

Time Travelling by Water

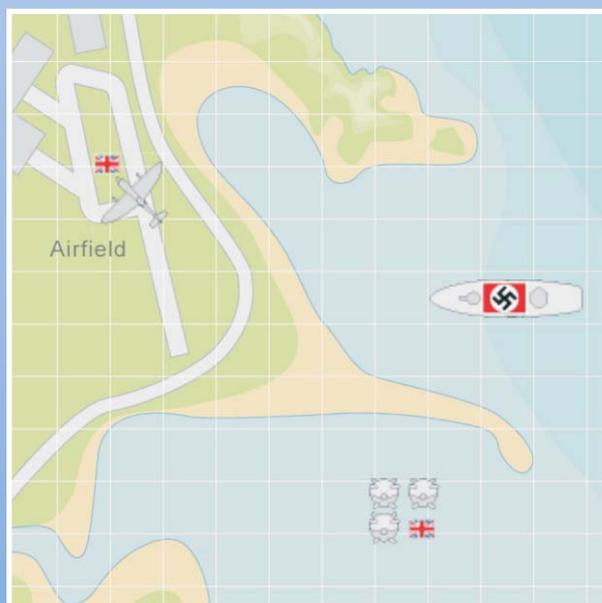
Wessex Archaeology

<http://blogs.wessexarch.co.uk/ttbw/>



World War 2 Boats and Ships Teacher's Pack

This teacher's pack contains activities and suggestions to complement the teaching of World War 2 Boats and Ships at KS2 and KS3. It was developed from the English Heritage/ALSF funded Assessing Boats and Ships Project.



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ENGLISH HERITAGE

 [Wessex Archaeology](http://www.wessexarch.co.uk)

WA Head Office
Portway House, Old Sarum Park
Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867
splash@wessexarch.co.uk
<http://splash.wessexarch.co.uk/>

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World War 2 Boats and Ships

This teacher's pack contains activities and suggestions to complement the teaching of World War 2 Boats and Ships at KS2 and KS3. It was developed from the English Heritage/ALSF funded Assessing Boats and Ships Project.

This pack includes:

- A script to introduce marine archaeology to the class – the PowerPoint presentation that accompanies this can be downloaded from <http://blogs.wessexarch.co.uk/ttbw/teacherspacks/>
- A fun and informative educational activity that allows your class to test their detective skills and build their knowledge of World War 2 Boats and Ships
- Suggestions for extension activities

The following resources are available to download from

<http://blogs.wessexarch.co.uk/ttbw/teacherspacks/>:

1. PowerPoint introducing marine archaeology
2. Battleship grids and vessel images
3. Battleship worksheets
4. Your Country Needs You (and your boat) vessel images

Curriculum links at KS2 -

This workshop is designed to support National Curriculum history units **4: Historical Enquiry**, **8b: British History** and **11b: Britain after 1930**.

Curriculum links at KS3 -

This workshop is designed to support National Curriculum history units **2: Key Processes (Historical Enquiry and Using Evidence)**; and **3: British History**.

In addition, this teaching pack can be used to explore themes within citizenship and geography, and can be an interesting stimulus for literacy or art.



Introduction to marine archaeology

This script accompanies a PowerPoint presentation or intro.pdf which can be downloaded from <http://blogs.wessexarch.co.uk/ttbw/teacherspacks/>

This lesson, we are going to become marine archaeologists.

What do you think an archaeologist is or what do you think an archaeologist does?

An archaeologist is someone who wants to know one thing – what life was like for people in the past.

Marine archaeologists study anything that is in the water that can teach them about people in the past, or how people have used water in the past.

Marine archaeologists are probably best known for diving on shipwrecks, but they also study rivers, lakes, ports, harbours, bridges, beaches... anything that can teach them about people and water in the past.

They have some very clever methods of investigating archaeology underwater. Archaeologists dive under the water to look at wrecks, and spend lots of time looking at paper records from the past where ships may have sunk to find new shipwreck sites. As well as diving, they go wading in shallow water or walking on the beach to study archaeology (*if you have a hi-vis coat, hard hat and wellies or waders, dress up a pupil to demonstrate this*).

