ORKUSTOFNUN
NATIONAL ENERGY AUTHORITY
HYDRO ENERGY DIVISION

Gunnar Thorbergsson

MAPPING OF ICELAND IN SCALE 1:50,000

Control Surveys in Increments 1 and 2

OS82043/VOD06
Reykjavík, May 1982

By Contract with
Iceland Geodetic Survey

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GRENSÁSVEGUR 9,
108 REYKJAVÍK ICELAND

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Abstract

Field work in 1981 in Western Iceland and Vestmannaeyjar islands, by contract with Iceland Geodetic Survey, and data processing are described. List of Coordinates with ground control points, idendified and described on airial photos, is given.

Ágrip (Summary in Icelandic)

Samningur milli Landmælinga Íslands og Orkustofnunar um mælingar á Vesturlandi og í Vestmannaeyjum var gerður 1981. Samkvæmt honum hafa landmælingamenn Orkustofnunar mælt inn myndpunkta vegna kortagerðar í mælikvarða 1:50.000 í svæðum 1 og 2 (Mynd 1). Þessi númer mælisvæða eru í samræmi við áætlun um myndmælingar, sem Defence Mapping Agency gerði og lét fylgja með loftmyndunum.

Landmælingar Íslands höfðu áður mælt inn myndpunkta í báðum svæðum, en eftir var að mæla inn punkta í eyjum á Breiðafirði og í Vestmannaeyjum og nokkra punkta á Vesturlandi.

Hnit og hæðir myndpunkta er að finna í hnitalista (2.2 List of Coordinates). Í samræmi við áætlun um myndmælingar, voru lýsingar af öllum punktum, sem skráðir eru í hnitalista, skráðar aftan á loftmyndirnar, sem notaðar voru úti á foldinni. Myndirnar með lýsingunum verða afhentar Landmælingum Íslands með skýrslu þessari. Loftmyndir, ásamt lýsingum myndpunkta er að finna í smækkaðri mynd aftast í skýrslunni.

Verk það, sem hér er lýst, er framhald mælinga Orkustofnunar fyrir Landmælingar Íslands á árunum 1977-80. Niðurstöður mælinga á áður fullmældum svæðum hafa birst áður. Sjá tilvísanir á bls. 4.

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1. Introduction

A contract between the Iceland Geodetic Survey and the National Energy Authority was signed in 1981, according to which NEA's surveyors have established ground control in islands in Increments 1 and 2 and a few points inland in Increment 1 (Fig. 1). This identification of survey areas (as Increments) agrees with a Photogrammetric Plan compiled by Defence Mapping Agency, Washington, D.C., provided together with the airial photos used. Some ground control had been established previously in both Increments by the Iceland Geodetic Survey.

Coordinates and elevations of ground control points are given in the List of Coordinates, section 2.2 of this report. As specified in the Photogrammetric Plan, descriptions of all ground control points are given on the photographs used in the field. The photos will be handed to the Iceland Geodetic Survey at the same time as this report. Reproductions of the photos and sketches of ground control are given in Appendix B.

The work described in this report is a continuation of work done by NEA in 1977-80. Results for other fully controlled areas were given in previous reports <1>, <2>.

<1> Gunnar Thorbergsson: Mapping of Iceland in scale 1:50,000. Control Surveys in Increments: 2,3,4,5. National Energy Authority. OS79006/ROD03. Reykjavik, February 1979.

<2> Gunnar Thorbergsson: Mapping of Iceland in scale 1:50,000. Control Survey in Northwestern Iceland. National Energy Authority. OS82033/VOD05. Reykjavik, March 1982.

2. Results

The results of NEA's field work consist of coordinates and elevations of ground control points as given in the List of Coordinates (2.2) and descriptions of the same points as sketched in the field (Appendix 2).

2.1 Coordinate systems

Iceland 1956 Datum (Hjörsey Datum) was established during the first order triangulation in Iceland 1955/56. The 1930 International spheroid was used.

Lambert's coordinates obtained by orthographic projection onto a cone touching the spheroid at latitude 65 degrees north, with central meridian at longitude 18 degrees west, are in general use in Iceland. The false origin is obtained by a shift of 500000 meters in each coordinate. This coordinate system is used in the computations following the surveys in Increments 1 and 2.

UTM-coordinates are used for the final results in the List of Coordinates. Iceland lies in grid zones 26W, 27W and 28W, and for these three zones the zone digits are 6, 7 and 8 respectively. The zone digit is the leftmost digit in the east-coordinate of a point.

2.2 List of Coordinates

A list of coordinates is given on the following three pages. Names of ground control points are as follows:

HVPP horizontal-vertical picture point

HPP horizontal picture point

VPP vertical picture point

followed by the number of the photo on which the point was identified and described.

Increment 1 UTM-coordinates

x-north	y-east	elev.	name
7239695.3	7424966.1		HPP-0913
7245288.5	7426822.7		HPP-0915A
7245157.3	7426709.1		HPP-0915B
7244143.3	7423207.5		HPP-1013
7239634.6	7412511.5		HPP-1143A
7240705.6	7416002.8		HPP-1143B
7235786.8	7413543.5		HPP-1145A
7235894.6	7413745.5		HPP-1145B
7230203.6	7416190.5		HPP-1147A
7230646.8	7416734.1		HPP-1147B
7251408.6	7430651.3		HPP-1831A
7251779.7	7431793.7		HPP-1831B
7246371.1	7429329.7		HPP-1833A
7246300.6	7429480.4		HPP-1833B
7239131.3	7431035.4		HPP-1835
7250348.5	7441284.7		HPP-2379
7146160.2	7436938.7		HPP-2415A
7145966.5	7436926.2		HPP-2415B
7146067.7	7442067.0		HPP-2417A
7146057.9	7441903.4		HPP-2417B
		120.1	VPP-2434
7223458.3	7425148.1		HPP-3103
7224419.4	7418788.5		HPP-3105A
7227890.2	7421943.9		HPP-3105B
7225722.2	7414834.1		HPP-3107A
7225968.5	7415247.7		HPP-3107B
7220800.3	7405287.5		HPP-3109A
7220607.3	7405314.3		HPP-3109B
7221892.4	7415582.8		HPP-3113A
7221656.2	7415254.4		HPP-3113B
7218351.2	7413636.9		HPP-3511A
7217548.1	7410405.6		HPP-3511B

Increment 1 UTM-coordinates

x-north	y-east	elev.	name
7214894.3	7404927.3		HPP-3513A
7214863.9	7404742.7		HPP-3513B
7215161.2	7401621.4		HPP-3515A
7215187.5	7401748.2		HPP-3515B
7247205.5	7438049.1		HPP-3525
7227876.6	7433486.9		HPP-3531
7171981.2	7431094.9		HPP-3553
7168715.3	7428640.8		HPP-3569A
7167914.2	7427427.8		HPP-3569B
7221877.8	7430519.1		HPP-3589
		224.2	VPP-3724
		118.4	VPP-3740
		290.9	VPP-3858
7207600.5	7489879.9	712.0	HVPP-3863
		523.9	VPP-4238
7209042.5	7391246.4		HPP-4783A
7208892.0	7391380.5		HPP-4783B
7183474.6	7449361.6	68.5	HVPP-5359
		402.5	VPP-5378
7259623.6	7468289.4		HPP-6887
		416.9	VPP-9084
		84.1	VPP-9120
7208751.2	7500443.8	283.1	HVPP-9515

Increment 2 UTM-coordinates

x-north	y-east	elev.	name
7034691.6	7536235.1		HPP-9059A
7036145.4	7540500.0		HPP-9059B
7037742.2	7540980.9		HPP-9059C
7029515.3	7531677.1		HPP-9061A
7030758.0	7535679.1		HPP-9061B
7022732.7	7530156.1		HPP-9063A
7025790.4	7531664.5		HPP-9063B
7021309.7	7525187.2		HPP-9065A
7021219.6	7525117.8		HPP-9065B

3. Field work

In 1980 a 60 km long traverse in Increment 8 was measured between triangulation points 0132 (Bakkasnjaafjöll) and 1256 (Hjardarnes) in order to position three points along the north coast of Breidafjördur. Distances were measured with Tellurometer MRA-101 and angles with Wild-T2 theodolites. The mean error of unit weight (direction) was 5.0 seconds and the maximum error in coordinates was 0.36 meters.

In 1981 a second traverse, 70 km long, was measured from 7042 (Mulatafla) south across Breidafjördur to triangulation point 0104 (Bjarnarhafnarfjall). This second traverse lies in Increment 1. Distances were measured with Geodimeter 14A and angles with Wild-T2 theodolites. The mean error of unit weight (direction) was 2.6 seconds and the maximum error in coordinates was 0.21 meters.

4. Methods

4.1 Triangulation and traversing

For a detailed description of the methods used by NEA in triangulation and traversing, see reference <1>, page 04.

4.2 Polar measurements

Polar or radial measurements were used in the control survey. One surveyor is transported to the 'pole', which (at the time of computation) is a known point. At the pole, the horizontal angle between a reference point and (usually) a light set up at the other instrument site (ground control point) is measured. The vertical angles are observed at both sites simultaneously and the distance between the two points is measured with Tellurometer MRA-101 or Geodimeter 14A.

4.3 Auxiliary points

A ground control point, situated a few tens of meters away from the instrument site, is positioned with one of a number of special methods. The methods include measurement of horizontal angles, horizontal distance with tape, levelling, stadia tachymetry, as well as electronic distance measurements.

5. Computations

Nearly all computations are done by computer. The types of records and the computer programs used will by mentioned here.

5.1 Record types

Coordinate records with coordinates and elevations of triangulation points and other points are used by most of the programs.

Measurement records in triangulation or traversing contain either observed horizontal angles or measured distances.

Polar measurement records contain results from two field books as recorded at the pole and at the other endpoint.

Auxiliary point measurement records contain the results of the simple measurements used in positioning auxiliary points.

5.2 Computer programs

Program GTRFX is used to compute refractive index from observations of barometric pressure and dry and wet temperatures.

Program TRIANG is used for adjustment of triangulation and traverse measurements. Up to 44 unknown points may be simultaneously adjusted.

Program POL is used for computation of coordinates and elevations of points positioned by polar measurements.

Program GTAUXIL is used for computation of coordinates and elevations of auxiliary points.

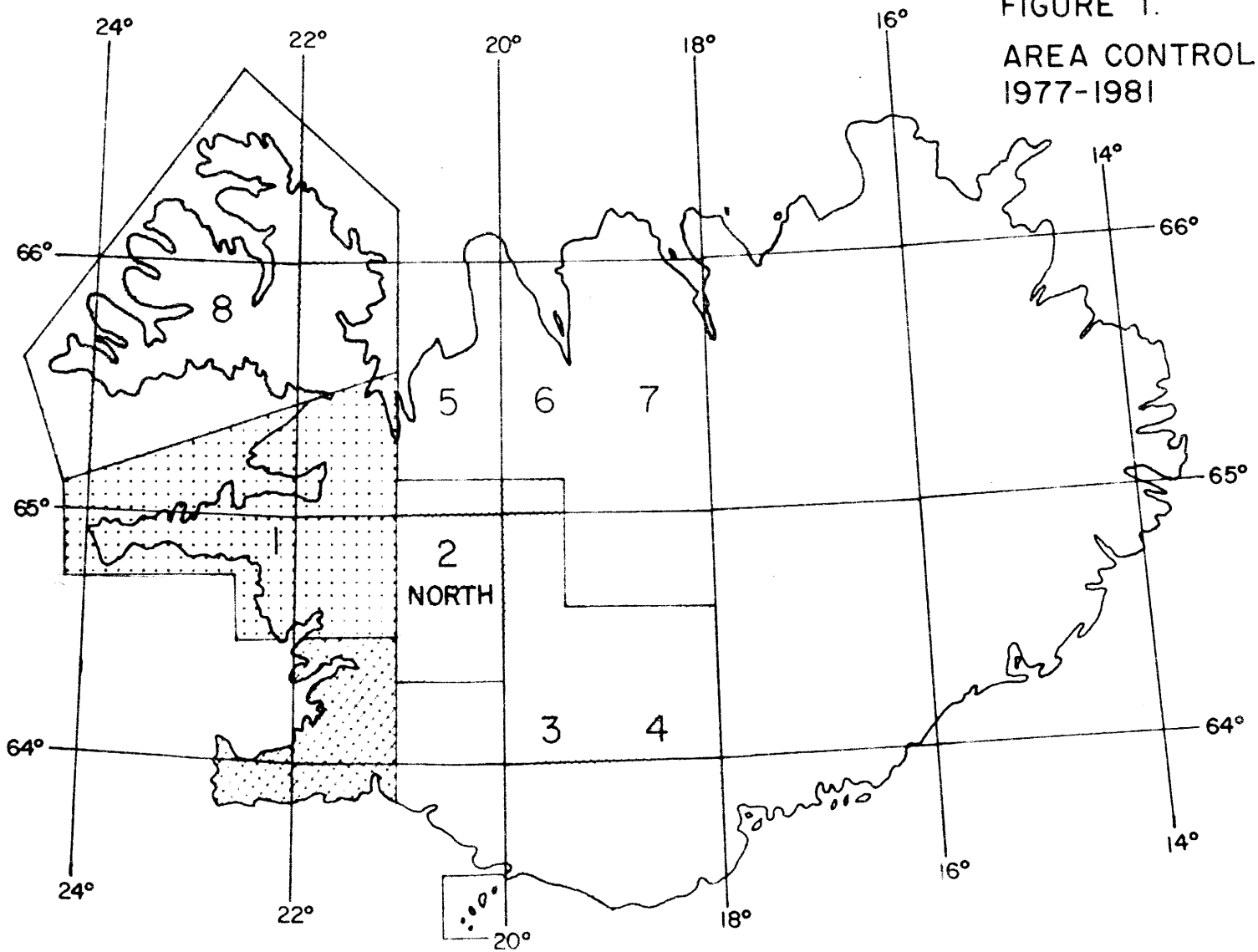
Programs LAMGEO and GEOUTM are used to transform Lambert coordinates into UTM-coordinates.

Program HVPP is used to list picture points.

VOD LM 900-GP
82-03-0553

FIGURE 1.

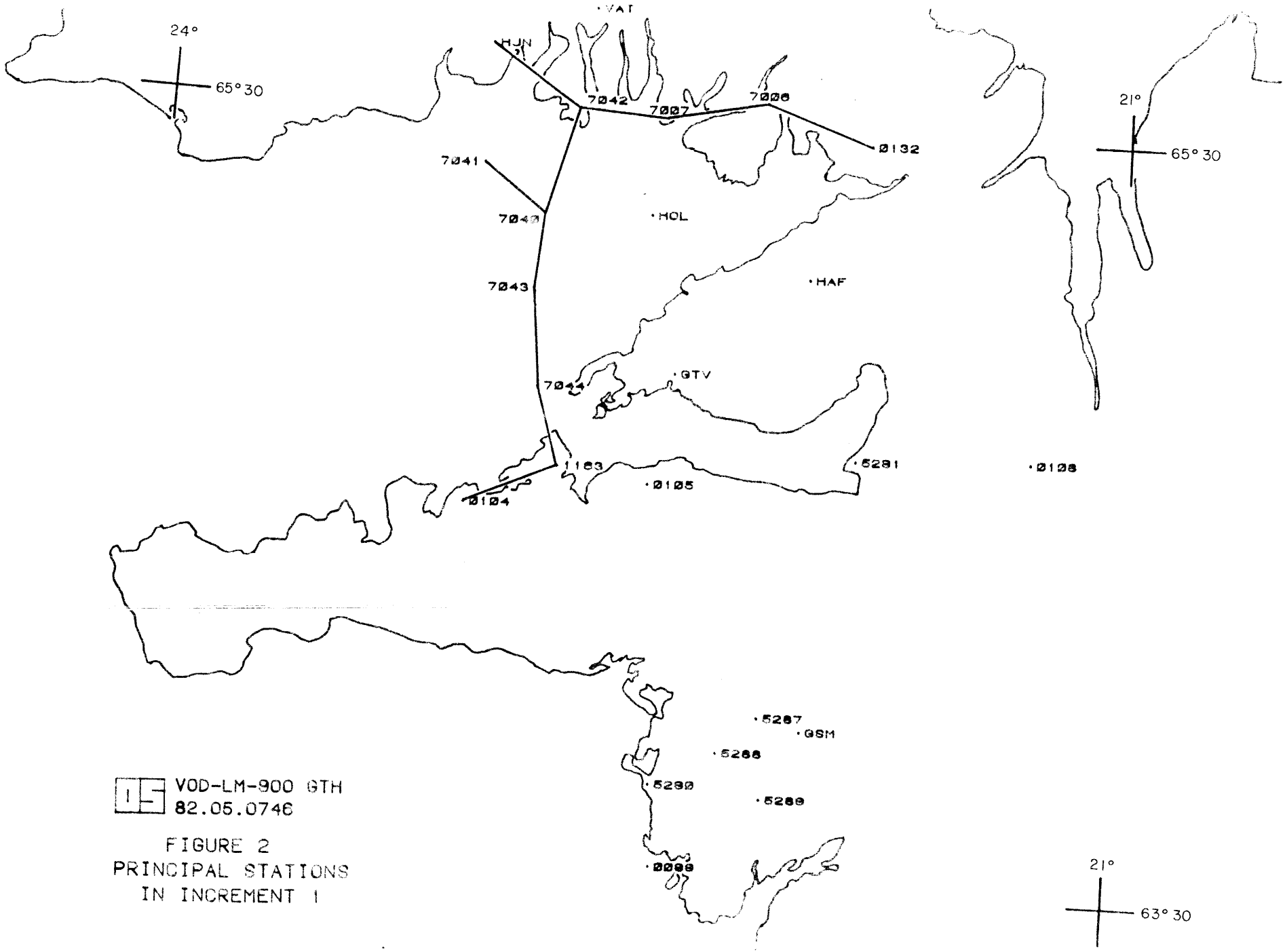
AREA CONTROLED BY NEA
1977-1981



AREA MAPPED 1961

CONTROLLED AREA

PARTIAL CONTROL



VOD-LM-900 GTH
82.05.0746

FIGURE 2
PRINCIPAL STATIONS
IN INCREMENT 1

Appendix 1
Computer input/output

Sea level observations were made near Hvalsá in Kollafjördur in 1980. 42 hourly observations were made on August 17.-19. with barometer readings every third hour. The elevation of point GT36 was computed as 1.20 meters above mean sea level. Sea level observations in 1981 are given in Table I.

Table I SEA LEVEL OBSERVATIONS July and August 1981

Point name	Date d/m	Time h/m	Height o. sea	Time-diff.	Ratio m	R T	E T0	Y T1	K Z0	J Z1	A Z	V	I	K	Altitude sea	rnt.
GT04/30	21/7	2000	-050	+030	1.00	1930	1510	2125	038	370	299				086	036
1307/00	09/8	1545	603	+042	1.09	1503	1334	1952	276	140	258				049	652
1008/30	15/8	1650	020	-	-	1608	1219	1831	033	381	268				061	081
1010/30	-	1708	000	-	-	1626	-	-	-	-	293				087	087
1011/00	-	1840	420	-	-	1758	-	-	-	-	374				176	596
1262/30	17/8	1500	100	-	-	1418	1331	1941	006	401	022				-209	-109
1139/00	-	1745	810	-	-	1703	-	-	-	-	248				039	849
1046/30	-	1830	000	-	-	1748	-	-	-	-	317				113	113
KL2/00	19/8	1030	290	-	-	0948	0840	1449	372	013	343				142	432
KL8/00	20/8	1210	000	+348	0.40	0822	0319	0924	015	363	339				050	050
KL9/00	20/8	1700	000	-	-	1312	0924	1534	363	030	137				-030	-030

Formula: Z = m*(Z0 + (Z1 - Z0)*(sin(PHI/2*(T - T0)/(T1 - T0)))**2 - 213)

T is time. Z is height of sea level. All heights and altitudes in centimeters.

