GUN ROCKS PROJECT

Interim Report 1970

By

W. R. Smith
Diving Officer

And members of the British-Sub-Aqua-Club

Tyneside Branch 114. named therein.

TYNESIDE

BRANCH 114

"THE SPANISH ARMADA DEFEAT"

Preface to my report

W. R. Smith

Out of 130 ships which left Spain, only 68 returned to their home ports. Out of these, 20 sank off the shores of Ireland and 5 sank off Scotland. Cornwall claimed 1 and 1 sank off Orkney Isles. The Galleasses, 'GIRONA' sank on October 26th, 1588 off the Giants Causeway Northern Ireland, all hands lost - 1300 men.

From the records some of the ships which made up the Armada Fleet:

65 - Galleons
25 - Hulks
19 - Cutters
13 - Coasters
4 - Galleys
4 - Galleasses

They were carrying 2.431 pieces of Ordnance of both bronze and cast-iron.

The round trip covered a total distance of 750 leagues before returning to Spain.

Taken from G. Matingley's Book - "Defeat of Spanish Armada"

1. From records the ships sailed under moderate canvas upto Norway Channel 61° 30" N far enough to go west. The ships that went missing were supposed to go missing the day before, after a storm which lasted all that day and the next. They must have waited too long because after 17th August 1588 they were never heard of again.

2. El Gran Grifon, capitana of Hulks, and several of its squadron were missing. The approximate position where this happened was 58°N. The storm was pushing them back. Could it also be possible that they fell back to 55° 37" N?

Taken from Miss Grace Watt's Book - "The Farne Islands"
Their History and Wild Life.

3. Looking back at History, to wreck of Forfarshire when she went onto the rocks in 1838, she had great difficulty in holding her own, even with engines, and then when they gave up, she drifted almost 40 miles onto Farne Islands. The strong tides and winds forced her back all the way from St. Abbs in the North.

4. Look at Chart and on it you will find that Gun Rock is in direct line with a S.E. drift. The fact that a cannon was found on this rock is not in itself proof but it could be worth investigation.

W.R.Smith
Diving Officer

20th April, 1970.

THE SPANISH ARMADA DEFEAT

Research into a possible N.E. Wreck

by

W.R. Smith

My interest was first aroused when I read a book by a well known Historian some two or three years ago. In this book he gave a very interesting account of the battles and also the epic voyage by the defeated Fleet around England, Scotland and Ireland before returning home to Espana. More to the point, he wrote of ships which went missing in North Eastern waters, that is to say somewhere North of 56° Lat. The information concerning the wrecks that are known, is pretty well documented elsewhere in this article, mainly the ones which were wrecked on the Northern coast or Ireland. The Observer magazine ran two articles in August & September 1969 which were written by the Finder of the Galleasses called 'Girona'. Robert Steniut found fantastic treasure and artifacts, but I would suggest you read these great articles for more information.

At about the time my interest started to gather momentum, I also read that a cannon was found some years ago on the Farne Islands and from that date, I started to ask questions and later look for the answers. I was told that it was supposed to be Spanish. More reading then became the order of the day, and to this end I have been reading books by Historians, Naturalists, Coil Experts and Arms Experts which all lend themselves to my pet theories that one of the Spanish Ships ran onto what is now called Gun Rocks sometime in August 1588. A few questions need to be asked and answered.....

NOTE - Old 16th Century Chart shows no name.

I would like to start my questions and possible conclusions with this reminder - these are only my personal ideas and conclusions and are not official:-

Question - Why was there never any trace of the eleven ships that went missing in the North Sea at approximately 58° Lat.?

Answer - Could be that our Northumberland coast at that time was very sparsely populated in particularly, the area around the Farne Islands. They could have gone down at sea but this does not always happen.

Question - The Captain of the San Martin was not sure at what Latitude his fleet were lying on the day they decided to turn off towards Ireland, because there had been a storm most of that night and most of the day. When he surveyed the Fleet, some were missing.

Answer - Could it be, as in the case of the wreck of the 'Forfarshire' which sank in 1838 and made Grace Darling famous by her rescues. This ship after battling all night up to St. Abbs Head started to drift south when her boilers blew up, leaving the engines dead. Just imagine what would happen to a badly damaged sailing ship in a South Eastern Gale! The 'Forfarshire' drifted some 40 miles plus in a few hours and crashed onto Harcar Rocks. This corresponds with chart data and indicates a S.E. drift which in a gale could force a ship onto Gun Rocks if you first miss the Goldstone Rocks .

Note - Note name of this rock

There are two rocks with this name, North and South 'Goldstone'. I have dived and searched the South Rock (6th July, 1970) and found only small pieces of what appears to be a rather modern wreck, i.e. pieces of copper tubing etc. The names of these rocks are Germanic in origin.

Question - How and where did the cannon that is in Bamburgh Castle come to be on top or near Gun Rocks?

Answer - Could it be that a wreck ran onto it at H.W. when the rock is just underwater, ripped out its bottom or its side only and then sank in deeper water leaving cannon relatively high and dry! Any bodies there, would not last long as the seals would make sure of that.

/2.....

NOTES

History books give a lot of information about wrecks in Ireland as I said, but they are not too definite about the East coast. On the morning they were going to turn off to go through the Orkney Islands, the Captain of the San Martin which was the leader, surveyed his Fleet and found four Hulks missing and seven of the squadron which when last sighted before a storm, were bearing into land in a bid to find succour.

These are the ships which I am putting my theory to - did one of these drift in the storm south onto the Farnes?

We come now to the time when we can talk about places, times and methods of finding any such wreck that exists. First the place, Gun Rocks which lie some 3½ miles North East of Seahouses. Second, we organise a boat diving series designed to search this area meticulously for a given period. August-October 1588 were the approximate dates of the wreckings.

Only by careful searching and noting down even the slightest thing we may find, will we possibly be able to find our target. Things to look for are heaps of stone (ballast) which do not look natural, pieces of wood, metal or in fact, anything that does not look just right. Remember, there will be a lot of kelp on the bottom at this site which makes searching even harder but with a lot of divers and enthusiasm we can do it.

A visit to Bamburgh Castle to look at the cannon did not bring any results. It is in bad condition from exposure.to the elements. What is certain is that it was in the sea some time. Big pieces are missing and no marks are apparent but its general dimensions are near to one type of Armada gun details are enclosed with this article and are as follows:-

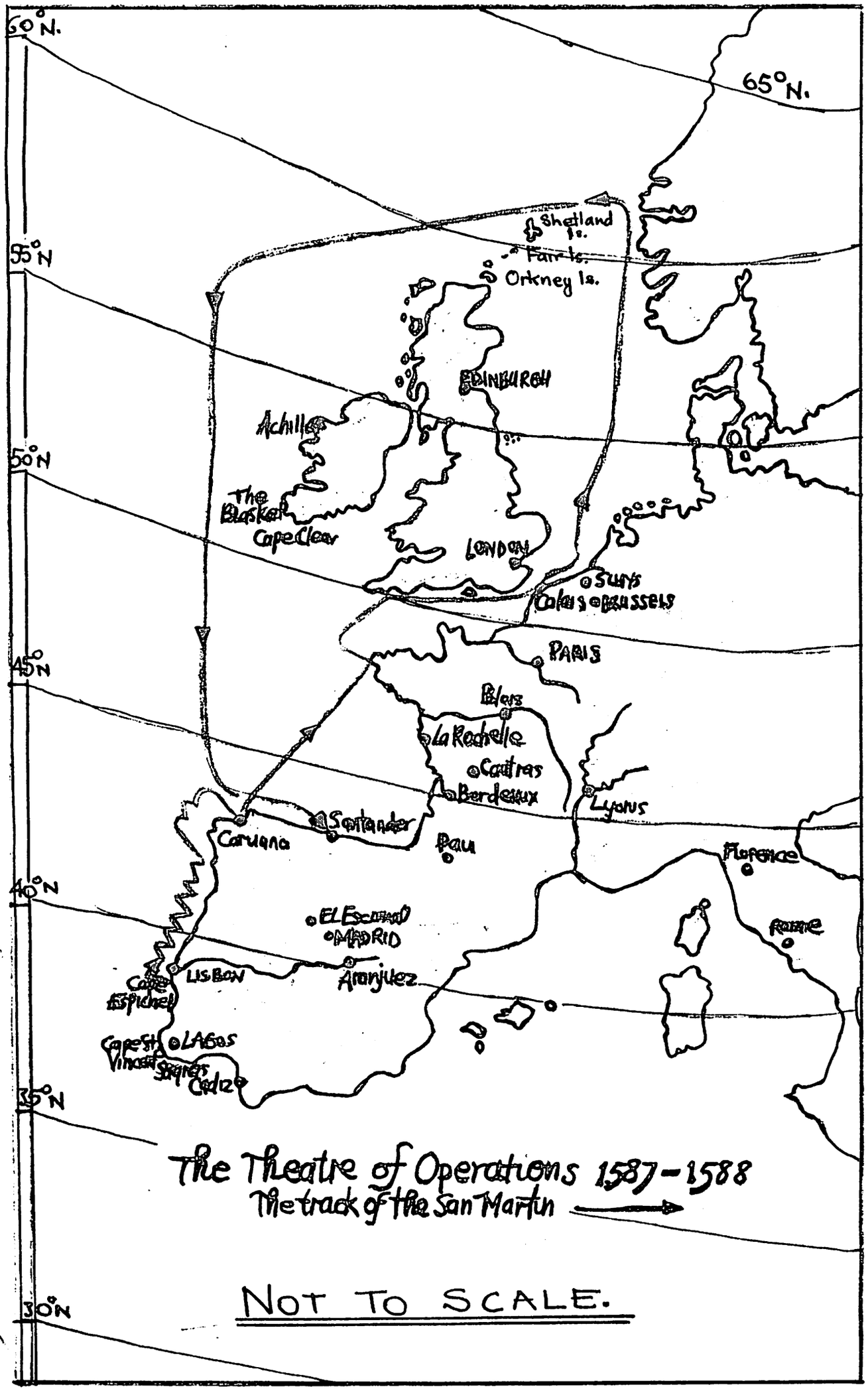
Length - 8 ft. 6 ins. Bore - 3.1/2 ins approx. Marks - None apparent

In conclusion, I would like to say that I hope you don't run away with the idea that this is a modern treasure hunt, its not - but what I hope it will be, is a serious attempt to find out the truth. Most of this article may be a lot of coincidences but only we can make sure. A lot of work is still left to do - this article is only the beginning.

NOTE Since this report was written, the 'Gran Grifon' has been found by Colin Martin's team on 9th June 1970. See his report, in my possession. Place found - 'Fair Isles', Scotland.

W.R.Smith

Diving Officer.



The Theatre of Operations 1587-1588
The track of the San Martin ⟶

NOT TO SCALE.

Fig [redacted]

LIST OF WRECKS SANK OFF IRELAND

(1) Gran Grifon (Sank between Orkney & Shetland)
(2) San Juan (11) & (26)
(3) Girona (Galleasses sank Giants Causeway)
(4) Trinidad Valencera
(5) Juliana
(7) Duguesa Santa Ana
(13) Lavia
(16) Rata Encoronada
(18) Gran Grin
(19) Falco Blanco
(21) A Flemish Ship
(22) A Ship of San Sebastian
(23) San Marcos
(24) A Zabra
(25) A Biscayan Ship
(27) Nuestra Senora de la Rosa
(28) San Pedro El Mayor (Sank off Cornwall)

NINE SHIPS, NAMES UNKNOWN.

(6) - (8) - (9) - (10) - (12) - (14) - (15) - (17) - (20)

THE GUNFOUNDERS OF ENGLAND by Ffoulkes
Cambridge University Press 1937

P.92. The figures tabulated below are those generally accepted as those measurements and calibres of cannon in the sixteenth century. There were other types in the early part of the sixteenth century, such as the Double Courtant or curtowe of 7300 lb. weight and the Courtant of 5500 lb carrying balls of 80 lb and 50 lb weight respectively, that is about 11 ins and 6 ins calibre. There were also.....

CANNON OF THE SIXTEENTH AND SEVENTEENTH CENTURIES

Basilisc	9000	-	8¾	-
'E' Cannon	8000	-	7	-
Cannon of 8 *	-	8000	-	8
Cannon of 7 *	-	7000	-	7
Demi Cannon	6000	6000	6½	6½
Culverine	4000	4500	5½	5½
Demi-Culverine	3000	2500	4½	4½
Saker	1500	1500	3½	3½
Minion	1100	1200	3¼	3¼
Falcon	800	700	2½	2¾
Falconet	500	500	2	2¼
Robinet	200	-	1¼	-
Cannon-perrier	-	3500	-	9.10.12
Demi-cannon Drake	-	3000	-	6½
Culverine-Drake	-	2000	-	5½
Dem-culverine Drake	-	1500	-	4½
Saker, Drake	-	1200	-	3½

* so called from the dimensions of the bore in inches.

Weight in pounds.		Calibre in inches	
1574	1643	1574	1643

The weights of the guns under the date 1574 are precisely those given by Holinshed (1,199), who wrote in 1586.

Robert Norton in 'The Gunner' gives the following guns in addition to the above: Aspicke 7600 lb., Pellican 2550 lb., Base 45 lb., Dragon 1400 lb., Syren 8100 lb., and Sparrow 4600 lb.

BALLISTICS IN THE SEVENTEENTH CENTURY
by A.R.Hall., M.A. Phd.

Artillery Tables P.166.

I English c.1590. This was drawn up by John Sheriffe and is to be found in S.P.12/242. Nos. 64. 65. It is possible that it represents a rather antiquated practice.

'The Brevity and the Secret of the Art of great ordnance necessary for all generals for their present memory'.

	Δ Height of piece.	Weight of piece.	Weight of shot	Weight of powder	Point-Blank Range	Extreme Range.
1.						
Cannon Royal	8½"	7000 lb	66 lb	30 lb	320paces	1930 paces
Cannon	8	6000	60	27	340	2000
Cannon Serpentine	7½	5500	53⅓	25	400	2000
Bastard Cannon	7	4500	41¼	20	360	1800
Demi-Cannon	6½	4000	30¼	18	340	1700
Cannon Perrier	6	3000	24½*	14	320	1600
2.						
Culverin	5½	4500	17⅓	12	400	2500
Basiliko	5	4000	15¼	10	non stated	-
Demi-Culverin	4½	3400	9⅓	8	400	2500
Bastard Culverin	4	3000	7	6¼	360	1800
3.						
Saker	3½	1400	5⅓	5⅓	340	1700
Minion	3¼	1000	4	4	320	1600
Falcon of 2.⅓	2⅓	800	3	3	300	1500
Falconet	2	500	1¼	1¼	280	1800

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[redacted]

Δ The diameter of the ball would be less by ¼" allowed for windage.

* Despite the name Sheriffe apparently gives the weight of an IRON ball. With very minor changes the same table is given by Sir.William Monson c.1630.

P.18. The Hague foundry under Verbruggen's direction was always in the van of progress and improvement and in 1750 it was laid down that the practice of decorating bronze guns with elaborate dolphins, coats of arms and inscriptions in high relief must be discontinued.....After the above regulation.....guns were turned smooth.....and any decorations or inscriptions were engraved.....

As has been noted above, the iron gun did not lend itself to ornamentation and it is not till the end of the sixteenth century that we find makers' names on their productions.x

x Note letter G on our cannon

p.19. Most of the guns from the sixteenth to the early nineteenth century are signed by their makers, the French and Italian masters using, generally, relief letters on the base ring: the English founders preferring engraving on the barrel.....

The dolphins, at first of an ornamental nature and afterwards plain lugs, were given up about the end of the eighteenth century. They are not found on early sixteenth century guns, and it is only at the end of the seventeenth century that they were generally adopted for field guns.

p.21. (Mons Meg) Another theory is that it was made at Mons, this is more plausible, for large quantities of ordnance were imported from Flanders up to the middle of the sixteenth century.....

p.22. He found that Dr. MacCulloch in his "Descriptions of the Western Isle of Scotland" (Vol. 1.536) had given an account of the salving of guns stated to have been part of the armament of the FLORIDA sunk during the persuit of the Armada off the island of Mull.

p.25. There was seldom any attempt to decorate iron guns, as the material does not lend itself to delicate relief or incised inscription. In Elizabeth's reign the crowned Tudor rose was used, as shown on the Pevensey gun, and the same badge was possibly used during the reign of Queen Anne.

p.27. English guns, or rather guns made in England, are smaller than the Oriental giants and range from the Basilisk of 8¾" to the Robinet of 1¼" calibre. They are plain, almost to austerity, having merely simple muzzle mouldings, dolphins in the form of fish, lions or mermaids and a crowned rose or other armorial insignia of fine design in high relief (fig.14), and are almost invariably inscribed with the maker's name and date. The fact that they were always cast with trunnions shows that they were mounted on ship or field carriages which permitted them to be elevated or depressed as occasion demanded. The cascabel buttons are for the most part simple and plain, but in two examples in the Tower (XIX, 10, 11) the rear end of these guns is in the form of a rose, the stalk of which curls over in ring form at the cascabel, hence the name "ring-tailed saker" for a gun of about 3" calibre (Plate XII & fig. 15).

The position of the trunnions is thus laid down by Thomas Smith (The Art of Gunnery, 1643). "Measure the length of the piece and divide by 7, multiply the result by 3. Result, how many inches or other measure the trunnions ought to stand from the lowest part of the capacity of the said piece at the breech".

Norton and Gaya give the names of the various rings as follows:-

Norton	Gaya
Cascabel	Cul-de-lampe
Base-ring	Plate-bande
Reinforce	Culasse
Trunnion-ring	
Muzzle-ring	Astregal
Vent	Lumiere

/3.....

p.120. Simon Gielis:- Malines, 1517 (Madrid, 3916: Enkhuisen)
Arnold Giles:- St. Olaves, London 1541-1571
Innocent Giordani:- Naples 1642 (Madrid, 3948, 3649)
Antonio di Giovanni:- Florence, 1496-1500.
Diego Gomez:- 1676 (Madrid 3659)
Samuel Gott:- Bayham and Lamberhurst, Kent 1654-1700
Jean Albert de Grave:- Amsterdam 1690-1720 Gun & Bell-founder
Sir Thomas Gresham:- Mayfield, Sussex 1573 (Woolwich, 11, 161)
Laon Guillaume:- 1358

1. These pieces be most servicable for battery being within 80 paces of their mark which is the chief of their force.

2. These pieces be good and servicable to be mixed with the above ordnance for battery to pierce being crossed with the rest as also fit for castles, forts and walls to be planted for defence.

3. These pieces are good and servicable for the field and most ready for defence.

II. Spanish c.1603	Weight of Gun	Weight of Shot	Len.of Gun
Demi-Cannon	2400 lb	16 lb	18 calibres
Culverin	5530	16	30
Demi-culverin	2800	8	26
Saker	1750		
Falconet	1050	3	30

(Diego de Prado y Tovar, Encyclopaedia de Fundicion de Artilleria y su Platica Manual (1630), pp. 8 et seq.)

III English: Civil War Period

	Calibre[x] of piece	Weight of piece	Length of piece	Weight of shot
Cannon Royal	8 in	8000 lbs	8 ft 0 in	63 lbs
Cannon	7	7000	10 0	47
Demi-Cannon	6	6000	12 0	27
Culverin	5	4000	11 0	15
Demi-Culverin	4½	3600	10 0	9
Saker	3½	2500	9 6	5¼
Minion	3	1500	8 0	4
Falcon	2¾	700	6 0	2¼
Falconet	2	210	4 0	1¼
Robinet	1¼	120	3 0	¾

[x]Probably ¼" should be allowed for windage. The simplification of the classification and the increased strength of the smaller pieces are worth notice. (William Eldred: "The Gunners Glasse." 1646).

IV French 1666 (de la Fontaine: Les Fortifications Royales, 92-Point)

Gunners & Loaders	Weight of ball	Calibre	Weight of Gun	Charge	Len.of Gun	Point Blank range	Extreme Range
5 Whole Cannon (Flemish)	45 lb	49½ lb	6100 lb	22½ lb	17½	1450 ft	16200
5 Whole Cannon (French)	33⅓	36⅔	5000	17	19½	1500	16400
4 Demi-Cannon (Flemish)	24	26½	4200	15	20½	1560	16500
4 Great Culverin (French)	15	16½	3400	10	33	1630	16625
4 Great Culverin (French	18	20	4000	12	32	1650	16850
3 Quarter Cannon	12	14¼	2800	8½	24½	1550	16050
2 Eight Cannon (Saker)	6	6⅔	1700	4½	29	1500	15925
2 Sixteenth Cannon	3	3⅓	1100	2½	35	1475	15550
2 Thirtysecond Cannon	1½	1.13/00	750	1½	41	1450	15200

/4.....

[redacted]

V. French 1697

	Weight of Piece	Weight of Shot	Length of piece
French Whole Cannon	6200 lb	33 lb	11 ft. 0 in.
Spanish Demi-Cannon	5100	24	11 0
French Demi-Cannon	4100	16	10 10
Spanish Quarter Cannon	3400	12	10 9½
French Quarter Cannon	1950	8	10 7½
'Moyenne'	1300	4	10 7
Falcon	150-800	¼ - 2	7 0

The names Culverin and Saker belong to pieces now disused and "dont les noms bizarres sont presque inconnus".

