WILHELMSHAVEN PAPER MODELS

NUMBER ONE IN CARDBOARD-MODELING

S.S. JOHN W. BROWN



History

The Liberty Ship, **S.S. JOHN W. BROWN** is the "**OLDEST OPERATING LIBERTY SHIP"** of the two remaining Liberty Ships in the world. Project Liberty Ship, with over 3000 members world-wide, is a non-profit, all volunteer organization, formed in 1978 to preserve, restore and operate the **S.S. JOHN W. BROWN**. This National Historic Vessel is a fully operational maritime museum, dedicated to the shipyard workers, U.S. Navy Armed Guard and Merchant Mariners who built, defended and sailed Liberty Ships during World War II.

During the early years of World War II, the United States of America organized an emergency shipbuilding program to replace the merchant ships sunk by mine fields, aerial bombing and U-boat attacks. To keep the Allied Nations supplied with food, military equipment, troops and other essential goods, 2751 Liberty Ships were built between 1941 and 1945. In order to "build them faster than they can sink them", 18 shipyards around the entire coast line of the U.S. participated in their construction.

The Liberty Ship design was based on British plans and modified to conform to American Maritime Practices and to make full use of mass production methods. Built at the Bethlehem Fairfield Shipyard in Baltimore, Maryland on September 27, 1941, the **S.S. PATRICK HENRY**, Hull # 1, was the first Liberty Ship launched.

Liberty Ships where 441 feet 6 inches in length with a beam of 56 feet 9 1/4 inches. When fully loaded, Liberty Ships could carry 8500 long tons of cargo, enough to fill 300 railroad boxcars. These ships where powered by a triple expansion steam engine developing 2500 horsepower at 76 r.p.m. with a top speed of 11 knots. Two oil-fired boilers generate steam at 220 psi and 450 degrees.

The **S.S. JOHN W. BROWN**, Hull # 312, was launched on September 7, 1942 at the same Bethlehem Fairfield Shipyard as the **S.S. PATRICK HENRY**. After returning from her maiden voyage to the Persian Gulf, the "Brown" was converted to a limited capacity troop ship, accommodating up to 500 troops or POW's in addition to cargo.

Restored to steaming condition in 1991, the S.S. JOHN W. BROWN made her first Chesapeake Bay cruise that September. Subsequently further major restoration has enabled the "BROWN" to venture beyond the Chesapeake. Since the Summer of 1994, she has steamed coastwise to several ports, including New York, Boston and Halifax, Nova Scotia. This achievement, however, does not complete Project Liberty Ship's mission. Volunteers are still needed to maintain the ship, to continue the far from finished work of restoration and to raise money to support the work. When the ship opens for visitors on a regular schedule, additional volunteers will be needed to serve as guides, help in the Ship's Store, work in the office and create and maintain exhibits. Thus Project Liberty Ship invites the public to join up. Members receive the publications "Brownie's Bights," "The Ugly Duckling," and the Ship's Store catalogues, plus additional mailings announcing cruises, the annual bull roast, the annual holiday party and other special events.

Technical Data

Length: 442 ft Propulsion: 3 cylinders, oil powered steam

Width: 57 ft engine with 2500 PS

Draft (fully loaded): 28 ft Crew: 43 merchant marine sailors and

Tonnage: 14,245 tons 12 - 28 marines

<u>Building Instructions</u> (including picture sheet)

Parts 1-1b Base plate (Sheet 5)

Separate tab 1a from 1b. Place parts 1 and 1b edge to edge and connect with tab 1a. Use a ruler to insure that the center line is aligned. Score the gluing tabs from the back and bend up.

Parts 2-2g Main longitudinal bulkhead (Sheet 5) Using tabs 2b and 2c glue parts 2, 2a and 2d together in the same manner as part 1. (Insure that the base line is straight). Score the gluing tabs on the bottom edge alternately from the front and the rear and fold according to the marking on the base plate. Cut out the slits (double lines) to the cross mark. (Here you are cutting out a section the thickness of sheet of card). Glue parts 2e and f to the marking line in their appropriate slits. Attach

Parts 3-17 Cross formers (Sheet 5)

part 2g after attaching the main deck.