Table II OBSERVATIONS IN TRAVERSE NORTH OF BREIDAFJORDUR

stat	pnt	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	note	ecc. (mm)(cm)
0132	HAF	7006	970474.0	RHF	1215240.0		0.0		0.0		0.0	9994	2789071.9
7006	0132	7007	1664832.0		0.0		0.0		0.0		0.0		0.0
7007	7006	HOL	1189900.0	7042	2165165.0		0.0		0.0		0.0		0.0
7042	7007	7040	1128781.0	HJN	2343093.0		0.0		0.0		0.0		0.0
HJN	VAT	7042	630362.0		0.0		0.0		0.0		0.0	9992	1057030.6

stat	ret. pnt	end pnt	distance (cm)	a pri. error (cm)	stat. height (cm)	end height (cm)		note	ecc. (mm)(cm)
0132	HAF	7006	1637302.0	7.9	56040.0	30619.0	0.1	9999	2789071.9
7006	7006	7007	1454967.0	7.4	30619.0	4333.0	0.1	9995	0.0
7042	7042	7007	1278963.6	4.3	29230.0	4278.0	0.1	9995	0.0
7042	7042	HJN	1559257.3	5.7	29230.0	57071.0	0.1	9995	0.0

Table III OBSERVATIONS IN TRIANGULATION ACROSS BREIDAFJORDUR

stat	pnt	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	note	ecc. (mm)(cm)
0104	HAF	1163	128707.0		0.0		0.0		0.0		0.0	9994	2673127.2
7041	7042	7040	790520.0		0.0		0.0		0.0		0.0		0.0
7044	1163	7043	2119783.0		0.0		0.0		0.0		0.0		0.0
7040	7041	7042	752360.0	HOL	1564610.0	7043	2634636.0		0.0		0.0		0.0
7042	7007	7040	1128781.0	HJN	2343093.0		0.0		0.0		0.0		0.0
1163	BHF	7044	1091205.0		0.0		0.0		0.0		0.0		0.0
HOL	0110	7042	1635721.0	7007	2109443.0		0.0		0.0		0.0		0.0
7007	7006	HOL	1189900.0	7042	2165165.0		0.0		0.0		0.0		0.0
7043	7040	0110	1170628.0	7044	1887059.0		0.0		0.0		0.0		0.0

stat	ret. pnt	end pnt	distance (cm)	a pri. error (cm)	stat. height (cm)	end height (cm)		note	ecc. (mm)(cm)
1163	1163	7044	1201639.4	4.3	7622.0	4313.0	0.1	9995	0.0
7043	7043	7044	1429384.6	5.8	1168.0	4313.0	0.1	9995	0.0
7041	7041	7040	1121356.3	3.9	2891.0	1230.0	0.1	9995	0.0
7043	7043	7040	1117108.1	3.9	1175.0	1230.0	0.1	9995	0.0
7042	7042	7040	1613289.9	5.8	29230.0	1132.0	0.1	9995	0.0
BHF	BHF	1163	1446906.7	5.0	57822.0	7622.0	0.1	9995	0.0
7007	7007	HOL	1437443.6	5.8	4321.0	2530.0	0.1	9995	0.0

Table IV POSITIONING OF POINT GTV (AND HPP-3531) NEAR VOGAR

stat	pnt	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	pnt	angle (cc)	note	ecc. (mm)(cm)
GTH	0105	GTV	3443121.0		0.0		0.0		0.0		0.0		0.0
GTV	0105	SKIF	423400.0	0104	498156.0	VELL	793127.0		0.0		0.0		0.0

PROGRAM POL CONFORMAL CONICAL PROJECTION

001	6.600						VESTURLAND OG EYJAR 1981
	612860.80	329236.40	283.00	0047	*2A	0047	HEIMAKLETTUR
	699600.56	582121.32	883.70	RHF	*2BV	0131	REIPHOLSFJOLL
	709581.00	454260.40	11.70	0099	*1BV	0099	HJORSEY
	687741.70	473812.40	460.70	GSM	*1BV	0101	GRIMSSTADAMULI
	736009.30	507936.10	576.40	0104	*1BV	0104	BJARNARHAFNARFJ.
	709422.70	510288.80	324.00	0105	*2BV	0105	HASKERDINGUR
	653945.90	512860.90	820.00	0108	*3BV	0108	GELDINGAFELL
	708385.70	531582.50	496.00	0110	*2V	0110	KLOFNINGUR
	685795.10	539959.50	923.00	HAF	*1BV	0113	HAFRATINDUR
	676610.30	559488.20	559.00	0132	*2BV	0132	SNJOFJOLL
	731107.09	575053.91	569.38	HJN	*3BV	1256	HJARDARNES
	716268.67	580056.53	411.95	VAT	*3B	1252	VATTARFJALL
	614698.40	546002.40	985.00	HK	*1BV	2001	HROSSAKAMBUR
	691734.57	565760.79	304.98	7006	*4B	7006	HLIDARHALS
	706152.99	563826.69	42.18	7007	*4B	7007	SKALANES
	718838.91	565434.48	291.20	7042	*4B	7042	KULATAFLA
	708513.01	549646.94	23.70	HOL	*CR	9001	HOLEY
	722504.18	513102.52	75.00	1163	*4B	1163	HELGAFELL
	725151.42	524823.53	41.50	7044	*1B	7044	ELLIDAEY
	724040.53	550165.66	10.70	7040	*4B	7040	SVEFNEYJAR
	725637.10	539109.11	10.30	7043	*4B	7043	BJARNEYJAR
	732490.99	557537.13	27.60	7041	*4B	7041	HERDILSEY
	0.00	0.00	328.80	5285			
	693888.97	475932.67	80.60	5287	*4BE	5287	
	699869.85	470879.12	46.90	5288	*4BE	5288	
	693663.65	463965.39	62.20	5289	*4BE	5289	
	709586.49	466304.93	8.60	5290	*4BE	5290	
	679383.76	513361.79	41.05	5291	*4	5291	
	614375.43	323689.53	121.00	5537	*3BE	5537	STORHOFDI
	681240.37	556171.83	72.20	FV4			
	0.00	0.00	1.30	KL2			
	0.00	0.00	0.50	KL8			
	0.00	0.00	-0.30	KL9			
	0.00	0.00	12.65	GT04			
	725164.59	524826.01	41.50	VELL			
	722512.91	513102.56	75.00	SKIF			
	722438.55	513099.23	60.00	GTH			
	705381.40	526394.40	40.00	GTV			

```
0104 HAF
     P19  2571031.0    0.  930349.0  0.47 0.55 1.46
     0.64 1039324.0  0.64  961544.0   .328287 296.0    744795.98  510935.26    7.96  P19          6.89  -0.51
P19  0104
     AG    508869.0    0.    1768.0  0.00 1.57 0.83
    99.99       0.0 99.99      74.0   .     0   0.0    744788.41  510919.29    8.70  AG
1163 7044
     AG09  531957.0    0. 1178833.0  1.15 1.22 1.44
     0.65 1003136.0  0.57  997827.0   .     0   0.0    715717.65  522741.16   25.70  AG09         5.90   1.95
0108 HK
     KL6   741478.0    0.   14438.0  0.00 2.50 1.49
     1.49 1028074.0  0.00       0.0   .     0   0.0    653816.89  312796.43  814.65  KL6
7040 7043
     915A 3252967.0    0. 1303521.0  1.53 1.46 1.24
     0.51 1000255.0  1.53 1000889.0   .     0   0.0    712865.14  543435.03   17.81  915A         6.70  -0.34
KL6  HK
     VR    771571.0    0.  702776.3  1.53 1.53 1.39
     1.48 1040352.0  1.59  960211.0   .     0   0.0    647689.81  509384.12  372.72  VR           6.43   0.17
0099 GSM
     KL12  853632.0    0. 1192239.4  1.40 1.50 1.41
     1.48 1000184.0  0.69 1000940.0   .     0   0.0    699813.22  447423.44   18.43  KL12         7.14  -1.59
5537 0047
     V2   2816561.0    0.  415692.0  1.62 1.54 1.11
     1.20  998200.0  1.61 1002129.0   .     0   0.0    618532.87  323599.83  134.25  V2           6.68  -0.03
9999
5291
     AG01       0.0    0. 1112531.0  0.60 0.54 0.85
    -0.01 1000515.0 -0.19 1000529.0   .     0   0.0         0.00       0.00   40.93  AG01         6.73  -0.32
AG01
     3740       0.0    0.  852494.0  1.54 1.60 1.42
     0.63  994644.0  0.69 1006220.0   .     0   0.0         0.00       0.00  118.55  3740         6.79  -0.29
3740
     -30        0.0    0.   25993.0  0.00 1.42 1.30
     1.30 1000756.0  0.00       0.0   .     0   0.0         0.00       0.00  118.37  3740/30
5291
     LKI        0.0    0.   69075.0  0.00 0.54 1.42
     1.42 1014016.0  0.00       0.0   .     0   0.0         0.00       0.00   24.99  LKI
5291
     AG03       0.0    0.  717286.0  0.97 0.77 1.47
     0.59 1000340.0 -0.19 1000414.0   .     0   0.0         0.00       0.00   40.73  AG03         6.47   0.14
AG03
     GT01       0.0    0.  491330.0  1.37 1.47 1.44
     0.64 1001795.0  0.58  998868.0   .     0   0.0         0.00       0.00   29.42  GT01         7.10  -0.24
GT01
     AG02       0.0    0.  274489.0  1.42 1.44 1.55
     0.66  988429.0  0.64 1012203.0   .     0   0.0         0.00       0.00   80.60  AG02         6.87  -0.04
AG02
     9120       0.0    0.  181553.0  1.57 1.55 1.47
     1.56  998833.0  0.66 1001596.0   .     0   0.0         0.00       0.00   84.13  9120         6.42   0.01
FV4  7006
     AG04 2122322.0    0.  558844.0  1.15 1.16 1.54
     1.61  999664.0  0.04 1000904.0   .     0   0.0    677910.60  551683.59   76.67  AG04         6.30   0.19
AG04 FV4
     6887 1073276.0    0.  826716.0  1.55 1.54 1.42
     0.67 1006091.0  0.64  994741.0   .     0   0.0    670749.43  555814.11    3.02  6887         6.70  -0.13
GT04
     -30        0.0    0.   27372.0  0.00 1.41 1.20
     1.20 1029082.0  0.00       0.0   .     0   0.0         0.00       0.00    0.37  GT04/30
```

