



Engineering Research Associates

MINNESOTA'S TECHNOLOGY WELLSPRING

1946 – FROM BUILDING TROOP GLIDERS



TO

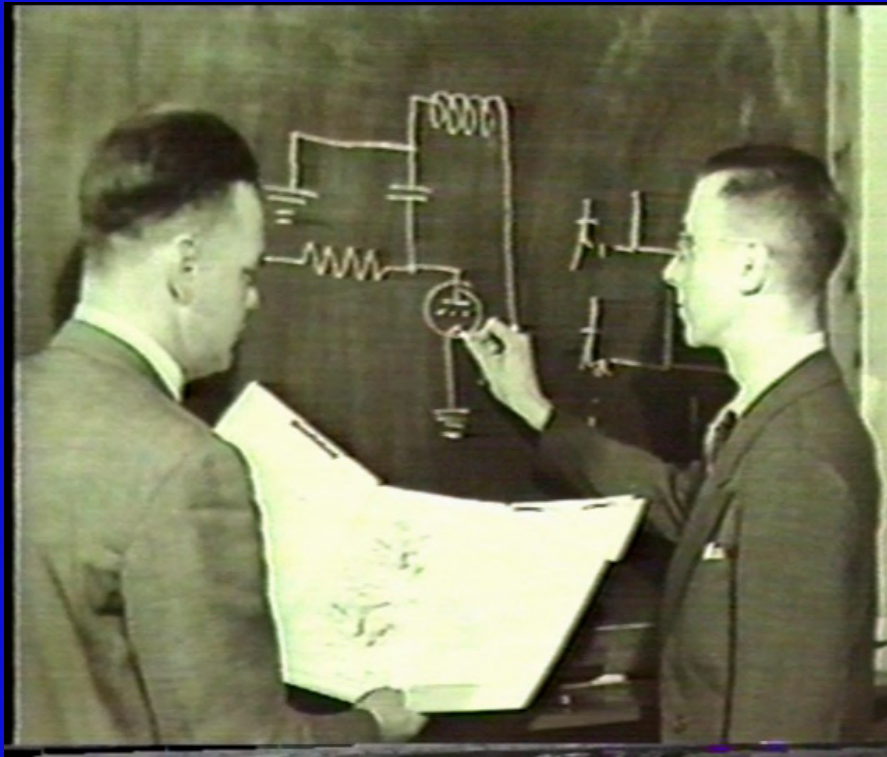
A NEW COMPANY IN ST PAUL



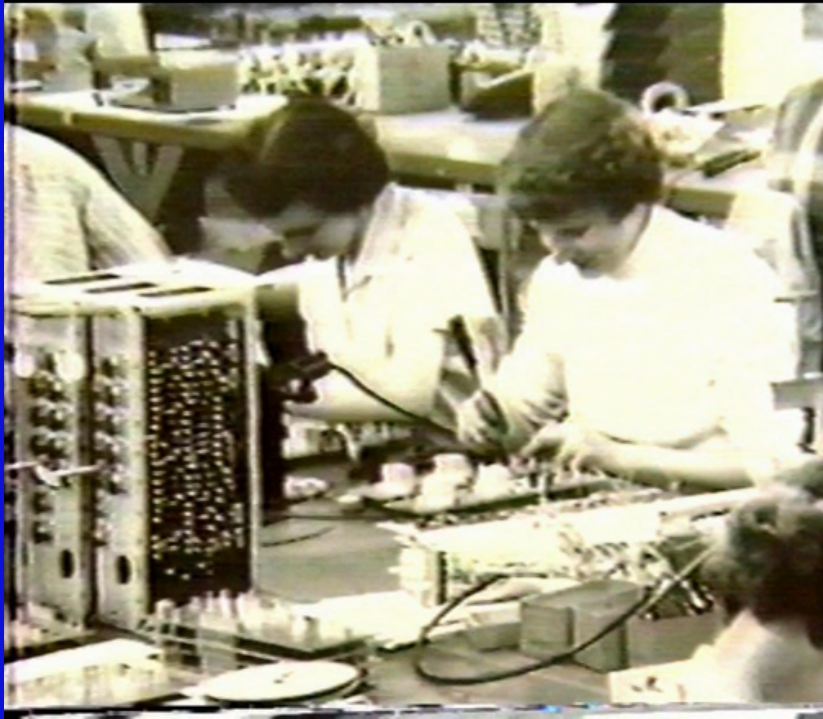
**THE FOUNDING OF ERA IN 1946 WAS
THE BIRTH OF MINNESOTA'S
COMPUTING INDUSTRY**

