Martin Company History

When the Lockheed Martin – Denver library shut down in 2013, employee Josh Hopkins saved a 3-ring binder with photocopies of documents about Martin company history. In 2022 after several moves, the contents of the binder were scanned so that they could be shared more widely and to increase the odds that at least one copy might survive.

The contents are scanned here in the following files (separated to be a manageable size):

"Boxkites to Bombers, The Story of the Glenn L Martin Company," a history book produced by the company around 1946.

"The Glenn L Martin Company: What it did for the growth of Baltimore" by Lisa Fallon, a report written by an employee for a class in 1985

A collection of magazine articles (including a Time Magazine cover story), advertisements, and a company list of all aircraft types and quantities produced.

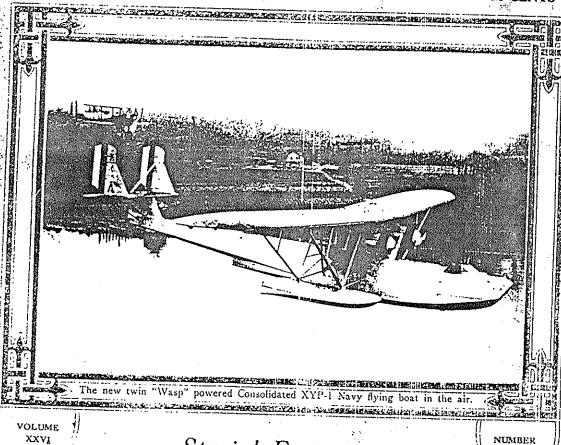
A selection of Martin Star newsletter excerpts from 1942-1943.

The Oldest American Aeronautical Magazine

FEBRUARY 9, 1929

Issued Weekly

PRICE 20 CENTS



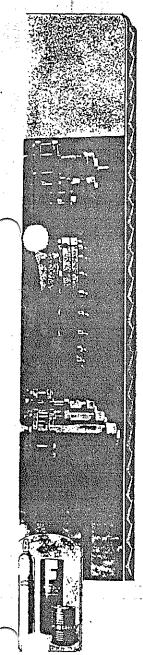
Special Features

Give Service Plus to the Air Traveler Control System Care and Maintenance Aviation Insurance in the United States

AVIATION PUBLISHING CORPORATION 250 WEST S7TH STREET, NEW YORK

Entered as second class matter July 27, 1928, at the post office at New York, N. Y., under the set of March 5, 1679. Yearly subscription rates: Domestic, 14; Canada, 33. All other countries, 46.

From: Roger Mason, Imployee



ouses-235 Carbide Wurehouses

AVIATION February 9, 1929

> HEREVER IT flies, the tri-colorstar of The Glenn L. Martin Company signifies to the experienced observer en-gineering supremacy, fine workmanship and unremitting care or-in one word-dependability. THE GLENN L. MARTIN COMPANY Builders of Quality Aircraft since 1909 CLEVELAND, OHIO

> > THANK YOU for mentioning AVIATION

February 9, 1929 AVIATION

:3 11.500.

ney Series A Wasp engine; purchased direction in & East River, New York City,

cies aviation motors, light in weight.

or auto, other 10 hours, 1814 Weeks Ave., Bronx, icd for boat Fieldhausen,

A) conditon. Scintilla magnetos, large ve tank, Curtiss Reed propeller, Miller chenp. Also new OXN-6 motor. Geo.

Miller valve Bill Lindley, ico 10 excellent condition; Flying instructions free. others, absolutely new, at a discount; also notes reconditioned like new, with high \$5.5 in good condition for sale or tradenson, Kans.

equipped, five months old, run 39 hours; recompass, level flight indicator, Bendix ni, double center section tanks, 30 gal-Privately used—had best of care. Cost 33.0. Buffalo Aircraft Distributors, Inc.,

start monoplane, fusciage, tail group and state. Wings have Wifon spread, five-rearred, lust the plane to get in those y. P. L. White, \$50 Ardmore Ave.,

Englerocks with guaranteed new OX-5 Springs or \$3,230.00 Richmond. Charles

condition with extra set Dary, 419. Essey Ave., good A motors, go

February 9, 1929 AVIATION

TRANSPORT PILOT, 2500 hours, experience on landplanes, scaplanes and amphibians and in all climatic conditions—service, instruction—desires connection reliable company. Box 1184, AVIATION.

LICENSED AIRPLANE and engine mechanic, experienced instructor, desires connection with school or airport in the east or south. Box 1185, AVIATION.

in design company designer with several years' experience i engines, wishes eastern connection with aviation Diesels. Box 1187, AVIATION. DIESEL ENGINEER, of high speed Diesel contemplating building

HELP WANTED

WANTED BY major mail contractor—pilot with cross-country night and bad weather flying experience. Those with less than 2,000 hours flying on larger equipment need not apply. Steady employment, good salary. Box 1091, AVIATION.

I AM taking agency for ship, starting a school, need a licensed transport pilot. I will give interest in business to right party without any investment. Write, give references and experience. Frank Wymbs, Scranton, Pa.

THE GLENN L. MARTIN Company is enlarging its engineering organization in preparation for greatly increased production in its new plant in the Baltimore area. Positions are open for qualified aeronautical designers having three to five years experience in practical aircraft design. Technically trained men prefetred. Unusual opportunities. The Genn L. Martin Co., Highlandtown P. O., Baltimore, Md.

expestress WANTED: Aeronautical engineer, thorough in aerodynamics and sanalysis. At least five years practical experience. All-metal work rience preferred. State experience, age, nationality, salary expected. 1180, AVIATION. WANTED: SHEET metal layout man, capable of taking charge of department in large airplane manufacturing company. Must understand aluminum welding, forming and hammer work. State salary wanted and complete experience in first letter. Box 1183, AVIATION.

EQUIPMENT WANTED

WANTED: ANZANI engine six cylinder, 60 hp. Please give full particulars and lowest price possible. George Berg, 104 Olive St., San Francisco, Calif.

complete; must 1744 N. Euclid, WANTED: USED serviceable OX-5 and OXX-6 motors be reasonable for quick saic. Wire or write R. A. Jostes, St. Louis. Mo.

State price, condition, first WANTED: 50 used ON.5 motors and parts. letter. Box 1121, AVIATION.

DO YOU know where I can get used, two cylinder, 25 hp., Wright More-house priced right for spot cash? Box 1186, AVIATION, WANTED: PARTS, fuscinges and wing sections all new production planes. Midway Aero Co., Minneapolis, Minn. Midway

be in good condition Warren Wright, 205 WANTED: WACO 10 or late production ship; must and cheap for cash; state all first communication. West Cherry, Blytheville. Ark.

MISCELLANEOUS

Aero Suply Co.

Air Associates, Inc.

Aircaft Service Directory

American Aeronautical Corp.

American Eagle Aircraft Corp.

American Eagle Aircraft Distributors, Inc.

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Crawford Airplane Co. Crouse-Hinds Co. Curtiss Acroplane & Motor Co., Inc. Cheney & Son, A.

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Crawford Airplane Co.

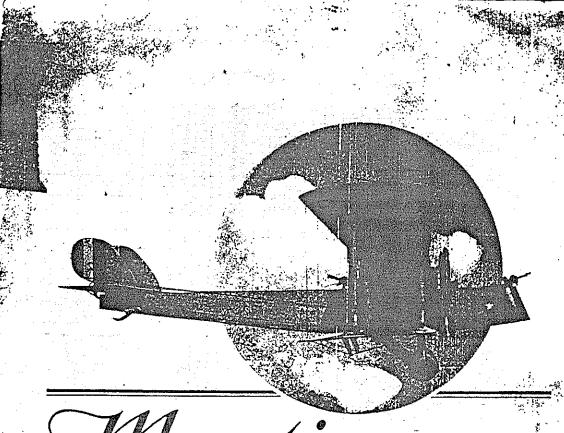
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Martin

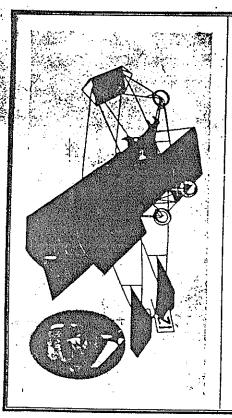
The Mightiest War Planer
The Foremost Peace Planer



The GLENN L. MARTIN CO. Cleveland, Ohio. U.S.A.

MARTIN BROCHURE

CIRCA APPROX. 1920
8-PAGES, COVER IN COLOR



The Progress of Martin Aircraft

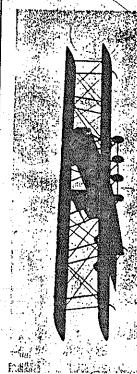
FIER, years of intensive study Glenn L. Martin evolved an airplane that would take to the air at his command. In 1909 the United States recognized Mr. Martin as a builder of successful aircraft. His early acronautical experience, and the fact that copys of effects through the Mr. Working the war, formed the organized a copys of effects designers and stilled workens who, during the war, formed the nucleus of the organization that built the famous Martin Bomber.

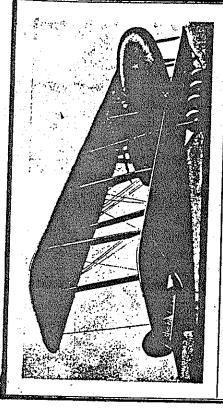
I gold The Glenn L. Martin Company produces three diffined models which are hased for the general design and construction of the Martin Bomber.

The Martin Mail Plane.

The Martin Topodo Plane.

Specifications Common in the Three Models





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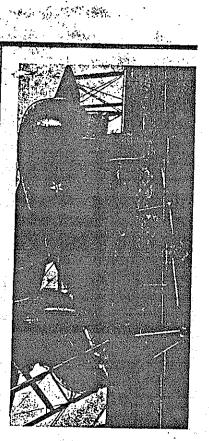
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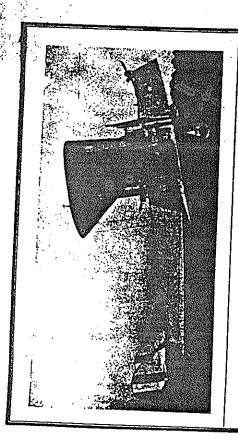
The Martin Mail Plane

to discontinue the use of one 60-foot mail car per day in each direction between New York and Chicago, and at the same time to advance the mail one business day. HE United States Post Office Department has six Martin Mail Planes between New York and Chicago. These planes fly the 730 miles distance wit stop, at Clereland. The use of the Martin Mail Planes coubles the Post Office D

Martin Mail Planes embody all the features of the Martin Bomber, with the exception of the fuscinge which is designed to accommodate 1,500 pounds of mail.

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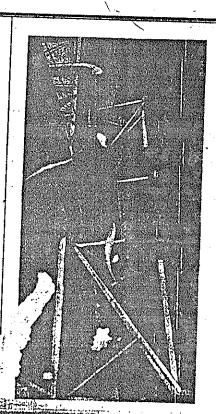
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The Martin Torpedo Plane

HE latest development of the Glenn L. Martin Company is the Navy Torpedo plane can "rate off" from the deed of a washing or sea sled, swoop down and launch its torpedo, and then if y back to shore. Should an engagement take place so far out from the case of the shore. Should an engagement take place so far out from it alone and with attachment in the place is equipped with air bags to out of the water.

Specifications

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The Martin Passenger Plane

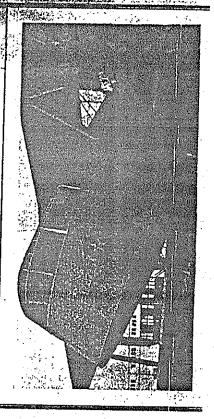
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HE Martin Passenger Place carries a pilot and eleven passengers with a four-bour a tupply of fuel. It has a flying speed of 115 miles per bour, and a landing speed of 54 miles per bour. The fact it will fif with a full load with one motor that off practically eliminates the necessity for forced landings.

The time saved by this new method of travel in comparison with other means of transportation is cridence that the day of the airplane has serviced. A few settual flights by Martin Places in comparison with the best railroad time:

# # # # # # # # # # # # # # # # # # #	
Disfance 213 miles 225 miles 150 miles 430 miles 630 miles	
Derfor New York New York New York	
Gereland Washington Gereland Gereland Dupton	

Refirond Time 5 br. 13 mm. 16 br. 13 mm. 16 br. 13 mm. 16 br. 15 mm. The Martin 800 H.P. Passenger Plane with Complete Equipment—



Distribute, N. Y.
O Casport, N. Y.
O Ballala, N. Y.
O Ningara, N. Y. and return
D Willengalay, Olio
P Cercland, Olio

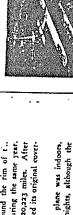
The 9,823-Mile Flight Around the Rim of the United States.

IN 1919 a Martin Bomber commanded by Colonel R. S. Harta and piloted by Lieutenant E. E. Harman few around the rim

Record of Flight

-. tot hrs. 24 min. 4,823 miles \$ 225 gal. 13,000 ft. Number of hours to circumnavigate U. S., Amount of gasoline consumed...... Greatest altitude (coast range). Approximate distance flown___

Col. Hatts and Crew of "Around the Rim". Martin Bomber



"Around the Rim" Martin Bomber Washington

a**are**enaa 1926

In addition to the 9.823 iniles flown around the rim of t.,. United States, this Bomber previously flew, during the same year. 10,400 miles across country, making a total of 20,223 miles. After a year of unusual service the Bomber still retained its original covering, and was ready to start on another flight.

