

# Eaton Metal Products



Since 1919

# Where Did the Eaton Name Come From?

- ◆ Albert Nathaniel Eaton was born August 30, 1859 in Quincy, MA.
- ◆ Little more is known of the early years of A.N. Eaton.

# 1880 - 1898

## In the Beginning

- ◆ Albert Nathaniel Eaton opens A.N. Eaton General Store in the Arizona Territory – 1880
- ◆ A.N. Eaton General Store remains open in AZ until the end of the mining boom in 1898.



# 1898 - 1903

- ◆ In 1898, Eaton moved his General Store to Kansas where it remained until 1903.
- ◆ In Kansas, Mr. Eaton purchased the rights to a stock watering tank from a nearby tin shop.
  - This purchase launched Eaton into metal fabrication.



# 1903 – 1910

- ◆ Nebraska & Iowa Steel Company is formed.
- ◆ 24 South Grant Street – Omaha, NE
- ◆ Eaton manufactured water and grain tanks at this location until 1910. Growing orders forced the company to a larger facility.



# 1910 – 1919

## Nebraska & Iowa Steel Company

- ◆ Moved to 13<sup>th</sup> & Willis in Omaha, NE.
- ◆ Orders continued to grow and by 1916 there were over 50 employees.



# How did the Eaton and Travis Families Cross Paths?

◆ Good question!



# The Eaton Family

## ◆ Eaton Family

- Albert Eaton and his wife Luella Little were married prior to 1880.
- The Eaton's were unable to have children and spoiled their niece Josephine Craig who lived nearby in Omaha.
- Josephine grew up around the business and became quite involved. Mr. Eaton was quite fond of Josephine and his wish was that she would marry someone worthy of the business.

# The Travis Family

- ◆ In 1916, John Raymond Travis was working as a bank teller in Omaha & began dating Josephine Craig, Mr. Eaton's niece.
- ◆ Shortly thereafter, J.R. Travis left the bank and went to work for Mr. Eaton.
- ◆ J.R. and Josephine would marry May 10, 1916 and the families were linked forever.

# Notable Events & Achievements 1880-1919

- ◆ A.N. Eaton General Store opened its doors in 1880.
- ◆ 1898 – A.N. Eaton purchased the rights to a stock watering tank.
- ◆ 1903 – Started Nebraska & Iowa Steel Company.
- ◆ 1916 – Josephine Craig and J.R. Travis were married.
- ◆ 1919 – The Denver shop opened.



# 1919-1929

- ◆ The end of World War I.
- ◆ Teddy Roosevelt Died.
- ◆ The Classic Dempsey-Willard fight.
- ◆ United Artist was formed by Mary Pickford, Charlie Chaplin, Douglas Fairbanks & D.W. Griffith.
- ◆ James a Travis was born.

# 1919-1929



- ◆ On June 10, 1919, Eaton Metal Products Company Denver was incorporated under the laws of the state of Nebraska.
- ◆ J.R. Travis would be at the helm of this operation.
  - (1841 Wazee)

# Eaton's First Products & Customers

- ◆ (100's) 55-Gallon Drums – Continental Oil Company (CONOCO)
- ◆ (6) Pump Skirts – Denver Powerine Company
- ◆ (6) 300-Gallon Tanks – CONOCO
- ◆ (1) 8,400-Gallon Tanks & (1) 12,600-Gallon Tank – F&F Bannell
- ◆ (2) 1,000-Gallon Tanks – Aero Oil Production



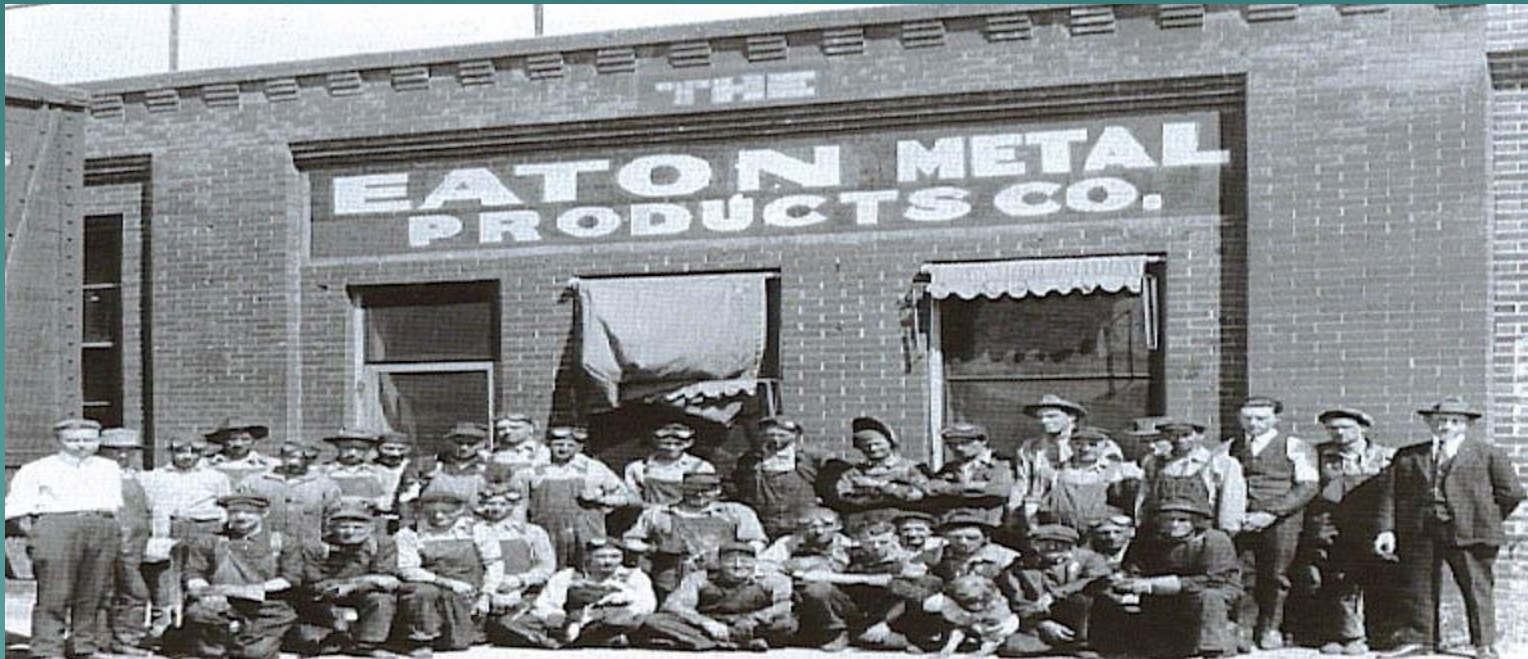
# Early 1920's

- ◆ In the late months of 1920, business crashed.
  - J.R. Travis was forced to diversify from tanks into “specially designed” products.



