

Operation Amphibious Angel

.. FLASH FLASH Immediate Action Required FLASH ...



UTC Challenge 2017

From: HMS ALBION

To: The UTC Young Engineers Teams

This signal is to provide you with information on the task ahead and to assist you with determining the solution you need to successfully complete the mission.

Your next step is to complete a project report and do your best to be selected to complete the mission. A second signal will be released to you following your successful selection for the National Final.

Please contact us with any queries.

Good Luck.

Yours Aye

Audra Enkeli

Lt Audra Enkeli RN

HMS ALBION



For all enquiries please contact: The Competitions Team: E: competitions@youngeng.org.uk

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At 08.00 local time the Commanding Officer of HMS ALBION issued the following briefing notes to the engineering team:

1. The stricken people of Angel Island urgently need our help and it is our duty to provide it with aid.
2. Rough seas and debris around Sand Island makes it difficult to negotiate the waters and the airstrips are too badly damaged to land aircraft.
3. Lt Audra Enkeli has been tasked with overseeing the mission. She reports that it is too dangerous for HMS ALBION to get too close and that a smaller more manoeuvrable vessel is required.
4. You are tasked to design and build a remote controlled solution capable of operating both in water and on land. The solution could be one vessel that operates in both environments, or two vessels, one for water the other land. The water based vessel must transfer the land vehicle to the island.
5. The entire solution must be capable of negotiating the debris and of recovering the supplies located in the waters surrounding Sand Island and on the island itself.
6. The supplies are to be returned to HMS ALBION for distribution to the islanders on Angel Island.
7. A Royal Navy Survey team has been dispatched to ascertain the specific size, shape and mass of the supplies. The survey team will report their findings in a subsequent signal.
8. The Commanding Officer will approve all design plans for the recovery vessels before any vessels are constructed.

Vital Dates

Entry closing Date:	07 November 2016
Design Report Date:	14 November 2016
National Final Selection Notification:	21 November 2016
National Final:	16 March 2017

Design Report

- Between 4-6 sides of A4 paper
- Include: schematic diagram of proposed solution
- Include: information on construction materials and methods
- Include: Research, development and testing proposals
- Include: Team name, age category, college and student names and ages



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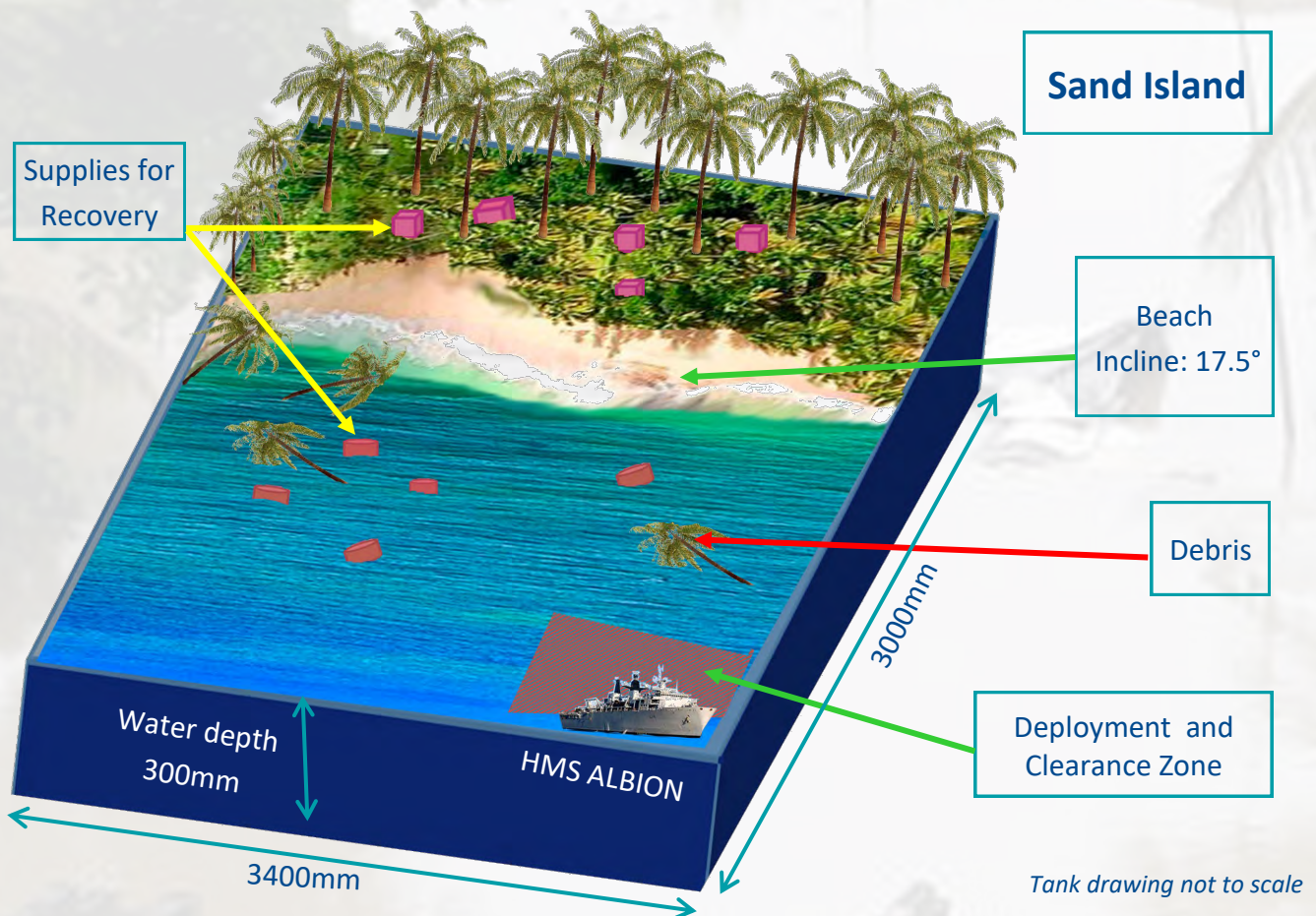


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Reconnaissance Information

1. HMS ALBION is anchored just outside the mission zone.
2. You will deploy your solution from alongside HMS ALBION.
3. The remote controlled solution must be capable of recovering and depositing items of varying materials, weights and dimensions.
4. The waterborne vessel must not exceed 500mm by 300mm at the waterline.
5. Power must be on the vessel with full remote control, umbilical control is prohibited.
6. The solution must include a device, mechanism or system capable of completing the mission.
7. The solution must be stable and be capable of propelling itself through the water and across dry land. It is imperative that your solution is water tight.
8. Recovered items must be transferred to the clearance Zone located near HMS ALBION.
9. Your vessel must have a name and you must create a team identity.
10. Rough seas, debris and the incline from the water to the island will hamper the mission.



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