

Life-Saving Rockets on the Isle of Wight – slide notes

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- Life Saving Rockets
- How did Isle Wight inventors use rockets to save lives at sea?

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- How many shipwrecks are there around the Isle of Wight?

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- 4000

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- 150 years ago, how might you rescue people from a shipwrecked near the Needles?

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- Map showing the location of the Needles

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- What if the weather is too dangerous for a lifeboat to come to your rescue?

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- Photo showing the Bembridge lifeboat @Queen Victoria' coming back from lifeboat practice circa 1889 to 1902

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- A photo of Manby's mortar being used.
- February 18th 1808, The first recorded rescue using the Manby apparatus invented by Captain George William Manby.
- It is a mortar that can fire a rope from the land to a ship that is difficulties.
- By the time of his death in 1854 nearly 1000 people were saved by his invention.

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- Photograph of Instructions for John Dennett's rockets (IW Heritage Service COZMM.1993.127)
- In the late 1820s John Dennett, of Carisbrooke, created a similar but more powerful rope-firing device that used a rocket.
- Dennett's rocket looked like a big firework with an iron weatherproof case and a pole rather than a thin stick.
- It had a greater range than a Manby's mortar, was lighter and needed less men to use it.

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- The coastguards would fire a rocket with a rope attached to a wreck

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- Crew and passengers can then to be hauled to land.

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- People are hauled to land in a breeches buoy which is a life buoy and breeches!

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- On the 3 October 1832 at Atherfield a Dennett rocket was launched with the rope reaching the wreck of the *Bainbridge* the first time after four Manby mortars had been launched unsuccessfully.
- 19 people were rescued and the story made national news resulting a contract for it to be used by coastguards (a map showing where Atherfield is).

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- On the 26th August 1833 John Dennett's rocket was demonstrated to Princess Victoria (who become Queen in 1837) at St Lawrence as she watched from a yacht anchored in Mill Bay.

The reporting of this made John Dennett's rocket even more famous

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- Edward Mourier Boxer's Rocket invented in 1865
- Boxer was asked to design a rocket that could travel further than Dennett's.
- He put two rockets in one case.
- The first rocket shot the line to its maximum height.
- The second rocket carried it forwards.
- It was used regularly until 1948.
- Boxer was in the Royal Artillery for 30 years and died in Ryde on the 1st January 1898

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- A photograph of a Boxer rocket (Carisbrooke Castle Museum NETCC 1985.5428) held in the Carisbrooke Castle Museum Collections (photograph)

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- Even though Boxer created an improved rocket the Dennett rocket continued to be used for firing rescue lines to ships until at least 1890 when one was used to rescue people from the *Irex*.

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- On the 25th January 1890 the *Irex* was grounded at Scratchell's Bay, close to the Needles (photo of the ship - IW Heritage Service COZMM.1993.737.15)

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- A painting (IW Heritage Service COZMM.1993.61) showing the wreck of the *Irex* with the line shot from Dennett's rocket. 29 out of 36 people are rescued using a Dennett's Rocket.

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- Photographs showing a coastguards training session with their life saving rocket apparatus near Steephill Castle circa. 1880-1915
(IW Heritage Service IWCMS.2012.145, IWCMS: 2009.146, IWCMS.2009.148, IWCMS.1995.586, 2009.144)

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- Rocket Science! What's the Science in our experiment?

Reaction - The reaction is the movement of the rocket in the opposite direction (thrust)

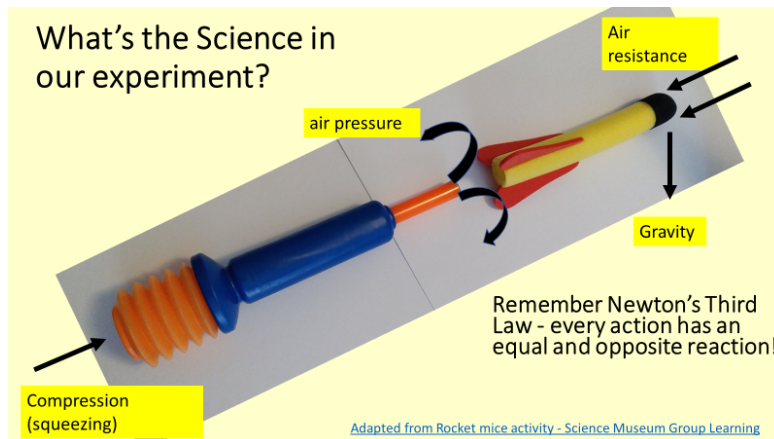
Action - When the gunpowder ignites, hot gases expand and pushes the rocket downwards

For a rocket to shoot off from the tripod and reach the ship the action, or thrust, from the rocket being ignited must be greater than the mass of the rocket.

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- Newton's Third Law
Every action has an equal and opposite reaction.

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- Rockets were still being used in the 1980s to rescue people on the Isle of Wight.
- They then fell out of use. What do you think replaced them?

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- Who to call for help in an emergency? If you find yourself in an emergency situation or spot someone else in trouble, you should call 999 or 112 and ask for the coastguard.
- If you are inland and see someone in difficulty on the water, be it on a river or a lake, you should ask for Fire and Rescue when you call for help.

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- The story can be heard on the link below. Note that towards the end of the story the hero Isaac Rose is referred to as a negro as he was in original press releases at the time. This could be used as point of discussion about how it is unacceptable to use this term today.