# 1922

- ◆ J.R. Travis began fabrication of the new Denver facility @ 48<sup>th</sup> & York.
- ◆ Travis moved Eaton to 33<sup>rd</sup> & Walnut to accommodate the design and fabrication of new and larger products while the facility at 48<sup>th</sup> and York was constructed.





# Notable Achievements in the 20's

- ◆ Eaton delved into truck tanks.
- ◆ Eaton opened its operation at 48<sup>th</sup> & York in 1924, where it currently operates today.
- ◆ In 1927, Travis instituted one of the first pension plans in CO through John Hancock.
- ◆ October 24, 1928, Eaton opened a shop in Great Falls, MT. Within 2 years, the company moved its operation to Billings, MT due to pressure from the union.
- ◆ In 1929, Eaton Metal in Denver closed out the year with \$402,720 in sales & profits of \$44,088.
- ◆ Outlook was bright for the future!



# 1930-1939 – The Great Depression

- ◆ At first, Eaton seemed Depression Proof. Sales for 1930 topped \$500,000 driven by orders for larger fitted transport tanks for bigger, more powerful gasoline delivery trucks.
- ◆ However, the slowdown was inevitable.
  - Eaton was forced to diversify again.

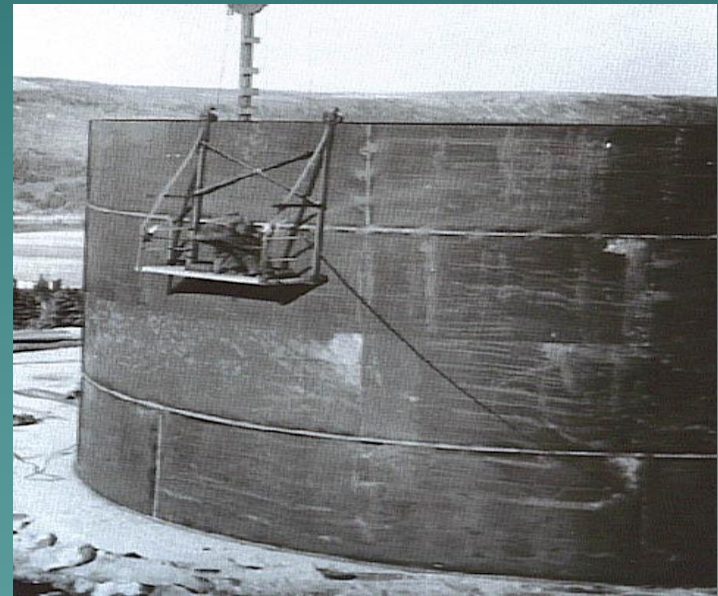
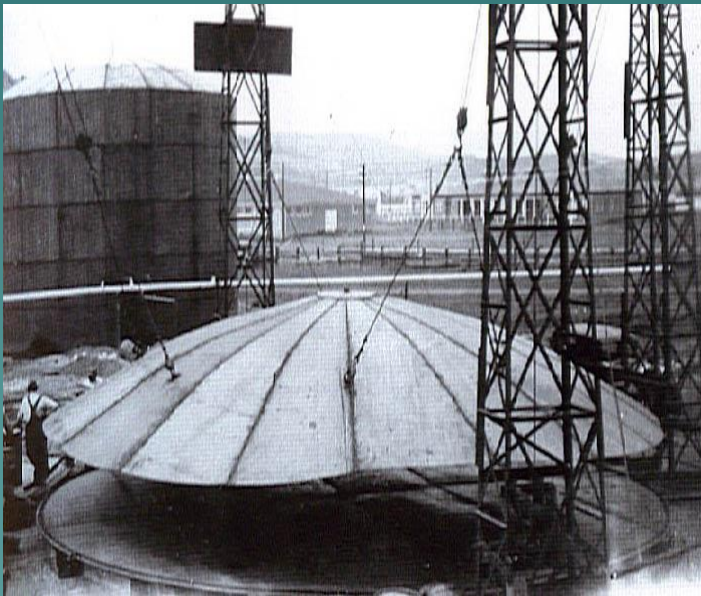
# 1930-1939

- ◆ Eaton began to install pumps and tanks for gasoline service stations.



# 1930-1939

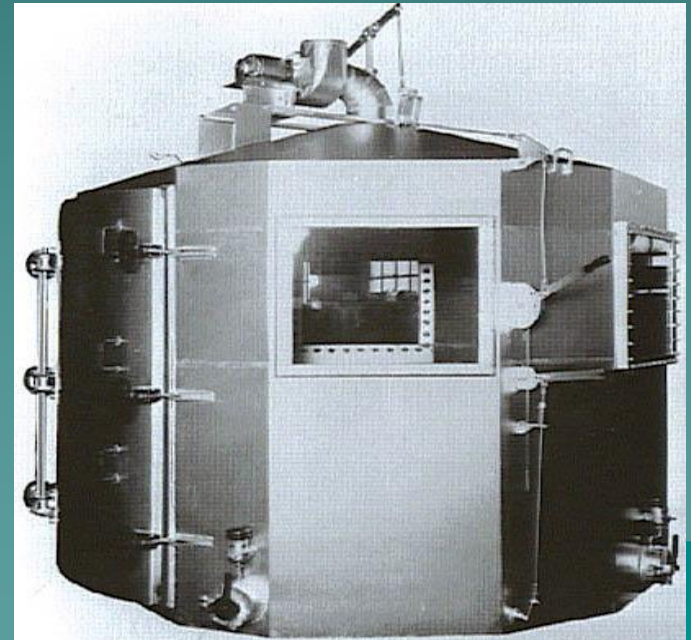
- ◆ Eaton also got into the field erected tank business.





# The “Dying” Business of the 1930’s

- ◆ Colorado Governor Edwin Johnson asked J.R. Travis to design a more humane way of executing prisoners with the use of lethal gas.
- ◆ The Gas Chamber was born.