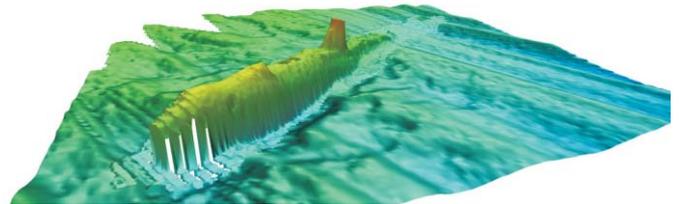
Archaeologists work with other people who use the water, such as fishermen, marine aggregate dredgers, and people developing offshore wind farms. They also do something called geophysical survey or geophys <phon: geo-fizz>. Geophys is a hi-tech system which uses sound waves to map the seafloor. *Look at the pictures that were made using geophysical survey.*

These pictures show different types of archaeology on the seabed – can you work out what they are?

1) WW2 Bomber – thought currently to be a German Dornier, which is lying upside down with its bomb doors open. This was found off the Kent coast.



2) A1 submarine – sunk whilst on auto-pilot in 1911. The submarine is currently lying in Bracklesham Bay, West Sussex.



3) The Talis – a ship carrying coal that was involved in a collision in 1906. The damage to the rear of the ship is clear on this picture. The wreck lies to the south-east of Beachy Head in East Sussex.



Archaeologists use all the clues available to them to try and learn about people in the past.



Activity 1: Battleships

The clues for this activity can be found at the back of this pack or downloaded from:
<http://blogs.wessexarch.co.uk/ttbw/teacherspacks/>

You will need:

- Cipher
- Coded messages
- Teacher's answers
- Coastal map (SMARTBOARD)
- Vessel images (SMARTBOARD)
- Pencil and paper

The German and British forces used lots of different boats to attack and defend their countries. The British Navy included large military vessels such as aircraft carriers, destroyers and submarines, smaller patrol vessels were also used and manned by volunteers, and finally aircraft such as Spitfires were deployed to fight from the air. The German forces had similar vessels although a German aircraft carrier was never deployed during the war, instead "Super Destroyers", large battleships, were used. German submarines were known as U-boats (an abbreviation of *Unterseeboot* or undersea boats). Both sides used sea or naval mines, which were placed just below the surface of the water and detonated when hit by a boat or submarine.

Codes were used during World War 2 to send secret messages to forces. It was important to know where friendly and enemy ships were, as well as information about dangers such as naval mines. A simple type of code that can be used to send messages is called a substitution cipher, where one letter is written as another.

The code below has been created by moving letters in the alphabet backwards by 5 letters, so that K is written as F. To encrypt the word CODES, we write XJYZN. You can practice with the class using the code:

XJYZN VMZ PNZY OJ NZIY NZCMZO HZNNVBZN

Solution:

Codes are used to send secret messages

Give a coded message to each pair. They have to break it using the cipher (below) and the message will tell them where their vessel/ aircraft is on the map.

Once the codes are broken ask the children to come to the SMARTBOARD and move the correct vessel into location according to their message.

If there is time, have a discussion about tactics and dangers of some of the positions of the ships both allied and enemy.

Homework Extension:

Get the children to create their own codes, and write messages in code to hide their ships.

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

Note: Print from version at back of pack



Activity 2: Your Country Needs You (and Your Boat!)

The clues for this activity can be found at the back of this pack or downloaded from:
<http://blogs.wessexarch.co.uk/ttbw/teacherspacks/>

You will need:

- Images of vessels
- Colouring pencils/crayons
- Scissors
- Sugar paper for mounting or blank paper for drawing

During World War 2 everyone had to do their part. People dug up their lawns to plant food crops, volunteered at factories and patrolled and protected Britain as the Home Guard.

Many of the shipwrecks recorded in the National Record for the Historic Environment that were lost during World War 2 were civilian boats that were adapted for use to defend the British coastline. Cargo ships became battleships, fishing boats were used as minesweepers, yachts as patrol vehicles and ocean liners were converted into hospital ships.

Read out some or all of the examples below and get the children to either adapt a vessel from the picture provided by mounting on sugar paper or using plain paper to design their own requisitioned vessel.

Get the children to consider the new purpose of their vessel and how they can adapt an old vessel for a new use. Consider equipment needed (not just guns!).

Examples from the National Record for the Historic Environment of vessels altered and used during World War 2 include:

HMS Southsea

A British paddle steam was requisitioned for use as a minesweeper in 1940. Minesweepers would search for sea-mines and cut their anchor cables detonating them. Southsea was fitted with a gun for defence. In 1941 she struck a mine whilst on active duty in the river Tyne.