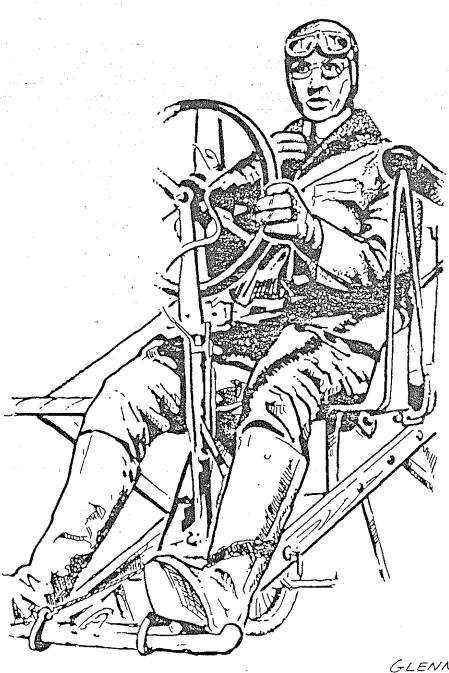
During the "Around the Rim" slight the plane was indoors, sheltered from the wind and rain, only two nights, although the shight started July 24th and ended November 19th. The record established by this plane is so remarkable that the Smithsonian Justitute at Washington has asked for the privilege of preserving it along-side of the epoch-making airplane of the Wright Brothers.

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GLENN LUTHER MARTIN 1886 - 1955 BUILT FIRST PLANE IN 1903. ATTEMPTED FIRST FLIGHT SUMMER OF 1907 (FAILED). DEC. 17, 1903 WRIGHT BROTHERS FLEW - KITTY HAWK, N.C.

MARTIN SOLD MAXWELL AND FORD AUTOS — SANTA ANA, CALIFORNIA. ROY BEAL AND CHARLES DAY HELPED MARTIN BUILD FIRST TWO (2) PLANES. DAY WAS MECHANICAL INSTRUCTOR AT Y.M.C.A. — SANTA ANA.

MARTIN FLEW FIRST PLANE AT 21. ENGINE WAS MODEL "T" FORD (NO H.P. GIVEN).

ARMINTA DeLONG (MARTIN) TAUGHT SCHOOL IN AFTON, IOWA. SHE AND CLARENCE WERE MARRIED NOV. 1882 AND MOVED TO MACKSBURG, IOWA (POPULATION 174). GLENN LUTHER WAS BORN JAN. 17, 1886 IN MACKSBURG. GLENN WAS 2 YEARS OF AGE WHEN THEY MOVED TO LIBERAL, KANSAS WHERE CLARENCE BOUGHT A HARDWARE STORE.

AT AGE 4, GLENN PUT ONE OF HIS MOTHER'S BED SHEETS ON HIS BOX-TYPE WAGON AND WAS PROPELLED DOWN MAIN STREET IN LIBERAL BY PREVAILING WINDS SCARING ALL OF THE FARMER'S HORSES. AT AGE 6 HE BUILT AND SOLD BOX KITES TO HIS FRIENDS FOR 25 CENTS EACH. SOME OF THE KIDS PAID HIM AT A RATE OF 5 CENTS PER WEEK.

MOVED FROM LIBERAL TO SALINA, KANSAS ABOUT 1894. STARTED WORKING IN A BICYC SHOP WHEN HE WAS IN HIS SECOND YEAR OF HIGH SCHOOL. TOOK 2 YEAR BUSINESS COURSE AT WESLEVAN UNIVERSITY, SALINA, KANSAS. MOVED TO L.A. FROM SALINA THEN TO SANTA ANA, CALIFORNIA, 1903. OPENED GARAGE IN 1904. BUILT 2ND SHIP IN AN ABANDONED SOUTHERN METH. CHURCH, 1908, PAYING \$12.00 PER MONTH. THIS SHIP WEIGHED 1150 LBS., HAD A 40 FT. WING AND COST HIM \$3000.00. FIRST SUCCESSFUL FLIGHT AUGUST 1, 1909 (100 FT. DISTANCE, APPROX. 8 FT. ALTITUDE). THIS SHIP HAD A 15 H.P. FORD ENGINE WITH A TOP SPEED OF 38 MILES PER HOUR (4 M.P.H. SAFETY MARGIN). REPLACED ABOVE ENGINE WITH A 30 H.P. ELBRIDGE ENGINE. MOVED FROM CHURCH TO VACANT CANNING FACTORY BUILDING IN L.A. AREA IN 1912. FORMER EMPLOYEES OF MARTIN WERE LARRY BELL, DONALD DOUGLAS, J. A. (DUTCH) KINDLEBERGE (NORTH AMERICAN), WILLIAM BOEING, SHERMAN FAIRCHILD, CLAUDE RYAN, EDDIE STINSO WILLIAM STOUT (FORD TRI-MOTOR, SILVER GOOSE).

GLENN FLEW TO CATALINA ISLAND IN #12 SHIP, MAY 10, 1912. LEFT FROM NEWPORT DOCK, CLIMBED TO 4000 FT AND HEADED FOR AVELON HARBOR, FLIGHT OVER TOOK 37 MINUTES. THIS SHIP HAD A 75 H.P. ENGINE. MADE WORLD'S LONGEST OVER-WATER FLIGHT (66 MILES IN 80 MINUTES FLYING TIME). BICYCLE TIRE INNER TUBE AROUND WAIST AS SAFETY GEAR IN CASE HE HAD TO DITCH.

CARRIED HIS FIRST PASSENGER ALOFT IN 1912, HIS MOTHER, MINTA MARTIN, SHE WAS 48 YEARS OLD AT THE TIME. ON JUNE 30, 1913, GEORGIA BROADWICK, 90 LB., 18 YEA OLD GIRL, PARACHUTED FROM HIS PLANE OVER GRIFFITH PARK IN L.A. FROM AN ALTITUD OF 1000 FT. RODE IN A SLING ALONG SIDE OF PLANE'S FUSELAGE. ON JUNE 10, 1914 SHE MADE ANOTHER JUMP OVER THE SAME PARK, THIS TIME FROM 3000 FT. FOR ARMY BRA CHARLES BROADWICK AND GLENN DEVELOPED A FREE FALL TYPE PARACHUTE, BEING OPENED BY A RELEASE CORD (RIP CORD).

GLENN DELIVERED 17 MODEL TT'S (TRACTOR TRAINERS) TO THE SIGNAL CORPS. WORLD FIRST SPECIALLY DESIGNED TRAINING PLANE. TOOK MARY FICKFORD FOR A RIDE IN 191 MARTIN AND WRIGHT MERGED IN 1916. THE \$10,000,000 ENTERPRISE LASTED ONLY 10 MONTHS. MARTIN MOVED FROM L.A. TO CLEVELAND IN 1917. HIS FATHER WOULD NOT GO ALONG.

U.S. DECLARED WAR ON GERMANY APRIL 6, 1917. AMERICAN FLYERS FOUGHT IN FRENC NEIUPORTS, SPADS, SOPWITH CAMELS, AND SE-5'S. CURTIS JN-4'S NEVER SAW ACTION IN WAR. CLEVELAND PLANT HAD 16,000 SQ. FT. OF WORKING AREA. COMPANY BANK INSURANCE DIVISION GROUNDED MARTIN FROM FLYING SEPT. 1917.

MB-1 BIPLANE, 72 FT. WING SPAN, TWO 400 H.P. ENGINES, 4 MAN CREW INCLUDING 2 GUNNERS, ONE TON OF BOMBS AT 125 M.P.H. RECEIVED ORDER FOR 20 ON JAN. 17, 1918. FIRST PLANE FLEW AUGUST 1, 1918 (7 MONTHS TO BUILD). TEST PILOT WAS ERI SPRINGER. GOT ORDER FOR 50, 9 COMPLETED BY NOV. 11, 1918 (ARMISTIS DAY). ORD

WAS CUT FROM SO TO 10. SHIP #10 CONVERTED TO TRANSPORT, COMPLETED 1919. LATE MARTIN GOT ORDER FOR 20 MORE. MB-1 COULD CLIMB TO 16,000 FT. WITH 1 TON 0F BOMBS. THE MB-2, READY FOR DELIVERY 1920, HAD AN ALTITUDE OF 30,000 FT. WITH 3400 LBS. OF BOMBS.

GIRL FRIENDS WERE CATHERINE IRVINE AND JACQUELINE (NO LAST NAME GIVEN); BUT 3HE, IT IS SAID, REFUSED TO MARRY HIM, APPROX. 1917. SHE LATER MARRIED ONE OF MARTIN'S EMPLOYEES.

LINDBERG FLEW ATLANTIC, MAY 1927. 3610 MILES IN 33 HOURS, 29 MINUTES.
G.A. VON DUSEN MADE INITIAL SURVEY UP AND DOWN THE EAST COAST FOR PLANT SITE.
SETTLED ON BALTIMORE AREA. CITY OFFERED 50 ACRES FREE, BUT THAT WAS NOT NEARL
ENOUGH FOR WHAT GLENN HAD IN MIND FOR THE PLANT. THIS DURING THE YEAR 1928.
MARTIN HIMSELF PICKED SITE WHERE PLANT IS TODAY, RENTED A PLANE TO LOOK FOR SP
THAT PLEASED HIM MOST. HE THEN SENT HIS CHIEF PURCHASING AGENT, BILL CRENNING
FROM CLEVELAND TO NEGOTIATE THE DEAL, THIS WAS IN THE EARLY PART OF 1929. LAN
WAS OWNED BY 45 DIFFERENT INDIVIDUALS. TOOK CRENNING 4 MONTHS TO CLOSE THE DE
FOR ALL THE LAND (1200 ACRES TOTAL, 500 PROPOSED FOR THE AIRPORT ALONE).
FINANCING FOR THE FIRST BUILDING (A) WAS \$1,500,000 - 300,000 SQ. FT. OF FLOOR
SPACE. MOVED IN PLANT OCTOBER 7, 1929 WITH APPROX. 1500 PEOPLE. BM-1 DIVE
BOMBER PLANES WERE FIRST PLANES AT THAT TIME, 2 PLACE METAL AND FABRIC BIPLANE
1000 LBS. OF BOMBS UNDER ALL METAL FUSELAGE. KEN EBEL WAS TEST PILOT, FIRST
SHIP CRASHED IN POTOMAC RIVER. THESE SHIPS WERE LATER MODIFIED TO BM-2'S.
PM-1, PM-2, AND PM-3 HAD 100 FT. WINGSPAN, TWIN ENGINES (NO H.P. GIVEN), 1000
MILE-PLUS RANGE. GLENN WAS 45 AT THE TIME (1931).

THREE CHINA CLIPPERS FOR PAN AMERICAN AIRWAYS, 130 FT. WING SPAN, 90 FT. LOW 2500 MILE RANGE, FOUR 830 H.F. ENGINES, CREW OF FOUR WITH 300 LBS. OF MAIL AND 12 PASSENGERS, 18 WITHOUT MAIL. PAN AM ACCEPTED FIRST CLIPPER OCT. 9, 1935. LARGER VERSION OF THIS CLIPPER BUILT FOR RUSSIA 1937. MODIFIED 8-10, 70 FT. WING SPAN, TOP SPEED OF 207 M.P.H., 10,000 FT. ALTITUDE WITH 2000 LB. BOMB. AIR CORPS ORDERED 14 THEN LATER 103 (OCT. 1932). SHIP KNOWN AS FLYING WHALE, JRIGINAL B-10'S STARTED IN 1931. CLARENCE MARTIN DIED JUNE 1, 1935, SANTA ANA CALIFORNIA. SHORTLY AFTER DEATH OF FATHER GLENN BOUGHT LAND ON EASTERN SHORE. HE INVESTED MONEY IN RECORD COMPANY, ALSO IN ALL-GIRL ORCHESTRA. BOTH FAILED. ALSO THE SAME IN A FOOD PROCESSING IDEA. MADE TRIP TO EUROPE IN 1938.

BY JAN. 1937 COMPANY HAD 1697 EMPLOYED, BY DEC. 2395. MONTHLY PAYROLL WAS \$331,134. SEPT. 21, 1938, 300 B-10'S HAD BEEN COMPLETED. THE 167'S (A22) WERE STARTED IN 1938, 100 BUILT. BADGES AND PASSES ISSUED SAME YEAR, ALSO NIGHT SHIFT STARTED, 3800 WORKING. BACKLOG ROSE TO \$30,000,000. HAD TO ADD ANOTHER 440,000 SQ. FT. OF FLOOR SPACE TO PLANT. NOV. 1939, 10,000 PEOPLE. 187'S (A3) BALTIMORES 300 M.P.H., 1575 SHIPS FOR THE ROYAL AIR FORCE. B-26 FLOWN FOR THE FIRST TIME NOV. 25, 1940. GOT ORDER FOR 1000 SHIFS. NEW FLANT AQUIRED FORT CROOK, OMAHA, NEBRASKA 1941. ALSO ROSIE THE RIVETER CAME INTO BEING FOR THE FIRST TIME SAME YEAR NOV. 20, 1941. COMPANY HIRED 19 WOMEN TO WORK IN FACTORY B-26 HAD 25,000 PARTS IN IT'S ASSEMBLY, 300,000 RIVETS. 53,000 WORKING IN BALTIMORE, OVER 17,000 IN NEBRASKA. B-26 WAS 58 FT. LONG, 65 FT. WING SPAN, OVER 300 M.P.H. WITH A LANDING SPEED OF 115 M.P.H., TWO TONS OF BOMBS, 500 MILE RANGE AND RETURN. WING LOAD RATIO OF 50 LBS. PER SQ. FT., NINE 50 CAL. MACHINE GUNS (KNOWN AS WIDOW MAKER). SPAN LATER CHANGED FROM 65 FT. TO 71 FT. BOMBARDMENT GROUP EQUIPPED WITH B-26'S. TEN SHIPS LOST ON MISSION OVER HOLLAND MARCH 17, 1940. 5266 B-26'S BUILT (3681 SHIPS AT BALTIMORE, 1585 SHIPS AT NEBRASKA). FLEW 110,000 SORTIES AND DROPPED 150,000 TONS OF BOMBS.

FIRST PBM-1 (MARINER), 118 FT. WING SPAN, OVER 3000 MILE RANGE, FLOWN 1939.