TYPES OF ARMADA GUNS.

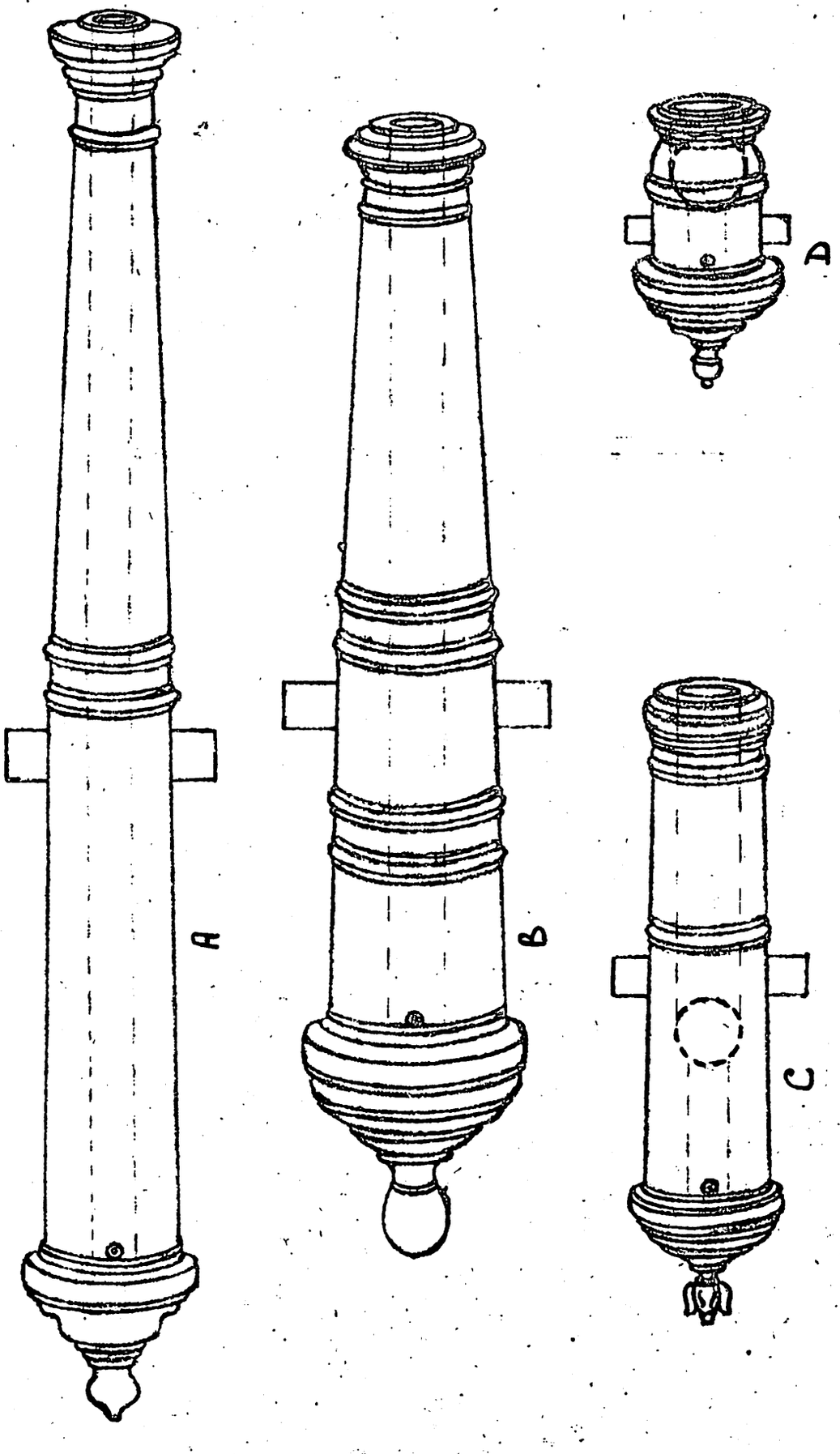
From 'Armada Guns' by Michael Lewis. George Allen & Unwin 42/- 5458B0A/623·4.

REF.	CLASS.	PEICE	HEIGHT of P (CALIBRE. INS)	WEIGHT. (IN 1595 lbs)	SHOT (lbs)	RANGE. (POINT BLANK)	SIZE. O.A. M/M & INS.	PARTICULAR CALIBRE.
A.	CANNON TYPE.	CANNON.	7¼ INS.	8500. "	50 (Iron)	340 (Paces)	2000. 10'-10"	18 - 24.
	HEAVY SHOTTED MEDIUM RANGE.	DEMI-CANNON.	6¼ "	4500. "	32 (Iron)	340 "	1700. 11'-5½ 10-5	" "
B.	PERIET TYPE.	CANNON PERIET.	8 INS.	2850 -	24 (stone)	320 (Paces)	1600 5'-4" OR	8
	MEDIUM SHOTTED. SHORT RANGE.	CHAMBERED. MUZZLE LOADING.	6 INS.	—	24 (Iron)	"	4'-0"	8.
C.	CULVERIN TYPES.	CULVERIN.	5¼ "	4000 lbs	17 (Iron)	400 (Paces)	2500. 14'-0 7'-10½	32-18 *
	LIGHT SHOTTED LONG RANGE.	DEMI-CULVERIN	4¼ "	2850 "	9 "	400 "	2500 11'-6"	32½ 30/50
	" "	SAKER.	3½ "	1800 "	5 "	340 "	1700 9'-4"	32. 30/50
	ALLWAYS SMOOTH GENERALLY STRAIGHT.	MINION.	3¼ "	1200 "	4 "	320 -	1600 8'-8"	32. 30/5
D.	CANNON FOUND ON SITE.	?	?	?	?	?	?	?
	Material: Cast-Iron	—	3¼-3½.	1200-1800	—	—	8'-8"	

NOTES * These Guns when long were for firing Fore & Aft but were clumsy when across the boat for which, they were shortened from 32 calibre to as little as 18. Site Cannon require more exstensive measuring before adding to this schedual.

W. R. SMITH. DIVING OFFICER.

Fig 11



Fig

GUN ROCKS PROJECT

Summary of operations to date:-

1. GEOGRAPHY:- West side of Staple Island which lies some $3\frac{1}{2}/4$ miles North East of the village of Seahouses in the county of Northumberland and lies on the approx. 55°N Line.
Lat. 55°-37'-51"N. Long. 01°-37'-39"W.
Distances - from the rock to West side of Island approx. 750 feet or 7 sec lat.

2. TIDES:- Very little slack water at H.W. Tide runs very fast in the gut between the rock and a small reef which is adjacent. Slack water starts approx. one hour after H.W. or L.W. at Seahouses, depending on wind direction. (See dive site plan for more details.

3. RESULTS OF FIRST DIVE First Dive report as follows:-
Sunday
17th May, 1970

14 Divers in two boats:-

Bill Sherwin's Dory 'Zokko' - 5 Divers
8 Divers in the 'John Wesley' which is owned by Jim Trotter of Seahouses.

R.Brown and S. Saul were told to dive on South side of rock - found what appeared to be 9 cast iron cannon of varying sizes and shapes. They estimated lengths to be about eight feet. No other checks were done at this time.

D.Russell and myself were swimming on N.E.side of rock when I found a bronze wheel well eroded in approx. 30-35 ft. of water, no other items lying around at this spot.

Conditions on this day were fairly good - underwater visibility 30 feet plus, in places. Tides started to move fast towards the end of diving operations. Tide pushing North and not South on the ebb, this is peculiar to the Farnes and is mentioned elsewhere in my report.

Work done so far:-

Reported finds to Receiver	- meeting in Newcastle on Monday 1st June at 3.0 p.m.
Also Mr. K. McWhirter of Tyne Tees Television	- Wants photographs and drawings etc., for a possible T.V. programe.
Public Library	- I have gone through a very complex catalogue of maps, dates 1300 AD 1890's to try and pin-point when the name of the rocks was given. They make no reference to this name, only old Germanic names. More checking required.

4. NOTES Met Receiver - he is very interested and has taken copies of sketches etc., and he informs me that I have to fill all salvor forms in etc., through the Area Receiver who is at Berwick. I have written to Mr. Murray to this end, awaiting his reply.

WEATHER - Fine AIR TEMP. 12°C Date - Sunday 17th May, 1970

WIND - South East WATER TEMP. 12°C

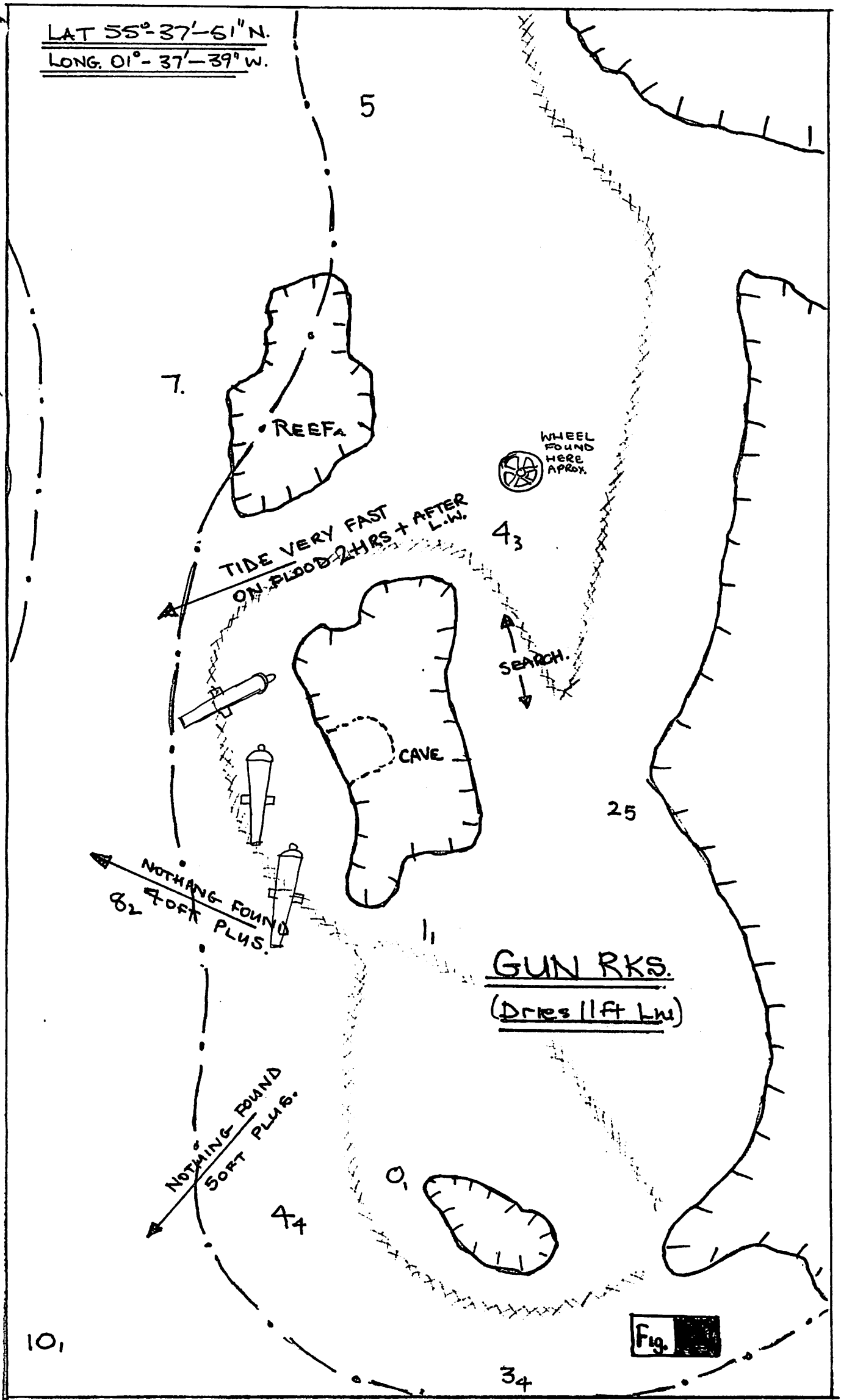
VISIBILITY - 15/20 ft. LOCATION - GUN ROCKS

BOATS - 'John Wesley'/Dell Quay Dory 'Zokko'

	Bottle Capacity	ATS In	ATS Out	Duration	Depth
John Wesley					
S. Saul	65 cu.ft.	120	20	45 mins.	50 ft.
R. Brown	"	145	20	"	"
E. Tysick	75 cu.ft.	120	60	30 mins	"
E. Dobbie	65 cu.ft.	150	25	"	"
W. Smith	65 cu.ft.	160	80	25 mins	40 ft.
D. Russell	"	155	65	"	"
G. Anderson	65 cu.ft.	145	130	40 mins	45 ft.
A. Harries	75 cu.ft.	160	145	"	"
	(Snorkelled after 10 min. Lung Dive)				
Zokko					
S. Inglis	65 cu.ft.	150	10	30 mins	50 ft.
W. Sherwin	"	150	10	"	"
R. Edmundson	75 cu.ft.	160	95	"	"
M. Pratt	Snorkel			30 mins	25 ft.
D. Blythe	"			"	"

Metal Pulley Wheel found and brought aboard by W.R.Smith/D.Russell.

8 to 10 cannon located 40 ft. deep West side of Gun Rocks by R.Brown/S.Saul.


LAT 55°-37'-51" N.
LONG. 01°-37'-39" W.
5
1
7.
REEF
WHEEL FOUND HERE APROX.
TIDE VERY FAST ON FLOOD 2 HRS + AFTER L.W.
4 3
SEARCH.
CAVE
25
NOTHING FOUND 4 OFF PLUS.
8 2
1 1
GUN RKS.
(Dries 11ft LW)
NOTHING FOUND SOFT PLUG.
0 1
4 4
10 1
3 4
Fig.

5. RESULTS OF SECOND DIVE Second Dive report as follows:-
Sunday
31st May, 1970

11 Divers went out in the 'John Wesley' to the site at which westerlys were blowing light to moderate approx. scale 3-4.

Swell conditions bad as this site is open to offshore winds, height 3-4 ft. short and choppy.

Underwater visibility still fairly good 10 ft plus, but due to current, divers unable to carry out their task well.

I sent two divers in to mark site and one had to come out - he was not feeling too good. Second diver sent as replacement with Snorkel cover for both. Photographs and Measuring Crews unable to dive - at this stage, boat was rolling through 120° and smashing loose air bottles against bulk heads.

I cancelled diving for the day at this point, and moved to a quiet site to watch seals feeding.

6. NOTES Tide a H.W. slack with offshore wind no good at this spot. Current was moving in excess of 1 knot and increasing.

WEATHER - Fine

AIR TEMP. 16°C

Date - Sunday
31st May, 1970.

WIND - Strong South West

WATER TEMP. 8°C

VISIBILITY 20 ft.

LOCATION - GUN ROCKS

BOAT - 'John Wesley'

	Bottle Capacity	ATS In	ATS Out	Duration	Depth
W. R. Smith	65 cu.ft.	150	70	30 mins	25 ft.
B. Christopher	"	150	60	"	20 ft.
D. Russell.	"	100	60	"	"
R. Brown	"	150	110	45 mins	40 ft.
R. Edmundson	75 cu.ft.	165	65	"	"
S. Inglis	Snorkel			20 mins	20 ft.
B, G. Sheppard	"			"	"
B. C. Walker	"			"	"
E. Tysick	No dive				
P. Napp	"				
N. Ashmore	"				

Conditions - extremely rough.

7. RESULTS OF THIRD DIVE Third Dive report as follows:-
Sunday
7th June, 1970

Dive conditions foggy but went out in 'John Wesley' accompanied by N. Ashmore's boat 'Ran'. Slow trip out to site, good navigation by boat crew. Fog was a blessing as it kept tourists at a safe distance (the local fishing boats run trips out to the Islands because of the bird-life and seals and also the fact that St. Cuthbert spent most of his life there).

Conditions could not have been better - water was flat and we got to site before the start of slack water. Time 11.20-11.45 a.m.

We anchored on the south side of the rock which is now (11 ft dries)

Total No. of Divers on board both boats - 12.
I sent Snorkel Divers over the site and they re-located the cannon immediately. I then sent a diver down to attach a rope to the cannon for reference. Photographs and measuring then became the order of the morning. Refreshments were followed by searches and some objects were recovered from the bottom. The places were noted. Objects were sword handles, parts of blades and scabbards, lead shot weights from a cave entrance 10 ft. down (not explored inside yet). Three assorted cannon balls were also recovered and kept in water. Approximate positions of all objects noted. Total amount of slack water today 2½ hours tide starting to move fast south around site at the end of this period, which signalled end of operations for the day. Perishable items put in water for future preservation, i.e., cannon balls and ironised sword blade pieces and scabbard parts. Figs 2, 3, 4 & 5.

NOTES 12 Cannon now noted and a few more points which may be of interest later on as we start to dig. The bottom up against the rock face was glowing in the sunlight and my heart missed a beat but on closer inspection (sharp knock with a wrecking bar) brought off a cloud of iron dust - the bottom of this point has objects buried under the crust. There appears to be even larger cannon underneath the surface. There also appears to be boxes of swords under one of the cannon, well cemented in.

WEATHER - Warm & Misty

AIR TEMP. 17°C

Date - Sunday 7th June, 1970

WATER TEMP. 12°C

WIND - Light Easterly

VISIBILITY - 40/50 ft.

LOCATION - GUN ROCKS

BOATS - 'John Wesley'/'Ran'

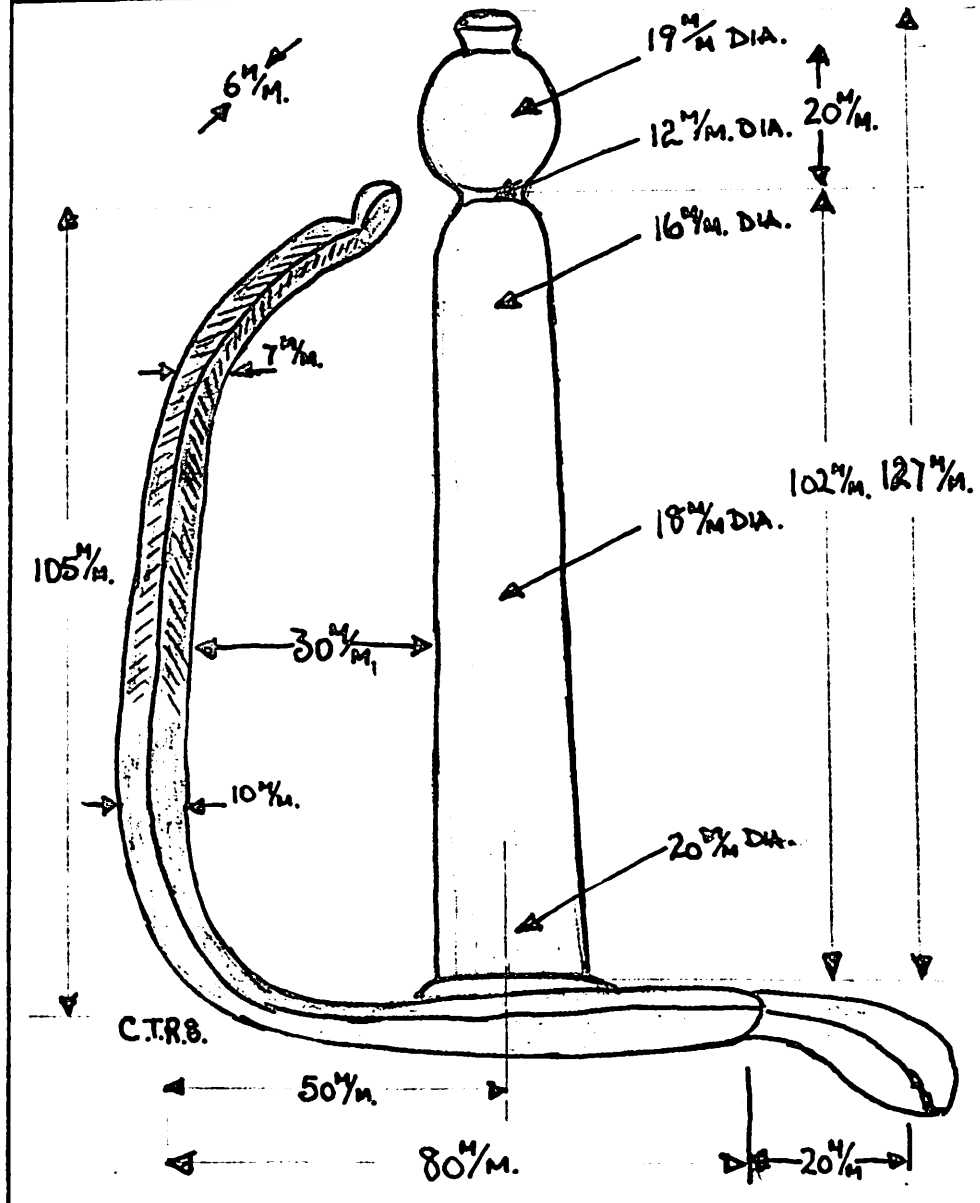
	Bottle Capacity	ATS In	ATS Out	Duration	Depth
John Wesley					
W. R. Smith	65 cu.ft.	155	25	45 mins	45 ft.
K. Muscarella	75 cu.ft.	160	60	"	"
R. Brown	65 cu.ft.	135	55	65 mins	50 ft.
E. Tysick	75 cu.ft.	160		"	"
R. Edmundson	"	150	40	60 mins	40 ft.
R. Price	"	160	30	"	"
N. Holmes	65 cu.ft.	150	40	55 mins	45 ft.
M. Pratt	"	150	20	"	"
E. Dobbie	"	150	30	"	"
D. Blythe	Snorkel Cover				35 ft.
Ran					
N. Ashmore	twin 40's	120	50	45 mins	50 ft.
B.G.Sheppard	65 cu.ft.	150	10	"	35 ft.