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GT04
     AG08       0.0    0.  360031.0  1.51 1.41 1.50
     0.68  998002.0  0.69 1002616.0   .    0   0.0        0.00       0.00   25.66  AG08        7.54  -0.24
AG08
     GT03       0.0    0.  361336.0  1.40 1.50 1.32
     0.64 1002917.0  0.68  997873.0   .    0   0.0        0.00       0.00   11.74  GT03        9.25  -0.69
GT03
     AG07       0.0    0.  286941.0  1.42 1.32 1.57
     0.68  992446.0  1.04 1008225.0   .    0   0.0        0.00       0.00   47.35  AG07       11.26  -0.77
AG07
     GT02       0.0    0.  293680.0  1.47 1.57 1.23
     0.66 1001738.0  0.70  999068.0   .    0   0.0        0.00       0.00   41.38  GT02       13.21  -1.14
GT02
     AG06       0.0    0.  417516.0  1.35 1.23 1.61
     0.71  991943.0  1.07 1008762.0   .    0   0.0        0.00       0.00   96.52  AG06       10.22  -1.26
AG06
     2434       0.0    0.  609762.0  1.49 1.61 1.24
     0.59  997504.0  0.67 1003202.0   .    0   0.0        0.00       0.00  124.04  2434        6.96  -0.26
2434
     -30        0.0    0.   14199.0  0.00 1.24 1.24
     1.24 1017843.0  0.00       0.0   .    0   0.0        0.00       0.00  120.06  2434/30
AG09 1163
     3589 2917214.0    0.  613972.0  1.38 1.44 1.35
     0.42 1001717.0  0.90  998952.0   .    0   0.0   710281.54  519887.30   12.65  3589        6.61  -0.01
AG09 1163
     3103 3512800.0    0.  102633.0  1.38 1.44 1.38
     1.47 1009942.0  1.44  990092.0   .    0   0.0   715562.45  521726.76    9.71  3103        6.87  -0.01
3103 AG09
     -20  2802929.0    0.    1232.0  0.00 1.38 1.38
     1.38 1100000.0  0.00       0.0   .    0   0.0   715573.35  521721.34    7.78  3103/20
7044 1163
     105A 3467664.0    0.  365274.0  1.45 1.54 1.40
     1.49 1005334.0  0.54  995107.0   .    0   0.0   721968.05  523032.52   11.76  105A        6.07   0.14
105A 7044
     -23  2005885.0    0.    9900.0  0.00 1.40 0.80
     0.80 1020169.0  0.00       0.0   .    0   0.0   721882.27  522983.20    9.22  105A/23
5287 GSM
     AG10 2679312.0    0.  236841.0  1.44 1.33 1.57
     1.64  999380.0  1.42 1000759.0   .    0   0.0   694293.39  478266.29   82.94  AG10        6.04   0.06
AG10 5287
     5359 2405284.0    0.  257117.0  1.46 1.57 1.37
     1.46 1000862.0  1.64  999282.0   .    0   0.0   693140.38  480564.42   79.93  5359        5.61   0.13
5359 AG10
     -10   948547.0    0.   14689.0  0.00 1.37 1.40
     1.40 1049484.0  0.00       0.0   .    0   0.0   693276.15  480619.31   68.50  5359/10
FV4
     AG05       0.0    0.  588912.0  1.27 1.16 1.57
     0.69 1002406.0  0.02  998300.0   .    0   0.0        0.00       0.00   52.67  AG05        6.50   0.07
7044 1163
     105B 3000872.0    0.  675047.0  1.50 1.42 1.29
     1.38 1003219.0  0.55  997429.0   .    0   0.0   718564.85  526301.65   10.45  105B        6.68  -0.08
7044 1163
     147B 2344451.0    0.  473027.0  1.35 1.42 1.44
     1.53 1005363.0  0.57  995127.0   .    0   0.0   723668.27  529315.10    2.98  147B        6.44   0.07
147B 7044
     -21  3052562.0    0.    3110.0  0.00 1.44 0.44
     0.44 1052369.0  0.00       0.0   .    0   0.0   723639.74  529302.99    1.42  147B/21
7044 1163
     147A 2290108.0    0.  417977.0  1.35 1.42 1.50
     1.59 1006058.0  0.57  994400.0   .    0   0.0   724184.96  528885.73    2.72  147A        6.43   0.06
```

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147A 7044
    -21   857374.0    0.    1896.0  0.00 1.50 1.00
    1.00 1025683.0  0.00       0.0   .    0   0.0    724203.90  528885.92    2.45  147A/21
7044 1163
    3113  197048.0    0.  444320.0  1.50 1.49 1.50
    1.59 1002151.0  0.57  998343.0   .    0   0.0    725539.23  520397.33   27.70  3113        6.63  -0.01
3113 7044
    113B 2342607.0    0.     940.0  0.00 1.50 1.50
    1.50 1134932.0  0.00       0.0   .    0   0.0    725544.61  520389.88   25.72  113B
3113 7044
    113A  582963.0    0.   39626.0  0.00 1.50 1.50
    1.50 1016030.0  0.00       0.0   .    0   0.0    725205.23  520610.32   17.73  113A
7044 1163
    109A  865139.0    0. 1145432.0  1.57 1.49 1.50
    1.59 1002309.0  0.57  998688.0   .    0   0.0    735543.90  520007.31    8.41  109A        6.52   0.21
109A 7044
    109B 1218397.0    0.   19488.0  0.00 1.50 1.70
    1.70 1007053.0  0.00       0.0   .    0   0.0    735526.21  519813.24    6.05  109B
109A 7044
    VITH  362596.0    0.    9581.0  0.00 1.50 1.50
    1.50 1000000.0  0.00       0.0   .    0   0.0    735448.97  519994.36    8.41  VITH
7044 1163
    107A  813577.0    0.   71368.0  0.00 1.42 1.50
    1.50 1033146.0  0.00       0.0   .    0   0.0    725771.70  524472.52    4.31  107A
7044 1163
    107B  780233.0    0.   23335.0  0.00 1.42 1.45
    1.45 1076496.0  0.00       0.0   .    0   0.0    725346.79  524699.03   13.50  107B
7044 1163
    511B  510082.0    0.  992714.0  1.57 1.49 1.50
    1.59 1002520.0  0.57  998342.0   .    0   0.0    730584.26  516515.06    8.41  511B        6.40   0.10
7044 1163
    511A  316096.0    0.  796736.0  1.43 1.49 1.50
    1.59 1003162.0  0.57  997552.0   .    0   0.0    727310.26  517154.33    5.88  511A        6.38   0.27
511A 7044
    -23  3424134.0    0.    1231.0  0.00 1.50 1.50
    1.50 1000000.0  0.00       0.0   .    0   0.0    727317.51  517164.28    5.88  511A/23
P19  0104
    4783 1544892.0    0.  572941.0  1.58 1.57 1.50
    1.59  999761.0  1.64 1000748.0   .    0   0.0    750103.93  508778.49   12.46  4783        7.22  -0.41
4783 P19
    783B  306555.0    0.   10052.0  0.00 1.50 1.50
    1.50 1026114.0  0.00       0.0   .    0   0.0    750003.95  508768.90    8.34  783B
4783 P19
    783A 3130971.0    0.   14958.0  0.00 1.50 1.50
    1.50 1008902.0  0.00       0.0   .    0   0.0    750130.73  508925.63   10.37  783A
P19  0104
    3515 3410973.0    0.  648467.0  1.64 1.57 1.50
    0.55 1000854.0  1.64  999876.0   .    0   0.0    739430.50  514577.00    3.56  3515        7.80  -1.01
3515 P19
    515B 2453893.0    0.    8465.0  0.00 1.50 1.50
    1.50 1012400.0  0.00       0.0   .    0   0.0    739346.44  514567.15    1.91  515B
3515 P19
    515A 3996698.0    0.    5327.0  0.00 1.50 1.50
    1.50 1017140.0  0.00       0.0   .    0   0.0    739474.40  514546.87    2.13  515A
AG   0104
    3513 3565753.0    0.  919096.0  1.52 1.45 1.50
    0.65 1000863.0  0.14 1000200.0   .    0   0.0    736169.13  514110.09    3.60  3513        7.85  -2.11
3513 AG
    513B  199265.0    0.   20080.0  0.00 1.50 1.50
    1.50 1000000.0  0.00       0.0   .    0   0.0    736369.75  514101.75    3.60  513B
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PROGRAM POL CONFORMAL CONICAL PROJECTION

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3513 AG
     513A  691723.0    0.    1998.0  0.00 1.50 1.50
     1.50 1000000.0  0.00       0.0   .    0   0.0    736183.91  514123.37    3.60  513A
7043 7044
     1145  133289.0    0.  452762.0  1.54 1.53 1.50
     0.67 1000068.0  1.60 1000435.0   .    0   0.0    726427.11  534650.91   12.09  1145        6.87  -0.11
1145 7043
     145B  479145.0    0.    6253.0  0.00 1.50 1.50
     1.50 1046239.0  0.00       0.0   .    0   0.0    726377.19  534688.30    7.55  145B
1145 7043
     145A 2653203.0    0.   16840.0  0.00 1.50 1.50
     1.50 1007503.0  0.00       0.0   .    0   0.0    726584.15  534590.12   10.10  145A
7043 7040
     143B  801828.0    0.  177239.0  1.54 1.53 1.50
     0.68 1003230.0  1.53  997207.0   .    0   0.0    723889.63  539405.26    2.36  143B        6.31   0.02
143B 7043
     -21  3259327.0    0.    1733.0  0.00 1.50 1.50
     1.50 1000000.0  0.00       0.0   .    0   0.0    723893.74  539388.42    2.36  143B/21
7043 7040
     143A 2693776.0    0.  189908.0  1.54 1.53 1.50
     1.59 1001462.0  1.53  998686.0   .    0   0.0    727428.99  538480.07    6.14  143A        7.37  -0.06
143A 7043
     -21  2684239.0    0.     544.0  0.00 1.50 1.50
     1.50 1072805.0  0.00       0.0   .    0   0.0    727432.99  538483.71    5.52  143A/21
HOL  7042
     831B 1302063.0    0.   91765.0  1.45 1.51 1.50
     1.50 1008369.0  1.51  991712.0   .    0   0.0    707600.45  549742.87   11.71  831B        6.93  -0.01
831B HOL
     -21  2897449.0    0.    3919.0  0.00 1.50 1.50
     1.30 1119723.0  0.00       0.0   .    0   0.0    707590.33  549705.72    1.38  831B/21
HOL  7042
     831A 2841156.0    0.   35024.0  1.45 1.51 1.70
     1.70 1025372.0  0.00       0.0   .    0   0.0    708749.53  549388.99    9.56  831A
HOL  0110
     3525 3390346.0    0.  845669.0  1.60 1.51 1.50
     0.82 1001847.0  1.85  998924.0   .    0   0.0    701562.61  544829.31    4.81  3525        6.92  -0.46
3525 HOL
     -20   989387.0    0.    1114.0  0.00 1.50 1.50
     1.50 1067841.0  0.00       0.0   .    0   0.0    701556.45  544838.52    3.62  3525/20
HOL  0110
     2379 3115480.0    0. 1049767.0  1.60 1.51 1.50
     0.85 1001395.0  1.85  999538.0   .    0   0.0    698174.32  547825.87    8.89  2379        6.84  -0.53
915A 7040
     915B 3140302.0    0.   17404.0  0.00 1.24 1.00
     1.00 1043893.0  0.00       0.0   .    0   0.0    712984.90  543329.31    6.06  915B
915A HOL
     0913 1844738.0    0.  588718.0  1.35 1.42 1.50
     0.54 1001671.0  1.49  998932.0   .    0   0.0    714987.27  537963.57    5.58  0913        6.76  -0.11
0913 915A
     -20  1640382.0    0.     960.0  0.00 1.50 1.60
     1.60 1069482.0  0.00       0.0   .    0   0.0    714985.41  537954.21    4.44  0913/20
915A HOL
     1013 2447126.0    0.  376723.0  1.35 1.42 1.50
     1.59 1001840.0  1.49  998474.0   .    0   0.0    716509.82  542501.82    7.76  1013        7.11  -0.14
1013 915A
     -20  1696684.0    0.    2974.0  0.00 1.50 1.50
     1.50 1074130.0  0.00       0.0   .    0   0.0    716531.79  542482.07    4.31  1013/20
915A HOL
     1011 3329878.0    0.  457130.0  1.35 1.42 1.25
     1.34 1001786.0  1.49  998584.0   .    0   0.0    714812.16  547591.01    6.47  1011        6.74  -0.06
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1011
    -90        0.0    0.    3430.0  0.00 1.60 1.70
    1.70 1076340.0  0.00       0.0   .    0   0.0        0.00       0.00    2.27  1011/90
1011 HOL
    -10  3011953.0    0.    1121.0  0.00 1.60 1.60
    1.60 1048470.0  0.00       0.0   .    0   0.0   714815.43  547601.70    5.62  1011/10
915A HOL
    1833  384063.0    0.  273571.0  1.42 1.42 1.50
    1.59 1002541.0  1.49  997646.0   .    0   0.0   710299.86  544405.58    7.20  1833        6.44   0.02
1833 915A
    833B 2506214.0    0.   15293.0  0.00 1.50 1.50
    1.50 1001560.0  0.00       0.0   .    0   0.0   710161.52  544340.40    6.83  833B
1833 915A
    833A  827867.0    0.    1543.0  0.00 1.50 1.30
    1.30 1075684.0  0.00       0.0   .    0   0.0   710308.83  544418.00    5.57  833A
915A HOL
    1835 1258152.0    0.  746297.0  1.35 1.42 1.00
    1.09 1001530.0  1.49  999092.0   .    0   0.0   708947.52  537102.93    3.93  1835        6.69  -0.10
FV4
    AG05       0.0    0.  588912.0  1.27 1.16 1.57
    0.69 1002406.0  0.02  998300.0   .    0   0.0        0.00       0.00   52.67  AG05        6.50   0.07
AG05
    KL1        0.0    0.  451351.0  1.27 1.28 1.44
    0.25  975432.0  0.53 1025239.0   .    0   0.0        0.00       0.00  229.24  KL1         6.91  -0.13
KL1
    4238       0.0    0.  705971.0  1.39 1.44 1.50
    0.47  972236.0  0.23 1028546.0   .    0   0.0        0.00       0.00  541.21  4238        6.45   0.15
4238
    -30        0.0    0.   10165.0  0.00 1.50 1.55
    1.55 1108817.0  0.00       0.0   .    0   0.0        0.00       0.00  523.87  4238/30
KL2
    KL3        0.0    0.  288114.0  1.42 1.42 1.50
    0.54  944013.0  1.42 1056426.0   .    0   0.0        0.00       0.00  258.74  KL3         6.18   0.07
KL3
    KL4        0.0    0.  853389.0  1.57 1.50 1.52
    1.59  995235.0  0.54 1005542.0   .    0   0.0        0.00       0.00  327.29  KL4         6.54   0.09
KL4
    5378       0.0    0.  383482.0  1.52 1.52 0.50
   -0.39  988003.0  1.59 1012464.0   .    0   0.0        0.00       0.00  402.45  5378        6.78  -0.05
KL6  HK
    3863 1296972.0    0.  903100.0  1.46 1.53 1.50
    1.59 1003782.0  1.59  996933.0   .    0   0.0   651693.69  504019.84  766.08  3863        6.31   0.47
3863 KL6
    -10  2124322.0    0.  121800.0  0.00 1.50 1.50
    1.50 1028350.0  0.00       0.0   .    0   0.0   651642.52  502804.26  711.96  3863/10
VR   HK
    9515  995982.0    0.  889201.0  1.48 1.54 0.82
    0.07 1006889.0  1.61  993901.0   .    0   0.0   641046.78  503474.66  283.14  9515        6.55   0.08
9515 VR
    -10  2153671.0    0.    2655.0  0.00 0.82 0.82
    0.82 1000000.0  0.00       0.0   .    0   0.0   641031.74  503452.79  283.14  9515/10
VR
    3858       0.0    0.  854705.0  1.48 1.54 1.80
    1.89 1006407.0  1.61  994264.0   .    0   0.0        0.00       0.00  290.94  3858        6.28   0.47
KL8
    KL7        0.0    0.  730030.0  1.76 1.70 1.46
    1.53  966772.0  1.79 1033804.0   .    0   0.0        0.00       0.00  384.91  KL7         6.34   0.28
KL7
    3724       0.0    0.  570660.0  1.46 1.46 1.50
    1.59 1016888.0  1.53  983586.0   .    0   0.0        0.00       0.00  235.62  3724        6.77  -0.11
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3724
    -30        0.0    0.   15757.0  0.00 1.50 1.50
    1.50 1046044.0  0.00       0.0   .    0   0.0        0.00       0.00  224.23  3724/30
KL9
    R105       0.0    0.  487368.0  1.67 1.73 1.47
    0.60  996133.0  1.54 1004393.0   .    0   0.0        0.00       0.00   31.92  R105        6.25   0.17
R105
    KL5        0.0    0.  664115.0  1.53 1.47 0.82
    0.68  981881.0  0.60 1018780.0   .    0   0.0        0.00       0.00  224.64  KL5         6.67  -0.06
KL5
    VR         0.0    0.  191158.0  1.22 1.29 1.39
    1.48  950595.0  1.36 1049534.0   .    0   0.0        0.00       0.00  372.92  VR          7.46  -0.06
5285
    KL11       0.0    0.  656394.0  0.45 0.39 1.43
    0.62  968755.0  0.48 1031870.0   .    0   0.0        0.00       0.00  653.45  KL11        6.64  -0.03
KL11
    9084       0.0    0.  256382.0  1.43 1.43 1.50
    1.59 1055031.0  1.43  945164.0   .    0   0.0        0.00       0.00  432.38  9084        6.63   0.00
9084
    -30        0.0    0.  121607.0  0.00 1.50 1.50
    1.50 1008144.0  0.00       0.0   .    0   0.0        0.00       0.00  416.92  9084/30
5290 GSM
    3553 2833606.0    0.  445676.0  1.44 1.44 1.45
    1.54 1000252.0  1.51 1000146.0   .    0   0.0   712074.93  470002.36    8.21  3553        7.42  -0.32
5290 5288
    569A 2354184.0    0.  515327.0  1.44 1.44 1.50
    0.81 1000024.0  1.51 1000499.0   .    0   0.0   714704.99  466903.31   10.84  569A        6.80  -0.11
569A 5290
    -23   643683.0    0.    5349.0  0.00 1.50 1.70
    1.70 1097756.0  0.00       0.0   .    0   0.0   714682.32  466955.55    2.46  569A/23
5290 5288
    569B 2251046.0    0.  639985.0  1.44 1.44 1.50
    0.86 1000940.0  1.51  999775.0   .    0   0.0   715979.80  466012.99    3.54  569B        6.85  -0.21
569B 5290
    -23  3311265.0    0.   11047.0  0.00 1.50 0.50
    0.50 1013322.0  0.00       0.0   .    0   0.0   715932.42  466112.76    2.23  569B/23
0099 GSM
    5290 3464550.0    0. 1204485.6  1.28 1.35 1.44
    1.51 1000635.0  0.71 1000468.0   .    0   0.0   709586.64  466305.55    9.68  5290        7.00  -1.15
KL12 0099
    2417 2992706.0    0.  462460.0  1.41 1.41 1.50
    1.59 1001245.0  1.48  999128.0   .    0   0.0   702421.64  443604.42   10.64  2417        6.71  -0.05
2417 KL12
    417A  758829.0    0.    8129.0  0.00 1.50 0.50
    0.50 1061781.0  0.00       0.0   .    0   0.0   702342.68  443586.73    3.76  417A
2417 KL12
    417B 2473233.0    0.    8757.0  0.00 1.50 0.50
    0.50 1054096.0  0.00       0.0   .    0   0.0   702506.63  443584.68    4.21  417B
KL12 0099
    415B 3325569.0    0.  851381.0  1.34 1.41 1.50
    1.59 1001398.0  1.48  999353.0   .    0   0.0   707484.58  443730.02    4.65  415B        7.04  -0.64
415B KL12
    415A 3357155.0    0.   19440.0  0.00 1.50 1.50
    1.50  968371.0  0.00       0.0   .    0   0.0   707462.82  443922.96   14.31  415A
7044 1163
    VELL 1259910.0    0.    1340.0  0.00 1.50 1.50
    1.50 1000000.0  0.00       0.0   .    0   0.0   725164.59  524826.01   41.50  VELL
1163 0104
    SKIF  235190.0    0.     873.0  0.00 1.29 1.29
    1.29 1000000.0  0.00       0.0   .    0   0.0   722512.91  513102.56   75.00  SKIF
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1163 0104
     GTH  2264470.0    0.    6734.0  0.00 1.29 1.60
     1.60 1140364.0  0.00       0.0   .    0   0.0    722438.55  513099.23   59.96  GTH
GTV  0105
     3531  603354.0    0.  177508.0  0.00 1.30 1.60
     1.60 1009066.0  0.00       0.0   .    0   0.0    707031.52  525740.67   14.63  3531
5537 0047
     V1   3876529.0    0.  459659.0  1.54 1.54 1.32
     1.41 1004722.0  1.61  995646.0   .    0   0.0    614041.82  328275.52   88.44  V1          6.67  -0.03
V1   5537
     059A 3419485.0    0.   71071.0  0.00 1.32 1.70
     1.70 1048518.0  0.00       0.0   .    0   0.0    613514.30  327801.96   33.99  059A
5537 0047
     059C  270397.0    0.  904336.0  1.62 1.54 1.29
     1.38 1003192.0  1.61  997526.0   .    0   0.0    608608.02  330659.12   81.00  059C        6.33   0.44
059C 5537
     -29  3883429.0    0.    3807.0  0.00 1.29 1.00
     1.00 1156516.0  0.00       0.0   .    0   0.0    608625.99  330626.85   72.02  059C/29
5537 0047
     059B  314279.0    0.  734334.0  1.62 1.54 1.50
     1.59  997119.0  1.61 1003494.0   .    0   0.0    609313.56  329012.91  157.80  059B        6.70  -0.11
059B 5537
     -29  2325534.0    0.   14255.0  0.00 1.50 1.50
     1.50 1172226.0  0.00       0.0   .    0   0.0    609182.25  329053.42  119.70  059B/29
5537 0047
     061B  163314.0    0.   23906.0  0.00 1.31 0.70
     0.70 1046650.0  0.00       0.0   .    0   0.0    614256.28  323896.14  104.11  061B
V2   5537
     9065 1431664.0    0. 1102228.0  1.28 1.18 1.50
     1.59 1005038.0  1.25  995841.0   .    0   0.0    625262.79  314865.61   54.30  9065        6.33   0.66
9065 V2
     065A   35186.0    0.   10830.0  0.00 1.50 1.50
     1.50 1009958.0  0.00       0.0   .    0   0.0    625192.03  314947.63   32.61  065A
9065 V2
     065B 1924042.0    0.     591.0  0.00 1.50 1.50
     1.50 1219488.0  0.00       0.0   .    0   0.0    625265.61  314860.82   52.30  065B
V2   5537
     063A 1146680.0    0.  766354.0  1.21 1.13 1.50
     1.59 1004669.0  1.20  995946.0   .    0   0.0    620122.32  316100.12   81.36  063A        6.44   0.19
063A V2
     -29  3365521.0    0.    4933.0  0.00 1.50 1.50
     1.50 1000000.0  0.00       0.0   .    0   0.0    620157.30  316134.93   81.36  063A/29
V2   5537
     063B 1009716.0    0.  447858.0  1.21 1.13 1.50
     1.59 1010769.0  1.20  989566.0   .    0   0.0    618504.64  319120.27   59.29  063B        6.27   0.13
V2   5537
     061A  925934.0    0.   81267.0  1.15 1.13 1.50
     1.50 1059057.0  1.13  940997.0   .    0   0.0    618421.59  322798.04   58.63  061A        5.20   0.02
061A V2
     -29   830711.0    0.   11544.0  0.00 1.50 1.50
     1.50  950045.0  0.00       0.0   .    0   0.0    618315.73  322843.28   67.68  061A/29
```
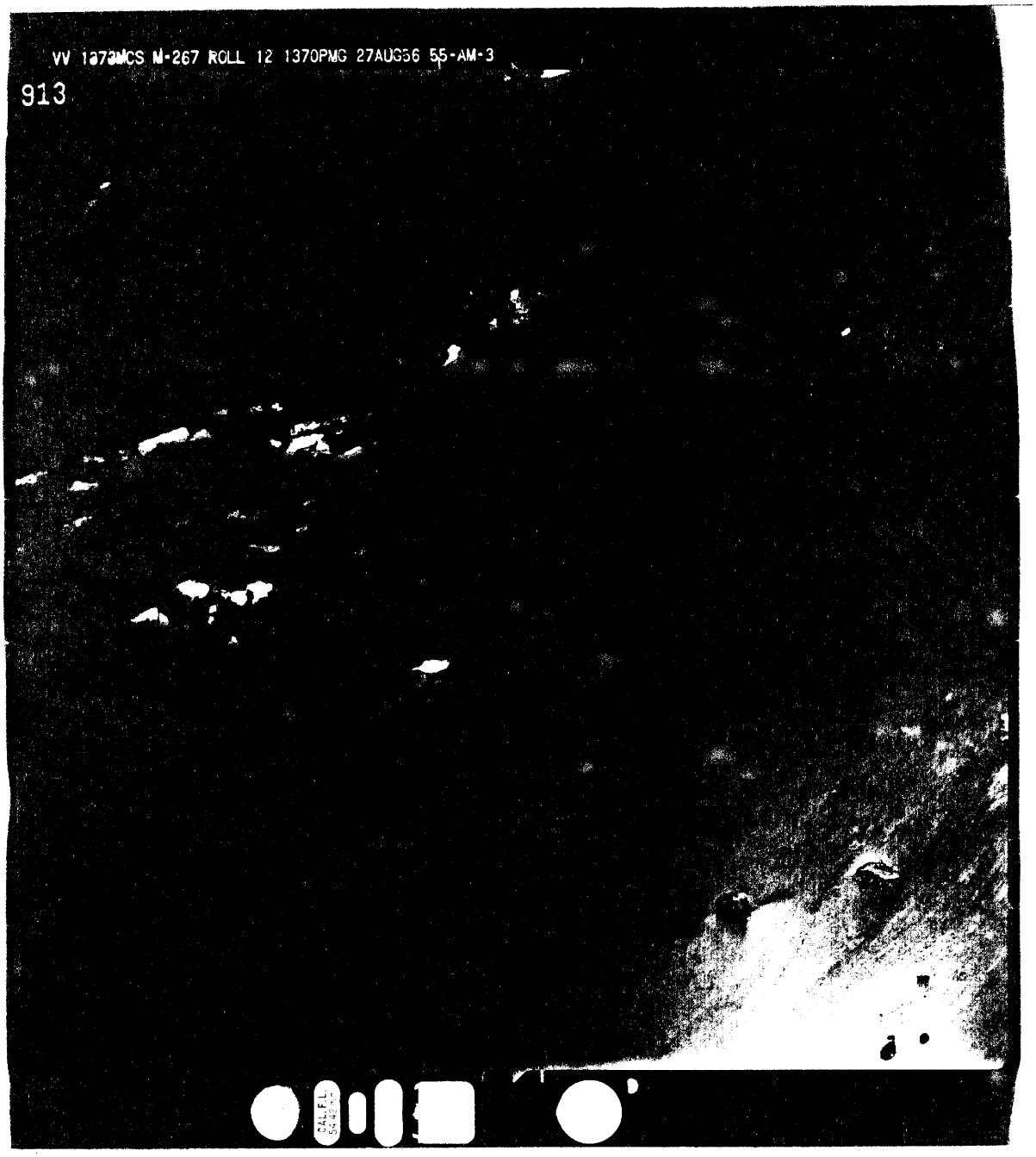
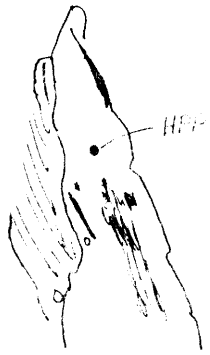
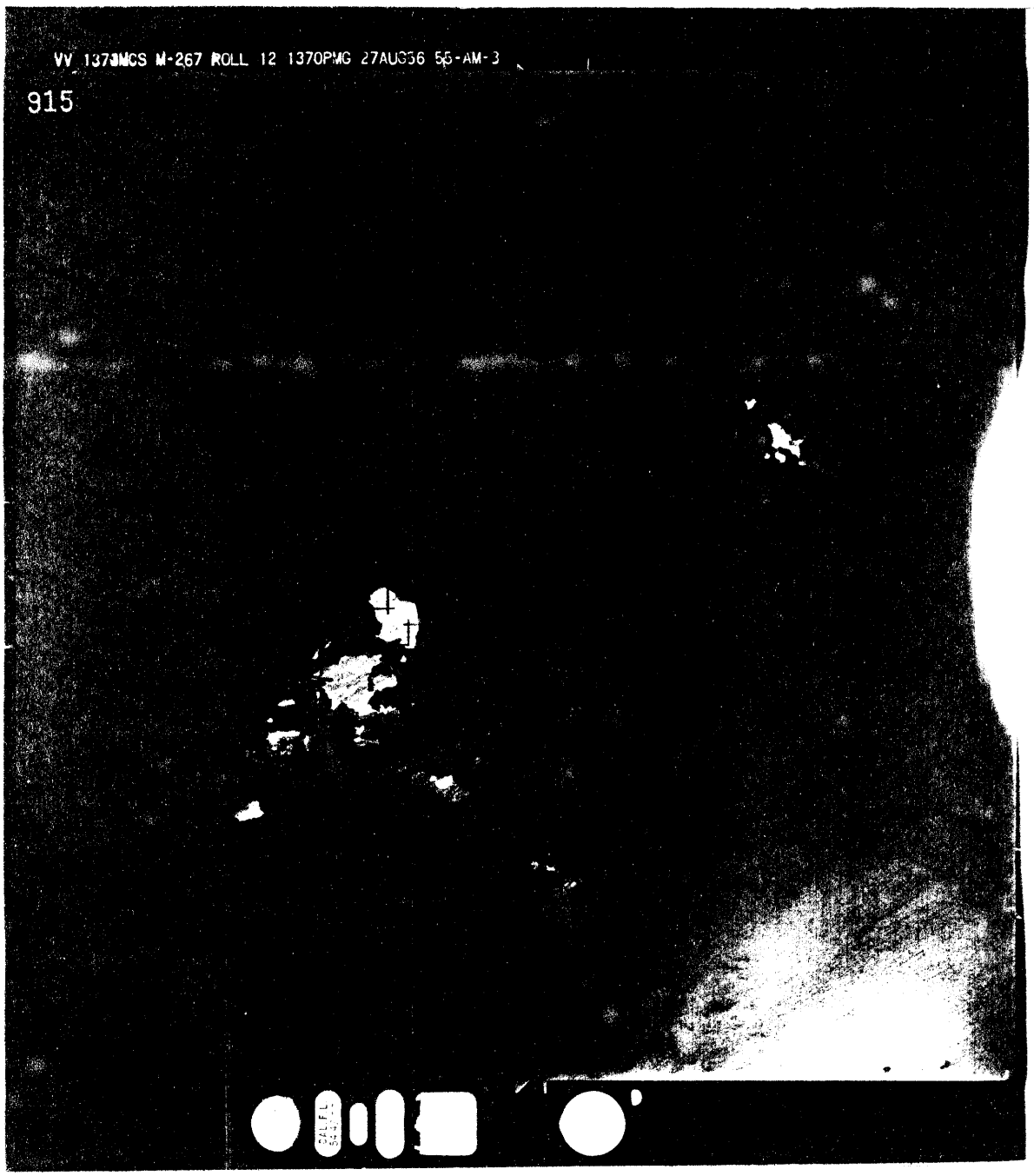

Appendix 2
Reproductions of photos

Those airial photos, on which ground control points were sketched, have been reproduced in reduced size on the following pages. The reproductions cannot replace the photos, but in case a photo with ground control description is lost, its reproduction should preserve the description.

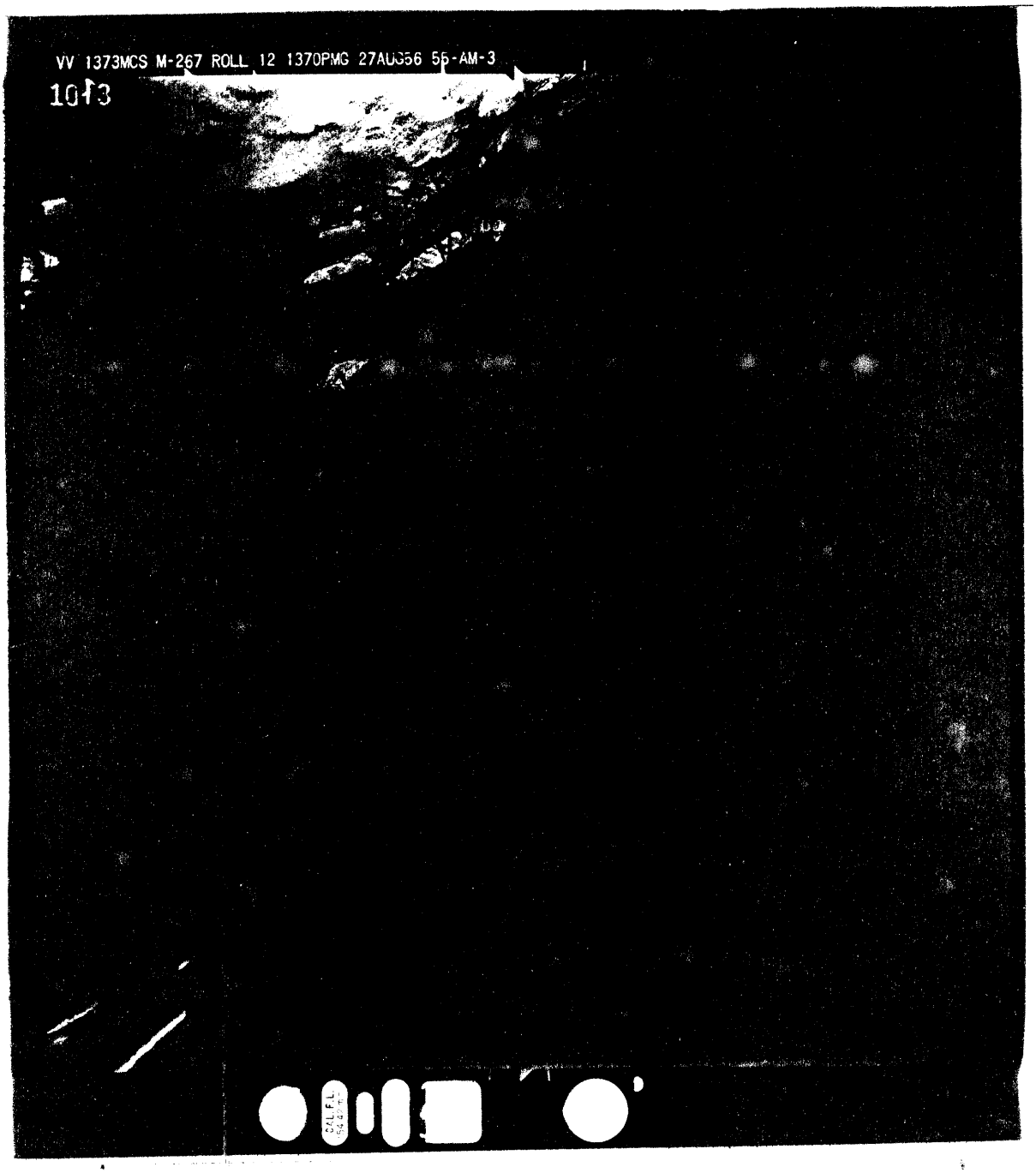
A photo reproduction, on the following pages, is orientated so that the photo number can be read directly without turning the report upside down. (The direction of flight is up the page). A ground control description is drawn from a stereographic pair of photos. The description is therefor 90 degrees rotated with respect to the photo. (The description is usually as seen from the east).