HMS Patia

Patia was built in 1922 as a transport steam ship but was converted in March 1941 into a convoy aircraft catapult ship – known as CAM ships (catapult armed merchantmen). HMS Patia's role was to spot and, if possible destroy, enemy submarines. HMS Patia carried an aircraft armed with light torpedoes, which would be launched off the deck using a rocket propelled catapult. Aircraft were unable to return to the vessel so pilots had to ditch their aircraft unless they could reach land. HMS Patia was sunk by a German bomber, which itself was shot down, in April 1941.

HMS Mollusc

Mollusc was a privately owned British yacht. A steamship with an auxiliary sail, she was requisitioned as a patrol boat and anti-submarine vessel. Fitted with a naval gun and loaded with ammunition, she was used to protect the entrance to the river Blyth, Northumberland. HMS Mollusc was sunk in March 1941 after two bombs from a German aircraft landed close to her hull causing her to flood.

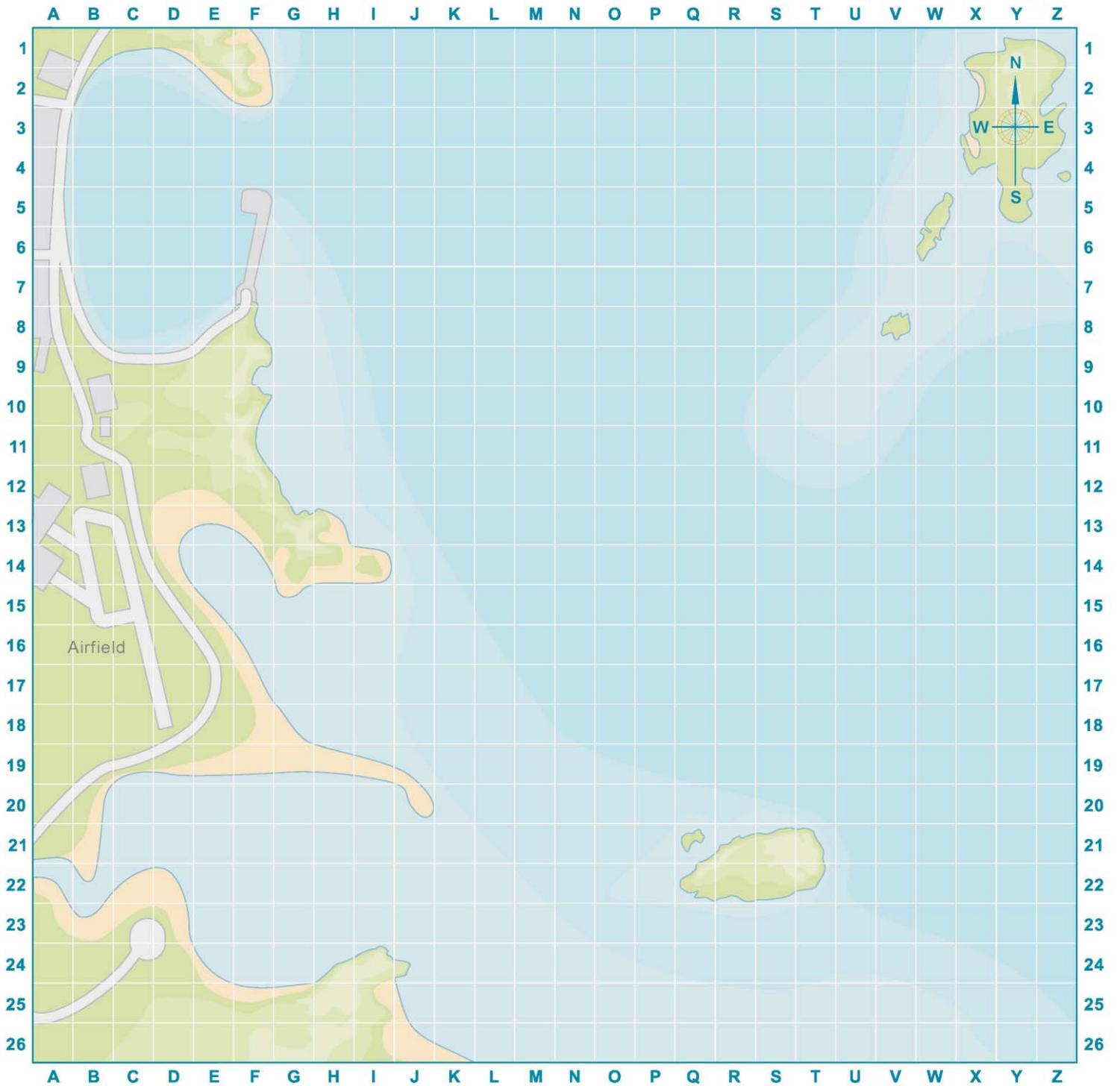
HMS Kopanes

Built in 1914 the Kopanes was a steam-driven fishing trawler requisitioned for war service as an auxiliary patrol vessel and equipped with a bow-mounted deck gun. In April 1941 the vessel was on patrol off Northumberland when she was attacked by a German aircraft and sunk.

HMS Aisha

Aisha was a British motor-driven yacht built in 1934 and requisitioned in February 1940 as a harbour defence patrol craft and took part in the Dunkirk evacuation. The vessel was painted battleship grey and had a single bow-mounted gun. HMS Aisha was sunk by a mine in October 1940 in the Thames Estuary.





0 100 metres



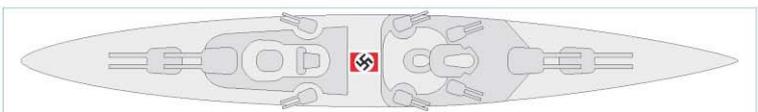
Battleship



U-boat



Minesweeper/Patrol Boat



Super destroyer



Naval/Sea mines



Junkers Ju 88



Battleship



Submarine



Minesweeper/Patrol Boat



Aircraft Carrier



