Appendix A - Description of test areas at Andøya



**RED** = Official test area **1**, **Bleik** 

**Green** = Official test area **2**, **Grunnvatn** 

Blue = Official test area 3, Stave

### Survey points

Notice: Geodetic reference frame is EUREF89.

Differences between EUREF89 and WGS84 (from Appendix H):

 $N~WGS84~epoch2024.7 = NEUREF89UTM33epoch1989.0 + \Delta N~$  where  $\Delta N=0.64$ m  $E~WGS84~epoch2024.7 = EEUREF89UTM33epoch1989.0 + <math>\Delta E~$  where  $\Delta E=0.46$ m  $\varphi~WGS84~epoch2024.7 = <math>\varphi EUREF89UTM33epoch1989.0 + \Delta Lat~$  where  $\Delta Lat~=0.0000056^\circ$   $\lambda~WGS84~epoch2024.7 = \lambda EUREF89UTM33epoch1989.0 + \Delta Long~$  where  $\Delta Long=0.0000119$  Seven significant decimal digits for latitude and longitude will ensure cm-precision.

Point ID	Latitude	Longitude	Ellipsoidal	Physical	Northing	Easting	Mark
			height	height	UTM33	UTM33	
							Foot
							antenna
SAMF	69.27560042	15.96812897	42.73	6.88	7685395.45	538232.98	at roof
MECONING	69.28000843	16.00593213	370.23	334.44	7685910.97	539717.71	rig
							Green
RX_1	69.28031078	16.01065010	352.50	316.72	7685947.75	539903.42	antenna
							White
RX_2	69.27876623	16.01691109	358.16	322.39	7685779.63	540153.46	antenna
SENDER	69.28007238	16.00643461	381.98	346.19	7685918.43	539737.43	rig
							Grey
							ant.
							yellow
REFANTENNA	69.27538406	15.96826115	41.01	5.16	7685371.41	538238.59	tripod
							Ericsson
							Right
E-BLEIK-RF	69.27560844	15.96881180	42.64	6.79	7685396.77	538259.93	Front
							Ericsson
							Left
E-BLEIK-LF	69.27560014	15.96882632	42.60	6.75	7685395.85	538260.52	Front
							Ericsson
							Left
E-BLEIK-LB	69.27560509	15.96884918	42.60	6.75	7685396.42	538261.42	Back
							Ericsson
							Right
E-BLEIK-RB	69.27561842	15.96885426	42.65	6.80	7685397.91	538261.59	Back
							Antenna
11	69.27548568	15.96814545	40.85	5.00	7685382.66	538233.84	rig

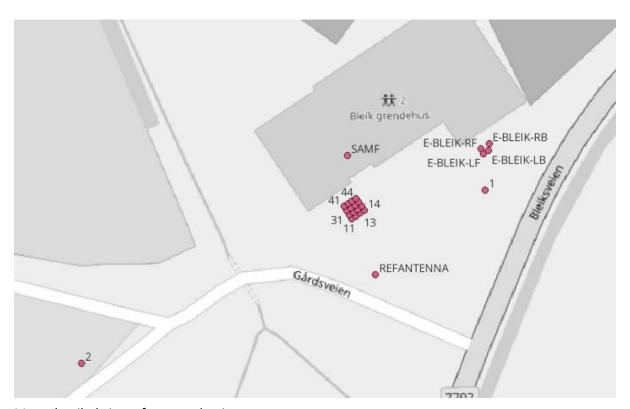
							Antenna
12	69.27549051	15.96816671	40.84	4.99	7685383.22	538234.67	rig
							Antenna
13	69.27549534	15.96818795	40.85	5.00	7685383.77	538235.50	rig
							Antenna
14	69.27550022	15.96820929	40.86	5.01	7685384.32	538236.33	rig
							Antenna
21	69.27549321	15.96813174	40.86	5.01	7685383.49	538233.28	rig
							Antenna
22	69.27549803	15.96815312	40.87	5.02	7685384.05	538234.12	rig
							Antenna
23	69.27550290	15.96817433	40.88	5.03	7685384.60	538234.95	rig
							Antenna
24	69.27550779	15.96819577	40.89	5.04	7685385.16	538235.79	rig
24	60.27550002	45.06044707	40.00	5.04	7605204.24	F20222 72	Antenna
31	69.27550083	15.96811797	40.89	5.04	7685384.34	538232.73	rig
22	60 27550562	15 06012020	40.89	F 04	7605204.00	F20222 F6	Antenna
32	69.27550562	15.96813928	40.89	5.04	7685384.88	538233.56	rig Antenna
33	69.27551050	15.96816054	40.91	5.06	7685385.44	538234.39	rig
	03.27331030	13.30810034	40.51	3.00	7005305.44	330234.33	Antenna
34	69.27551533	15.96818190	40.92	5.07	7685385.99	538235.22	rig
			10.00				Antenna
41	69.27550813	15.96810477	40.92	5.07	7685385.14	538232.19	rig
							Antenna
42	69.27551297	15.96812596	40.93	5.08	7685385.69	538233.02	rig
							Antenna
43	69.27551782	15.96814729	40.94	5.09	7685386.25	538233.85	rig
							Antenna
44	69.27552264	15.96816853	40.96	5.11	7685386.80	538234.68	rig
							Asphalt
1	69.27553403	15.96883049	39.86	4.01	7685388.48	538260.80	nail
							Asphalt
2	69.27523091	15.96674688	40.48	4.63	7685353.39	538179.06	nail
							Tree
							stick,
							Height
101/2 05:5	60 222 1227	45 00000000	66.00	24.55	7070455	F2622=	ref:
LOK2-ORIG	69.22249871	15.93303984	66.92	31.04	7679453.28	536937.52	terrain
AF0	60 22202200	15 02225222	65.60	20.80	7670504.00	F36040 40	Tree
A50	69.22293289	15.93335322	65.69	29.80	7679501.88	536949.19	stick,

