



Ministry
of Defence

Our Ref: FOI2019/08648

Ministry of Defence
Main Building
Whitehall
London SW1A 2HB
United Kingdom

Telephone: +44(0)20 7218 9000

E-mail: DNO-Secretariat Team (MULTIUSER)

[REDACTED]
[REDACTED]
17 December 2019

Dear [REDACTED]

Thank you for your email requesting the following information:

File reference: ES 18/13

As confirmed previously, we have treated your correspondence as a request for information under the Freedom of Information Act 2000 and we can advise that the Ministry of Defence (MOD) holds information in scope of your request.

We attach the following document:

- File ES 18/13 – Monte Bello Maps

If you wish to complain about the handling of your request, or the content of this response, you can request an independent internal review by contacting the Information Rights Compliance team, Ground Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.gov.uk). Please note that any request for an internal review should be made within 40 working days of the date of this response.

If you remain dissatisfied following an internal review, you may raise your complaint directly to the Information Commissioner under the provisions of Section 50 of the Act. Please note that the Information Commissioner will not normally investigate your case until the MOD internal review process has been completed. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website at <https://ico.org.uk/>.

Yours sincerely,

Defence Nuclear Organisation Secretariat

PR 1977101

011124

CF 12465

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4/6/19

ES18/13

W

CLASSIFICATION
REVIEW
25/1/64

HPG.5012

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R.H.5 REPORT

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BY AWE ALDERMASTON

21/04

~~SECRET~~

SECRET

ANTHALL - S.W. COAST

MONTE BELLO ISLANDS

FROM A HYDROGRAPHIC SURVEY OF 1911.
Contours and soundings taken from an photographic 1911.
Soundings in fathoms obtained from an earlier survey.
Tide gauge at 130 - Lat 36° 00' S, Long 115° 00' E.

Soundings refer to the True Tides and are given from Lowest Tide - 120' at 1
All heights are corrected to their above Mean High Water Springs
For Abbreviations see Admiralty Chart 4411

CHARTERS & PRINTING
Done from a Survey of the
Sounding Sheet 414
Printed at the Admiralty

MAP A 1

D DAY (WATER) - Oct 3rd.

- W1 Water Survey 1 - Maj. Gen. Lt. Plimmer.
- W2 " " 2 - Lt. Col. Linden Bailey, Lt. Parsons.
- W3 " " 3 - Maj. Lambie, Lt. Makela.

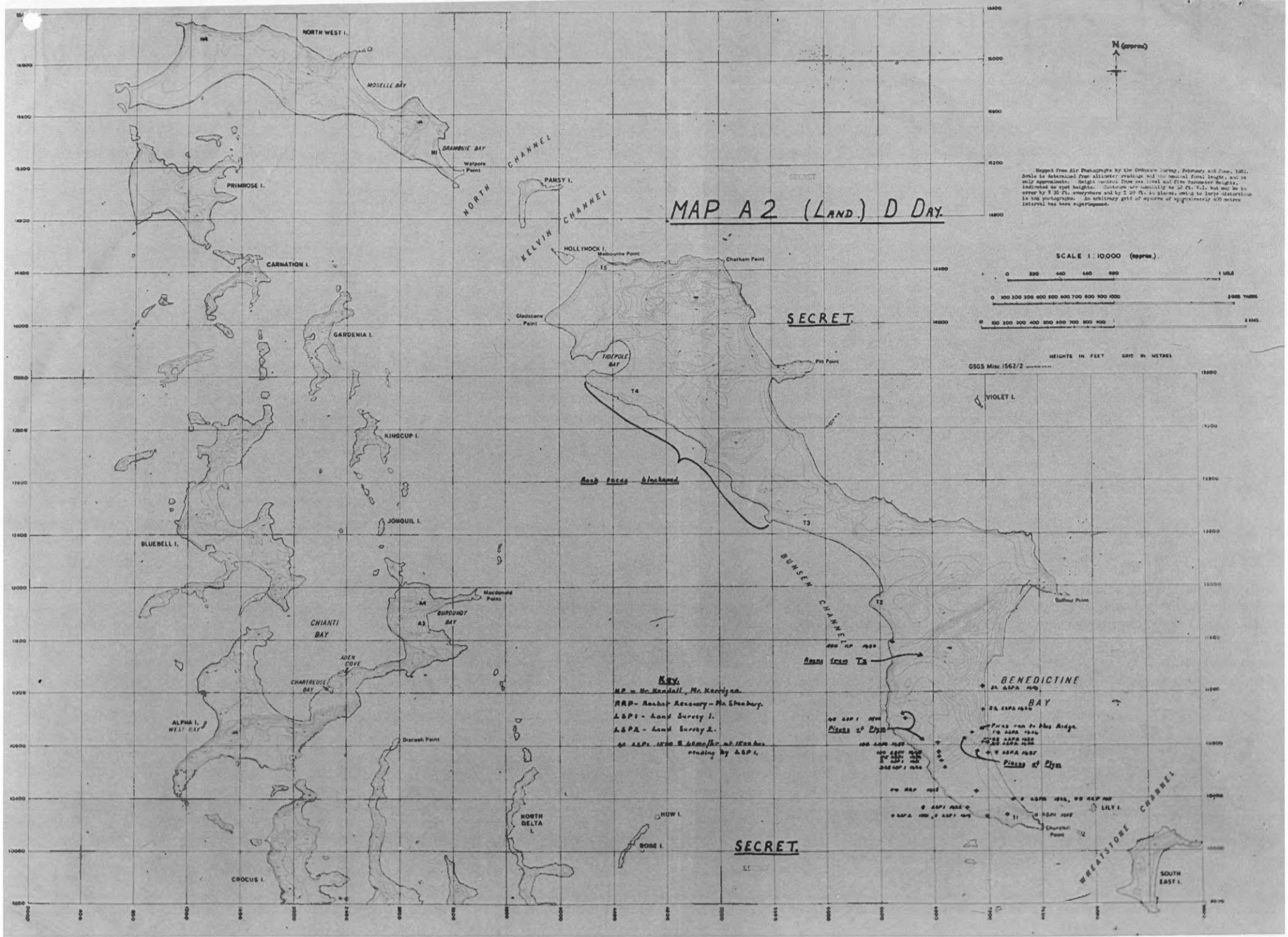
100 Wt 1422 & 100 Wt/hr in the boat
reading by team W1.
at 1422.

Notes:
1. The chart is based on the hydrographic survey of 1911.
2. The soundings are in fathoms.
3. The contours are in fathoms.
4. The tide gauge is at 130.
5. The chart is for the use of the Admiralty.

Soundings	Contours	Notes
10	10	
20	20	
30	30	
40	40	
50	50	
60	60	
70	70	
80	80	
90	90	
100	100	

Soundings	Contours	Notes
10	10	
20	20	
30	30	
40	40	
50	50	
60	60	
70	70	
80	80	
90	90	
100	100	

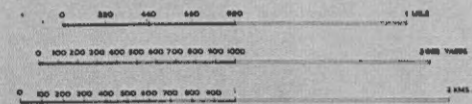




MAP A2 (LAND.) D DAY

Mapped from Air Photographs by the Ordnance Survey, February and June, 1961. Contours are determined from altimeter readings and the mean of four heights, and are only approximate. Height contours from sea level and five barometer heights, indicated the spot heights. Contours are usually to 20 ft. T.L. but may be in error by 5-35 ft. everywhere and by 100 ft. in places, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 60 metres (sides), has been superimposed.

SCALE 1:10000 (approx.)



HEIGHTS IN FEET GRID IN METRES
OSGS Misc 1562/2

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Rear Face Allocated

Key.
 NP - Mr. Randall, Mr. Kerrigan.
 RRP - Anchor Recovery - Mr. Stanbury.
 LSP1 - Land Survey 1.
 LSP2 - Land Survey 2.
 40 ASPs - 1000 ft. contour at 1000 ft. reading by LSP 1.

Rears from T4

Lines of Sight

BENEDICTINE BAY

21 ASPA 1030

22 ASPA 1035

23 ASPA 1040

24 ASPA 1045

25 ASPA 1050

26 ASPA 1055

27 ASPA 1060

28 ASPA 1065

29 ASPA 1070

30 ASPA 1075

31 ASPA 1080

32 ASPA 1085

33 ASPA 1090

34 ASPA 1095

35 ASPA 1100

36 ASPA 1105

37 ASPA 1110

38 ASPA 1115

39 ASPA 1120

40 ASPA 1125

41 ASPA 1130

42 ASPA 1135

43 ASPA 1140

44 ASPA 1145

45 ASPA 1150

46 ASPA 1155

47 ASPA 1160

48 ASPA 1165

49 ASPA 1170

50 ASPA 1175

51 ASPA 1180

52 ASPA 1185

53 ASPA 1190

54 ASPA 1195

55 ASPA 1200

56 ASPA 1205

57 ASPA 1210

58 ASPA 1215

59 ASPA 1220

60 ASPA 1225

61 ASPA 1230

62 ASPA 1235

63 ASPA 1240

64 ASPA 1245

65 ASPA 1250

66 ASPA 1255

67 ASPA 1260

68 ASPA 1265

69 ASPA 1270

70 ASPA 1275

71 ASPA 1280

72 ASPA 1285

73 ASPA 1290

74 ASPA 1295

75 ASPA 1300

76 ASPA 1305

77 ASPA 1310

78 ASPA 1315

79 ASPA 1320

80 ASPA 1325

81 ASPA 1330

82 ASPA 1335

83 ASPA 1340

84 ASPA 1345

85 ASPA 1350

86 ASPA 1355

87 ASPA 1360

88 ASPA 1365

89 ASPA 1370

90 ASPA 1375

91 ASPA 1380

92 ASPA 1385

93 ASPA 1390

94 ASPA 1395

95 ASPA 1400

96 ASPA 1405

97 ASPA 1410

98 ASPA 1415

99 ASPA 1420

100 ASPA 1425

SECRET

AUSTRALIA - N.W. COAST

MONTE BELLO ISLANDS

FROM A HYDROGRAPHIC SURVEY OF 1881

Contours and sounding taken from an altimeter, 1888

Soundings in fathoms colored from an earlier survey

Transverse Island 115° - Lat $10^{\circ}32'$ S 79.6. Long $115^{\circ}26'$ E 79.6

Change rate to the True Compass and see page four hereunder from 150° and 150° and 150° and 150°

All depths are reported on this chart above High Water Springs

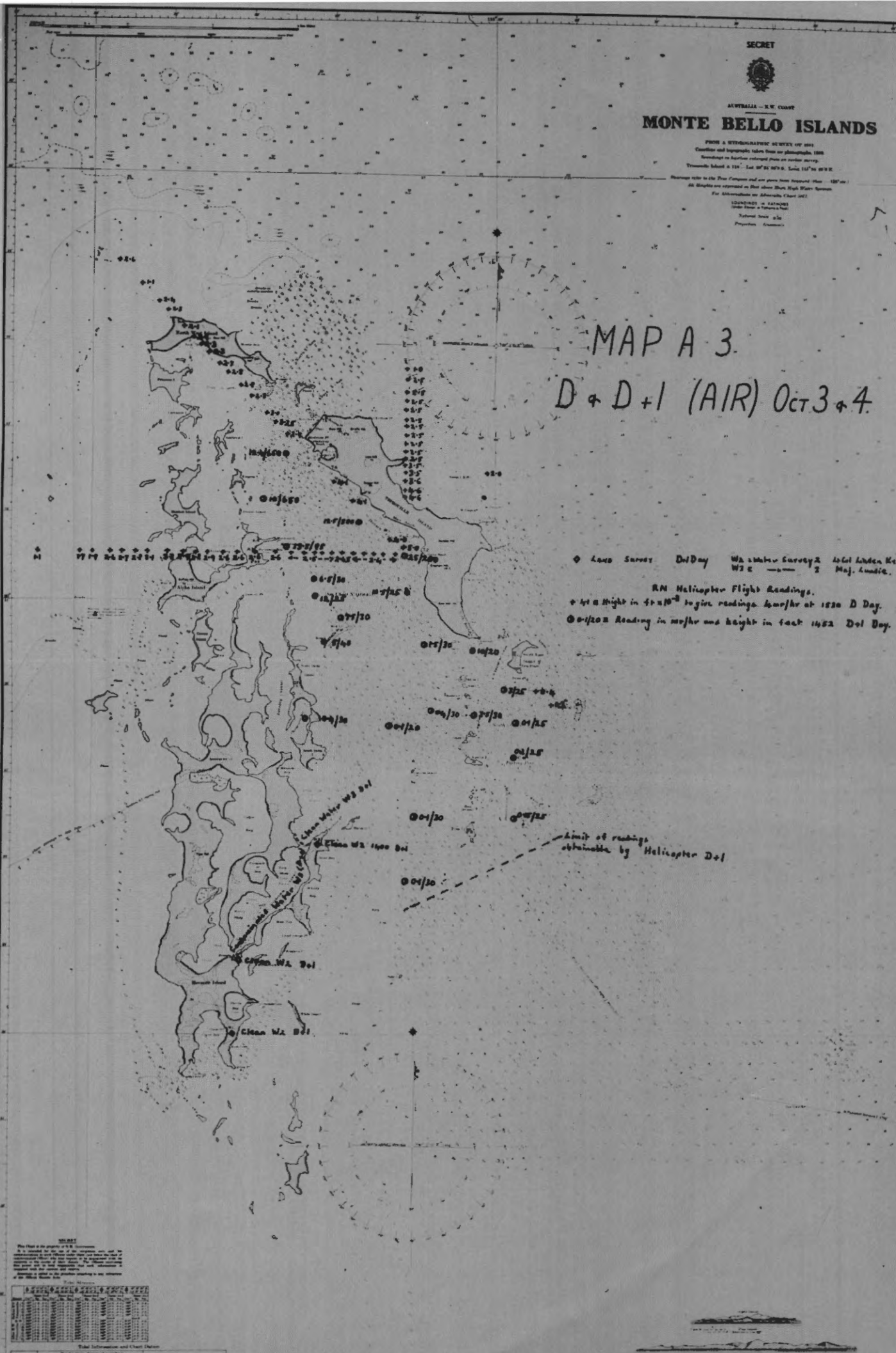
For Abbreviations see Admiralty Chart 1021

15260601 - 15260601

15260601 - 15260601

Natural Scale 1:50,000

Projection Transverse



MAP A.3.