Naval/Sea mines



Spitfire

To encode a message: take each letter and move it back 5 places in the alphabet.
So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?



Solutions

1	6 WMDODNC HDIZN ¼FH ZVNO WZVXC	6 BRITISH MINES 1/4KM EAST BEACH
2	BZMHVI PWJVO ZVNO JA DNGVIY	GERMAN UBOAT EAST OF ISLAND
3	WMDODNC NPWHVMDIZ DI CVMWJPM	BRITISH SUBMARINE IN HARBOUR
4	BZMHVI YZNOMJTZM NJPOC JA XJHKVNN DNGVIY	GERMAN DESTROYER SOUTH OF COMPASS ISLAND
5	6 BZMHVI HDIZN NJPOC JA DNGVIY	6 GERMAN MINES SOUTH OF ISLAND
6	WMDODNC HDIZNRZZKZM RZNO JA DNGVIY	BRITISH MINESWEEPER WEST OF ISLAND
7	BZMHVI PWJVO DI ZNOPVMT	GERMAN UBOAT IN ESTUARY
8	WMDODNC VDMXMVAO XVMMDZM 1FH IJMOC JA DNGVIY	BRITISH AIRCRAFT CARRIER 1KM NORTH OF ISLAND
9	2 WMDODNC NKDOADMZN JI VDMADZGY	2 BRITISH SPITFIRES ON AIRFIELD
10	WMDODNC NKDOADMZN JQZM CVMWJPM	BRITISH SPITFIRE OVER HARBOUR
11	2 BZMHVI WJHWZMN 2FH ZVNO CVMWJPM	2 GERMAN BOMBERS 2KM EAST HARBOUR
12	WMDODNC YZNOMJTZM 1FH IJMOCZVNO JA VDMADZGY	BRITISH DESTROYER 1KM NORTHEAST OF AIRFIELD
13	BZMHVI HDIZNRZZKZM 2FH JA WZVXC	GERMAN MINESWEEPER 2KM EAST OF BEACH
14	BZMHVI YZNOMJTZM ¼FH RZNO XJHKVNN DNGVIY	GERMAN DESTROYER ¼KM WEST COMPASS ISLAND

To encode a message: take each letter and move it back 5 places in the alphabet.
So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

6 WMDODNC HDIZN ¼FH ZVNO WZVXC



To encode a message: take each letter and move it back 5 places in the alphabet.
So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

BZMHVI PWJVO ZVNO JA DNGVIY

To encode a message: take each letter and move it back 5 places in the alphabet.
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Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

WMDODNC NPWHVMDIZ DI CVMWJPM



To encode a message: take each letter and move it back 5 places in the alphabet.
 So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