PBM-1'S THRU PBM-5'S WERE BUILT. MARTIN P-5M-1 (MARLIN) OR RATHER THE XP5M-1

JTILIZED THE WINGS AND THE HULL OF THE PBM-5 (MARINER) AND WAS FLOWN FOR THE FIRST TIME MAY 4, 1948. THE FIRST P5M-1 FLEW JUNE 22, 1951. THE P5M-2 FIRST FLEW APRIL 29, 1954.

THE MARS FLYING BOAT, 72 TONS, 4 ENGINES, 200 FT. WING SPAN COULD FLY ATLANT: NON-STOP. 25 TONS OF FRIEGHT, 300 TROOPS, CONTENTS OF A 15-ROOM HOUSE. INITY ORDER OF 20 WAS OUT 10 5 (HAWAII, PHILIPPINE, MARSHAL, MARIANAS, & CAROLINE).

IN 1944 MARTIN GAVE \$1,700,000 TO THE UNIVERSITY OF MARYLAND. ONE YEAR LATER HE GAVE \$800,000 TO G.I.M. INSTITUTE OF TECHNOLOGY. SALES TOTALLED \$24,000,00 IN 1939, \$598,000,000 IN 1943. THE ENGLA GAY, A NEBRASKA BUILT B-29, DROPPED FIRST ATOMIC BOMB ON HIROSHIMA, AUGUST 6, 1945.

MARTIN'S 2-0-2 (COMMERCIAL), 36 PASSENGERS, 250 M.P.H. INITIAL ORDERS FOR 1: 2-0-2'S, 159 3-0-3'S FOR A HOPEFUL BACKLOG OF \$83,000,000. NORTHWEST AIR LINE GOT THE FIRST 2-0-2 AUGUST 1, 1947. NINETEEN 2-0-2'S DELIVERED, 3-0-3'S WERE CANCELLED. SIXTY 4-0-4'S BUILT FOR EASTERN AIR LINES.

GEORGE BUNKER ARRIVED IN BALTIMORE FEB. 21, 1952. MARTIN XP6M-1 (SEAMASTER) LONG RANGE MINE-LAYING AND RECONNAISSANCE JET FLYING BOAT HAD MAXIMUM SPEED OF 633 M.P.H. AT 40,000 FT. COMBAT RADIUS 1500-1750 MILES. WEIGHT LOADED 150,000 LBS. THE FIRST OF TWO XP6M-1 SEAMASTER PROTOTYPES WAS FLOWN JULY 14, 1955 AND A PRODUCTION ORDER FOR 24 P6M-1'S WAS AWARDED ON BEHALF OF THE U.S. NAVY IN AUGUST 1956. THE SECOND PROTOTYPE, WITH HYDRO-FLAPS ON THE REAR HULL USED AS WATER RUDDERS, WAS COMPLETELY DESTROYED IN NOV. 1956. THE B-57E WAS FIRST FLOWN APRIL 1956, MAXIMUM SPEED 620 M.P.H., SERVICE CEILING 48,000 FT., RANGE 2300 TO 3000 MILES.

MARTIN OWNED OVER 25% (293,700 SHARES) OF THE COMPANY STOCK. MINTA MARTIN DIED MARCH 14, 1953 AT AGE 89. GLENN DIED DECEMBER 4, 1955 AT AGE 69. MARTIN DOCTOR WAS DR. W. KENNEDY WALLER. HIS ESTATE WAS WORTH MORE THAN \$14,000,000. MARTIN OPENED FLYING SCHOOL IN 1914. BILL BOEING WAS ONE OF HIS FIRST STUDENT

GLENN LUTHER MARTIN

Glenn L. Martin was born at Macksburg, Iowa, on January 17, 1886. Two years later his family moved to Liberal, Kansas, where his father ran a wheat farm and a hardware shop.

When Glenn was six years old he had his first experience with aerodynamics and business procedures. He learned how to build and fly box kites more successfully than any other boy in the neighborhood. What's more, he uncovered a market for them and began his first production line on the floor of his mother's kitchen. The charge was twenty-five cents per kite.

When the Martin family moved to Salina, Kansas, the boy secured work in a bicycle shop while he was attending high school. Subsequently he took a two-year business course at Kansas Wesleyan University, and with his love of things mechanical he promptly promoted himself a job as garage hand with the first automobile business to open in that town.

The family then moved to Santa Ana, California in 1905. After working there for a few months as an auto salesman and repairman, Glenn started a garage of his own. It was a few months later that he read of Orville Wright's hundred-second flight at Kitty Hawk, North Carolina.

Glenn Martin knew that he also would fly some day, but his first steps toward realization of this desire were taken with the thoroughness and caution which characterized his entire life. He built a biplane glider and for months practiced gliding from the hills near Santa Ana. Only after he felt completely at ease in his giant kite did he rent an abandoned chuch and begin construction of a biplane with a motor and propeller. There were no text books for reference, no blue prints or past experiences to guide him. Everything he did was experimental.

After two years of work, which cost more than \$2,000, Glenn Martin's first aircraft was ready for flight. Again there was no headlong rush into the unknown. He taxied for days to get the feel of the plane. Finally in August 1909, he made his first flight, covering one hundred feet at a two foot altitude.

Continuing for weeks to make these low flights, he did nothing for fun or vain glory. Every hop resulted in a study period and very often in the necessity for adjustment. Little by little he increased the altitude of his hops until he reached fifteen feet and stretched the distance flown to a hundred yards.

Not until the summer of 1910 did young Martin begin to feel satisfied with his plane. Newspaper accounts of the flying attracted large crowds to Santa Ana and the local Chamber of Commerce decided to help him. The plane was put on exhibition, tickets were sold and several hundred dollars were raised which Martin used as a nest egg toward building his second plane.

The next year he began to make real money. He and his aircraft were in great demand at county fairs and local celebrations.

By 1911, Glenn L. Martin was one of the best known fliers in the entire country and went barnstorming all over the West. He attracted world-wide attention on May 10, 1912 by flying a seaplane of his own manufacture from Newport Bay, near Los Angeles, to Catalina Island, thirty-eight miles away, and back. This was a vintage year for Glenn Martin in the number of prizes won and in the number of records broken.

He was first to deliver newspapers by plane; first to drop a baseball into a catcher's mitt from an airplane; he tossed a bouquet into a May Queen's lap by plane, bombed a sham fort by plane; used his flying machine to hunt coyotes, to hunt escaped convicts, to pick up a passenger from a boat, to search the ocean for lost aviators, the first flyer to fly his own mother, first to take motion pictures from a plane, first to shower the public from the air with department store advertising and merchandise coupons, and one of the first to deliver the mail by plane.

As far as Martin was concerned, all of this was important only because it served to advertise and create demand for the planes being built in his infant factory at Santa Ana.

. ...

He continued his public appearances and in 1912 moved his factory to Los Angeles and started a flying school, in which many future leaders in aviation were trained.

Wartin Marieta memories con ing back to stay

and yet fragile are our memories of this man who not only founded and inspired the Martin Marietta Corporation but also had a profound influence on the American aerospace industry and its achievements. So the Martin Marietta Management Club (MMMC) is going to do something about it. Seizing the Opportunity afforded by two key events a scheduled refurbishment of the Main Plant lobby at SLRC and the celebration of Orlando Aerospace's 30th anniversary, the club is forging ahead with plans to collect, furnish and install a historical display showcasing Martin Marietta's 78-year heritage. And if all goes as planned, employees and visitors attending the company open house scheduled in November in conjunction with Orlando Aerospace's 30th year will

be able to see the unveiling of the display. While November is only a few months away, the project actually has been in the planning stages since 1981. Sometime later, under the stewardship of former MMMC president George Sammet, the go-ahead was obtained to proceed with preliminary plans.

Sammet appointed Bob Rawa as project chairman and in the ensuing time,

display blended with the renovation of the lobby. Then, during the past month, final approval for the display was gained.

Donating time and manpower, and obtaining enthusiastic support from members of the Martin Marietta Retirement Association (RAMM), the The display will reflect upon Martin Marietta's technological contributions to display will not be anything ordinary. the country in the areas of aeronautics and national defense,

At least eight categories of technology will be depicted in the lobby itself with an adjoining room displaying various memorabilia donated, collected and purchased by project boosters over the past few years.

Employees and visitors will view an tributed by Pete Slifker of Martin enormous 3'x4' framed photograph con-Marietta's first plane, a PM-1, built at the Baltimore plant in 1930 and surrounded by its manufacturing and management

Not far away will be Christmas cards contributed by Gene Foster from the Martin Company during the 1930s. The item resembling an oversized piccolo will actually be the airscoop from #5 Matador

But MMMC and RAMM also have an ace up their sleeves. Searching for a centerpeice for the display, the two groups are collaborating to build a replica of Glen L. Martin's first plane, a 1909 modified Curtis designated Model 1 constructed from silk, bamboo and spruce.

That's right, they're actually building the plane and when finished, the aircraft will hang in the lobby.

"The idea really came from a great many people," explains Rawa. "George when we were in the airplane business. I selected Glen's original Model 1, Dave Barnhart, historian for the project, aided Sammet wanted a plane that Martin built and abetted the idea, and Gene Foster convinced us we weren't crazy.'

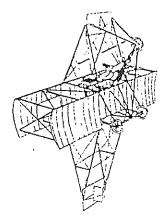
Barnhart and Chick Henn obtained Pietrzak contributed drawings and the idea was successfully presented to the original plans for the aircraft, Mark RAMM as a project.

Already, RAMM has provided 45 volunteers who have begun building the plane under the direction of Chief Program Director Garth Myers. Any doubts the groups are serious about finishing the plane are dispelled upon

with all its test crew's autographs, viewing the laminated propeller produced by Don Prasky in his workshop. He's now started work on a mock-up of the All of this being done with woxd, mind engine found in Martin's 1909 Model 1.

"The project definitely is off and running." beams Rawa, "and some Avery Owen, Dick Wangenheim, Stan dedicated volunteers like Marsha Cliff, Brazell and Jerry Kircher are helping steer us toward our goals." Rawa has asked any Orlando Aerospace employees, retirees or collectors having memorabilia they wish to contribute for the display to contact him,

"We'll ensure those valuable items will be preserved in safe haven for many years to come," promises Rawa.



Secretary keeps fit by teaching

Huge Jet Flying Boat With 700 mph Speed Coming Within 15 Years, Martin Predicts

Aviation Pioneer Becoming Industry's 'Elder Statesman'

By JACK DAMEY

By JACK DAVIS?

BALTIMORE UP 1740 can't help wonder how many times he has been taken for a parson. His big frame, snow-white helr clear blue eyes and handsome face, brimming with sincerity seem to make the choice obvious.

Yet he is the same "wild-eyed, hallucinated, viaionary young man" who 40 years ago was called a reckless daredevil as he barn-

reckless daredevil as he barnstormed around the country in his

weird flying machine.

In a way, both descriptions fit Glenn L. Martin-alrplane builder, stunt flier, industrialist—has had a way of wearing a lot of shoes pointed in different direc-

MARTIN gradually has been stepping out of the management pleture at his big aircraft plant on the outskirts of Baltimore and is assuming the position of adviser and "elder statesman" of the Industry

But his mind is as keen and agile as ever and many of his plans are far ahead of the times.

For example, there's an idea of the flying boat of the future, made possible by vast improve-

ments to the jet turbine.

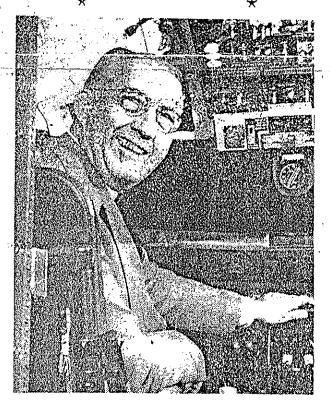
He envisions a "fast and tremendous vessel, rakish in design" that would speed from continent to continent with huge pay loads at 600 to 700 miles an hour.

HOW FAR away is this craft?
"I believe," Martin says, "that in the face of a dire emergency one could be furned out in four years. In the natural course of events we should see one in the next 10 or 15 years—certainly in our lifetime."

The Glenn L. Martin Co. aling machine in mid-1908. Acres at the end of the field, but the wobbly craft had to give its ready has started preliminary tually it was only a box kite with a more powerful motor. studies toward developing such a a four-cyclinder. 12-horsepower craft. It has mounted a new-de- Ford engine mounted between the contract of th sign; hull-much longer and slimmer than the present-day types— on a World War II flying boat and is making tedious tests over Chesapeake Bay,

GLENN MARTIN has been liv-ing with the wind all his life. The first recorded experience he had with zephyrs was at four. He rigged one of his mother's sheets to his red wagon and sailed to an inglorious upset.

A few years later he became kite-crazy. At 19 he began link-ering with automobiles in a bicycle shop where he worked in Salina, Kan. When the family moved to Santa Ana, Cal., in 1908 he opened up a garage.



GLENN L. MARTIN

.....on the wing since 1908

their historic made flights. Young Martin led a double life. When he wasn't selling automobiles he built and flightble life. tested a crude glider,

wings. Martin spent long hours hand-whittling a propeller of sturdy pine.

over the bumpy field, picked up speed slowly and at the last minute skimmed off the ground,

Test flights in the pasture came in quick succession until young Martin was skimming over the fence at the end of the field, but

Sutherland, protested to Martin's L mother, not realizing it was she h who held the lamp for him to work by.

"If you have any influence will that wild-eyed, hallucinated sionary young man," he would him off before he is k

But the serious, bespecyoung man was catching the fan- a cy of California with this hair raising flights. His investments finally began paying off. He best came the "Flying Dude" at fairgrounds, San Francisco paid him h \$2,000 to fly a message across the bay to Oakland, By 1912 he was making plans to start an aircraft t manufacturing business.