D & D+1 (AIR) Oct 3 & 4.

◆ Low Survey D+1 Day WA station Survey 2 Lt Col Linden Kelly WTC I Maj. Lennie.

RN Helicopter Flight Readings.
+ 428 flight in 4280' logie readings 4280 ft at 1230 D Day.
001208 Reading in meter and height in feet 1452 D+1 Day.

Limit of readings obtainable by Helicopter D+1

NOTE:
This chart is the property of H.M. Government
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be used for any purpose without the sanction of
the Admiralty. Any person who does so is liable
to be dealt with accordingly. The Admiralty
is not responsible for any loss or damage
to property or for any injury to persons
caused by the use of this chart.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

Tide Information and Chart Datum
Mean High Water Springs
Mean Low Water Springs
Mean High Water Neap
Mean Low Water Neap
Mean High Water
Mean Low Water
Chart Datum
Datum in soundings are
referred to Mean Sea Level



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ADWALALA - N.W. ISLAND

MONTE BELLO ISLANDS

FROM A HYDROGRAPHIC SURVEY OF 1952.
Contours and soundings taken from photographs, 1952.
Soundings in brackets enlarged from an earlier survey.
Trinidad Island at 132° - Lat. 8° 54' 30" S, Long. 157° 54' 30" W.

Soundings refer to the True Datum and are given from Mean High Water (MHW) - 1.07 m.
All depths are expressed in Feet above Mean High Water Datum.
For Abbreviations see Admiralty Chart 1011.

Scale 1:50,000
Projected Scale 1:50,000
Projection - Mercator

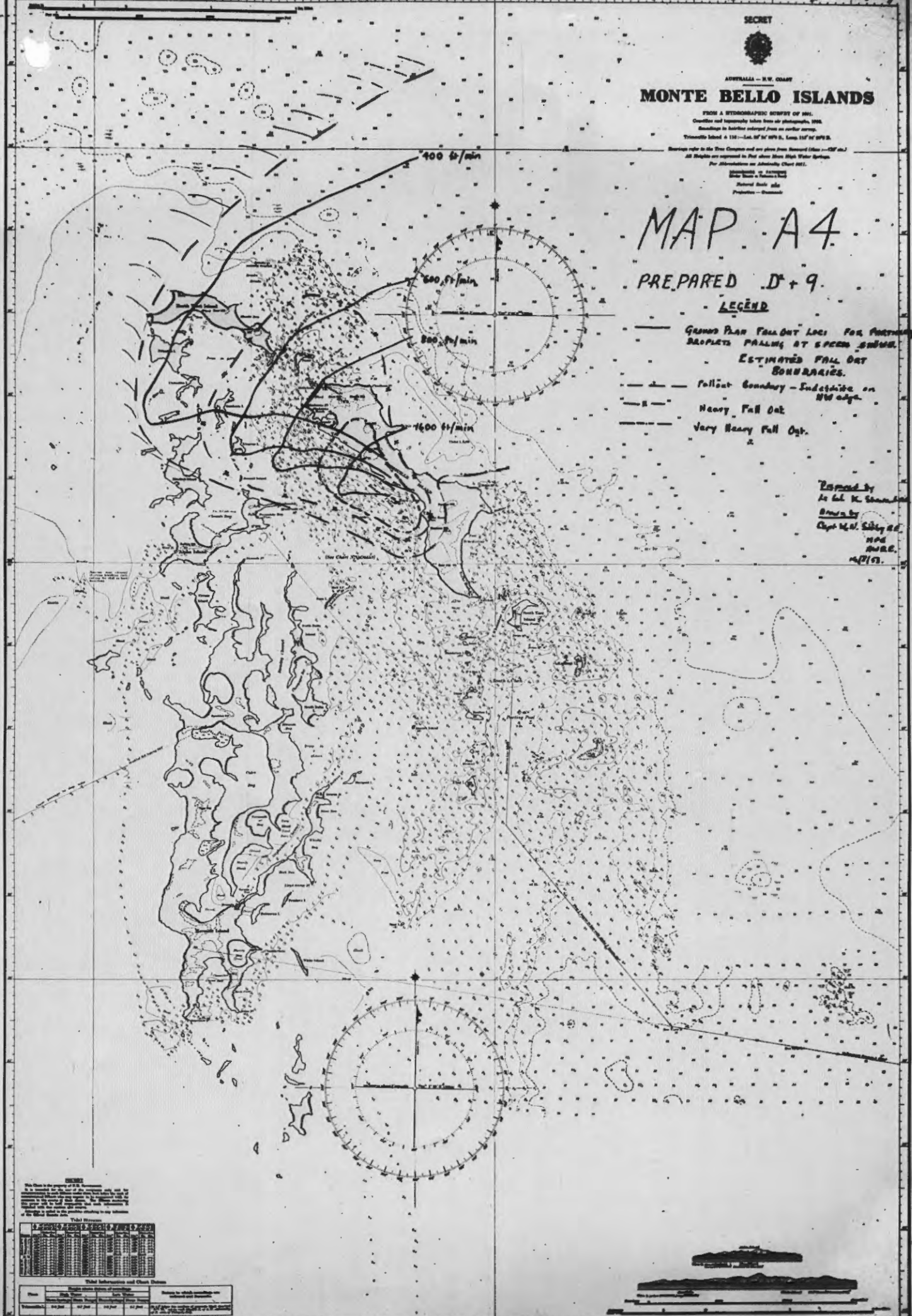
MAP A4

PREPARED D+9

LEGEND

- GROUND PLAN FALL OUT LINES FOR PORTLAND BARRIERS FALLING AT SPEED 500 KTS.
- ESTIMATED FALL OUT BOUNDARIES.
- Fall out boundary - Indefinite on NW edge.
- Heavy Fall Out
- Very Heavy Fall Out.

Designed by Lt Col. K. S. ...
Drawn by Capt. M. V. ...
M.V.S.
M.P.S.



NOTE: This chart was compiled from the Hydrographic Survey of 1952-53. It is based on the latest available information and is subject to change without notice. It is not to be used for navigation unless it is accompanied by the latest Notices to Mariners.

Tidal Stream

Time	Direction	Force
0000
0300
0600
0900
1200
1500
1800
2100

Tidal Information and Chart Details

Item	Details
Scale	1:50,000
Projection	Mercator
Soundings	In Feet
Datum	Mean High Water



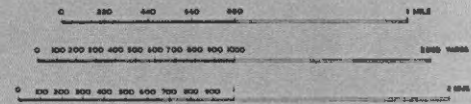
MAP B 1 (LAND) D+2 (Oct 5)



SECRET

Maped From Air Photographs by the Ordnance Survey, February and June, 1951. Scale is determined from altimeter readings and the actual focal length, and is only approximate. Height control from sea level and from barometer heights, indicated on spot heights. Contours are normally to 20 ft. but may be in error by 2-30 ft. everywhere and by 2-30 ft. in places, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 400 metres interval has been superimposed.

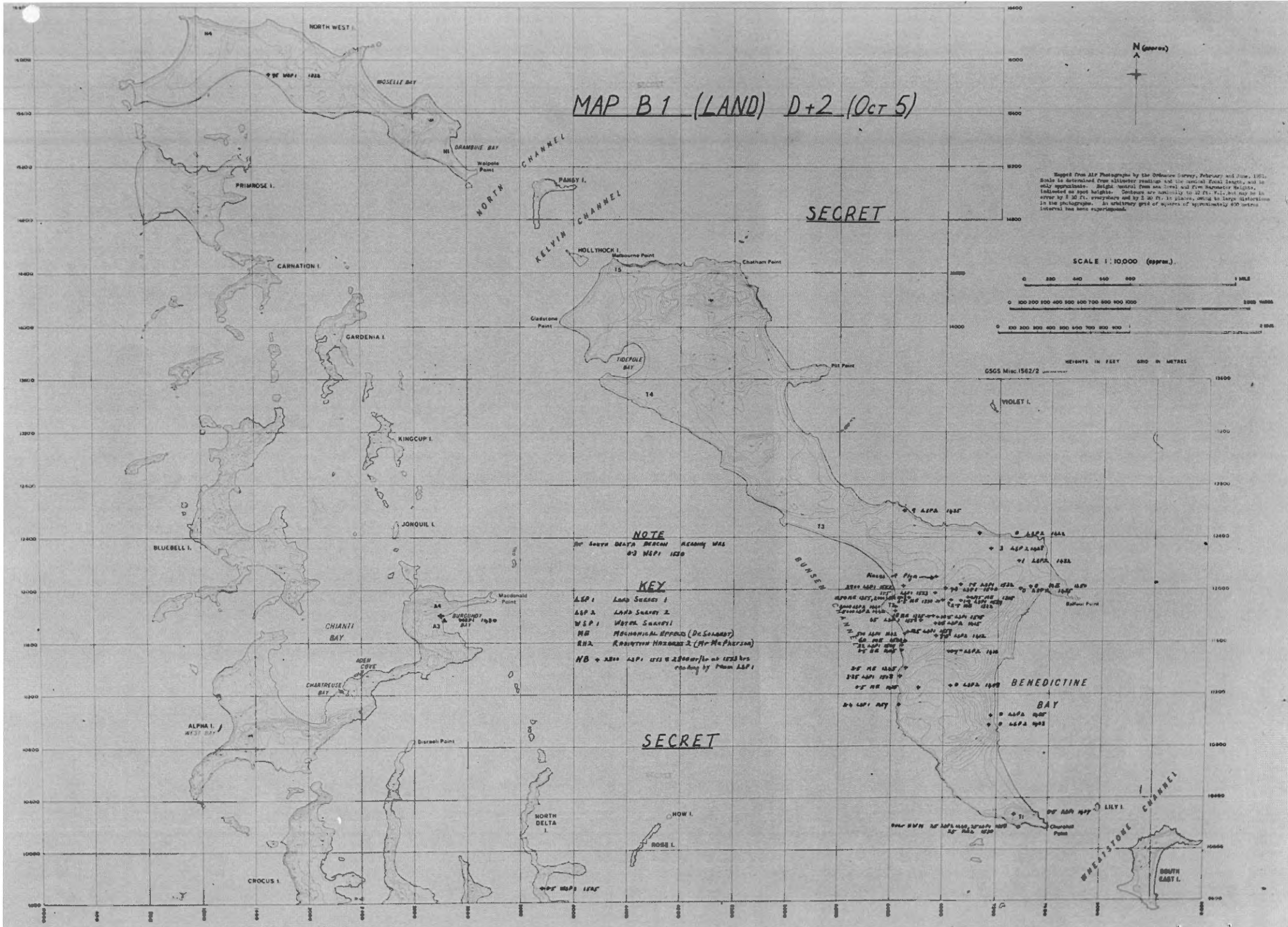
SCALE 1:10000 (approx.)



NOTE
 OF SOUTH DELTA BEING REARMED WAS
 ON 15/1/1950

KEY
 ASP 1 LAND SURVEY 1
 ASP 2 LAND SURVEY 2
 WSP 1 WATER SURVEY 1
 MB MECHANICAL EFFORT (Dr. GARDNER)
 RMA ROBERTSON MARSHALL 2 (Mr. MacPherson)
 NB + 2000 ASP 1 1951 & 2000 ft. at 1951 hrs
 (copying by from ASP 1)

SECRET



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ANTARCTICA - NEW CHART

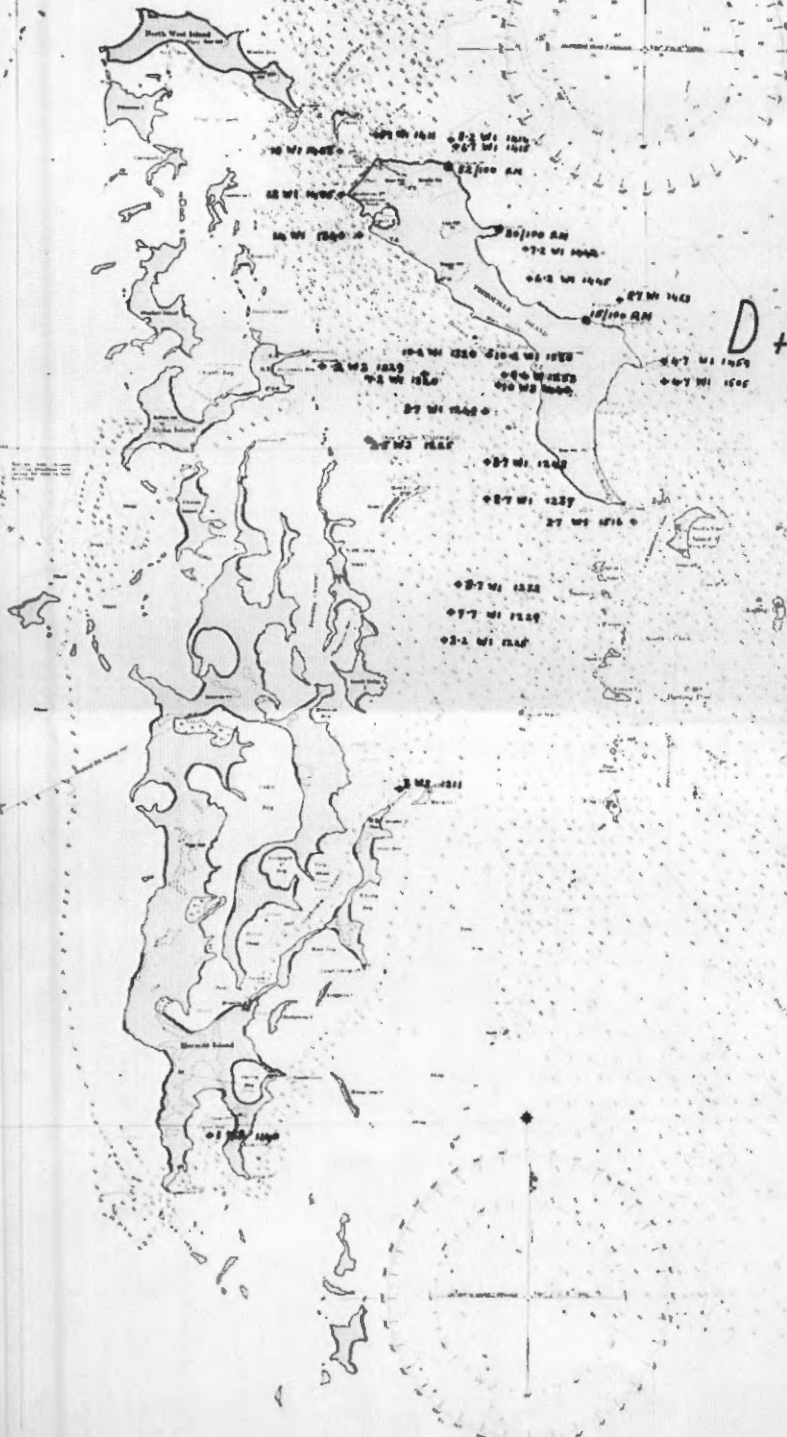
MONTE BELLO ISLANDS

FROM A HYDROGRAPHIC SURVEY OF 1944
Contours and soundings taken from an echograph, 1944
Soundings in fathoms obtained from an earlier survey
Tern Island a 19 - Lat. 67° 30' S, Long. 117° 14' E
Soundings up to the Five Fathoms and are given from the 100-foot line - 100 feet
All depths are expressed in feet above Mean High Water Springs
For Information see Admiralty Chart 5411
Scale 1:50,000
National Series 1:50,000
Projection: Mercator

MAP C1

D+3 (WATER & AIR) OCT 6th.