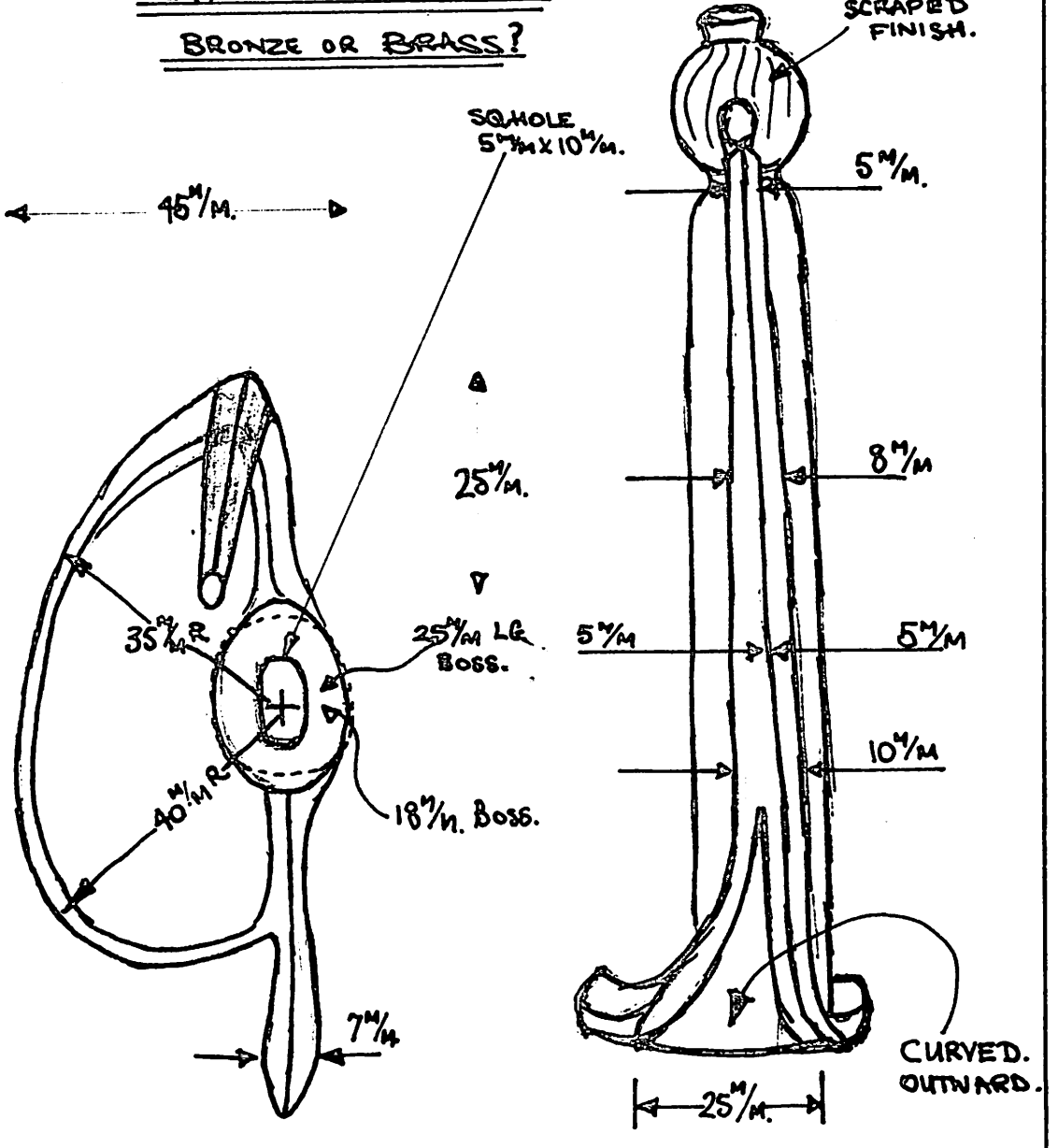
Sword Hilts, Cannon Balls and Depth Weights brought aboard.

DRAWN	W. R. SMITH.
DATE.	12. 6. 70.
SCALE.	FULL SIZE.

RAPIER HANDLE.

BRONZE OR BRASS?





WEIGHT 10.502s +

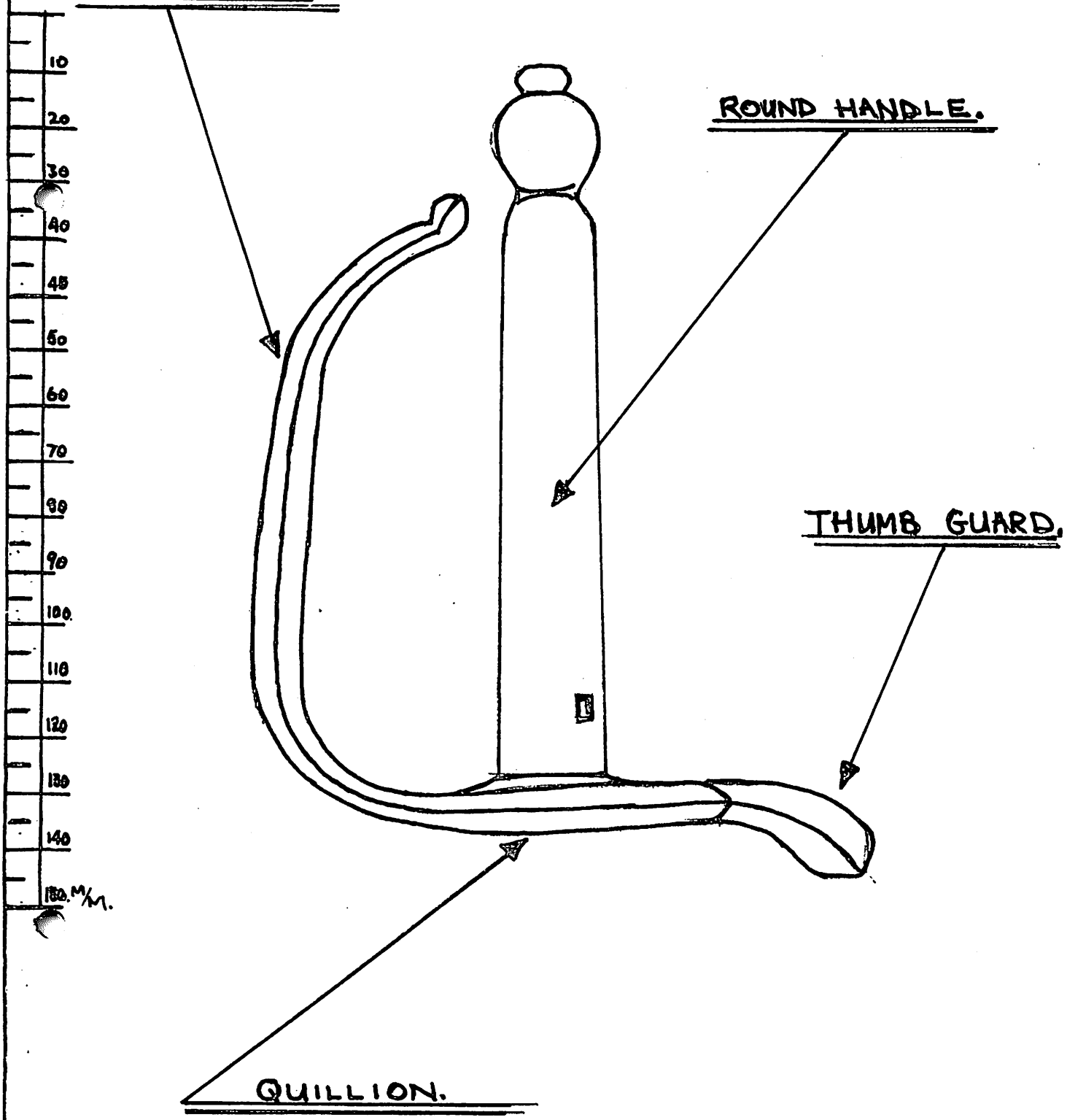
Fig 5a

REF. [redacted]

'RAPIER HANDLE.'

BRONZE OR BRASS.?

WEIGHT. 10·5 OZS.



DRAWN	W. R. SMITH.
DATE.	12. 6. 70.
SCALE.	FULL SIZE.

Fig 6a

DRAWN	W. R. SMITH
DATE	12. 6. 70
SCALE.	NOT TO SCALE.

LEAD SOUNDING WEIGHT.

MATER:- LEAD: 9lbs.

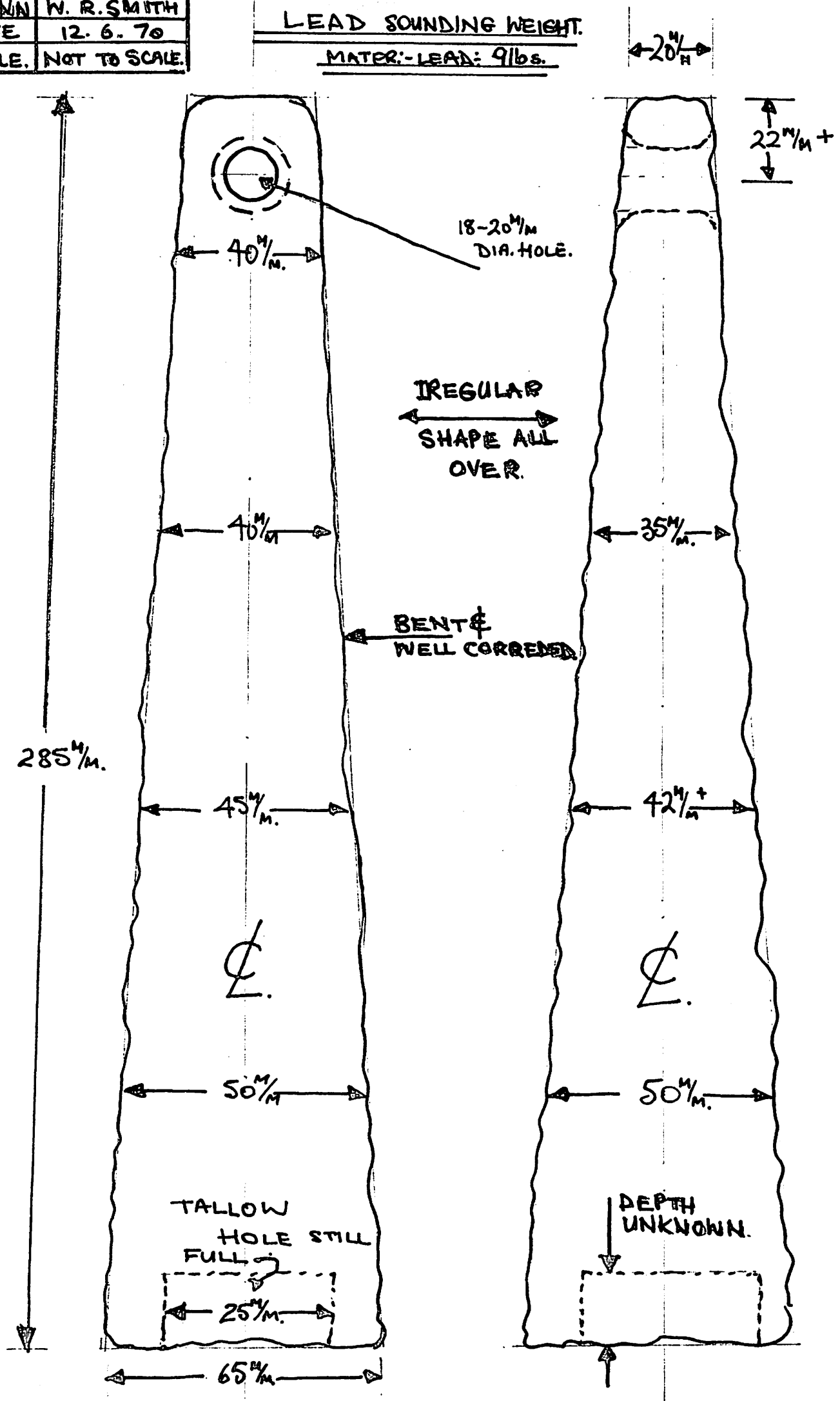
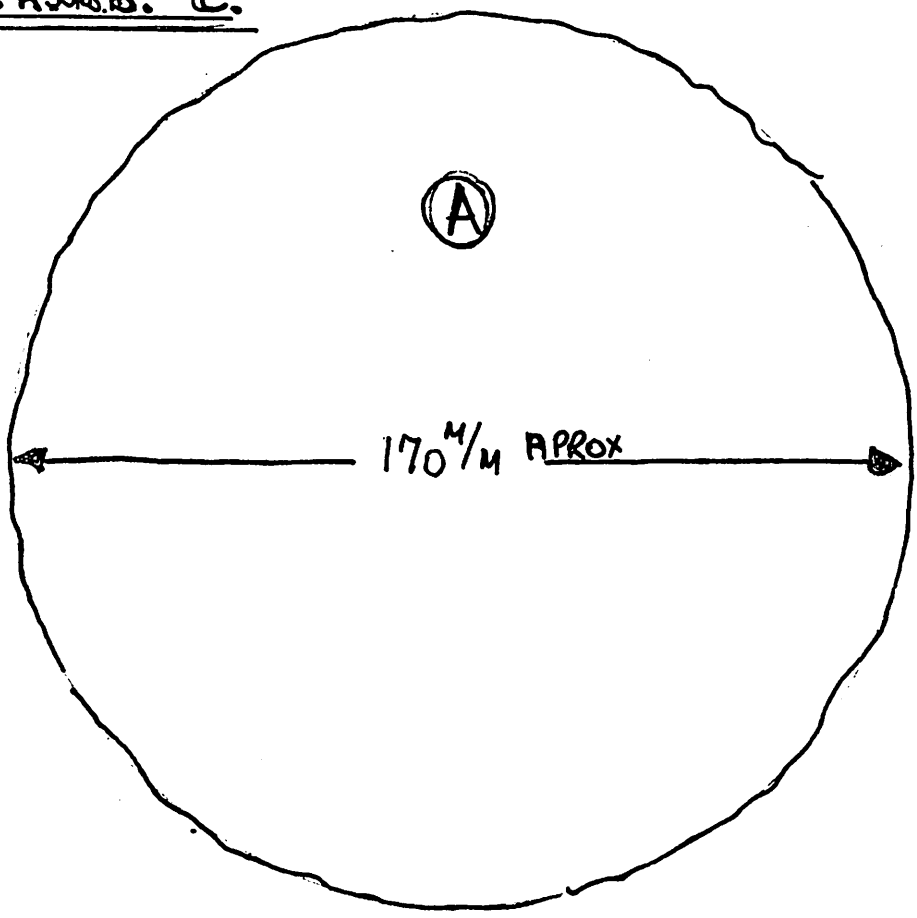


Fig 7a

CANNON BALLS.

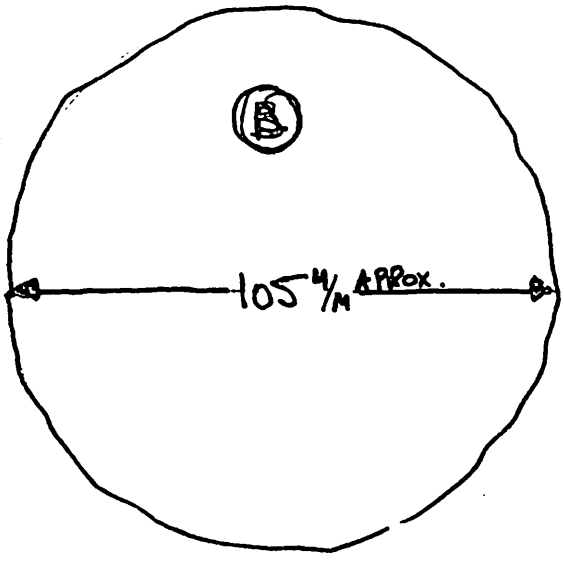
MATERIAL: CAST-IRON.

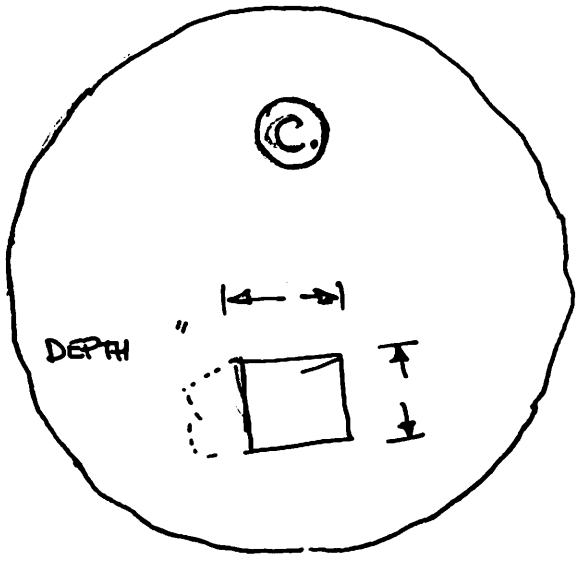
WEIGHTS: A 35lbs. B. C.



CONDITION: GOOD.

SHAPE'S: IREGULAR.





DRAWN	W. R. SMITH
DATE.	12, 6. 70.
SCALE.	NOT TO SCALE.

Fig 8a.

8. RESEARCH INTO OBJECTS SO FAR:- I have made full detailed sketches of all parts found and photographs taken.

The sword handles have been roughly dated by two sources, i.e., Hancocks Museum and Laing Art Gallery Museum both of Newcastle. The dates they put on the items were between 1500-1620 and 1720 at one Museum. A more detailed report is necessary.

Other objects so far have not been dated. Many reference books have been looked through but so far, I have not been able to come up with any similar. The handles are bronze or brass? Museums wish to help out with research work.

9. NOTES - The dives done so far have convinced us that it is a wreck site and not a dumping ground.

Costs of operations and Equipment used are as follows (with a brief history of events):-

Boats used 'John Wesley' a drifter of some 30 ft. plus, heavy and stable. Cost to run £7.4.0d per trip.

17th May 1970 - £7.4.0d
31st May 1970 - £7.4.0d
7th June 1970 - £14.8.0d

Nick Ashmore's 15'-6" boat used on one trip.

Air costs also mounting up at 6/6d per cylinder per diver.

Cameras, lifting gear, floats, measuring equipment etc.,

Costs of film material - B.G.Sheppard, N. Ashmore, W.R.Smith.

10. RECEIVER Met Receiver at Berwick on Saturday, 13th June, 1970 and handed over pieces which have so far been brought up. We are now waiting to make arrangements for the articles to be put back into our hands so that ageing and so forth can be done. Mr. Murray whom we met, is only there for three weeks and Mr. Summerville will be back on Monday 16th June, 1970.

Salvage Paper W.R.5. was filled in and duly signed by me on behalf of the branch.

Mr. Murray put forward a good idea for a T.V. programe but requires verification by their Head Office. The idea is as follows:- The shipping Act of 1894-1906 says that the Receiver or his agent should go out in a boat to the wreck, place a lead shot weight on the wreck and claim it for the Crown. This would make a good centre point for a programe.

'CASCABELL' By Nick Ashmore.

film. F. .. at sec.

'PERSPECTIVE' By Nick Ashmore.

film. F at sec.

11. FUTURE WORK Carry on diving on site - establish ourselves as Salvors by survey and lay down archaeology grids etc., publicise to the full. Lifting cannon for T.V. programe as well as continue with arms expert opinions etc.

T.V.Story Work Wed. 17. 6.70.
Mr. Alan Bax requires full report and photographs.
All work requires photocopying re. H. Harvey.

Meeting of T.V. people I have met Mac. Campbell and his writer and some of his crew. He talks of a T.V, programe and R.A.F. help to lift cannon.

Money and help to be discussed by T.V.people and myself. Awaiting a meeting. First meeting Wednesday, 17th June, 1970.