He went to Dayton, O., to con- p for with Orville Wright about a royaltles, for the patent rights justly belonged to the Wrights.

"Orville told me to go shead and work and fly all I wanted to and forget royalties, that we were ! all pioneers in the budding busi- poss," he recalls.

MARTIN made his first sale to the government two trainer planes in 1913. He has made government sales every gear since,

Aviation "firsts" to his credit are legion. They include the first recognized bomber, the MB2, His BM-1, the first of the dive bombers, revolutionized naval aviation. His PBM patrol ship and its descendants were a hig factor in submarine hunter-killer operations in the Atlantic during World War

Martin was the first to deliver newspapers by plane, drop a baseball into a catcher's mitt from a moving plane, fly his own mother. take motion pictures from the air and shower the public with department store advertising.

He was one of the first to de-WITH A new three-cyclinder, liver mail by plane, hunt coyotes 30-horsepower Eldridge marine and escaped convicts by plane, engine Marlin was off and in full demonstrate aerial bombing tech-On Aug. 1, 1909—a year and flight. Many townspeople agreed niques, pick up a passenger from \$3,000 later—he gunned the crude he was off—in his head.

The family physician, Dr. H. H. May Queen's lap from above. ********************************

AIRCRAFT BUILT BY THE GLENN L. MARTIN COMPANY (1919 - 1959)

******	*********	********	******* NUMBER O	
******	TYPE ************	CUSTOMER *********	CH ANDO	LOO.
MB-1	BOMBER	U.S. SIGNAL CORPS	10	9-17-19
MF	MAIL PLANE	U.S. SIGNAL CORPS	6	1919 1-2-19
MBT	BOMBER/TORPEDO	U.S. NAVY	2	4-1-19
MT	BOMBER	U.S. SIGNAL CORPS	8	9-30-19
MB-2	BOMBER	U.S. SIGNAL CORPS	20	1921
MO-1	OBSERVATION	U.S. NAVY	36	1-25-15
M-20-1	OBSERVATION	U.S. NAVY	3	4-6-15
MS-1	SUBMARINE SCOUT	U.S. NAVY	6	4-17-1923 7-30-19
NT-1	TRAINER	U.S. NAVY	1	9-29-19
√ SC-1	SCOUT, TORPEDO BOMBER	U.S. NAVY	35	8-22-19
SC-2	SCOUT, TORPEDO BOMBER	U.S. NAVY	40	1-9-19
₹ NM-1	NIGHT MAIL		3	B-11-19:
T3M-1	SCOUT, TORPEDO BOMBER	U.S. NAVY	24	2-17-19:
T3M-2	SCOUT, TORPEDO BOMBER	U.S. NAVY	100	10-18-191
T3M-4	SCOUT, TORPEDO BOMBER	U.S. NAVY	1	2-2-19:
XT4M-1	TORPEDO LANDPLANE	U.S. NAVY	1	8-4-197
T4M-1	TORPEDO SEAPLANE	U.S. NAVY	102	12-20-192
XT5M-1	DIVE BOMBER	U.S. NAVY	1.	1929
FM-1	PATROL BOMBER	U.S. NAVY	27	10-18-173
FM-1B	PATROL BOMBER	BRAZIL	· 3	10-25-193
CT6M-1	CARRIER/TORPEDO	U.S. NAVY	1	12-29-193
XF2M-1	PATROL	U.S. NAVY	1	6-22-193
P3M-1	PY-1 PATROL BOAT	U.S. NAVY	9	5-4-193
P3M-2	FY-1 FATROL BOAT	U.S. NAVY	9	9-25-193
PM-2	PATROL BOAT	U.S. NAVY	28	9-23-192

	XB-907	LITTI CITATION				
, we have	X-BM-1	HIGH SPEED BOMBER	==== \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1		4-20-1
•		DIVE BOMBER	U.S. NAVY	1		6-27-1
	BM-1	DIVE BOMBER	U.S. NAVY	17		7-8-1
	€ BM-2	DIVE BOMBER	U.S. NAVY	17	* *	12-31-1
	CLIPPER	COM'L FLYING BOAT	PAN-AMERICAN	3	12-20-1934	12-24-1
	YB-10	BOMBER	AIR CORPS	14		6-19-1
	YB-10A	BOMBER	AIR CORPS	1		
	YB-12 BOMBER		AIR CORPS	. 7		7-25-19
	YB-12A	BOMBER	AIR CORPS	25		7-25-19
	YB-14	BOMBER	AIR CORPS	1		7-25-19
	B-10B	BOMBER	AIR CORPS	103	7-13-1935	8-8-15
199	B-10B	DEMONSTRATOR	ARGENTINE ARMY	1	_	8-30-15
·	B-10B	BOMBER	ARGENTINE ARMY			4-28-19
*	B=10B	BOMBER	ARGENTINE NAVY	12		11-13-19
	B-10B BOMBER B-10B BOMBER 3-10B BOMBER		AMTORG	1		9-10-19
			SIAM	3		3-5-19
Ĺ,			SIAM	3		4-26-19
	B-10B	BOMBER	TURKEY	20		9-17-19
	B-10B	BOMBER	CHINA	6		2-19-19:
	B-10B	BOMBER	CHINA	3	ŕ	8-18-19;
	B-10B	BOMBER	DUTCH EAST INDIES	13		2-2-190
	B-10B	BOMBER	DUTCH EAST INDIES	26	· · · · · ·	3-24-170
	B-10B	BOMBER	DUTCH EAST INDIES	39		9-28-193
	B-10B	BOMBER	DUTCH EAST INDIES	40		5-5-193
	B-10B	BOMBER	DUTCH EAST INDIES	2		7-7-145
	XB-10	BOMBER	AIR CORPS	1		
	CLIFFER	COM'L FLYING BOAT	U.S.S.R.	1	11 24 4057	4 55 155
	XPBM-1	FLYING MODEL	U.S. NAVY	1	11-24-1937	1-20-193
	XPBM-1 (MARINER)	FATROL SEAPLANE	U.S. NAVY	1		
	PBM-1	PATROL SEAPLANE	U.S. NAVY		1938	•
	XFBM-2	PATROL SEAPLANE	U.S. NAVY	20	3-26-1941	
	PBM-3	PATROL GOADLAND	U.D. NHVY	1	4-22-1942	

	FBM-BR /	PATROL SEAPLANE	U.S. NAVY	18	1942	
	PBM-3C	PATROL SEAPLANE/ TROOP CARRIER	U.S. NAVY	274		
	Съвм-ЗЅ	PATROL SEAPLANE/ TROOP CARRIER	U.S. NAVY	55		
(PBM-3S	PATROL SEAPLANE/ TROOP CARRIER	U.S. NAVY	40		
	PBM-3D	PATROL SEAPLANE/ TROOP CARRIER	U.S. NAVY	60	÷	
	PBM-3D	PATROL SEAPLANE/ TROOP CARRIER	U.S. NAVY	200		
	PBM-5	PATROL SEAPLANE/ TROOP CARRIER	U.S. NAVY	230		
* }'	PBM-5	PATROL SEAPLANE/ TROOP CARRIER	U.S. NAVY	40		
	PBM-5	PATROL SEAPLANE	U.S. NAVY	349		
	PBM-5	PATROL SEAPLANE	U.S. NAVY	225		
	FBM-5	PATROL SEAPLANE	U.S. NAVY	175		
	PBM-5	PATROL SEAPLANE	U.S. NAVY	300	t	JULY, 194
(}	XPBM-5A	FATROL SEAPLANE (AMFHIBIAN)	U.S. NAVY	1 .	12-10-1945	
	PBM-5A	PATROL SEAFLANE (AMPHIBIAN)	U.S. NAVY	24	JAN, 1948	
ė.	PBM-5A ·	PATROL SEAPLANE (AMPHIBIAN)	U.S. NAVY	12	·	
	XA-22 (MARYLANE)	ATTACK BOMBER	AIR CORPS	1 ·	1938	9-28-193
	A-22	ATTACK BOMBER	FRANCE	115		
	A-22	ATTACK BOMBER	FRANCE	100		
	A-22	ATTACK BOMBER	FRANCE	· 95		
	A-22	ATTACK BOMBER	GREAT BRITAIN	150		
	A-22	ATTACK BOMBER	GREAT BRITAIN	35		
	XPB2M-1 (MARS)	LONG RANGE PATROL SEAPLANE	U.S. NAVY	1	7-3-1942	NOV, 194;
(ins	JRM-1 (MARS)	LONG RANGE PATROL SEAPLANE	U.S. NAVY	4	7-21-1945	1946
	JRM-2 (MARS)	LONG RANGE PATROL SEAPLANE	U.S. NAVY	1	1946	APR, 1947
	B-26					

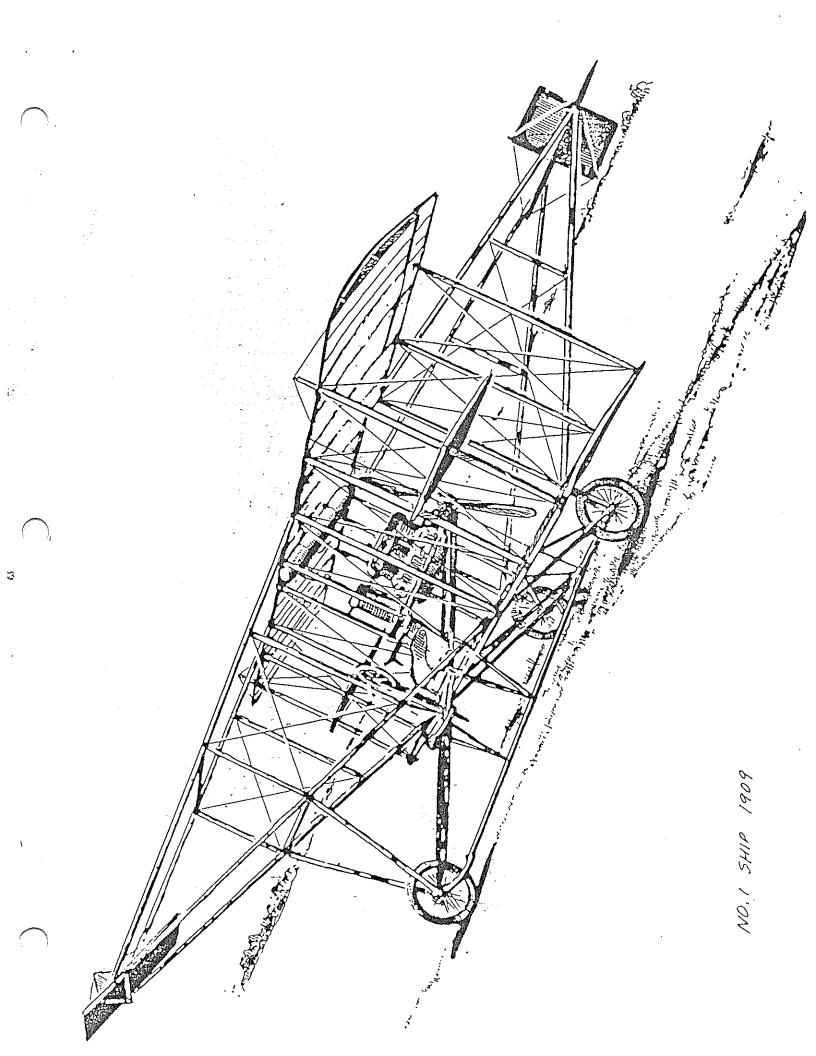
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4-0-4 MILITARY TRANSPORT U.S. COAST GUARD 2	19
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(MAULER) TORPEDO BOMBER U.S. NAVY 3 JAN, 1946	
(AM-1 DIVE BOMBER/ (MAULER) TORPEDO BOMBER U.S. NAVY 87 12-16-1946	
AM-1 DIVE BOMBER/ (MAULER) TORPEDO BOMBER U.S. NAVY 44	
AM-1Q DIVE BOMBER/ (MAULER) TORPEDO BOMBER U.S. NAVY 12	
AM-1Q DIVE BOMBER/ (MAULER) TORPEDO BOMBER U.S. NAVY 6 OCT, 1949	- - • • •
XP4M-1 LAND-BASED (MERCATOR) PATROL BOMBER U.S. NAVY 2 OCT, 1946	,
	51
AND THE OTHER REMBERS IT STATE COOPER TO THE STATE OF THE	48
XB-51 3-JET LT. BOMBER U.S. AIR FORCE 2 10-28-1949	
XP5M-1 EXFER. SEAFLANE U.S. NAVY 1 5-4-1948	
P5M-1 ASW SEAFLANE U.S. NAVY 6-22-1951	•
P5M-2 ASW SEAPLANE U.S. NAVY AUG, 1953 12-20-	
M-270 EXPER. SEAPLANE U.S. NAVY 1 1952	196
B-57A LIGHT JET BOMBER U.S. AIR FORCE 7-20-1953	196