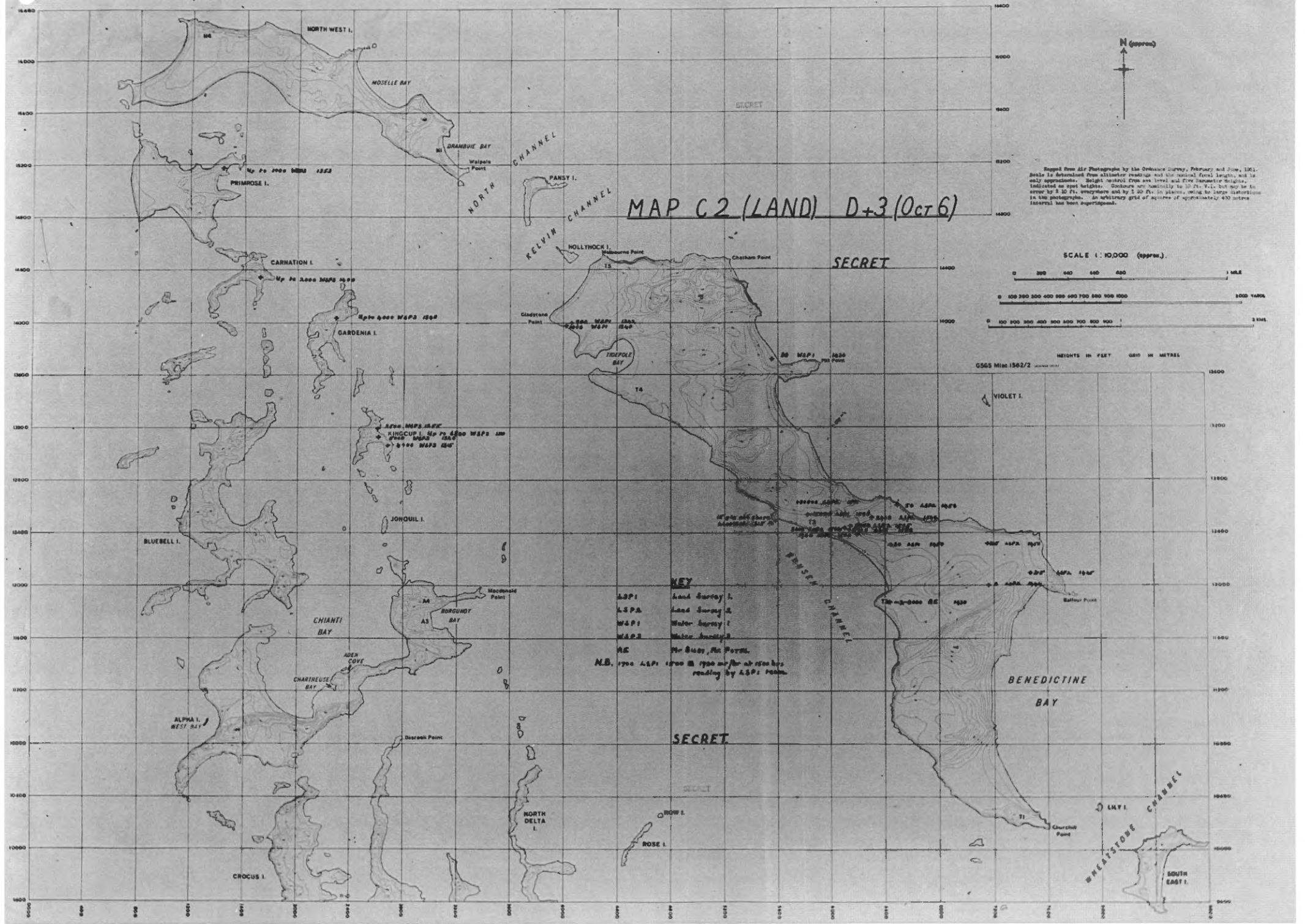
- W1 Water Survey 1 - Maj. Cox
- W3 " " 3 - Maj. Aundic
- AN AN Helicopter Flight readings at 1000 hrs.
- Helicopter Readings
- 25 W3 1225 2 100 m/hr at 1225 by team W3
- 22/100 AN 2 22 m/hr at 100 feet



1:50,000
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Symbol	Description
○	Helicopter Readings
○	25 W3 1225 2 100 m/hr at 1225 by team W3
○	22/100 AN 2 22 m/hr at 100 feet

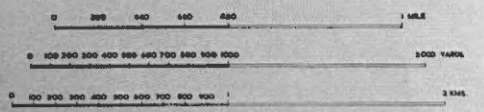
Printed in Great Britain by the Admiralty Press, London



MAP C2 (LAND) D+3 (Oct 6)

Based from Air Photographs by the Ordnance Survey, February and June, 1961. Profile is determined from altimeter readings and the nominal focal length, and is only approximate. Height measured from sea level and true horizontal distance, indicated as spot heights. Contours are normally to 10 ft. but may be in error by 2.50 ft. everywhere and by 1.00 ft. in places, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 400 metres (square) has been superimposed.

SCALE (1:10,000 (approx.))



HEIGHTS IN FEET 0 100 200 300 400 500 600 700 800 900 1000
G565 Misc. 1562/2

KEY
 LSP1 Land Survey 1
 LSP2 Land Survey 2
 WSP1 Water Survey 1
 WSP2 Water Survey 2
 NE No. 1000, No. 1000
 M.B. 1700 LSP1 1700 M 1700 m/fm at 1700 hrs reading by LSP1 Point

SECRET

SECRET

SECRET

SECRET

WREATHSTONE CHANNEL

NORTH CHANNEL

RELVIN CHANNEL

ROSEN CHANNEL

Geographical labels on the map include: NORTH WEST I., MOSELLE BAY, DRAMBUI BAY, Walsels Point, PRIMROSE I., CARNATION I., GARDENIA I., JONQUIL I., BLUEBELL I., CHIAITI BAY, ADEH COVE, CHARITREUSE BAY, ALPHA I. WEST BAY, CROCUS I., NORTH DELTA I., ROSE I., PANSY I., HOLLYMOCK I., Macdonald Point, BURGUNDY BAY, Macdonald Point, DISCREET POINT, NORTH DELTA I., ROW I., ROSE I., VIOLET I., BENEDETTINE BAY, Church Point, SOUTH EAST I., and LILY I.

MAP D₁ (LAND) D+4 (OCT 7)



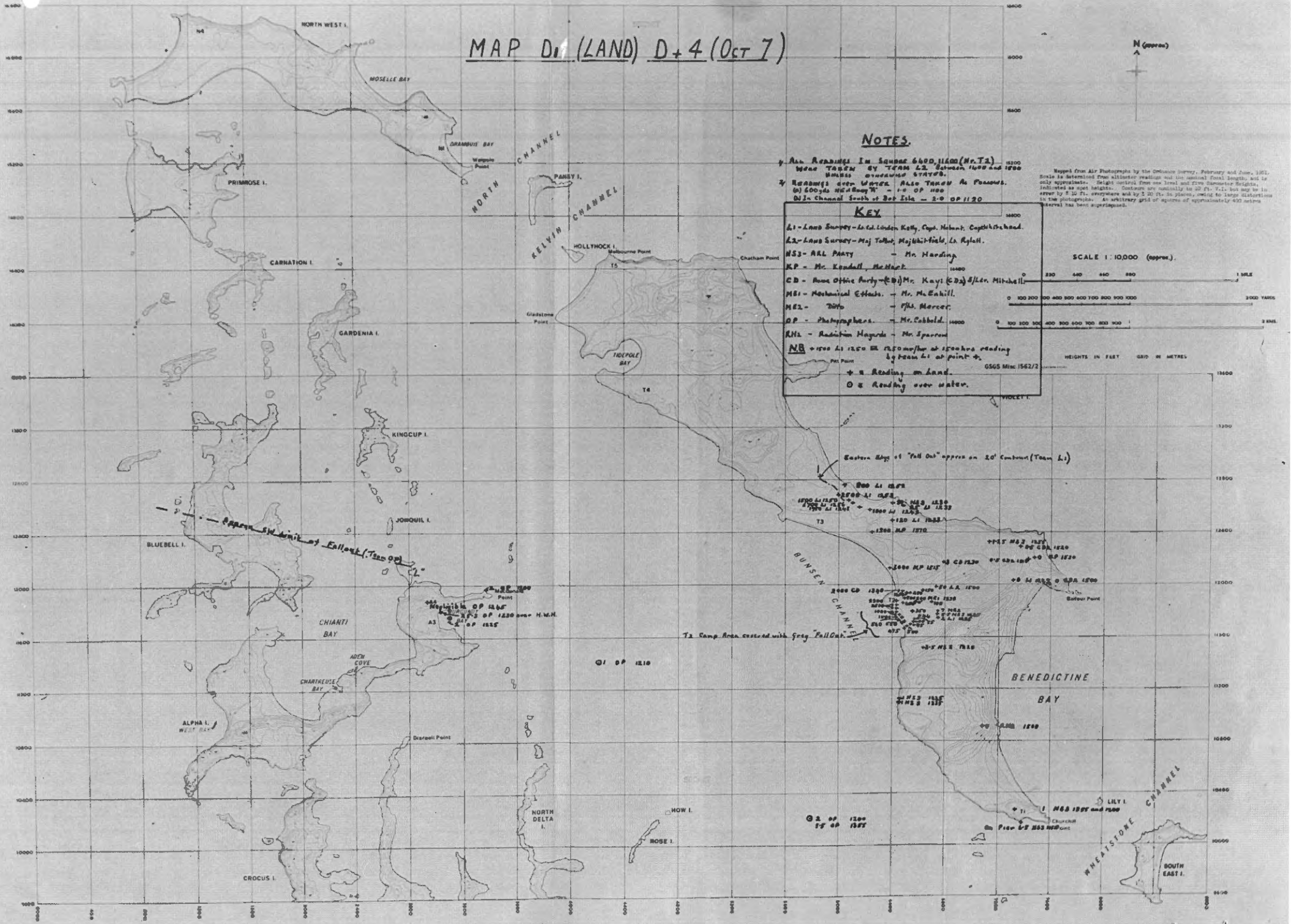
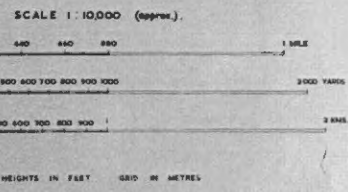
NOTES

- 1. All Readings in Square 6400 (Mr. T₁) 1100 Were Taken by Team L₂ Between 1400 and 1500 Unless otherwise stated.
- 2. Readings over Water Also Taken as follows.
 - (A) 500 yds West Bay T₁ - 1st OP 1400
 - (B) Channel South of Bot Isle - 2nd OP 1120

KEY

- L₁ - Land Survey - Lt. Col. Linden Kelly, Capt. Melant, Capt. H. Schindler.
 - L₂ - Land Survey - Maj. Tollet, Maj. Whitfield, Lt. Ryley.
 - NS3 - ARL PARTY - Mr. Harding
 - KP - Mr. Kendall, Mr. Hart
 - CD - Base Office Party - (CD) Mr. Kaye (CD) S/Lt. Mitchell
 - ME1 - Mechanical Estab. - Mr. M. Cahill
 - ME2 - Ditto - Mr. Mercer
 - OP - Photographers - Mr. Cobbold
 - RN1 - Radio Signaller - Mr. Sparrow
 - NB - 1500 ft 1250 ft 1250 m/ft at 1500 hrs reading by team L₁ at point of
- * = Reading on land. 0565 Mm. 1562/2
 O = Reading over water.

Maplet from Air Photographs by the Ordnance Survey, February and June, 1951. Scale is determined from altimeter readings and the nominal focal length, and is only approximate. Height control from one level and five diameter heights, indicated as spot heights. Contours are usually to 20 ft. 1 ft. but may be in error by 5 to 10 ft. everywhere and by 20 ft. in places, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 400 metres interval has been superimposed.