Cut out the slits on the cross formers in the same manner. Slide the cross formers into the main longitudinal bulkhead, position perpendicular and fasten to the main longitudinal bulkhead and the base plate.

Parts 18-18b Main deck (Sheet 1)

Cut out the slits (double lines) and shaded circles in parts 18 and 18a. Score the gluing tabs on the sides from the back and bend down. Connect the two parts of the main deck with the tabs b (as with the base plate) and fasten to the cross former structure.

Parts 19-19d Hull - port side (Sheet 3)

Connect parts 19 and 19a with the gluing tab b. Starting at the bow, attach the hull to the tabs of the base plate and the main deck. Glue the shield parts c and d inside to the hull. (The scupper outlets can be cut out).

Parts 20-20d Hull - starboard side (Sheet 3) Prepare these parts in the same manner as parts 1919d.

Parts 21-21c Superstructure (Sheet 1)

Score the parts according to the line code and bend the gluing tabs back. Position the superstructure on the appropriate place on the main deck.

Parts 22 - 22c Supports for the Bridge (Sheet 1) Score parts 22 and 22b, glue back to back and allow to dry thoroughly. Fasten the supports left and right next to the superstructure walls to the longitudinal markings on the hull shield as well as to the walls 21 and 21c.

Parts 22a and 22c Shield parts with deck supports Bend the side rectangle of parts 22a and 22c forward fasten to the deck as a continuation of the hull so that the hull shield is completed (22 and 22a port and 22b and c starboard).

Parts 23-23d Boat deck (Sheet 1)

Next to the railings are four marks. These are the positions for the deck supports which should be made from wire. Diameter of the wire should be 0.5 mm and length 9mm. Cut out the slits in part 23 as done in the main deck. Cut the railing at the arrows. Score and bend the lines according to the line code. Glue the side railing parts back to back. Glue the deck to the superstructure walls. Attach the companionways b and c to the rear platforms in such a manner that they point towards the middle. Fold the railings a and d, glue back to back and attach around the platforms of the companionways.

Parts 24-24b Bridge walls (Sheet 1)

Score the gluing tabs and bend back. Cut a 5mm incision between the railing and stairs at the arrows. Fasten the wall to the boat deck and wall part 21. Bend the shield section of part 24a (bridge extension) up and attach to the lateral markings on the wall and glue the shield of part 21 around it. Fold the stairs along the middle line and glue back to back. Prepare and attach part 24b in a similar manner on the other side.

Parts 25 and 25a Walls and Deck (Sheet 1)

Cut out the slits of part 25 and bend the gluing tabs back. Fold the railings of part 25a up and glue part 25a at a right angle in the slit of part 25 with the printed side up. Fasten this group between the superstructure walls part 24. Fasten parts 25c and d flush to their marking lines on 25a with the printed sides facing the printed side of part 25a. Glue railings and ladders of parts 25d and e back to back. The ladder and railing are now hanging on a small platform. Fold the ladder down and the railing up. Fold the short part of the railing at a right angle and fasten to the platform. Fasten part 25d (right) and e (left) flush to the gaps in part 24 above the doors. The ladders go (with the long edge fastened to the wall) diagonally from the platform down (between the door and next porthole).

Parts 26-26g Bearing deck (Sheets 1 & 3)

Make incisions at the arrows on part 26. Bend the shield and railing of part 26 up. Bend parts a, b, c, and d according to the line code, glue back to back as necessary and complete the railing with these parts. Glue the bearing deck to the superstructure wall 24. Glue the ladder e back to back and fasten in the opening of the railing in 26d. Glue part f back to back, cut into four strips and fasten vertically to the marking lines. Glue part i into a box open on one side and fasten to the appropriate marking (i). Glue part h (sheet 1) into a box with the colored side inwards open on one side. Fold part g (sheet 1), round the lower part and glue edge to edge. Glue h inside the top of g and fasten to the marking (26gh) on the bridge wall.

Parts 27-27d Funnel (Sheet 2)

Separate tab a from part 27. Round the funnel (to the shape of disks b and c) and glue into a cylinder with the tab a. Glue disk b in the bottom and disk c in the top. Form part 27d into a ring with the tab and fasten on top of the funnel. Position the funnel on the bearing deck with the ladder facing forward.

