
"REPORT" SPANISH ARMADA
LA TRINADAD VALENCERA
by Charles H. Perkinson
Diving Officer
City of Derry Sub-Aqua Club

La Trinidad Valencera, the fourth largest ship in the Spanish Armada of 1588, stricken and sinking after a storm, sought shelter in Glenagivney Bay, Donegal. In February of this year (1971), thirteen members of the City of Derry Sub Aqua Club located the remains of La Trinidad Valencera culminating a two year project of the club. Club members, aware of the great historical value and importance of the site, first turned its efforts to securing legal possession. Members agreed from the start that the site was to be worked as an archaeological and not a treasure salvage. No member was to have any personal gain and all proceeds were to become property of the club and the good of diving.

Committees were established and professional advice was sought from all quarters. Site survey started immediately to map the exact location of every visible item. On advice of legal council, it was decided to raise four of the large bronze cannons in order to firmly establish salvor in possession. The cannon had been plotted carefully on the survey map before being brought to the surface during the Easter holidays. The second cannon bore the full arms of Philip II and left no doubt that the ship was indeed the La Trinidad Valencera.

The club's publicity officer, W. S. Donaghey, during this time was exploring various methods of obtaining financial aid on the project long term. Contact had been made with the BBC Chronicle and they were invited over to

film the raising of the cannon, along with Colin Martin on archaeology and Steven Reese-Jones for the preservation of the cannon. The club financed the basic survey and recovery operation, while the BBC were very helpful in contact assistance with the experts in the various archaeological fields.

In order to get a better appreciation of the extent of the site Jeremy Green was brought over to do a complete metal survey of the site. His survey indicated that an enormous job and responsibility lay ahead of the club to complete a proper archaeological and preservation justice to the site. Colin Martin worked on the site for the remainder of the summer and full attention was given to complete survey and estimation of the task. All salvage was discontinued because of preservation difficulty. No exciting recovery was allowed and the bulk of the work was the tiring task of paper work and research, but all the club members got a better knowledge and appreciation of the work load ahead.

A number of guest divers visited the site during the summer under the guidance of the City of Derry members. The Belfast club was among the visitors.

The last item recovered this summer was one of the most exciting archaeologically. It was a bronze breech loader with iron mountings which was fully loaded and ready for firing including ball, breech block with powder and hemp in fire hole to keep the powder dry, the metal wedge, and leather recoil pad. This is the first known recovery to indicate how these guns were used. This gun was taken to the

Belfast University laboratory and conservation started by Steven Reese-Jones. It is now in preservation liquid for the next five years in Moville, Co. Donegal.

The items recovered this summer from the site included a matching pair of bronze whole-cannons with $7\frac{1}{2}$ " bore weighing about 5,800 pounds each. Both these cannons bear the arms of Philip II and were made in 1556 by one Remigy de Halut. These are the only known whole-cannons recovered from an Armada wreck still in existence. There were two Venetian cannons, one with a $3\frac{3}{4}$ " bore weighing about 3,000 pounds and one with a 3" bore weighing about 2,000 pounds. The swivel-cannon (breech loader) was about four foot long with the overall length including iron mounts and swivels about six foot. All of these items are in a liquid conservation vat in Moville and will remain there for up to five years.

Other items recovered included:

Pair of brass navigational dividers.
Bronze weight with lead core.
Sheet copper powder ladle heads for the cannon.
Pewter vessel.
Crushed copper vessel with handles and footing.
Stone and iron shot of various calibres.
Lead musket ball.
Piece of leather.
Small piece of turned wood.
Pieces of pottery.

A ten foot long cast-iron cannon, two twelve foot long anchors, a number of iron gun carriage wheels and iron as well as iron concretion remain visible on the site. These items, while very exciting to look at would only deteriorate to waste if brought to the surface at this time.

Throughout the winter months the club will be continuing the site survey and obtaining the finances required to carry out a full programme next season. This

includes having qualified experts in the archaeological field on the site full time, equipment to work the site properly and the finance and expertise to preserve and house all of the items which will be raised. The continued training of the club members in the study of marine archaeology will also occupy a good deal of the club's efforts over the winter months.

The City of Derry Sub Aqua Club have had an exciting and rewarding season. Every club member can feel some pride in the fact that he had contributed successfully to the reputation of unselfish divers and clubs everywhere that seek the preservation of history and man's academic achievements.

"REPORT"

Underwater Medicine Course
June 21 - 25th 1971
by Dr. John Galway

A course in Underwater Medicine was organised by the Director of Studies, Institute of Naval Medicine, Alverstoke, Hants. The course was attended by naval and civilian medical personnel.

The aim of the course was to present theoretical and practical problems associated with existence in a hyperbaric environment whether on land or under water.

Content

The history of diving was reviewed briefly and was followed by a discussion on underwater physiology and medicine. This included the basic physics of compression with application of the gas laws. The physiology of respiration was discussed and extended to include the pathology resulting from breathing gases and gas mixtures under pressure. Barotrauma was discussed as it affected the lungs (pulmonary barotrauma)