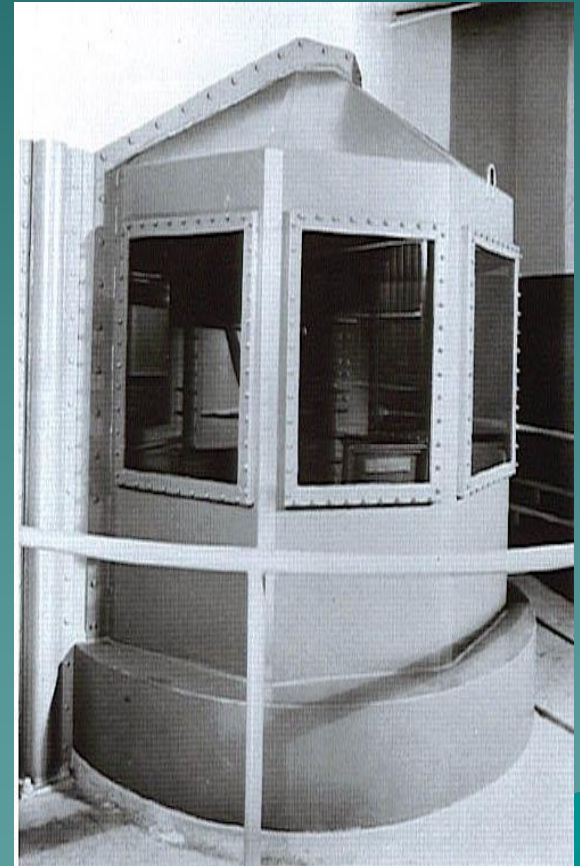
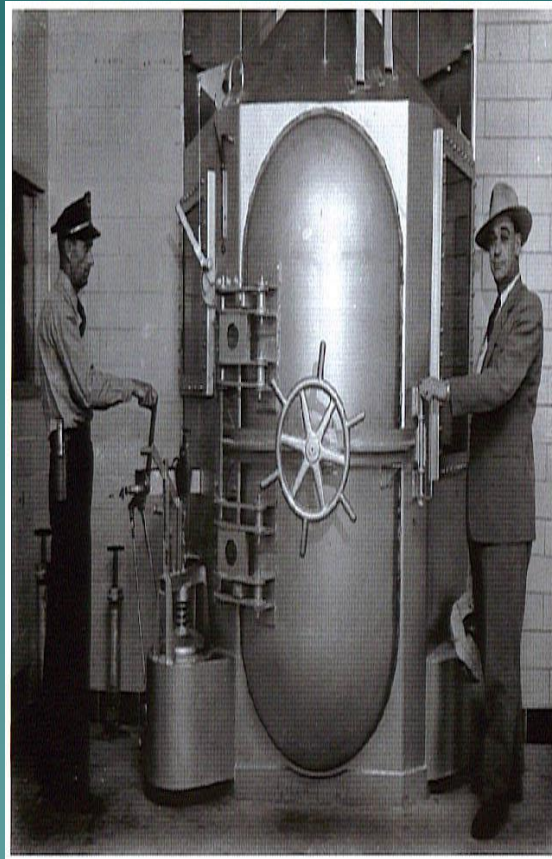
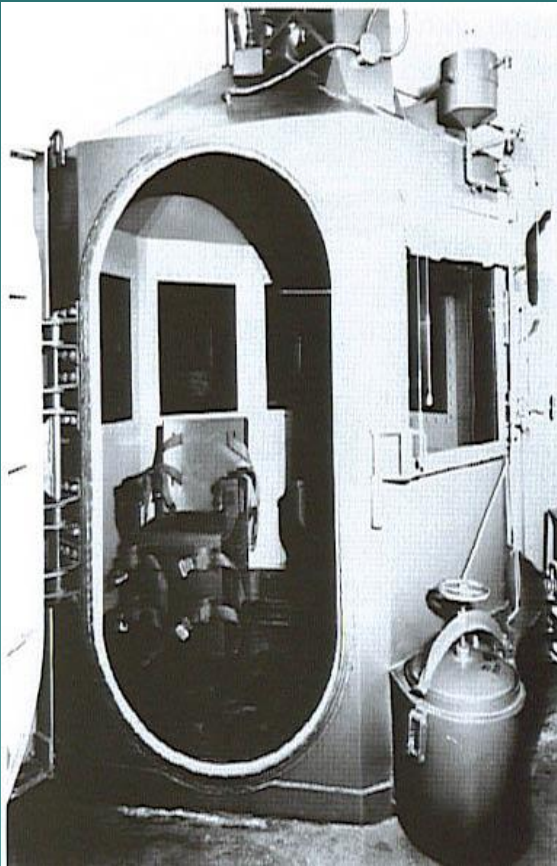
# How the Chamber Worked

- ◆ The lethal gas chamber is first produced in 1933.
- ◆ Active Ingredients:
  - 1.5oz of cyanide pellets
  - 2 quarts of sulfuric acid
  - 5 quarts of water
- ◆ The cyanide pellets were mechanically lowered into the acid.
- ◆ A cloud of toxic gas would fill the chamber.



# It's Best To Be Outside Looking In!

## Two Seater - What a View - San Quentin





# Gas Chamber Sales

- ◆ Colorado – 1933 (Three Seater)
- ◆ Missouri – 1937 (One Seater) - \$3,570
- ◆ Oregon – 1938 (One Seater) - \$3,590
- ◆ Fed. Govt. – 1938 (San Quentin)
  - Two Seater
  - \$5,000
- ◆ Other Gas Chamber Sales – WY, AZ (1950), MS (1955), MY (1956) & NM (1956).

# Last Gas

- ◆ Final gas chamber built in 1956 for CO.
  - First execution – John Gilbert Graham
    - ◆ Convicted of blowing up a DC-6 after taking off from Stapleton Airport.
- ◆ The “last gas” was Walter LeGrand, on March 4, 1999.
  - The execution took place in AZ as an apparent protest against the death penalty. A week prior his brother Karl had chosen lethal injection.
- ◆ As you can see, this is a dying business without a single registered complaint!

# Notable Achievements in the 30's

- ◆ Entered the field erected tank business.
- ◆ Entered the Oil Equipment Business.
- ◆ Designed, fabricated and patented the lethal gas chamber.
- ◆ The Denver Plant acquired ASME "U" Stamp #74, which we still have today.
- ◆ A.N. Eaton incorporated a plant in Albuquerque, NM in 1933.

# 1940 - 1945

- ◆ WWII – Eaton was heavily involved prior to the U.S. entering the war.
- ◆ 1941
  - Special War Production 20.6%
  - Filling Station Equipment & Service 15.6%
  - Misc. Sheet & Plate Production 14.2%
  - Gasoline & Oil Underground Equipment 10.1%
  - Gas Storage Tanks & Equipment 7.5%
  - Truck & Transport Tanks & Body Parts 7.4%
  - Water Storage Tanks 5.3%
  - Gasoline & Oil Underground Tanks 4.9%
  - Other Products 14.4%

# WWII – DENVER: Shipyard of the Rockies

- ◆ Denver thrived as Government Contracts moved from CA to CO.
- ◆ Eaton Metal Products Company – Denver Plant – U.S. Navy Contracts
  - 1942 - \$1,943,569
  - 1943 - \$3,189,979
  - 1944 - \$2,958,827
  - 1945 - \$2,526,794