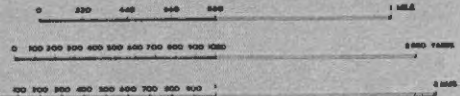


MAP E (LAND + WATER) D+5 (Oct 8)

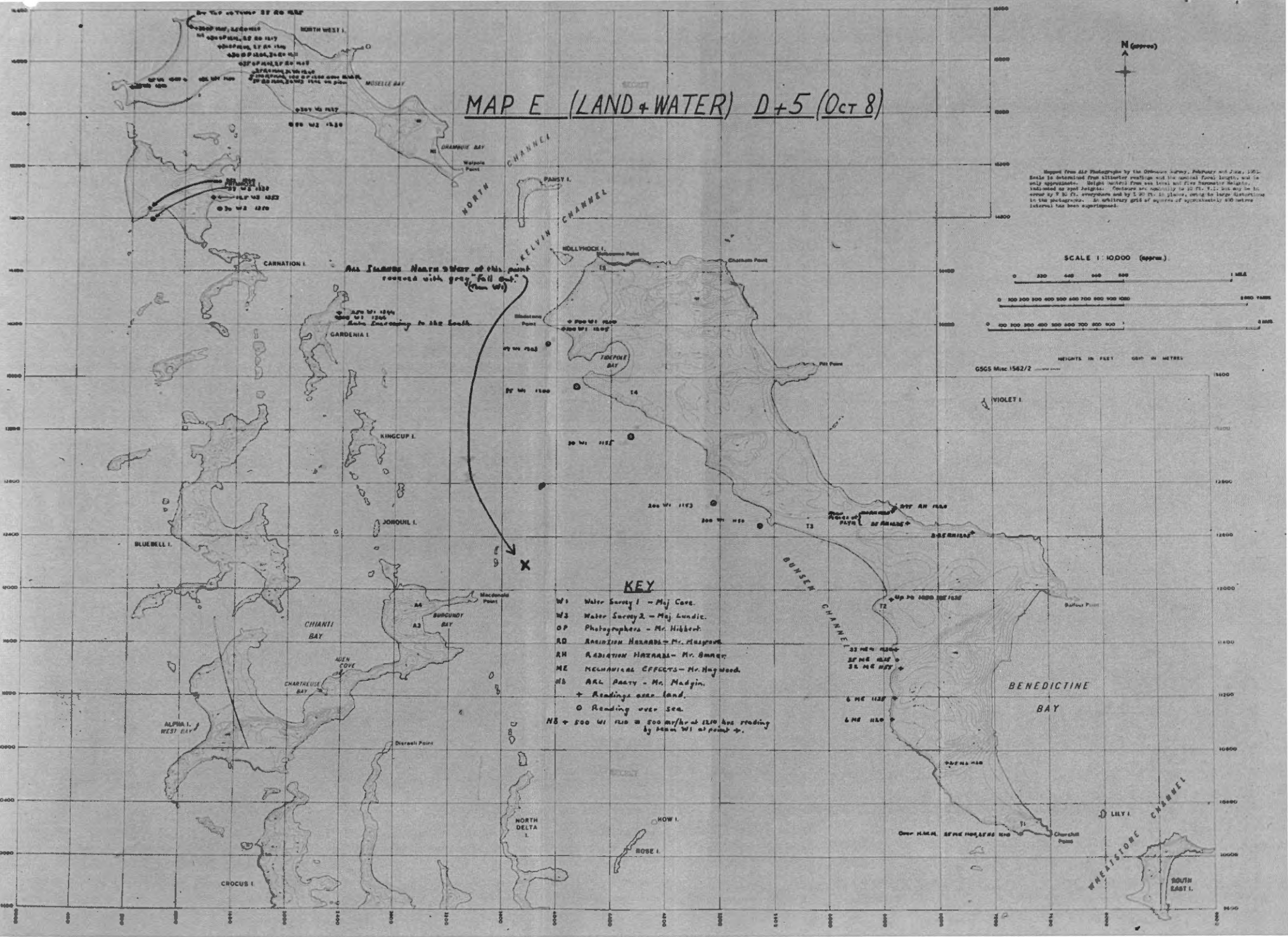


Map from Air Photographs by the Ordnance Survey, February and June, 1951. Scale is determined from altimeter readings with the national T.M. length, and is only approximate. Height marked from sea level and five fathoms height indicated on spot heights. Contours are generally in 20 ft. 1:1 but may be irregular by 5 ft. or more and by 20 ft. or more, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 400 metre interval has been superimposed.

SCALE 1:10,000 (approx.)



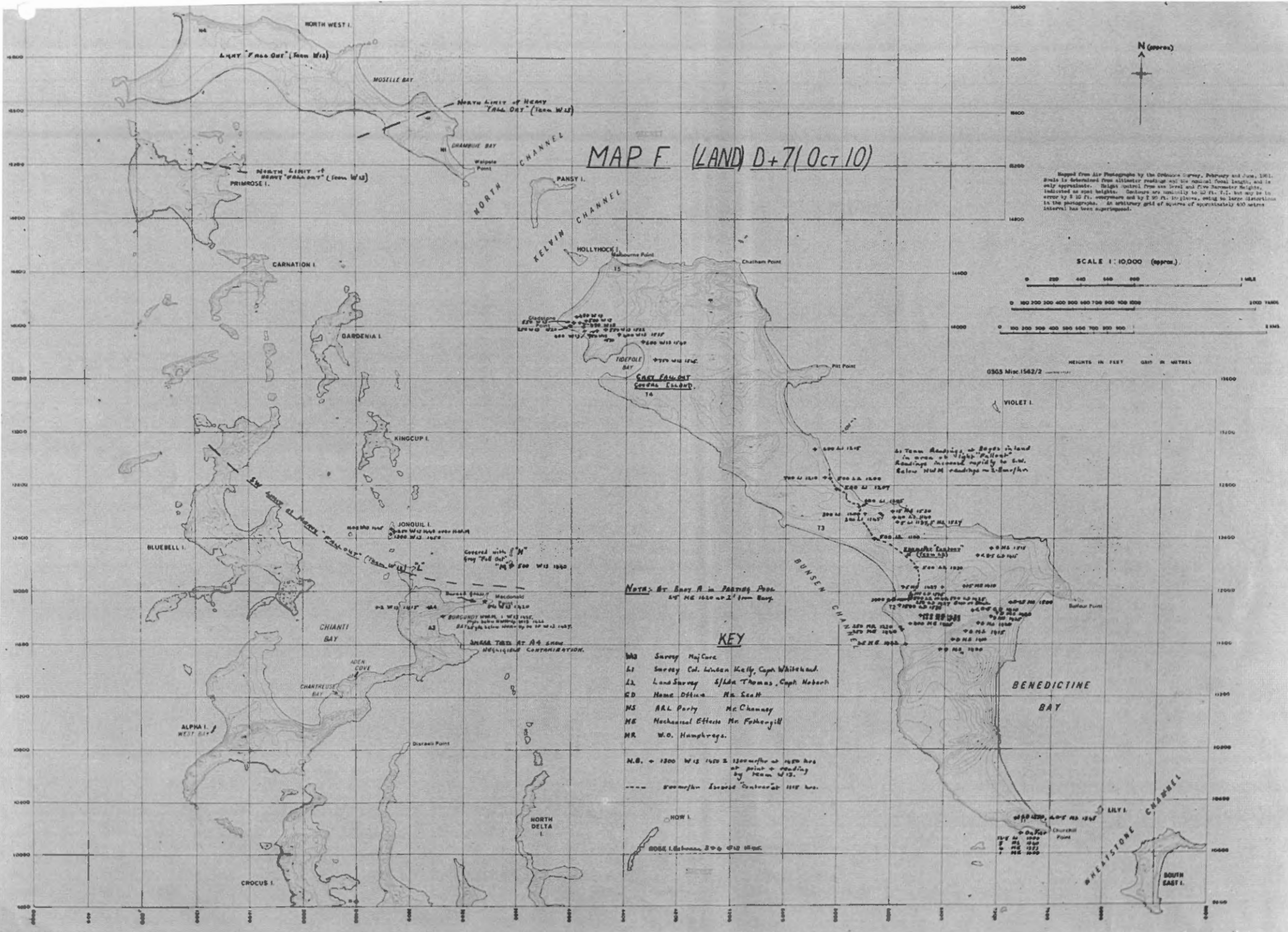
HEIGHTS IN FEET 0 200 400 600 800 1000 1200 1400
 GSGS Misc 1562/2
 0 200 400 600 800 1000 1200 1400
 METRES



All Islands North West of this point
 rounded with grey "fill out"
 (from W1)

KEY

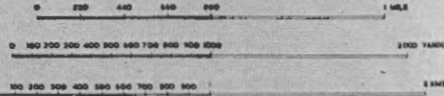
- W1 Water Survey 1 - Maj. Cove.
- W2 Water Survey 2 - Maj. Lundie.
- OP Photographers - Mr. Hibbert.
- RD Radiation Hazards - Mr. Glasgow.
- RM Radiation Hazards - Mr. Bennett.
- ME Mechanical Effects - Mr. Haywood.
- MS ARL Party - Mr. Madgin.
- + Readings over land.
- o Readings over sea.
- NS → 500 W1 1210 = 500 m/hr at 1210 hrs reading by beam W1 at point +.



MAP F (LAND) D+7 (OCT 10)

Mapped from Air Photographs by the Ordnance Survey, February and June, 1961. Scale is determined from allometer readings and the nominal photo lengths, and is only approximate. Heights indicated from sea level and Five Barometer Heights, indicated as open heights. Contours are normally to 20 ft. T.I., but may be in error by 5-10 ft. everywhere and by 1-50 ft. in places, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 400 metres interval has been superimposed.

SCALE 1:10,000 (approx.)



9303 Misc 1542/2

NOTE: At Spot A in PARTING POOL
 47 NE 1450 = 2' from East.

KEY

- MO Survey Major
- LI Survey Col. Linden Kelly, Capt Whitehead
- LI Land Survey S/Ldr Thomas, Capt Hobart
- CD Home Detachment Mr. Seah
- MS R.A.L. Party Mr. Channey
- ME Mechanical Effects Mr. Fothergill
- MR W.D. Humphreys

N.B. + 1500 WIS 1450 = 1500 m/ftr at 1450 hrs
 at point of reading
 by team W13.

--- Summer Islets Contour at 1100 m.

At Town Reading at Spot A in land
 in area of "Village" "Pit" etc.
 Readings increased rapidly to S.W.
 Below W.D.M. readings = 2-3 m/ftr

Covered with "N"
 Spot "Fall Out"
 M 500 WIS 1950

BURUNDY WALK, 1 WIS 1450,
 after below reading, WIS 1450
 500 WIS 1450

AREA TWO AT A4 SHOWS
 NEGLIGIBLE CONTAMINATION.