Parts 28 and 28a Open helm (Sheet 3)

After scoring, bend the side parts down and glue the corners edge to edge. Glue the railing back to back and position on the marking lines on the open helm. Glue the helm to the bearing deck with the H marking toward the stern.

Part 29 Skylight (Sheets 1 & 4)

Fold part 29, form into an A-frame box open on the bottom and fasten to the marking on the rear of the boat deck 23. Fold the railing section of part 29a up. Fold the sides down, gluing edge to edge to form a box open on two sides. Fasten this box to the marking on 23 with the door facing the skylight. Fold railing 29b along the middle line and glue back to back. Form the railing at the incisions to a rectangular U-shape and position vertically on 29a. Pay attention to a small distance from the edge!

Parts 30-30b Two 2cm Anti-Aircraft gun positions (Sheet 3)

Round parts 30a and b and form into a ring (part 30a inside). Glue in disk 30 underneath (curved line). Glue the anti-aircraft position to the forward edge of the bearing deck.

Parts 31-31b Two 2cm Anti-aircraft gun positions (Sheet 3)

Bend the shield parts of part 31 up and fasten part a around the outside. Separate part 31b at the arrow, shape to the curve of 31 and glue back to back (short part inside). Complete the shield part of 31 with this part. Fasten these gun positions on the appropriate markings (f0 on the bearing deck 26.

Parts 32-36 Loading hatches (Sheet 3)

Fold the side parts down and glue the corners edge to edge. Place the hatches on the markings on the main deck (v=forward).

Parts 37a-41a Winch housings and entrances (Sheets 3 & 4)

Cut out the shaded circles on parts 37, 38, 39 and 41. Prepare in the same manner as the hatches 34-36. Double the rectangle containing parts 37a, 38a and 41a. After thorough drying, cut out the parts and fasten to the lower lines on the houses 37, 38 and 41, thereby connecting them with the loading hatches.

Fold the ventilator part 38b, round the top part, glue edge to edge and fasten to the top of winch house 38.

Parts 40, 40a and 40b (Sheet 3) Fold the diagonal sides left and right of the door back. Fold the long center section to the shape of the sides and glue edge to edge. Fasten to the markings on decks 18

and 18a (40 and 40a with doors facing the stern and 40b with door facing center line of the ship).

Part 42 Rear superstructure wall (Sheet 1)

Fold the glue tabs back and position on the rear part of the main deck according to the markings.

Parts 43-43d Rear superstructure deck (Sheet 2)

Cut the railing of part 43 at the arrows to the marking line, fold the railing up and glue railing parts a and b around it. Cut the shield part c at the arrows, glue back to back, round and fasten to the round part of the deck. Fold and glue railing parts e back to back and close the gaps between the railing and shield. Fasten the deck with 3 mm extended to superstructure wall 42 (shield toward the rear). Now attach parts 48-480. Cut part 43d at the arrow and glue the railing and side ladder back to back. Fold the ladder down and the railings up. Position this part as a catwalk over part 48 to the opening in deck 43.

Parts 44-44d Two 2cm AA gun positions (Sheets 2&3)

Fold part 44 into a rectangular post, glue edge to edge and position on the marking on deck 43. Pay attention to the marking points for the supports made from wire! Glue the shield of part 44a back to back and fold up. Fold shield parts b and c along the middle line and glue back to back. Round the part (shorter part inside) and complete the shield for part 44a. Position the gun position 44a on the two rectangular posts with the opening to the stern. Fold the ladder 44d along the middle line, glue back to back and insert in the opening in the shield.

Parts 45-451 Anchor winch (Sheet 2) (Sketch 1)

Attach the doubled base plate 45 to the main deck. Fold the side parts of part 45a down. Adjust the long tab to the shape of the side parts, glue edge to edge with these parts and attach the open side to the middle of part 45 (pay attention to V=forward). Bend strip b according to c, glue together and attach to the rear of part a. From the right side glue both disks e to d. Attach the rear side of one d/e part to a. Attach one part d/e to the back of f. Glue part f behind g. Glue strip i into a ring and glue between disks h. Glue the winch with its white backside to g. Glue part k into a triangular beam and attach to the right side of a. Now attach part g to the markings on the base plate and to k, with the winch facing outward. Proceed with part L (left side) in the same manner. Fold the trapezoid shaped section of both anchor chains down. Bend down the chains between the two marking lines into a fourth of a circle arc and attach to the winch and the main deck.

