South Bay Historical Society Bulletin

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Rohr Exhibit in the Chula Vista Heritage Museum

A new exhibit on the history of the Rohr Aircraft Corporation opened January 29 at the Chula Vista Heritage Museum. This is the second exhibit produced by the South Bay Historical Society for the Museum that opened in January 2016 with the Great Flood Centennial exhibit. The Rohr company had a profound impact on the history of Chula Vista and the aircraft industry. It was the world's largest producer of engine power packages from World War II to the 1990s. Fred Rohr pioneered the concept of a "feeder" subcontractor supplying vital airplane components to the factory where the plane was assembled. He developed new tools such as the drop hammer and new materials such as honeycombed titanium. The company employed up to 10,000 workers in its 67 buildings on 162 acres along the Chula Vista bayfront from G Street to J Street. The influence of the Rohr weekly payroll was dramatically demonstrated in 1954 when Fred Rohr paid his workers in silver dollars, flooding the community with bags of coins. Rohr was sold to BF Goodrich in 1997 and became Aerostructures Group. In 2012 United Technologies Corp. of Farmington, CT, acquired Goodrich and the former Rohr company became part of UTC Aerospace Systems. Although the name has changed, Rohr remains a vital part of Chula Vista history.

Rohr Chronology

Frederick Hilmer Rohr was born May 10, 1896 in Hoboken, NJ, the son of Henry Gustav Rohr, a German immigrant.



1924 Fred Rohr established the Standard Sheet Metal Works in San Diego, working out of his garage.

1925 Rohr went to work for Ryan Airlines and moved his entire metal shop into the old fish cannery building at the foot of Juniper Street used to build the Ryan M-1 monoplane.

1927 Rohr was one of the "Nighthawks" working for Frank Mahoney who built the *Spirit of St. Louis* plane for Charles Lindbergh in the Ryan hangar at Dutch Flats. Fred Rohr, sheet metal foreman; O. R. MacNeal, final assembly foreman; Fred Ayres, doping and finishing foreman, and Lon Wheeler, welder, were the "Nighthawks" because they worked night and day from Feb. to May to build Lindbergh's plane.

1928 After Mahoney sold Ryan Airlines, Rohr went to work for George Prudden, one of the founders of

the Solar Aircraft Company. Prudden was a pioneer in manufacturing metal airplanes, and it was at this time that Rohr developed his drop hammer to shape metal parts.

1932 Rohr was hired by Boeing in Seattle to install his drop hammers.

1935 Rohr returned to San Diego and became the manager of Claude Ryan's new company, Ryan Aeronautical. When the European war broke out in 1939, aircraft orders surged in the U.S. as FDR called for 50,000 planes to defend America against Hitler.

1940 Rohr incorporated his own company Aug. 6, 1940, with help from Consolidated Aircraft's Reuben Fleet, and leased a 3-story building at 8th and J St. in downtown San Diego. In November 1940, Chula Vista gave Rohr 10 acres on the bay to build a factory.

1941 Rohr's first building on the Chula Vista bayfront was finished Feb. 1; second building on June 15.

1941 Rohr Employees Federal Credit Union was formed. In 1995, the name was changed again to Pacific Trust Federal Credit Union. By 2000, the charter was changed to a mutually owned federal savings bank, Pacific Trust Bank.



The "Nighthawks" with Charles Lindbergh in 1927. Fred Rohr is at the far right.



Rohr's first factory was an old furniture warehouse in downtown San Diego at 8th and J Street. The three-story brick building is still there today. The top two floors are offices and the bottom floor is the Social Tap restaurant. The building is directly behind Petco Park and the trees at the right are part of the landscaping for the entrance to the Park at the Park.

1941 Burt Raynes moved to Chula Vista and bought the home at 299 Hilltop that was built in 1929 for banker W.C. Stephens.