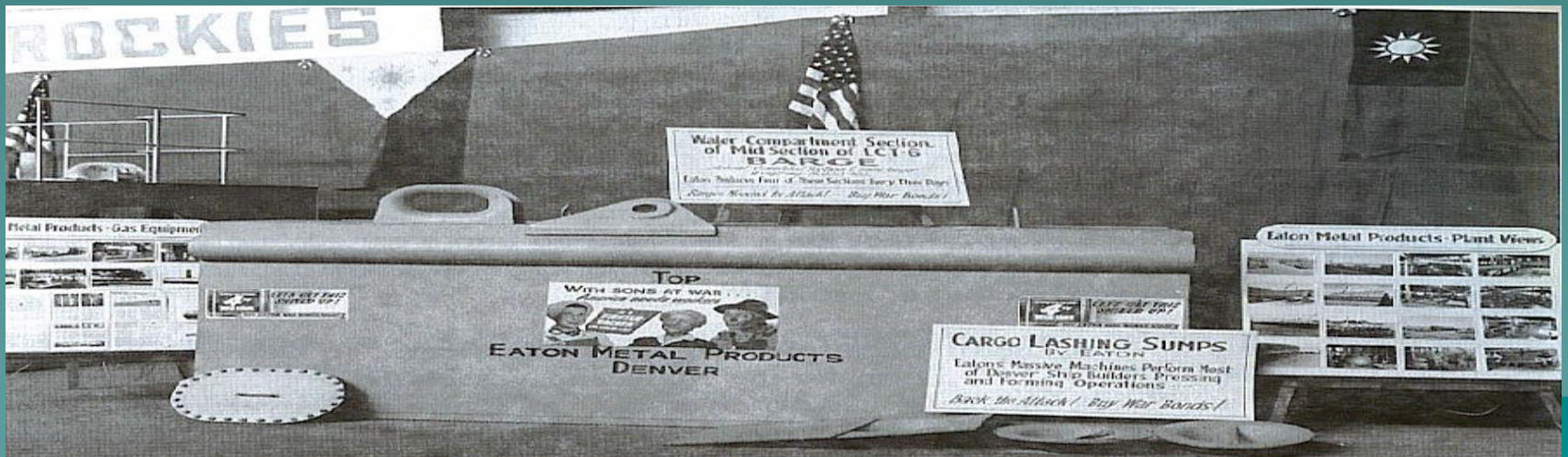
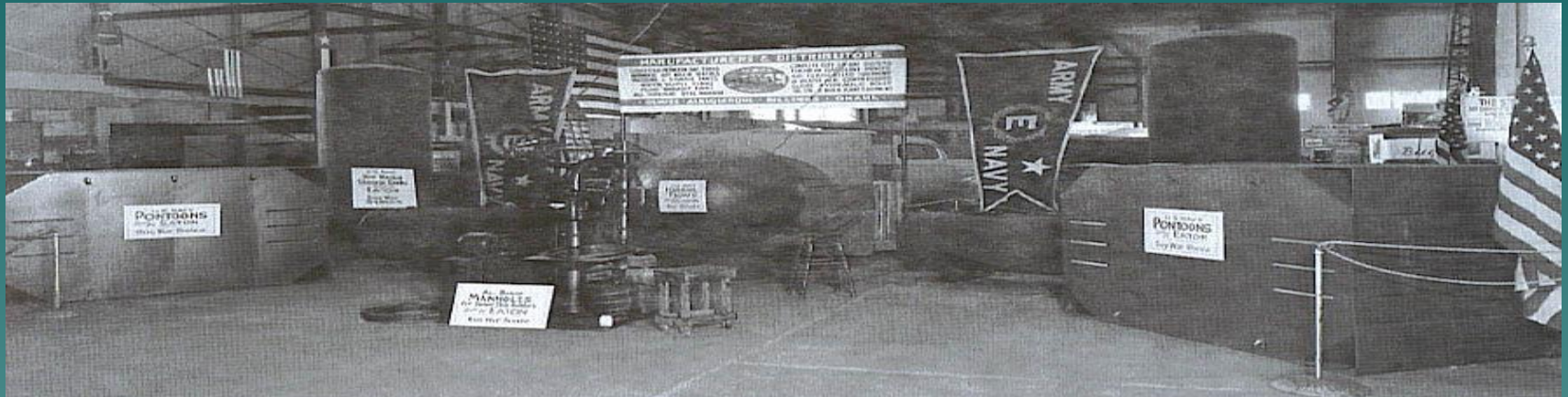


# J.R. Travis & Admiral Friedell





# Some of the Products



# Notable Achievements & Events

## 1940 - 1945

- ◆ A.N. Eaton incorporated a plant in Omaha on May 1, 1941.
  - This plant received the Army-Navy “E” award December 8, 1942 for the production of 54,000 pontoons in 2 years, the most in the U.S. by any plant.
- ◆ Jim A Travis and Jane Grace Craven were married May 15, 1942.
- ◆ A.N. Eaton died March 29, 1943 at the age of 83.
- ◆ The Denver plant received the “E” award April 25, 1943 for the production of pre-fabricated ship hulls.
- ◆ Timothy J Travis was born November 11, 1944.
- ◆ The Albuquerque, NM plant received the “E” award May 6, 1945 for the production of buoy’s and pontoon’s.
- ◆ After the war, Jim A Travis came to work full time.

# 1946 - 1953

## ◆ Post War Expansion

### – From wartime products to:

- ◆ Butane & Propane Tanks
- ◆ Large Water Storage Tanks
- ◆ Steel Service Stations & Other Structural
- ◆ Sectional Plate Pipe
- ◆ Corrugated Metal Pipe
- ◆ Truck Tanks

### – New Products

#### ◆ Gasair Machine

- Mixed either butane or propane to get the desired BTU content to be burned in natural gas equipment.



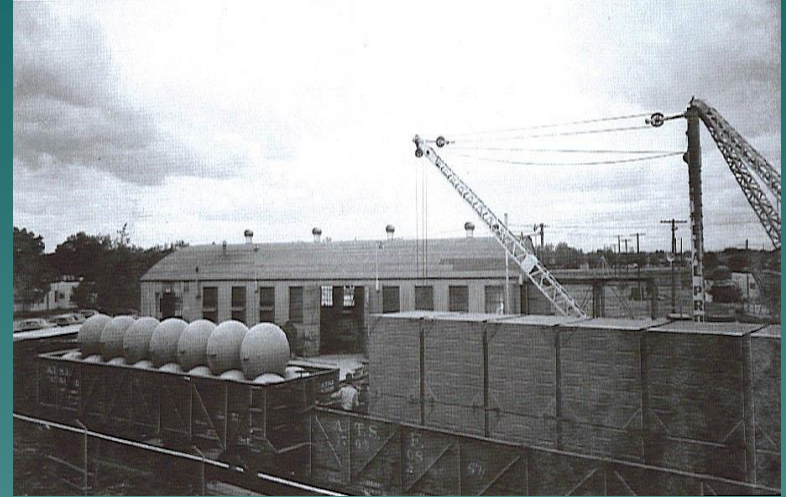
# 1950 Plant Area

- ◆ With the assistance of 3 large facilities and mounting orders, Eaton continued to grow.
- ◆ In 1950, Eaton had manufacturing facilities in Denver, Albuquerque & Billings.
  - Under Roof Mfg Area: 84,320 sq.ft.
  - Open Air Mfg Area: 9,900 sq.ft.
  - Warehouse Area: 21,000 sq.ft.
  - Storage Area (Open Air) 444,350 sq.ft.