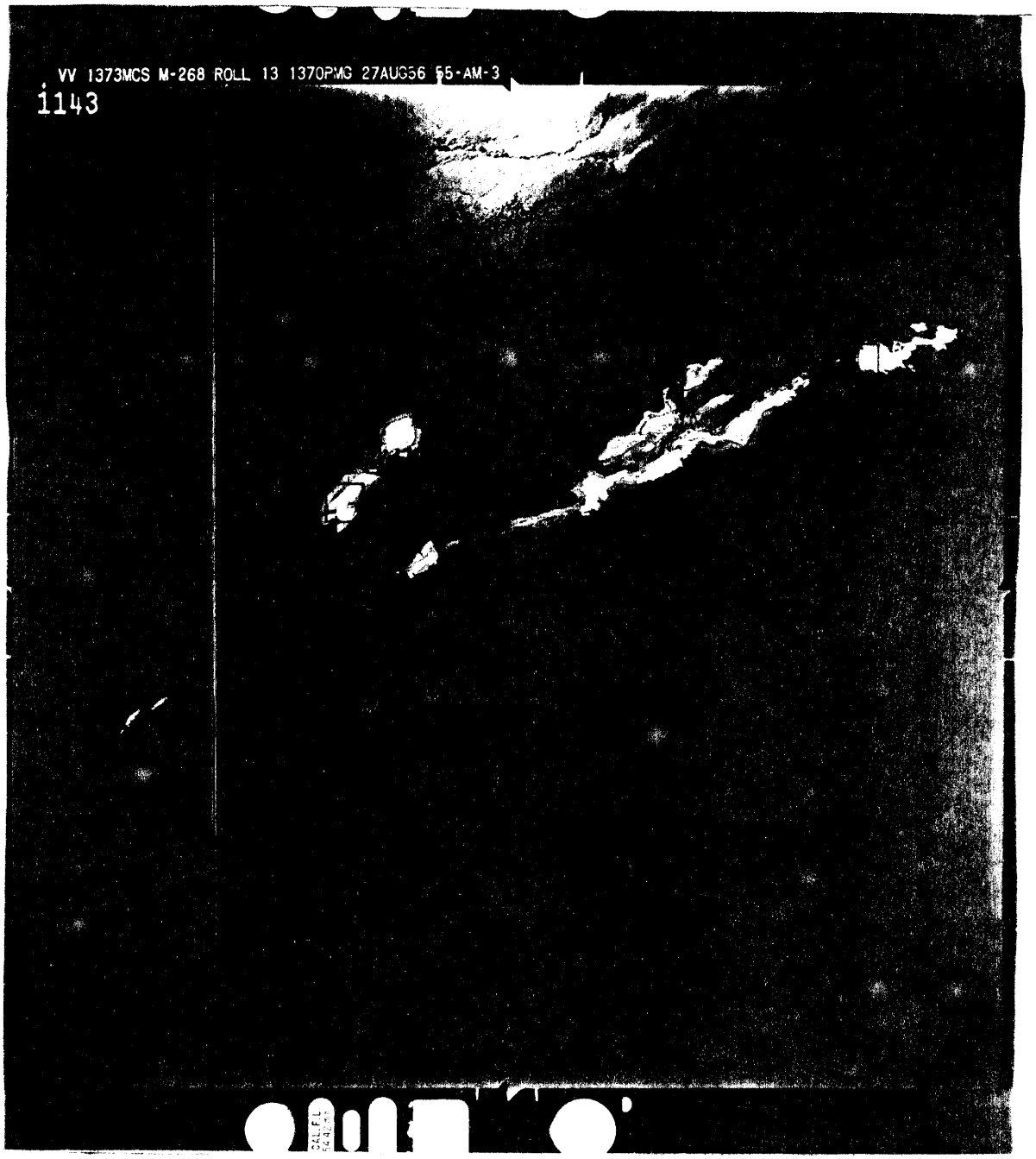

VV 1373MCS M-267 ROLL 12 1370PMG 27AUG56 55-AM-3
913



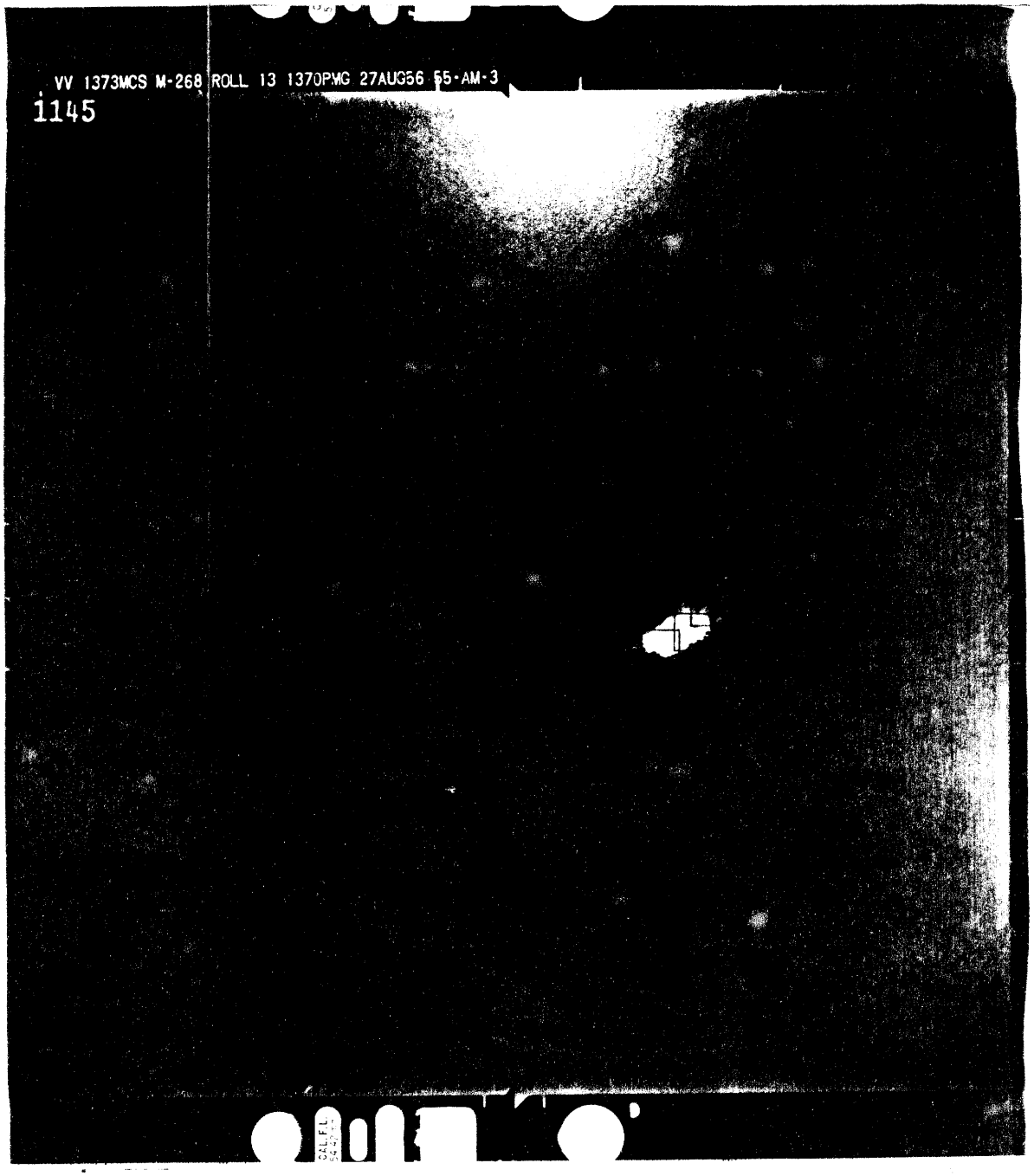


915A er hundapúta (dökk af lit) á ljósri klöpp og er hvítir punktar á eynni.
915B er brunnur (ljós blettur)


VV 1373MCS M-267 ROLL 12 1370PMG 27AUG56 56-AM-3
1013

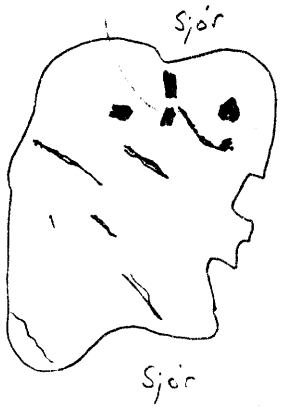

VV 1373MCS M-268 ROLL 13 1370PMG 27AUG66 55-AM-3
1143

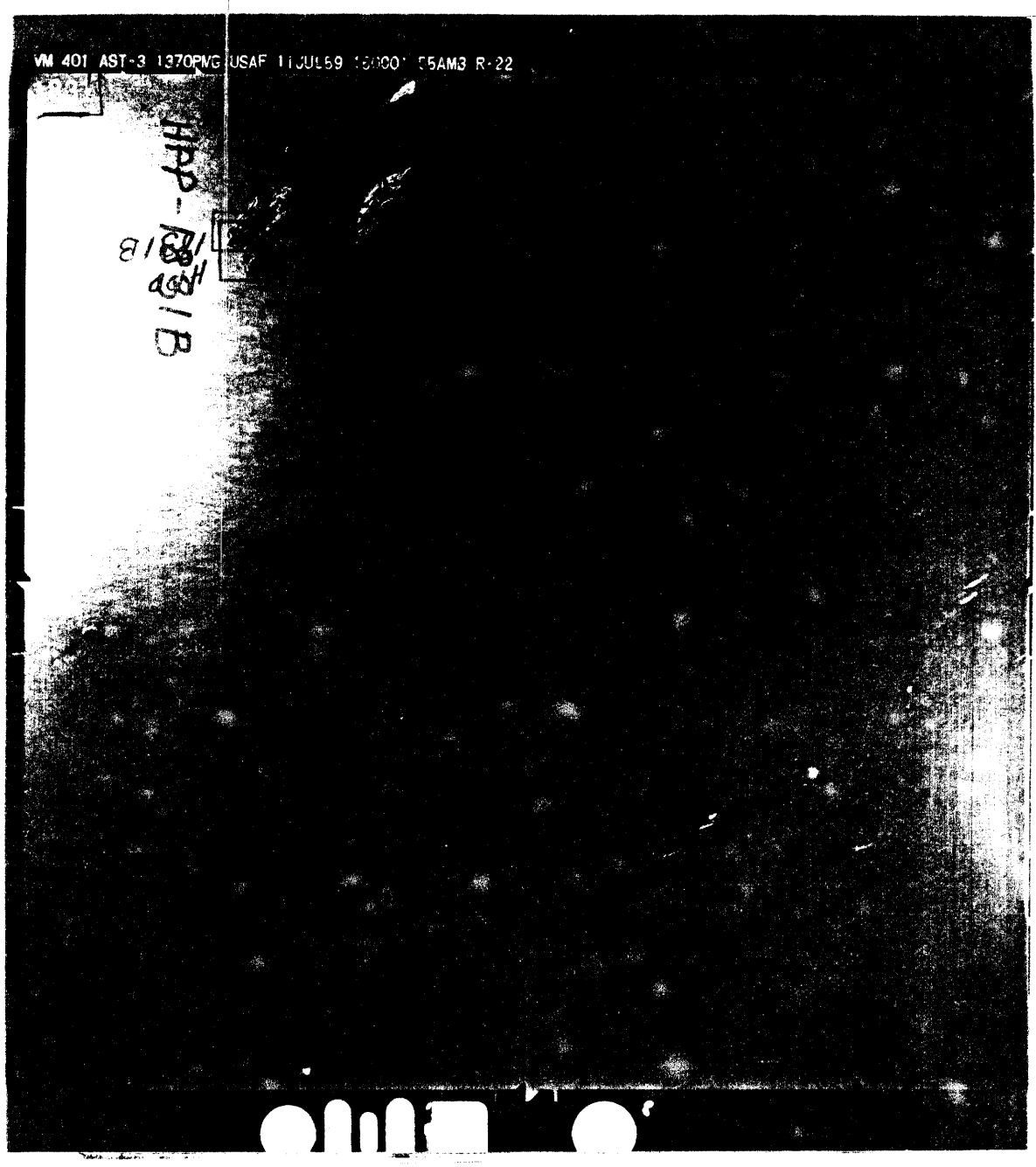

Sandur
Graif land
Klettar

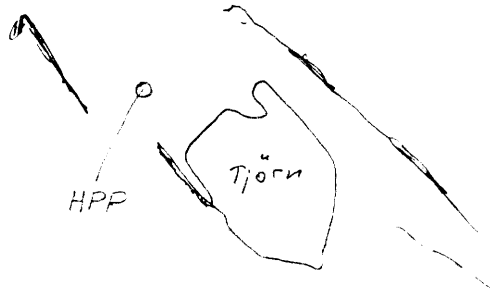

VV 1373MCS M-268 ROLL 13 1370PMG 27AUG56 55-AM-3
1145

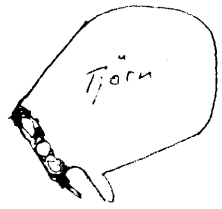

HPF

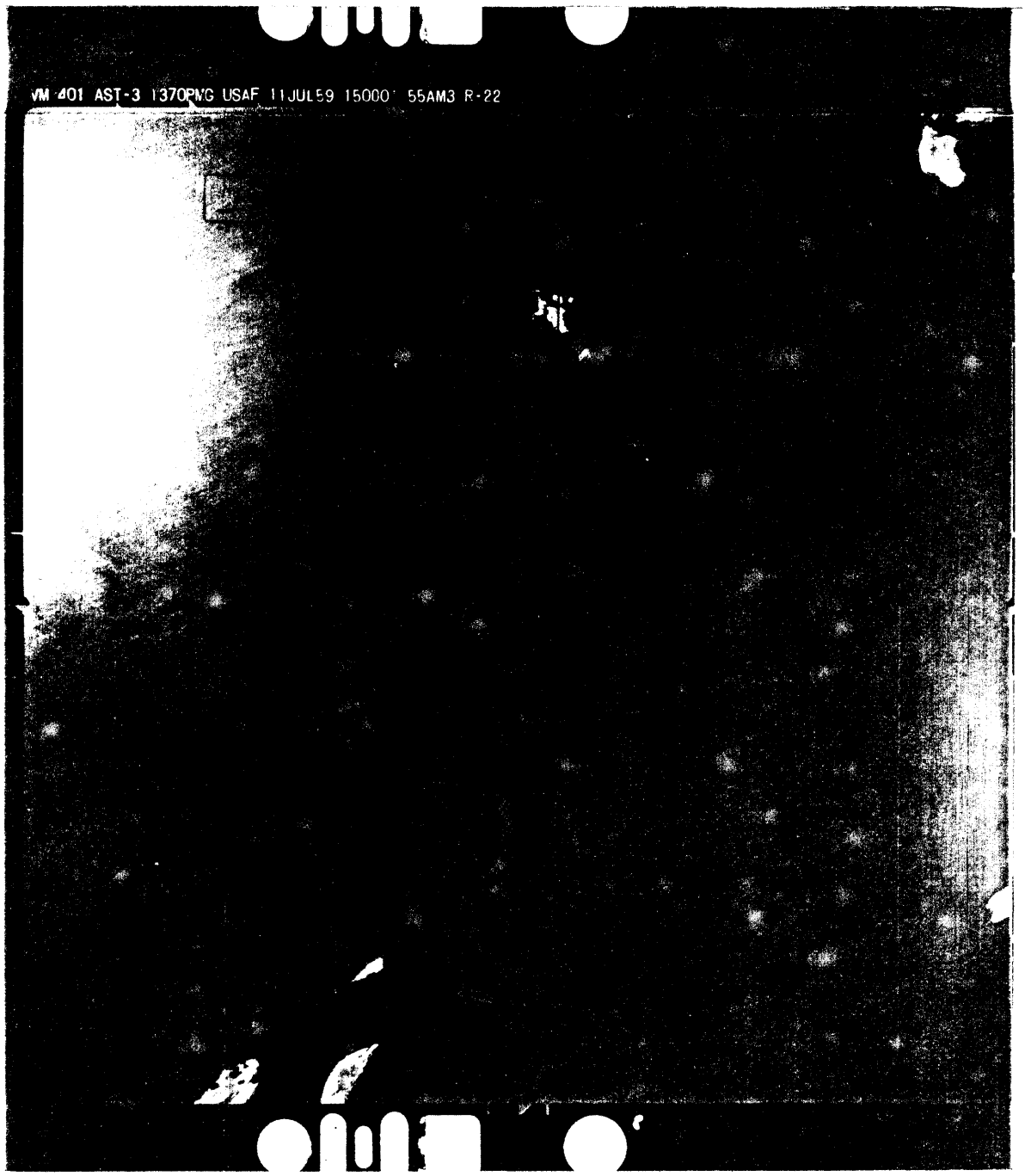
Punktarinn er í miðjum hólma í lóni í eyju

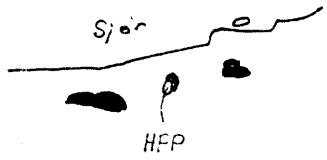



VM 401 AST-3 1370PMG USAF 11JUL59
HPP-
B


HPP
Tjörn


Tjörn

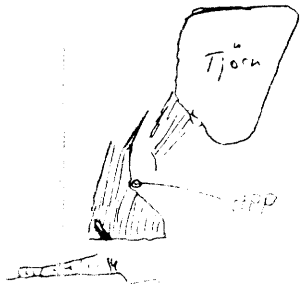




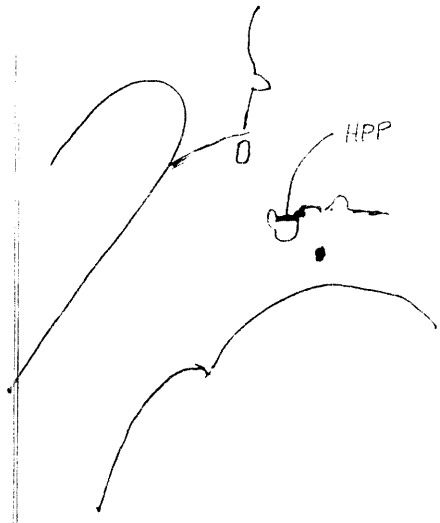
Ítr. -1830A

+

HPP-1873B

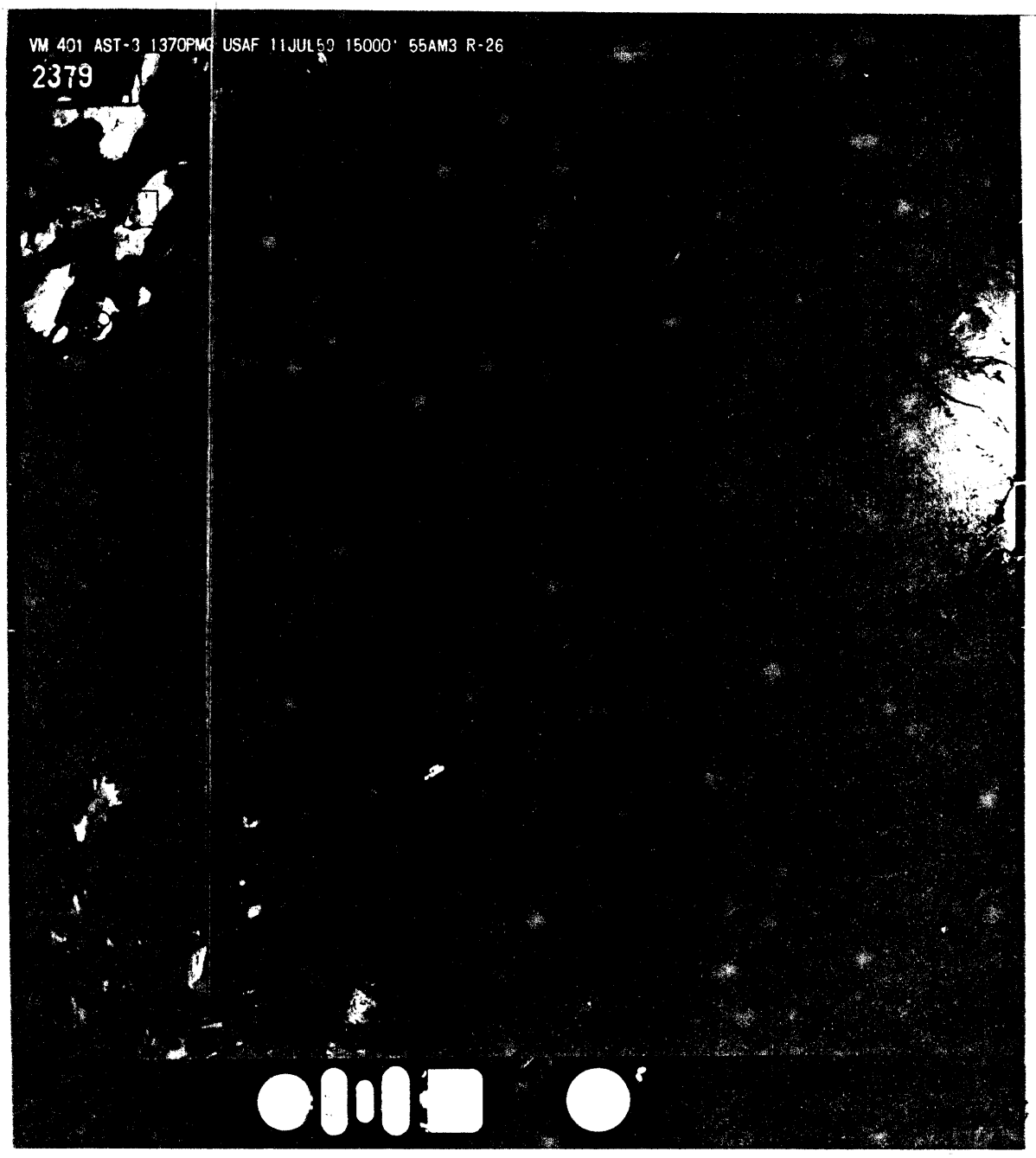


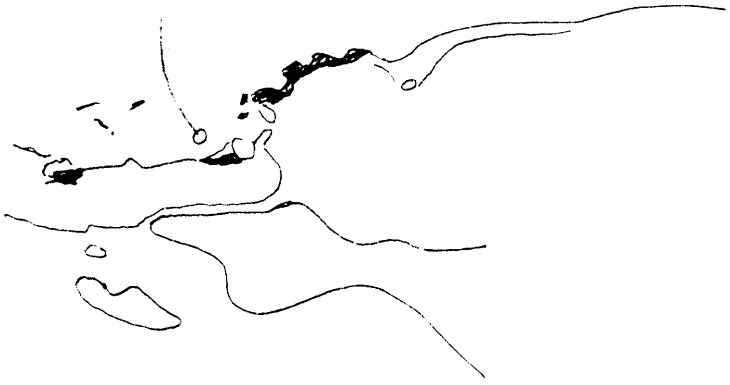
Punktur inn er í ljósum steini í kriku norðan

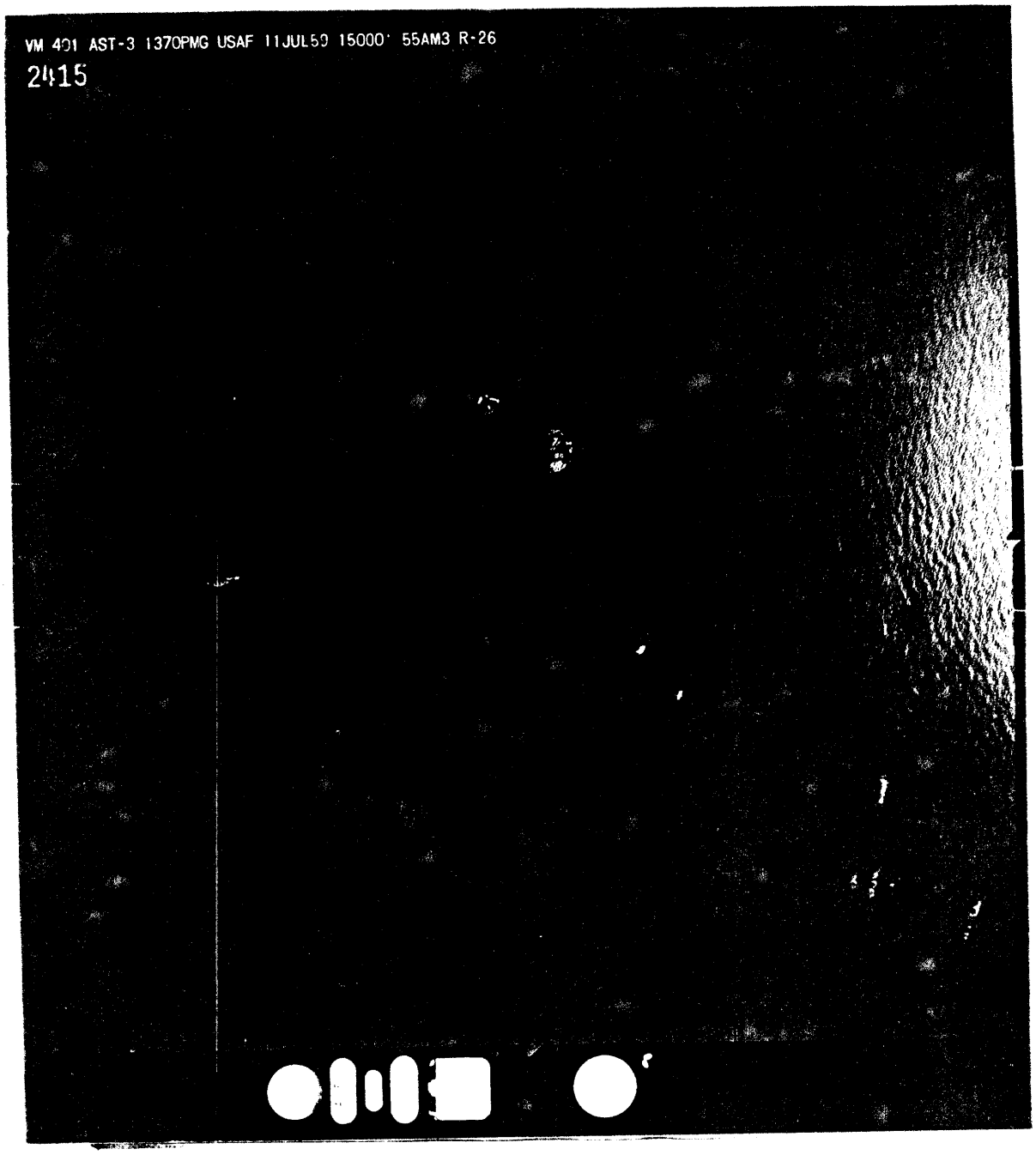


Punkturinn er á miðri vesturhlíð stórar ljósar klappar og fellur skuggi frá þeirri hlíð þar sem hún er rúmlega meters há.

