

# **BUILDING INSTRUCTIONS**

Version 2.0

#### HMS Sirius 1786 Deck Cannon

Modellers Shipyard is proud to present another kit in our series of models that have significance to Australian colonial maritime history. We are the only manufacturer of wooden model kits in Australia.

The *HMS Sirius* was the flag ship of the First Fleet. This frigate, under the command of Captain Arthur Phillip, led a fleet of 11 ships carrying 1350 convicts, sailors and other passengers, to establish the first settlement in New South Wales. The fleet left England on 13 May 1787 and after a monumental journey taking eight months to complete the fleet arrived in Botany Bay between 18-20 January 1788. Two years later, when the fledgling colony of New South Wales was struggling to support itself, the *HMS Sirius* and the *HMS Supply* were sent on a special voyage to transport marines and convicts to Norfolk Island to lessen the burden on the new settlement. It was here that the *Sirius* foundered when it struck a reef off Sydney Bay (Kingston) on Norfolk Island and was finally wrecked on the 19th March 1790.

In January 1791 Capt. John Hunter decided to attempt to salvage the ship's guns. He had previously avoided this task out of concern that the gun deck would collapse upon the orlop and lower decks, preventing access to cables and stores. With the exception of two carronades that had fallen overboard when the masts were cut down, all the guns were hauled ashore with their carriages.

One of the cannons salvaged was returned to Sydney and used as signal gun at South Head. In 1907 the Sirius cannon was installed at Macquarie Place to mark the place where the British flag was first hoisted and eastern Australia was claimed for Britain on the 26 January 1788.

The Sirius cannon and its carriage was restored by the Australian National Maritime Museum and the City of Sydney as part of a Public Art program to maintain and preserve the City's artworks and historical monuments. The cannon is now a public monument located in Macquarie Place, Sydney.

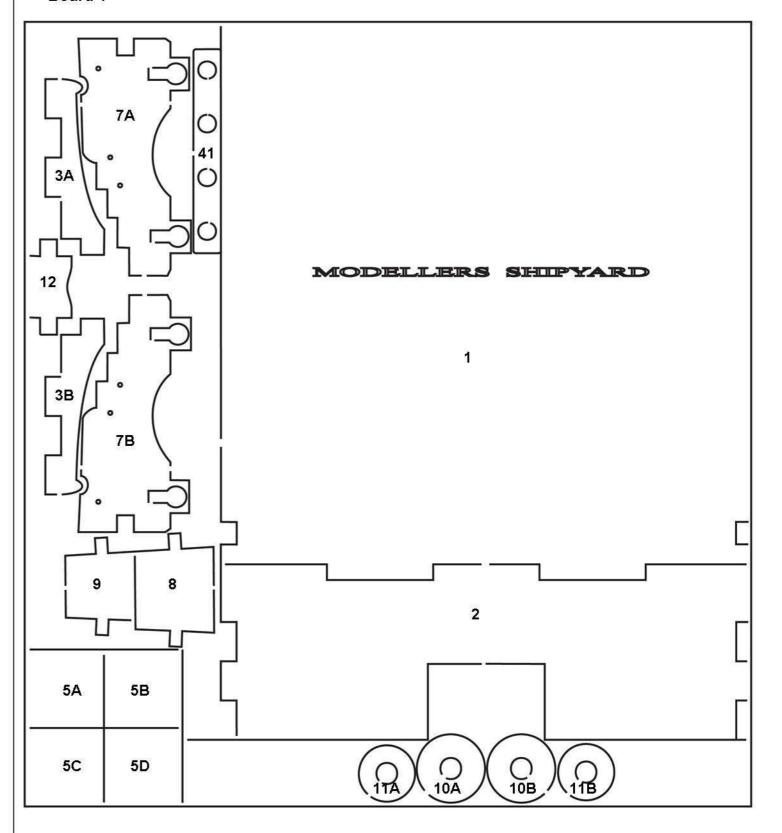
#### **Materials & Parts List**

P1 Base	
P2 Bulwark	
P3A/B Supports	
P4 Deck	
P5A-D Feet	
P6 0.5x6x150mm walnut timber strip—22 lengths	
P7A & 7B Carriage Cheeks	
P8 Carriage Rear Base	
P9 Carriage Front Base	
P10A & 10B—Wheels—Front	
P11A & P11B—Wheels—Rear	
P12 Carriage Transom	
P13A-D Axle Spacers	
P14 Axles—Dowel 5x100mm	
P15 10x10x20mm limewood	
P16 1x2x20mm walnut	
P17 Quoin hand grip	
P18 2x10x20mm walnut	
P19 1x3x40mm walnut	
P20 Eye pins - 16	
P21 Eye plate—2	
P22 5mm brass ring—2	
P23 Wheel pins	
P24 5x125mm L section walnut	
P25 Cannon Barrel	
P26 Capsquares	
P27 1mm brass wire	
P28 3mm brass ring—2	
P29 Chain—Black— 50mm	
P30 0.25 cord—fawn	
P31 Blocks—7mm 2 hole—4	
P32 2mm Cord—800mm	

