. Considering an 8K supercart costs $25 or so, $120 for 16 times as much RAM is a bargain. The AMS also allowed us to prove our concept, and get the technology embodied by the mapper quickly into the hands of programmers so that they could become familiar with the technology. Further, you can do real things for the 99/4A, even with "only" 128K.

Finally, the AMS has allowed us to begin work on a software system that brings our last goal - a memory system that is transparant to programmers - within reach. Several programming languages in development will take advantage of the memory without the programmer specifically writing program code to do so.



The Comparisons

Inevitably, there will be comparisons between AMS and other memory systems. While you can compare AMS to other devices in terms of the amount of memory, it is impossible to compare it in terms of how the memory is used. The only memory device that comes close is a supercart. Like a supercart, the AMS provides real memory for programs, and not disk storage. Unlike a supercart, it offers much more than 8K of RAM.

Comparing the AMS to a RAM-disk, as mentioned above, is like comparing apples and oranges. RAM-disks are "solid-state disk drives", meaning memory chips that are controlled by software to emulate a disk drive. The AMS, by comparison, is memory that can be directly used by programs to store data or program code which can be used or acted on without "loading" it first.

To illustrate the difference between RAM-disk memory and AMS memory, a good example of would be a database program. With **TI-Base**, for instance, if you have a 2000 record database you may be able to store (perhaps) 50 records in memory at once. Whenever **TI-Base** sorts the database, it has to physically load each of the 2000 records, 50 at a time, into the same space in memory. It creates an "index" of those records, which it then saves to disk after it has completed loading all of those records. This "index" tells the program the order the 2000 records are in. With a database like Personal Record Keeping, you would be limited to maybe 100 records altogether, since it doesn't allow you to have more records than you can fit into memory.

If you had a database designed to work with AMS, *all 2000 records could be in memory at once*. A sort would be instantaneous as the records could be put into sorted order within memory - or an index built in memory without loading anything first. The same database could be sorted in a tiny fraction of the time, and searching the database would be instantaneous. This same comparison would apply in any situation where you have a lot of information to store - a word processor, graphics program, etc. Because all of the data physically resides in memory, it can be accessed and used much faster.

In addition to providing memory for data, AMS also provides memory for larger programs. Because all of the program can be loaded into memory at once, managing memory with AMS is less difficult than loading parts of the program from disk - and takes much less code. The AMS memory card functions almost exactly like memory beyond 640K does on PC compatibles. Programming a 99/4A equipped with the AMS (or its sibling) is no more difficult than writing PC programs larger than 640K.

While technically, AMS is fundamentally different from other cards - some people have been tempted to compare it with other memory systems on the basis of the amount of memory offered. While the AMS offers as much memory as some other memory systems (the Foundation has been mentioned), again, there is no comparison. *The AMS is only memory card for the 99/4A that offers a memory mapper - and a memory mapper is the only way to truly expand the amount of memory available for programs and data on the TI-99/4A.*

The Future

The AMS is currently in the classic "chicken-before-the-egg" dilemma. If you were to buy one and plug it in, it only works as a 32K card until you run a program designed to use it. Why would anyone want to buy a card where there is currently no software designed for it? Conversely, while would anyone write a program for a device nobody owns?

These are legitimate questions, and they deserve honest answers.

From a programmer's perspective, if AMS was just another RAM-disk for the 99/4A, I would agree. However, the AMS is a real technical breakthrough in 99/4A memory expansion. We have good reason to believe that every programmer that has hit the 32K memory barrier in the past is (and if they aren't, should be) interested in writing programs for AMS. There are really no other options if you want to make larger and more powerful programs.

For programmers, the AMS is the first and only true memory-mapped memory device for the 99/4A. *There is no easier way to write programs larger than 32K.* Further, the AMS was designed to the only real standard that ever existed for expanding 99/4A memory - the one TI specified for the unreleased TI-99/8. The AMS provides memory to the 99/4A the same way memory is provided to the 99/8. The AMS is the only true memory expansion system for the 99/4A aside from a 32K card or a supercart.