# Shops - 1950



Billings, MT



Albuquerque, NM

Denver, CO – No Photo Available

# 1946 – 1953 Notable Events & Achievements

- ◆ Eaton Manufacturing plant opens in Salt Lake City, UT.
- ◆ The Salt Lake plant became an authorized ASME “U” stamp holder.
- ◆ Trig Travis was born in 1952.
- ◆ John Raymond Travis II “Hap” was born February 18, 1953.
- ◆ February 25, 1953, J.R. Travis died of cancer at the age of 63.
- ◆ Jim A Travis became President at age 34.



# Words of Wisdom – J.R. Travis

- ◆ Clear your desk of all papers except those relating to the immediate problem at hand.
- ◆ Do things in order of importance.
- ◆ Don't keep putting off decisions.
- ◆ Learn to organize, deputize & supervise.

# 1953 – 1959 – Time for Transition

- ◆ America was transitioning as a country:
  - The Korean War Ended.
  - Julius & Ethel Rosenberg were electrocuted for selling atomic secrets to the Soviets.
  - The NY Yankees won the World Series for the 5<sup>th</sup> straight year.
  - Marilyn Monroe posed as the nude centerfold in the first issue of Playboy.

# Eaton's Transition

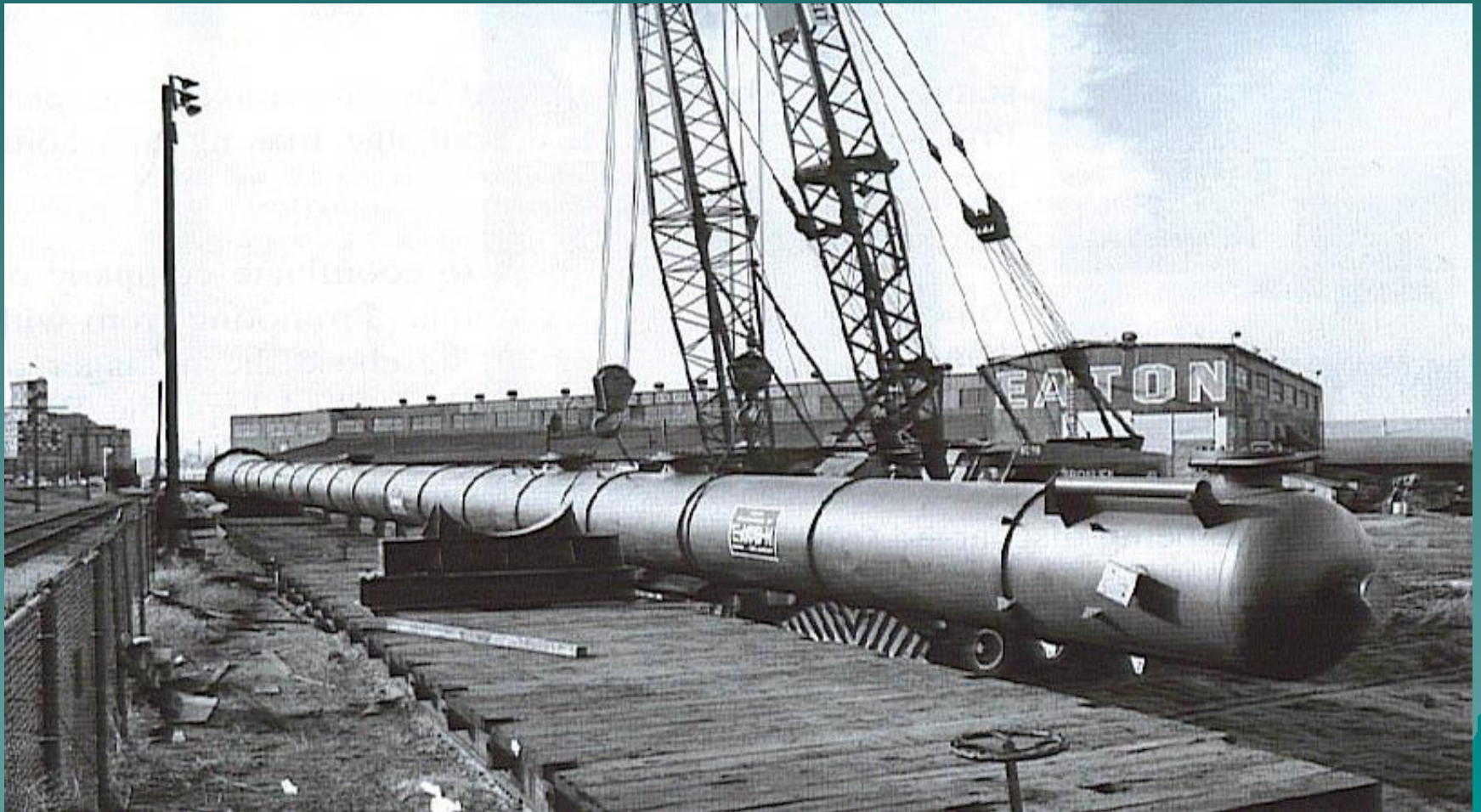
- ◆ An era ended with J.R. and a new one began with Jim A Travis "Tuffy."
- ◆ J.A. Travis was saddled with many problems:
  - Convincing the "old timers" he was up to the challenge.
  - Battling the increasing production & administrative costs.
  - Expanding Eaton's product line.