BZMHVI YZNOMJTZM NJPOC JA XJHKVNN DNGVIY

To encode a message: take each letter and move it back 5 places in the alphabet.
So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

6 BZMHVI HDIZN NJPOC JA DNGVIY



To encode a message: take each letter and move it back 5 places in the alphabet.
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Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

WMDODNC HDIZNRZZKZM RZNO JA DNGVIY

To encode a message: take each letter and move it back 5 places in the alphabet.
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The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

BZMHVI PWJVO DI ZNOPVMT



To encode a message: take each letter and move it back 5 places in the alphabet.
 So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

WMDODNC VDMXMVAO XVMMDZM 1FH IJMOC JA DNGVIY

To encode a message: take each letter and move it back 5 places in the alphabet.
 So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

2 WMDODNC NKDOADMZN JI VDMADZGY



To encode a message: take each letter and move it back 5 places in the alphabet.
 So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

WMDODNC NKDOADMZN JQZM CVMWJPM

To encode a message: take each letter and move it back 5 places in the alphabet.
So the letter K becomes F.

The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

2 BZMHVI WJHWZMN 2FH ZVNO CVMWJPM



To encode a message: take each letter and move it back 5 places in the alphabet.
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The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

WMDODNC YZNOMJTM 1FH IJMOCZVNO JA VDMADZGY

To encode a message: take each letter and move it back 5 places in the alphabet.
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The message: Codes are fun = XJYZN VMZ API

Plain	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cipher	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U

What does this say?