Photographs so far:- Number 1-50

1. Cannon - 4 shots)
2. Cannon Balls - 1 shot) all required
3. Bronze Wheel - 6 shots) enlarging and
4. Handles, Cannon Balls on land assorted) bring together
5. Handle and Shot Weight (2) in colour) to make on
6. General shots of boats, sites etc. (assorted)) job lot
7. I would like to see a colour transparency film)
on conditions. Nick, Barrie, Myself (for club))

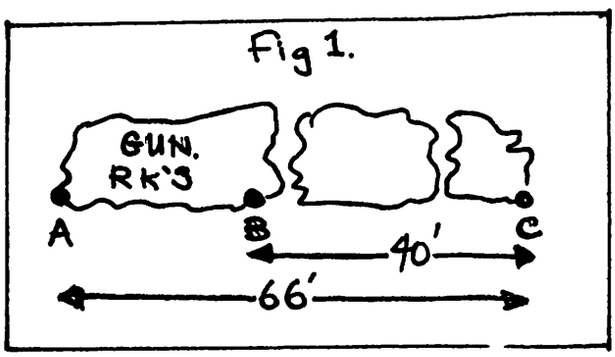
12. RESULTS OF FOURTH DIVE Fourth Dive Report as follows:-
21st June, 1970

We went out on a nice sunny morning from Seahouses. Hard work loading gear was the first major job of the day but we managed to get all equipment stowed and get underway by 10.45 hours. Perfect conditions prevailed, i.e., smooth water, very little wind.

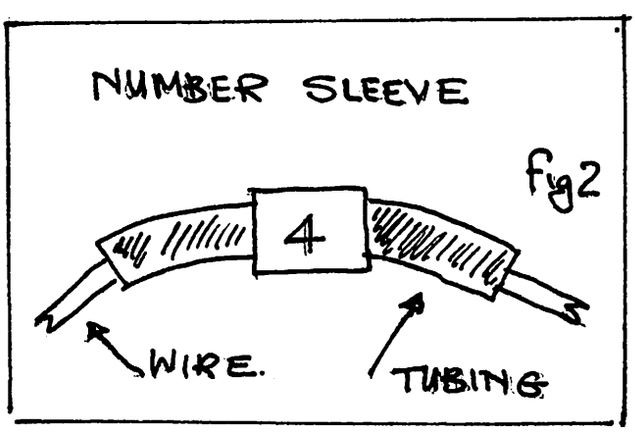
The number of divers present were 14 - 12 divers on the 'John Wesley' and 2 divers on Nick's boat.

Arrived at Gun Rocks by 11.20 hours and prepared for the days work party.

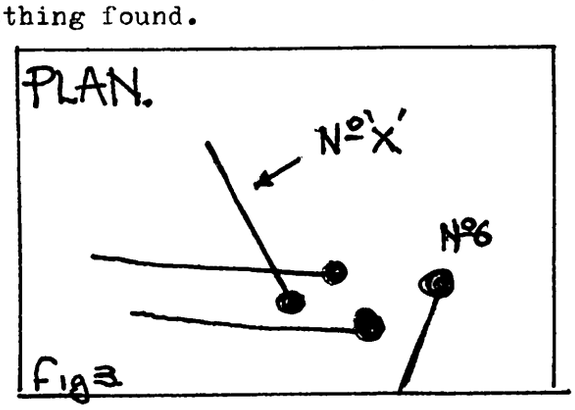
First job was carried out by S. Inglis who put pitons in the rock at A.B,C fig.1. The distance was measured by N. Holmes and D. Blythe by plumb line and 100 ft. nylon tape. Then the team started to put down floats and mark cannon by tying on marking tags which consists of electrical wire which holds in place a plastic sleeve on which a number is fixed, coloured white. Fig 2.



B.G. Sheppard was working on the floats and R. Edmundson worked on tagging and S. Inglis helped B.G.S. in the latter stages of float fixing. The number tagged so far, approx. 7 or 8. 13 Floats put on, total number of cannon now counted approx. 20. A piece of brass sheet trapped under cannon No.7. See sketch of site with approx. positions marked. The next job was to start measuring by tri-angulation. From the datum line we marked A.B.C. The rest of the divers were employed in cutting kelp from around the cannon.



We also sent two divers into the cave with torches to inspect. Its approx. 15 ft. deep with a pebbly bottom - nothing found. Two divers, myself and R. Brown drift dived on the current to see if anything had been washed along over the years - nothing found.



Approx. sketch of site showing principal cannon site some found after marking 2 or 3 found surrounding cannon No. 7 & 5. It appears now that the wreck crashed over reef and not over the rock itself as was first thought. Fig 4.

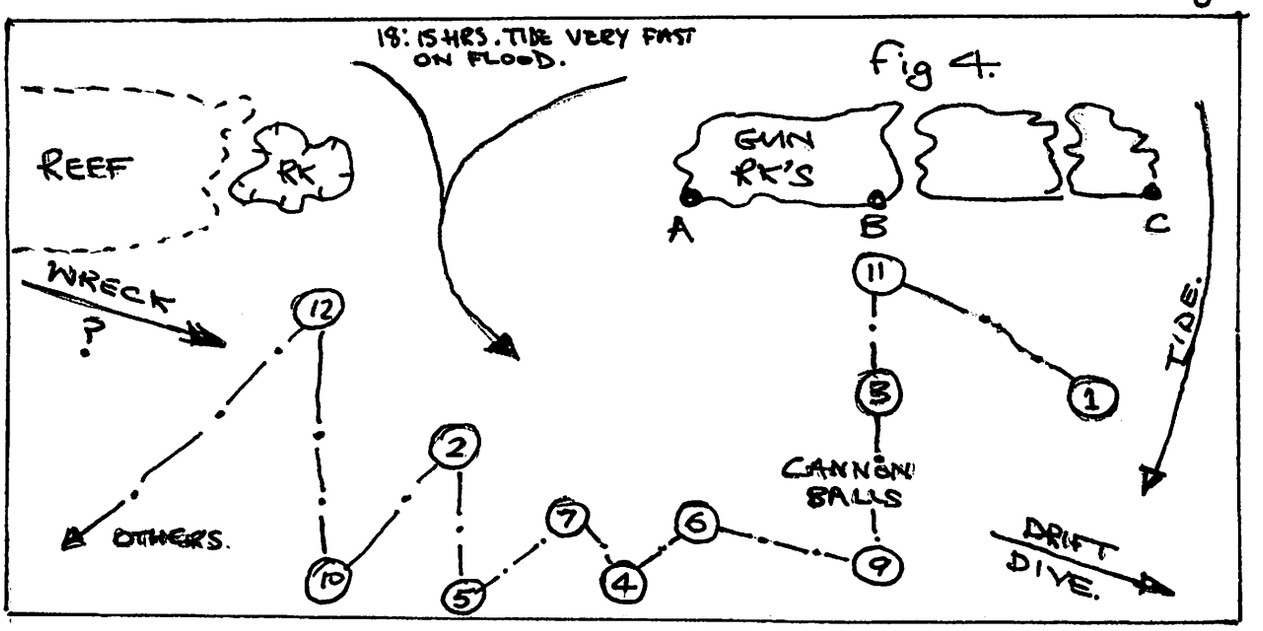
Continued.....

RESULTS OF FOURTH DIVE - Continued

A few faults came to light on todays operations:-

First, do not try to do too much on one day.
Second, we will have to put a continuous guide line down between the cannon. Marked thus #——·——·——·→ and use No.1 as our base line complete with submerged float suitably scribed, i.e., (Tyneside branch site, first salvours, Archaeological Survey underway.) All piton floats at sea level 12:05 hours slack water. Four cannon in a heap on No. 6 floater.

Plan of cannon layout at No.6
Size of 'x' 8'7" lg x 19" dia. x 11" dia. 4" bore. Trunnions to back 53". More sizes of cannon required (Future) Fig 3.



NOTE Head keeper from Longstone paid a visit complete with tape-recorder looking for information for his book. He offered his help on any problems we may have.

W.R.SMITH

Diving Officer

GUN ROCKS PROJECT

RESULTS OF FIFTH DIVE
Saturday
4th July, 1970

This week-end was mainly devoted to T.V. film work of the project and the site in general.

Purpose:- To publicise the project and also raise funds for future research.

Todays programe started when we departed from Seahouses as usual at 09-45 hrs approximately. The team on board the 'John Wesley' included six divers, a cameraman, soundman, reporter, producer with two guests and four divers on N. Ashmore's 'Ran'.

Work progress on site as follows:- Kelp clearing, buoying certain cannon and a general clearing up.

The cameraman was put into the water for the first time but he was not too happy - he swallowed a lot of sea-water. The first 100 ft of film under-water was done by a branch team, i.e., Nick, Harry and myself.

Material recovered from cannon site (No.12) by Mark Pratt was as follows:-

1 - 7" cannon ball (weight 35 lbs)
Small cannon balls (" dia.)
1 - Piece of Copper Sheathing from cannon site (No.7)

At Site (No.12) large numbers of balls make up the bulk of this part of the sea bed. This area will require a very large hard working team to clear it when the time comes. The copper sheathing under cannon (No.7) was examined and we found square nail holes along edge.
Position of find, directly under cannon.
Material - copper sheet.

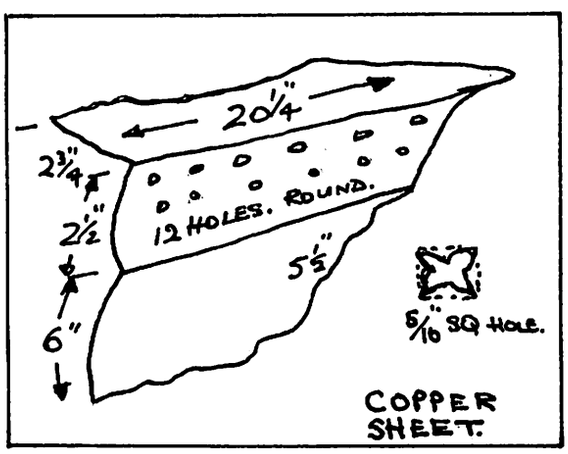


Fig 5.

Note:- P.G.W.Annis of Maritime Museum says that this piece of copper will not be hull sheeting but will more likely be a hatch cover protection.

(No.5) cannon site which is marked and tri-angulated has been picked as the possible cannon to lift because it is almost free of the sea-bed and is also the outer most cannon on the site. Further forms W.R.5. are required from the Receiver for any artifacts recovered. M. Pratt was the recoverer of artifact (fig.5.).

NOTES. Most of today was taken up by filming and sound recording. Work was completed at approximately 14.00 hrs and we arrived back at Seahouses at approximately 16.00 hrs. Tides in the morning - Ebb tide coming up to slack L.W. at approx. 10.00 hrs out at Gun Rocks. Conditions on site good, no swell underwater - visibility 20/25 ft.plus. Sunlight strong at 12.00 hrs plus. Film and Sound track were done in the lee of Staple Island. Interviews with R.Brown the finder of the cannon took place along with a discussion.

WEATHER - Fine

AIR TEMP. 17°C

Date - Sunday
21st June, 1970

WIND - Light
Southerly

WATER TEMP. 10°C

LOCATION - GUN ROCKS

VISIBILITY - 15/20 ft.

BOATS - 'John Wesley'/'Ran'

	Bottle Capacity	ATS In	ATS Out	Duration	Depth
W. R. Smith	65 cu.ft.	150	70	45 mins	30 ft.
R. Brown	"	150	60	"	"
R. Brown 2nd Dive	"	150	30	75 mins	30 ft.
T. Rae	"	150	30	"	"
T. Rae 2nd dive	"	150	100	20 mins	"
G. Anderson	"	150	100	"	"
A. Harries	75 cu.ft.	160	60	45 mins	"
J. Barron	65 cu.ft.	150	30	"	"
E. Dobbie	65 cu.ft.	150	60	"	"
N. Holmes	"	110	30	"	"
M. Pratt	"	150	25	30 mins	"
D. Blythe	"	150	55	"	"
S. Inglis	"	150	10	60 mins	"
R. Edmundson	75 cu.ft.	160	60	"	"
B.G.Sheppard	twin 40's	130	65	65 mins	"
" 2nd dive	"	65	20	25 mins	"

N. Ashmore - Boat Handler of 'Ran'

Purpose - Cutting kelp, measuring etc., photographs.

WEATHER - Fine

AIR TEMP. 16°C

Date - Saturday
4th July, 1970.

WIND - East

WATER TEMP. 8°C

LOCATION - GUN ROCKS

VISIBILITY 15 ft.

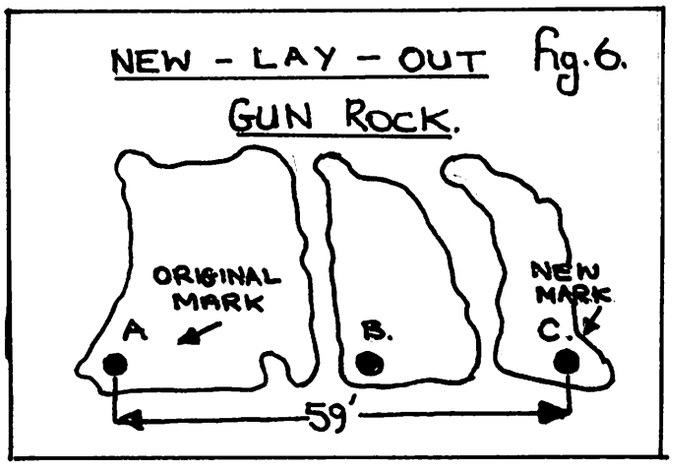
BOATS - 'John Wesley'/'Ran' 11.30 a.m. to 2.45 p.m.

	Bottle Capacity	ATS In	ATS Out	Duration	Depth
'John Wesley'					
W.R.Smith	65 cu.ft.	130	70	20 mins	25 ft.
H. Harvey	"	150	120	"	"
D. Russell	"	150	100	30 mins	40 ft.
R. Brown	"	150	10	"	"
R. Edmundson	75 cu.ft.	160	135	20 mins	25 ft.
E. Dobbie - no dive					
B. Shallcross)					
T. Phillips)					
K. McWhirter)	Members of Tyne Tees Television.				
McCampbell)					
2 - Guests)					
'Ran'					
N. Ashmore	twin 40's	140	110	20 mins	30 ft.
E. Tysick - no dive					
A. Harries	75 cu.ft.	160	65	25 mins	35 ft.
M. Pratt	65 cu.ft.	150	65	"	"
A. Harries (2nd)	75 cu ft.	65	10	25 mins	35 ft.
M. Pratt "	65 cu.ft.	65	10	"	"

RESULTS OF SIXTH DIVE
Sunday
5th July, 1970

Todays operations started at approximately 09.30 hrs when we went aboard, bound for Gun Rocks once again. 10 Divers plus 2 T.V. crew were on board 'John Wesley'. Nick Ashmore left at same time in his boat 'Ran' with three divers on board.

We started by re-doing work that was done a few weeks ago - reason - piton 'C' pulled out. New measurement 59 ft. taken and put on master sheet Fig.6. Some items removed for dating, these places noted (M.Pratt being the main finder). Artifacts, cannon ball 7" dia. very small balls 1.7/8" dia. one very small knuckle guard from a sword handle. A full list to be made for Receiver, see sample of find sheet from Syd Wignal's report.



Other items for site plan Cannon No.2 has three sword handles underneath and alongside. Around No. 12 cannon which is not tagged yet but buoyed and measured from 'Piton' (A) 54 ft from 'Cascabel' is a large mound of material from this mound, pieces of pottery and glass. One piece of pottery has a coat of arms or a design on it. Needs verifying.

NOTE - Tyne Tees Television researches finding out about these artifacts.

Most of material brought up is for dating only. Careful note of areas taken.

Also found, was this piece of metal (fig.7) the shape of a tube, it has a small bore at end 'A' 11/16" and gets larger at end 'B' 1.5/16". Material - Brass? Some small balls 2" dia. also brought up which were hollow type not yet certain. Weight 3.3/4 lbs

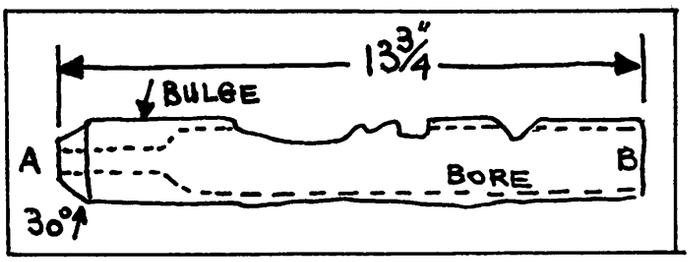


Fig.7.

Film and sound recording done at all stages of operations today.

Cannon No. 1 not tagged yet but marked on site plan. No. 1 cannon was re-measured and sizes are as follows:- Muzzle end 10", Cascabel end 20" dia. and its approximately 9 ft. long. She is lying on a 10° magnetic bearing. Tri-angulation is necessary.

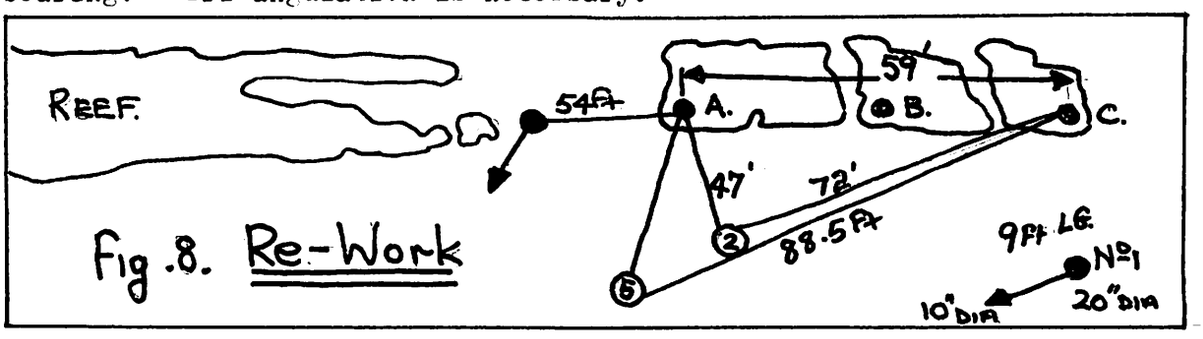


Fig.8. Re-Work

Approximate lay-out showing new pitons and work done today. Still photos required of new finds, re. T.T.T. scaled elevation plan also require construction. We moved No.5 cannon with the boat today to make sure it will lift. After moving it, I checked for damage - none to cannon or site. I searched around the site where it had been - no artifacts present, rocky bottom.

NOTES Preparing a full report to be sent to Mr. Alan Bax of work completed so far. Copy for the National Maritime Museum.

WEATHER - Fine AIR TEMP. 16°C Date - Sunday 5th July, 1970

WIND - East WATER TEMP. 8°C LOCATION - GUN ROCKS

VISIBILITY - 20 ft.

BOATS - 'John Wesley'/'Ran'

	Bottle Capacity	ATS In	ATS Out	Duration	Depth	
W. R. Smith	65 cu.ft.	150	60	45 mins	35 ft.	
K. McWhirter (T.V.)	"	150	-	35 mins	25 ft.	
" "	"	150	10	60 mins	35 ft.	(2nd)
B.C.Walker) Cover	"	100	75	35 mins	25 ft.	
R.Edmundson) for	75 cu.ft.	135	110	30 mins	"	
G. Anderson) above	65 cu.ft.	150	90	35 mins	"	
B,C.Walker	"	75	10	"	35 ft.	(2nd)
R.Edmundson	75 cu.ft.	110	70	"	25 ft.	(2nd)
R.Edmundson	"	70	10	20 mins		(3rd)
E.Tysick	"	120	60	60 mins	40 ft.	
D. Russell	65 cu.ft.	150	70	"	"	
M. Pratt	"	150	45	"	"	
M. Pratt	"	45	10	20 mins	30 ft.	(2nd)
D. Blythe	"	150	60	"	45 ft.	
E. Dobbie	"	145	65	40 mins	40 ft.	
N. Ashmore	twin 40's	110	40	"	"	
A. Harries	75 cu.ft.	160	60	25 mins	35 ft.	
R. Brown	65 cu.ft.	150	90	"	"	
A. Harries	75 cu.ft.	60	10	60 mins	"	(2nd)
R. Brown	65 cu.ft.	90	10	"	"	"
G. Anderson	"	90	10	"	"	"

T. V. Crew - B. Shallcross/T. Phillips.

Glass, crockery, copper sheathing etc. found.

RESULTS OF SEVENTH DIVE
Monday
6th July, 1970

Boat departed as usual at 09-30 hrs and we were on site by 10.45 hrs. approximately. Wind force 3-4 from S.W. Sea conditions on site poor (surface only). A two or three feet swell was present.

Most of the team are now getting used to the boats movements in all directions with the exception of one who was ill with sea-sickness. No filming was done today on site as visibility was poor as well as poor light at the surface.

Jobs completed today - all kelp cleared around cannon No. 5 which we moved yesterday (Sunday) then a re-check was carried out to see if any damage had been done to the cannon or to the site. There was none.

The site is now generally cleared of weeds but more work has to be done before the careful jobs begin.

A few small loose artifacts were recovered today from cannon site No.6. see Fig. No.3, - they were two small well eroded sword handles, one piece of copper 6" x 2", one piece of lead 3" x 1.1/2", a piece of pottery the same as Sunday's find but from a different place. One more cannon was tagged, i.e., No. 25 and one which had come loose due to swell conditions. I also checked to see if any previous markers had come off, i.e., (Piton) markers, surface markers etc. All secure so far.

