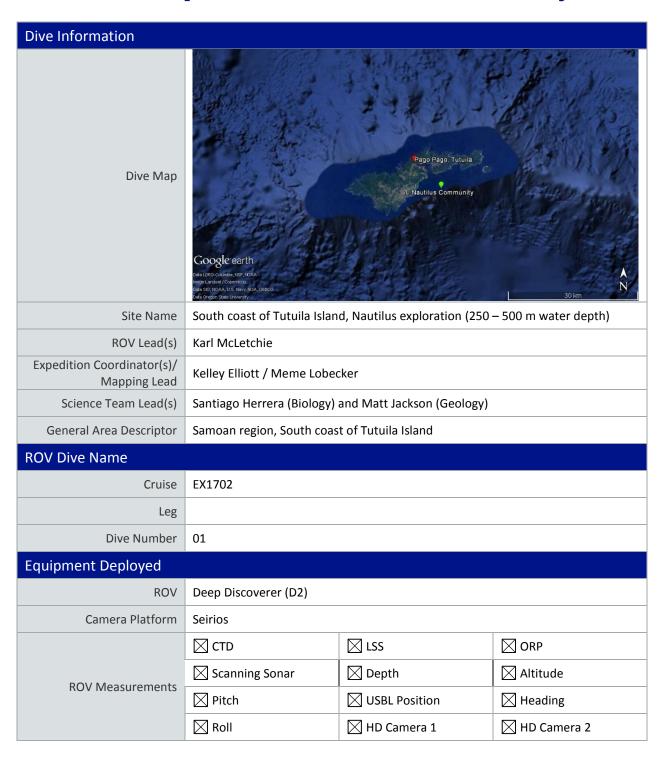


## Okeanos Explorer ROV Dive Summary

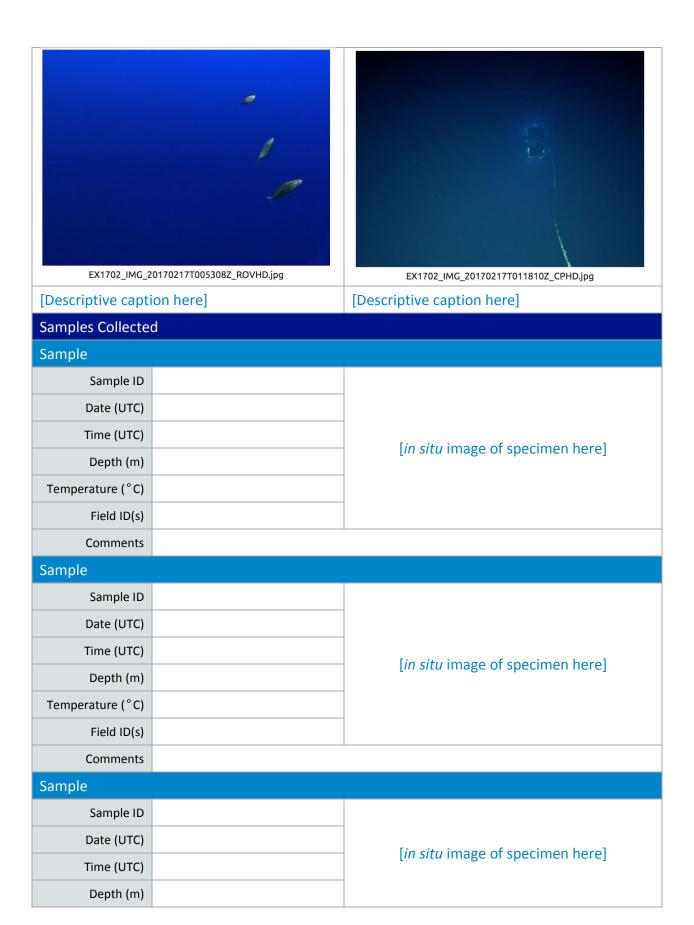


		∑ Low Res Cam 2	
	☑ Low Res Cam 4	☑ Low Res Cam 5	
Equipment Malfunctions	Hydraulic leaks on the 1) Schilling Orion manipulator and 2) the oil compensation system. These forced cancellation of the dive		
ROV Dive Summary (from processed ROV data)		mmary: EX1702_DIVE01 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^	00 .' W 00
Special Notes	The dive was cancelled owing to equipment malfunction. The dive never reached bottom.		
Scientists Involved (please provide name, location, affiliation, email)	Chris Kelley (UH), Tara Harmer Luke (Stockton U), Amanda Netburn (NOAA OER), Mike Vecchione (NMFS), Bruce Mundy (NOAA NMFS), Joe O'Malley (PIFSC), Peter Auster (UConn), Diva Amon (Trinidad), Asako Matsumoto, (PERC/CIT), Deb Glickson (NASEM), Ryan Nichols (PIFSC).		
Purpose of the Dive	The following text was from the original dive plan, but is included here for completeness:  This dive seeks to characterize a population of protected Nautili that has been observed using baited cameras in the Taena Bank area, at depths between 300 and 400 meters, near the harbor of Pago Pago, American Samoa. This is also the depth range for bottomfish and precious corals.  From a geologic standpoint, this dive presents an important opportunity to sample the shallow volcanic stratigraphy of Tutuila island. The dive will begin at a depth of approximately 500 meters on a relatively steep wall, with a slope of 40-70 degrees. This wall is likely to have exposed basalt. Sampling 1 or 2 basalt samples from this steep wall would provide a record of the deepest volcanic stratigraphy on this dive. The ROV will climb <100 m to a relatively flat platform that is likely a submerged coral terrace. After traversing this terrace, the ROV will then move up another relatively steep wall—likely to present outcroppings of basalt—that terminates at the modern reef platform at an approximate depth of ~250m; this dive presents an opportunity to obtain 1 or 2 additional samples of the shallower volcanic stratigraphy likely to be present on the second steep wall. At the 250m contour we will move laterally along the second platform edge. A water column transect may be conducted at 250 m for 30-60 minutes to		



	characterize mid-water communities and possible vertical migration of nautiluses.  2-3 biological samples will be collected along this transect.			
Description of the Dive	NA. The ROV achieved a depth of $^{\sim}500$ m and had to surface, due to the leak in the oil compensation system. The dive was cancelled and did not reach bottom.			
Overall Map of the ROV Dive	Area	Close-up Map of Main Dive Site		
NA. The dive was cancelled.		NA. The dive was cancelled.		
NA. The dive was cancelled.		NA. The dive was cancelled.		
Representative Photos of the Dive				







Temperature (°C)			
Field ID(s)			
Comments			
Sample			
Sample ID			
Date (UTC)		[in situ image of specimen here]	
Time (UTC)			
Depth (m)			
Temperature (°C)			
Field ID(s)			
Comments			

## Please direct inquiries to:

NOAA Office of Ocean Exploration & Research 1315 East-West Highway (SSMC3 10th Floor) Silver Spring, MD 20910 (301) 734-1014