1942 Feb. Rohr delivered to Consolidated Aircraft the first set of four B-24 power packages only three hours before the delivery deadline of midnight, February 14, 1942. By 1945 Rohr had delivered 31,760 units for the B-24, 5,607 for the PB4Y2, and 520 for the PB2Y3, for a total of 37,887. It became the world's largest producer of airplane propulsion units.

1942 May. Rohr hired its first female employee; by 1944, 55% of Rohr employees were women.



Dick Wilson sold hot food to workers from five food trailers in the Rohr parking lot in 1943.

1942 June. Construction began on the Hilltop Village and Vista Square federal housing projects.

1942 Aug. 3. Monday bond rally at Rohr achieved 100% war bond sales.

1943 Feb. Food trailers by Dick Wilson served Rohr workers from parking lots.

1943 May 4. Ceremony for Army-Navy E award.



1943 June. World heavyweight boxing champion Joe Louis toured Rohr.

1943 July. Rohr leased the San Diego Country Club for employee recreation.



Consolidated PB2Y3 planes were converted in 1943-44 with larger engines to haul more cargo.



Fred Rohr and unidentified ladies walking on the Consolidated PB2Y3 conversion field in 1944

1943 Oct. Rohr took 41 PB2Y-3 airframes on consignment to be completed as PB2Y-3R long-range transports, or as PB2Y-4 or PB2Y-5. All PB2Y-5 models were equipped with JATO jet assist.

1943 Nov. 6 Rohr sponsored a war bond rally in Los Angeles with film stars Beryl Wallace and young Roddy McDowell.

1944 Rohr began building engine pods for the Lockheed P-2 Neptune.

1944 Sept. 24 was first Family Day Open House.

1945 Jan. Rohr employment peaked at 9800 in 1944, then dropped to 6355 by Jan 1945.

1945 May 17. First flight of the Lockheed P2V Neptune, a twin-engine patrol craft, with engine pods built by Rohr.



1947 June. The B-47 Stratojet was the first sweptwing bomber and the first with jet engines suspended below the wing on pylons. Rohr supplied Boeing with these unique engine nacelles.

1945 July. Rohr Aircraft Corp. became a subsidiary of International Detrola Corp. that was headquartered in Detroit.

1946 Professional wrestling was staged at the American Legion Stadium with 1400 seats between H and I streets on Bay Blvd. in the Rohr parking lot.

1947 Detrola, changed its name to the Newport Steel Compant.



1947 Rohr made power packs for the giant Boeing B-50 Superfortress bomber, built largest punch press in West for B-50 contract.

1949 Dec. 7. A new Rohr company was organized, after first leaving Detrola as the Harbor Aircraft Corporation on Oct. 18, then changing its name again to the Rohr Aircraft Corporation on Dec. 7.

1951 Oct. Rohr built the Riverside plant for B-50 power plant, and for Boeing KC-97.

1952 Contract to make engine pods and major airframe components for the Boeing B-52 Stratofortress.

1953 Mar. Rohr began making power packages for the DC-7, until replaced by DC-8 in 1958.



1954 Rohr is awarded a large contract for the Lockheed C-130 Hercules transport.



In Sept.1954 Fred Rohr bought the Manor and Old Adobe built in 1938 by Ruben Harrison for the Rohr Employes Recreational Club. It was often the location of the annual Halloween Carnival held for Rohr employees and families, and later for the people of Chula Vista. In 1958, 35,000 parents and children attended the two-day event, and Rohr was credited with dramatically reducing the holiday vandalism that had previously taken place in the city. In 1966, Rohr sold the mansion and 23 acres to the City of Chula Vista for \$60,000, when voters approved the City's plan to acquire an adjacent 138-acre golf course, privately owned by the Bonita Valley Country Club.







