

Animation

RV *Investigator* – mapping the sea floor (general)

[YouTube] ref: <http://youtu.be/xLdTav9qyps>

Transcript

[Music plays and plankton appear on screen with text: Marine National Facility]

[Camera pans over a school of southern bluefin tuna]

[Image changes to show an animation of the RV *Investigator*]

[Text appears: RV *Investigator* Multibeam Surveying]

[Image changes to show sonar equipment located underneath the *Investigator*. Text appears: Underneath *Investigator* is a hydrodynamically designed housing called a gondola that contains sonar equipment.]

[Image changes to show the *Investigator* and sonar signals being emitted. Text appears: The sonar equipment emits acoustic signals.]

[Image changes to show an aerial view shot of the *Investigator* and how the signals can travel. Text appears: The acoustic signal is only limited by the seafloor and features like canyons and mountains.]

[Image continues to show the *Investigator* and how the signals can travel. Text appears: *Investigator* can map the sea floor to any ocean depth. The deepest location in Australian waters is the Diamantina Trench south-west of Perth, at 8,047 m.]

[Image changes back to show the sonar equipment located underneath the *Investigator* and the bubbles being created by the ship. Text appears: Bubbles created by the ship interfere with the acoustic signals. It's like car lights trying to shine through a snow storm.]

[Image changes to show a clearer picture of exactly where the sonar equipment is located. Text appears: So, to minimise this interference, the gondola is positioned 1.2 m below the hull.]

[New text appears: *Investigator's* hull is designed to create fewer bubbles that are swept below the hull.]

[Image changes to show a computer generated map of parts of the Australian seafloor. Text appears: Australia has the third largest ocean territory in the world, but we've only mapped 12 percent of our seafloor. By mapping the seafloor we have discovered ancient canyons and rivers, and where resources may be found. Maps of the seafloor also improve our understanding of tectonic plates and tsunamis.]

[CSIRO logo appears with text: Big ideas start here www.csiro.au]

MNF: <http://www.marine.csiro.au/nationalfacility/>

Investigator blog: Investigator@CSIRO