							Height
							ref: top
							Tree
							stick,
							Height
A100	69.22336709	15.93366659	65.76	29.87	7679550.48	536960.86	ref: top
							Tree
							stick,
							Height
A150	69.22380127	15.93398000	65.64	29.75	7679599.08	536972.52	ref: top
							Tree
							stick,
							Height
B50	69.22218526	15.93394222	65.80	29.91	7679418.87	536973.77	ref: top
							Tree
							stick,
							Height
B100	69.22187181	15.93484460	66.76	30.88	7679384.47	537010.03	ref: top
							Tree
							stick,
							Height
B150	69.22155835	15.93574693	67.95	32.07	7679350.07	537046.28	ref: top
							Tree
							stick,
							Height
C50	69.22237796	15.93182408	64.44	28.55	7679439.08	536889.60	ref: top
							Tree
							stick,
							Height
C100	69.22225721	15.93060834	63.97	28.08	7679424.89	536841.68	ref: top
							Tree
							stick,
							Height
C150	69.22213644	15.92939261	63.64	27.75	7679410.69	536793.75	ref: top

## Description of site 1

#### Overview of survey points

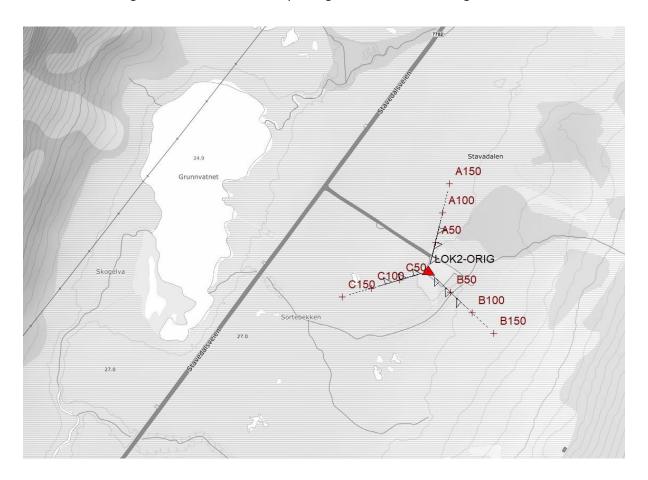




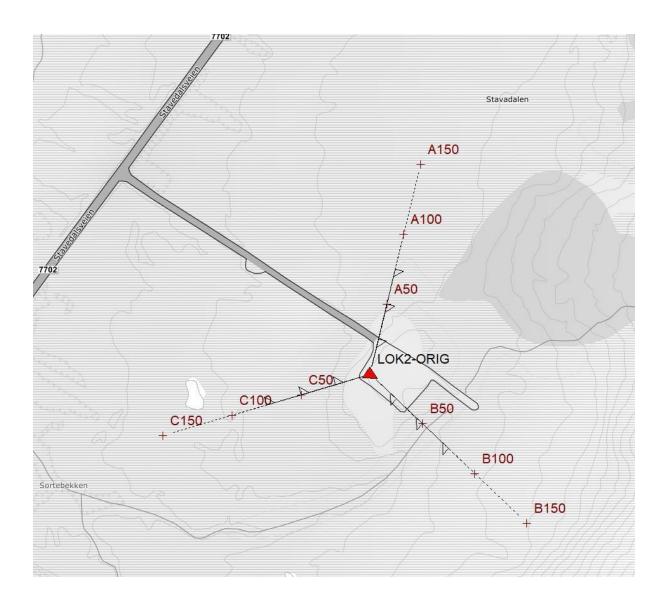
More detailed view of surveyed points.

### Description of site 2

Location 2 is the parking lot at the end of a dirt road. Position N 69.2225°,  $\emptyset$  15.9335° Most of the testing will be conducted at the parking lot, or the surrounding area.



There will be certain marked position surrounding the area. 120 degrees apart, at 50, 100 and 150 meter in distance. Those positions can be found on the picture below:



# Description of motorcade route(s) on Andøya, site 3

The start is as Stave commynity house (69.212187 North ,15.858559 East), the small jammers can be used the intersection between county road 7702 and communal road "Oklveien" (69.14409 North, 15.75847 East). The picture below shows the stretch of road that can be used for the motorcade (Red line).



The road is quite narrow 5.1 meters with a speed limit of 80 km/h. The traffic volume is low with about 1000 vehicles per day. For some tests where reduced speed is need there will be a NPRA vehicle in front and at the back of motorcade. Communication to the vehicles will be via FM radio.