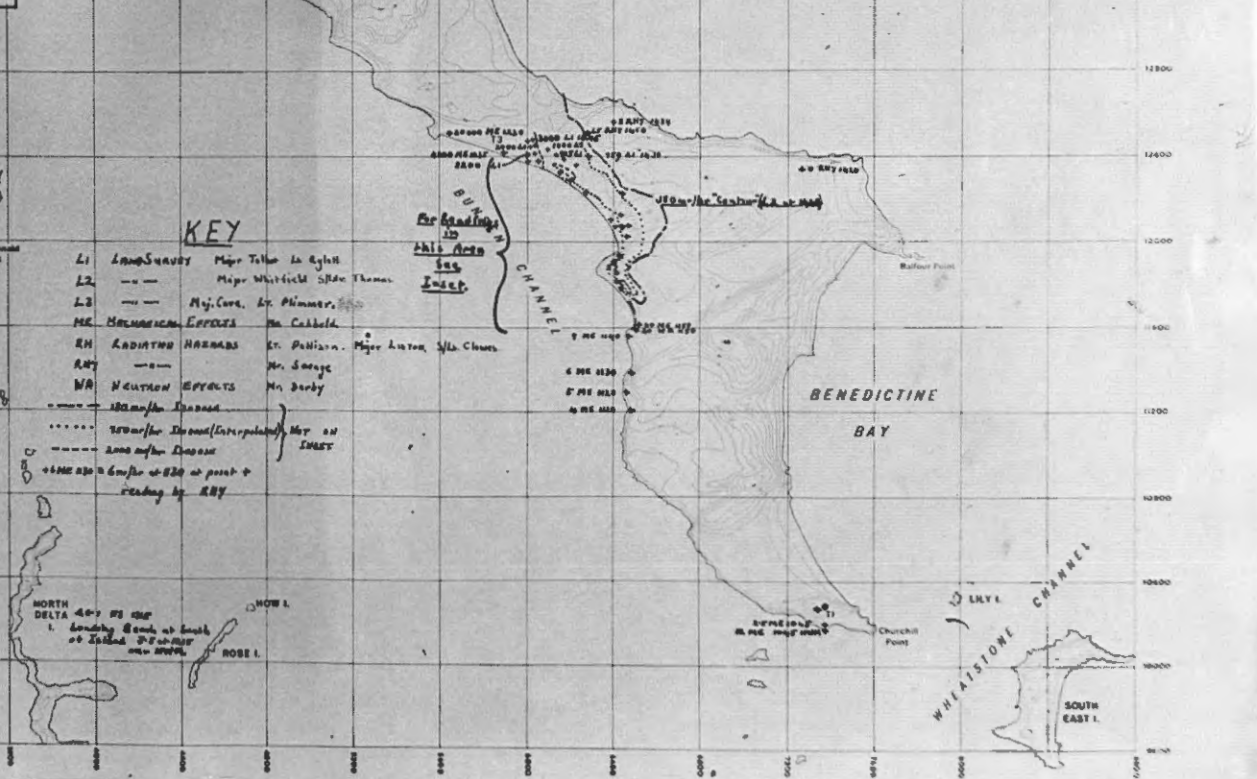
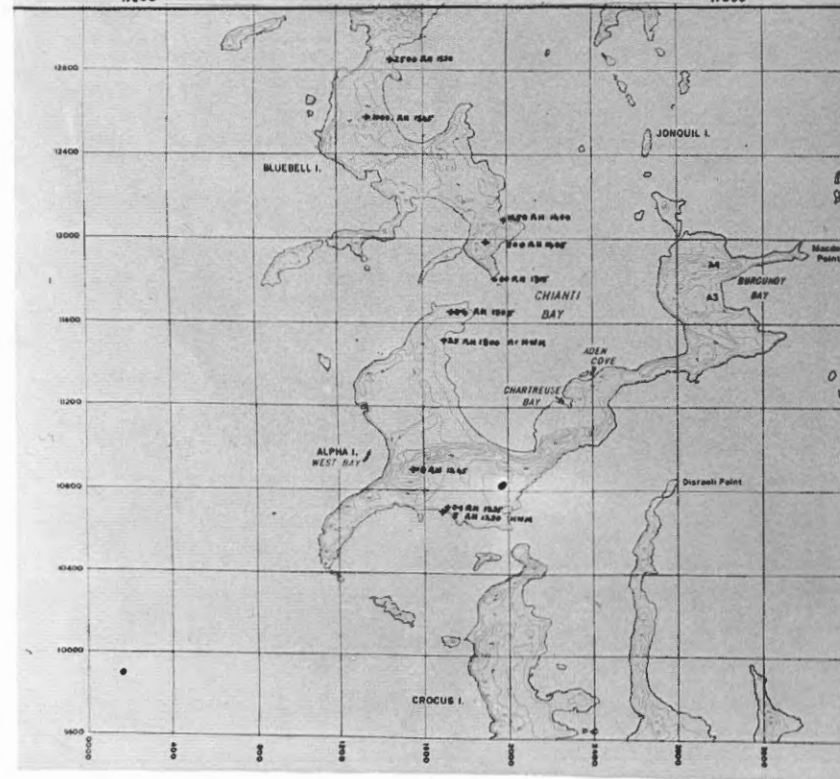
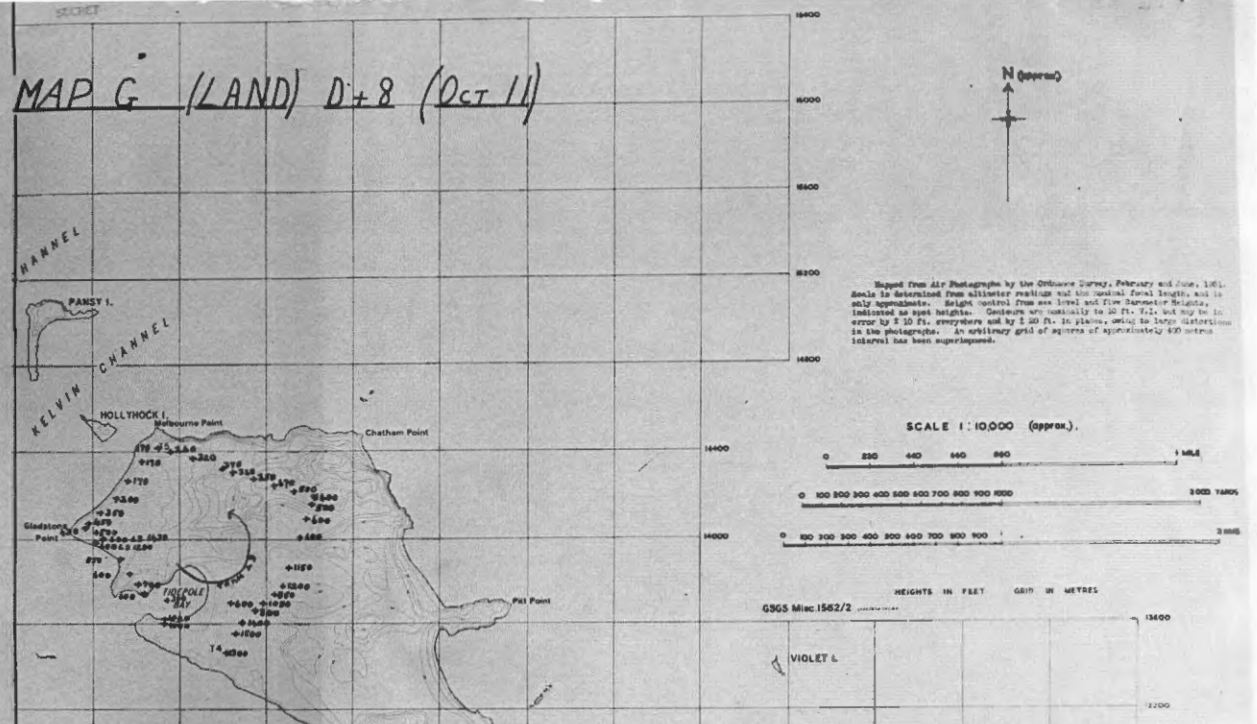
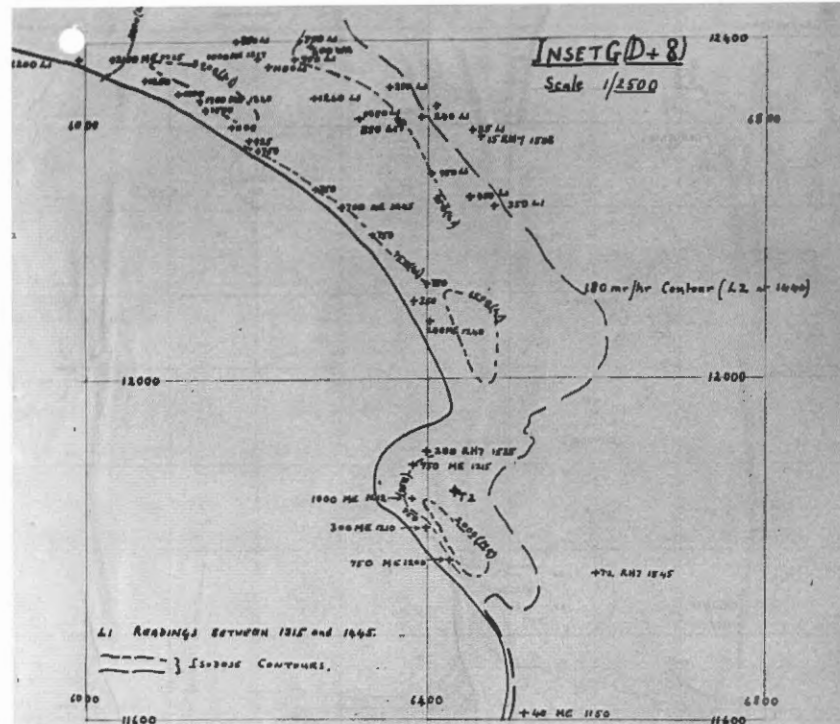
Light "Fall Out" (Team W13)

NORTH LIMIT OF HEAVY
 "FALL OUT" (Team W13)

NORTH LIMIT OF
 HEAVY "FALL OUT" (Team W13)

100000 ft
 1000 WIS 1450
 1000 WIS 1450

ROSE I. (shown 200 ft. W.D. M. 1450)



KEY

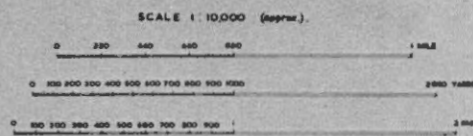
L1	Land Survey	Major: Toller, Lt. Eyles
L2	---	Major: Whitfield, S/Mr. Thomas
L3	---	Maj. Comd. Lt. Plimmer
ME	MEMORANDUM	EXPLORES: Mr. Colford
EM	RADIATION	HARRADS: St. Dennis, Major: Lister, S/Mr. Chives
AR	---	Mr. Savage
WR	WALKMAN	EXPLORES: Mr. Derby
- - - -	180 m/hr Isobase	
.....	Isobase for Isobase (Interpolated)	Not on INSET
- - - -	200 m/hr Isobase	
+400 ME	6 m/hr at 400 m point + reading by RBY	

Maped from Air Photographs by the Ordnance Survey, February and June, 1961. Details are determined from altimeter readings and the usual focal lengths, and is only approximate. Height control from sea level and true barometric heights, indicated as spot heights. Contours are normally to 20 ft. 7.5, but may be in error by 5 to 10 ft. everywhere and by 10 ft. in places, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 400 metres interval has been superimposed.

SECRET
MAP H (D+13) LAND (OCT 16) at 1330 hrs



Striped Oblique Photographs by the Ordnance Survey, February and June, 1961, scale is determined from millimeter readings and the actual focal length, and is only approximate. Height contours from one level and five barometric heights, indicated as spot heights. Contours are normally to 20 Ft. F.T. but may be in error by 5 to 10 Ft. everywhere and by 5 to 20 Ft. in places where the larger distortions to the photographs. An arbitrary grid of squares of approximately 400 metres interval has been superimposed.