P33	4x4x60mm limewood
P34	2mm dowel x70mm
P35	Barrel frame
P36	Barrel frame
P37	Barrel base
P38	Barrel top
P39	Barrel sides
P40	Barrel Lid
P41	Cannon Ball Rack
P42	Cannon Balls
P43	0.5mm Cord - fawn
P44	Name Plate



#### Board 1



DECK CANNON HMS SIRIUS 1786 SHEET 1

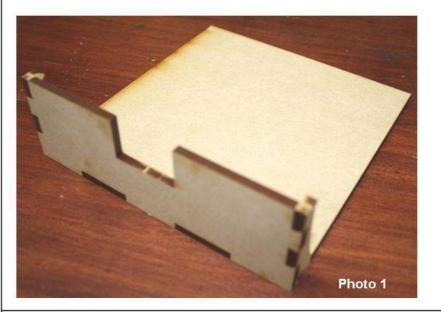
#### Board 2

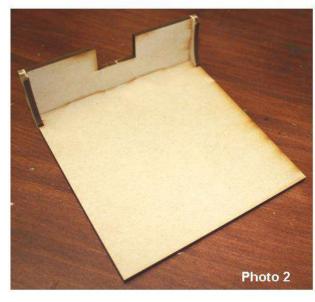
# 13A-D 35 36 38 DECK CANNON HMS SIRIUS 1786 MODELLERS SHIPYARD

# 1.0 Assemble Base, Bulwark & Bulwark Supports

Identify the base P1, bulwark P2 & bulwark supports P3A & 3B. Remove these parts from Board 1. Dry fit these parts together. Once satisfied glue parts together. Allow 24 hours to dry.



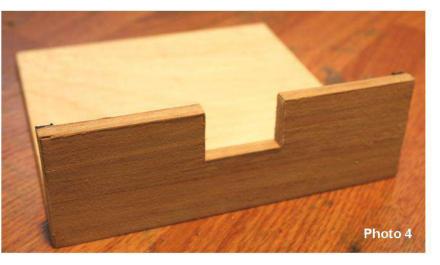




# 2.0 Deck and Bulwark Planking

Identify the deck P4 from Board 2. Dry fit in place. Once satisfied glue in place. Plank the inside and outside of the bulwark with 0.5x6mm walnut timber strips P6. Use the same timber to plank the edges of the base, the bulwark top, inside of gun port and the sides of the bulwark supports. Identify the base feet P5A-D and paint black. Once dry glue in place as the feet for the base. Paint the inside edge of the bulwark supports black. Once dry point apply a light spray of clear satin or matt polyurethane finish to the deck and inside and outside of the bulwark.





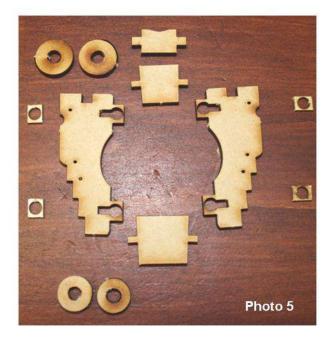
DECK CANNON HMS SIRIUS 1786 SHEET 2

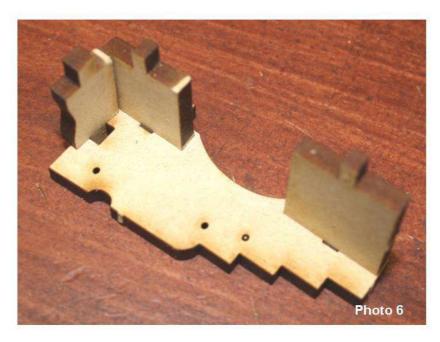
# 3.0 Cannon Carriage Assembly

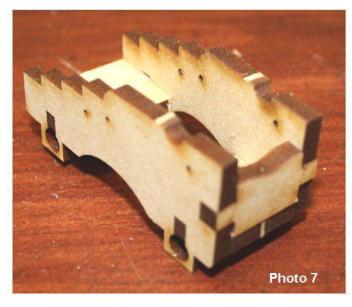
Identify the cannon carriage parts from Board 1 & Board 2. Use a file to remove any remnants of the tabs that hold the pieces to the board.