**A COMPLETELY NEW SET OF
TECHNOLOGIES WAS INVENTED**

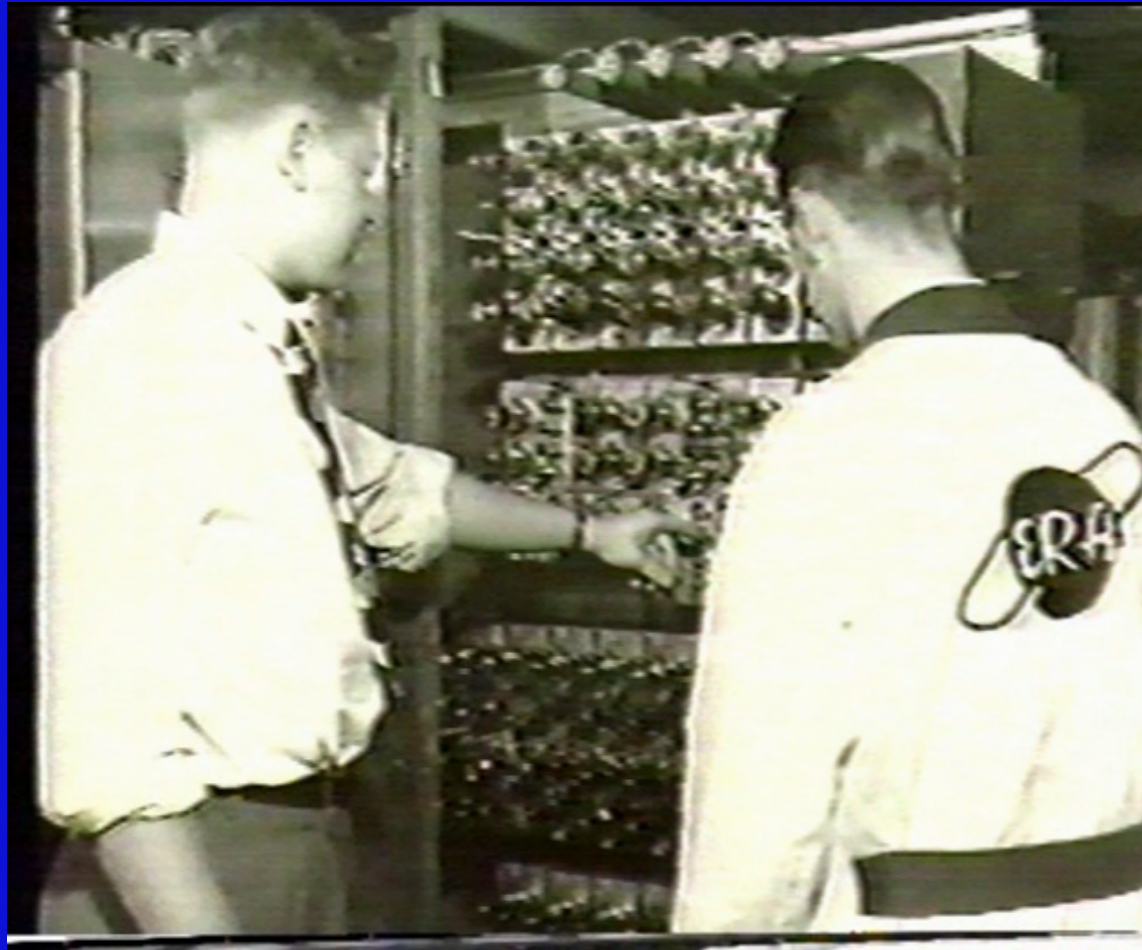
COMPUTER DESIGN



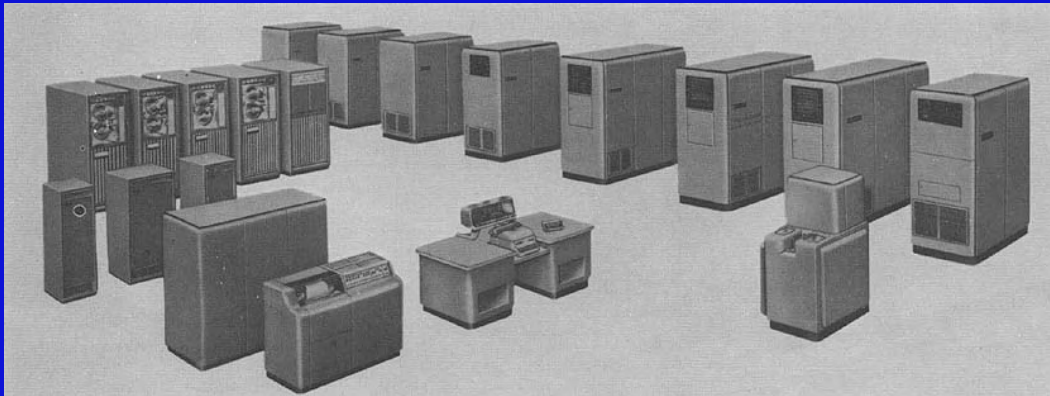
COMPUTER MANUFACTURING



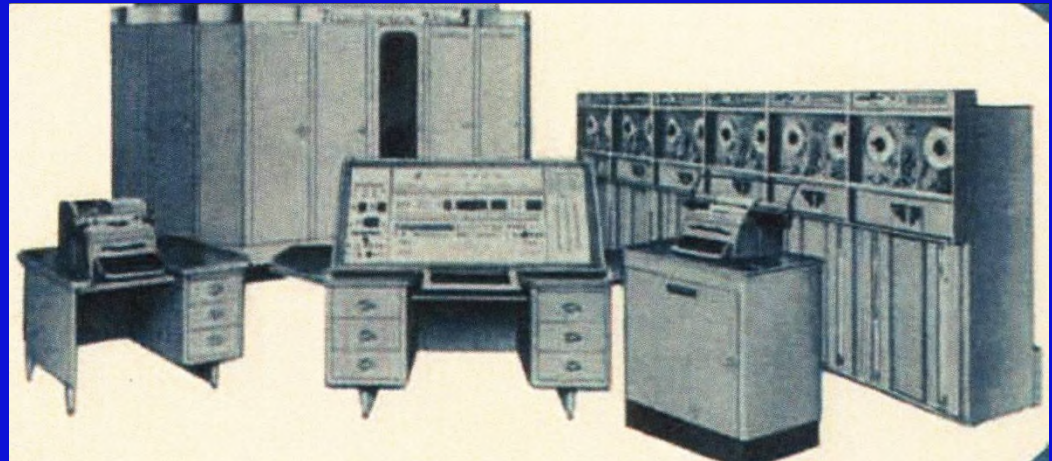
COMPUTER SYSTEMS



COMPUTER APPLICATIONS

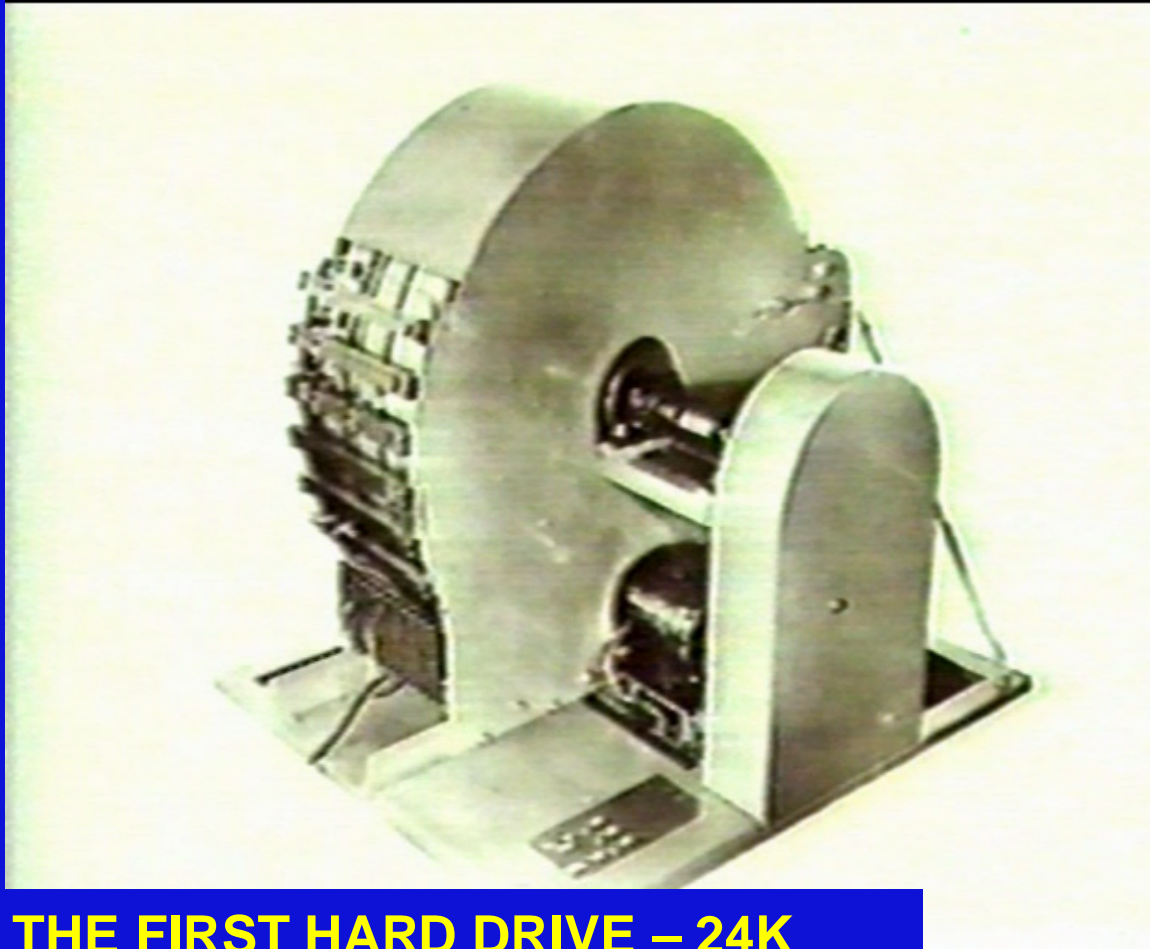