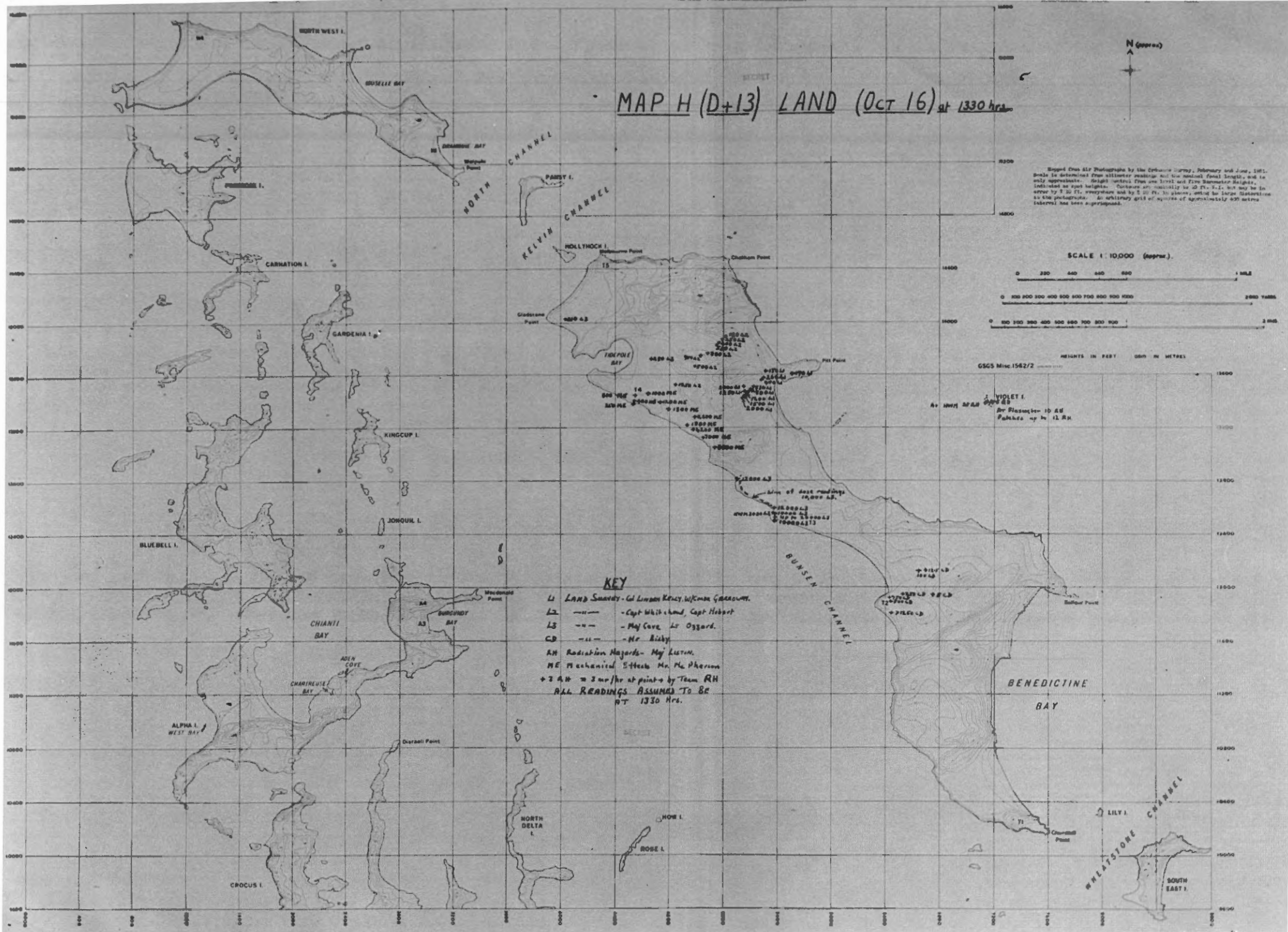


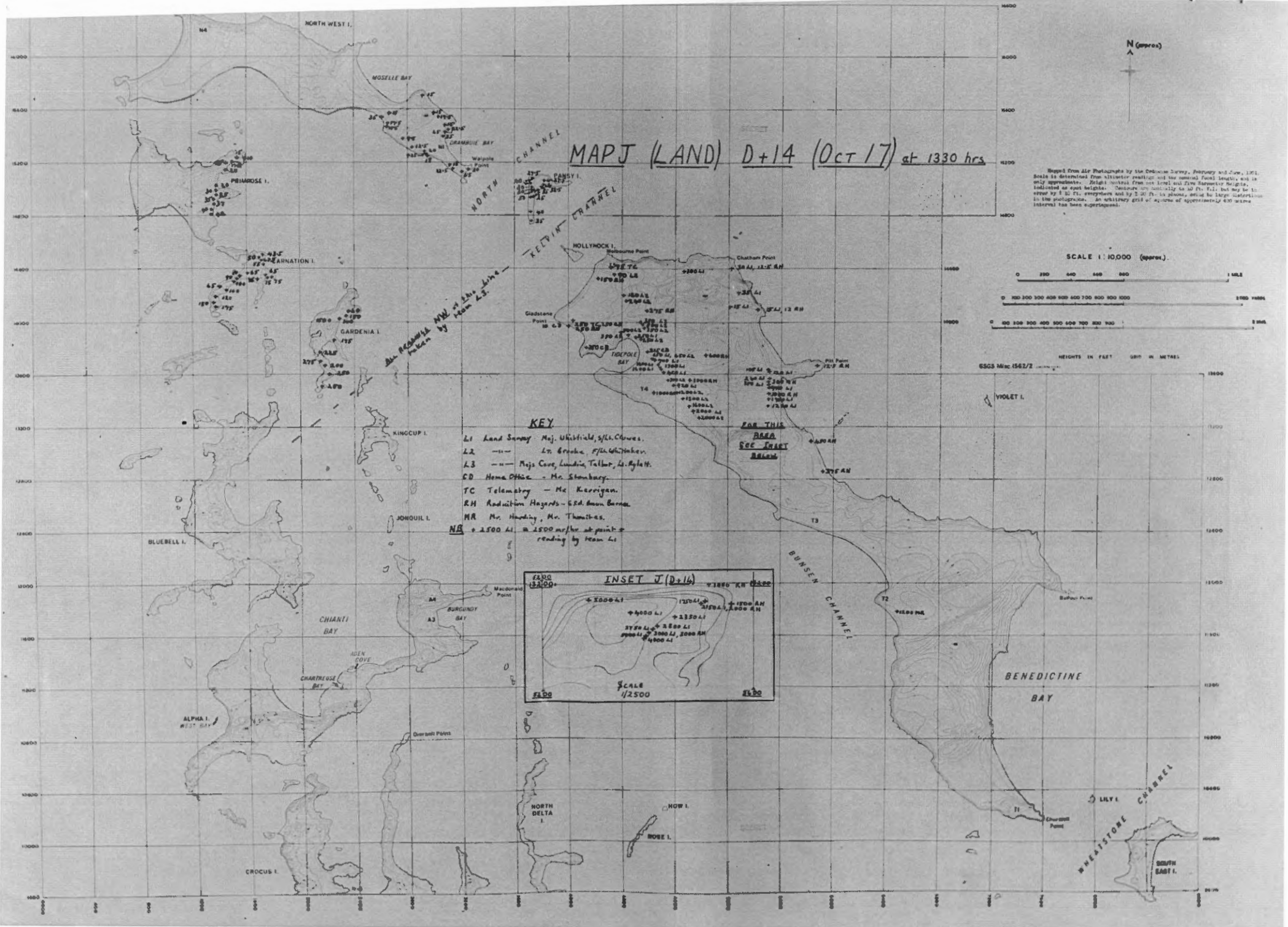
HEIGHTS IN FEET 0 200 400 600 800 1000 1200 1400 1600
 GSGS Misc 1542/2 0 100 200 300 400 500 600 700 800 900 1000
 0 100 200 300 400 500 600 700 800 900 1000
 HEIGHTS IN METRES 0 100 200 300 400 500 600 700 800 900 1000

KEY

- L1 Land Sweater - Col Linden Kelly, W/Comd GARDONIA.
- L2 --- - Capt Whitcomb, Capt Hobart
- L3 --- - Maj Cove, Lt Oggard.
- CB --- - Mr. Bixby.
- RH Radiation Hazards - Maj LESTER.
- ME Mechanical Effects - Mr. McPherson.

+ 2 RH = 3 m/hr at point - by Team RH
 ALL READINGS ASSUMED TO BE AT 1330 Hrs.

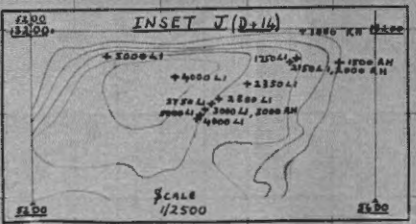




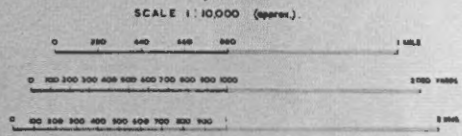
MAP J (LAND) D+14 (Oct 17) at 1330 hrs

AN RECONNAISSANCE MISSION by team L3

- KEY**
- L1 Land Survey - Maj. Whitfield, S/Lt. Cowes.
 - L2 - Lt. Brooke, F/Lt. Winkler.
 - L3 - - - - - Majs. Cope, Lumbie, Talbot, Lt. Ryland.
 - CD Home Office - Mr. Stambury.
 - TC Telemetry - Mr. Kerrigan.
 - RH Radiation Hazards - Sgt. Brown Barnes.
 - MR Mr. Harding, Mr. Thomles.
 - NR + 1500 M at 1500 meters at point reading by team L1



Map from Air Photographs by the Ordnance Survey, February and June, 1951. Scale is determined from altimeter readings and the nominal focal length, and is only approximate. Detail control from sea level and Five Hundred Height, indicated on spot heights. Contours are normally to 20 Ft. but may be in error by 5 to 10 Ft. everywhere and by 20 Ft. in places, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 400 metres interval has been superimposed.



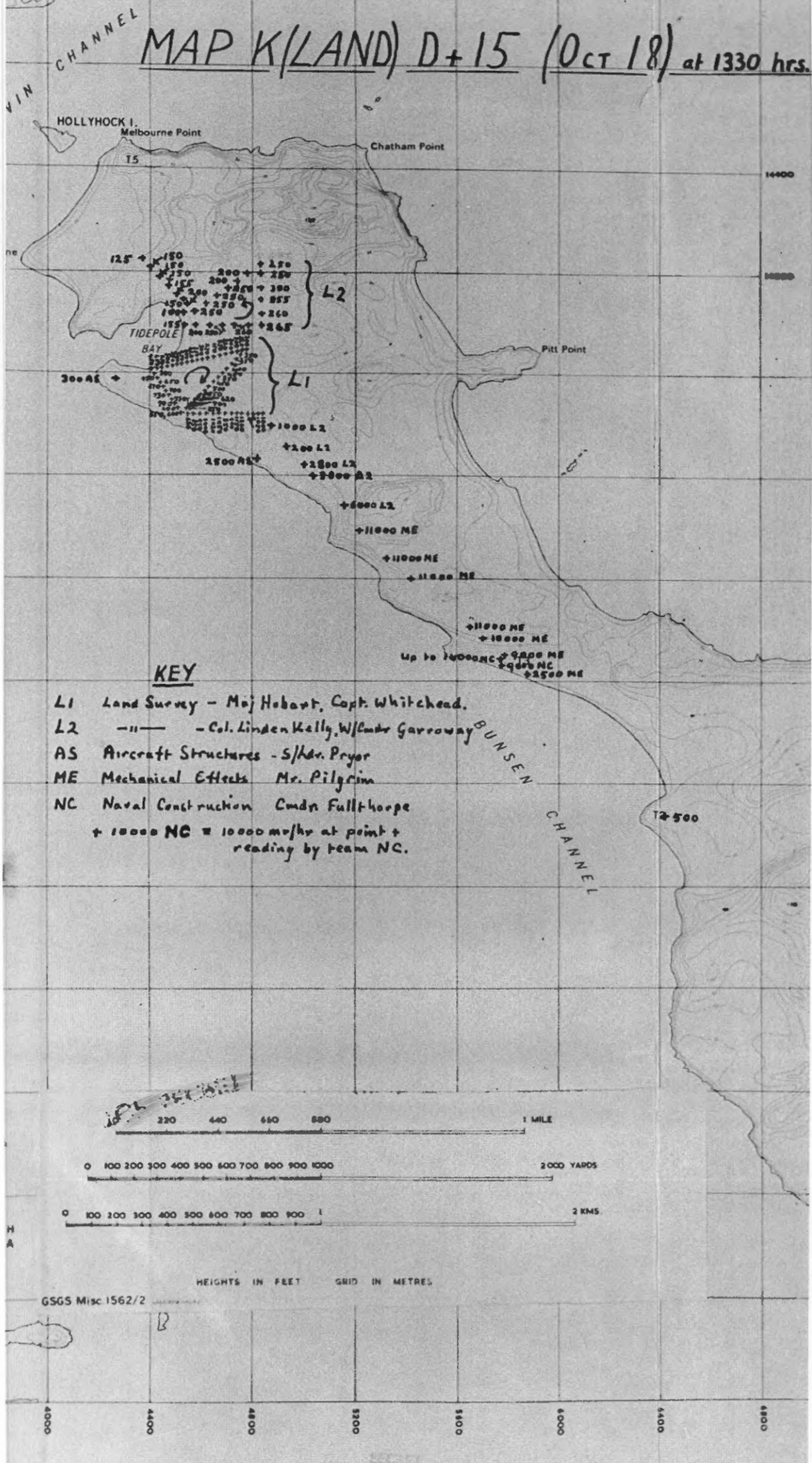
HEIGHTS IN FEET (left) METRES (right)

EGCS Merc 1562/2

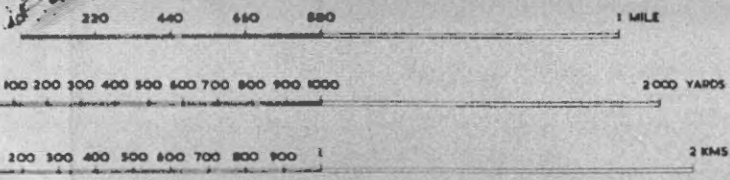
FOR THIS AREA SEE INSET BRENDA

N (approx)

MAP K(LAND) D+15 (OCT 18) at 1330 hrs.



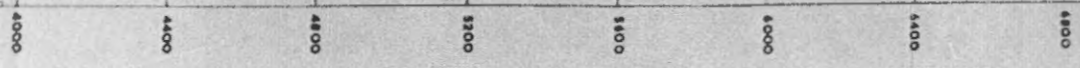
SECRET

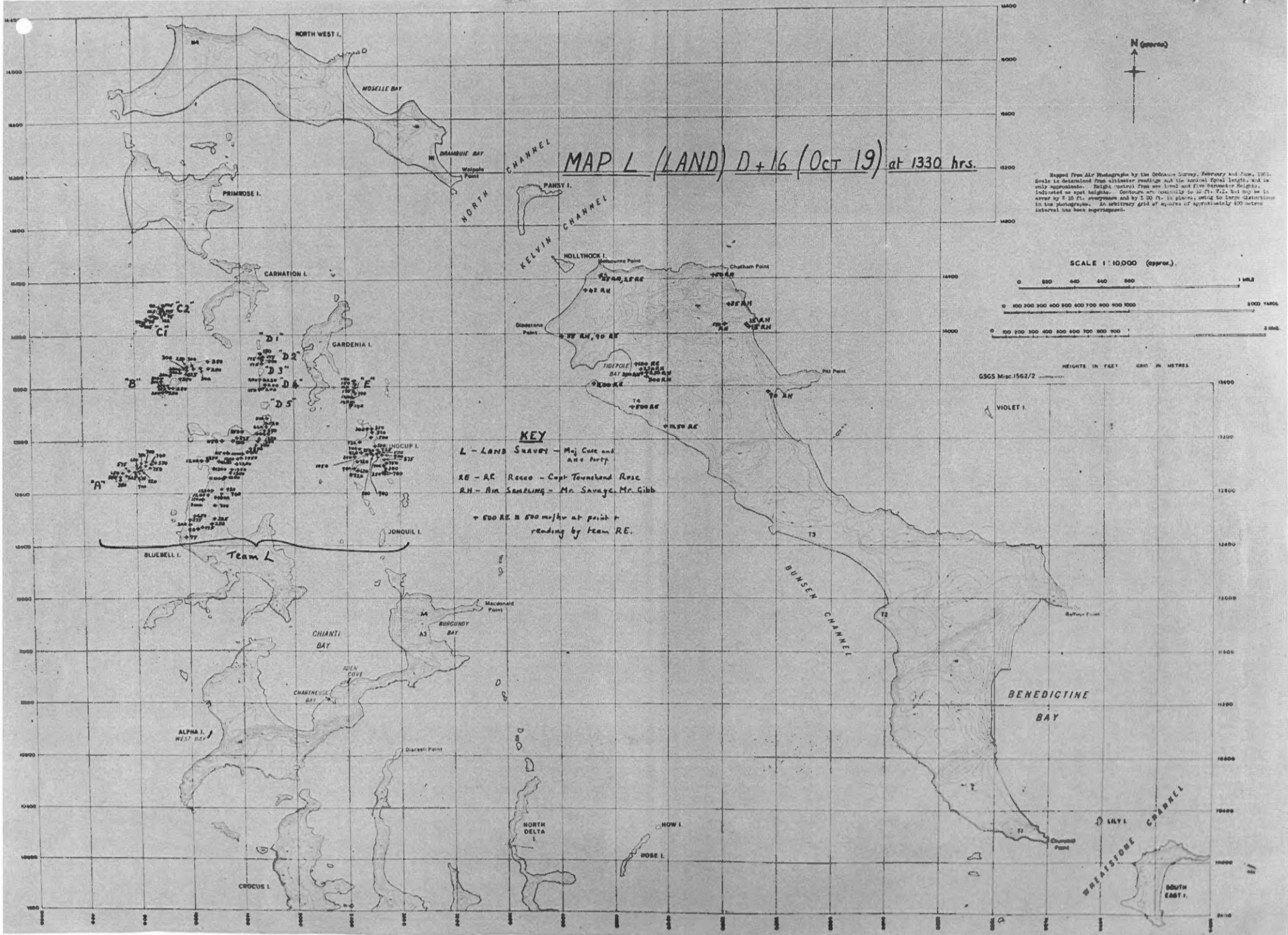


HEIGHTS IN FEET GRID IN METRES

GSGS Misc 1562/2

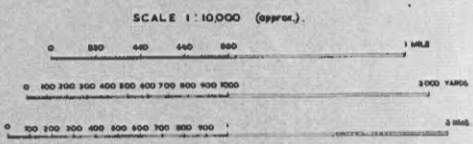
B





MAP L (LAND) D+16 (Oct 19) at 1330 hrs.