Parts 46-46i Bow gun platform (Sheet 2)

Make incisions in part 46 at the arrows, fold the railing up and glue the long thin sections back to back. Fold the portion of the part 46 with the door down and glue back to back according to the fold lines. Fold railing part a, glue back to back and glue around the railing of part 46. Prepare b in the normal manner and fasten around the round portion of part 46. Fold part, glue edge to edge and

position on appropriate space between the anchor chains. Position the platform on c in such a manner that the part folded down with the door is positioned vertically and connects to the wave break. Glue parts j and k back to back and complete the wave break. Glue part d edge to edge into a tube and insert in the circular openings near the wave break up to the marking line. Prepare parts e, f and g (like part 31) into an anti-aircraft gun position and position on part d. Glue the railing portions of part h back to back and fold up. Tailor the catwalk to fit between the platform and the gun position and fasten in place. Position the ladder in the remaining gap of the railing. There are similar structures for port and starboard.

Parts 47-47g Winches (Sheet 2)

Prepare 47 in the same manner as part 45a. Glue part 47 with its open part to the base plate a. Glue the areas with the circles b, d, e, and g back to back. Glue the strips c and f edge to edge into rings. Construction of the parts:

- large drum disk b, ring c, disk d
- small drum disk e, ring f, disk g

 Attach these drums to the side markings on part 47.

 Position the winches on the main deck in such a manner that the small drum faces toward the loading batch

Parts 48-480 Stern winch (Sheet 2) (Sketch 2) Glue part 48 edge to edge into a box open on one side and position it on the rear main deck with the circle facing the right. Fold 48a on the fold lines and attach to the right of 48. Double the rectangles 48b-c and cut out the figures. Attach part b to a with the circle toward 48. Round 48d and glue edge to edge into a cylinder. Close the openings with a disk c. Glue the side drum between 48 and 48b. Glue part 48k into a triangular beam and attach one end to the triangle on part b. Cut out the parts from the doubled rectangle 48f-h. Attach f to b, with its triangle mark toward b, to k and to the line on the deck. Form i into a ring and attach to the marking on b. Glue disk h, with its gray side outward, to i. Glue the winch to f. Complete parts 48k, 1-n and o in a similar manner and attach to the left side. There is no part 48e!

Part 49 Four inflatable dinghy holders (Sheet 4) Fold part 49 according to the line code and glue back to back. Cut out the shaded areas. Fold the side parts at a right angle to the middle section. Attach these rubber dinghy holders on the marking lines on the main deck and to the shield and the top of the side parts to the roof of the winch housing. Position the rubber dinghy holders as follows:

- two by the winch house 38 and
- two by the winch house 39

Parts 49-49c Four inflatable dinghies (Sheet 4)
Fold part 49b and glue flush to the marking lines on 49a (printed side inward). Cut out the shaded area of part 49c, fold the side parts down, glue corners edge to edge and glue over part 49 to part 49a.
Attach the rubber dinghies to the dinghy holders.

Parts 50-50c Two 2cm Anti-aircraft gun positions (Sheet 3)

Prepare in the same manner as gun positions 46d-f. Glue the ladder back to back and fasten to the ladder section on the shield. Insert the tube 50 up to the marking line in the circular opening on the main deck near hatch 5 and fasten in place. Fasten the gun position to the tube so that the ladder is facing forward. Pay attention to the points for the wire supports.

Parts 51-51d Four pair davits (Sheet 4)

Make a sandwich out of parts 51 and 51a with the blank sheet in between (insure printed sides are facing out). Cut out the eight shaded triangles. Glue one each part c to b to form a T-shape Glue the davits in pairs to the short marking lines on the boat deck. Glue part d (four boat cradles) to the long marking lines.

Parts 52 and 52a Four boats (Sheet 4)

Score the front and back of part 52, fold on the middle lines and glue the side extensions back to back (the middle part remains unglued!). After drying, bend the tab extensions up in such a manner that the unglued middle part arches into a boat shape. Close the openings with parts a. Cut off the excess tabs and position the boats on their cradles.