# New Products

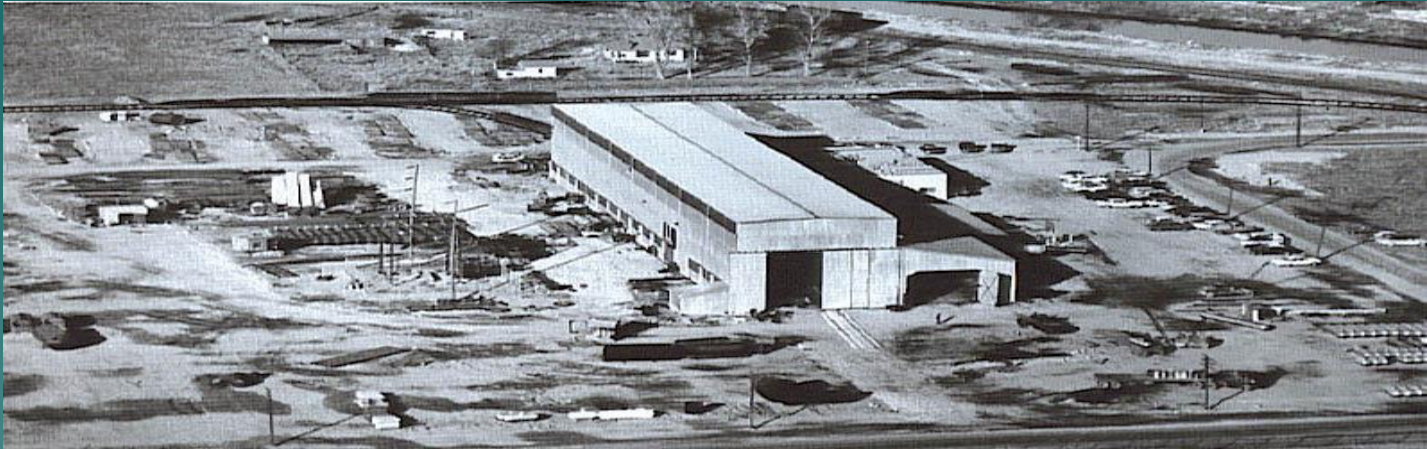
- ◆ Heavy Focus on ASME Vessels
- ◆ Bulk Plants – Gasoline – Oil – LPG
- ◆ Air Compressors
- ◆ Light Poles
- ◆ Service Station Equipment & Pumps
- ◆ Tanks of All Types & Sizes
- ◆ Swimming Pools
- ◆ Hoists
- ◆ Hot Water Generators
- ◆ Pumping Units
- ◆ Grain Bins
- ◆ Loading Docks

# 1958 – (27) 156' Cracking Towers





# 1959 – Salt Lake Plant Moved to its Current Location



# 1953 – 1959 Notable Events & Achievements

- ◆ Most significant product expansion to date in Company's history.
- ◆ Salt Lake City operation moved to its current location in 1959.
- ◆ Eaton resumed bidding military contracts for new military needs.



# 1960 - 1966

- ◆ Nuclear energy technology.
- ◆ JFK & Richard Nixon clashed in the first televised presidential debates.
- ◆ The civil rights movement was gaining momentum.
- ◆ Cassius Clay won gold in the Olympic Games in Rome.
- ◆ Cold War gripped the U.S.

# 1960 – 1966

- ◆ Eaton Metal Benefited:
  - \$2M contract at Lowry AFB to build an underground complex.
  - \$12M contract at Lowry AFB, Mountain Home in ID and Larson Air Base in WA to supply & install all underground tunnels and silos for the Titan missiles.
  - The threat of nuclear war created demand for fallout shelters.

# Nuclear Fear Drove Sales

- ◆ Complete family protection cost \$1,349 + \$325 for installation.

**SURVIVAL SECURITY NOW!**

with the new **"RADI-GARD"** Mark IV  
**Radiation Fallout Shelter**

by **EATON METAL PRODUCTS CO.**, builders of the underground radiation-proof tunnel system for the protection of operating personnel of the Titan Missile Installation.

**COMPLETE FAMILY PROTECTION . . . Heavy Steel Plate Construction, Completely Waterproof!**

Protect yourself and your loved ones from fatal atomic fallout in event of nuclear explosion! According to latest reports 97% of the population CAN survive atomic blast if adequate protection is provided from **FALLOUT**.

The new EATON "RADI-GARD" repels radioactive fallout and provides that protection required for survival. Eaton's Fallout Shelters are designed to the most rigid Civil Defense Specifications . . . Providing more adequate space than that suggested for up to 9 persons (96 sq. ft.).



SEPARATE COMPARTMENTS —			
COMP. 1 Blankets & Bedding	COMP. 2 Food Supplies	COMP. 3 Water Storage	COMP. 4 Survival Equip.

The unique construction of the "RADI-GARD" provides more than ample, out-of-the-way storage under the wooden floor. Easy access to storage is provided by separate hatches. Because of this unique storage area more room is provided for moving about.

The outside coating is radiation repellent Fibre Impregnated Asphalt . . . the same coating and thickness as used in the Underground Titan Missile Sites. The inside is finished in restful pastel green color.

**"RADI-GARD" Standard Equipment Includes:**

- Air blower and intake, requires only 1 1/2 minutes operation every hour!
- Air Exhaust
- Fold-up bunks for four persons, with room for 5 additional bunks.
- Four under-floor storage areas.
- Wooden floor with access hatches.
- Entry hatch with ladder and second filter hatch.

A complete fallout shelter . . . Ready to place into the ground, to Civil Defense Approved Specifications.

# Late 1961

- ◆ In late 1961, sales dropped substantially as the government began cancelling orders.
  - Eaton had purchased materials needed for the defense contracts on credit. A costly error creating terrible financial problems.
  - Change orders to existing contracts were not being granted.
  - Jim Travis financed the company by mortgaging his house and life insurance policies.
- ◆ By the end of 1961, the government finally issued a change order, saving the company from economic peril.



# 1962 – 1966

## Refocusing on the Private Sector

### ◆ Customers

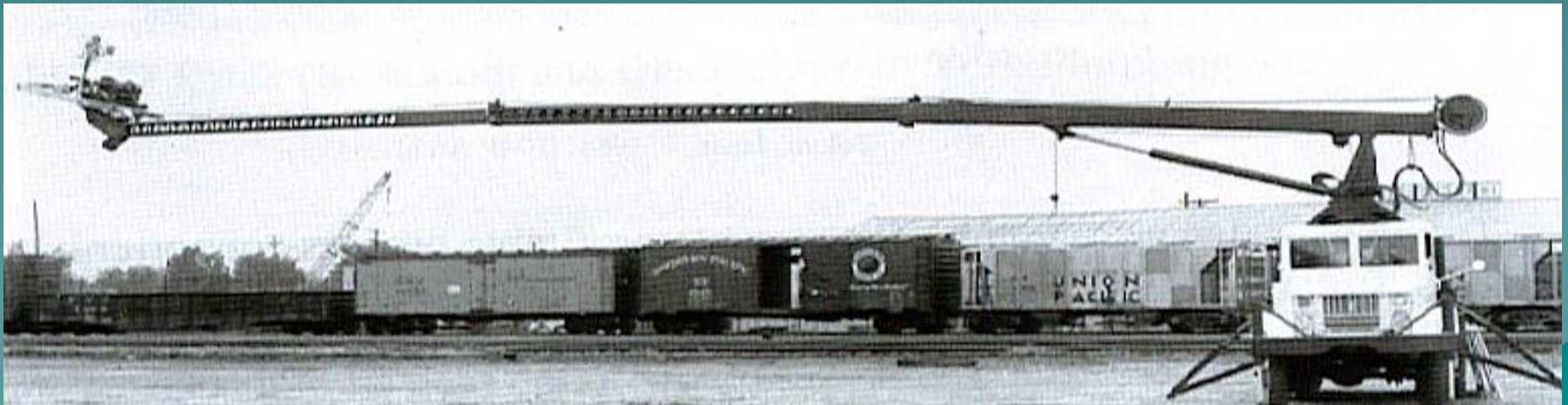
– Major Oil	36.74%
– Industrial	18.77%
– Jobbers	14.12%
– Contractors	10.80%
– Service Stations	9.90%
– LPG Distributors	5.74%
– Government	1.96%