Maped from Air Photographs by the Ordnance Survey, February and June, 1961. Grids as determined from altimeter readings and the national spheroid length, and is only approximate. Height control from sea level and five aneroid heights, indicated as spot heights. Contours are normally 50 ft. but may be in error by 5-10 ft. overground and by 5-20 ft. in places, owing to large distortions in the photographs. An arbitrary grid of squares of approximately 400 metres interval has been superimposed.



KEY

L - LAND SURVEY - Maj. Case and his party

RE - RECON - Capt. Townsend Rose

RH - AIR SAMPLING - Mr. Savage, Mr. Gibb

+ 500 RE in 500 m/hr at point + reading by team RE.

HEIGHTS IN FEET 6800 IN METRES

OSGS Misc. 1562/2

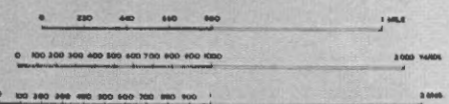
MAP M (LAND) D-18 (Oct 21) at 1330 hrs

N (approx)



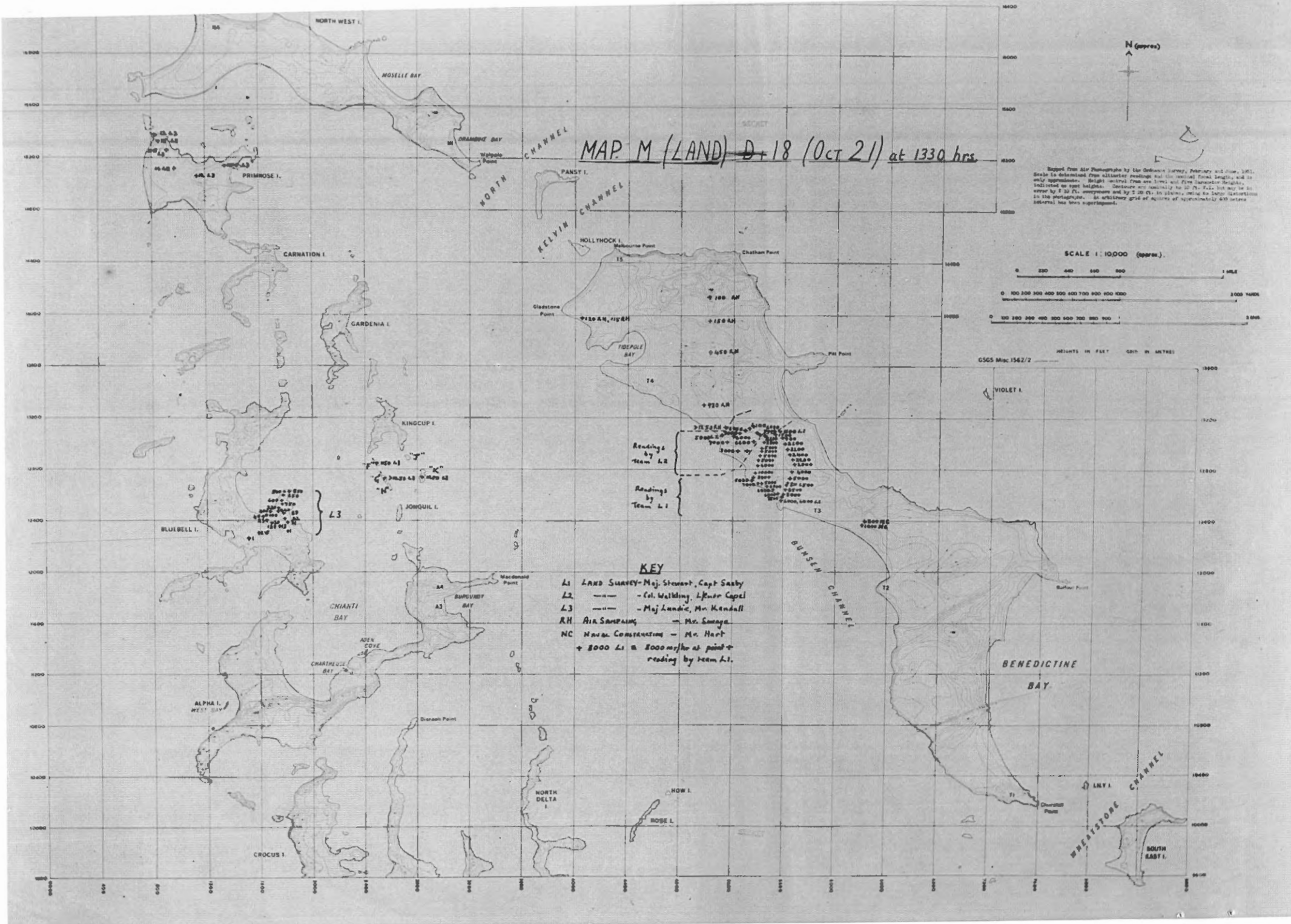
Report from Air Photography by the Ordnance Survey, February and June, 1951. Scale is determined from altimeter readings and the vertical focal length, and is only approximate. Height is not from sea level, and from horizontal height. Indicated on spot heights. Contours are normally at 20 ft. 20 ft. may be in error by 2 to 3 ft. everywhere and by 5 to 10 ft. in places, and in some circumstances in the photographs. An arbitrary grid of squares of approximately 600 yards intervals has been superimposed.

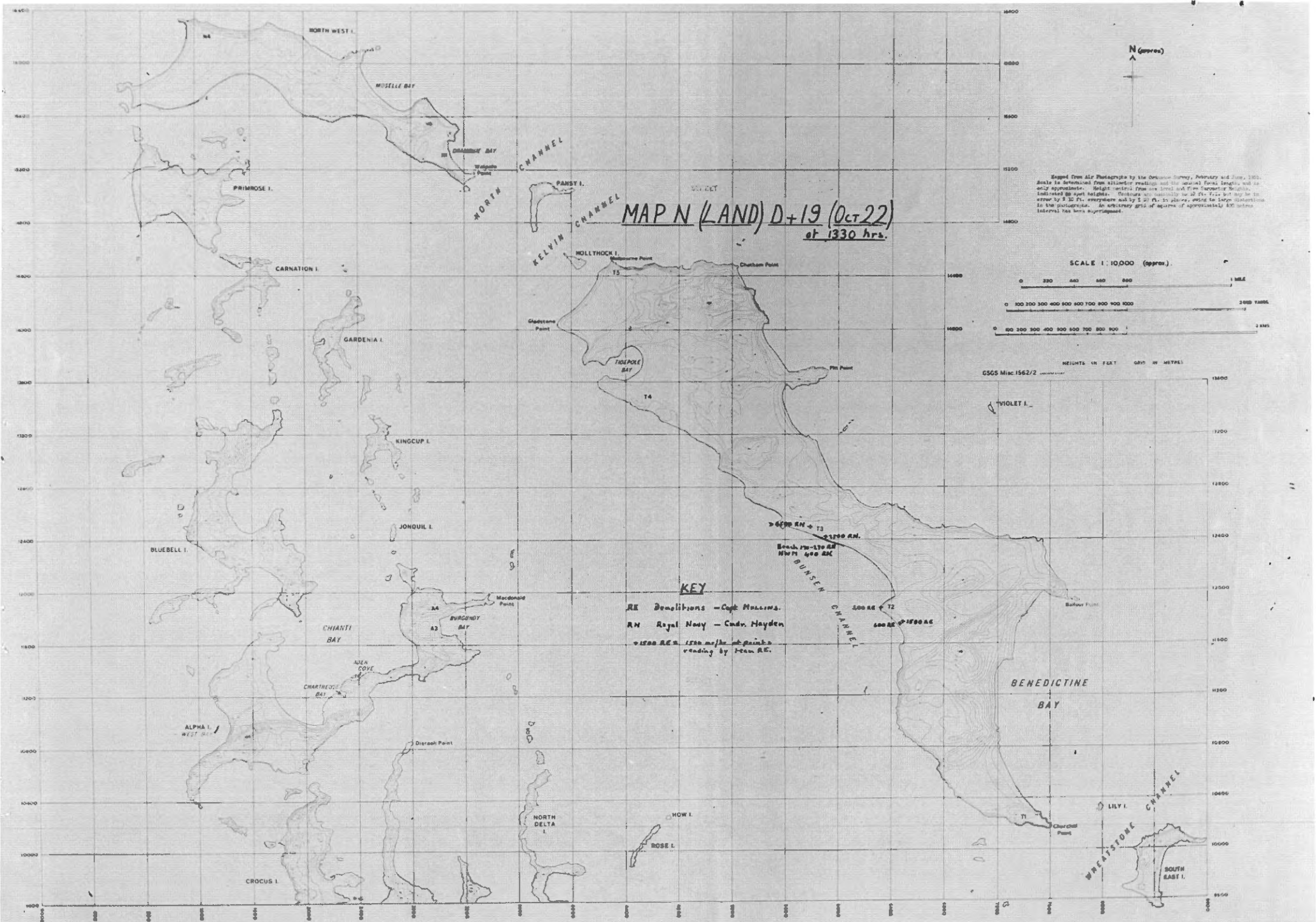
SCALE 1:10000 (approx.)



CGS Misc. 1562/2 HEIGHTS IN FEET GRIP IN METRES

KEY
 L1 LAND SURVEY - Maj. Stewart, Capt. Sasby
 L2 ———— - Col. Welling, Lt. Col. Capel
 L3 ———— - Maj. Lunnie, Mr. Kendall
 RH AIR SAMPLING - Mr. Smeay
 NC NAVAL CONSTRUCTION - Mr. Hart
 + 8000 L1 = 8000 m/ho at point + reading by team L1.

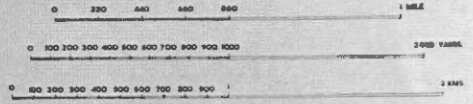




MAP N (LAND) D+19 (Oct 22)
at 1330 hrs.

Scanned from Air Photographs by the Ordnance Survey, February and June, 1962.
 Scale is determined from stadia measurements and the usual formula. Heights and depths are only approximate. Height control from sea level and from Fortification Heights, indicated on spot heights. Contours are possibly to 20 ft. Tidal range may be the error by 3.30 ft. everywhere and by 2.20 ft. in places, owing to large variations in the topography. An arbitrary grid of squares of approximately 400 metres interval has been superimposed.

SCALE 1:10,000 (approx.)

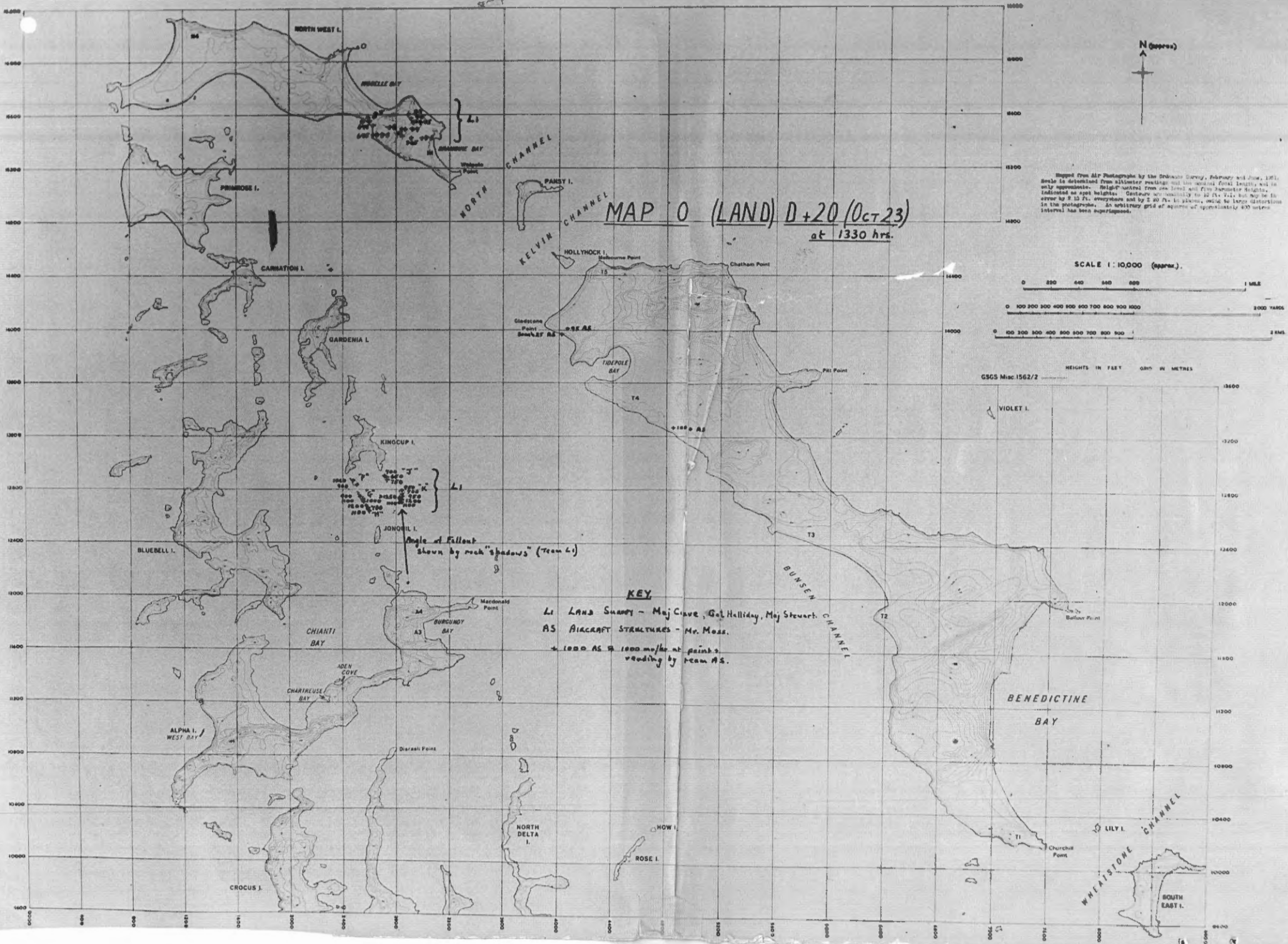


HEIGHTS IN FEET GRID IN METRES
 OS65 Misc 1562/2

KEY

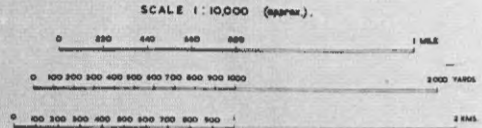
RE Demolitions - Capt. Mullins.
 RN Royal Navy - Cdr. Hayden
 1500 RE 1500 m/ft depth reading by team RE.