Assemble the cannon carriage—dry fit all parts. Once satisfied glue parts together. Allow 24 hours to dry. Fit and glue the axel spacers P13A-D in place.

Once the cannon carriage is dry use wood filler to fill any gaps and use sandpaper to give a smooth finish.





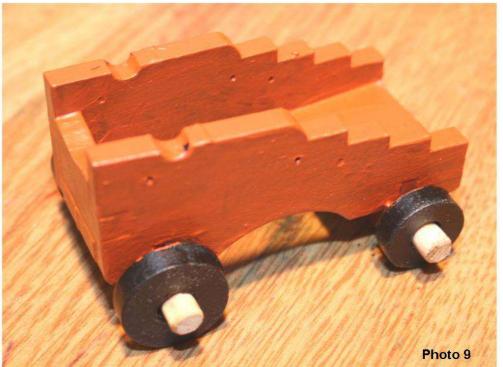




# 4.0 Cannon Carriage

Paint the cannon carriage a deep red or a deep burnt orange colour. Paint the wheels P10 & P11, cannon barrel P25 and capsquares P26 black. Allow paint to dry. Use the 5mm dowel P14, cut a 45mm length for the front axle and a 50mm length for the rear axle. Fit and glue in place the axels and wheels.







DECK CANNON HMS SIRIUS 1786

#### 5.0 Quoin

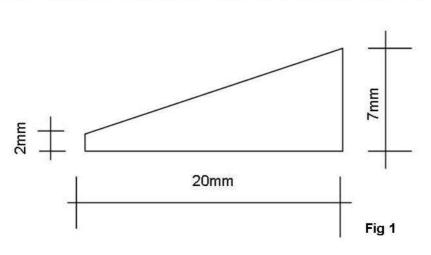
The quoin is a wooden wedge which is moved in or out to adjust the elevation or depression of the cannon barrel.



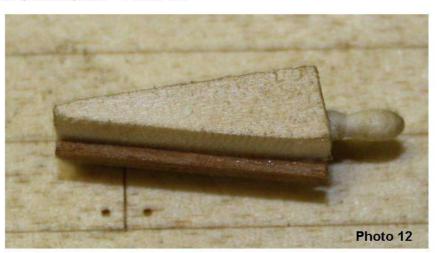
To make the quoin identify the length of 10x10x20mm limewood P15. Shape P15 to the dimensions shown Fig 1. Identify the length of 1x2x20mm walnut P16. Glue this length along the centre of the shaped wedge—Photo 11. Drill a 1mm hole in the centre of the rear face of the wedge and glue the hand grip P17 in place—Photo 12.

#### 6.0 Quoin Runner

Identify the length of 2x10x20mm walnut P18. Identify the length of 1x3x40mm walnut P19. Cut P19 into two 20mm lengths. Glue the two 1x3mm walnut lengths in place as shown Photo 13. Fit the quoin runner in place as shown Photo 14. Glue the quoin in place—Photo 15.