BZMHVI HDIZNRZZKZM 2FH JA WZVXC



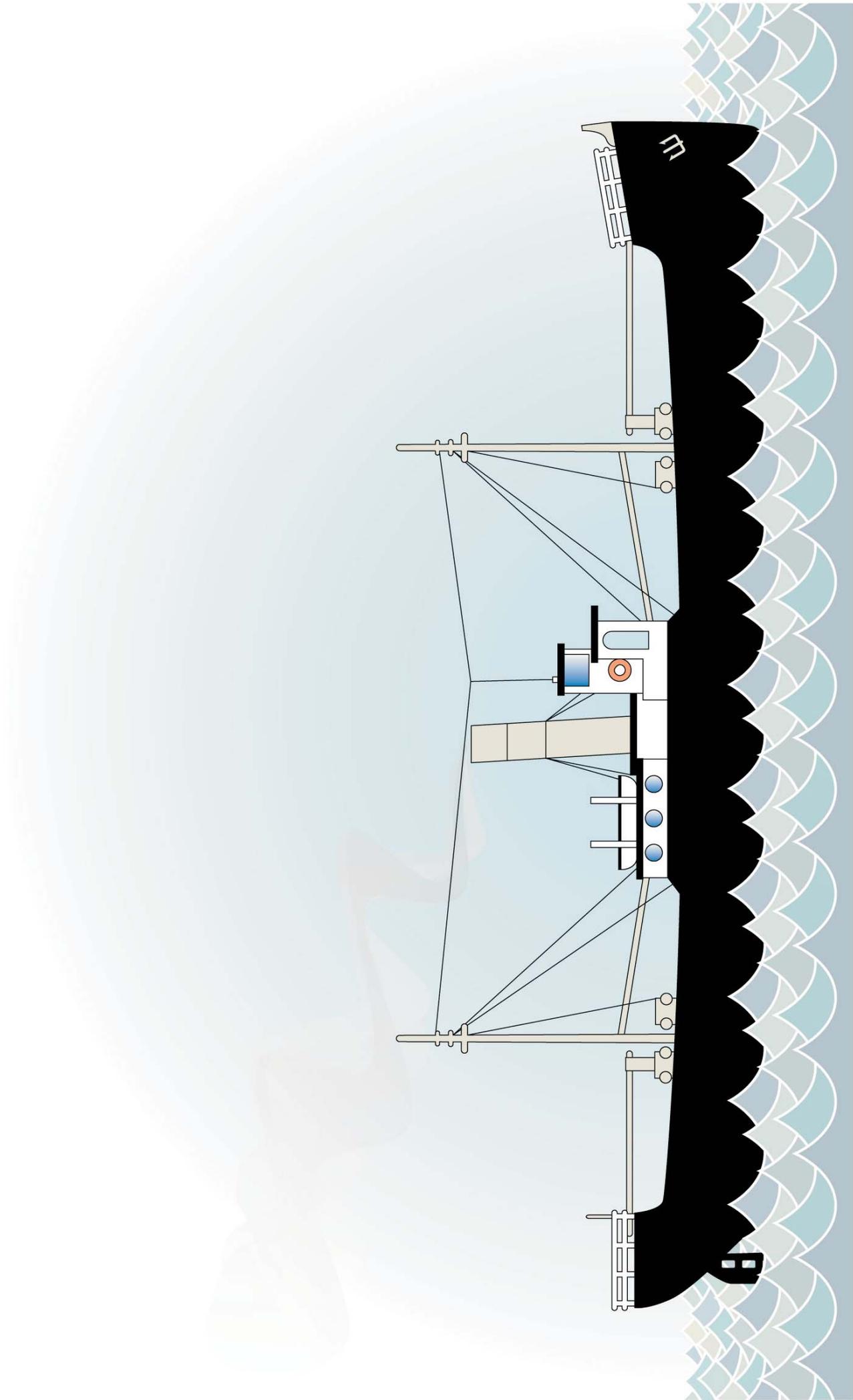
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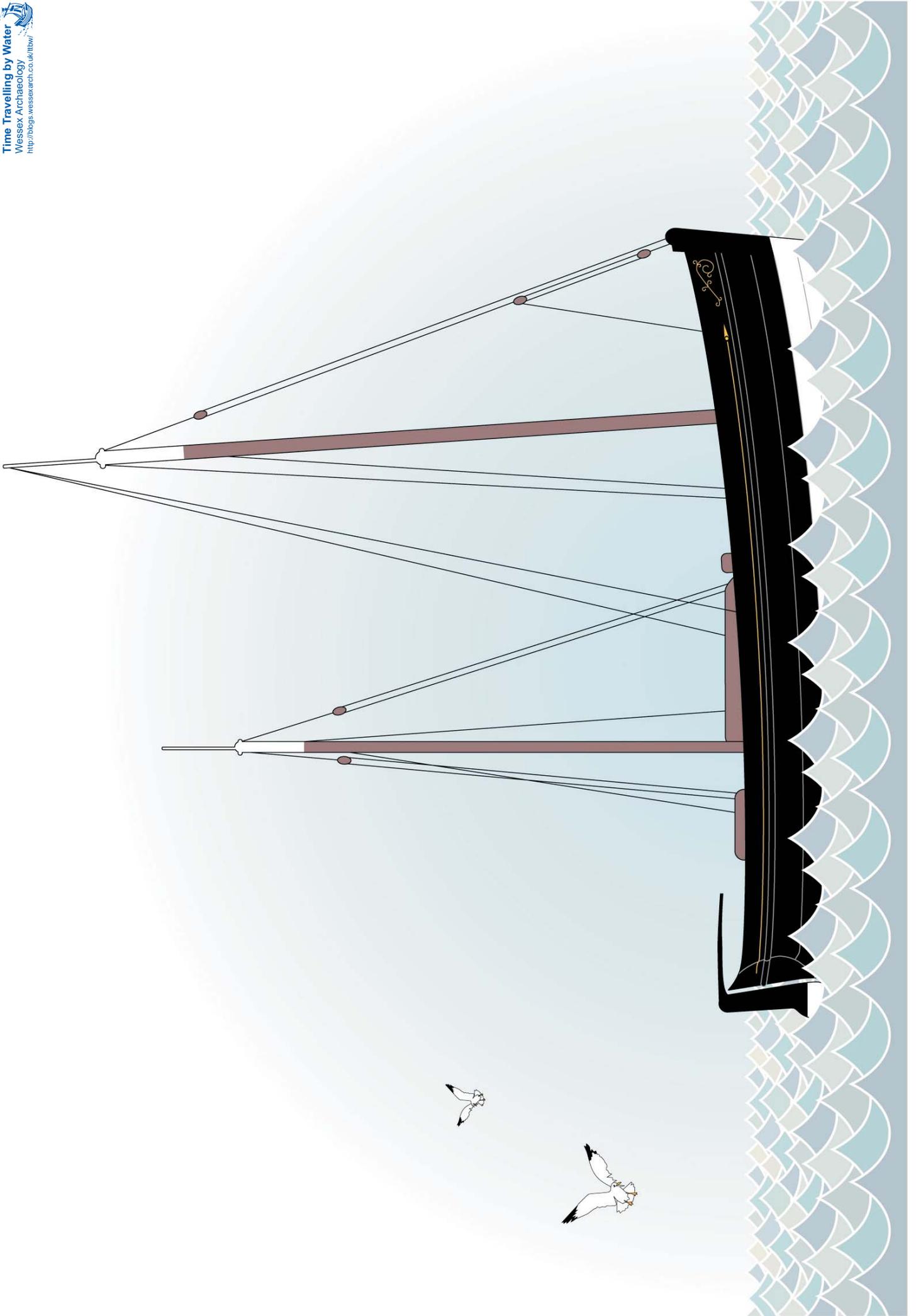
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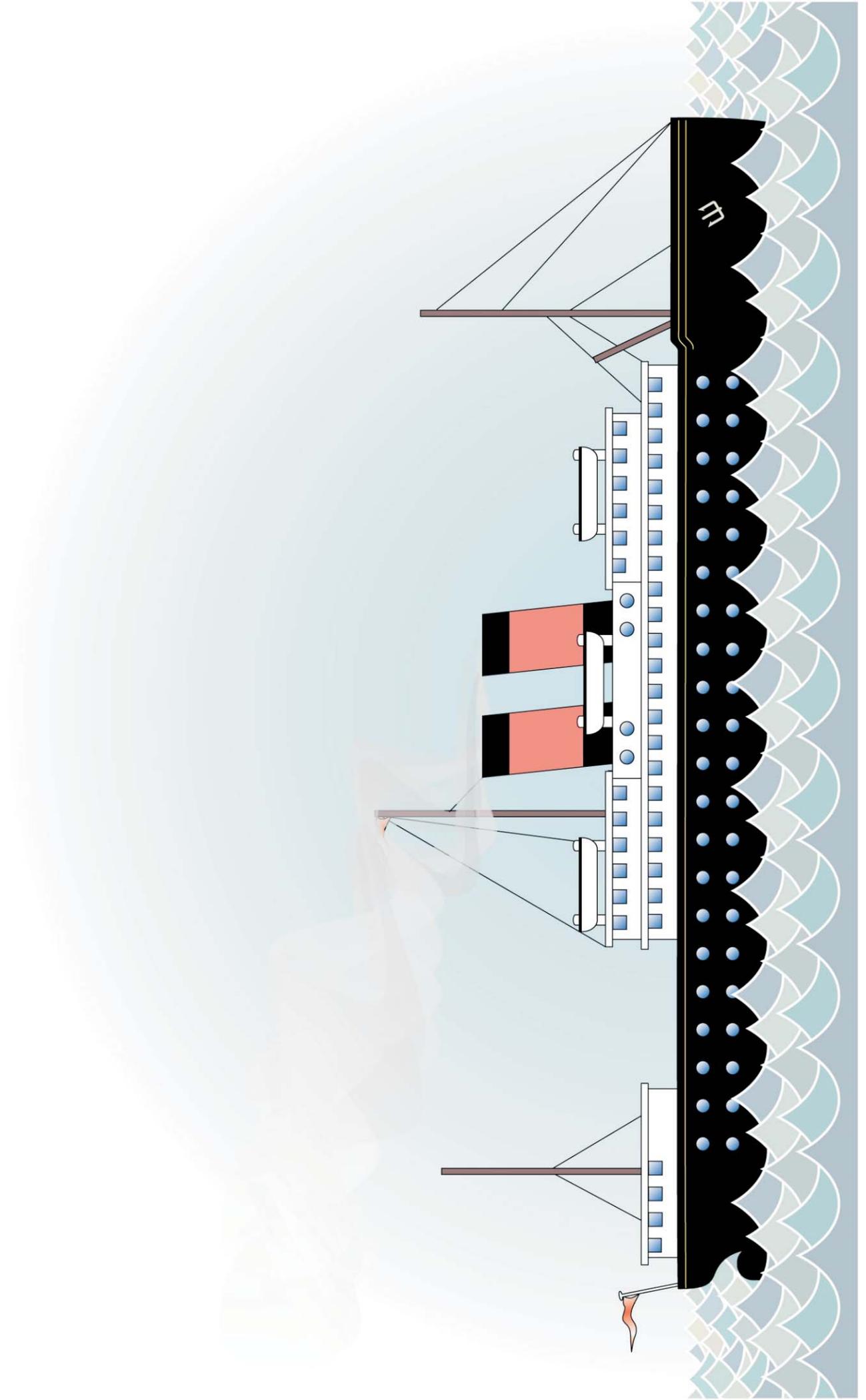