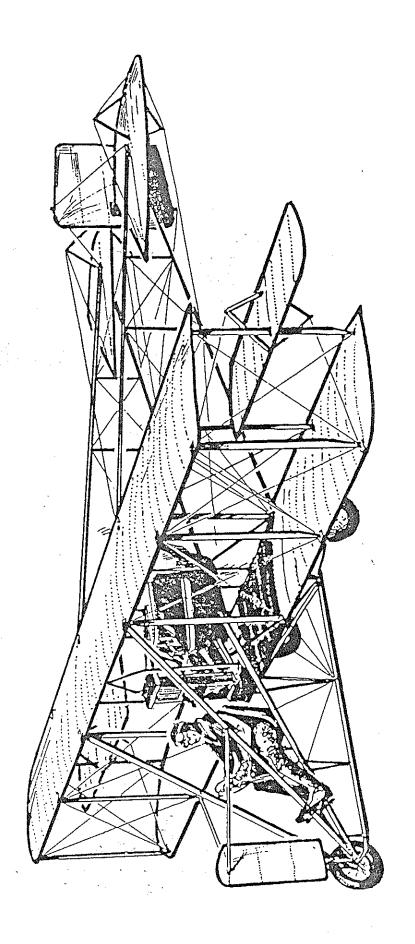
r	RB-57A	RECON. JET BOMBER	U.S. AIR FORCE	EARLY 1	954
,	B-57B	TACTICAL JET BOMBER	U.S. AIR FORCE	6-28-19	95 4
	B-57C	JET TRAINER	U.S. AIR FORCE	12-30-19	954
•	RB-570	HIGH ALTITUDE JET TEST BED	U.S. AIR FORCE	<u>:</u>	,
	B-57E	LOW TARGET JET	U.S. AIR FORCE	403	1959
	XP6M-1 (#1 (SEAMASTER	SEAPLANE	U.S. NAVY	1 7-14-19	755
	XP6M-1 (#2 (SEAMASTER		U.S. NAVY	1 5-18-19	756
	YP6M-1 (SEAMASTER	ATTACK) SEAPLANE	U.S. NAVY	6 1-20-19	?58
* 5 ***	P6M-2 (SEAMASTER	ATTACK SEAPLANE	U.S. NAVY	8 2-17-19	959 8 <u>-21-19</u> 1
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	GORGON IV	PROPULSION TEST			•
	GORGON IV	PROPULSION TEST VEHICLE	U.S. NAVY	11-29-19	48
	GORGON IV		U.S. NAVY OFFICE OF NAVAL RESEARCH	11-29-19 14 4-3-19	
	VIKING	VEHICLE HIGH ALTITUDE RESEARCH ROCKET	OFFICE OF	14 4-3-19	
	VIKING KDM-1 TM-61	VEHICLE HIGH ALTITUDE RESEARCH ROCKET	OFFICE OF NAVAL RESEARCH OFFICE OF NAVAL RESEARCH	14 4-3-19 1949	49 DEC, 195
	VIKING KDM-1 TM-61 (MATADOR) TM-76	VEHICLE HIGH ALTITUDE RESEARCH ROCKET RAMJET DRONE	OFFICE OF NAVAL RESEARCH OFFICE OF NAVAL RESEARCH U.S. AIR FORCE	14 4-3-19 1949 1000 1949	49 DEC, 195 1957
	VIKING KDM-1 TM-61 (MATADOR) TM-76	VEHICLE HIGH ALTITUDE RESEARCH ROCKET RAMJET DRONE TACTICAL MISSLILE SURFACE TO SURFACE TACTICAL MISSILE SATELLITE	OFFICE OF NAVAL RESEARCH OFFICE OF NAVAL RESEARCH U.S. AIR FORCE U.S. AIR FORCE	14 4-3-19 1949 1000 1949	49 DEC, 195 1957 CLASSIFIE
	VIKING KDM-1 TM-61 (MATADOR) TM-76 (MACE)	VEHICLE HIGH ALTITUDE RESEARCH ROCKET RAMJET DRONE TACTICAL MISSLILE SURFACE TO SURFACE TACTICAL MISSILE SATELLITE	OFFICE OF NAVAL RESEARCH OFFICE OF NAVAL RESEARCH U.S. AIR FORCE U.S. AIR FORCE OFFICE OF NAVAL RESEARCH	14 4-3-19 1949 1000 1949 CLASSIFIED 1956	49 DEC, 195 1957 CLASSIFIE 57 9-18-195
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	VIKING KDM-1 TM-61 (MATADOR) TM-76 (MACE) VANGUARD ORIOLE 1998 (BOLD ORION	VEHICLE HIGH ALTITUDE RESEARCH ROCKET RAMJET DRONE TACTICAL MISSLILE SURFACE TO SURFACE TACTICAL MISSILE SATELLITE LAUNCH VEHICLE AIR TO AIR TEST MISSILE AIR LAUNCHED) BALLISTIC MISSILE URFACE TO SURFACE	OFFICE OF NAVAL RESEARCH OFFICE OF NAVAL RESEARCH U.S. AIR FORCE U.S. AIR FORCE OFFICE OF NAVAL RESEARCH U.S. NAVY U.S. AIR FORCE U.S. NAVY	14 4-3-19 1949 1000 1949 CLASSIFIED 1956 14 MAY, 195	1957 CLASSIFIE 57 9-18-195 52 2-25-195 58 DEC, 195
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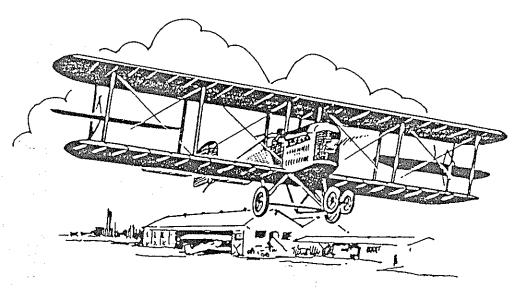
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	GEMINI	HIGH ALTITUDE BOOSTER ROCKET	U.S.	AIR FO	RCE	15		CURREI
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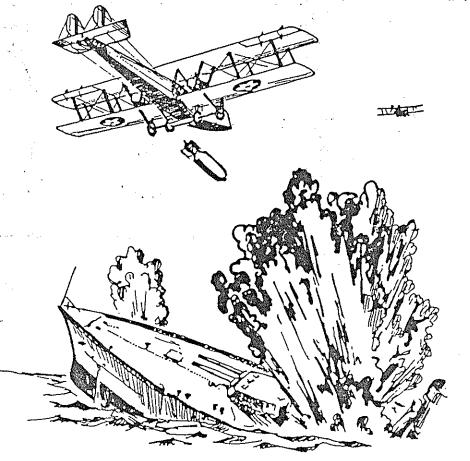




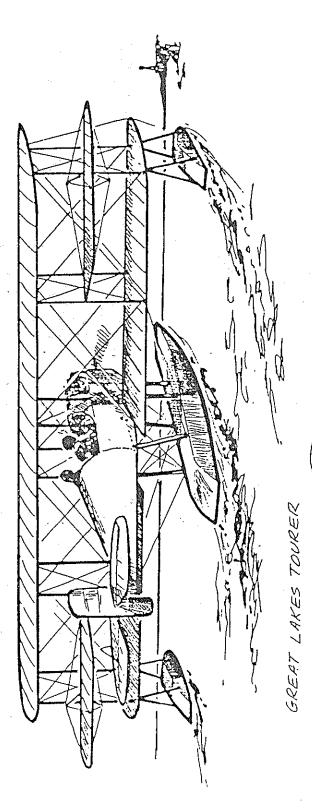
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MODEL TT TRACTOR TRAINER

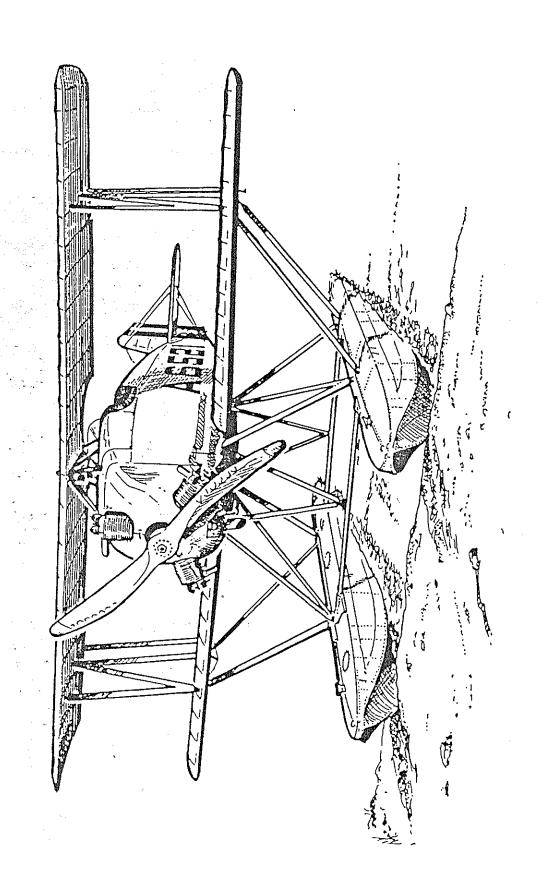


BILLY MITCHELL'S MB-2 BOMBER



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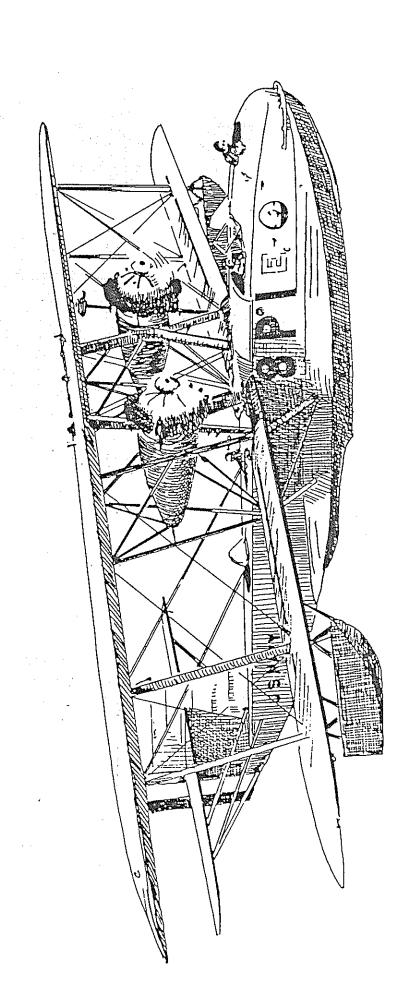
CLEVELAND PLANT



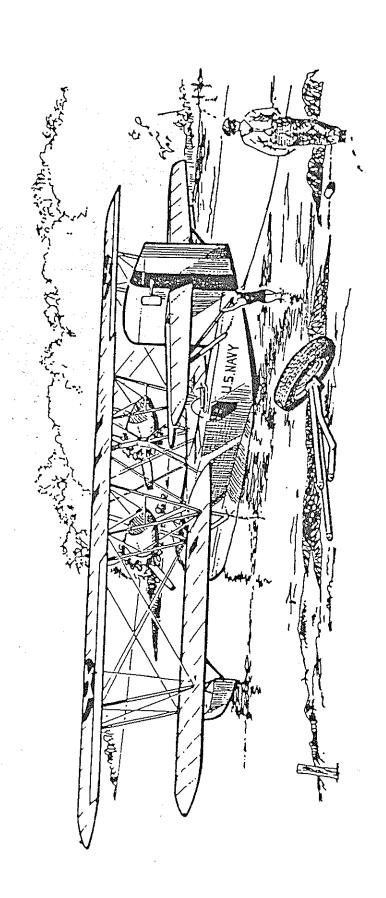
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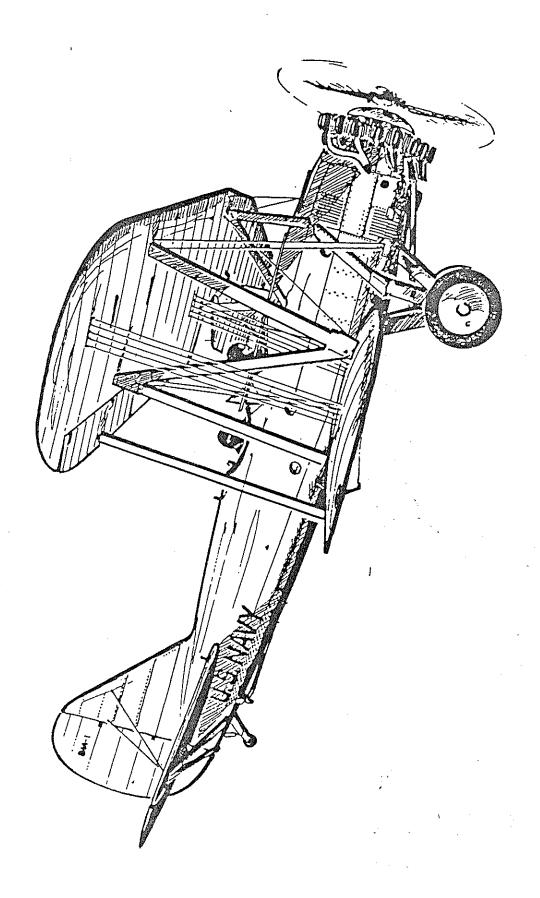
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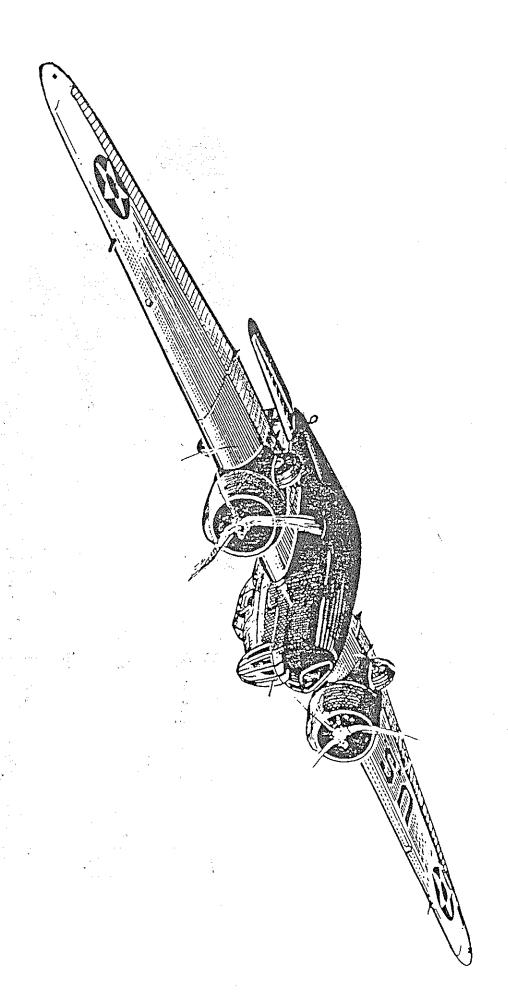
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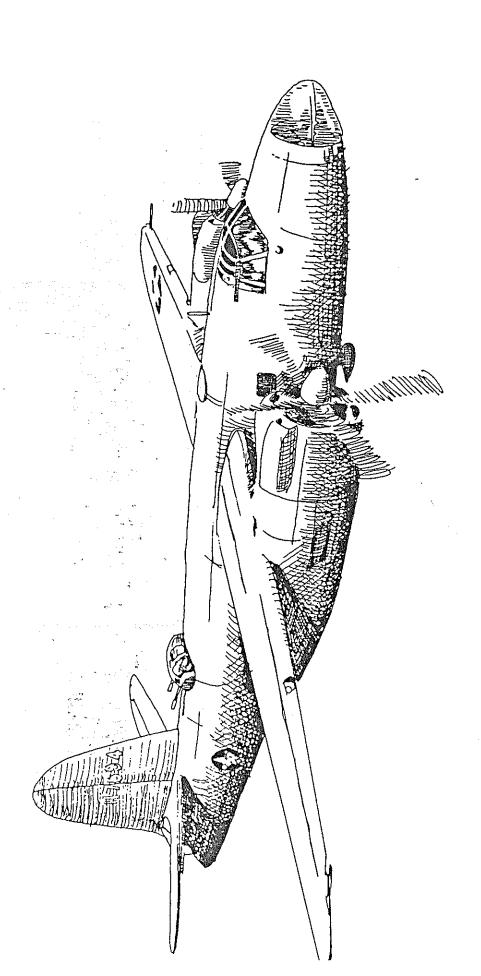