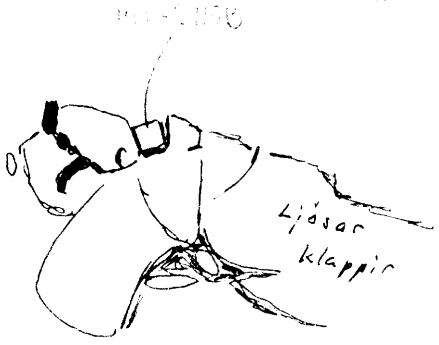
HPP - [illegible]

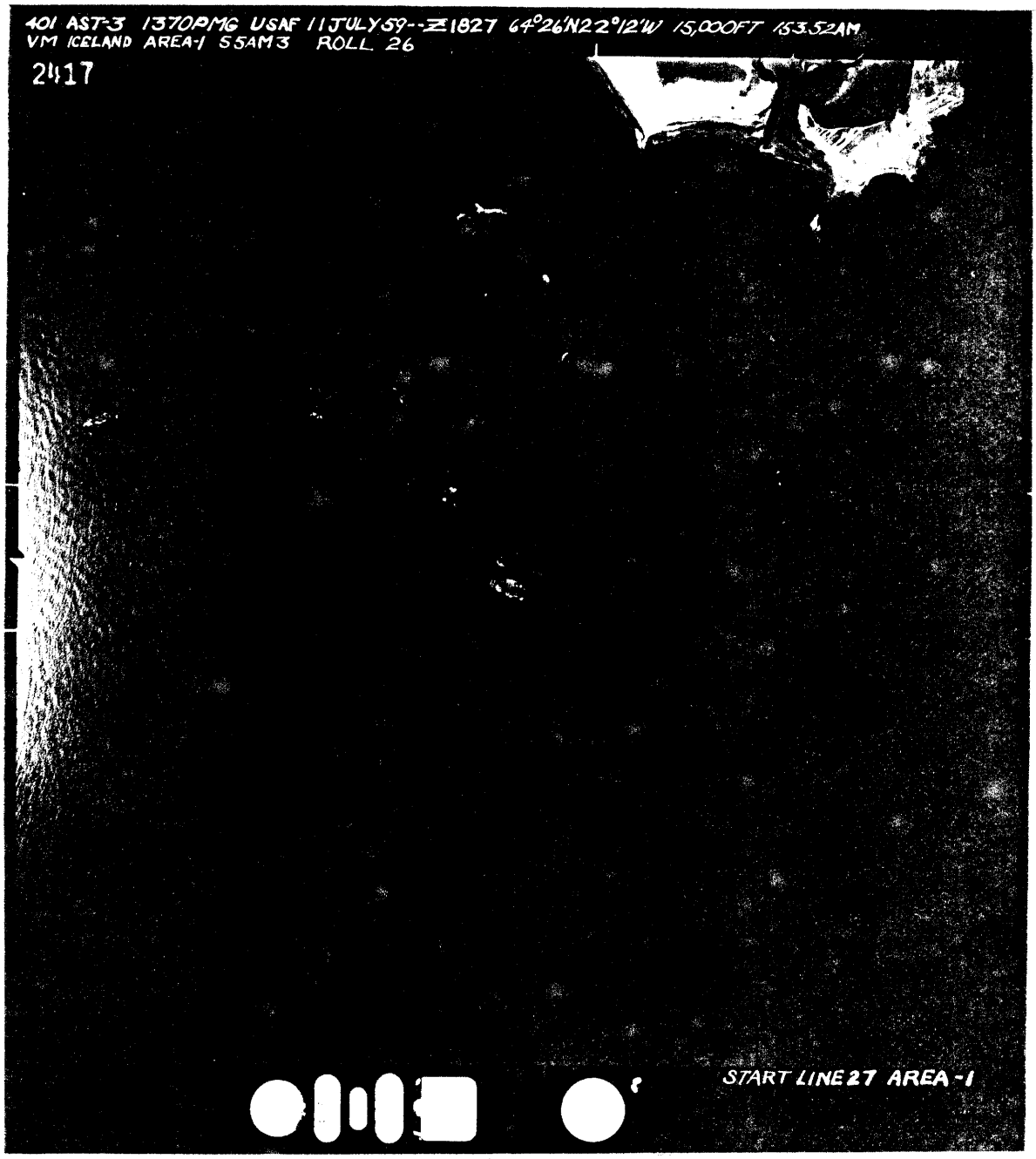

VM 401 AST-3 1370PMC USAF 11JUL59 15000' 55AM3 R-26
2379



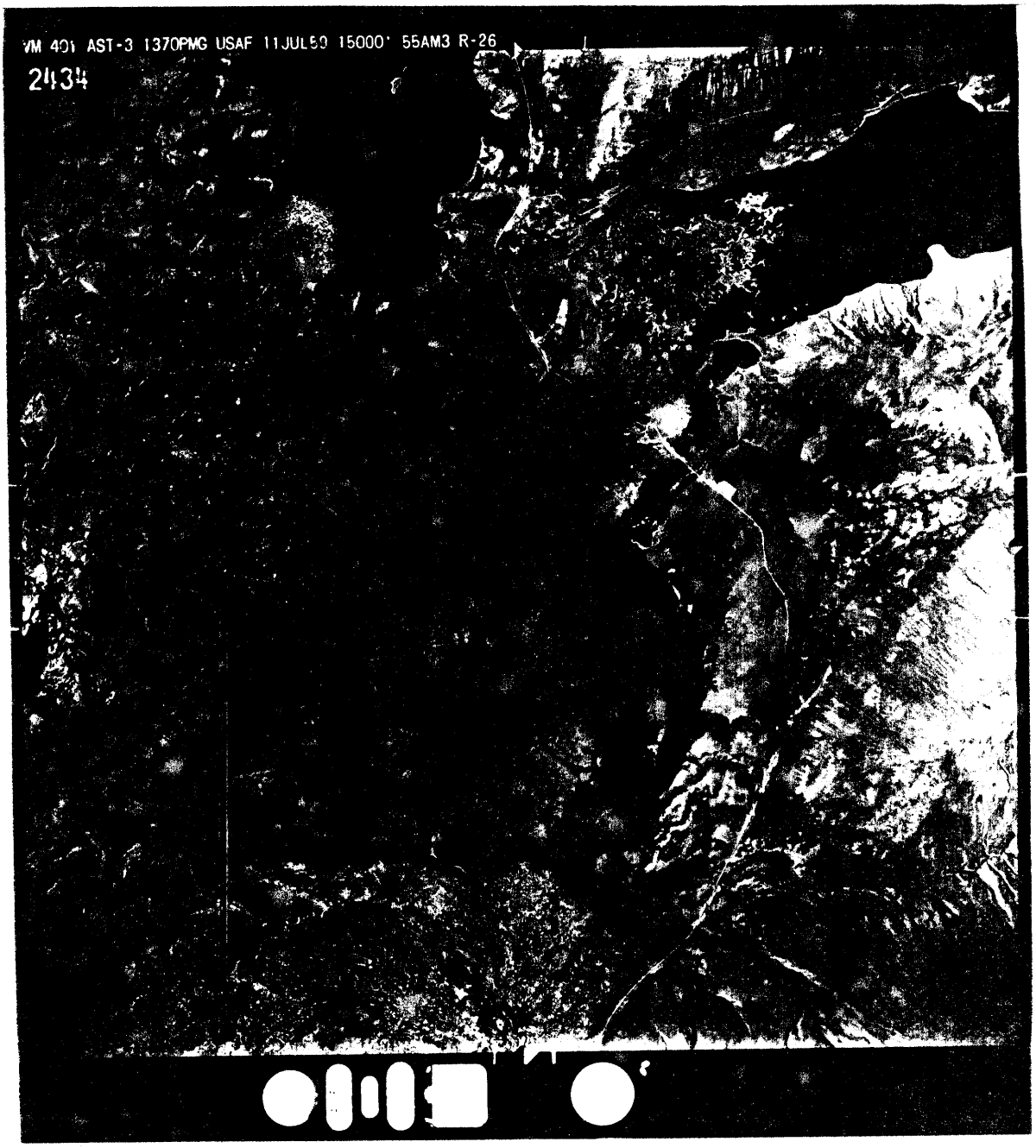


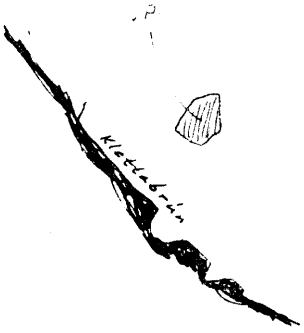
HPP-2415A er miðja vita



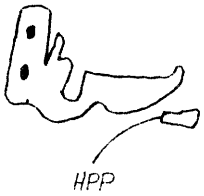

401 AST-3 1370PMG USAF 11JULY59--Z1827 64°26'N22°12'W 15,000FT 1533.52AM
VM ICELAND AREA-1 S5AM3 ROLL 26
2417
START LINE 27 AREA-1


Stór klettur





VPP-2434 er í miðri
sléttri grastorfu uppi
á ílangri klettahæð



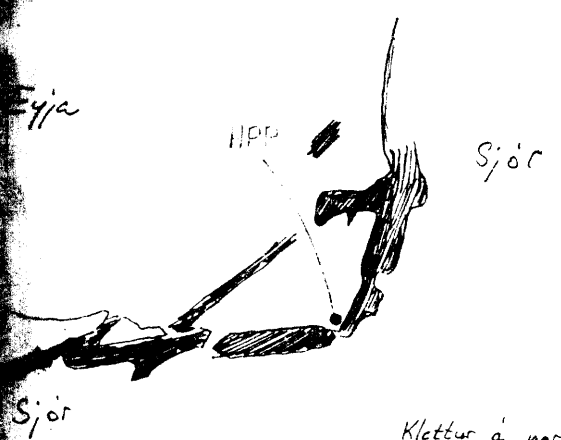
HPP-3103 er í vesturenda moldor-flags og er sá endi 3 m breiður

HPP-3103

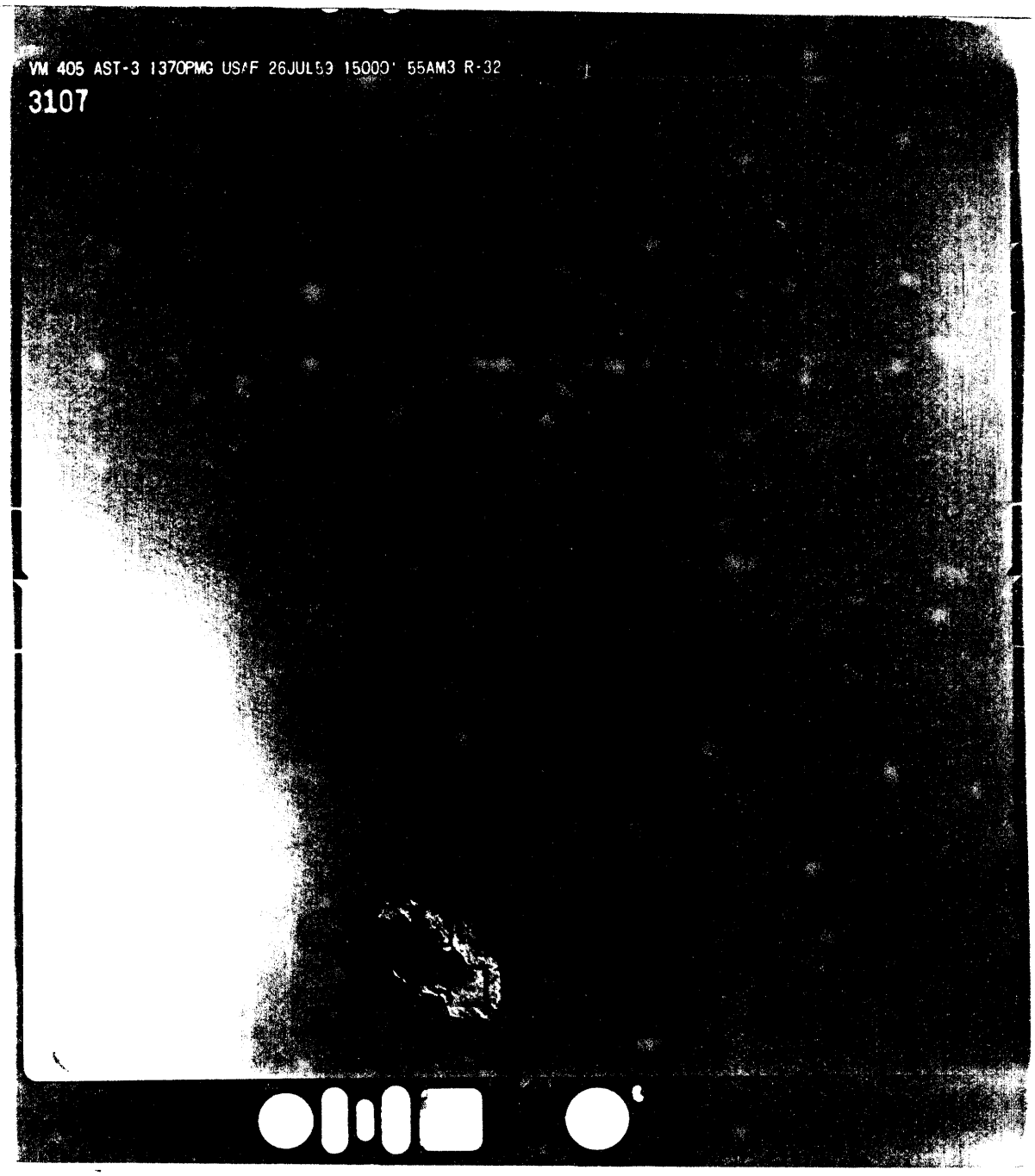
VM 405

310

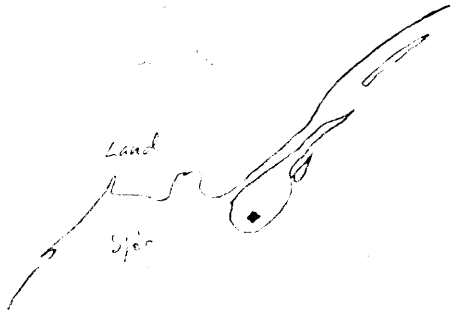
55AM3 R-32



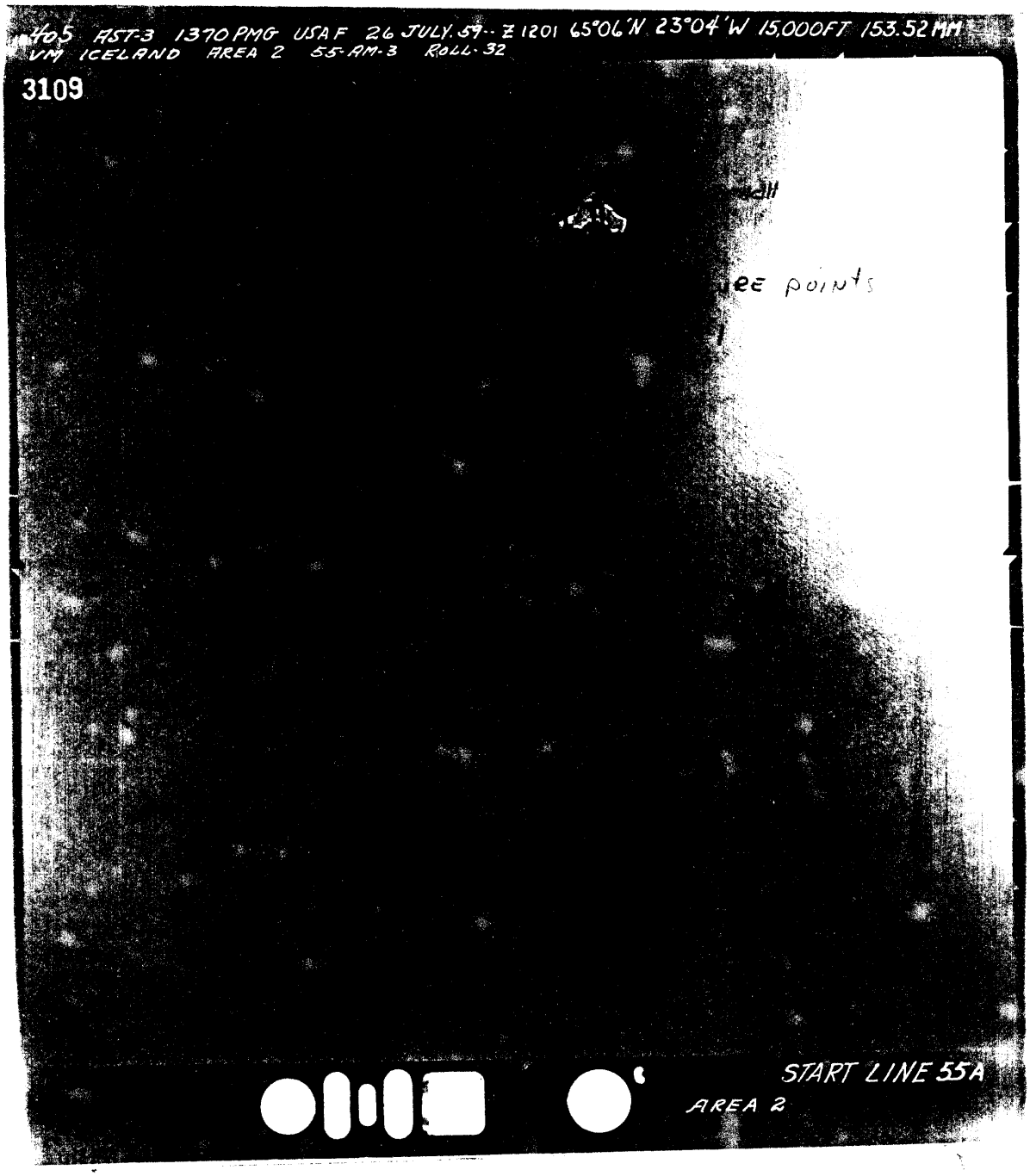
Klettur á norðaustur-horni eyjarinnar



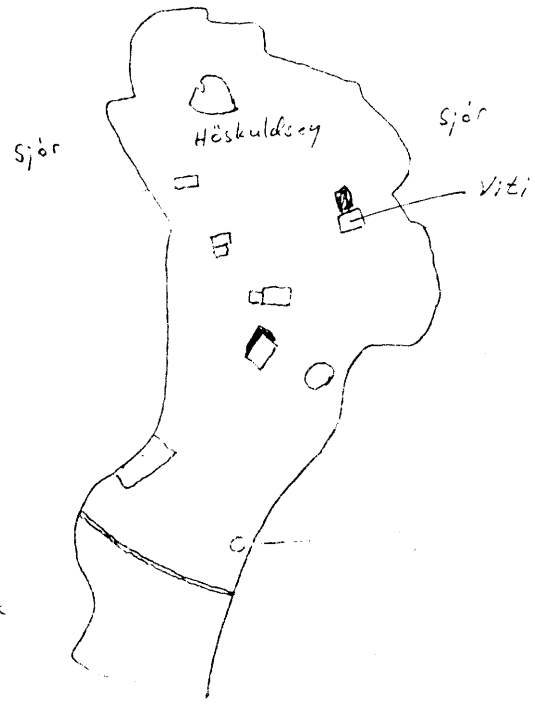
Punkturinn er í ljósum steini



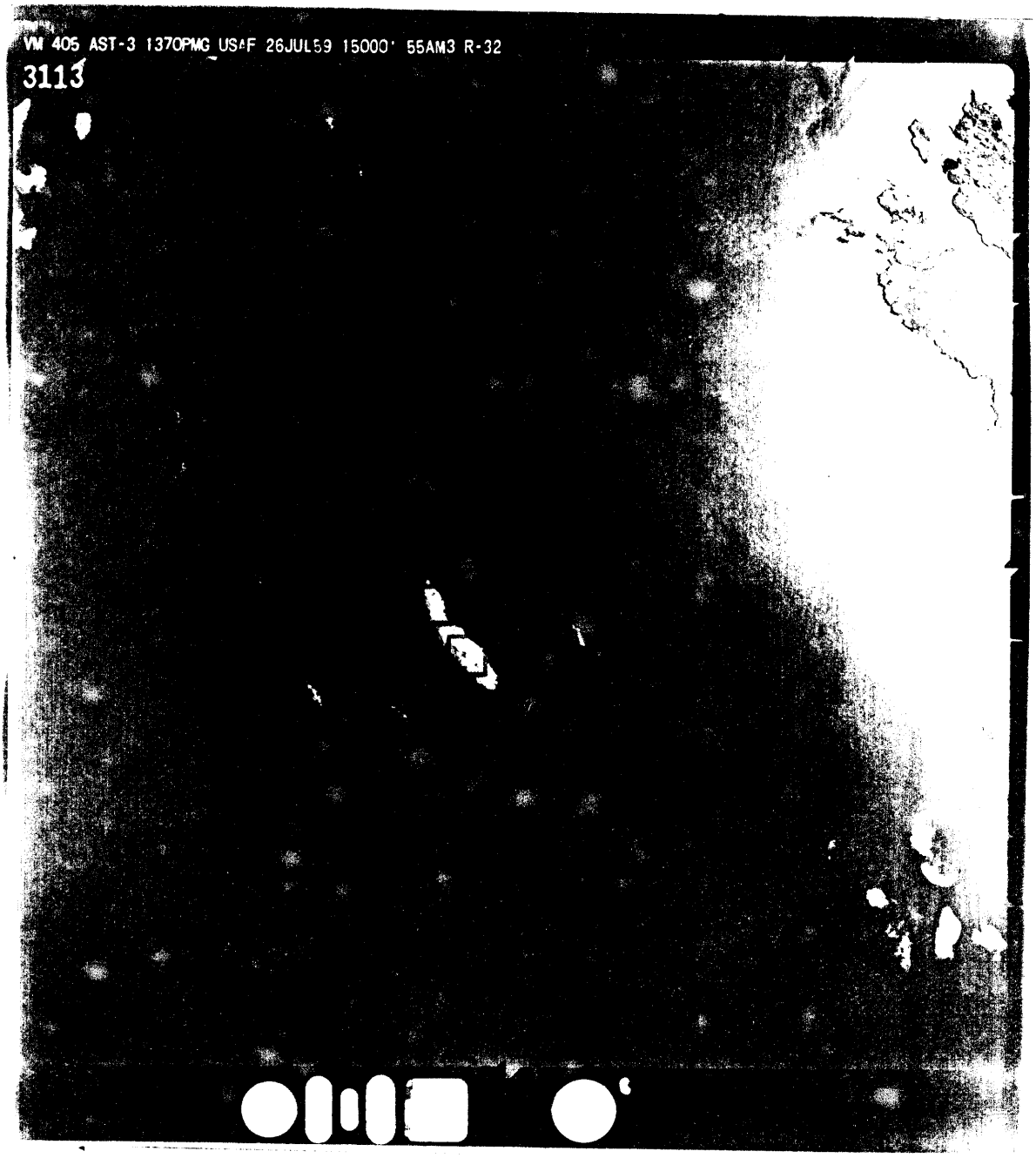
Punkturinn er í dökkum díl (smátjörn) í hólma