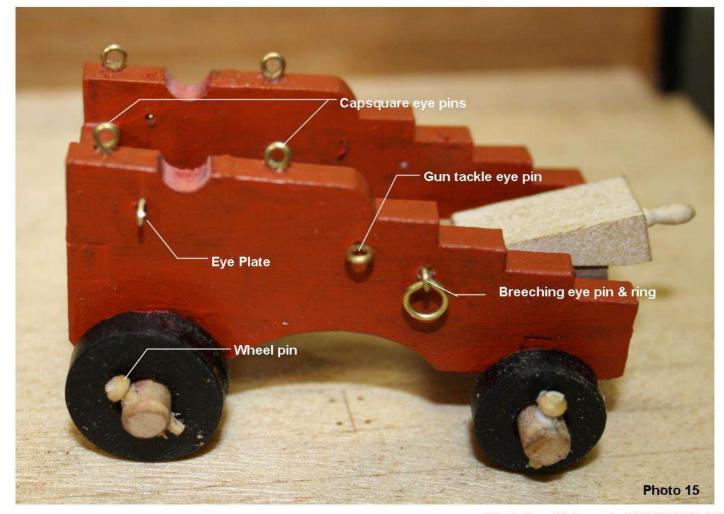


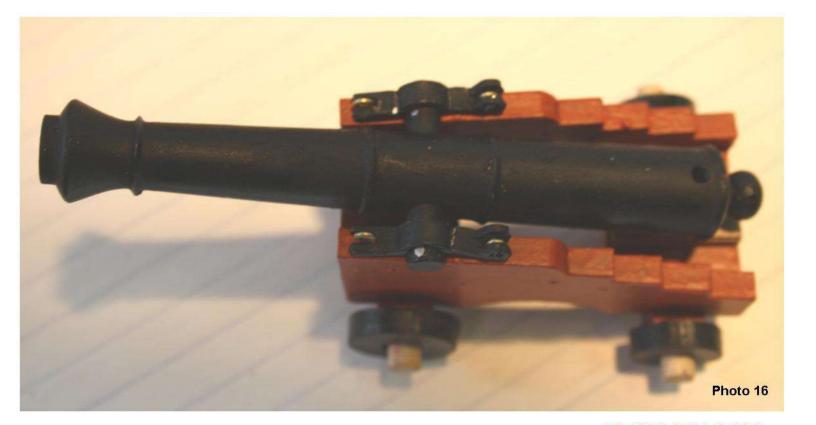




#### 7.0 Cannon Carriage Fittings

The next step is to attach the brass fittings to the carriage. Identify the brass eye pins P20. You will need to fit 4 on each side of the cannon carriage. Identify the eye plates P21. You will need to fit 1 on each side of the cannon carriage. Identify the brass ring P22. Fit this as shown Photo 15. Fit the eye pins, eye plate and ring as shown Photo 15. Note: To determine the location of the capsquare eye pins temporarily fit the cannon barrel in its location and place each capsquare in place—mark the location of the holes to be drilled to accept these eye pins—Photo 16. Identify the wheel pins P23. Drill a hole in each end of the axle to accept the pins. Cut-off the top of the pin and shape as shown Photo 15. Glue each pin in place.





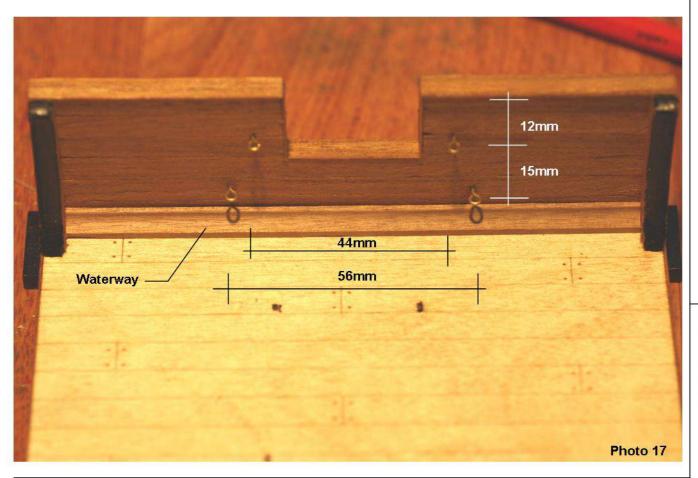
DECK CANNON HMS SIRIUS 1786

#### 8.0 Bulwark Fittings

The next step is to fit the waterway and the bulwark gun tackle and breeching anchor points.

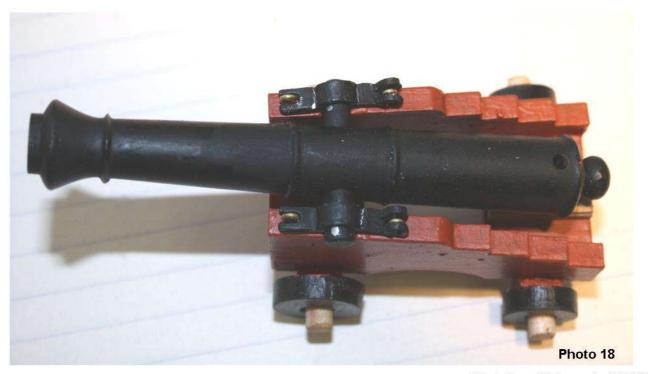
To fit the waterway identify the 5x125mm L section walnut P24. Fit this part between the bulwark supports at the base of the bulwark and deck joint. Glue in place.

Locate and fit four eye pins as shown Photo 17 as the gun tackle and breeching anchor points.



#### 9.0 Cannon Barrel

The next step is to fit the cannon barrel P25, capsquares P26 and pins. Place the barrel in its carriage location. Place the capsquares in place. Photo 18.