1954 On Dec. 10, Rohr's 5,547 workers were paid in silver dollars, flooding the city with 12 tons of coins.

1955 An assembly plant was opened at Winder, Georgia, for Lockheed's Hercules C-130.

1955 Contract signed to build the power packages for Lockheed's new turbo-prop Electra.

1955 Jan. Strike is called but the plant remains open during picketing. Strike lasts 6 weeks.

1956 Auburn WA plant opened for B-52 parts.

1956 Aug. The old 3-story brick building in downtown San Diego razed and departments were moved to Chula Vista.

1956 Nov. 11. was the first flight of the Mach 2 Convair B-58 bomber that used honeycomb skin.



B-58 Hustler

1957 Rohr began to offer scholarships to employees and children of employees.

1957 Rohr began a research and development program to develop a sound suppressor-thrust reverser for jet engines.

1957 Chula Vista plant installs its first computer, a vacuum tube IBM 650.

1957 Sept. The first flight of the Lockheed JetStar prototype with engine pods made by Rohr.

1957 Nov. Rohr patented the Tilting Arc to handle engines.

1957 Dec. 20 was the first flight of the Boeing 707. Rohr made engine pods and fuselage section.



Rohr designed the exhaust with sound suppression for the Boeing 707.

1958 May. Rohr employment is at "an all time high" with 10,028 employees at the Chula Vista plant.

1958 May 30. First flight of the Douglas DC-8 with Rohr nacelles and thrust reversers.

1959 The fill of 9 acres of bay front tidelands to be leased to Rohr; city planning to fill another 75 acres.

1959 New military orders included wing components for the North American B-70, Mach 3 bomber.



On Oct. 12, 1958, Fred Rohr took Earl Mountbatten fishing during the British admiral's tour of San Diego navy bases.



Rohr employees lined up each week at the clockhouse next to the H Street gate and guardhouse to receive paychecks until the clockhouse was demolished in 1959. In the middle of the parking lot beyond the clockhouse is the home of John Becerra who refused to sell his quarter acre and instead charged \$1.50 per week for parking (earning enough to send his kids to college).

1959 Rohr made propjet power packages for the Navy's new P3V-1 submarine hunter version of the Lockheed Electra.

1959 Stainless steel honeycomb panels are made for the Convair B-58 Hustler, and the McDonnell F-4H Phantom fighter. Rohr designed a machine to make honeycomb cores.



1960 Rohr began to diversify; its first non-aircraft product was a tracking antenna 60 feet in diameter for the Air Force, erected in Alaska. An area of 85,000 square feet on the west edge of the Chula Vista plant was paved for an antenna assembly pad.



1960 The Modular Components Corporation, a wholly owned subsidiary of Rohr, made prefabricated homes with complete bathroom

1960 Sept. Rohr installed new computer, the Remington Rand Solid State 80 Univac.

1961 Rohr dropped the word 'Aircraft' from its corporate name and the company became Rohr Corporation.

1961 Rohr had ten machines operated by numerical tape control, the latest being a filament winding machine of its own design, the first in the industry.



1961 Rohr's Space Products Division made components for the Polaris, the Arcas, and the Iris missiles, and pylons for the Hound Dog missile, as well as heat shields for the Agena rocket.



The world's largest solid fuel rocket nozzle was built in the Riverside plant's "Hall of Giants."

1961 Mar. Lockheed gave initial contract to Rohr for production of engine pods and pylons for the first five C-141 jet transport planes.

1963 Rohr won the contract to make engine pods for the Douglas DC-9.

1963 Rohr began design and manufacture of a 210foot spacecraft tracking antenna for the NASA station at Goldstone, CA, dedicated Apr. 29, 1966.

1964 Rohr signed contract with the Gilfillan Corporation of Los Angeles to build the antennas of the Navy's AN/SPS-48 Shipboard Radar System.

1965 Rohr's Marine Division built a 65-foot aluminum-hulled high-speed boat for the California Fish and Game Commission.

1965 The Space Products Division at Riversde delivered to Thiokol Chemical Corporation the world's largest solid fuel rocket nozzle, which was successfully fired in February.