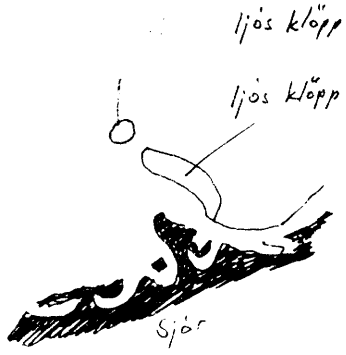
HPP-3109A er í miðjum kofa

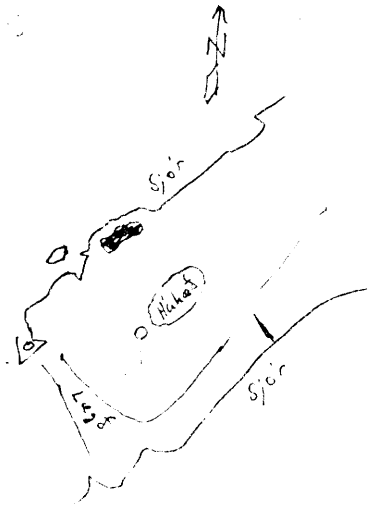


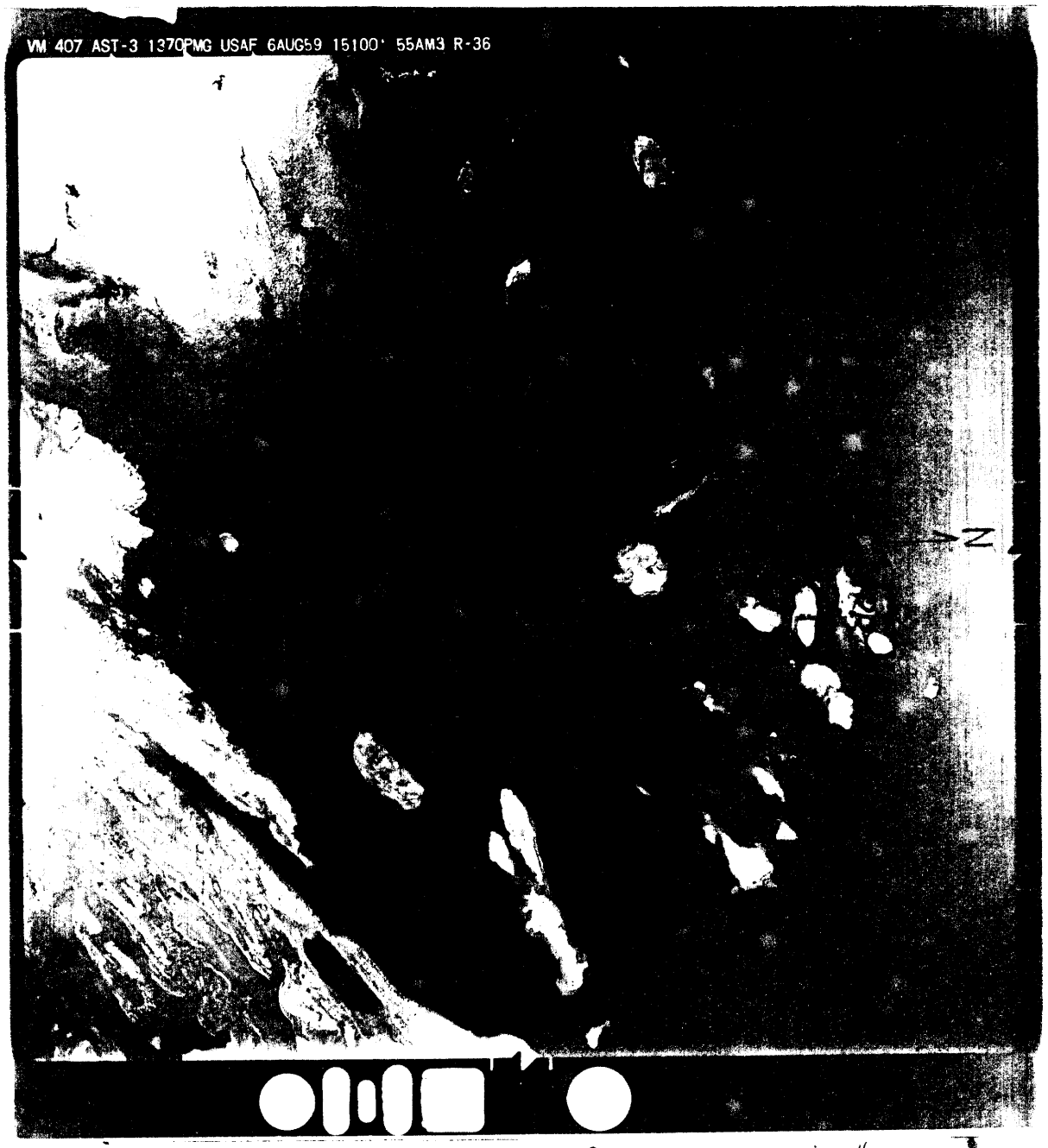
HPP-3109B er í miðjum fermingelaga steyptum brunni



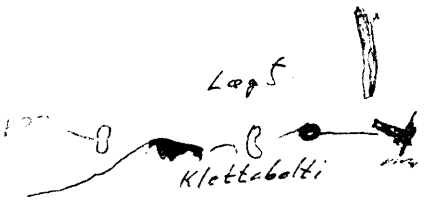
Punktarinn er í ljósum díl (klöpp) suðvestan í háhæð og hallar niður af lægð sem gengur þvert yfir eyna



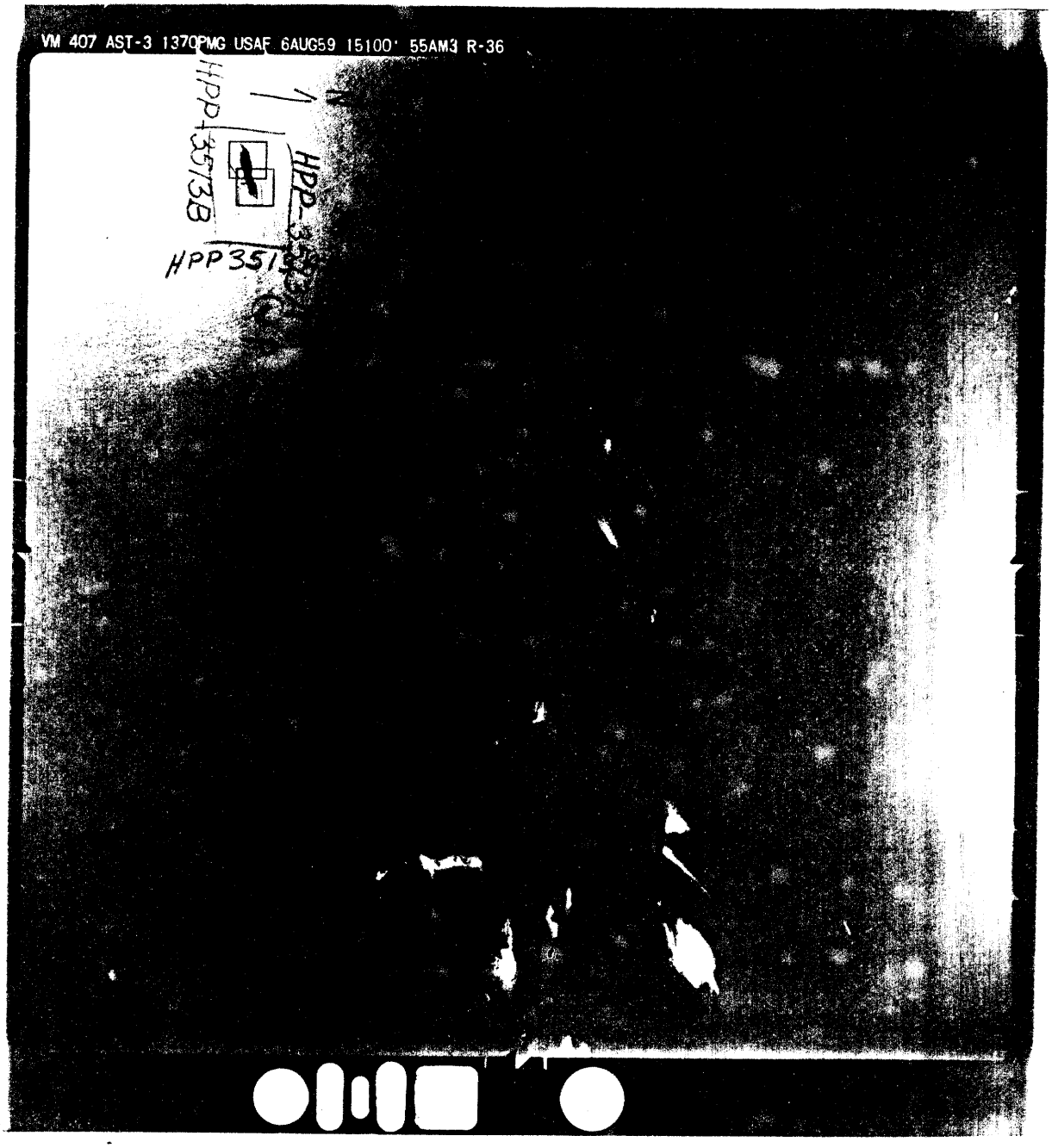


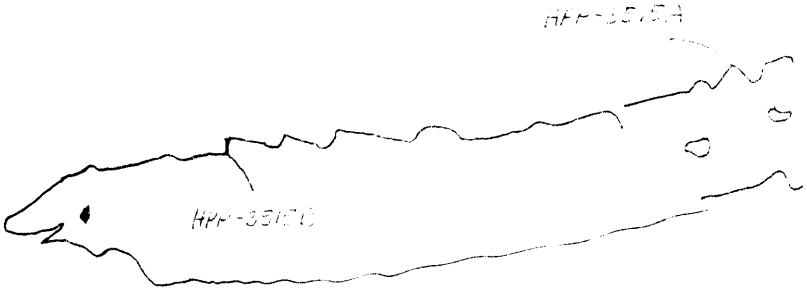


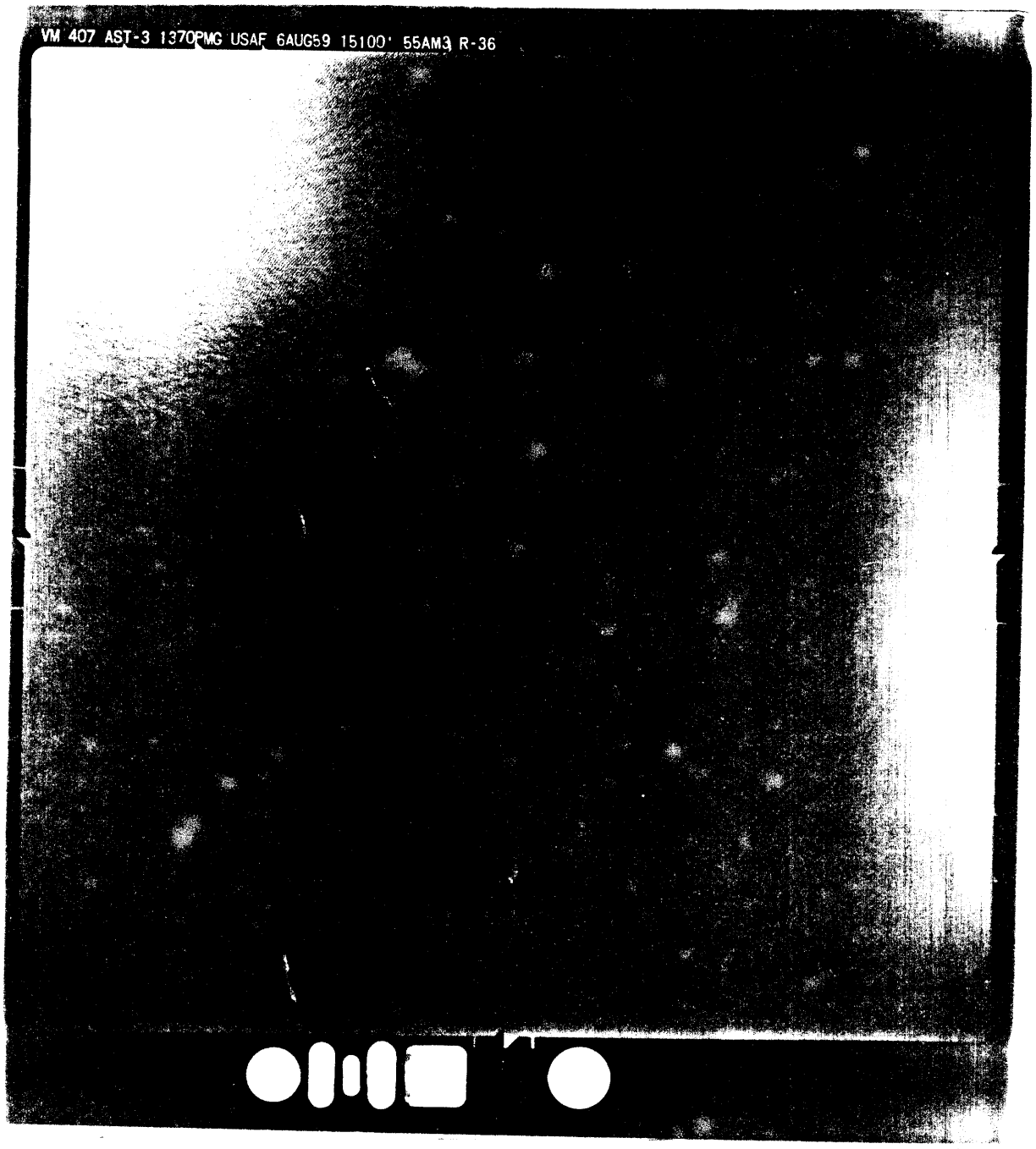
Punkturinn er mitt á milli tveggja steina, sem renna saman í einn ljósan díl á myndinni.