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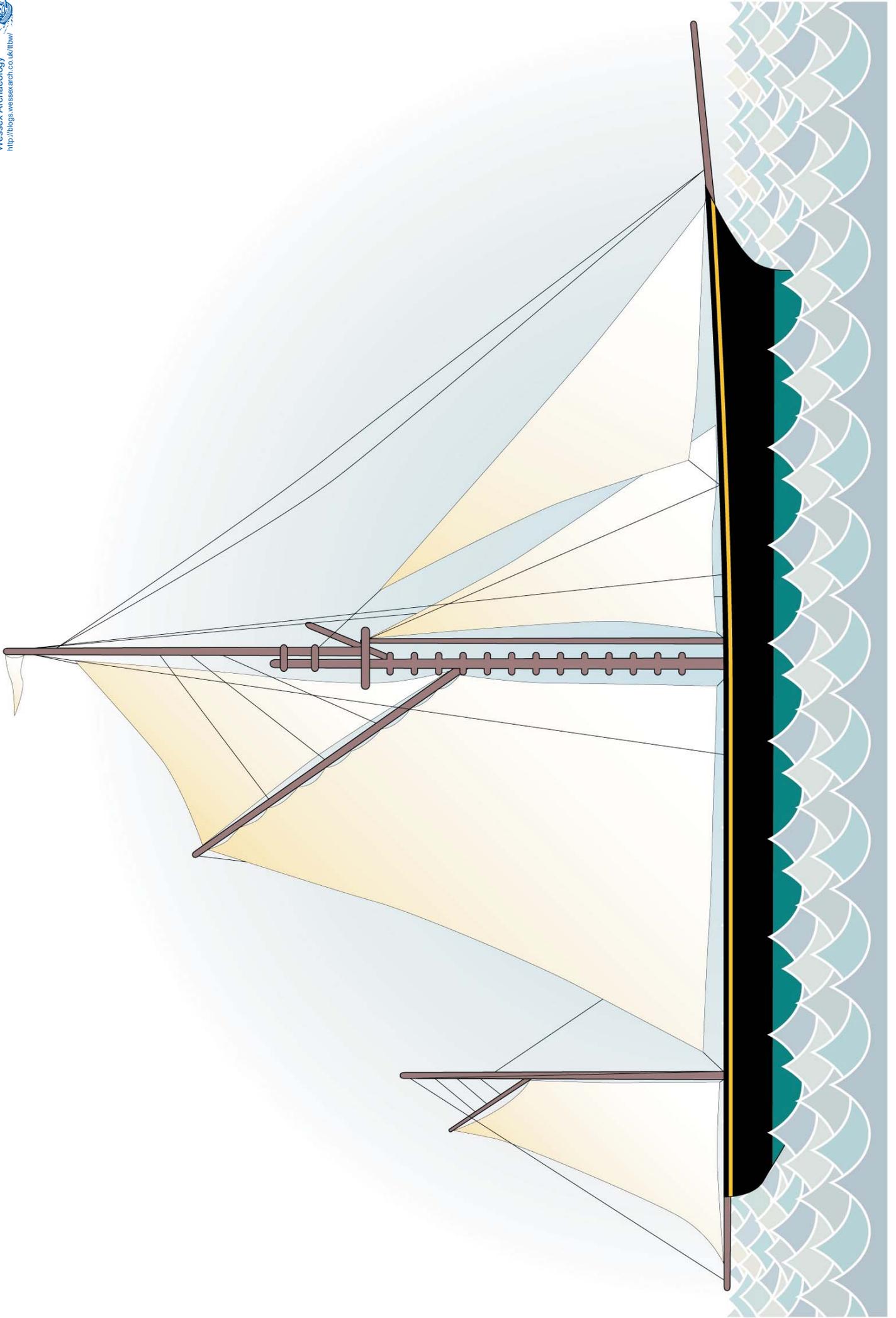
What does this say?

BZMHVI YZNOMJTZM ¼ FH RZNO XJHKVNN DNGVIY











WESSEX ARCHAEOLOGY LIMITED.

Registered Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.

Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk

For more information about us visit:

www.wessexarch.co.uk



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