

ARCTIC

**NO FUSS
NO RUSH
NO EXTRA EYES**

JUST SKIES TO FLY

FINNISH LAPLAND is the largest remaining wilderness in Europe.

Being sparsely inhabited makes the area a truly attractive choice for any company that wishes to test its equipment beyond the reach of too many keen eyes. Mild summers offer you days with 20 hours of continuous sunlight. Harsh winters put your products to test unmatched with any other spot in continental Europe.



With the congested air space of Central and Western Europe already constraining UAV operations, this new open environment will provide an important stimulus to development of unmanned air system by the European aerospace and defence industries.

Robonic operates a dedicated UAV test flight centre at Kemijärvi, Finland. This centre is established to support development, test and evaluation, and operational training for ground launched targets and tactical UAV's. The facilities will include support for both catapult and runway launched air vehicles.

The Robonic Arctic Test UAV Flight Centre (RATUFC) is located just inside the Arctic Circle. The Kemijarvi airfield, located some 90 km east of the town of Rovaniemi, already has a 1400 m runway and basic airfield infrastructure that supports year round civil and military flying operations. RATUFC offers an excellent opportunity to test whole systems in Arctic environments to ensure full functionality in extreme conditions.

Robonic's full-service UAV test environment offers:

- large range size up to 11 000 km²
- all planning, reservations and permits needed from and with Finnish civil and military authorities
- 4D-large airspace and ASM
- cold environment down to even - 40 °C
- daylight even 24 hours per day
- covered airfield almost only for UAV's
- ground facilities - temporary will be arranged as per customer requirements
- superior cost-effectiveness
- full logistics support (accommodation, vehicle etc.)

Environment

The range area will comprise of some 11 000 km² of air space. The UAV test flights will be conducted in segregated airspace.



Airfield EFKM

- runway, taxiways and aprons in very good condition
- 2 aprons
- covered, asphalt
- 17/35
- elevation 692 ft / 211 m
- 1400 x 23 m
- almost zero traffic
- no ATS or RDRs

Average figures of Kemijärvi area

Kemijärvi region has a continental climate with relatively warm summers and cold winters. Westerly air streams also affect the area from time to time. Snow accounts for 40-50% of precipitation, with the permanent snow cover generally lasting from mid November until the spring melt in mid May. The waterways remain ice-covered for almost 7 months. The season of the white nights, when the sun does not set at all, lasts for around 5 weeks (4 June-9 July).

Temp	°C
Snow	cm
Daylight	hrs / day
Met	

Testing opportunities from long SUMMER days



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-12	-11	-7	-1	4	11	14	12	7	0	-7	-11
38	50	58	44	11	-	-	-	-	7	10	20
4,5	8,5	11	15	19	24	21	18	14	10	6	2,5
Spe VFR	VFR	CAV	CAV	CAV	CAV	CAV	CAV	VFR	Spe VFR	IFR	Spe VFR



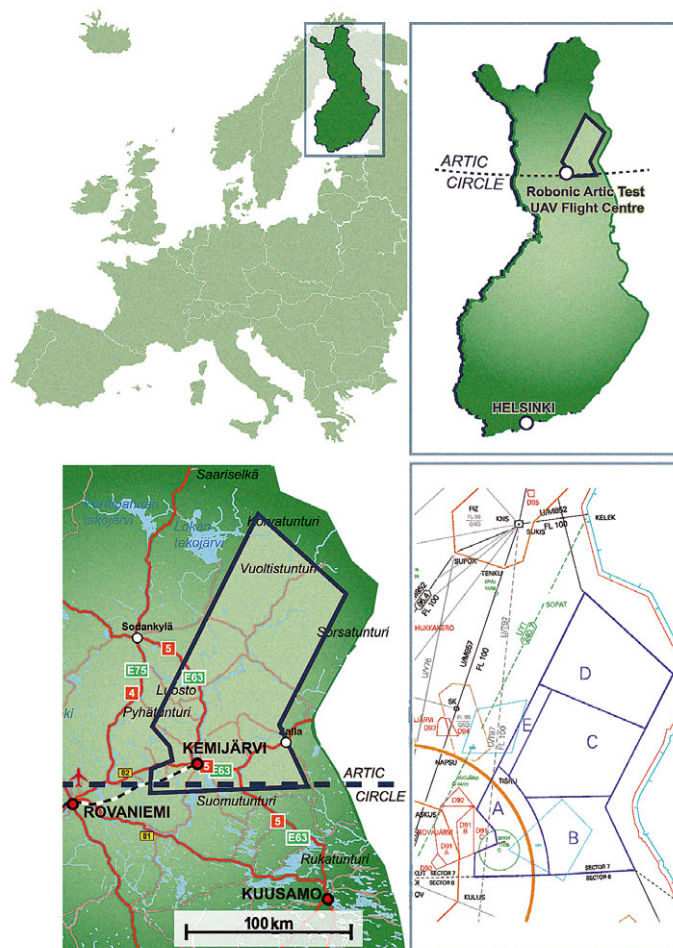
Facts

- area: approx. 11 000 km²
- population: < 2/km²
- flora: forest, marsh
- 4 main villages + approx. 10 very small ones
- fells: about 20, 1300-1700 ft msl
- waters: 1 lake area, many narrow rivers
- railroad to Kemijärvi town
- road network thin - covers the whole area
- radars (civ + mil) cover the range

Air Space Management

Almost every part of the range is class G (FL95) below 3000 meters. Above this class C is applied. Temporary danger-area divided to sub-areas

- A (GND-FL 75), B,C,D,E (GND-UNL).
- G51: very limited (< 100 hrs/year) glider use.
- MILCTA: no effect when danger-area activated.
- D91: close to EFKM (6 km), UAV-aviation is possible in D91 when the area is not used by Finnish Defence Forces. FDF TSAs 723, 712, 710: no effect when the danger area is activated.



Permits

All permits with Finnish authorities, such as FCAA, Finavia etc, will be arranged by RATUFC.

Contact / Info

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Surrounded by a string of dozens of wooded hills and fells, the heart of Kemijärvi lies on a beautiful peninsula lapped by the waters of the Kemijoki river, the Kemijärvi and Pöyliöjärvi lakes and Kuumalampi pond. In all, Kemijärvi has around 393 lakes and ponds – some of the best pike waters in Finland. Kemijärvi's population comes to around 9,400 and its surface area covers approximately 3,942 km² of which water areas account for some 365 km².

KEMIJÄRVI, FINLAND

As Finland's northernmost city and the service centre for Eastern Lapland, Kemijärvi has plenty to offer.



Sports and keep-fit enthusiasts have lots to choose from – easily accessible fells, the Sports Hall and Ice Hockey Rink as well as the Poukama spa and indoor swimming pools. The Culture Centre, Music School, museums and events offer experiences for culture lovers. Besides accommodation, conference and recreational facilities, Kemijärvi's other services, such as those of the Lapponia Hospital, are widely used.

Kemijärvi is easily accessible, with Rovaniemi and Kuusamo airports about an hour's drive away, the night train between Helsinki and Kemijärvi (and other trains to Rovaniemi) as well as coaches and passenger cars. The fell resorts of Suomu, Salla and Pyhä-Luosto are within an hour's reach from Kemijärvi centre and the drive to Ruka takes about 1,5 hours. Snowmobile routes take you to the ski resorts in winter.

The small industrial city of Kemijärvi has a diverse structure of livelihoods, and agriculture and the forestry industry have a firm foothold here. For more information, please contact Jari Luoma-aho, Business and Trade Director, on +358 40 589 1340.



KEMIJÄRVI

sparkling waters and
green gold

www.kemijarvi.fi