NOTE Mondays programe went out on National I.T.V. network as well as local Tyne Tees Television Studio Station. The under-water films were very good and it looks like the site has been dated as early 17th century.

WEATHER - Fine | AIR TEMP. 16°C | Date - Monday 6th July, 1970

WIND - East | WATER TEMP. 8°C | LOCATION - GUN ROCKS

VISIBILITY - 15/20 ft.

Boat 'John Wesley' 09.45 hrs - 1530 hrs.

	Bottle Capacity	ATS In	ATS Out	Duration	Depth	
T. Rae	65 cu.ft.	140	75	20 mins	30 ft.	
A. Harries	75 cu.ft.	150	100	"	"	
T. Rae	65 cu.ft.	80	70	"	"	(2nd)
C. Malvern	"	150	90	"	"	
W. R. Smith	"	150	70	40 mins	"	
E. Dobbie	"	90	-	"	"	
B. C. Walker	"	150	90	35 mins	"	
E. Dobbie	"	150	70	"	"	(2nd)
A. Harries	75 cu.ft.	100	70	25 mins	"	(2nd)
D. Russell	65 cu.ft.	115	65	"	"	
A. Harries	75 cu.ft.	70		25 mins	"	(3rd)
E. Dobbie	65 cu.ft.	70		"	"	(")

Purpose - Kelp Clearing, Tagging.

Found:- Piece of Pottery, Handles (small), 1 piece of copper, 1 piece of lead.

LATER - SAME DAY LOCATION - SOUTH GOLDSTONE

W. R. Smith	65 cu.ft.	150	65	20 mins	45 ft.
E. Dobbie	"	150	70	"	"
T. Rae	"	150	90	35 mins	55 ft.
A. Harries	75 cu.ft.	100	70	"	"
C. Malvern	65 cu.ft.	90	75	30 mins	40 ft.
K. McWhirter	"	120	70	"	"

C. Souter - Snorkel.

RESULTS OF EIGHTH DIVE
Tuesday,
7th July, 1970

Departe Seahouses as usual 09.45 hrs and proceeded to site in a leisurely manner complete with T.V. crew.

On site, filming of cannon etc. was started with success. We also measured topography of site so our detailed site plan can get under way later today (fig.10).

Three more cannon were found through the gut on other side of site, see plan (Fig.10). They were measured roughly to give us some idea of size of site. Distance approx. 150 yards plus.

All material todate is being brought together this evening so that I can make a more detailed site plan to a scale of 1/16"-1 ft.

NOTES - This site plan is at this moment in time (14th July) in the offices of Tyne Tees Television. Require back 15th July.

WEATHER - Fine

WIND - Light S.W.

AIR TEMP. 16°C

WATER TEMP. 10°C

VISIBILITY 15/20 ft.

Date - Tuesday
7th July, 1970

LOCATION - GUN ROCKS

BOAT - 'John Wesley'

	Bottle Capacity	ATS In	ATS Out	Duration	Depth
C. Malvern	65 cu.ft.	150	75	45 mins	25 ft.
E. Dobbie	"	150	120	"	"
K. McWhirter	"	150	120	"	"
W. R. Smith	SNORKEL				

PURPOSE - Filming, Measuring and searching.

RESULTS OF NINTH DIVE
Wednesday,
8th July, 1970

Conditions slightly off today - wind - light fog in patches. Water slightly choppy.

Departed from Seahouses harbour 10.45 hrs after waiting almost two hours for air. Had to make do with only four full bottles.

Arrived on site which was rather bumpy today, so we decided to move boat to East side of Rocks. Conditions here not too bad but it has put off measuring work. Snorkel divers took some topographic measurements in bad conditions. T.V. film also shot on snorkel.

Divers on floats searched this new side of Rock - found nothing. They also measured up the new cannon found yesterday (Tuesday) and they informed me that it is only 8'-6" long, similar to the other ones on the site.

Muskett shot was brought up today, from under cannon No.12 by the team. Sizes and weights are as follows - Material - Lead. Fig 9.

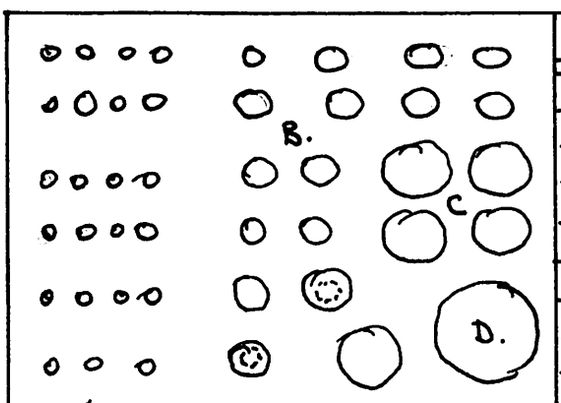


Fig 9.

SIZE	WEIGHT	MATERIAL
A. 5/8 - 1½	¾lb x ¼	LEAD.
10 + 7		
B. 2"-1¾	6½lbs ÷ 9	CAST-IRON.
x 9.		
C 3½ DIA.	7-9lbs.	CAST-IRON.
D. 7" DIA	35lbs.	CAST-IRON.

NOTES - This material required from studio.

WEATHER - Fog in Patches AIR TEMP. 16°C Date - Wednesday 8th July,1970

WIND - S. W. Wind (Choppy sea) WATER TEMP. 10°C LOCATION - GUN ROCKS

VISIBILITY 15/20 ft.

BOAT - 'John Wesley'

	BOTTLE CAPACITY	ATS IN	ATS OUT	DURATION	DEPTH
M. Pratt	65 cu.ft.	150	100	45 mins	20 ft
T. Rae	"	150	90	"	"

A. Harries Snorkel
D. Russell "
A. Turner "
K. McWhirter (camera) Snorkel
W.R.Smith - no dive

Purpose:- Measuring.

Found:- Muskett balls from No. 12 cannon (M. Pratt).

RESULTS OF TENTH DIVE
Friday,
10th July, 1970

Quite a few divers turned up today, even though it is not a holiday, but the more the merrier.

The T.V. crew were also present as usual, their job today was to get as much preparation film for Saturday's attempt at lifting cannon (No.5).

Conditions today not too good - 2/3 ft swell moderate S.W. winds making our stay at anchor uncomfortable. The 'John Wesley' was used as our base, as usual.

Stan Inglis was the first diver over the side, the purpose of todays diving is purely to make ready the cannon (No.5) for lifting on Saturday. This involved putting rope slings on at four positions along the cannon mainly towards the rear. Rope used was 1.1/4" circ. Polypropolene in two layers leaving a 6" loop at the top for securing the buoyancy bag. Fig 10.

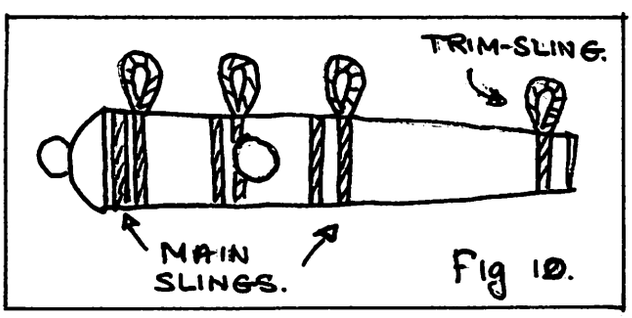


Fig 10.

The rest of the divers were employed in the cutting of kelp around the cannons on site to make survey on future dates easier.

Diving was concluded at approximately 16.00 hrs.
Conditions today U/W Vis. approximately 20-30 ft in places. Temp. 10°C.

NOTES - I checked the site just before finishing for today and I also put on last sling. Everything ready for tomorrow.

WEATHER - Fine

AIR TEMP. 16°C

Date - Friday
10th July, 1970

WIND - Light to mod
South West

WATER TEMP. 10°C

VISIBILITY 30 ft.

LOCATION - GUN ROCKS

BOAT - 'John Wesley'

	Bottle Capacity	ATS In	ATS Out	Duration	Depth	
E. Dobbie	65 cu.ft.	140	95	20 mins	20 ft.	
K. McWhirter	"	150	30	"	"	
D. Russell	"	110	65	"	40 ft.	
W. R. Smith	"	90	60	"	"	
C. Malvern	"	165	110	"	"	
A. Harries	"	150	90	"	"	
S. Inglis	"	150		30 mins	50 ft.	
A. Harries	"	90	30	"	"	2nd
G. Anderson	"	154	90	20 mins	20 ft.	
A. Harries	"	90	30	"	"	3rd
C. Malvern	"	110	70	30 mins	50 ft.	2nd
G. Anderson	"	90	40	"	"	"
N. Ashmore	twin 40's	140	100	35 mins	45 ft.	
S. Inglish	65 cu.ft.	150		"	"	2nd
T. Rae	"	160	45	60 mins	20 ft.	
D. Edney	"	150	60	"	"	
T. Rae	"	110	60	30 mins	20 ft.	2nd
D. Edney		80	-	"	"	"
N. Ashmore	twin 40's	100	35	45 mins	45 ft.	2nd

Purpose:- Putting slings around cannon No.5 (S. Inglis)

Cutting Kelp and surveying.

RESULTS OF ELEVENTH DIVE
Saturday,
11th July, 1970

We started fairly early on Saturday morning after a frustrating week of waiting for the buoyancy bag to arrive from Alan Bax in Plymouth. Reason for non-delivery - lost in a station somewhere in England. It arrived in Seahouses at 09.30 hrs by taxi which T.T.T. laid on to bring it from Newcastle where it was found. Also a load of rope came from British Ropes which was on order - half a ton - but they sent the wrong rope 1½"dia rope was delivered instead of 1¾" circ. (we were not amused)

The weather was getting worse, winds of force 5-6 increasing and blowing W.N.W. I thought that if anything else goes wrong then we have no chance of raising the cannon this week-end. Any way, we started to prepare the new equipment - the buoyancy bag is the type which goes inside a nylon net and has nylon lifting eyes along each side, six in number. It also has rubber grommets around the bag for securing the net (fig.11) Air capacity 40 cu.ft. of free air at a test pressure 10 p.s.i. All equipment was loaded on boat by 11.00 hrs.

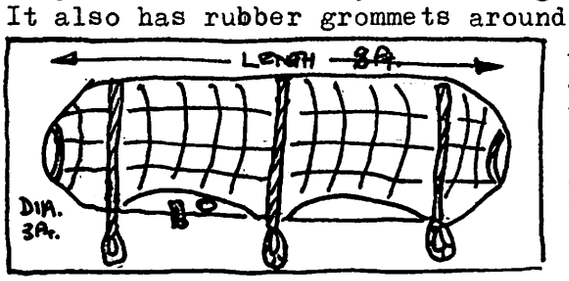


Fig 11.

Tide today well back L.W. is at 13.00 hrs approx. at site so speed was not that important. We arrived on site too soon making it necessary to lie off in calmer waters for an hour or so as it is very uncomfortable lying at anchor in the tide race which is quite a spectacle on its own. Conditions at this stage were getting worse, swell 4-5 ft wind gusting up to 6-7. We could not get the anchor to hold. In fact just before the end of the days diving our 2" anchor rope parted leaving our No.1 anchor on the bottom (must recover it on Monday or Tuesday).

The following is an account of our first lift attempt on Cannon No.5 see site plan:-

We started by putting down two 56 lbs shot weights next to cannon. Next, ropes were run from the boat down through the eyes on the blocks back to the boat where the buoyancy bag was made ready for hauling down to the cannon. Bag hauled down with the help of four divers who then started the job of attaching the bag to the cannon with ropes. This job completed, they then signalled to the diver in charge of the filling cylinder to go to the bottom to start his job which was slowly to fill the bag. At this stage, the T.V. camera was going strong, getting every operation on film for the record. The bag was at this stage O.K. then, just as the cannon was getting ready to lift, the pressure of air in the bag appeared to move, throwing all the weight to the wrong end making the bag unstable. (the reason was that the bag moved in the net). We tried putting a small trimming bag on the muzzle end but this failed because perhaps one or two divers were too enthusiastic putting air into bag. It suddenly went critical and the cannon took off up to the surface the wrong way. The cannon at this stage was in a vertical position with the cascabell end about 5 ft. from the sea-bed swinging about not in control by divers who, at this stage, went in all directions leaving a very surprised diver-cum-cameraman looking for his extras - all he was left with was a swinging menace which sounded like some very large bell. What a sight, 2500 lbs of cast-iron swinging around. Speed was needed to put this potential hazard back on the sea-bed. The area was cleared and two divers released the bag and allowed cannon to sink back to sea-bed. Cannon checked for damage and also the surrounding area where it lies - found to be O.K.

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Then came our enquiries:- How did it happen? What did we do wrong?

First, we had the bag too far forward over the cannon - we should have had all slings aft of trunnions, we also should have ensured that all fixing grommets were well tied to stop the bag moving inside the net and make sure that only four or six divers controlled the whole lift.

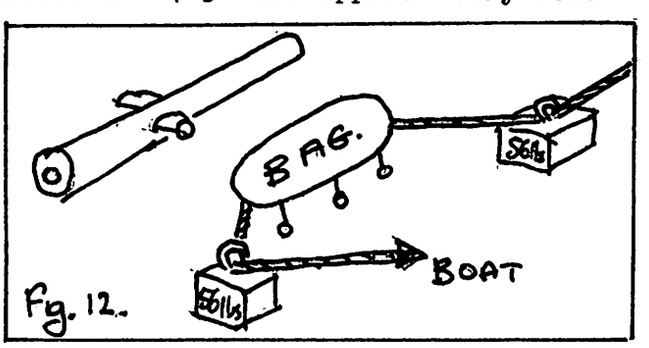
Well, we all learn by our mistakes, so we packed up all the gear and returned to Seahouses - by this time through monstrous seas.

A few last words - I think even if the lift had been successful we would not have got it back in these conditions. T.V. observers thought we had no chance from the very start. Divers involved in the operation today are as follows:-

E. Dobbie, R. Brown, M. Pratt, H. Harvey on the lifting bag.
Underwater - A. Harris, myself and later C. Malvern on the air filling.
G. Anderson assisted. I was overall Marshal of operations.

Tomorrow a different approach will be made.

We arrived back at Seahouses at 17.30 hrs approx. very cold and hungry but not defeated.



Fg. 12.

NOTES - T.T.T. wanted us to hire a drifter to tryya direct lift as they thought it might not work but we refused by saying we will re-think and bring it up and in tomorrow. Saturday nights answer.

WEATHER - Fine AIR TEMP. 17°C Date - Saturday, 11th July, 1970.

WIND - Strong South West WATER TEMP. 8°C

LOCATION - GUN ROCKS

VISIBILITY 20 ft.

BOATS - 'John Wesley"/"Clan Gillean" 11.15 a.m. to 3.15 p.m.

	Bottle Capacity	ATS In	ATS Out	Duration	Depth
7 Members of T.V. crew					
D. Edney	65 cu.ft.	150	30	50 mins	25 ft.
T. Rae	"	145	35	"	"
E. Dobbie	"	140	90	30 mins	20 ft.
H. Harvey	"	150	10	"	"
D. Russell	"	130	85	20 mins	"
B. Christopher	"	130	85	"	"
R. Brown	"	135	50	60 mins	25 ft.
W. R. Smith	"	150	10	"	"
E. Tysick	75 cu.ft.	160	10	15 mins	"
C. Malvern	65 cu.ft.	150	75	20 mins	20 ft.
M. Pratt	"	100	10	30 mins	"
G. Anderson	"	150	60	"	"
G. Anderson	"	60	10		" 2nd
A. Harries	75 cu.ft.	160	30	35 mins	25 ft.
A. Harries	"	70	10	25 mins	" 2nd
N. Ashmore	twin 40's	140	40	105 mins	"
P. Napp - SNORKEL				90 mins	22 ft.

RESULTS OF TWELFTH DIVE
Sunday,
12th July, 1970

BOATS - 'John Wesley'/Clan Gillean and 'Ran'

THE BIG LIFT - After a good breakfast at our shore base, Beadnell Hall, we proceeded to Seahouses harbour for 09.30 hrs to make arrangements for todays attempt at lifting cannon from the sea-bed. After our unsuccessful attempt yesterday (Saturday) we did some re-thinking late last night. Suggestions for todays lift were as follows:-

First, the bag must be fully tested and blown up (before transporting to site, and also all parts of netting and fixing grommets to be fastened in situ on shore. The whole bag was deflated prior to shipping out to site - this ensured that nothing could move when it is hauled down to the cannon.

Second, some other method of blowing up the bag other than a diver taking down an Aqua-Lung bottle as this does not give sufficient control of the venting operation. One of the boat crew came up with a good suggestion in conjunction with Equipments Officer, Colin Malvern - that we leave bottles aboard and pass a hose down to a diver on the bag who will in turn take notice of signals via hose. The diver then in fact can have perfect control on air and it would make it easier to change over for more cylinders.

The diving team was then picked to do all work connected with the lift and I told all other divers to stay out of the water.

The site today was not much better than Saturday for conditions although the wind had dropped a little. We were still having difficulty in getting anchors to hold in the fast tide - remember we lost our No.1 anchor yesterday.

I sent Harry Harvey over first, to check the conditions of the cannon and the slings after having had to drop it back to sea-bed on Saturday. He reported everything O.K. and proceeded to put a sling on the muzzle end complete with ring so that the buoyancy bag could be hauled down to the cannon. (Note we did away with the blocks by using cannon as anchor point). A rope was passed through the ring and returned to the boat where the bag was fastened on prior to hauling down. We were now ready for the attempt.

The four man team now went into the water together to start operations - others on deck stood by at their posts, air control, ropes, haulers, divers etc. Some difficulty was had hauling down until all air had been squeezed out of the bag. The divers promptly attached the bag by its appropriate eyes and then returned to base craft for air hose. Air was slowly let in and after a total of 17 minutes had elapsed since the start of the sea-bed operation, the gun came to the surface under reasonable control. The divers on the bottom experienced something which must be a very rare feeling of doing something really spectacular. One diver said "If I dive for another 100 years, I will never get the same thrill again".

Once on the surface, speed was the order of the day - the towing rope was attached complete with a safety tow rope. I signalled to the T.V. crew boat that we were washing out the rest of diving as the cannon was now under tow and all haste was needed to get it out of the dangerous fast rip tide which was still just off our port hand. Waves in this rip were still 6-8 ft. in places and very agitated. The air hose was left attached to compensate for loss due to pounding through the heavy seas. We left our No.2 anchor buoyed for picking up by our No.2 boat as we could only go ahead with no degree of latitude to manoevre.

THE BIG LIFT A very precise exercise in boat handling followed by Jim Trotter, the skipper of the 'John Wesley' when he took the boat through the bad rip tide which the wind was once again whipping into a frenzy. The boat was just making way and the bag, complete with cannon and umbilical cord looked like some big grey whale following in our wake.

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RESULTS OF TWELFTH DIVE.....Continued

Anxious moments were experienced as we started on the first leg of the four mile trip back to Seahouses through very choppy water. Our first stop, we decided, would be Longcarr Hole which is in the Inner Farne Group where checks on equipment etc., would take place. The T.V. boat (Clan Gillean BK) was on our Starboard side all the way across the Staple Sound filming progress as it happened and another Seahouses boat came out to note progress (Silver Dawn). It was a very heart thrilling experience (personal thought). We arrived in Longcarr Hole very relieved.

The last leg of the crossing was now in the offing after Harry Harvey reported to me that everything was O.k. with the bag and towing rope. All the time we were underway, the crew were standing by with sharp knife and marker line in the event of having to cut the load free, 150 ft. of line and marker are also attached - the biggest danger of losing our load is that the water is 120 ft plus in places in the 'sounds'. We made steady progress across the Inner Farne Sound and approached harbour at approximately 16.00 hrs where we had to cast off our load as water was still only half tide. Nick's boat 'Ran' came alongside and took tow rope and air cylinder for manoevering in shallow water of harbour. We manoevred the load against the harbour wall where a large crowd looked on and the film crew were doing their stuff. The cannon was then anchored in the clear waters of the harbour and we relaxed and waited for high water and the last leg of this operation which was removing it from the water.

REMOVAL. Approximately 20.00 hrs I sent a diver down to check how far the muzzle of the cannon was hanging down and to swim across harbour and check depth of water. What a shock! the muzzle had dropped to 16 ft and the harbour check showed 12 ft. We then put a trimming bag on and drew the bag up to almost level and started the shifting operation. We towed the load over with Nick's boat and divers helped by pushing towards harbour slipway some 500 yards away. Yard by Yard she went towards the waiting boat trailer which we had borrowed and had taken underwater to meet the load. The trailer was attached by 200 ft. of rope to shore where a landrover was going to pull it out of the water. By this time, a few hundred people had turned up to see the cannon brought out of the water. Once on the trailer and roped etc., we started to haul - at this point many of the watching crowd got on the line and it flew up the slipway to the delight of the spectators. Well after 200 years plus, its out of the water and waiting for the transport which will take it down to Tyne Tees Television Studio in Newcastle where it will get a very close inspection by the Experts.