AIRLINE RESERVATION SYSTEM



DATA COMMUNICATION SYSTEM

NEW PRODUCTS WERE PRODUCED

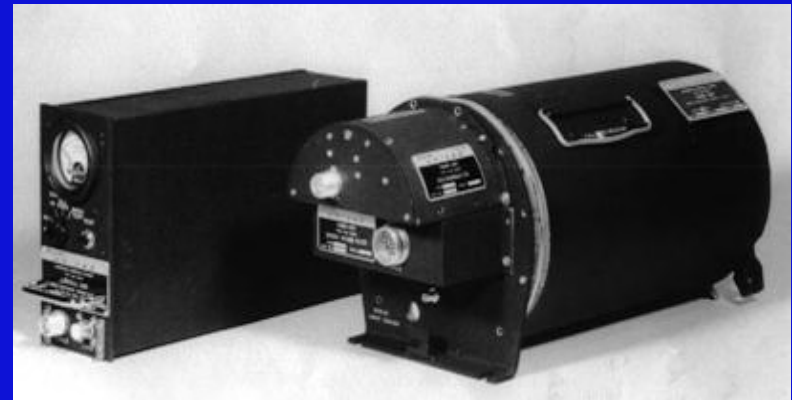


THE FIRST HARD DRIVE – 24K

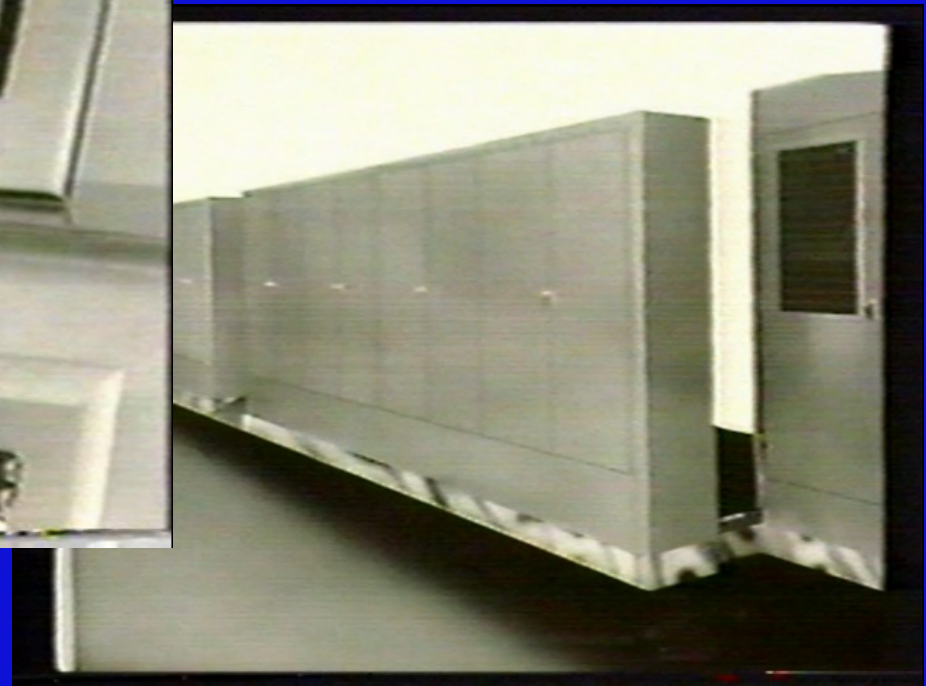
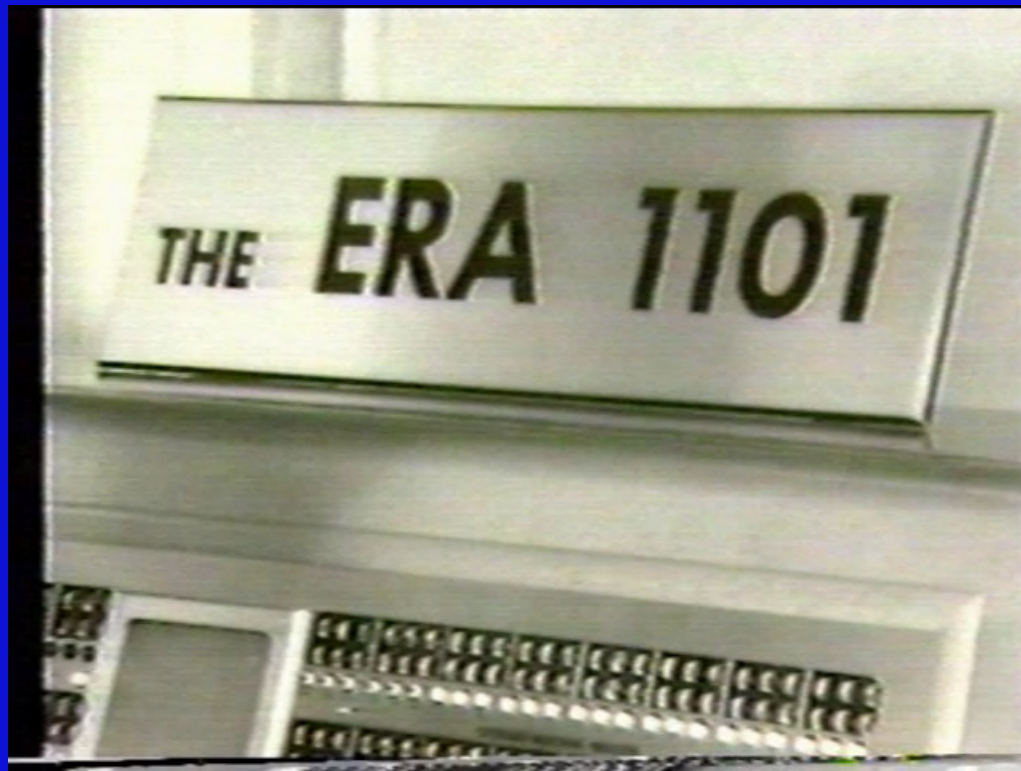
NEW PRODUCTS

AUTOMATIC ANTENNA COUPLER

ERA DEVELOPED NON-COMPUTER PRODUCTS TO PROVIDE MUCH NEEDED REVENUE FOR THE NEW COMPANY. THE MOST SIGNIFICANT OF THESE WAS A FAMILY OF AIRCRAFT ANTENNA COUPLERS, WHICH AUTOMATICALLY TUNED THE AIRCRAFT RADIO TO THE ANTENNA. THOUSANDS WERE USED ON BOEING, LOCKHEED, AND GENERAL DYNAMICS PROPELLER AND JET AIRCRAFT, INCLUDING AIR FORCE ONE.