1965 Nov. Rohr awarded engine pod contract for Boeing 737.

1965 Nov. 8. Fred Rohr died at age 69.



Burt F. Raynes was Rohr president 1963-70.

1966 Apr. Rohr received \$250 million order for Boeing 747 jumbo jet engine pods and pylons.

1966 Ronald Reagan spoke in the Rohr cafeteria on Friday, Sept. 30, his first political appearance in the South Bay as Republican candidate for governor.

1967 April. The DC-8 "Super 63" made its maiden flight with Rohr nacelles and thrust reversers.

1967 May. Boeing gave Rohr the contract to build engine pods for SST prototype.

1967 June. Rohr built a new automated warehouse at the Chula Vista plant using its patented Automove technology.



Rohr established its Brown Field jet engine test facility in 1968.



The biggest strike in the history of Rohr began Nov. 30, 1971 and lasted 63 days. Local 755 of the International Association of Machinists and Aerospace Workers (IAM) representing almost half of Rohr's 6,400 workers picketed the plant's main gate. After some violence, police enforced a court order allowing nonunion workers to enter the plant.





The first BART transit car left the plant in Feb. 1972 after the strike settlement allowed final assembly of the cars to begin.

1967 Oct. Rohr launched the first 35-foot welded aluminum workboat of a 19-boat order for the Navy.

1967 Rohr added the female voice "Mabel" to the new touch-tone Automated Data Acquisition and Retrieval system, called RADAR. The system, new and unique in industry, was developed in a joint effort by Rohr, IBM and Pacific Telephone.

1968 Oct. Rohr fabricated the outer-hull components for Lockheed's Deep Submergence Rescue Vehicles (DSRV).

1969 Feb. Rohr made the engine inlets and aft nacelles for the Grumman F-14 fighter jet.

1969 Mar. The British-French Concorde made its maiden flight March 2. Rohr produced all movable aerodynamic surfaces and engine bays for the planes.

1969 July. Rohr won contract to build 300 BART transit cars and constructed the new large Building 61 for the job on the site of the old Tyce plant on G Street.

1969 Nov. Rohr bought two French companies to make the high-speed air-cushion Aerotrain.

1969 Dec. Rohr leased 4.7 acres on Tidelands near J Street Marina for parking lot.

1969 Rohr at Chula Vista produced cases and domes for the Titan III rocket program.

1970 Jan. Rohr made conveyors and electrical controls to mechanize post office mail handling systems.

1970 Feb. Rohr hired to provide computer systems and programming for the new food marketing system developed by TeleMart Enterprises in San Diego.

1970 Rohr contracted to make 61 landing craft, each 73 feet long, for the Navy, to be produced in a new boat yard at the end of G Street.

1970 Rohr purchased the Flxible Company, an Ohiobased manufacturer of transit buses.

1971 Apr. Rohr purchased the San Diego Prestressed Concrete Company to build support structures and guideways for rail transit systems, air-cushion vehicles and people mover systems.

1971 Nov. Rohr changed its name to Rohr Industries, Inc.

1971 Nov. 28. The biggest strike in Rohr history lasted 63 days.



1972 Rohr Monocab PRT system was exhibited at Transpo72 in DC.

1972 Rohr bought the Monorail Division of Westinghouse Air Brake Company that designed and manufactured people movers, including the Wgasa Bush Line Railway at the San Diego Wild Animal Park.

1972 July 27. The first flight of the McDonnell Douglas F-15 Eagle that used engine casing made by the RohrBond process.

1974 June. Fred Garry became president.

1974 June. Rohr began contract on a high-speed, 2,200-ton air-cushion ship, the Surface Effect Ship (SES).

1975 Aug. Rohr's BART car contract ended; Washington Metro contract cancelled.

1975 Sept. Rohr began work on a contract for seven five-car turbine-powered passenger trains for Amtrak.

1976 Incorporation of Rohr Marine, Inc., to build Navy boats.

1976 Rohr was selected by Thiokol Chemical Corporation to build the large rocket motor cases for the Space Shuttle program.