6000 RN + T3
 2100 RN
 Beach 170-175 RN
 NW 17 400 RN
 300 RN + T2
 400 RN + 1500 AG



MAP 0 (LAND) D+20 (OCT 23)
at 1330 hrs.

Support from Air Photographs by the Ordnance Survey, February and June, 1961.
Scale is determined from altimeter readings and the contour interval is only approximately. Height control from sea level and from datum heights indicated as spot heights. Contours are normally 10 ft. but may be in error by 5 ft. everywhere and by 20 ft. in places where large distortions in the photographs. An arbitrary grid of squares of approximately 400 meters interval has been superimposed.



KEY

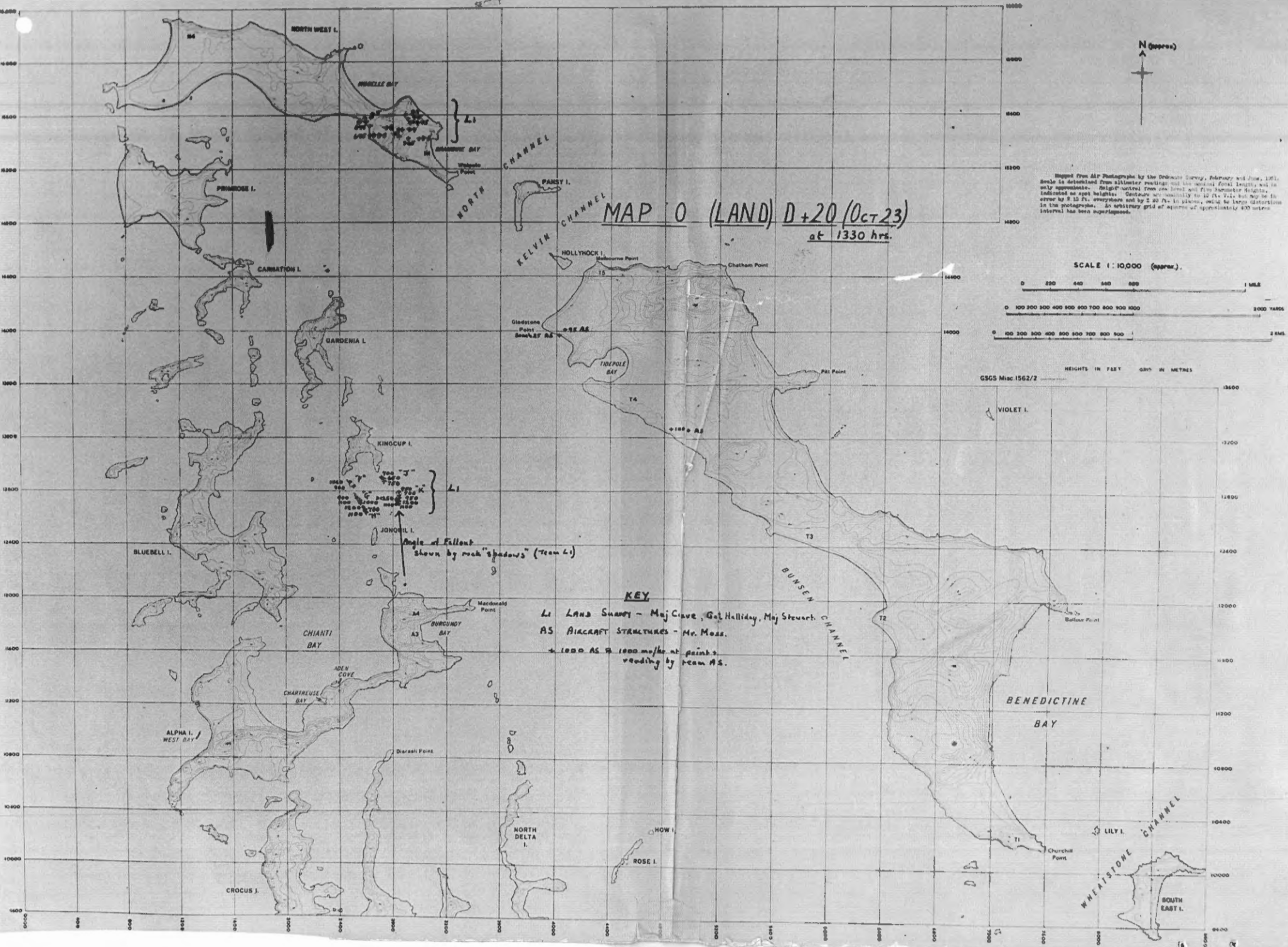
L1 LAND SURVEY - Maj. Cline, Col. Holliday, Maj. Stewart

AS AIRCRAFT STRUCTURES - Mr. Moss.

+ 1000 AS = 1000 meters at points reading by team AS.

Angle of Fallout shown by rock shadows (Team L1)

WHAISTONE CHANNEL

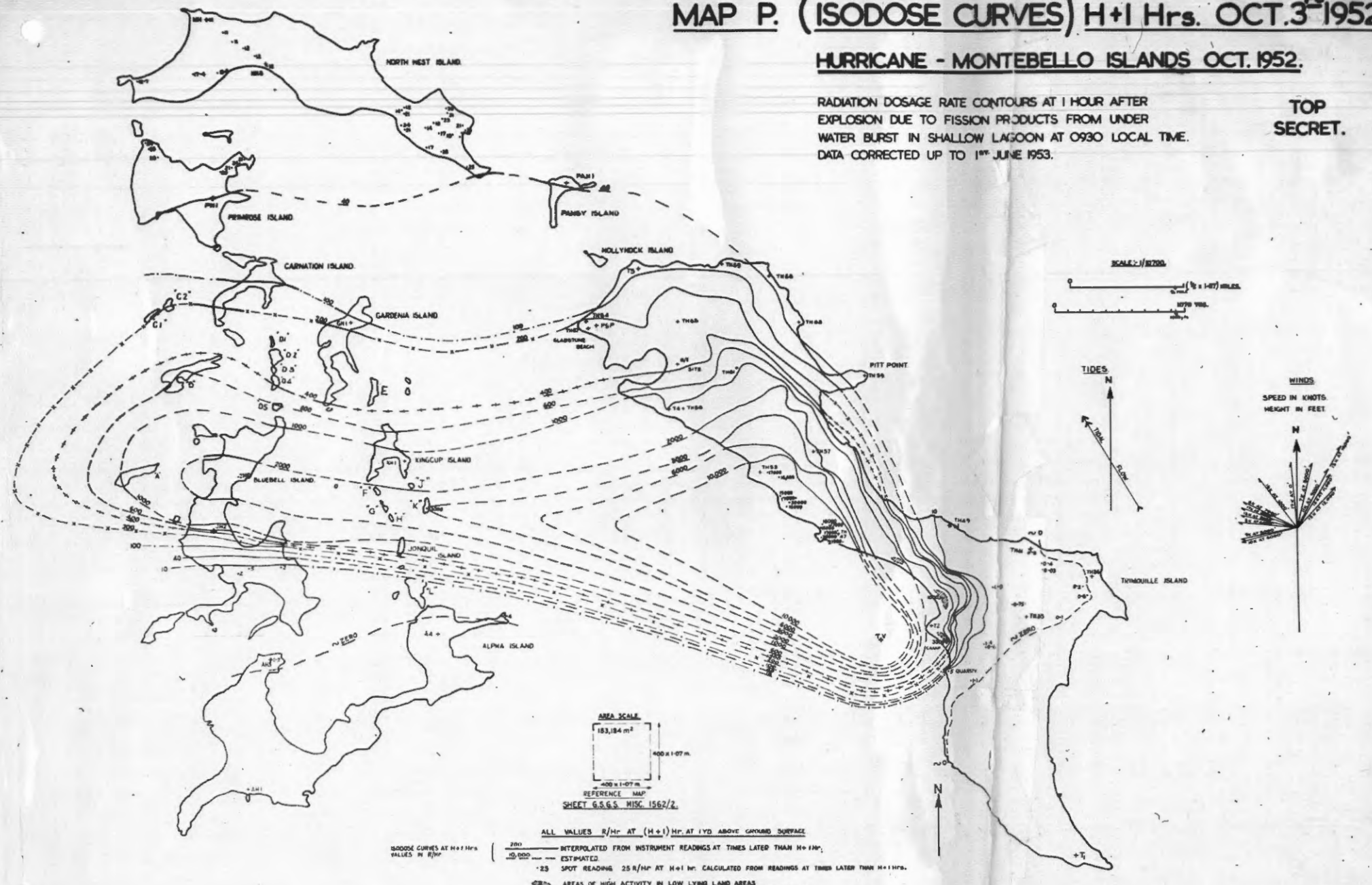


MAP P. (ISODOSE CURVES) H+1 Hrs. OCT. 3rd 1952.

HURRICANE - MONTEBELLO ISLANDS OCT. 1952.

RADIATION DOSAGE RATE CONTOURS AT 1 HOUR AFTER
EXPLOSION DUE TO FISSION PRODUCTS FROM UNDER
WATER BURST IN SHALLOW LAGOON AT 0930 LOCAL TIME.
DATA CORRECTED UP TO 1ST JUNE 1953.

**TOP
SECRET.**



ALL VALUES R/Hr AT (H+1) Hr. AT 1 YD ABOVE GROUND SURFACE

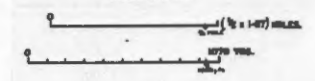
7000 ——— INTERPOLATED FROM INSTRUMENT READINGS AT TIMES LATER THAN H+1 Hr., ESTIMATED

25 ——— SPOT READING 25 R/Hr AT H+1 Hr. CALCULATED FROM READINGS AT TIMES LATER THAN H+1 Hr.

1000 ——— AREAS OF HIGH ACTIVITY IN LOW LYING LAND AREAS WITH HIGHEST RECORDED DOSE RATE WHEN KNOWN IN R/Hr AT H+1 Hr.

ALL READINGS WERE TAKEN WITH INSTRUMENTS 1 YD ABOVE GROUND SURFACE
AERE TYPE 1155 RANGES 0 - 12.5 mR/hr 0 - 125 mR/hr 0 - 125 R/hr
AERE TYPE 1155 RANGES 0 - 3 R/hr 0 - 30 R/hr 0 - 300 R/hr
CORRECTIONS APPLIED FOR ENERGY SENSITIVITY - SEE TEXT.
Area Time = 6 Hr. x 30 min.

SCALE: 1/8" = 1.47 MILES



CREDITS:

RADIATION SURVEY BY TEAM RNS (MAJOR K STEWART) 8-29 OCT 1952
INTERPRETATION BY MAJOR K STEWART, RNS
PLOTING AND DRAWING BY CAPT W BARRY, EE 811
TRACKING BY DRAWING OFFICE, M.D.S. FORT SALSTAD
CORRECTIONS AND ADDITIONS BY DRAWING OFFICE M.D.S. ALBERMANTON
PHOTOGRAPHIC REPRODUCTION BY PHOTOGRAPHIC SECTION 8 GM ALBERMANTON

SECRET

AUSTRALIA - N.W. CHART

MONTE BELLO ISLANDS

FROM A HYDROGRAPHIC SURVEY OF 1941
Contours and topography taken from air photographs, 1943.
Soundings in fathoms referred from an earlier survey.
Traverse Island S 110° E, Lat. 29° 54' S, Long. 151° 46' E.

Soundings refer to the True Compass and are given from Reduced Mean Sea Level.
All heights are referred to that about Mean High Water Spring.
For Abbreviations of Admiralty Chart 5011.

ISLANDS IN ITALICS
SHOWN FROM A FATHOM'S
SOUNDING SCALE
Natural Scale 1:50,000
Projection: Gnomonic

MAP Q METEOROLOGY

LEGEND

- - - ESTIMATED LIMITS OF CLOUD (VIEWED FROM ABOVE) AT 10,000 FT. FROM PHOTOGRAPH PAPER HI AND -M-4
- - - COLUMN AT 10 SECS
- - - MUSHROOM HEAD AT 10 SECS
- - - GROUND FLOW FALL SET LOGS FOR PARTICLES/DROPLETS FALLING AT 6 SECS SHOWN.
- - - LINE 'A' SOUTHERN BOUNDARY OF CONTAMINATION ESTIMATED FROM DIRECTION OF MUSHROOM HEAD AND WIND VECTORS. GROUND WIND EQUIVALENT TO SENI ANGLE TAN⁻¹ 1/4
- - - LINE 'B' CONTAMINATION AS TAKING OFF ESTIMATED AS ABOVE. TO THE EAST OF THIS LINE CONTAMINATION SLIGHT.
- - - LINE 'C' SOUTHERN LIMIT OF CLOUD CENTRE

TIME	HT. OF COLUMN
+ 10 SECS	~ 3200 ft.
+ 1 min.	~ 5000 ft.
+ 2 mins.	~ 8000 ft.

Prepared by
S. G. H. (60000) 20
Drawn by
Capt. W. J. G. (60000) 20
1945

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Year	1945	1946	1947	1948	1949	1950
1945	100	100	100	100	100	100
1946	100	100	100	100	100	100
1947	100	100	100	100	100	100
1948	100	100	100	100	100	100
1949	100	100	100	100	100	100
1950	100	100	100	100	100	100

Year	1945	1946	1947	1948	1949	1950
1945	100	100	100	100	100	100
1946	100	100	100	100	100	100
1947	100	100	100	100	100	100
1948	100	100	100	100	100	100
1949	100	100	100	100	100	100
1950	100	100	100	100	100	100