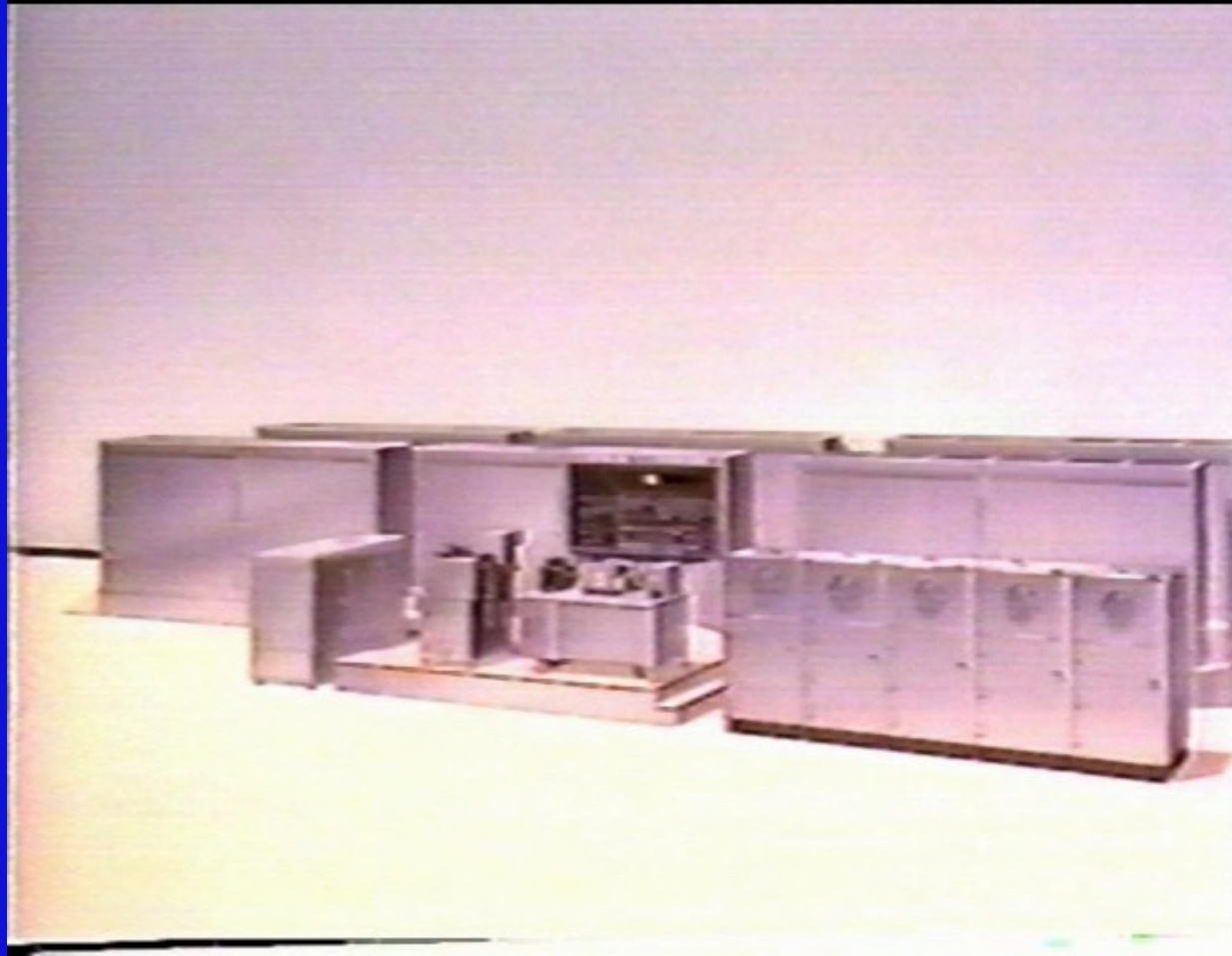
ERA'S FIRST COMMERCIAL COMPUTER



THE LEGACY OF



ERA 1103 – FORERUNNER OF THE UNIVAC and UNISYS MAINFRAME FAMILY



THE LEGACY OF



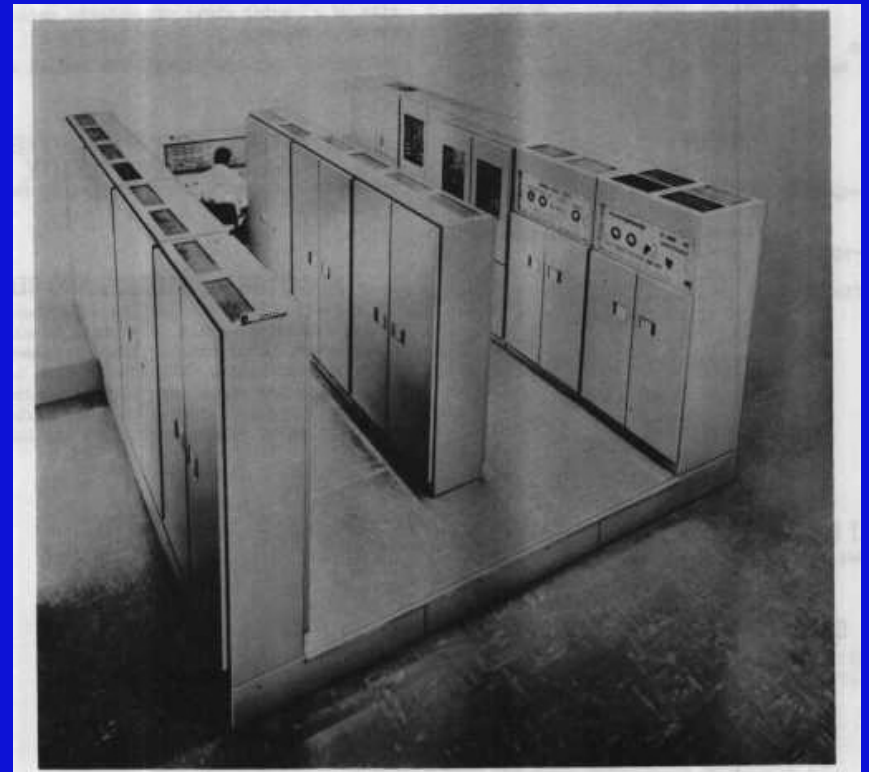
1952 – ERA WAS PURCHASED
BY REMINGTON RAND AND
BECAME A PART OF THEIR
UNIVAC DIVISION