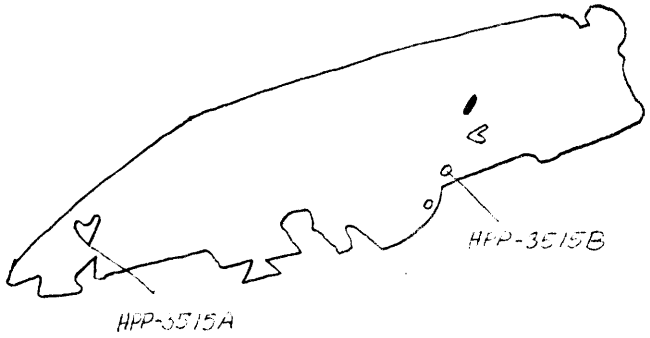


Punkturinn er í miðjum dranga, sem er ljós á lit, sívalur og er 3 m í þvermál

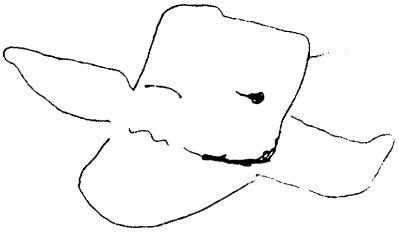

VM 407 AST-3 1370PMG USAF 6AUG59 15100' 55AM3 R-36
HPP-3573B
HPP-3573B
HPP3513

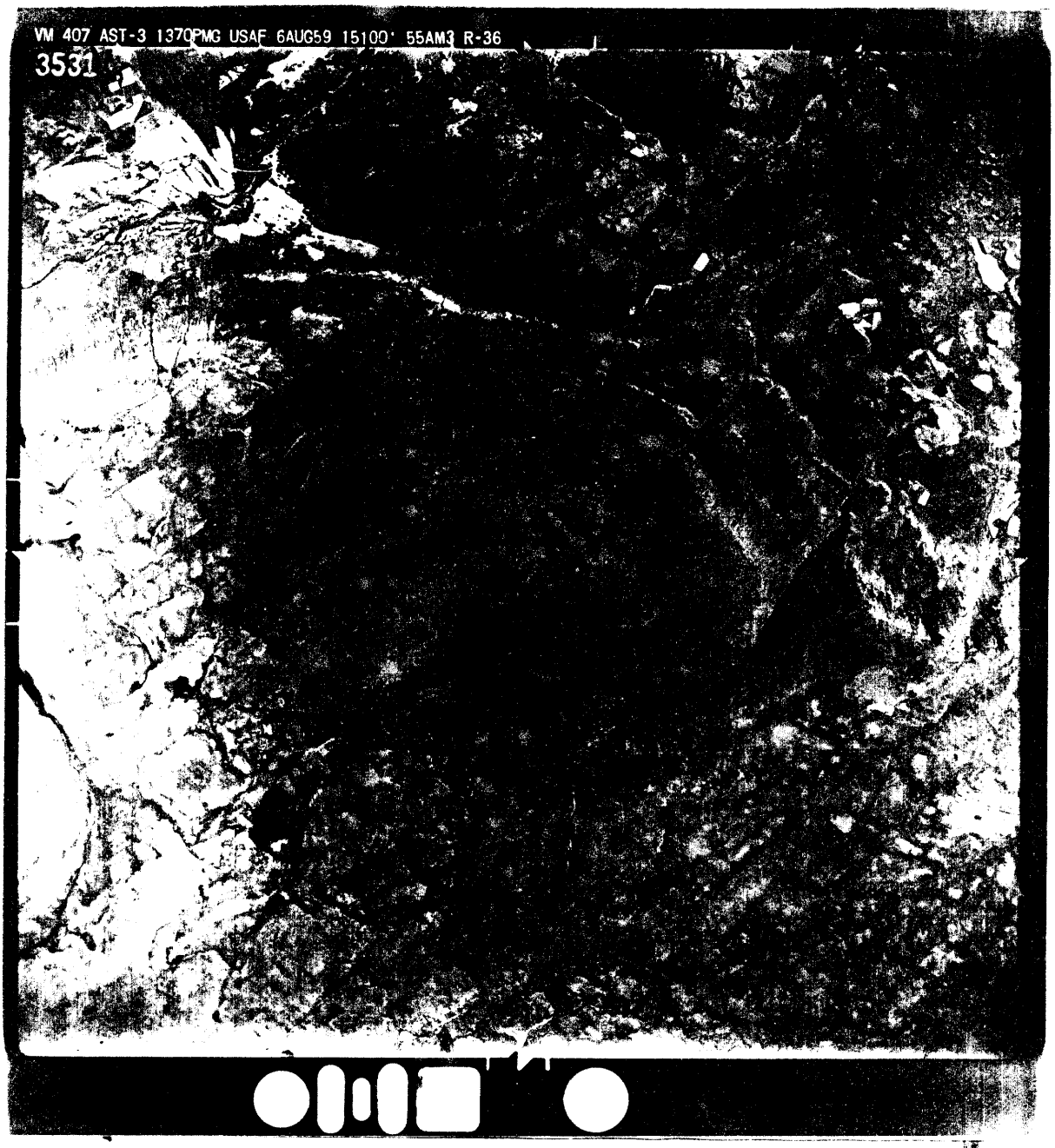

HPP-3513A
HPP-3513B

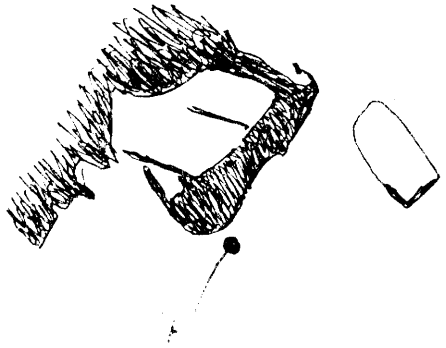

VM 407 AST-3 1370PMG USAF 6AUG59 15100' 55AM3 R-36


HPP-3515B
HPP-3515A

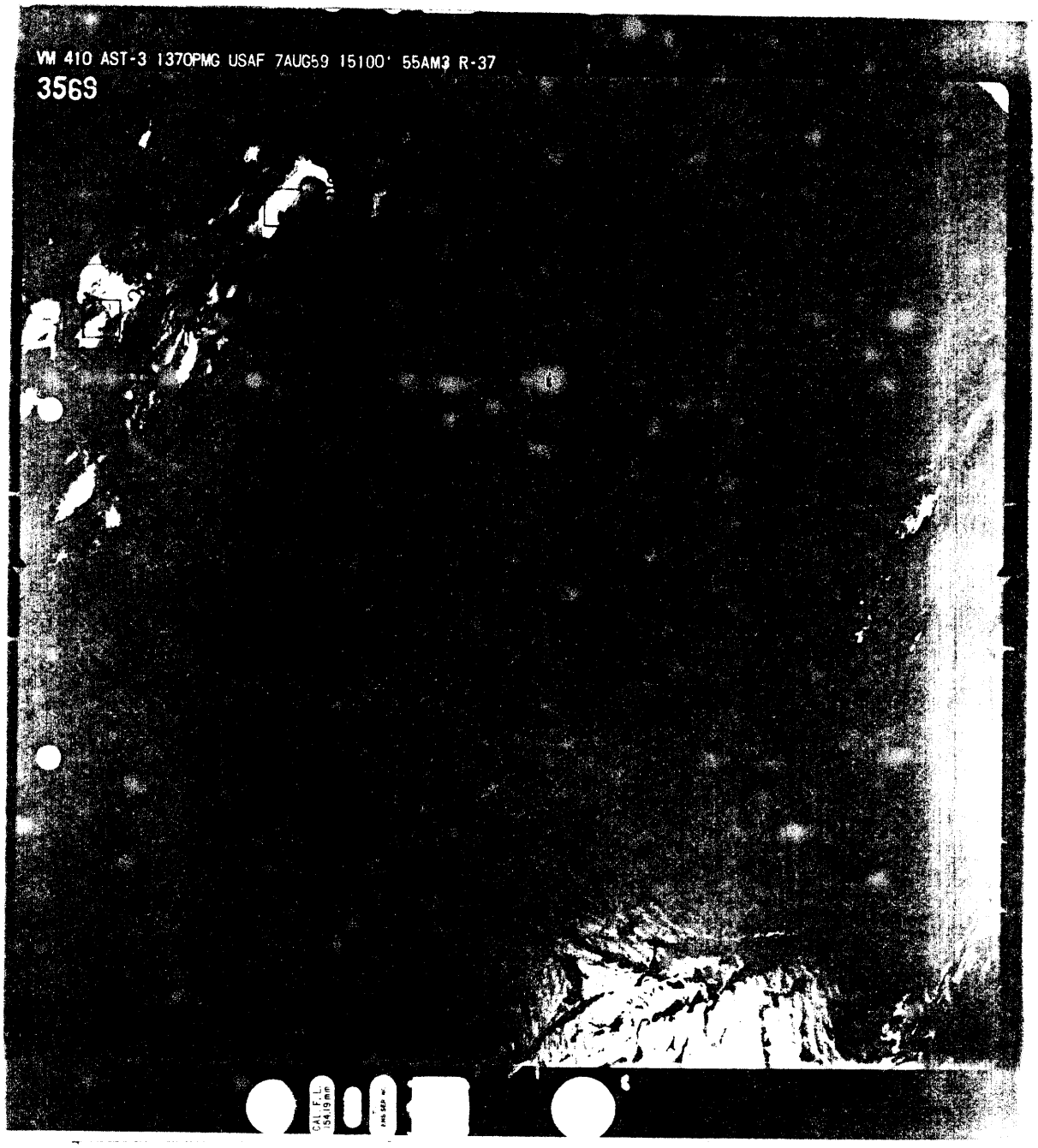

VM 407 AST-3 1370PMG USAF 6AUG59 1510D' 55AM3 R-36
3525
START LINE 2SC AREA-1



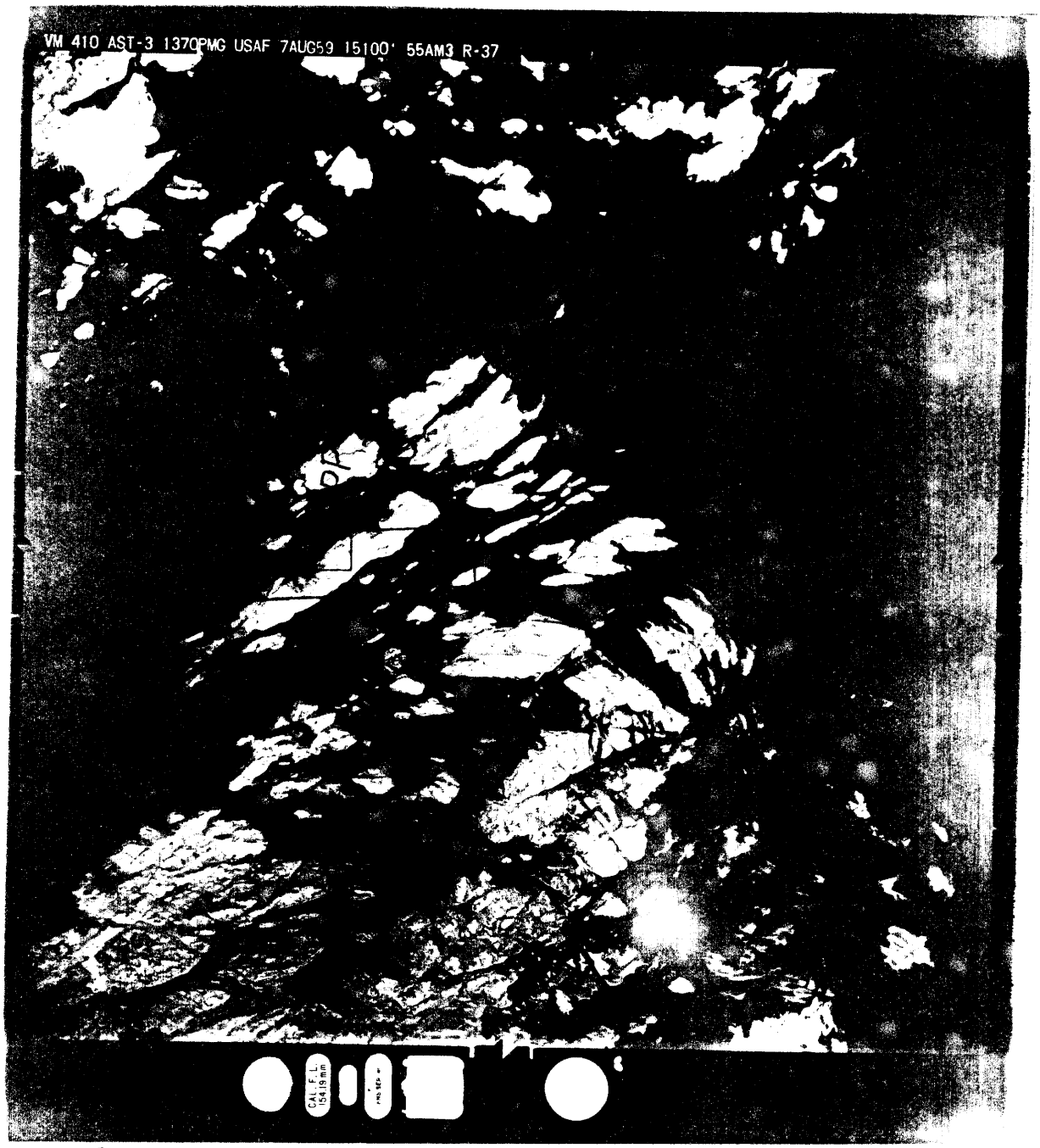

VM 407 AST-3 1370PMG USAF 6AUG59 15100' 55AM3 R-36
3531



Punkturinn er í ljósi
klöpp á Hattarana


VM 410 AST-3 1370PMG USAF 7AUG59 15100' 55AM3 R-37
3569

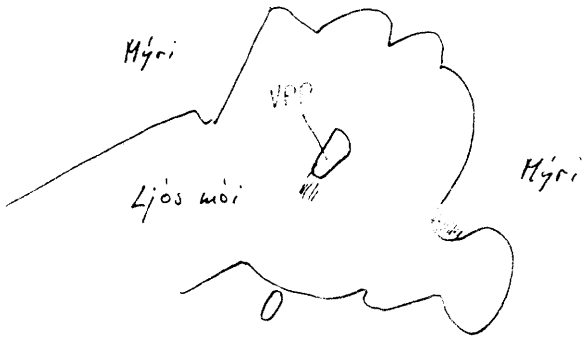

Ljós grandi
Sjór



HPP-3589

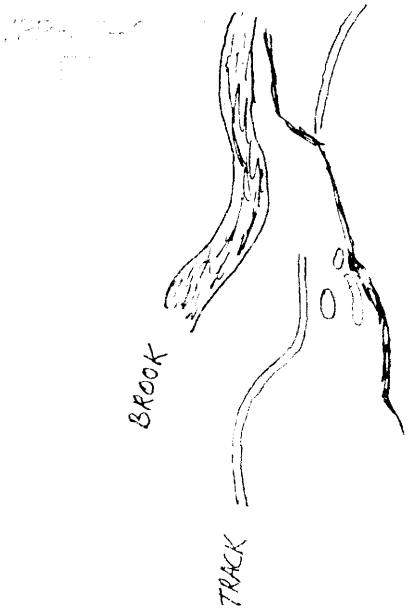
HPP-3589 er í miðjum
ljósum klettahól

HFF



Punktarinn er í suðausturhluta lautar, sem er dekkri og lægri en móinn umhverfis.

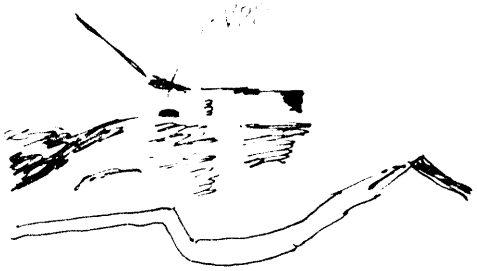

VM 412 AST-3 1370FMC USAF 7AUG59 15000' 55AM3 R-38
3740
VRP-3740


BROOK
TRACK

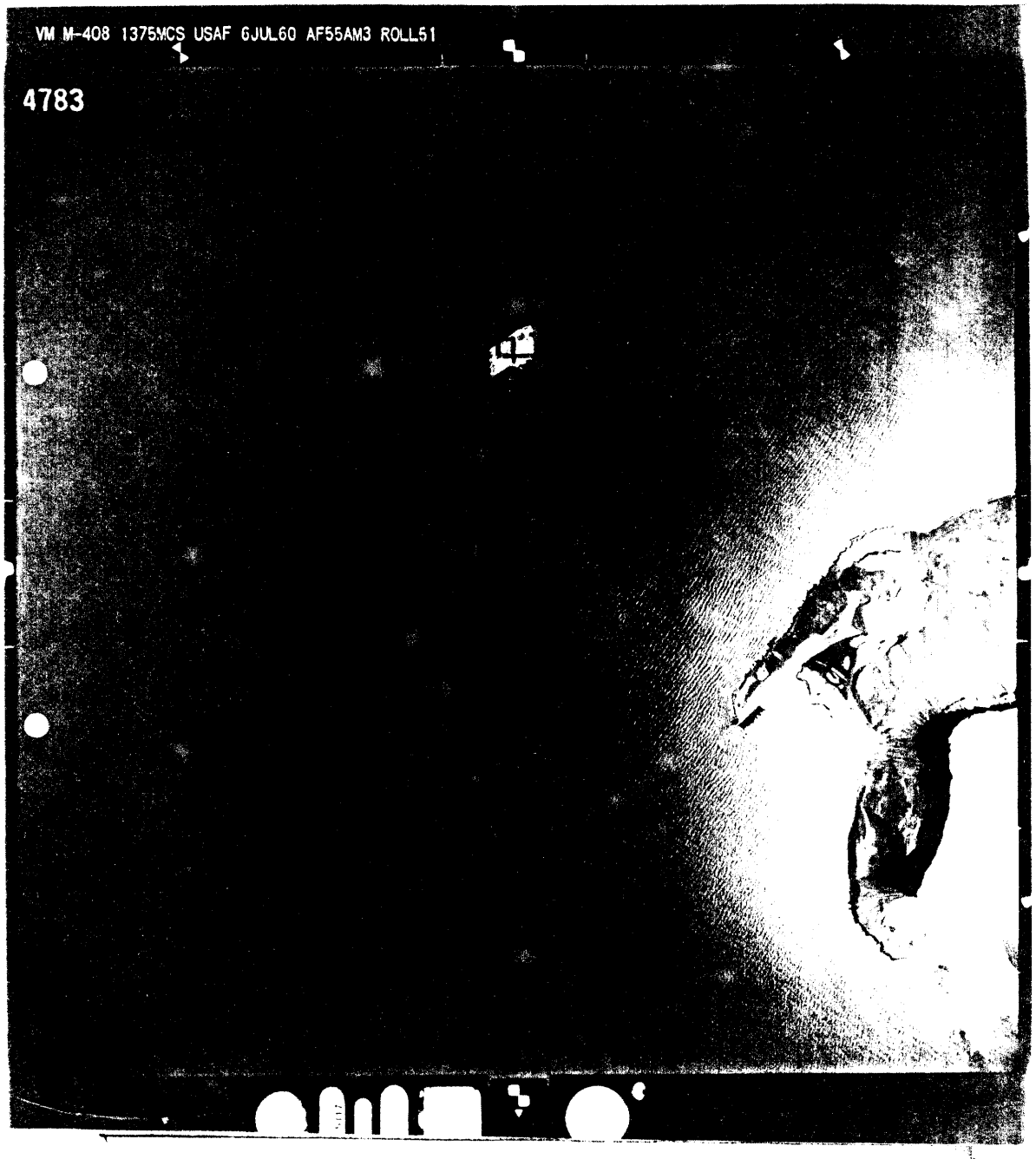
3

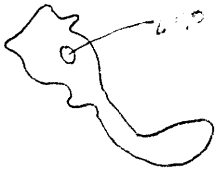
Punktinn er 4 m vestur af (rétt vestur af) stórum steini, sem sést sem ljós blettur í dökkum umhverfi – sem aftur er í ljósu, sléttu landi


VM 412 AST-3 1370FMG USAF 7AUG69 15000' 55AM1 R-39
3863



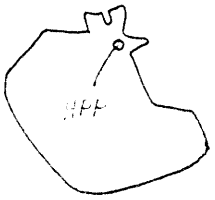
Punktinn er í ljósum farvegi
móts við 3 m langt dökkt borð



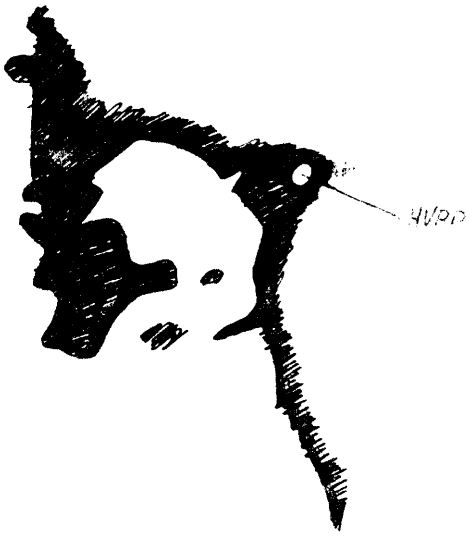


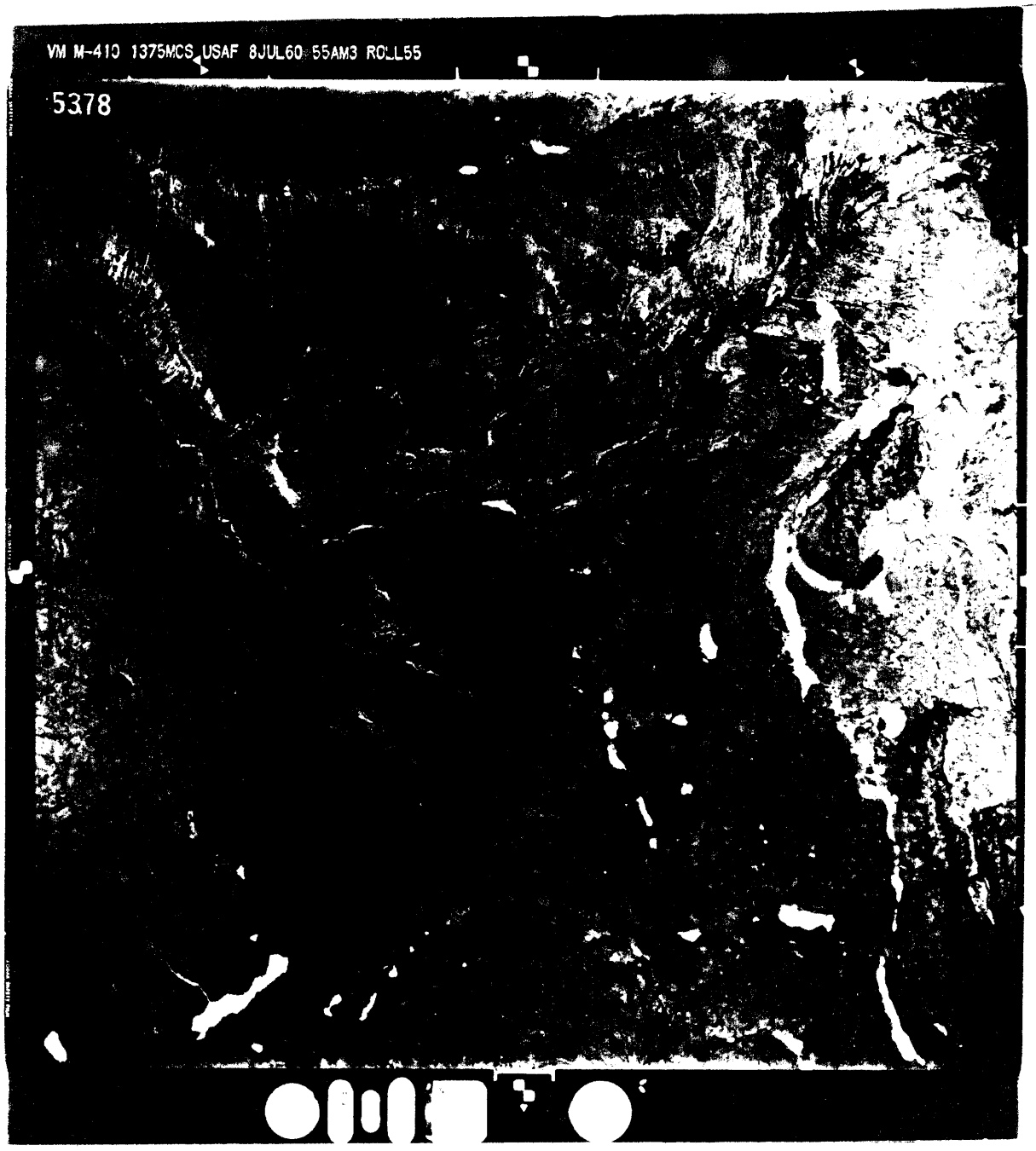
HPP-4784A

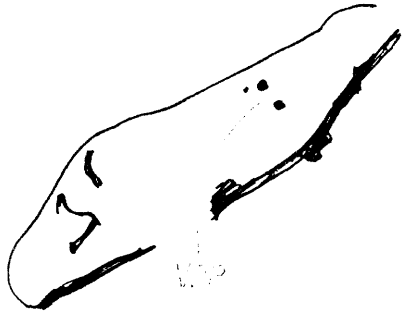
HPP-4784B



HVPP-5359

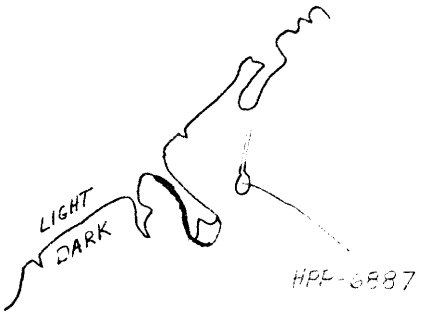



VM M-410 1375MCS USAF 8JUL60 55AM3 ROLL55
5378



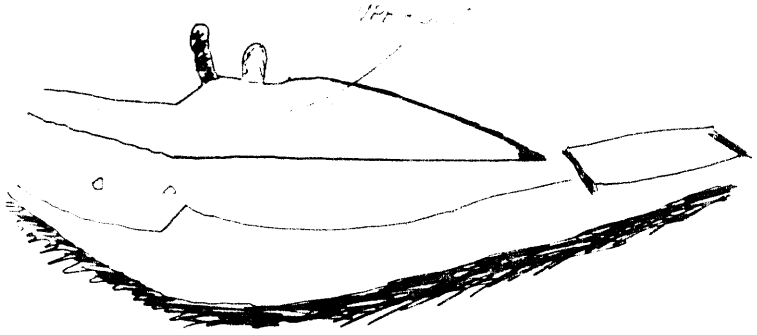

VM M-418 1375MCS USAF 16JUL60 55AM3 ROLL68
6887
CAL F.L.