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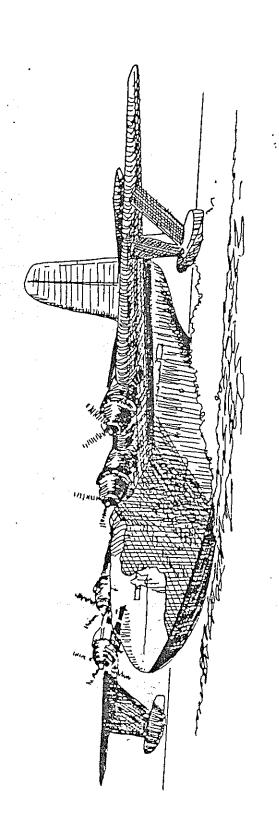
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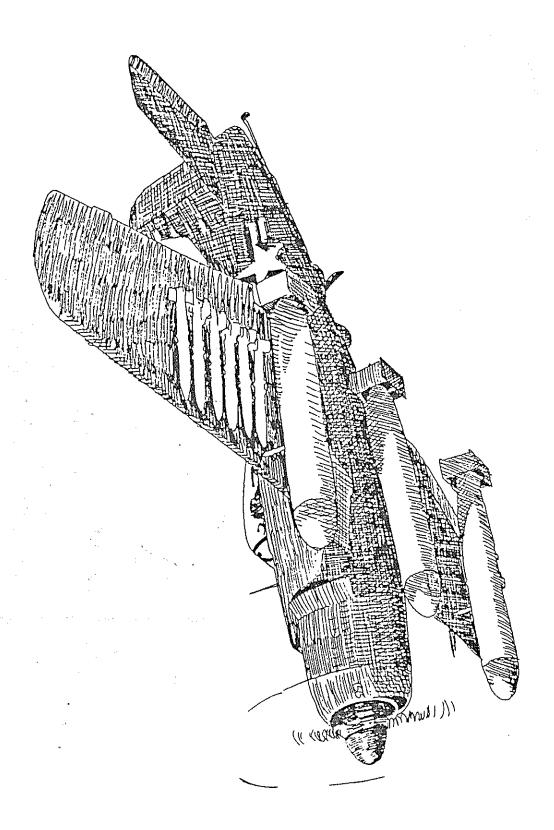


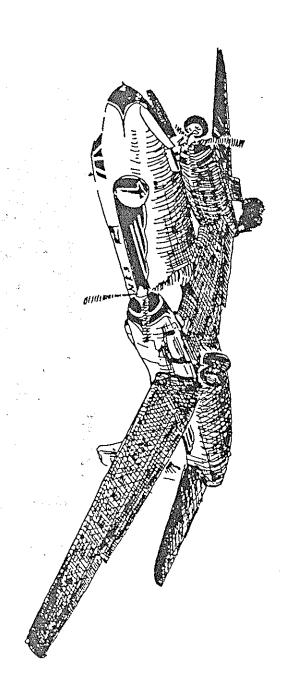


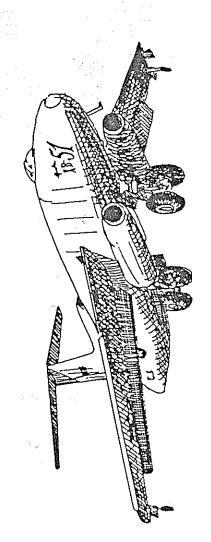
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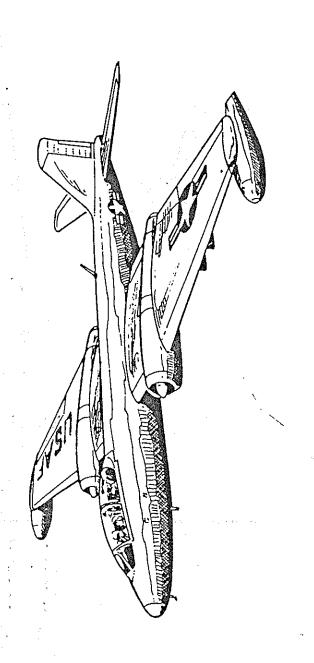
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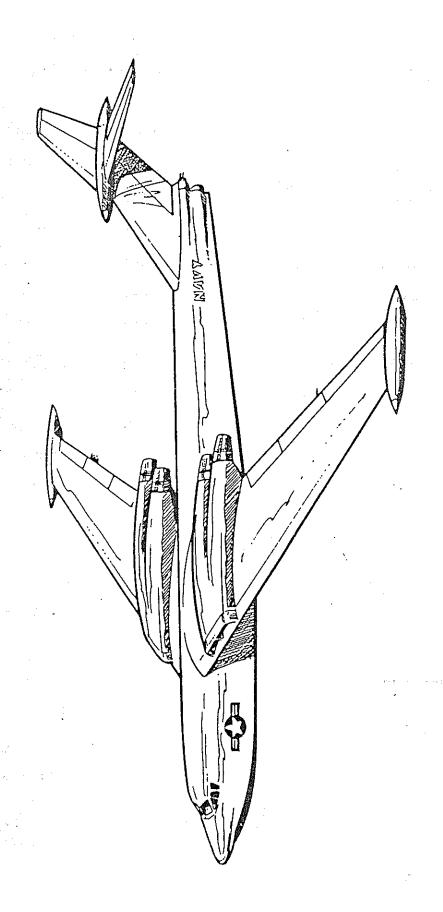




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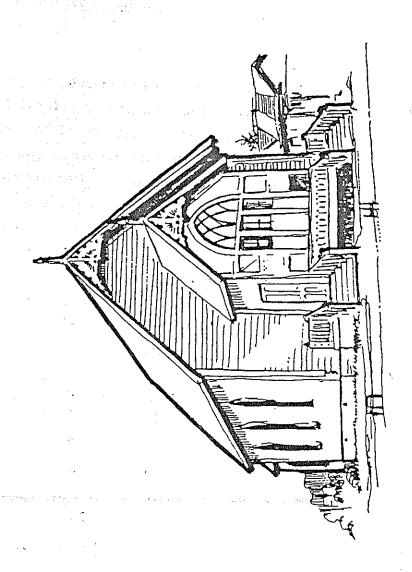


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***** NUMBER	*************** TYPE	FING DRAWING NUMBERS (************************************	***** YEAR
130	M-130	"CHINA CLIPFER"	1934
139	B-10	"FLYING WHALE"	1935
156	M-156	"RUSSIAN CLIPPER"	1938
162	PBM	"MARINER"	1937
166	B-10	FOR FOREIGN SALES	1937
167	A-22	"MARYLAND"	1938
170	JRM	"MARS"	1942
179	B-26	"MARAUDER"	1940
187	A-30	"BALTIMORE"	1942
210	AM-1	"MAULER"	1946
219	P4M	"MERCATOR"	1946
223	XB-48	6-JET EXPERIMENTAL	1946
234	XB-51	3-JET EXPERIMENTAL	1946
237	P5M	"MARLIN"	1946
272	B-57	"CANBERRA"	1953
275	P6M	"SEAMASTER"	1955
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		0540 0547 1115 1125 OR 1120 (CHERYL) 1344 1351	

NAME ******	TYPE	YEAR *******	PHOTO NO. *********
MB-1 XP2M-1	BOMBER PATROL	1919	118
~ 211	PHIRUL	1931	6745
			33926 33957
PM-1	PATROL	1930	33756
PM-2	PATROL	1931	33731
			33953
P3M-1	PATROL	1931	6053
P3M-2	CATOO		33937
	PATROL	1931	33941
		•	33942
B-10B	BOMBER	1935	33949 8531
		1/33	8679
			9617
M-130	"CLIPPER"	1935	9694
			12415
M-156	"CLIPPER"	4.00	P-14902
	CLIFFER.	1937	11967
PBM-1	PATROL	1941	12093 19797
		* / 7 *	P-11993
PBM-5A	PATROL	1945	P-18738
F: 0/			P-21612
B−26 - A−30	"MARAUDER"	1940	P-16306
_ JRM-1	"BALTIMORE" "MARS"	1942	P-29163
	THE THE	1945	P-17729
,	\(\frac{1}{2}\)		P-17730 P-27922
AM-1	"MAULER"	1946	P-35528
2-0-2	AIRLINER	1946	° P-51073
4-0-4	AIRLINER	1951	F-39864
XP4M-1	"MERCATOR" 、	10.4	P-44102
P4M-1	"MERCATOR"	1946	P-33403-R
XB-48	BOMBER	1949 1947	P-37802 P-21616
	,	1777	P-32698
XB-51	BOMBER	1949	P-37343
	•	and the second s	P-37353
			P-37510
ν.	the second secon		P-37514
			F-37516 F-37563
Art. Same a.			P-39798
P5M-1	"MARINER"	1951	14367-C
P5M-2	"MARINER"	4 (2) (2)	28777-R
3	LIMILTIACIL.	1953	P-42616
			P-42621 P-42624
** ***			P-51535
B-57A	"CANBERRA"	1953	P-46602
			F-49341
>			P-49999
3.			₽-50001 ₽-52544
XP6M-1	"SEAMASTER"	1955	P-54633
	DOLLY		BB-12674
			98-12675



LOS ANGELES FACTORY

In the fall of 1912, the organization was incorporated formally as the Glenn L. Martin Company and operations were shifted from a former cannery in Santa Ana, California, to quarters in Los Angeles. The factory was a going concern of 14 employees. However, the pre-World War I market for aircraft was extremely limited, and Martin, who had earned Expert Aviator's Cerfiticate Number Two (Glenn Curtis was awarded Certificate Number One), helped meet his payroll by barnstorming the country as an exhibition pilot. Two of the company's few customers were Lincoln Beachey, an acrobatic flier of some renown, and William Edward Boeing, a Seattle lumberman and flying enthusiast who soon would establish his own aircraft manufacturing firm.

In 1913, the Los Angeles plant turned out the first Martin aircraft to be built for the military, an Army model TT trainer. It was one of these planes, with Martin at the controls, that carried out the first experiment in aerial bombing.

In 1917, the Glenn L. Martin Company and the Wright brothers merged interests in the Wright-Martin Aircraft Corporation. But the merger was short-lived and the new corporation was dissolved the same year.

Outside view of Los Angeles Plant

CLEVELAND FACTORY

In 1918, Martin reestablished his Glenn L. Martin Company in Cleveland, Ohio, where it remained for a decade.

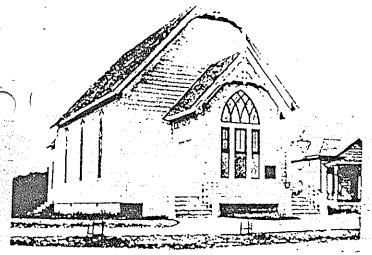
At Cleveland, the firm recruited perhaps the top aeronautical engineering team of the half-century. Included in the roster were Donald W. Douglas, Sr., Lawrence D. Bell, J.A. Kindelberger, and C.A. Van Dusen -- all of whom were later to head their own aircraft manufacturing companies. The remarkable team produced the MB-2, a twin-engine biplane designed for Army use in World War I. Although the war ended before this plane reached the front for action, the MB-2 remained the standard Air Corps bomber for several years.

Interest in military aircraft continued after the end of World War I, and Martin developed and built many different types of planes for the Army and Navy during the 1920's. It pioneered the first night mail planes for the Army, built the first all-metal seaplane, adapted the MB-2 for torpedo launching, and developed the first practical dive bomber.

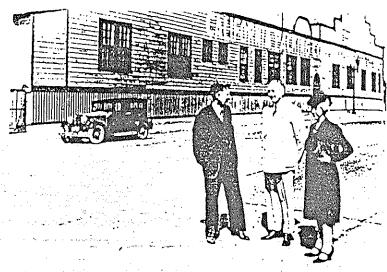
BALTIMORE FACILITY

As the tempo of aircraft development continued to increase, Martin outgrew its Cleveland facilities and in 1928 selected a new location near Baltimore at Middle River, on the Chesapeake Bay. The Baltimore site was selected principally for its proximity to Washington, D.C., its access to open water for seaplane testing, year-round flying weather, and the availability of a skilled labor supply.