THE MINNESOTA OPERATIONS
ARE A KEY DEVELOPMENT AND
MANUFACTURING CENTER FOR
UNIVAC

ATHENA

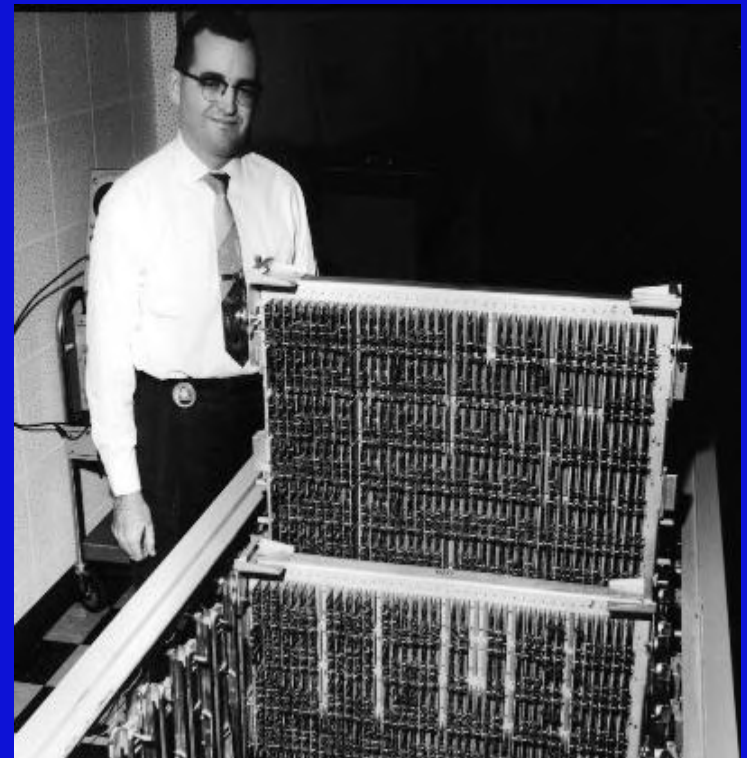
THE FIRST MISSILE GUIDANCE COMPUTER

ATHENA BEGAN AS
THE TITAN 1 GUIDANCE
COMPUTER
DEVELOPED FOR THE
US AIR FORCE . THESE
GROUND-BASED
COMPUTERS WERE
USED FOR MORE THAN
400 SUCCESSFUL
SPACE PROGRAM
LAUNCHES.



Naval Tactical Data Systems THE COMPUTERIZATION OF THE US NAVY

IN THE MID-1950S, THE US NAVY SELECTED UNIVAC TO PRODUCE SHIPBOARD COMPUTERS TO AUTOMATE NAVAL COMMAND AND CONTROL. THIS BEGAN A LEGACY OF PRODUCING NAVAL SYSTEMS WHICH CONTINUES TODAY.



SPACE PROGRAM

**UNIVAC COMPUTERS
WERE KEY
COMPONENTS OF THE
SPACE PROGRAM,
PROVIDING MISSION
CONTROL, TRAINING,
TRACKING AND DATA
ANALYSIS
CAPABILITIES TO NASA.**



EXPLOSIVE GROWTH OF THE INDUSTRY

**DURING THE LATE 1950s AND 1960s ERA
EMPLOYEES BEGAN TO FORM OTHER
MINNESOTA COMPANIES SUCH AS
CONTROL DATA. THESE CONTINUED TO
SPIN OUT SUCCEEDING GENERATIONS OF
LOCAL TECHNOLOGY COMPANIES, LIKE
CRAY RESEARCH. IN THE LAST 50 YEARS,
OVER 200 NEW MINNESOTA COMPANIES
HAVE ROOTS THAT EXTEND BACK TO ERA.**

PRESERVING THE HISTORY

IN 1977 ERA PIONEER ERWIN TOMASH WAS INSTRUMENTAL IN FOUNDING THE CHARLES BABBAGE INSTITUTE CURRENTLY RESIDING AT THE UNIVERSITY OF MINNESOTA. CBI'S MISSION IS TO "COLLECT, PRESERVE, AND MAKE AVAILABLE FOR RESEARCH PRIMARY SOURCE MATERIALS RELATING TO THE HISTORY OF INFORMATION TECHNOLOGY."



**TODAY, THE LARGEST SUCCESSORS
OF THE LEGACY OF ERA ARE THE
MINNESOTA-BASED UNITS OF
UNISYS AND LOCKHEED MARTIN.**

**THESE COMPANIES CONTINUE TO
PRODUCE COMPUTER PRODUCTS,
SYSTEMS, AND SERVICES THAT
HELP TO PROTECT AND ENRICH OUR
LIVES IN MANY WAYS.**