1979 Dec. Surface Effect Ship cut from Pentagon budget.

1980 The McDonnell-Douglas MD-80, or "Super 80," entered service with Rohr nacelles.

1984 Rohr built a plant in Foley, Alabama, to make parts for the Lockheed C-5 Galaxy.

1984 Aug. Rohr won contract to build engine housing systems for the Airbus A320.

1986 Jan. Rohr dedicated a laboratory devoted exclusively to the development of carbon-carbon composites in Chula Vista.

1989 Rohr built a plant at Heber Springs, Arkansas.

1989 May. Rohr to provide nacelles for the Airbus A340 four-engine, long-range jetliner.

1990 Rohr plant built at San Marcos, Texas, to build titanium engine bay doors for the F-22 Raptor fighter.

1992 Rohr changed its name to Rohr, Inc.

1993 Bob Rau became president.

1996 Rohr plant built in Prestwick, Scotland.

1997 BFGoodrich bought Rohr, became Goodrich Aerostructures.

2005 buildings south of H Street were demolished.

2008 Mar. 27. dedication of historic Drop Hammer.

2012 July 26. United Technologies Corporation bought Goodrich and the Chula Vista plant became UTC Aerospace Systems Aerostructures.

2013 The Port District and the City of Chula Vista offered a plan for the bayfront that includes a resort conference center, hotel, retail and residential developments. The former Rohr plant is reduced to the current UTC plant , shown in gray between F and H Streets.



North Island Tour

SBHS members were given an exclusive tour of the North Island historic districts on Feb. 8 by Navy Cultural Resources Manager Alex Bethke. The tour began at the



oldest buildings still standing on the base, Buildings 1 and 2, the seaplane hangars from1918 now used as warehouses with large windows replacing the great sliding doors that opened to the seaplane ramps into the bay. This was the same location on the northeast edge of the base where the Glenn Curtiss Flying School's old wooden hangars stood in 1912.



We walked along the cement quay that replaced Pier Juliet in 1940 where aircraft carriers docked, starting with the USS Langley in 1924. Before that, this was the Marine Ways dock built by John D. Spreckels in 1887, and a bridal path for horseback riding by his Hotel del Coronado guests. It was Spreckels who planted the first Eucalyptus trees on North Island, some of which still survive in what is today Heron Park, a wildlife sanctuary for the Great Blue Heron whose nests we could see high in the trees.



We turned south on Quentin Roosevelt Blvd and walked to the Administration Building, the most notable structure on the base with a tower 110 feet tall. It was designed in 1918 by Bertram Grosvenor Goodhue who was hired by the Navy to design most of the early buildings in the Historic District. Goodhue's Spanish Colonial Revival style can be seen in Balboa Park on his buildings from the 1915 Exposition, and at the Marine Corps Recruit Depot on buildings he designed 1921-26.



Behind the Administration Bldg is a long quadrangle with barracks from 1919 on the north side and barracks from 1937 on the south.



At the end of the quad is the Chief Petty Officers' Quarters with arcaded courtyards, round cedar vigas in the ceilings, green tiled fountain and planters.

Back on the bus, we drove to the opposite end of North Island, to the Rockwell Field Historic District, where the Army aviation school was located from 1912 to 1935. Detroit architect Albert Kahn was hired by the Army in 1918 to design the air field buildings.



We stopped and toured the Bachelor Officers Quarters (Bldg I) at the south end of Quentin Roosevelt Blvd, next to the landing strip that in 1933, when the BOQ was built, was a large circular landing field, full of the gophers and jackrabbits that made every landing hazardous. The large courtyard at the center of the BOQ has a fountain and circular walk. The single-story arcaded wings hold rooms for officers. Inside Bldg I is the famous I-Bar and a large room planned for a museum.

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