### ◆ Products

– Tanks	26.10%
– Jobbing	25.70%
– Special Fab	19.40%
– Farm Tanks	9.90%
– Truck Tanks	7.40%
– LPG Tanks	5.77%
– Misc	2.70%
– Hot Water Tanks	1.50%
– Pickup Tanks	1.40%
– Water Tanks	.08%
– Septic Tanks	.05%
– Garages	.05%

# A New Product

- ◆ In 1963, Eaton purchased Ajax Iron Works and its Truco product line.
  - Specialized in designing & manufacturing equipment for telephone and utility companies.



# Major Customers

- ◆ Aerotech Industries
- ◆ American Fertilizer
- ◆ American Steel & Iron
- ◆ Bechtel Corporation
- ◆ California Oil Company
- ◆ Climax Molybdenum
- ◆ Colorado Interstate Gas
- ◆ Colorado School of Mines
- ◆ City of Colorado Springs
- ◆ Conoco
- ◆ Delta Engineering
- ◆ Empire Steel
- ◆ Great Western Sugar
- ◆ Illinois FLUD Truck
- ◆ Mack Truck
- ◆ Michigan Bell Telephone
- ◆ Mobil Oil Company
- ◆ Power Equipment
- ◆ Phillips Petroleum
- ◆ Sinclair Refining Company
- ◆ Shell Oil Company
- ◆ Standard Oil Company
- ◆ Tennessee Valley Authority
- ◆ Texaco Incorporated
- ◆ U.W. Government
- ◆ Western Electric
- ◆ Western Filter
- ◆ Western Knapp Engineering
- ◆ York Plumbing & Heating

# 1960 – 1966 Notable Events & Achievements

- ◆ The booking of military contracts, almost bankrupting the company.
- ◆ Refocusing on the private sector.
- ◆ The purchase of Ajax Iron Works.
- ◆ Tim Travis started November 1963.
- ◆ Mass production of propane tanks.



# 1967 - 1980

- ◆ The Green Bay Packers win Super Bowl I.
- ◆ American Soldiers were fighting in Vietnam.
- ◆ The first black justice, Thurgood Marshall, was appointed to the Supreme Court.
- ◆ #1 movies of the day were *The Graduate* & *Bonnie & Clyde*.

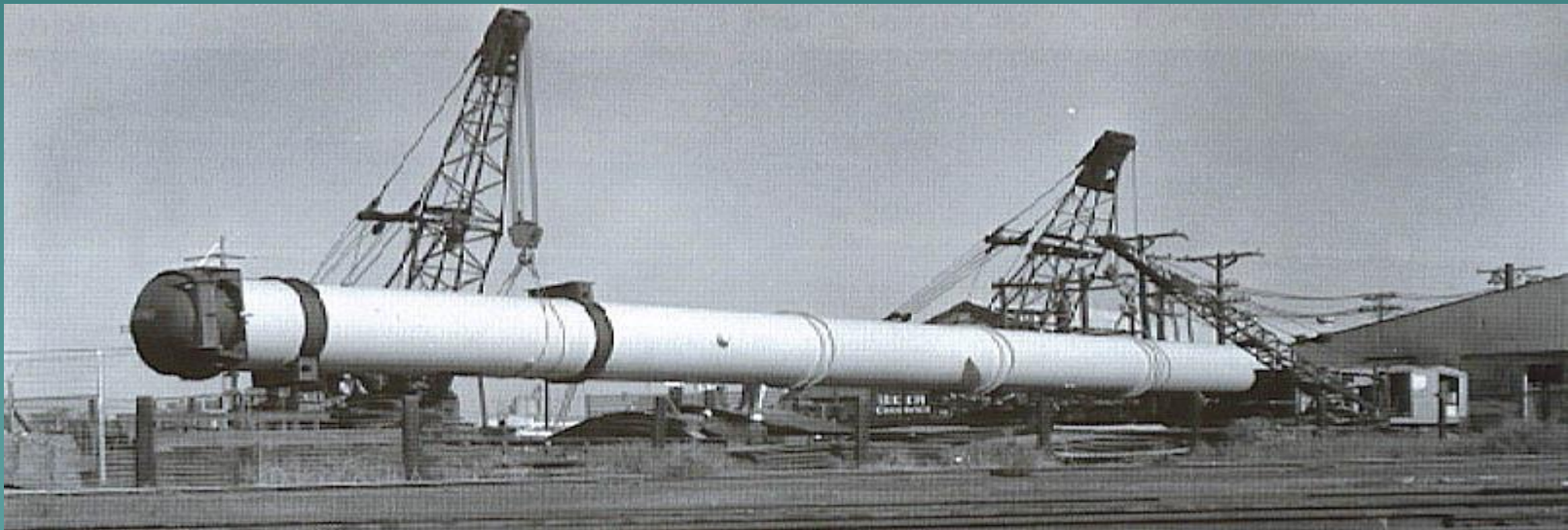
# The West's Growing Population and Infrastructure.