**JUST A FEW OF THESE WAYS
INCLUDE:**

BANKING AND FINANCE

**MORE THAN 2000
FINANCIAL
INSTITUTIONS RELY
ON UNISYS SYSTEMS**



PROTECTING OUR HOMELAND

**SYSTEMS AND
EQUIPMENT
DELIVERED TO
THE US COAST
GUARD PROTECT
OUR BORDERS
AND ASSURE THE
SAFETY OF U.S.
CITIZENS**

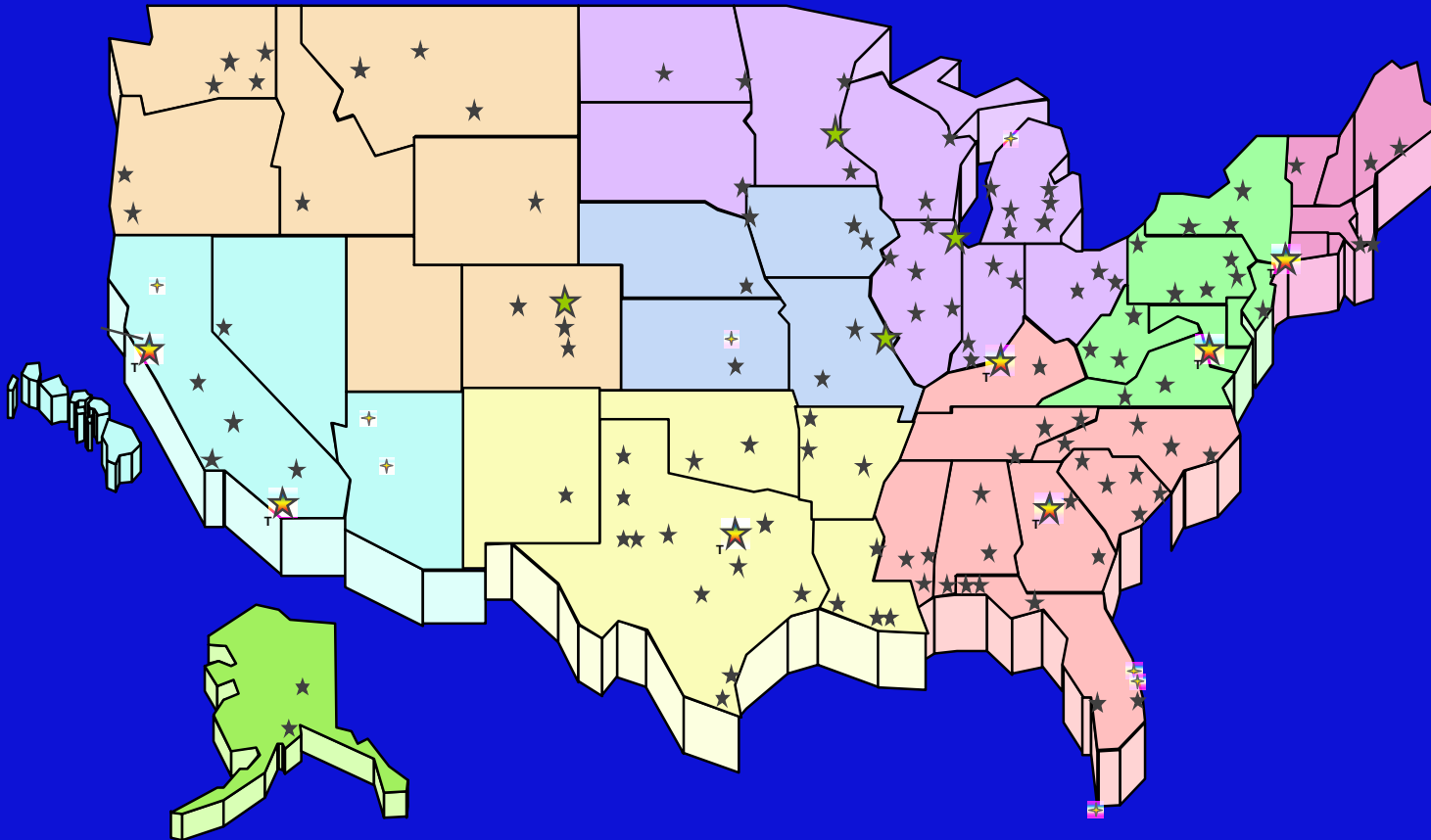


AIRLINES

RESERVATIONS,
TICKETING, AND
CARGO TRACKING



AIR TRAFFIC CONTROL



**CONTROLLING ARRIVALS AND
DEPARTURES AT MORE THAN 130 US
AIRPORTS**



MONITORING THE OCEANS

**MANNED AND
UNMANNED
AIRCRAFT PROVIDE
REAL TIME
ASSESSMENT OF
SEAGOING THREATS
WORLDWIDE**



IRS PROCESSING

**MODERN
COMPUTER
TECHNOLOGY
ASSURES FAST
AND ACCURATE
TAX PROCESSING
OF ALL TYPES OF
TAX RETURNS**

Form 1040		Department of the Treasury—Internal Revenue Service		2007	IRS Use Only—Do not write or staple in this space.																								
U.S. Individual Income Tax Return		For the year Jan. 1-Dec. 31, 2005 or other tax year beginning , 2007, ending , 20		OMB No. 1545-0074																									
Label (See instructions on page 12.) Use the IRS label. Otherwise, please print or type.	L	Your first name and initial	Last name	Your social security number																									
	A	If a joint return, spouse's first name and initial		Last name	Spouse's social security number																								
	B	Home address (number and street). If you have a P.O. box, see page 12.		Apt. no.	▲ You must enter your SSN(s) above. ▲																								
	E	City, town or post office, state, and ZIP code. If you have a foreign address, see page 12.		Checking a box below will not change your tax or refund.																									
Presidential Election Campaign	Check here if you, or your spouse if filing jointly, want \$3 to go to this fund (see page 12) >				<input type="checkbox"/> You <input type="checkbox"/> Spouse																								
Filing Status Check only one box.	<div> <div> 1 <input type="checkbox"/> Single 2 <input type="checkbox"/> Married filing jointly (even if only one had income) 3 <input type="checkbox"/> Married filing separately. Enter spouse's SSN above and full name here. > </div> <div> 4 <input type="checkbox"/> Head of household (with qualifying person). (See page 13.) If the qualifying person is a child but not your dependent, enter this child's name here. > 5 <input type="checkbox"/> Qualifying widow(er) with dependent child (see page 14) </div> </div>																												
Exemptions If more than four dependents, see page 15.	<div> 6 a <input type="checkbox"/> Yourself. If someone can claim you as a dependent, do not check box 6a. . . . } Boxes checked on 6a and 6b b <input type="checkbox"/> Spouse } No. of children on 6c who: <div> c Dependents: <table border="1"> <thead> <tr> <th>(1) First name</th> <th>Last name</th> <th>(2) Dependent's social security number</th> <th>(3) Dependent's relationship to you</th> <th>(4) <input type="checkbox"/> if qualifying child for child tax credit (see page 15)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td><input type="checkbox"/></td></tr> </tbody> </table> </div> </div>				(1) First name	Last name	(2) Dependent's social security number	(3) Dependent's relationship to you	(4) <input type="checkbox"/> if qualifying child for child tax credit (see page 15)					<input type="checkbox"/>					<input type="checkbox"/>					<input type="checkbox"/>					<input type="checkbox"/>
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NAVAL COMPUTERS