The next quarter century was the golden age of aircraft production for Martin. From the Baltimore facility came a distinguished line of aircraft—aircraft that helped establish America's position in world aviation and, more importantly, played a vital role in crushing the Axis powers in World War II. These planes included the B-10, the first of the modern bombers and winner of the 1932 Collier Trophy; the China Clipper and her famous sister seaplanes that flew Pan American's trans-Pacific route from San Francisco to Manila; the Navy PBM Mariner series; the RAF Baltimore bomber; the famed B-26 Marauder bomber; the giant Mars cargo and troop carrier flying boats. The Martin Company's peak wartime employment reached 70,000.



The unused church building at Santa Ana, Calif., where Glenn L. Martin built his first airplane. The church was torn down a few years ago. The old "boxkite" was first flown on August 1, 1909.



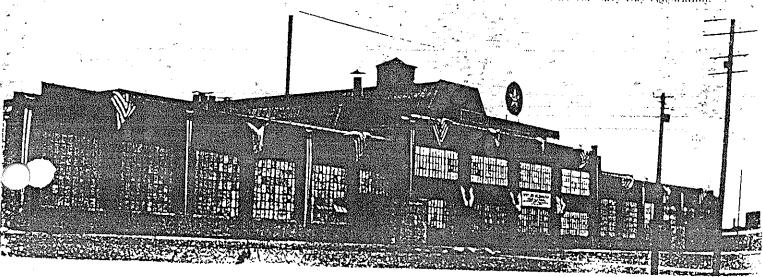
The second Martin factory was this canning plant at Santa Ana. Picture was made during visit of Mr. Martin and his mother, Mrs. Minta Martin, "First Lady of Aviation," some years ago. They're talking with the late Terry W. Stephenson, Sr., an old friend.

MARTIN'S OBSERVES 40TH BIRTHDAY



Expanding business required the fledgling Martin Company to move to this location in Los Angeles in 1912.

Plant was moved to Cleveland a few years later, 45 this mideen factory. Decorations are for Navy Day eglebration.



THE Glenn L. Martin Company is celebrating its fortieth birthday this month.

It was in the earliest days of a band of pioneer aviators who flew "by the sent of their pants" that Glenn Martin wheeled a frail "boxkite" he had designed and built himself and took to the air on August 1, 1909, only six years after the Wright Brothers had made the first flight in a heavier-than-air craft.

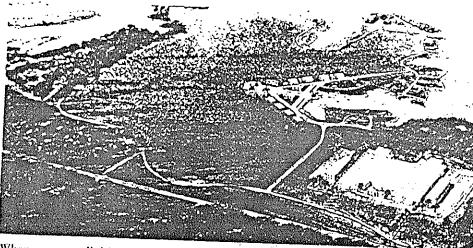
The locale was a meadow just outside the town of Santa Ana, Calif., where them Martin had been a successful automobile salesman and mechanic, but spent his spare time and all his ready cash in building with meagre engineering data an "aeropiane" in which he hoped to fly.

Fly he did in the early morning mists. He kept right on flying, always in better, stronger, safer aircraft until floday. The Glenn L. Martin Company is one of the oldest aircraft manufacturers in the world almost as old as the "flying machine" itself.

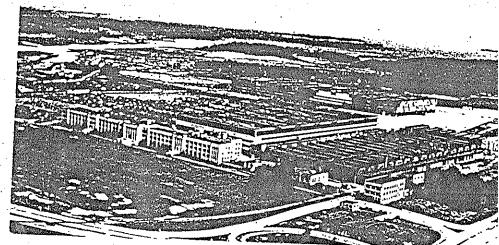
The story of those early days has been told and retold, yet it's an ever fascinating subject. The early flyers Martin, Curtiss, Beachy, Hoxsley and many others, including a few in the Armywere true adventurers in an unknown wilderness.

There was practically no science in the design and construction of those early craft. Engineers today have proved time and time again that many of the theories and beliefs of those early days were wrong, yet the airplanes flew in spite of the ignorance of the builders and pilots.

The abandoned church building where the first Martin plane was built laboriously by hand was totally unsuited for the future plans envisioned by the youthful and enthusiastic pilot. Space

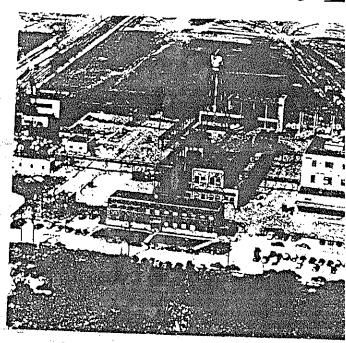


When move to Baltimore was contemplated, architect made rendering above of how plant would eventually look. Below: Aerial photo of plant today shows plans were closely followed.





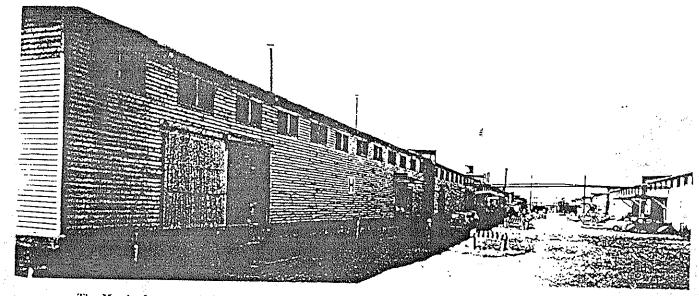
During the war, the plant almost disappeared under one of hest camouflage julis on East Coast.



Acrial view of Chemicals Division plant at Painesville, Olco, where Marvinol* resin is made.

Night view of Administration and Engineering Buildings.

*Trade bathe of The Olem A. Martin Company



The Martin factory at Baltimore was first located in the Canton warehouse area near the waterfront;

was rented in an old cannery in Santa Ana, but in a couple of years this was outgrown and a move was made to Los Angeles.

Money was largely raised by exhibition flying at county fairs, but Mr. Martin had interested the Army Signal Corps in one of his designs and he built for the service its first training plane, the Model TT, in 1913. From then on, the energies of the Martin Company have largely been concentrated on the construction of military aircraft to the end that the name "Martin" is known and respected among military pilots the world over.

among military pilots the world over.
With World War I in full swing, the
Martin Company moved to Cleveland
into a new, modern factory. Both the
Army Air Corps and the Navy were customers and many types of aircraft were
built for special purposes. The most
famous of this era was the MB twin-

engine bomber, whose fame made the words "bomber" and "Martin" almost synonymous.

A new location, close to material sources, with adequate area for growth, next to tidewater was indicated, so twenty years ago the Martin Company moved from Cleveland to Baltimore, Until the present factory at Middle River was completed, facilities were rented in a warehouse area in Baltimore.

Tremendous expansion took place during World War II so that today there are 958 acres of land used by the Martin Company and the factory buildings provide 2,702,415 square feet of working space. In its 40 years, the Martin Company has built more than 10,000 aircraft.

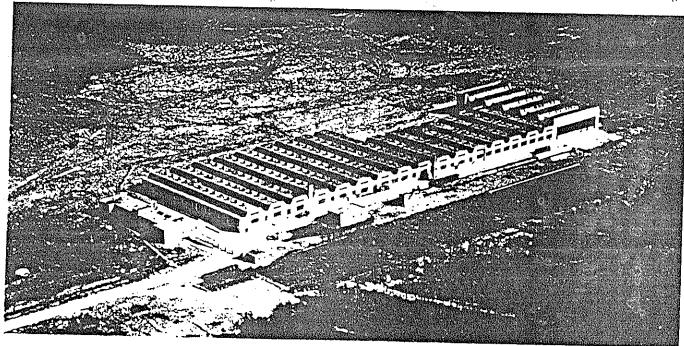
At the peak of the war effort, when the plant was running 'round-the-clock, there were almost 53,000 people employed at the Middle River plant and another 17.000 at a plant operated by Martin's for the Government near Omaha, Nebr., where B-26 Marauders and B-29 Superfortresses were made.

The Omaha plant was similar in size to Plant 2 at Middle River, another Government structure, which has been turned back and is now an Army Signal Corps Depot. Plant 2 was especially constructed for assembly lines to build the Martin B-26, which proved to be the most effective medium bomber in the European Theater of Operations and elsewhere, and had the lowest loss in combat ratio of any bomber in the ETO.

Aircraft are still the principal part of the Martin Company's business, but since the war the tremendous growth of pilotless aircraft, rockets and guided missiles has opened up an entirely new field and the Martin staff designing these items, as

(Continued on page 24)

Air view of first unit of Martin plant at Middle River, near Baltimore. Main structure is now known as "A" Building.



UFFICERS ASSUME NEW DUTIES WITH MARTIN COMPANY

All atomica time poor to



DANIELA, EVATT Vice President-Finance



EARL R. UIILIG Controller



W. L. LUCAS Treasurer



FRANKLIN M. BEALL Assistant Controller

charge of sales of the Firestone Tire and Rubber Company, of Akron, Ohio,

In addition to being a Certified Public Accountant, Mr. Evatt, a native of Oklahoma, studied in the Oklahoma schools and in Business Administration and Law at the University of Oklahoma.

Mr. Uhlig, who has been employed at the Martin Company since July, 1941, was elected assistant controller in November, 1942, in which capacity he has served since that time,

Mr. Lucas has been assistant secretary of the Martin Company since Sept. 19, 1941 and assistant treasurer since November 20, 1942.

Mr. Beall has served as chief accountant at the Martin Company since January 16, 1947. He was first employed September 2, 1943.

Mr. Schmidt was first employed at the Martin Company on May 23, 1943 and on May 16, 1948 was named assistant to the treasurer, having served in this capacity since that time.



ROBEŘTA, SCHMIDT Assistant Secretary

WE'RE 40 YEARS OLD

(Continued from page 6)

well as electronic devices, is one of the largest and most comprehensive in the country.

As a result of their studies, two missiles have already been made public the Viking high-altitude research rocket and the Gorgon IV, a radio guided test vehicle for the rampel engine. A new type furret for the Army has also been tevealed.

This, however, has in no way defracted from work on aircraft of the most advanced type. Currently in production are the AM-1 Mauter, Navy decetorpedistonater, and the PIM-1 Mercetor, a long-tange partial plane for the Navy, using toth piston and jet engines.

Martin's also produced the first six-jet fronter for the United States Air Force, the Nie48, two of which are now undergoing tests at Wright-Patterson Air Force Base near Dayton, Ohio, For the Navy, the NP5M-1, a flying boat featuring a long after-body for safer landings and takeoffs particularly in rough water, is now, in the hands of the Navy Trail Board.

Martin 2-0-2 transports, the first postwar twinsengine airliner, are establishing engable records for reliability and economy both in this country and South America.

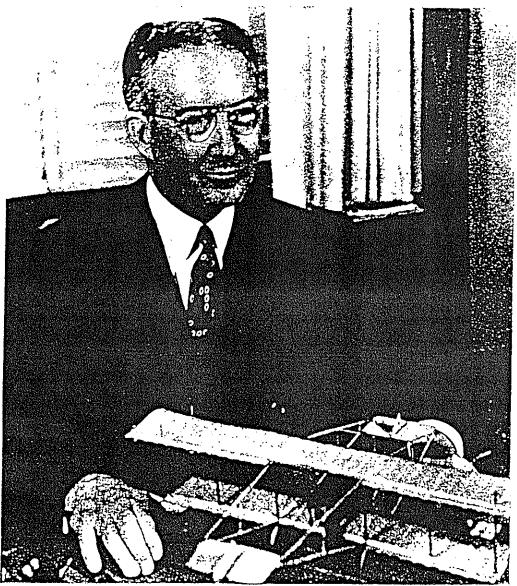
The world's largest operational flying bouts today are the Martin-built Mars ships may ferrying personnel and cargo between Manieda, Calif. Naval Air Station and Honolulu, with frequent trips to other parts of the United States and its possessions. Five of these sky mails were delivered to the Navy just after the war and each has put in well over 5,000 from of them? since delivers.

An early user of plastics in airplanes, the Martin Company went into the production of vinyl resins through its Chemicals Division. A new, modern plant at Painesville, Ohio, was completed late in 1947 at a cost of \$6,000,000. First connercial shipments were made from Painesville in March, 1948, and the Company is now the third largest producer of these resins.

The forty years since August 1, 1901 are minute as time goes, yet they have seen a complete revolution in many things including methods of transportation, and the Martin Company has always been a paoneer Just as avaitors of 1900 could not visualize what flying would be in 1949, so today's avaition men can't predict what things will be like in 1989, forty years hence. The Martin Company's eightfelth birthday, though, should be in an interesting and, by present standards a fautastic eta.

1939

THE WEEKLY NEWSMAGAZINE



A. Land C. Maria

GLENN MARTIN AND HIS FIRST BORN

One of his new war for a cons. \$882,000.

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TRANSPORT

Ites to Bombers

(See Cover)

He was a husky, solemn, shock-headed kid of 6 when he first decided there was money to be made in the quantity production of flying machines. That was 47 years ago in wind-whipped Liberal, Kans., where his father, Clarence Martin, had set up one of the first hardware stores in the Sunflower State's southwest. Working from the time school was out until bedtime, Martin's son, Glenn Luther, methodically turned out biplane box kites at

\$39,500.000 worth of planes. With the new contract, however, the biggest plane manufacturing backlog, \$48,000,000, glows in Rival Douglas' fireplace.

Mother's Boy. A stoutish pursemouthed man who looks out of shining spectacles with an amiably deliberate expression. Glenn Martin is exhibit At of what a human being can do by channeling all his time and talent in one direction. From his earliest kite-making days, he has been a no-nonsense man. When he was a youngster he promised his mother he would not drink until he was 21; at 53, he



GLENN MARTIN (CENTRE), MARY PICKFORD
His other passengers included Valeska Suratt, a pair of pink tights.

the rate of three a day, sold them for 25¢ apiece.

