

Extreme conditions await if MH370 found

SYDNEY: Salvagers are confident debris and human remains can be recovered if Malaysia Airlines Flight 370 is finally found, despite the pitch-black darkness, crushing pressure and ice-cold water awaiting them.

The disappearance of the Boeing 777 carrying 239 passengers and crew almost four years ago is one of aviation's greatest mysteries, with an Australian-led hunt across a 120,000sq km zone failing to reveal the crash site.

Yet a new probe now underway by private firm Ocean Infinity – commissioned by Malaysia on a “no find, no fee” basis – has revived hopes the doomed plane might be found.

If the wreckage is located in treacherous terrain up to 6km or 19,685 feet deep – far off Western Australia and north of the earlier search site – experts say high-tech underwater robots can handle the demands of recovery.

“They (searchers) are working at the extreme edge of what’s capable,” South African salvage master Nick Sloane, who led the operation to recover the stricken Italian cruise ship *Costa Concordia*, said.

“(But) the benefits to the manufacturers of the aeroplane, operators and the families are that if you actually locate the wreckage, it’s worthwhile to go ahead and take the next step and recover it.”

That expedition would require cutting-edge technology, likely last months and potentially cost more than the maximum US\$70mil (RM272.6mil) reward Malaysia is offering



High-tech operation: An autonomous underwater vehicle, one of eight used to search for MH370, being deployed at sea. — AFP

Ocean Infinity, according to deep-ocean salvagers.

To aid the previous search – the largest in aviation history – the ocean floor was mapped in detail for the first time, revealing the varied underwater terrain.

It showed seafloors more than 4,700m deep, vast mountains 1,500m high, deep canyons and massive underwater landslides of sediment, Geoscience Australia said.

If debris is found between 2,000m and 6,000m – known as the abyssal zone – salvagers would work in a perpetually dark and near-freezing region.

Wreckage has been recovered from such depths previously: Air France 447 at nearly 4,000m in the Atlantic, the cargo ship *El Faro* (4,500m) off the coast of the Bahamas and South African Airways 295 (4,900m) off Mauritius – far deeper than where oil and gas companies operate.

Machines that can operate at such extremes include deep-ocean operator Odyssey Marine Exploration’s remotely-operated vehicles (ROVs), which have frames constructed out of high-strength aluminium. A handful of other companies have similar technology.

The ROV, tethered to the mother ship, is fitted with LED lights that illuminate the dark environment and can record high-definition footage, Odyssey Marine’s chief operating officer John Longley said.

The submersible – remotely driven by pilots on a surface ship – has two manipulator arms that function like “human hands” and can retrieve smaller objects, added deep-sea shipwreck hunter David Mearns.

Larger parts such as the jet’s wings can be brought to the surface using baskets or slings.

Mearns said such underwater journeys could take several hours with the overall mission possibly lasting up to half a year.

“But once you get into a position on the seabed, it’s remarkable the dexterity of these ROVs in terms of what they can do,” he added.

— AFP