Parts 53-53e Three guns (Sheet 4)

Double part a and glue the disk to disk 53. Glue bedge to edge into a truncated cone and position on a. Double part c, cut it out and fold the side tabs up. Glue part d into a box open on one side. Score part e and glue edge to edge into a tube. Fasten part e in d and glue to the fork c. Glue part c/d/e to the cone. Position the bow gun on the platform 46. Position the other two guns on platforms 44a.

Parts 54-54i One 27mm gun (Sheet 2) (Sketch 3) Construct in accordance with sketch 3. Fasten to designated position on part 43.

Parts 55-55e Ten 2cm guns (Sheet 2) (Sketch 4) Construct in accordance with sketch 4. Position on designated markings.

Parts 56-56b, 57-57b, 58-58b Masts (Sheet 4)

Score part 56 along its entire length along the lines implied by the small marking lines and form into a small tube. Cut out the shaded circle in part a and slide over the mast and glue to the upper marking line (u=down and v=forward). Close the top of the mast with disk b and insert through the hole in the first winch housing and glue to the main deck. Glue part 56c back to back, form into a cylinder and close one end with part d. Prepare parts 57 and 58 in the same manner. The marking for part 57a is just under the tip of mast 57 (the same goes for 58). Parts 57-57b go in the second winch housing and parts 58-58b in the third winch housing.

Parts 59-59c Rectangles (Sheet 4)

Glue part 59 (the rectangle with parts 61-61g) back to back with parts 59a-59c (achieving a four thick piece). Insure that part 59 c is glued with the

printed side out. The top surface is the cutting surface.

The Verschnittreserve can be used in case there are cutting errors on any of the gray parts.

Parts 60 Ventilators (Sheet 4)

Construct the ventilators as follows: glue parts 60a-60d edge to edge into a cylinder (slanted edge on top). Glue A, B, C and D edge to edge into cylindrical cones. Color the inside of the cones gray. Glue the smaller opening of A, B, C and D to the slanted edge of 60a, b, c and d respectively. The result is an angled tube. The positions of the ventilators are marked with two short lines as follows:

Ventilator 60a two in front of hatch 1, four around the funnel, two near the rear railing of the boat deck and two in front of the rear winch.

ventilator b in front of the bridge wall 21 next to hatch 3 and on the boat deck next to the deck house 29a.

ventilator c on the winch housings 37, 38 and 39. ventilator d to the side of the skylight 29 and on the markings of deck house 29a.

Parts 61-61g Loading booms and bars on part 59

Loading booms 61 extend from the T-markings of the forward side of the winch housing 37 over the hatch 1 to the overhang at the supporting posts for the bow gun. Position two supports a on the markings on the deck house 41. Fasten two supports a to the markings on the railing behind the gun platform next to the ladder.

Two loading booms b extend from the rear T-markings on the winch housing 37 to the supports on the deck house 41.

Two loading booms c extend from the rear T-marking of winch housing 38 over the cross to the corners of the railing on the boat deck.

Two loading booms b extend from the forward side of winch housing 39 to the corners of the railing of the boat deck.

Two loading booms b extend from the rear of the winch house 39 to the supports a on the railing behind the gun platform.

One loading boom b extends from the middle T-marking of the rear side of winch housing 37 vertically to the sailing mast 56.

One loading boom b extends from the middle T-marking of the forward side of the winch housing 39 vertically to sailing mast 58.

Mast e stands vertically on the bearing deck on the port side between the funnel and railing.

Place one each bar f on the marking on the masts 56, 57 and 58.

Separate part g at the arrow and position one flag on the bow and one on the stern.

Parts 62-62b Bollards (Sheet 2)

Glue part 62 back to back and cut out the rectangles. Glue parts a edge to edge into cylinders, attach to the rectangles and close the end with disk b. Position the bollards on the main deck.

Parts 63-63b Bollards (Sheet 2)

Prepare in the same manner as parts 62-62b.

Position tackle and antennas as shown in the title block of sheet one.

We wish you hours of pleasure with your model.!