Last week the Kansas kite builder got an order for some more of his quantityproduced flying machines. The U.S. Army bought a half-million dollars' worth* of Martin 167 attack bombers, two-engine ships that can streak through the air at 360 m.p.h., tote a ton of bombs, maneuver against the nimblest pursuit ship in the air. It was no two-bit order, but it was not big enough to give pleasure to Glenn Luther Martin. He had hoped to fill the \$15,000,000 humber order which the War Department simultaneously placed with his big competitor. Douglas Aircraft Co. of Santa Monica, Calif. But the fact that he did not get the big order was not even a serious setback to Glenn Martin today. His \$10,000,000 plant outside Baltimore had just delivered 117 posibers to The Netherlands, was dg on a ten-million dollar order for new gull-winged flying boats for the Navy, 215 of the 107 bumbers for France, Altogether his backlog of orders came to

 Probably for three ships. Service regulations torbid autonomenent of the number of planes in any U.S. order. still keeps his promise. He was too poor and busy in his youth to smoke, nor does he yet. He never had much time for women, has never married.

Minta Martin had a dream before Glenn's birth that she was up in a flying machine, a circumstance which probably gives Glenn Martin title to the earliest aeronautical propensity in the airplane business. She gave him a sheet to sail his wagon before the Kansas wind. She saw him begin to tinker with machinery and at night read him newspaper articles about the flight experiments of Chanute and Lilienthal. She was just as pleased when he made himself an expert mechanic by working in a garage as she was when he studied business at Kansas Wesleyen.

Gleun's father liked it better when the Martins moved to Santa Ana, Calat, and Glenn began making \$3,000 to \$4,000 a year selling Fords and Maxwells. When Gleun began making gliders in his zarage, Father Martin's evebrows raced. When Glenn rented an abandoned Microdist church, locked the doors, paints \$100 km dows and, with a whittled propeller and a Ford Model N motor, began to construct an airplane, his alarmed father cought.

Glenn had taken leave of his senses, Mother Martin did not. She used to carry the coal-oil lamp around at night while Glenn climbed about his contraption, gluing fabric on the wings, varnishing the struts.

Early Days. In the early, rough-&tumble days of flying Glenn Martin was an incongruous figure. Solemn as a preacher, he dressed in black with a tall white collar, wore a businesslike helmet when he flew. Other pin-feather fliers, who turned their checkered caps backward when they climbed into their planes, called him "The Dude."

But while most of the other fliers just flew. Glenn Martin barnstormed to find out how to make better flying machines. Almost as soon as he learned to fly he began manufacturing planes in Santa Ana. He opened a factory in Los Angeles in 1912, from which he sold planes to the U. S. Army, still one of his best customers. For seven years, sobersided Martin, half pilot, half industrialist, whizzed around the country, flying to finance manufacturing.

One summer he barnstormed through the West carrying a woman parachute jumper in pink tights, to be let out over county fairs. He even set a few records, an altitude mark for hydroplanes (4.400 feet) in 1912, the longest overwater hop (from Newport Beach, Calif. 28 miles to Catalina Island) in the same year. Because aviators were few, the return was handsome. Most of it went into the factory. Because publicity for Martin—and he got plenty—was publicity for Martin planes, the business flourished. Even Father Martin (who died in 1935) admitted that Glenn had been on the right track all along.

One of his early passengers was Minta Martin, whom he took up precariously perched on the leading edge of the lower wing. Another was Cinemactress Mary Pickford, for whom he played the villain in The Girl of Yesterday, renting himself and his plane for \$700 a day. Still another was Musicomedienne Valeska Suratt, who planted three kisses on his cheek after he landed her in front of a crowd in Los Angeles. Blushing Martin ran away, later told newsmen soberly "her air conduct was good."

By 1917, Glenn L. Martin Co. was in Cleveland and its president had virtually quit flying. From that plant came the first Martin bomber, a huge, two-engined biplane. Built too late to get into the War, the first Martin bomber went to the Air Service. A great crane-like thing that drifted in stodgily to its landings, it was the standard bombardment plane of the service until the middle '208.

To Boltimore. Adding designers, draftsmen, withdrawing more & more from designing to administer the business. Martin turned out better & better models in rapid succession. He swapped little information with other manufacturers, became known as a sombre lone wolt. From the Cleveland plant came the first plane built specifically for mail service, the first metal American monoplane, of which the Navy bought 36, the first homber with an alloy-steel fuse-lage, of which the Navy bought 103.

By 1925 it was time to expand again, and this time Builder Martin decided to a

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have plenty of room. From unsuspecting holders of tide-water property above Baltimore, options were cautiously obtained by agents who represented themselves as acting for a New York sportsmen's club. When they were all in, Glenn L. Martin Co, had options on 1,243 acres of land, was ready to build a plant.

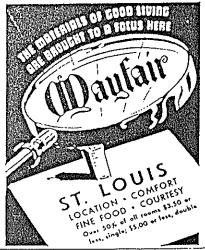
Since then things have gone a-humming. Soon after he moved into the plant Martin told friends he had a ship coming off the drawing boards that would revolutionize military aviation. It did. The ship was the Martin B-10, a two-motored monoplane. With a range of 1.800 miles and a bomb load of 2,400 pounds, it could pull away from any pursuit ship then in the air at a top speed of 250 miles an hour. The U. S. Army took 151 of them, the Argentine 35, The Netherlands 117. The last of the Netherlands order is being set up for flight this week in Java. Altogether 340 B-10s rolled out through the factory doors, to be flown to near-by purchasers, or to be packed in crates for overseas shipment. They were so far ahead of bombers of the day that they won Builder Martin the Collier Trophy in 1933.

Sandwiched between military and naval orders the Martin plant also turned out the first clippers for Pan American's Pacific run, huge, four-engined flying boats. Meanwhile, with pursuit ships getting faster & faster, practical, businesslike Glenn Martin laid down another job for his designers. What was now needed, he said, was a bomber that could defend itself against fighters. Since it could no longer outspeed them, its only chance to stay in the air lay in giving it enough maneuverability and fire power to hold its own in aerial combat.

The answer was the new 167, a sleek, mid-wing job. Most expensive of Martin's war babies, the first one cost \$882,000 before its tests were completed. Last January, while Douglas was under scrutiny in the Senate for showing its new attack bomber to France before the U.S. had a crack at it-by and with the consent of President Roosevelt-Martin calmly went ahead with his order of 167s for France.

Also he entered a 167, fitted with U. S. instruments and equipped for Air Corps tactical missions, in the Army's attackbomber competition. Douglas, which has also been one of the big Army contractors, had lost its entry when it started the Senate asking questions; at Santa Monica Test Pilot Johnny Cable cracked up the new Douglas ship, with a French observer aboard, and was killed. Reentering the competition late, Douglas turned up with a slicked-up job, reputedly with a speed above 400 miles an hour, and, in a Garrison finish, last week took first money.

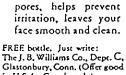
In the midst of 1939's war-scared aircraft manufacturing boom, Glenn Martin remains, as usual, priestlike and detached, To his office he goes every morning, hurtling along in a 16-cylinder, seven-passenger Cadillac ("they cruise better when they're big") at speeds that make motoreyele policemen wince. But they make no arrests for Martin is the second largest employer of labor in the Baltimore in-



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• Examined by a microscope after shaving, every razor blade shows tiny particles of skin. This chipping of your tender skin may cause sore spots, pimples. That's why millions use cool, refreshing

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dustrial area. (The largest: Bethlehem Steel.)

He sits down at his desk before \$:30. tall and impassive, and with slim spatulate fingers runs through his mail. During the morning he drops in at the engineering building, where 460 engineers and draftsmen are at work, to peer at blueprints and drawings. Sometimes he goes through the plant, where 6,000 mechanics turn out his ships in a method as nearly resembling straight-line production as the aircraft industry has yet approximated. But Glenn Martin does not tinker with airplanes any more. He tells other people what he wants. When he returns to his office he is as unruffled and immaculate as before. A fussy dresser, he goes in for double-breasted suits in sturdy fabrics, insists that his tailors (Bell & Co., Manhattan) put cuifs on his coat sleeves, adorn his lapels and cuffs with little raised ridges that give the suits a ribbed appearance vaguely like the belly of a B-10.

Frequently he goes to Manhattan, tearing up the highway at breakneck speed



MOTHER MARTIN ... had a prenatal premonition.

with his mother sitting unruffled beside him. But never does he go by airplane. Few years ago only stockholders in the company were Martin and Motorman Louis Chevrolet. But in 1934, with funds needed for expansion, 325,000 shares of Glenn L. Martin Co. were put on the market at \$11.50 a share (current price: \$34.625). Today, Martin remains well in control with some 37% of the stock in his hands, but the bankers who are now interested in his company have taken him out of the air. Because Martin is the Martin Company they are taking no chances. His life is insured for \$1,000. 000 and the policy is void if he so much as gets into an airplane on which a propeller is turning.

In 1937, the Martin Company turned a net profit of \$1,144,858. Last year it made \$2,349,355 (equal to \$2.15 a share) and in the first quarter of this year it made \$682,496. Yet Martin has never paid a cash dividend, has ploughed back its

carnings into plant expansion and reserve.

When Martin goes to Manhattan with his mother, he stays over to see a show or two, any kind just so he's sure it's likely to be good. Occasionally he goes duck shooting on the Chesapeake. Still more rarely he goes on short cruises in his 107foot, twin-Diesel yacht Glenmar, from which he keeps in communication with the plant by radio-telephone. He likes to talk about plans for a long trip at sea, but probably he will never make it, because he invariably finds ways to keep himself busy.

With the help of a maid, widowed Minta Martin keeps house for her son in Baltimore's swank Ambassador Apartments, just a short walk from the Second Presbyterian Church, of which she is an active member. Martin sometimes goes with her to church on Sundays, dodges it when he can. On evenings when they don't go to the movies he likes to sit at home, surrounded by massive furniture and by paintings of landscapes which Minta Martin has dashed off from time to time over the past 40 years. Two years ago Mrs. Martin stopped painting, doesn't expect to resume again. There is no more room on. the walls.

Sitting at home, Glenn Martin goes over airplane plans, thinks about plant expansions, reads technical papers on aircraft design in which he tries to keep up in hisspare time. He seldom goes out, dislikes social functions, steers clear of parties nd tries to keep at work. When he feels erworked, which sometimes happens after a hard day, he takes a turn around the block and goes to bed.

Now the Atlantic

To genial, mustached Arthur E. La Poste, wiry veteran of many a hop across the Pacific, went the honor. When the last handshake had been exchanged before the newsreel cameras, Pan American Airways' President Juan Terry Trippe, seeing another ocean-spanning dream about to come true, turned to him: "Captain La Porte, is the flight in order?"

"The Yankee Clipper is ready, sir, standing by for orders," Skipper La Porte answered with self-conscious crispness. From his swarthy chief he took the manifest, went aboard, and gave the command to cast off. Out on Long Island's Manhasset Bay, the Clipper headed into the wind. The thunder of her four engines re-echoed from the hangars as she got up on the step. In a few more seconds she

So last week, on the twelfth anniversary of Colonel Charles A. Lindbergh's takeoff for Paris, Pan American Airways (of which Lindbergh is technical adviser) inaugurated the first transatlantic mail service. In the hold of the Clipper were .574 pieces (1,603 lbs.) of mail, mostly

h collectors (rate: 30f a half ounce), and a box of four dozen California marigolds for Queen Mary. Alert at her crew stations, or lolling in the luxurious cabins were 16 Pan Am employes.

Before next dawn the two-decked Clipper landed in the harbor at Horta, in the Azores. Delayed more than six hours

while swamped Horta postal employes stamped 23,000 letters, she got to Lisbon 26½ hours after leaving the U.S. From there the Clipper made an easy hop to the end of the line at Marseille.

Under CAA's certificate of convenience and necessity, awarded to Pan Am the day before the first trip, only two transatlantic flights may be made a week, With authorizations from France and England for six a week, CAA is keeping room for competition. Only competitor now in sight: American Export Airlines, which has not yet made its first exploration flight.

With 400 on its passenger waiting list. Pan American will carry no revenue passengers until next month. One of the provisions of CAA's order was for five flights with mail only, so that Pan Am's crews will be thoroughly familiar with the run before the first passenger run (capacity: 40) is made.

Signs of Death

From the tortuous, terraced streets of Chungking, frightened Chinese saw doom in the blood-red discs on the under side of raiders' wings before ever a Japanese bomb had been dropped. The people of Madrid and Barcelona learned to duck whenever they saw the red-&-yellow wing insignia of Nationalist ships overhead. Fighting tribesmen in Palestine know they must take to cover whenever attack planes sweep down on them with the blue-white-&-red wing targets of Great Britain.

Distinctive national insignia for fighting planes were originated early in the World War so that in the split-second action of aerial dogfights pilots could quickly identify friendly planes, would fire on none by mistake. After the War their use soon spread to all the world's air forces. Even with camouflage they will probably be used in the next great war, both for their identification factor and because the sight of friendly wings overhead is a morale builder for ground troops. As the flags of nations have disappeared from modern battlefields, they thus reappear, in new forms (see next (wo pages), in the battles of the air.

That they also enable panicked noncombatants to identify low-flying raiders, and even bombers in the middle military altitudes, is of no great military importance. Defending anti-aircraft crews identify friendly and enemy planes by their distinctive silhouettes, and to them wing and tail markings are only confirming evidence that approaching ships should be fired on or allowed to go by.

Detour

Like any other businesslike airline, K. L. M. (Royal Dutch Air Lines) likes to run from city to city by the most direct route. But last week its new special London-Warsaw plane service was routed via Copenhagen, Gdynia and south to the Polish capital, avoided the direct route across Germany,

Reason for the detour: In forced landings in Germany on the Vienna-London run, Jewish passengers with through tickets were taken up by the Gestapo and disappeared. Presumably they wound up in concentration camps.