#### 10.0 Cannon Barrel Fittings

Identify the 1mm brass wire P27. Cut 2 lengths 7mm long. Fit this wire through the capsquare & rear eye pin to create a hinge. Repeat for the other side of the carriage—Photo 19. Identify the 3mm brass rings P 28. Fit this ring to the eye plate—Photo 20. Identify the black chain P29. Cut two lengths 20mm long. Fit one end of the chain to the ring attached to the eye plate and the other end to an eye pin P20. Fit the eye pin and chain as shown Photo 20.







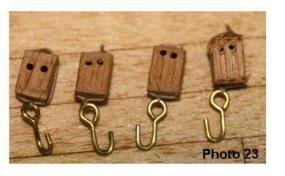
#### 11.0 Gun Tackle

The next step is to prepare the blocks for the gun tackle. Take 4 eye pins P20 and shape as shown Photo 21. Using a 50mm length of 0.25mm cord P30 tie the shaped eye pin central to the length of the cord—Photo 22. Prepare 4 eye pins this way.

Identify the 7mm 2 hole blocks P31. Take the four prepared eye pins with ties and tie around the block as shown Photo 23. Seal the cord knots with a dab of PVA glue. Trim-off any excess cord—Photo 23.







### 12.0 Breeching Rope

The next step is to prepare the breeching rope and hooks. Use a length of 1mm brass wire P27 to shape 2 hooks as shown Photo 24. Cut a 250mm length of 2mm cord P32. Cut a second length 40mm long and use 0.25 cord P30 to tie a loop central to the main length of cord. Tie the two brass hooks previously shaped to each end of the main length using 0.25 cord P30-Photo 25.

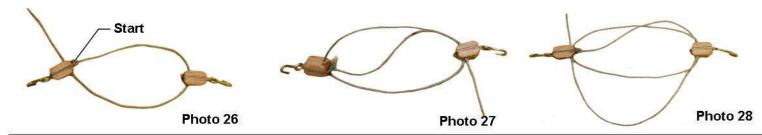




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#### 13.0 Cannon Tackle

Taking two of the previously prepared blocks and using 0.5mm cord P43 reeve the blocks together as shown Photos 26 - 28. Keep the tackle loose until it is fitted to the model.



#### 14.0 Rigging the Cannon

The next step is to rig the cannon. Attach one end of the tackle hooks to the upper bulwark eye pins and the other to the central eye pin as shown Photo 29. Repeat for the other side of the carriage. Coil the tackle rope as shown Photo 29. Attach the breeching rope hooks to the lower bulwark eye pins as shown Photo 29. Feed rope through 3mm ring P28. Fit rope around the cascable of the barrel and tie-off as shown Photo 30.





#### 15.0 Cannon Ball Rack

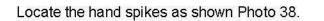
Identify the cannon ball rack P43 from the Board 1 and paint a deep red or a deep burnt orange colour. Identify the cannon balls P44 and paint them black. When both items are dry glue the cannon balls in place on the rack. Locate rack as shown Photo 38.

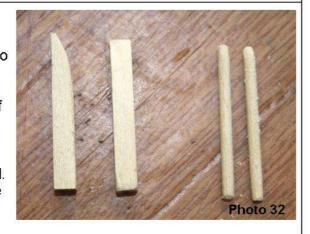


# 16.0 Hand Spikes

The hand spikes were used to manoeuvre the cannon carriage into place and as a lever to raise the rear of the barrel to adjust the quoin. To make the lever end of the hand spikes identify the 4x4mm limewood P33. Cut two lengths 30mm each. Use a file to shape as shown Photo 32. Drill a 2mm hole into the centre of the square end face to a depth of approximately 4mm. Paint these pieces black.

Identify the 2mm dowel P34. Cut two 35mm lengths of 2mm dowel. Slightly taper one end of each handle to fit into the hole of the lever end. Glue the handle into the lever end. Paint the handle red or deep orange if desired.





#### 17.0 Bucket

Identify the bucket parts P35 - P40 from the 2mm board. Fit and glue the parts as shown Photos 33 to 37. Use a file to just take the edge off each side piece P39. Paint the lid P40 black as shown. Use a length of 0.5mm cord P43 to make a handle as shown. Glue the top in place. Use 0.5mm cord to wrap around the bucket as shown. Fit the bucket in place on the deck as shown.









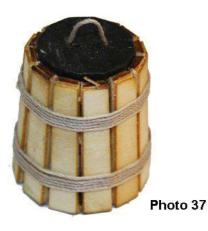


Photo 36

18.0 Finishing Touches Use 2mm cord P32 to make a rope coil. Locate the rope coil and

Photo 34



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