**SINCE THE FIRST
DAYS OF NTDS, ERA
LEGACY COMPANIES
HAVE PROVIDED
MISSION CRITICAL
COMPUTERS FOR
EVERY US NAVY SHIP
AND SUBMARINE**

STATE AND LOCAL GOVERNMENT



**SYSTEMS AND SERVICES
TO KEEP GOVERNMENTS
FUNCTIONING SMOOTHLY
AND EFFICIENTLY**



SPACE SHUTTLE SIMULATION



**COMPUTER-
BASED
SIMULATION
OF SPACE
SHUTTLE
OPERATIONS
ASSURES
MISSION
SUCCESS**

PUBLISHING

UNISYS SUPPORTS
OVER 130
PUBLISHERS AND
MORE THAN 16,000
JOURNALISTS
WORLDWIDE



THE LEGACY OF



Unisys

TELECOMMUNICATIONS

UNIVAC AND LOCKHEED
MARTIN PRODUCTS AND
SERVICES ENABLE
STATE OF THE ART
WORLDWIDE
COMMERCIAL AND
MILITARY
COMMUNICATIONS
SYSTEMS



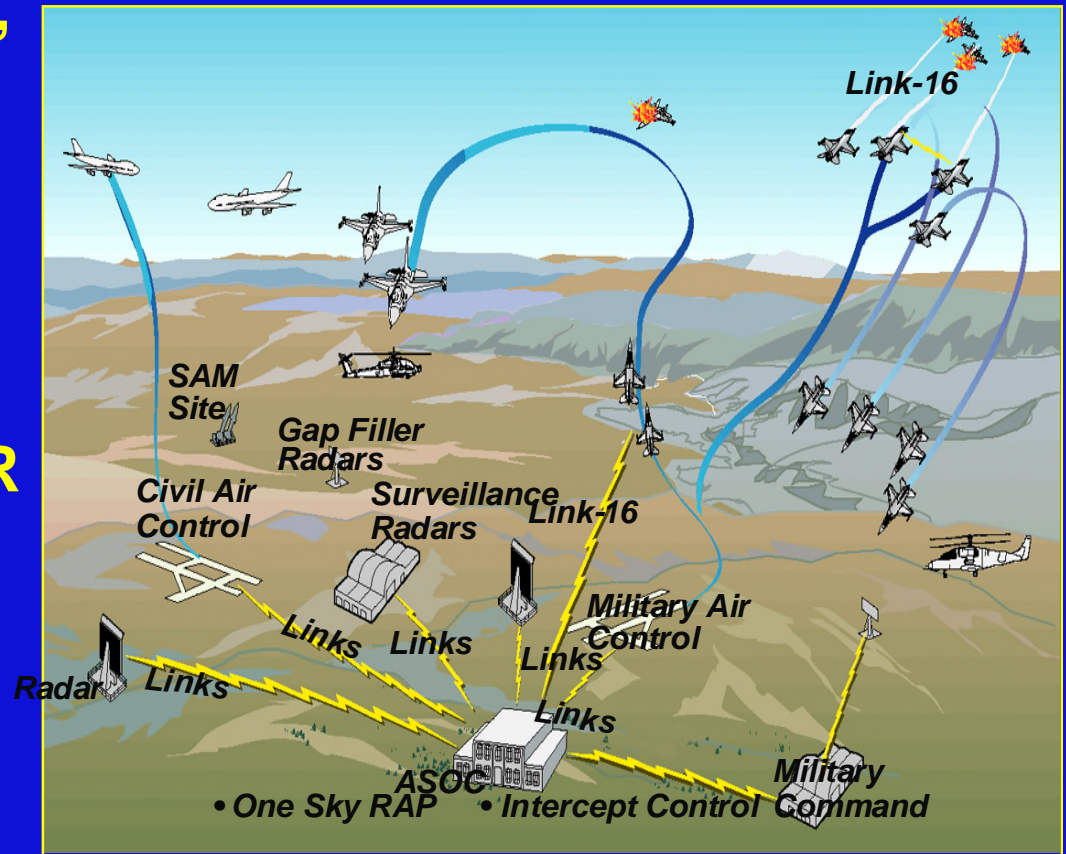
AIRCRAFT COMPUTERS

**RUGGED
MISSION
COMPUTERS
FOR TODAY'S
INFORMATION-
DRIVEN
MILITARY**



MILITARY COMMAND AND CONTROL

INTEGRATED SENSOR,
DATA, AND
COMMUNICATIONS
SYSTEMS PROVIDE
EFFECTIVE
MANAGEMENT OF
MILITARY FORCES FOR
THE UNITED STATES
AND ALLIED
PARTNERS.



INTERNATIONAL MARKETS

TODAY, UNISYS AND LOCKHEED MARTIN PRODUCTS SPAN THE GLOBE. THOUSANDS OF BANKS, BUSINESSES, MULTINATIONAL CORPORATIONS, FOREIGN MILITARIES, AND GOVERNMENT AGENCIES WORLDWIDE CONTINUE TO BENEFIT FROM MINNESOTA INNOVATIONS.



THE LEGACY OF



**ENGINEERING RESEARCH ASSOCIATES
STARTED AND GREW QUIETLY IN THE YEARS
FOLLOWING WWII. IT ESTABLISHED A
LEGACY OF HARD WORK, VISION,
INNOVATION, AND EXCELLENCE THAT
SERVED IT AND ITS SUCCESSOR COMPANIES
WELL. THIS LEGACY CONTINUES TODAY
AND INTO THE FUTURE, CONTINUING TO
SERVE MINNESOTA AND THE WORLD,
TOUCHING OUR LIVES EVERY DAY.**