NOTES The cannon will be used on the programe then moved to Laing Art Gallery Museum to be preserved and then it will be put on display at Science Museum, Newcastle.

Awaiting technical Report and P.Napps measurements.

W.R.Smith

DIVING OFFICER.

Sunday
12th July, 1970

Location - Gun Rocks

Weather - Fine South West Wind Air Temp. 16°C Water Temp. 9°C

VISIBILITY 20 ft.

BOATS - 'John Wesley'/Clan Gillean/'Ran' 11.40 a.m. - 4.45 p.m.

5 Members of T.V.Crews	Bottle Capacity	ATS In	ATS Out	Duration	Depth
H. Harvey	65 cu.ft.	150	10	60 mins	20 ft.
R. Brown	"	145	10	"	"
M. Pratt	"	150	100	30 mins	20 ft.
A. Harris	75 cu.ft.	150	50	"	"
P. Napp, B.Christopher, D. Blythe, S.Chamberlain	Snorkel				
E. Tysick, G.Anderson, W.R.Smith, D. Russell, E. Dobbie, D. Edney, N. Ashmore, T. Rae, D. Sterry, A. Turner, and C. Malvern	On board boats				

CANNON RAISED 2.20 p.m.

From 7.10 to 8.15 p.m. Cannon was towed across harbour and beached

Taking part:- W.R.Smith, H. Harvey, R. Brown, A. Harris, G. Anderson, E.Dobbie, N. Ashmore, D. Blythe, P. Napp, C. Malvern, D. Russell, M. Pratt.

BOAT - 'Polstar' 11.20 a.m. to 2.15 p.m. CRUMSTONE ROCKS

R. Price D.M.	75 cu.ft.	160	10	30 mins	50 ft.
N. Holmes	65 cu.ft.	110	10	"	"
K. Muscarella	75 cu.ft.	160	40	"	40 ft.
M. Plater	twin 40's	120	30	"	"
D. Hinchliffe	twin 50's	170	30	50 mins	"
M. Lewis	75 cu.ft.	160	40	"	"
A. Thomason	72 cu.ft.	160	10	"	"
J. Phipson	75 cu.ft.	160	10	"	"
A. Ramsay, M. Bolam, K. Hartnell	Snorkel			60 mins	25 ft.

Beadnell Beach

R. Price	75 cu.ft.	160		35 mins
K. Muscarella	"	160		"
M. Bolam, A. Ramsey	- Snorkel			45 mins

Beadnell Shore Dive

N. Holmes	95 cu.ft.	160	10	30 mins	20 ft.
Another	Snorkel Cover				

GUN ROCKS PROJECT

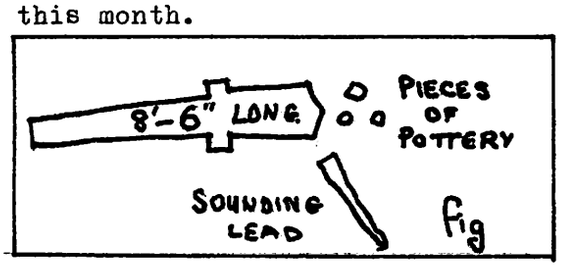
RESULTS OF THIRTEENTH DIVE
Saturday
18th July, 1970.

We had to arrive very early this morning as the tides were very dodgy for getting the boat out of the harbour. The reason for this is that the tides were spring tides and very low, L.W. water being 07.45 hrs. We had to ferry all equipment out to the 'John Wesley' in Nick Ashmore's boat 'Ran' which made life that little more difficult. The tide was the lowest I have seen for a long time.

Number of divers who turned up this morning were eight in number. This included Alan Bax who is a member of the committee for Nautical Archaeology. He came along to make personal observations of the site following his appearance on 'Today at Six' the T.V. programe which is helping us with the project.

Alan Bax was suitably impressed by work so far completed but he gave us some very good pointers for future work. He explained the work which must be done to make this site a worthwhile attempt at underwater archaeology. A summary of his suggestions are added at the end of this report.

Work today was mainly done by six divers as two of the team were full of cold. The main jobs were to cut and harvest kelp from the site and visually observe any other relevant material such as new cannon etc. Nick's job was to assist Alan Bax with photographs and notes so that he could perhaps give a more detailed opinion later this month.



T. Rae and A. Harris found another cannon which he noted and cleared of kelp. Next to the cannon, he found a very large lead sounding weight see (Fig.) and a couple of pieces of pottery which had no markings on them.

What was obvious today was the lack of a working grid pattern. This was part of Alan Bax's discussion after the dive. One other useful job completed today was the recovery of the 'John Wesley's' No.1 anchor which we lost last Saturday afternoon. I am still trying to impress the importance of NOT bringing artifacts to the surface. The best thing to do would be to sketch any items found and then surface to ascertain the position, but when the grid is laid, the grid number only will be necessary. The cannon which we raised last weekend (No.5) and had on the programe, was found to have a letter 'G' on the trunnion. A fuller understanding of cannon design is being undertaken by Peter Napp (Report his findings to me as soon as possible)

NOTES A. Bax and P. Annis who were on the T.V. programe on Friday night have given me their permission to use their names in connection with my reports.

Suggestions put forward by A. Bax are as follows:-

1. He suggested that we get our grid down as soon as possible.
2. That we put our interim report forward to the Committee for Nautical Archaeology in the hope that we can obtain a 'Sea-Bed Lease'.
3. That we write to the four people named at the end of this report for information about the possible origin of the wreck from their respective countries. An interim report to be sent to each person.
4. He also suggests that we check out the possibility of any other wrecks in the Gun Rocks area which could also be covered by the "Sea-Bed Lease".
5. He also suggested we take rock samples and have them tested, if material was different to the local rock then it could be ballast.

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RESULTS OF THIRTEENTH DIVE.....continued

6. He suggested only laying the grid on one side of rock for a start.

7. He suggests that we have our interim report copied and that we send copies to the people listed below.

I have written to Philip Annis asking him to please send a summarised version of his opinions about the small arms he studied on Friday night.

The following people require letters sent as soon as possible.

A.	Alan Bax - Copy of interim report	(2 weeks)
B.	Philip Annis - Copy of interim report	(2 weeks)
C.	" " - Request for Summary	(A.S.A.P.)
D.	Sydney Wignal - Letter of Thanks	(")
E.	Receiver at Berwick - Request for access to material & W.R.5. signature	(A.S.A.P.)

Addresses

Curator of Ships & Naval Architect
Danish National Museum
Mr. Ole Crumlin Pedersen
Vikingeskibshallen
Roskilde,
DENMARK Phone 03-356555

Drs M.P.H. Roessingh
Witte-De-Withlaan 3.
Oegstgeest
(Near Leiden) Phone Ou 760-52431

Mr. Oluf Cederlund
Statens Sjqhistiska Museum
Stockholm
Sweden Phone

Musuem DireKtor
Svein Molaug
Norsk Sjofarts Musem
BYGDØNES Phone

Philip Annis - His personal card to hand - Greenwich Maritime Museum.

Alan Bax - Fort Bovisand, Plymouth Phone (Home 68831) 42570

SUGGESTIONS:- Artifacts sheet to be printed up (see specimen copy) Print as soon as possible.

Give interested people a specific piece of research to do and let them give me their findings in not e form.

Suggested Grid
Lay-out
Main-plan
Lay-out.

WEATHER - Wet | AIR TEMP. 18°C | Date 18th July, 1970 Saturday

WIND - Light N.W. | WATER TEMP. 10°C

VISIBILITY - 10/15 feet | LOCATION - GUN ROCKS

BOATS - "John Wesley"/"Ran"

	Bottle Capacity	ATS In	ATS Out	Duration	Depth
N. Ashmore	twin 40's	140	70	30 mins	
A. Bax	65 cu.ft.	150	75	"	
J. Barron	twin 40's	120	60	35 mins	50 ft.
P. Napp	65 cu.ft.	145	30	"	"
A. Harries	75 cu.ft.	160	30	25 mins	
T. Rae	65 cu.ft.	150	30	"	
I. Graham	65 cu.ft.	150	-	30 mins	
H. Harvey	65 cu.ft.	150	-	"	
N. Ashmore	twin 40's	140	70	30 mins	25 ft. 2nd dive
A. Bax	65 cu.ft.	75	-	"	" " "
J. Barron	twin 40's	60	15	"	" " "
T. Rae	65 cu.ft.	150	30	25 mins	45 ft. 2nd dive
A. Harries	75 cu.ft.	150	30	"	" " "

Kelp Clearing, Photographs, Searching Reef N.

Lead Weight/Pottery finds (T.Rae) Retreaving Anchor.

RESULTS OF FOURTEENTH DIVE
Sunday
19th July, 1970

Diving out on the site cancelled because of a fouled tide.

It took so long to load all equipment and get all the divers on board the 'John Wesley' that by the time we got underway we had lost the benefit of the low tide.

Conditions:- Very Low Water Spring Tide making loading difficult
07.45 hrs. L.W. Wind S.W. light
Swell - 2/3 ft against the tide.

NOTES - Changed the dive venue to the 'Crumstone Rocks' where the team relaxed diving on a modern wreck. Believed to be the 'Britannia' of 4-6000 tons. Underwater vis. 15/20 feet.

Conditions in the lee of Island - good.

WEATHER - Fine AIR TEMP. 18°C Date 19th July, 1970 Sunday

WIND - Light S.W. WATER TEMP. 10°C

VISIBILITY - 20 feet LOCATION - CRUMSTONE ROCKS (NO DIVE AT GUN ROCKS)

BOATS - 'John Wesley'/'Ran'

	Bottle Capacity	ATS In	ATS Out	Duration	Depth	
B.G.Sheppard - Passenger						
G. Anderson - "						
N. Ashmore - No dive						
W.R.Smith - " "						
D. Dawson - Snorkel (no depth as not enought weight.)						
R. Brown	65 cu.ft.	135	10	45 mins	70 ft.	
A. Harries	75 cu.ft.	160	20	"	"	
R. Brown	65 cu.ft.	135	90	20 mins	"	2ND dive
A. Harries	"	70	10	"	"	3rd "
A. Harries	"	150	70	20 mins	50 ft.	2nd dive
H. Harvey	"	140	30	"	"	" "
H. Harvey	"	85	45	25 mins	40 ft.	1st dive
B. Christopher	"	150	40	"	"	
I. Graham	60 cu.ft.	150	40	"	"	
P. Napp	65 cu.ft.	150	60	55 mins	50 ft.	
L. Smith	60 cu.ft.	140	20	"	"	
L. Smith	65 cu.ft.	150	60	20 mins	60 ft.	2nd dive
T. Rae	"	150	15	"	"	
T. Rae	"	90	10	50 mins	50 ft.	2nd dive
A. Turner	"	150	15	"	"	
L. Smith	"	60	10	15 mins	33 ft.	3rd dive
P. Napp	"	160	33	"	"	2nd dive

RESULTS OF FIFTEENTH DIVE
Friday
24th July, 1970

Arrived at Seahouses 10.30 hrs. for a dive out at site for 12.00 hrs. approx.

Reason:- Mr. David McFarland of Thames Television wished to view the site in connection with a programe we will probably do in September this year. The programe which is called 'Magpie' will do a documentary about the project and the persons who are working on it in connection with the Branch.

The dive had to be called off because of conditions.

Jim Trotter of the 'John Wesley' was not too happy about going out unless it was really necessary. We would have to be out until 16.30 hrs at least because of tides.

Conditions:- Very poor, Rain and Fog, North Wind making heavy swell conditions. Poor surface visibility and the bottom looked dirty.

People Attending:- S. Inglis, N. Ashmore, T. Rae, W.R.Smith, R. Price, A. Harries, David McFarland.

NOTE We had a long discussion about the project over cups of coffee when we filled him in with most of back ground information which he required.

RESULTS OF SIXTEENTH DIVE
Sunday
26th July, 1970

Tides this week are good for loading etc., as they are reasonably late L.W. not until 1400 hrs. We got all gear on board by 11.45 hrs and we were under way by 12.30 hrs. approx.

Conditions:- Not too good, wind still in North but light.
Swell quite heavy but long and slow in the Farne sound.

Boat used:- 'John Wesley' as usual.

Purpose was to lay out the start of our survey grid as discussed last week, see master plan. Owing to the fact that some equipment is not available yet, i.e., steel rope and bolts, it was decided that we lay a base line down with our heavy weights and rope and see how hard it is going to be in fact.

Also against us was the fact that Nick Ashmore's small boat was not available which meant using buoyancy bag to man-handle 56 lb weights around the site. We place the first weight with much difficulty, approximately 15 feet from 'piton' 'C' which is marked on master plan and then we proceeded to put weight number two down in the same manner. A rope was passed between the two and pulled tight - we cleared all kelp along the line so it would lie flat and straight. A couple of faults became apparent:-

1. the seabed is not flat as was first thought and the line is 4 ft. in places from the bed

2. our second weight is down the cliff making the rope bent - we will have to put it at the top of the cliff later.

The idea of putting the rope down was to give us a base line for the next step which requires putting down our wire grid using Rawlbolts and rigging wire as the base lines. This was not an easy operation.

The rest of the team continued cutting kelp and removing rock samples for the rock and sea-bed to ascertain whether it is ballast or not. Miss B. Christopher will get a report from Hancocks Museum about the rock. A lot of work will be required for fix this grid but it was obvious just from that simple base line just how invaluable the grid will be. Operations ceased today at 17.00 hrs approx.

Good experience was had in the use of Buoyancy Lifting Bag.

NOTES We had a guest with us today from
She is a Lady Diving Officer (appeared to enjoy herself on this dive)

Next week, we will continue to Tag cannon and put down the grid with rope if the other material is not available yet.

WEATHER - Showery AIR TEMP. 12°C Date 26th July, 1970 Sunday

WIND - Light East WATER TEMP. 10°C LOCATION - GUN ROCKS

VISIBILITY - 10 feet

BOAT - 'John Wesley' Depart 12.55 to 5.10 p.m.

	Bottle Capacity	ATS In	ATS Out	Duration	Depth	
W.R.Smith	65 cu.ft.	150	40	60 mins	35 ft.	
B.G.Sheppard	"	155	10	"	"	
D. Edney	"	140	40	50 mins	40 ft.	
A. Turner	"	150	30	"	"	
M. Green	1 x 40	120	-	40 mins	25 ft.	
T. Rae	65 cu.ft.	150	70	"	"	
T. Rae	"	70	20	20 mins	20 ft.	2nd dive
A. Harris	"	160	90	"	"	
A. Harris	75 cu.ft.	160	60	40 mins	30 ft.	2nd dive
R. Brown	65 cu.ft.	150	50	"	"	
A. Harris	75 cu.ft.	60	-	30 mins	20 ft.	3rd dive
R. Brown	65 cu.ft.	50	-	"	"	2nd dive
C. Malvern	"	160	70	40 mins	35 ft.	
B. Christopher	"	150	70	"	"	
C. Malvern	"	70	30	25 mins	30 ft.	2nd dive
B. Christopher	"	70	-	"	"	" "
P. Napp (Three Snorkels)				45 mins	17 ft.	
				35 mins	"	
				35 mins	"	
S. Chamberlain - Snorkel				80 mins	20 ft.	

Purpose:- Laying marking lines for dimension purposes.
Kelp Clearing.

RESULTS OF SEVENTEENTH DIVE
Sunday
2nd August, 1970.

Arrived at Seahouses late but we made all haste to get equipment on board before we lost the tide. Low Water today is at 10.00 hrs in the harbour and 11.00 hrs out on site. We use Jim Trotter's new boat the 'Wesley II' BK 273 which he took delivery of on Thursday after three days trials down at Newcastle. The boat has a much larger seating capacity but is not much bigger hullwise that his old boat. We look forward to some good days diving from this craft.

We did not get a great deal of work done today as I think some of the novelty is wearing off. Some divers just want to mess about and don't really want to follow any set working pattern. However, we got a little done such as Nick Ashmore and Barrie Sheppard took photographs of the site from all angles giving us a better knowledge of the site. R. Brown, A. Harries and myself attempted to adjust our base line with no success. We must get more slack water and lay the grid out fully. (proposed Sat. 7.8.70 for this operation.)

Other members of the team were employed by kelp clearing and some divers were gently excavating a find near cannon (6) site. The finds were pieces of copper plate work and bits of lead well buried in concretion. A large flat cast iron block? is covering this section as is a lot of cannon balls of $7\frac{1}{4}$" dia. variety. Not a great amount of work was done after 12.30 hrs as the tide was now moving very fast.

Arrived back in harbour approx. 13.30 hrs.

NOTES We carried out a small search for one of the local fisherman who had lost one of his brass fairleads from his boat when pulled out of its mountings by heavy swell conditions earlier in the week. T.Rae and myself searched for and recovered in the place known as 'Pinnacles Haven'.

Helps local relations and costs very little.

WEATHER - Fine AIR TEMP. 16°C Date 2nd August, 1970 Sunday

WIND - Light South WATER TEMP. 12°C

LOCATION - GUN ROCKS

VISIBILITY - 15 feet

BOAT - 'Wesley' Depart 9.55 a.m. to 1.55 p.m.

	Bottle Capacity	ATS In	ATS Out	Duration	Depth	
R.Edmundson	75 cu.ft.	160	90	60 mins	30 ft.	
E. Tysick	"	160	90	45 mins	25 ft.	
M. Pratt	65 cu.ft.	150	50	"	"	
D. Blyth	"	150	60	"	"	
B.G.Sheppard	"	145	80	"	30 ft.	
R. Brown	twin 40's	80	20	"	"	
A. Harries	65 cu.ft.	150	50	"	"	
R. Edmundson	75 cu.ft.	90	30	40 mins	25 ft.	2nd dive
W.R.Smith	65 cu.ft.	150	60	"	"	
N. Ashmore	twin 40's	140	?	75 mins	40 ft.	Snorkelled
P. Napp - Snorkel Cover					17 ft.	
T. Rae	65 cu.ft.	90	20	40 mins	25 ft.	
M. Green	single 40	120	-	"	"	
P. Napp	65 cu.ft.	141	22	47 mins	30 ft.	
C. Souter - Snorkel				30 mins	25 ft.	

GUN ROCKS PROJECT
Saturday
29th August, 1970

We acted as hosts to Tamworth Branch who came out to the site with us to observe only and take a few photographs (which were lost on the following day together with a very expensive camera).

We used the Clan Gillean boat as there was not sufficient divers to man our normal boat. We dived on H.W. slack which is not the best time normally but conditions were perfect - underwater visibility was 40/50 ft in places and flat calm.

NOTE - This is the first time I have been able to see almost all of the site underwater. You get a better all round picture of the site when the visibility is like this.

Work done by P. Napp and B. Price included cleaning the trunnions of cannon and making sketches of the maker's marks.

Other work included photography by H. Harvey, assisted by D. Russell and relaying of the base line and general survey by myself and K. Strom. The latter diver was on his first sea dive and did very well.

Material recovered by me was two 3/4" dia. lead muskett balls from the gully between the rock and the adjacent reef.

The ballast of the ship appears to be there as the stones observed by myself were too symetrical to be anything else. They appear to be approximately 30" long by about 2 feet deep and 18-20" wide.

Samples required at a later date.

Trunnion Sketches included.

GUN ROCK PROJECT.

Report on site research carried out 29th. August and 6th. September, 1970, from the 'Clan Gillean'

Following the discovery of the capital letter 'C' on the left hand trunnion of the gun recovered from Gun Rock it was decided to investigate the trunnions of other guns in situ on the bottom in an endeavour to trace further possible means of identification. An initial survey was carried out on Saturday 29th. when four seperate marks were uncovered. At the time only two of these could be clearly identified as an 'F' and an 'S', this latter possibly with a small indestinguishable mark preceding it. Further, at the time, the end of the dive precluded a note being taken of the side of the trunnions where the above letters appeared. A subsequent investigation on the 6th. September, a Sunday, established the missing information and allowed further research so that a total of eight guns had been looked at. Only those trunnions which were readily accessible were looked at and no attempt made to excavate any of those which were buried.

The marks are as listed below together with their position if this was recorded. Some trunnions bore no marking and as such are marked PLAIN. Otherswhere buried have yet to be seen and are marked UNKNOWN. Where the trunnion was not recorded the mark appears in the column so marked. The numbers given to the cannon in the table and sketch plan below are those which have been attached to the actual cannon on site. All letters appear upright in relation to the normal working position of the cannon apart from the unrecognisable mark on no. 11 and this was at first thought to be an 'F' lying on its back but cannot be reconciled as such.

Cannon No.	Left Trunnion.	Right Trunnion.	Trunnion Unrecorded.
2	Unknown.	Plain.	N/A.
Adjacent to 6	Unknown.	F	N/A.
7	Plain.	Unknown.	N/A.
10	-	-	- S
11	-	-	
12	Worn Away.	F	N/A.
13	F	Unknown.	N/A.
Adjacent to 13	Unknown.		N/A.