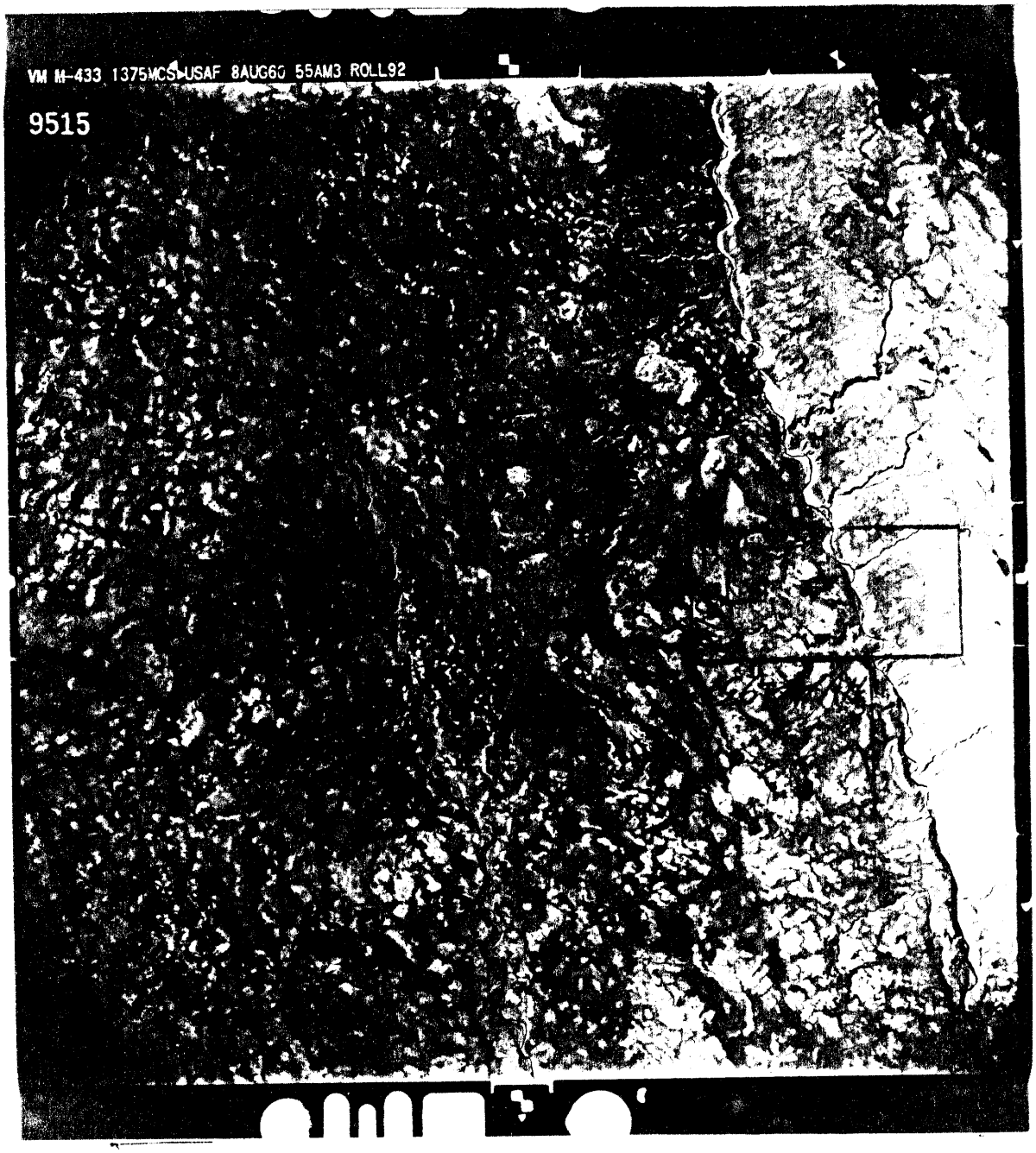
HPF-6887


LIGHT
DARK
HPF-6887

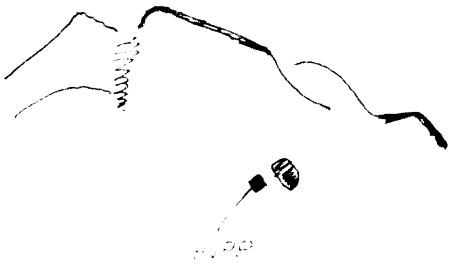
Punkturinn er á sléttu landi milli ávalrar hæðar og lækjar

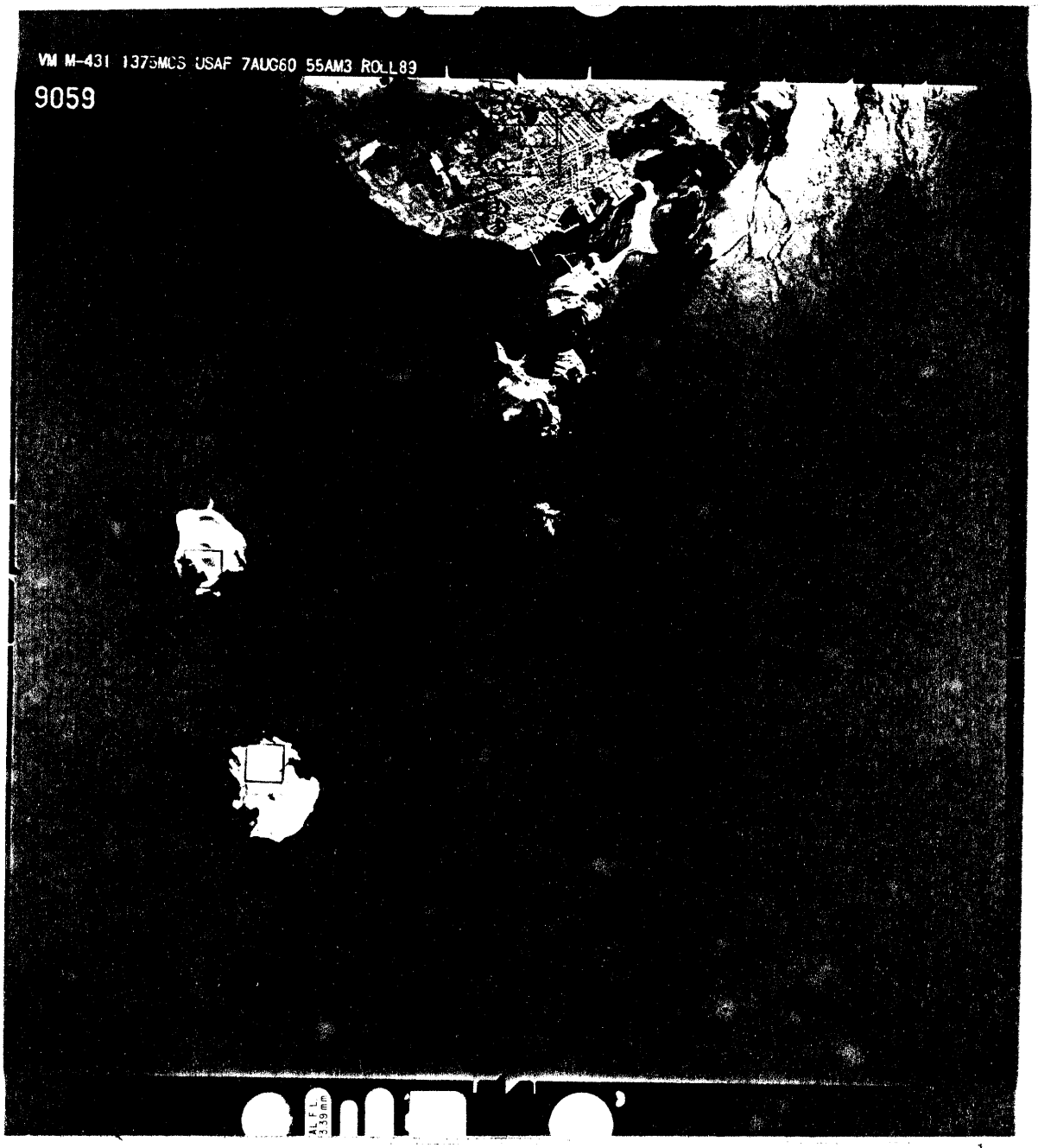

VM M-432 1375MCS USAF 8AUG60 55AM3 ROLL89
9120
N
CAL F L
53.39 mm

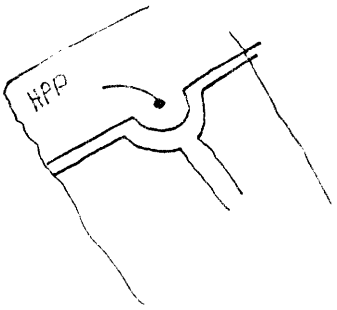




Punkturinn er í miðri smáatjörn og miðvert hæð við næsta um-hverfi hennar

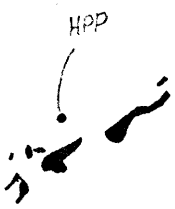






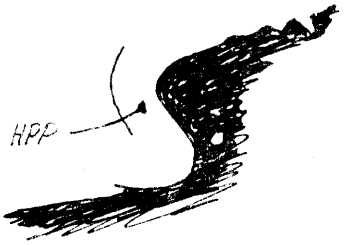
Stytta vestan kirkju

HPP



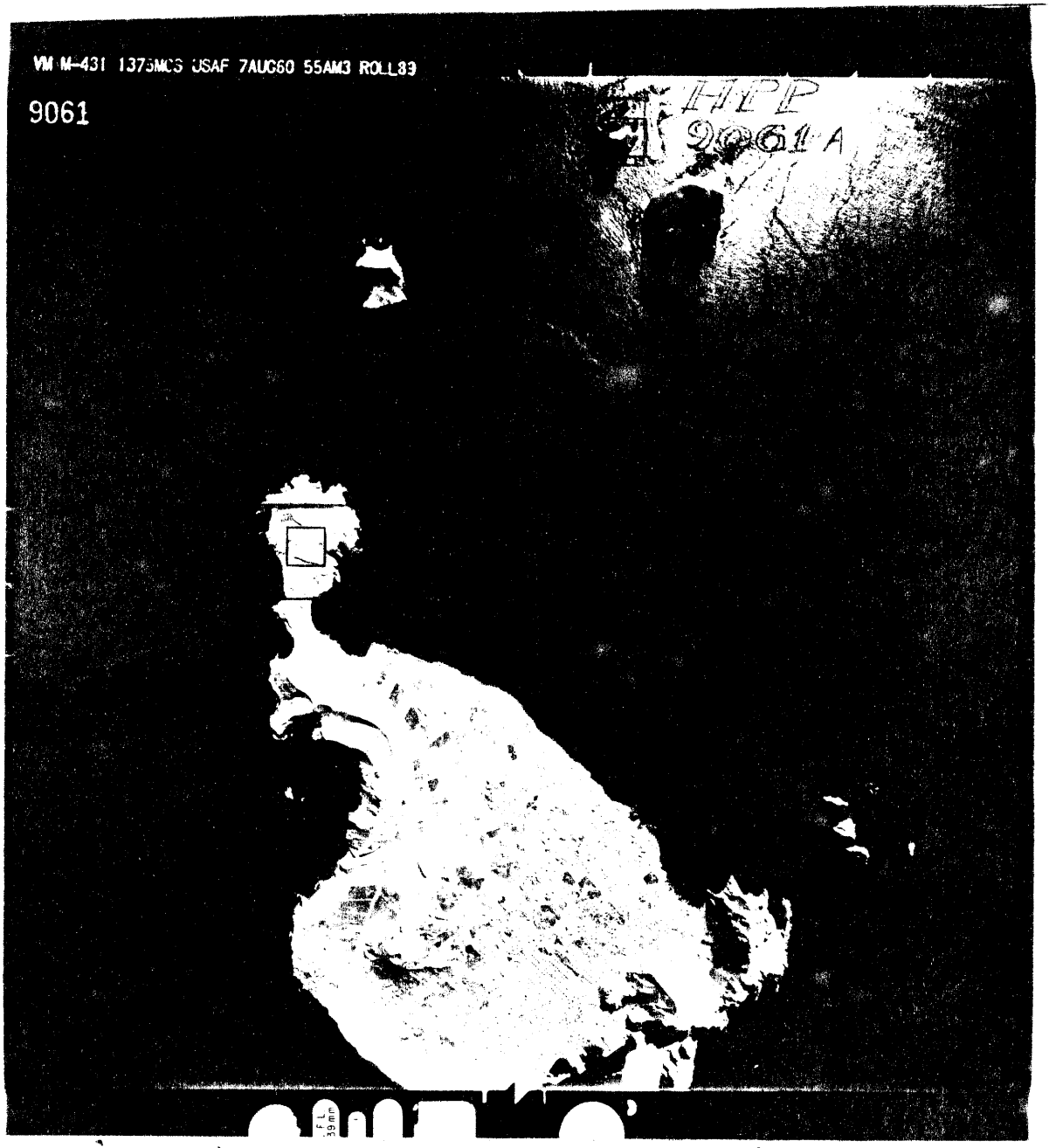
HPP-9059A

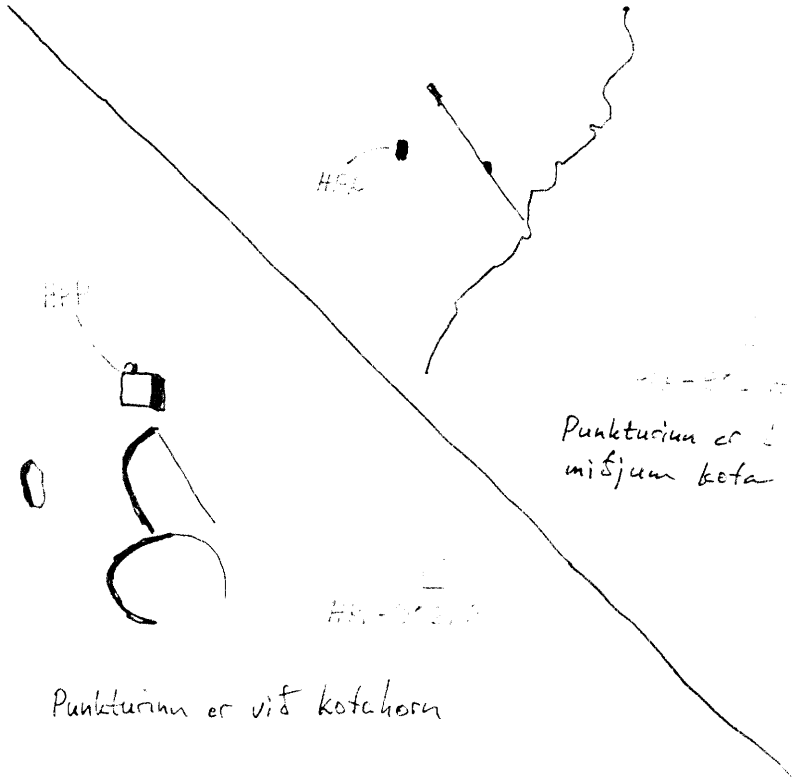
HPP

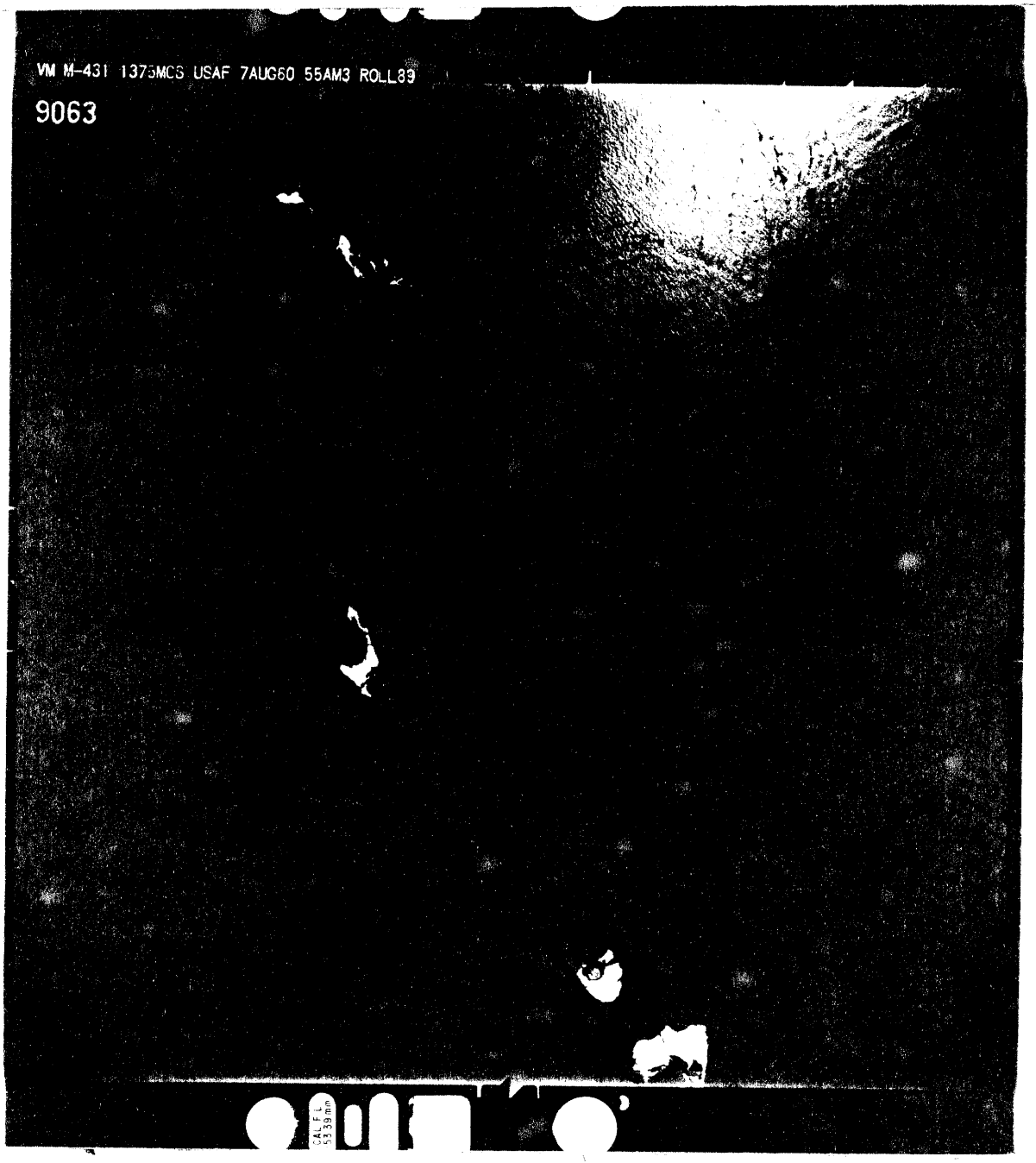


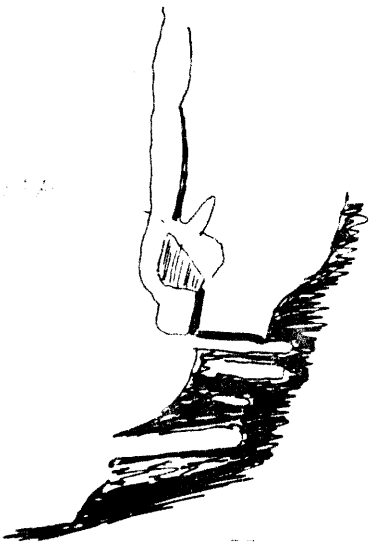
HPP-9059C

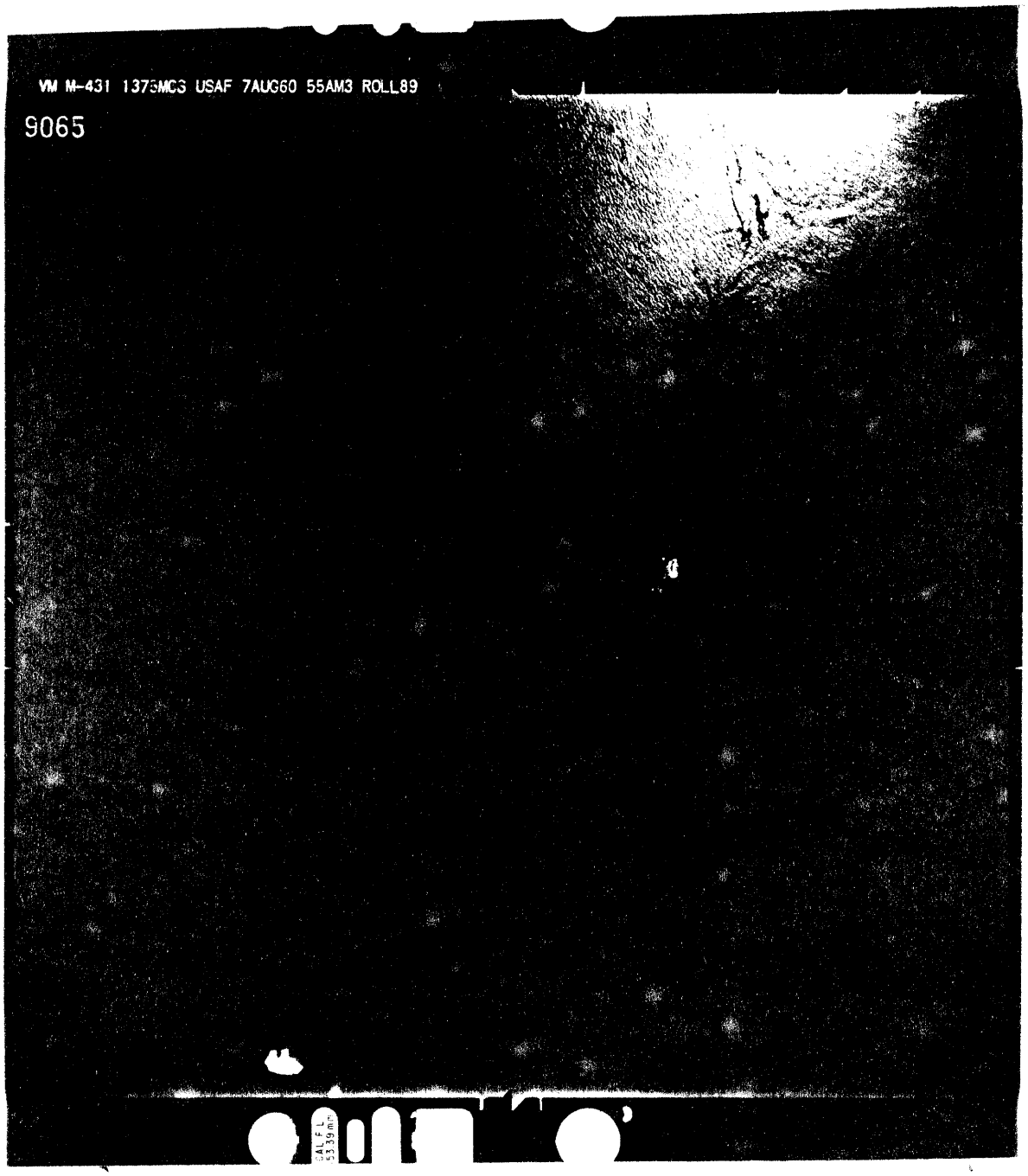
HPP-9059B

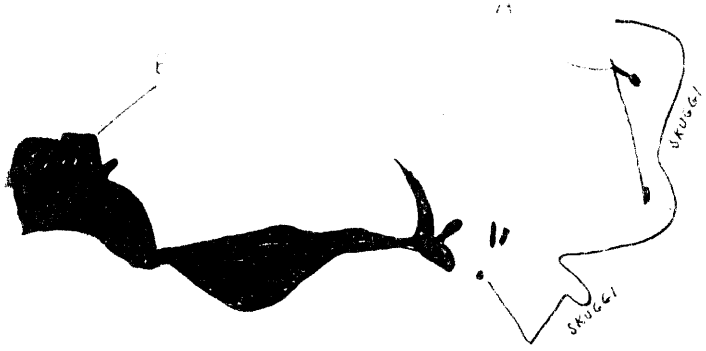

VM M-431 1375MCS USAF 7AUG60 55AM3 ROLL89
9061
HPP
9061 A


Punkturinn er
miðjum kofa
Punkturinn er við kofahorn


VM M-431 1375MCS USAF 7AUG60 55AM3 ROLL89
9063
CAL F.L.
53.39 mm




VM M-431 1375MCS USAF 7AUG60 55AM3 ROLL89
9065


SKUGGI
SKUGGI