## ◆ 1964

- Oil Equipment 41%
- Special Fab 31%
- Utility Equipment 13%
- Propane 15%

## ◆ 1967

- Oil Equipment 31%
- Special Fab 43%
- Utility Equipment 18%
- Propane 8%

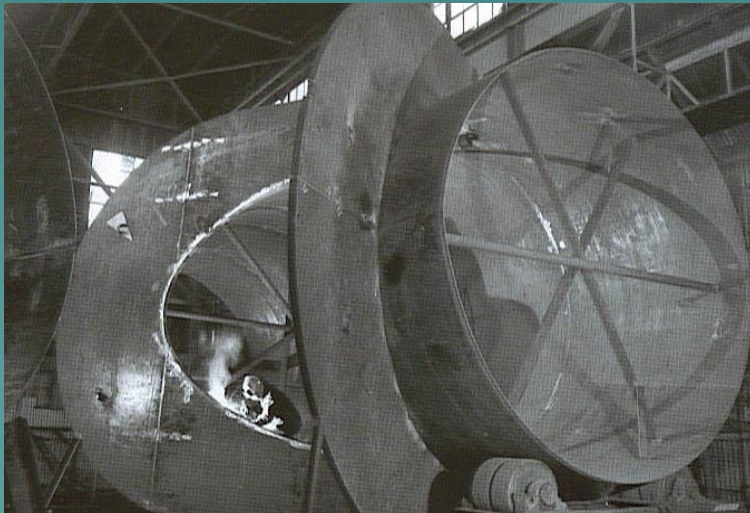


# Population Boom

- ◆ With the population boom in the west, energy demands grew.
  - Eaton participated in:
    - ◆ Current Creek Dam Project
    - ◆ Wyodak, WY Power Plant
      - Built what was then the world's largest air-cooled steam condenser.
      - Produced 1.5 million pounds of steel.
    - ◆ Laramie River Station
      - Ammonia, hydrazine, measuring, boiler blow-off, exhaust duct and clean & dirty oil tanks.
      - Several ASME vessels.
      - Tubular galleries – Some as large as 212' @ 13' ID.
      - Coal Conveyer System
      - 21 Coal Silos – 26' ID x 50' Tall



# Special Fab Began to Dominate





# 1967 – 1980 Notable Events & Achievements

- ◆ Tim Travis and Charlotte Thompson were Married April 8, 1967.
- ◆ Josephine Travis died January 11, 1968.
- ◆ Hap Travis joined the company 2-13-1973.
- ◆ Trig Travis joined the company 10-1-1973.
- ◆ Became very heavily focused on Special Fab.
- ◆ The Denver & Salt Lake shops became authorized ASME “R” Stamp holders in 1976.

# 1981 - 2008

- ◆ Stagflation gripped the economy.
- ◆ Ronald Reagan was nearly assassinated.
- ◆ The Iran hostage crisis ended.
- ◆ Oil was booming.

# Boom to Bust

- ◆ In the early 80's, Eaton experience both ends of the spectrum.
  - 1980-1981: Oil & Gas related products comprised 45% of Gross Sales.
  - 1982: Boom went to bust. Eaton's business level fell of 50% practically overnight.
- ◆ Closed the Cheyenne, WY shop 1982 as a result of downturn in the oil field.



# Serious Changes

- ◆ Eaton implemented many changes to survive the downturn in business:
  - Implemented a J.I.T. philosophy.
  - Changed payment terms:
    - ◆ From – 80-90% at shipment.
    - ◆ To – Up front money & progress payments.
  - Diversification
    - ◆ Focused heavily on growing the oil equipment (Sales & Service) business.

# Oil Equipment Continued to Grow

- ◆ Purchased Casper Pump in 1982.
  - CP focused on construction and service of the petroleum industry in WY.
- ◆ Purchased Royal Distributor Co in 1985.
  - RDC focused on Southern Colorado.
- ◆ Purchased Lange Wayne Company in 1985.
  - LWC focused on Salt Lake & surrounding areas.
- ◆ Opened Grand Junction office in 1990.
  - Focused on the Western Slope.
- ◆ Purchased Buckingham Equipment in 1994.
  - Focused on the Albuquerque market.
- ◆ Purchased Francone Equipment in 1994.
  - Focused on the front range.
- ◆ From 1985 – 1993, S&S grew at a rate of 25% per year.

# Special Fab

- ◆ A shift in philosophy came in 1984.
  - Shifted from “pots & pans” to value add and big & heavy.
- ◆ 1988 – Mama Bear
  - Widths up to 12’ and thickness up to 2.5”
- ◆ 1990 – Papa Bear
  - Widths up to 13’-4” and thickness up to 6.5”
- ◆ CADD System integrated into design and engineering.
- ◆ Pocatello, ID facility opens in 1991.
  - Heavy lift and stress relieving operation.



# Special Fab Equipment





# Autoclaves - Special Fab

## ◆ Autoclaves

- (1) 15' x 75' @ #425,000 - 1989
- (1) 15' x 92' @ #620,000 - 1991
- (2) 15' x 92' @ #620,000 - 1992-3
- (3) 15' x 92' @ #620,000 - 1994-5
- (1) 19' x 76' @ #1,000,000 - 1995
- (1) 19' x 76' @ #1,000,000 - 1997
- (2) 14' x 76' @ #325,000 - 2006-7





# Current Eaton Metal Shops



# Current Industries

- ◆ Oil & Gas
- ◆ Petrochemical
- ◆ Power Generation
- ◆ Mining

# 1981 – 2008 Notable Events & Achievements

- ◆ November 12, 1981, Tim Travis became President of Eaton Metal.
- ◆ 1984 – Made the shift from “pots & pans” to larger, value added products.
- ◆ 1989 – Fabricated the first of 11 autoclaves.
- ◆ 1990 - CADD system integrated into design & engineering.
- ◆ 1990 – Installed plate roll 6.5” thick & 13’-4” wide.
- ◆ 1991 – Opened the Pocatello, ID facility.
- ◆ 1993 – Implemented Intergraph 3-D Cad System for Engineering.
- ◆ 1994 - Installed State-of-the-Art Plate Burning machine in SLC Plant.
- ◆ 1994 – Jim A Travis “Tuffy” died after battling a long term illness.
- ◆ 2005 – Implemented Pro-E 3-D Cad System for Engineering.
- ◆ 2006 – Installed New State-of-the-Art Burning Machine, SLC Plant
- ◆ 2006 – Implemented Square Wave Welding Technology, POC Plant.
- ◆ 2007 – Implemented Microsoft Project Planning and Scheduling Software.
- ◆ 2007 – Jane Craven Travis died.
- ◆ 1981-2008 – Grew our Sales & Service operation by over 1000%.



# 2008 & Beyond

- ◆ Looking Forward:
  - Energy, or lack thereof.
    - ◆ Tremendous opportunities for fabricators & oil equipment companies:
      - Oil & Gas
        - ◆ ASME pressure vessels & storage tanks
      - Renewable Energy
        - ◆ Wind – Wind Towers
        - ◆ Hydro – Penstocks & other products
        - ◆ Solar – Pressure Vessels
      - Bio Fuels
        - ◆ Modifications to existing filling stations
      - Nuclear?
        - ◆ Several types of fabricated products
      - Coal?
        - ◆ ASME vessels, tubular galleries, tanks, structural steel etc...
    - ◆ WE ARE GOING TO NEED ALL OF IT!
      - Here's why.

# Energy Across the Country

## ◆ Eaton's Outlook:

- We see a pendulum across the country.

### ◆ Short Term:

- Tremendous push for green energy, regardless of cost.

#### ◆ Example: Ethanol

- Higher energy costs and possibly brown or black outs.

### ◆ Long Term:

- A combination of fossil, renewables & nuclear.

# 5<sup>th</sup> Generation???



# Questions???

10/3/2014

2008 STI Summer Meeting