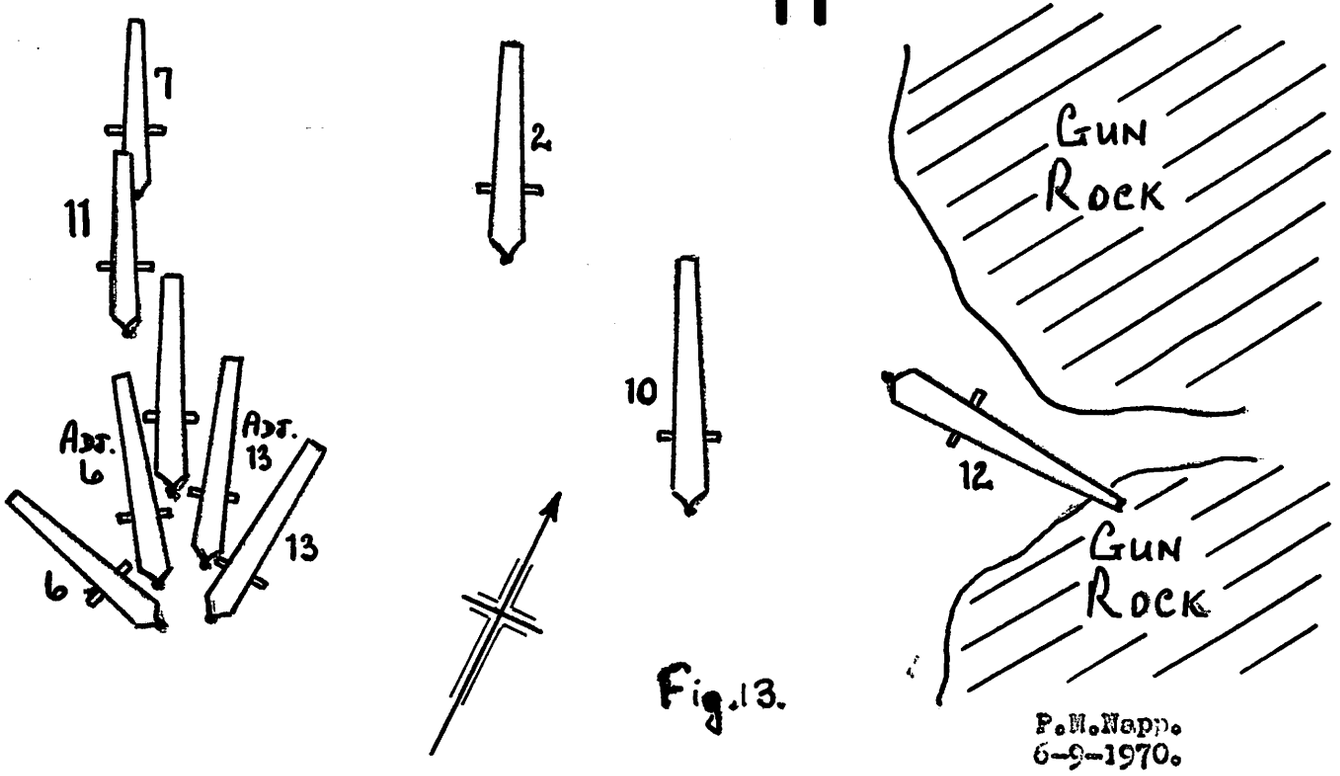
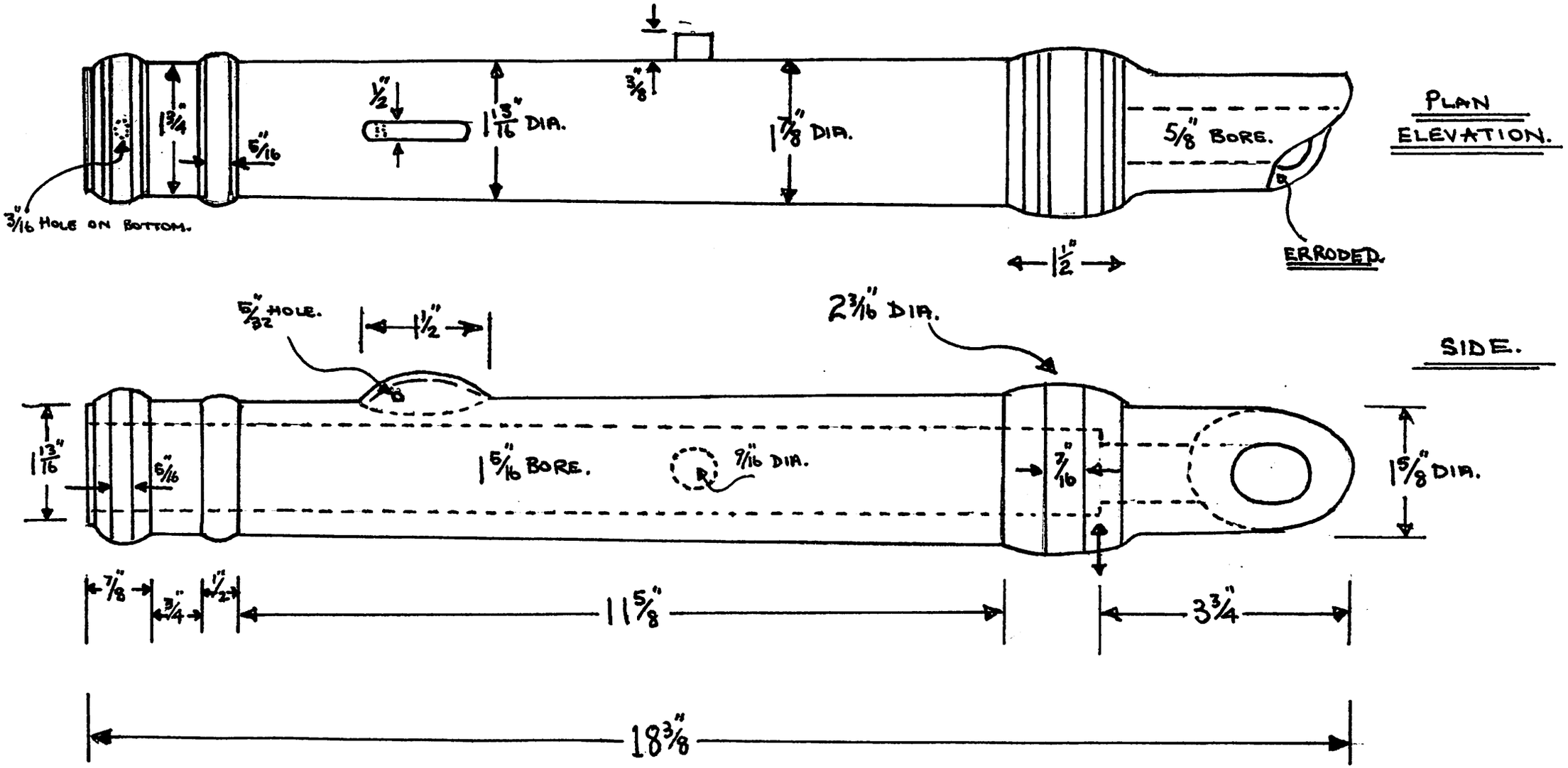


Fig. 13.

P.M.Napp.
6-9-1970.



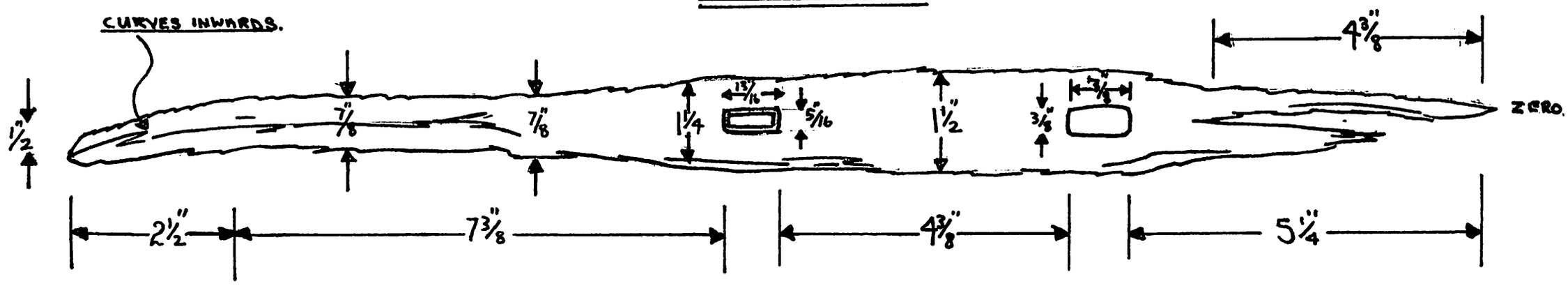
SCALE.	1/2 FULL SIZE.
DRAWN BY.	W. R. SMITH

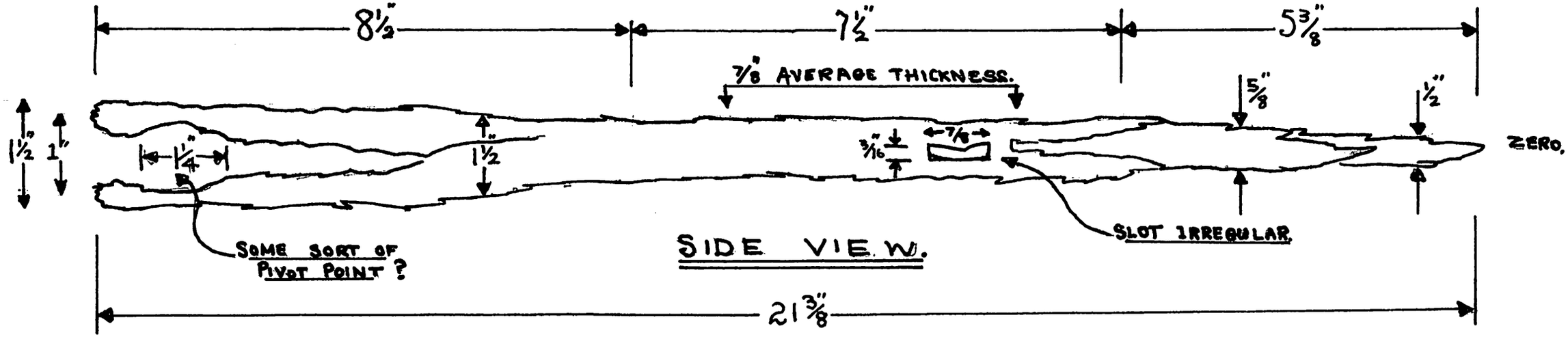
MATERIAL	BRASS OR BRONZE.	
WEIGHT.	7 lbs.	

PROJECT	GUN ROCKS PROJ.
DATE FOUND.	20. 9. 70.

TITLE.	
LOCATION	

PLAN VIEW.





SIDE VIEW.

SCALE.	HALF FULL
DRAWN BY	W. R. SMITH.

MATERIAL	WROUGHT IRON.
WEIGHT.	2 3/4 lbs.

LOCATION	CANNON Nº 25.
DATE FOUND.	13. 9. 70.

NOTES. METAL APPEARS TO BE IN LAYERS. SHAPE VERY IRREGULAR VERY SHARP ALL OVER.

THE HISTORY OF HUMAN SOCIETY

"The Dutch Seaborn Empire 1600 - 1800"

by

C.R.Boxer

p. 4. The Dutch Navy which did not exist in 1568 had achieved the reputation (by 1648) of being the best in the Atlantic World by a series of victories culminating in M.H. Tromp's destruction of a Spanish Armada in the Downs (21st October 1639).

p. 6. In other words, the merchants and marines of Holland and Zeeland had a large, perhaps a preponderant share of the seaborn carrying trade between the Baltic and Western Europe by the middle of the 16th century and before the struggle with Spain had begun.

p.21. .....the five provincial admiralties or navy boards (Rotterdam, Zeeland, Amsterdam, North-Quarter, and Friesland) which maintained the Dutch warships, most of which were hired or converted merchantmen.

p.27. By 1648 the Dutch were indisputably the greatest trading nation in the world, with commercial outposts and fortified 'factories' scattered from Archangel to Recife and from New Amsterdam to Nagasaki. If some of these places were precariously held, others yielded encouraging profits. Dutch achievements in European waters alone make impressive reading. "By extraordinary enterprise and efficiency", writes C. Wilson, "they had managed to capture something like three-quarters of the traffic in Baltic grain, between half and three-quarters of the traffic in timber, and between half and a third of that in Swedish metals. Three-quarters of the salt from France and Portugal that went to the Baltic was carried in Dutch bottoms. More than half the cloth imported to the Baltic area was made or finished in Holland". All this in addition to the fact that they were the largest importers and distributors of such varied colonial wares as spices, sugar, porcelain and trade-wind beads.

(C.Wilson "Profit and Power" - a study of England and the Dutch wars. Cambridge 1957.)

p.54 ..... the period of the Eighty Years War (1568-1648) taken as a whole, was one of great and increasing prosperity for Dutch overseas trade.

p.297 1648 Spain recognises Dutch independence by the Treaty of Munster. (January).

1650-1 Passage of the English Navigation Act discriminating against Dutch seaborne trade.

1652-4 First Anglo-Dutch war, ending in a decisive Dutch defeat in the North Sea and regional Dutch victories in the East Indies and the Mediterranean.

1658-9 Dutch intervene in the Baltic and relieve the pressure of the Swedish attach on Denmark.

1665-7 Second Anglo-Dutch War, culminating in the Dutch raid on the Medway and the Treaty of Breda.

1668 Triple Alliance between Dutch Republic, England and Sweden.

1672-4 Third Anglo-Dutch war and invasion of the Republic of the French.

p. 70 Note 6. C.R.Boxer "The Dutch East Indiamen: their sailors, their navigators and life on board" 1602-1795 (Mariners Mirror Vol. XL1X, May 1963. pp.81-104)

p. 91 To protect their merchant shipping from interference by foreign warships in European seas, the Dutch made great use of convoys, particularly in the Mediterranean and Baltic trades. They also sent warships to meet homeward-bound East and West India Fleets in the English Channel or off the Shetlands and Fair Isles.

p.106 Only the Amsterdam admiralty managed to find the money to build thirty-three ships between 1723 and 1741, including twelve line-of-battleships of between fifty-two and seventy-four guns

WEATHER - Fine AIR TEMP. 18°C Date - Saturday 29th August, 1970

WIND - Light Westerly WATER TEMP. 12°C LOCATION - GUN ROCKS

VISIBILITY 40/50 ft.

Conditions:- H.W. slack tide, time 3.00 p.m.
Current fast at first - 4 knots approx.
Waited for dead water.

Boat - 'Clan Gillean'

	Bottle Capacity	ATS In	ATS Out	Duration	Depth
W. R. Smith	65 cu.ft.	150	100	45 mins	35 ft.
K. Strom	"	150	100	"	"
B. Price	75 cu.ft.	160		60 mins	"
P. Napp	60 cu.ft.	150		"	"
H. Harvey	65 cu.ft.	150		45 mins	"
D. Russell	"	150		"	"
A. Colclough	65 cu.ft.	150		50 mins	"
B. Colclough	"	150		"	"
R. Barton	65 cu.ft.	150		50 mins	"
M. Dodge	"	150		"	"
Tamworth					
B.	"	150		50 mins	"
A.	"	150		"	"

Dive time duration approx. 2.30 p.m. to 4.30 p.m.
Boat arrived back Seahouses 5.45 p.m.

GUN ROCKS PROJECT

STAGE ONE CONCLUSIONS:-

Quite a lot of information has been coming to light through the help of Tyne Tees Television researchers and the experts whom they have laid on for our benefit, for example:-

Report from the Victoria & Albert Museum.

THE POTTERY - Is late 17th century salt glazed stoneware of German origin, manufactured at the town of Frechen on the Rhine which was well known for potteryware all over the known world.

Portions of the pots indicate they were "Bellarmines" jugs for wine or water named after a Cardinal Bellarmine who was particularly hated in the Protestant countries (we need to know more about him).

The design on the pottery fragments is of distinct Rhrenish flavour, sometimes the designs were heraldic in concept but yours, the museum suspects, is a floral pattern.

THE GLASS FRAGMENTS. The heavy glass base comes from a wine bottle, the full shape is rather like a bun with a short neck. These were commonly used until the present day cylindrical bottle was made. Country of origin unknown.

The V. and A. will send us a picture showing what the stoneware jugs looked like, though they haven't one with the exact pattern of the Farne Islands 'find'.

Taken from CASSELLS ENCYCLOPAEDIA - A storehouse of General Information. (Beast to Castro. Vol.2.)

> Bellarmine, Robert, Theologian, was born in 1542 at Monte Pulciano, Tuscany. After studying under the Jesuits, he was ordained a priest in 1569 and appointed to the chair of theology at Louvain. In 1599 he was made a Cardinal, and in 1602 Archbishop of Capua. He was the main support of the Church of Rome in the 16th century. He was learned and in controversy moderate. His chief work, (Disputationes de Controversiis Christiane Fidei adversus hujus Temporis Haerecticos), was the main point of the Roman Church's defences that the Reformers attacked for years. He died in 1621, having occupied since 1605, an important position in the Vatican.

Taken from OXFORD DICTIONARY OF THE CHRISTIAN CHURCH

> Owing to the cold climate of the north, Bellarmine moved from Louvain to Rome in 1576 and became professor of controversal theology at the newly founded Collegium Romanum. (This was founded by the Jesuits, possibly by Ignatius Loyola with the intention of training priests to convert Protestant Germany to Catholicism). Bellarmine's life was devoted to scholarship and controversy. He attempted to destroy the arguments of Protestants by reason rather than dogmatic statements. James I of England entered into controversy with him. He took a prominent part in the production of a revised edition of the Latin Bible, the Vulgate. He wrote a book denying the temporal authority of the Pope, whom he held had only an indirect power of temporal authority. Sympathised with Galileo. He was one of the greatest and most saintly figures of the Counter Reformation. He was called 'Venerable' in 1627 and canonized in 1930, the delay in giving him this honour may be said to be due to his opposition to the notion that the Pope could have temporal power. He was Archbishop of Capua from 1602-5. His later years were spent in writing books on spirituality.

NOTES Probably worth following up - Question why should Frechen be associated with either Bellarmine or German R.C. priests? Was Frechen a Protestant or Catholic town?

/2.....

STAGE ONE CONCLUSIONS - Sheet 2.

Taken from THE CONCISE ENCYCLOPAEDIA OF CONTINENTAL POTTERY & PORCELAIN

By Reginald G. Hagger. Andre Deutch. 6 gns.

P. 59 **Bartmann**, Bartmannkrug.

(German), a narrow necked bulbous jug or bottle with a mask of a bearded man on the front of the neck, called in England a 'greybeard' or 'Bellarmine'. Stoneware jugs in this form were extensively made at Frechen in the Rhineland, and exported with Rhenish wine to England, where they were imitated. Plate 66c Page 250

See also BELLARMINE and WITCH BOTTLES, (W. Mankowitz & Reginald G. Hagger, Concise Encyclopaedia of English Pottery & Porcelain, New York and London, 1957)

P. 199 Frechen, Rhineland, GERMANY.

Grey stoneware with a brown glaze was made here, the colour being a light or even yellowish brown. The shapes which may be associated with Frechen include the TRICHTERKANNE (mug with an oviform body, spreading wavy foot and a funnel shaped neck): STURZBECHER (a kind of mug or jug in the shape of a fat bellied man whose head takes the place of the foot and which only looks right when it is stood the wrong way up: tall narrow tankards (SCHNELLEN): and 'greybeards' or BARTMANNER.

The Frechen industry was founded in the sixteenth century and the Eigelstein workshop in Cologne was transferred there. Production continued in the seventeenth century. Plate 66a Page 250

P. 62 Bellarmine Born 1542-Died 1621

English nickname for big bellied stoneware jugs with a Bearded Mask in relief opposite the handle, made in the Rhineland. These were also called 'Grey Doves' and were copied by John Dwight and other British makers.
Frequently mentioned in English 17th Century Literature (Ben Jonson) - (Thomas Shadwell) - (Thomas D'Urfey).

Taken from CASSELLS ENCYCLOPAEDIA

JONSON, BENJAMIN - Born 1574, Died 1637

Dramatist, was educated at Westminster. After following the trade of a bricklayer, he became an actor, also writing plays in conjunction with others. His first independent work "Every Man in His Humour" 1596 was followed by "Every Man out of his Humour" 1599, "Cynthia's Revels" 1600, "Sejanus" 1603 "Volpone" 1606, "The Alchemist" 1610 and many others. He wrote masques for the court of James I and in 1616 was appointed Poet Laureate.

SHADWELL, THOMAS - Born 1640, Died 1692.

Dramatist of some ability, ridiculed by Dryden as McFlechnoe in his satire of that name, and as Og in the second part of Absalom and Achitopel. The quarrel was caused by the scurrilous tone of the "The Medal of John Bayes" written by Shadwell as a counterblast to Absalom & Achitopel and the Medal which satirised the opponents of the Court party. Shadwell succeeded Dryden as Laureate in 1688.

D'URFEY, THOMAS - Born 1628, Died 1723.