While we can't make programmers take advantage of the card, its potential to make so many projects that were impossible in the past possible, or even easy, will interest any programmer who wants to make better programs.

From an average person's standpoint, the issue is more complicated.

AMS was designed and implemented by a software company. Therefore, its guaranteed support from at least one software company - one that is in the process of writing a considerable amount of software designed to take advantage of it. While initially most of our software will be AMS versions of our other products, these versions will not only be faster and more capable, but ultimately, may evolve into much bigger, more powerful programs. Further, programming languages designed to make writing software for AMS even easier are also in development - including a full assembler package and a new Extended BASIC cartridge. While we can't speak for other software developers, virtually every product in our future will take advantage of AMS one way or another.

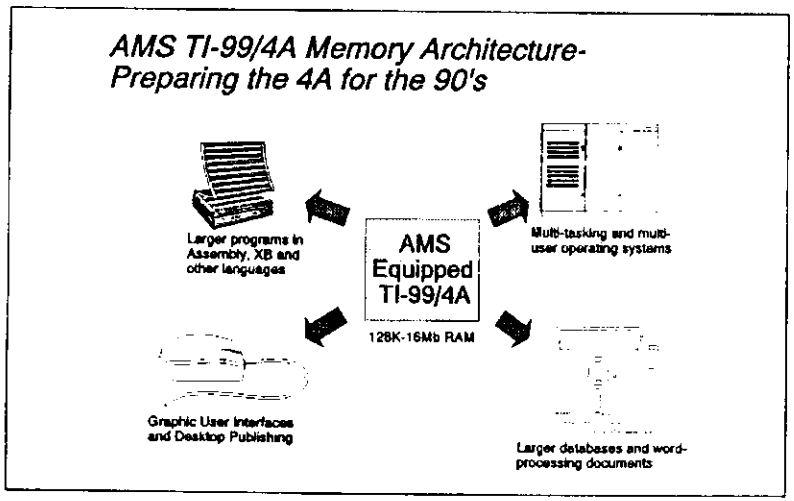
Also as a software company, we have a better idea of what programmers need in order to write programs for the AMS. In order to allow other developers to work with AMS, we've placed all programming specifications and source code into the public domain, and we are providing AMS systems with documentation at cost to any programmer that wants one. We already have mailed documentation to most prominent TI software developers.

From the point of view of a customer, the AMS is being produced by a company with an almost 10-year track record in the TI community - and a solid record of keeping our promises (well, all but 1 or 2 of them). We are in it for the long run, and so we will do whatever we can to support and develop this technology.

Examples? We are currently working on the next generation AMS card which allows 1024K to 16384K of memory for the 99/4A - potentially 8 times the memory of the Geneve. A wide array of development software will be included with the device - which will be fully compatible with its predecessor. To protect buyers of the current card - they will be able to trade it in on the next card when its available.

Finally, we can offer one last form of "buyer protection". We are committed to making this memory device the standard extended memory system for the 99/4A. Asgard intends to license the design for a low, one-time fee to any company, user group or individual that would like to make AMS-compatible cards. *We designed this card because we needed it to do the software we wanted to do - not to get into the hardware business.* We are negotiating with several people right now, and if all goes well, in the future you should be able to buy compatible cards from a number of vendors.

If all of these reasons don't convince you, the best reason of all is the potential of what can be done with more memory on the 99/4A. More memory will open up a wide variety of new applications that are difficult to impossible on the 99/4A:



As the chart illustrates, AMS makes lots of things possible that weren't before, including:

- Multi-tasking and multi-user operating systems
- Full-scale business packages
- Graphical user interfaces and true desktop publishing
- Full-size word processors, databases and spreadsheets
- Modern, full-size programming languages such as C and ever more capable Extended BASICs
- Great advances in graphics, speech and music software - including multi-media, digitizing, fax software, and more

All in all, AMS will let the 99/4A live up to its full potential as a computer by eliminating its most serious problem - the lack of memory available for programs and data.