Poet and Dramatist, was born at Exeter from a family of French refugees. He prepared for the Bar, but turned aside to literature and wrote sonnets, ballads, odes and about thirty pieces for the stage which were popular and were tainted by the licentiousness of that age. He was a friend of Addison and Steele and satirised Charles II, Anne & William III. In 1683 he published a new collection of songs and poems, and in 1719-20 "Whit and Mirth" or "Pills to purge Melanch".

THE ANCIENT ART STONEWARE OF
THE LOW COUNTRIES AND GERMANY. By M.L. Solon
Volume 2.
Printed by the Chiswick Press. Ref. 738 (492)

FRECHEN

P.16. When the potters of Cologne were driven away from the town, we have seen that it was to Frechen they transported their industry..... The exact date of their arrival has not transpired, but from the style or ornament on the pieces discovered on the spot, it can be approximately fixed to the second half of the sixteenth century.

P.15. We do not mean to say, however, that the works of the Frechen potters cannot absolutely be traced to them: through the many specimens so curiously brought to light we can now define the peculiar features by which they may be identified with tolerable accuracy.

We may take as a guide, in the first instance, the various colours of the glaze: it is, when of a dark tint, rather blackish than brown, or else, if lighter in tone, of a dull greenish yellow: the glaze has, more than any other, a tendency to agglomerate in minute drops all over the surface.

P.16 A well-known beer jug, of the kind named in German BARTMANN, was the favourite model adopted by the Frechen potters, they persisted in producing it through all periods, with an infinity of modifications in the details, but without deviating much from the general notion. The piece derived its appelation from the bearded human face boldly embossed on the front part of the neck. These faces assume very different character, varying from the noble features of a god-like head, to the uncouth expression of a comic mask: sometimes akin to the models found in antique sculpture: in other instances ill-shapen and rough, as if hewn by the hand of the clumsiest stone-cutter of the Dark Ages.

It had become such an established form, that the cheapest beer jugs to suit the taste of the purchaser, had to bear the face with the flowing beard (figs. 147 and foll.) In the Low Countries and in certain German Towns this face was taken as the portrait of Charlemagne.

P.18 Through the Cologne merchants it reached England in quantities, and there it soon replaced the wooden and leathern jugs hitherto in use in taverns and alehouses. When excavations are made in London, many Bartmanns, or, as they were called, "Greybeards", still come to light. In the Guildhall Museum may be seen large numbers of them, all found in the city. At the time when Cardinal Bellarmine was struggling against the developments of the Reformation in England, the broad belly of the jug and the grinning features of the bearded face were pleasantly taken as representing the unpopular Cardinal: and from this came the name of Bellarmine by which they were known for a long time afterwards.

NATIONAL MARITIME MUSEUM
Greenwich, LONDON S.E.10
Telephone: 01-858 4422

Our reference: B1(iv)01
Your reference:

19 August 1970

W R Smith Esq
6 Pickering Green
Harlow Green Estate
Gateshead 9
Co Durham

Dear Bill

FARNE ISLANDS' WRECK

Thank you for your letter of the 29 July. I am sorry I have not replied sooner as I have been on holiday.

I enclose copies of some notes I prepared more or less for my own interest which you may find useful.

More recently I spoke with a Dutch friend from the Rijksmuseum in Amsterdam about the uniform nature of the sword-hilts you found. I think there is a very good chance that these came from a Dutch ship and I should suggest that they will not date from before about 1670.

I will let you know if I discover anything else.

Yours sincerely

Philip

P G W Annis
Senior Research Assistant
Department of Ships

The following is a report received from Mr. P.G.W. Annis of the National Maritime Museum, Greenwich, London S.E.10 on the 19th August, 1970:-

"A RECENTLY DISCOVERED WRECK IN THE FARNE ISLANDS (GUN ROCK)

The following articles have been recovered:-

1. An iron 6- or 9- pounder gun apparently dating from the approximate period 1650 - 1750. It has low set, tapered trunnions one of which may bear the letter G or C on its tip. The cascabel is almost flat and the thickness of metal at the muzzle is quite considerable. Until extensive concretion has been removed, little more can be said. It could be of any nationality.

2. An assortment of brass sword hilts. These pieces show remarkable similarity for the late 17th early 18th centuries and, in general, consist of the following parts:-

A hollow tubular grip containing traces of a wood filling. These grips seem to have been made in one with an olive-shaped pommel which incorporates a tang button (i.e., this part is not separate but simply a conventionally shaped reinforcement.) Many tang buttons are pierced at the pommel (presumably all of them are but concretion has hidden some) and most grips have a square or rectangular hole cut near the top which may have held some locking device or brazed ring for a knot (?). Guards are also of brass and appear solid (and probably cast). Some are not long enough to reach the pommel when placed in position on one of the above grips. These may have been damaged but could be original. Other knuckle-guards have an obvious 'hook' at the pommel end but few if any pommels show signs of a hole to admit this feature. An oval (almost kidney) shaped shell is fitted (cast in one with the guard) the cross on the obverse. No blades are extant (save for a piece rusted in a fragment of scabbard) but it is possible from other evidence to assume that these were straight and double-edged being of flattened diamond section.

3. In general, these swords of which examples of many more are said to be lying on the sea-bed, look alright for a late 17th/early 18th century date but the degree of uniformity is very surprising for so early a date. Presumably only a very small number of manufacturers were involved and the swords were made to contract is also said that a number of those still in the sea are arranged in a way which suggests that they were either boxed or fitted in racks when the loss of the ship occured.

3. A 7 inch diameter round shot still displaying signs of its casting. It weighed some 35 pounds (in ordinary condition, a 42 pound British round shot was about 7" dia.) but may well have lost weight through leaching.

4. Some pieces of pottery identified by the Victoria & Albert Museum as salt-glazed ware made in Frechen (Rhineland) in the second half of the 17th century together with the base of a glass bottle given the same date.

5. A collection of spheres which, if they were of solid iron, would not be unlike 1 pounder grape. These are apparently hollow and may perhaps be grenado. Most weigh only an ounce or so.

6. 3 Leads for sounding.

7. A copper sheet with rectangular nail holes

8. A length of heavy, hollow iron tube (10" - 12" long)

A number of other guns, apparently similar to 1 above are still on the sea-bed.

Mention has been made of a much bigger gun, some 14 feet long (where the others are about 8 feet long) which lies a short distance away. Divers state, however, that this measurement should be treated with caution and further measurements will be made. A gun of this size could only belong to a warship.....and a big one at that.

Tentative conclusions are as follows:-

The ship is likely to be a merchant vessel if British though the number of guns tend to rule this out. It may be a foreign naval vessel (the Admiralty Library state that it is not a Royal Navy Wreck) or merchantman or, and indications favour this, an Indiaman. The uniformity of the sword hilts suggests contract manufacture which, in turn, implies a large scale owning organisation. On the other hand, these swords may have been cargo. If the vessel was a warship then she is likeliest to have been Dutch or Scandinavian or possibly French.

There is a possibility that more than one ship is involved. The divers think not at present but no ship parts or fittings have been found as yet.

P.G.W. Annis.
Senior Research Assistant
Department of Ships
NATIONAL MARITIME MUSEUM,
Greenwich,
LONDON S.E.10.

Dear Alan,

GUN ROCK PROJECT

B.S-A.C. Tyneside Branch

You may remember from your trip up to the Farne Islands, when you took a number of notes together with the names of some of us who hope to be involved in the above on a long term basis. I have agreed to try and relieve the burden on Bill Smith somewhat, by undertaking some of the correspondence and background reading. When we spoke together you were kind enough to give me a list of books which we might find useful in providing background material, and also the offer of any more information you might have, for the sake of a post card. This will be rather more than a postcard, I am afraid.

As you were aware, numerous photographs were taken of the artifacts and we know that you expressed the wish to receive a set of these together with a copy of our report section by section as these become available. We are currently working on the photographs and will keep you in mind. The first stage of the report is just about reaching completion material-wise but needs a little sorting. We are also discovering just how many copies we really need and beginning to appreciate the probable cost involved. I understand from Bill that it will really be upon the basis of our first report that the Committee for Nautical Archeology will base the case for us being granted a lease of the seabed in the area of interest. When completed, should this "official copy" be sent to you with another for yourself, or should it be sent direct to the Committee in London? If the latter, under what heading and for the attention of whom?

Since your visit, I have discovered the Newsletter issued by the Committee from which some queries arise together with others from our reading.

You promised to provide us with a copy of a special form which has been drawn up for the recording of cannon details together with an annotated diagram so that we can refer to the relevant parts by their correct names. In this respect, I see from Newsletter No. 4, July,1970 "Coronation"? pages 21 & 22, you note the discovery that "the length of the cannon is from the muzzle to the beginning of the breach." Does this mean in effect, the distance from the muzzle to the base ring or alternatively, the depth or length of the bore? If this latter is the case, and the bore has become blocked-up, would a measurement from muzzle to touch-hole be the same thing? You go on to say that 9" was subtracted from each measurement. Can this be taken as a standard amount to be deducted from the total length or was it merely that this was the distance in the case of all your guns of the distance from the end of the permellion to the base ring or touch-hole as the case may be?

A little complicated I am afraid but I trust the meaning is clear. From the foregoing are we to take it that the lengths of cannon, as defined above, are those quoted in tables such as appear in "The Gunfounders of England" by Ffoulkes or "Ballistics in the Seventeenth Century" by A.R.Hall, M.A. PhD, rather that the total overall lengths of the guns in question.

I note from page 70 of "Shipwrecks and Archeology: The Unharvested Sea" by Peter Throckmorton that he refers to a gun found off Cape Gelidonya and identified by Mendel Peterson as probably English where the weight was inscribed on the breach in hundredweights, quarterweights and pounds. Have you any idea whether this was general practice either amongst the English alone or by gunfounders as a whole?

/2.....

Also from newsletter No.4, I see a list of Museums who have the facilities for preservation programmes although it is pointed out that capacity will generally be lacking. Initially it was understood that a local museum in Newcastle upon Tyne would undertake the preservation of our cannon. However, it now seems likely that not only do they not have the facilities which would be required but had they done so, would have hesitated to incur such expense upon an item which was not their property. The warnings of the article to a T which may however have come to our attention too late.

The author H.W.M.Hodges speaks of the water near the seabed as being sulphide rich due to the decay of micro-organisms. Surely, however, this would only apply to fairly deep water where it would tend not to be distrubed rather than in the range with which we are concerned of 20-30 ft. It is fairly obvious that the safest place for the guns is on the bottom of the sea pending definite undertakings of preservation work or the future discovery of cheaper and easier methods. Does this mean, however, that they should be left severly alone in view of the irretrievable damage that can so easily be done to them or are we warranted in attempting to clean them up on the bottom as an aid to identification. If not all of them, perhaps a small sample, especially where a number are involved, approximately 32 in our case so far. Presumably such attempts at cleaning would not release harmful chemicals if the guns remain on the bottom or is such an aasumption too simple?

Failing local help we see that the nearest museums with preservation facilities are those at York or Edinburgh.

Have you any idea when anchor cables gave way to chain? I appreciate that it will have no bearing on our period of approximately 1630 - 1700 but I am curious with relation to other old wrecks.

Finally, can you suggest any specific books which might have a particular bearing on the pottery of 'our' period, Bellarmine jugs and the like? I have been endeavouring to trace a copy of "History Under the Sea" by Mendel Peterson but so far, have met with no success whatever. Booksellers being of no help with an edition of such limited interest I wrote to the publishers in the United Kingdom, David and Charles of Newton Abbott only to be informed that it is already out of print and that they have no idea when a new edition may go to press.

Please forgive the foregoing. I have rather let the typewriter run away with me and have taken you literally at your word. I must also apologise for the impersonal note of the typewriter but regret that it is a necessary sacrifice in the interest of legibility and ease of taking copies. Hoping that the above does not give rise to too many headaches or take up too much of your time.

Yours faithfully,

Peter M. Napp.

Mr. P. M. Napp.
23, Harriott Drive,
Killingworth Station,
NEWCASTLE UPON TYNE. NE.12. OEU

P.S. I nearly forgot one of the primary purposes of writing to you. I have had the local City Library trying to trace a copy of William Falconer's 'Universal Dictionary of the Marine". 1769 edition. Is the spelling of Falconar correct and can you supply any other information which might help them to trace a copy such as publisher, date of publication etcetera?

C O P Y

British Sub-Aqua Club,
Tyneside Branch No.114,
C/O Hancock Museum,
NEWCASTLE UPON TYNE.

13th July, 1970.

Dear Mr. Thorp,

I am writing to you following a discussion between our Diving Officer Mr. William Smith and Mr. Peter Hawkey at Seahouses yesterday.

Mr. Smith asked me to explain that we did not seek your permission to land on Gun Rocks because it is below the High Water Mark and we did not realise that you would regard it as necessary. On two occasions we have taken a line across to the rock for the safety of the Seahouses boat and for surveying purposes. We are sorry that we did not seek your permission in the first place, and hope that where the safety of the boat is concerned, and where it is necessary for getting a proper fix for charting purposes, you will not object to our getting a line to the rock.

We do take your point about setting a bad example, and Tyne Tees have promised not to take or show any pictures of people on the rock, and we will not climb out of the water unless it is really necessary.

Yours sincerely,

Beverley Christopher (Miss)

(Scientific Officer 114 Branch)

R.W. Thorp Esq.,
Secretary Farne Islands Committee,
National Trust,
Narrowgate,
Alnwick,
Northumberland.

NOTE:- No offical reply to-date. W. R. Smith. D.O.
22-7-1970.

AN EXTRACT FROM A REPORT TO BE ADDED TO THE LETTER SENT (for interest only)

From P.J. Jarvis to the Chief Agent (National Trust)

7.2.69.

The Conveyance to the Trust (possibly from Mr. Thorp) is dated 10th August 1925, and the Islands are described in two parts:-

First, the following Islands were conveyed together with the rocks adjoining them:-

The Farne Island, West Wideopen, East Wideopen, Litter Scarcar, Big Scarcar, The Bush and the Knoxes.

The second group of islands were conveyed together with all the estate and interest (if any) of the Grantor of and in the foreshore of such islands and rocks.

Navistone, Longstone, Clove Car, Little Harcar, Big Harcar, North Wamses, South Wamses, Roddam and Green, Brownsman Island, Staples Island, Gun Rock, Skenley Car, Callers, Crumstone, Fang, Islestone Shad, Glororum Shad, Oxcar, Elbow, Megstone and Swadman.

- - - - - - -

Apparently, in some way or other, the foreshore was the property of the Bishops of Durham, and eventually came into the possession of private people, never, as in other places being acknowledged as Crown Property.

When the National Trust took over Lindisfarne they discovered that they had not got the shooting rights of the shore, and this is still not resolved.

What would be the result if the question of foreshore rights came to litigation between the Crown and the National Trust I cannot imagine, but I think they will prefer to negotiate with people like ourselves rather than have it stirred up.

Mr. Thorp, the National Trust Agent was the previous owner of much of the Farnes.

"Explanation as to the ownership and legal aspects of us putting divers onto Gun Rocks for survey purposes"

Received from Beverley Christopher - July, 1970.

W.R.Smith
Diving Officer.

27, Chiltern Drive,
West Moor,
NEWCASTLE UPON TYNE.
NE.12. ONU
ENGLAND

The Mayor,
Frechen,
GERMANY

11th September, 1970.

Dear Sir,

I am writing on behalf of the Tyneside Branch of the British Sub-Aqua Club and would be very pleased indeed if you could possibly spare the time to assist us in a small matter.

Whilst diving at the Farne Islands (off the Northumberland coast) recently, we came across pieces of pottery which when examined by Experts from the Victorial & Albert Museum, London, indicated that they were Bellarmine jugs for wine or water. The jugs were dated as late 17th century salt glazed stoneware of German origin, manufactured in your Town which was well known for potteryware all over the known world. They were named after a Cardinal Robert Bellarmine (Theologian, born 1542, died 1621).

So far, we have been able to trace quite a lot of Cardinal Bellarmine's personal life from local libraries but our reason for writing to you is that we need to know what connection this Italian Cardinal had with Frechen and why these jugs were named after him.

We would be very much obliged, therefore, if you could kindly supply us with this information as soon as possible.

Many thanks,

Mrs. A. E. Brown.

27, Chiltern Drive,
West Moor,
NEWCASTLE UPON TYNE.
NE.12. ONU
ENGLAND

Bürgermeister,
Frechen,
DEUTCHLAND

11th September, 1970.

Lieber Bürgermeister,

Ich Schreibe im Namen von dem Tynesiden Abzweigung des britisches unter wasseres Assoziations, und ich würde wirklich sehr erfreut, wenn Sie Die Zeit sparen Konnen, um uns helfen in einer kleiner Dinge.

Als Kürzlich tauchten wir an der Farne Insel (bei der Northumberland Küste), fanden wir Stücke Tonwaren. Diese Stücke waren bei Sachverständigen vom Victoria and Albert Museum, London, bei Licht betrachtet, und sie fanden, dass sie Bellarminen Krügen für Wein oder Wasser waren. Die Krügen gingen auf des Siebzehntes Jahrhunderts zuruck, und sie sind salzverglastes Steingut des deutsches ursprungs, fabriziert in Ihrer Stadt, die sehr berühmt wegen Tonwaren war. Die Krügen waren nach einem Kardinal Robert Bellarmine, einem Theologen (1542-1621), genannt.

Schon haben wir viel des Privatlebens des Kardinals auf dem lokalen Bibliothek ausfindig gemacht. Unsere Vernunft Ihnen zu schreiben ist, weil wir kennen müssen, welcher Konnex den Italiner mit Frechen hatte, und warum diese Krugen nach ihn genännt waren.

Wir würden sehr verbunden wein also, wenn Sie uns mit diese Auskungft so bald wie moglich beliefern können.

Unsere viele Danken,

Mrs. A.E.Brown.

GUN ROCKS PROJECT

Acknowledgements

1. Jim Trotter — Skipper of 'John Wesley' BK 2 of Seahouses, Northumberland. Without his skill as a seaman and his local knowledge, this project would not have even started. Thanks also to his crew P. Swan, G.

2. Tyne Tees Television — Their help both financially and practical were of immense help. Special thanks to cameraman K. McWhirter for his professional work and as a branch member and diver.

3. Lt.Commander Alan Bax. — For his initial interest and subsequent visit to dive on the site as well as appear on the programe 'Today at Six' where he voiced his opinions and gave us much expert knowledge for which we are indebted.

4. P.G.Annis of Maritime Museum, Greenwich, London. — who also gave up his time to visit us and gave valuable advice.

5. Commander Philip White R.N. — For his original liason work between ourselves, Tyne Tees Television, B.S.A.C and others.

6. Sunday Times Newspaper — For their excellent coverage of the story of our find and the way in which they wrote the story.

7. Mr. Sydney Wignal — For allowing me to read his works on the 1968 Expedition on the Santa Maria De la Rosa. His methods and ideas were of immense help.

8. Norman D. Rosenberg. of Oceans Magazine, San Diego, California. — for financing the photocopying of this report.

9. Last but not least — All the members of the branch, Tyneside 114 who have helped in this interim report either directly or indirectly, namely:-

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A special Thank you to the following people who have helped me in the ardous but enjoyable task of preparing this interim report. First, Mrs. Anne Brown who has typed most of this report more than once. Peter Napp for research. Nick Ashmore as Co-Organizer and for photographs, also Barrie Sheppard for photographs. Miss Beverly Christopher for her museum work and liason. Jack still photographer for Tyne Tees and Mac Campbell, programe director also of Tyne Tees Television.

GUN ROCK PROJECT

THANKS FOR USE OF EQUIPMENT

(1) Jim Trotter for use of 'John Wesley'

(2) Pat Laidler
Frank _____ for use of 'Clan Gillean'

(3) McKays Fish Shop for work as boat Agent

(4) Lt. Commander Alan Bax for lifting Bag

(5) _____ for lifting Bag

(6) _____ for use of boat trailer

(7) Tremble Cranes for lifting and transporting cannon

(8) Stockton Branch for offer of compressor

GUN ROCKS PROJECT

REFERENCES AND SOURCES

1. 'Defeat of Spanish Armada' by G. Mattingly

2. 'History and Wild Life of Farne Islands' by G. Watt

3. 'Grey Seals and the Farne Islands' by Mrs. Grace Hickling

4. Bellarmine Pottery Report - Victoria & Albert Museum, London

5. Bellarmine — "Cassells Encyclopaedia" (a storehouse of general information) - Beast to Castro Vol.2.

6. Bellarmine — The Concise Encyclopaedia of Continental Pottery & Porcelain by Reginal G. Hagger. (Andre Deutsch 6 gns.)

7. Bellarmine — Oxford Dictionary of the Christian Church

8. Gunfounders of England by Ffoulkes 1937 pp. 18, 19, 21, 22, 25, 27, 120

9. Underwater Archeology by George Bass

10. 'Wasa' by Anders Franzen

11. The Wooden Ships in the Royal Navy by Archibald

12. 'The Ship' by Bjorn Landstrom

13. 'The Dutch Seaborn Empire 1600-1800' by C.R.Boxer pp. 4,6,21,27,55, 297, 70, 91, 106.

14. 'Armada Guns' by Michael Lewis - George Allen & Unwin 42/-