Vågå Wave Camp

Local rules and procedures

Version 2.0

Innholdsliste

1 General

1.1 Scope

The scope of this document is to cover all aspects of the Vågå Wave Camp, including administrative and operational procedures.

1.2 Validity

- All aircraft operating from the lake Vågå, and inside the Vågå Airsports Area in controlled airspace must comply to these rules and procedures
- These local rules and procedures are only valid during the Wave Camp period
- If there is a conflict between these rules and procedures and official rules and regulations (BSL etc), the official rules and regulations take precedence over this document. Organizers will attempt to avoid such conflicts.
- These procedures do not apply to other non-participating aircraft in the area, however such pilots are recommended to observe NOTAM on the Vågå Wave Camp, and to coordinate with Ground Station at 122.175MHz for traffic information

1.3 Changes

- This document may be changed without notice until the first main briefing of the Wave Camp.
- Subsequent changes will be announced at the daily briefings, camp notice board in the briefing room, and on the camp web site.

1.3.1 Version history

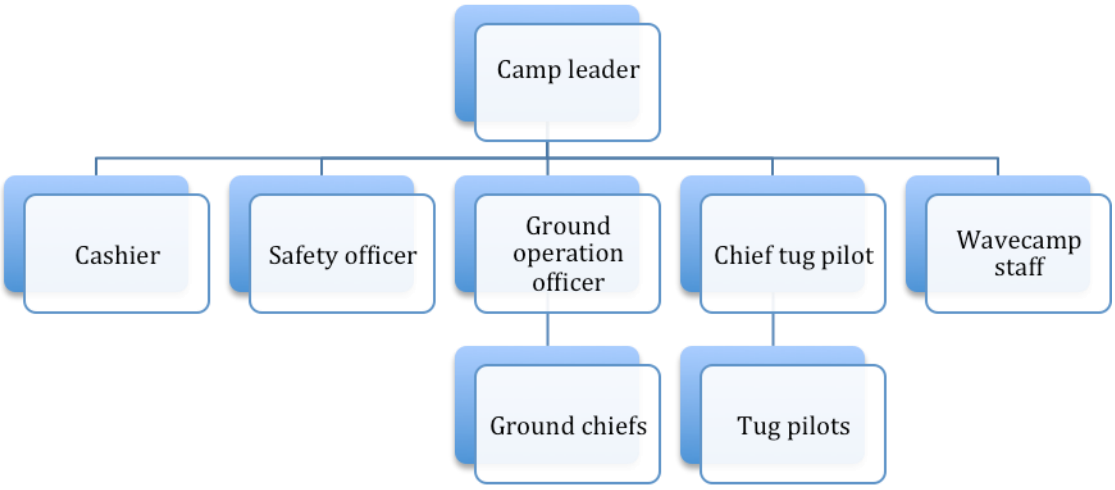
Date	Version	Author	Description
26.02.2005	1.0		First version
05.03.2005	1.1		Fixed typo
27.01.2006	1.2		Sec. 3.4, 4.3, 4.4
27.01.2007	V1.3		Phone numbers updated
07.02.2011	V1.4	IFP	• Updated page footer • Change history table (1.3.1) • Flarm requirement (4.1, 4.2) • Names and phone numbers for Wave Camp staff (3.4) • Added organisation chart (2.1)

25.02.2013	V1.5	ØM	• Organisation (2.1) • Air force (2.4.5) • Names and phone numbers for Wave Camp staff (3.4) • Required equipment (4.2) • Airsports area Vågå (4.12.3) • Towplane -> Tug • Loss of communication (4.12.5) • Flying above FL 135 (4.13) • Appendix C • Ground station operating hours (4.12.8) • Standard Squawk 7100 (4.13.4) • Vågå Airsports area moved from 3.8 to 4.13
26.02.2013	V1.6	PO/ØM	Language improvements
02.03.2013	V1.7	PO/ØM	More language improvements
28.02.2015	V1.8	ØM	Airsports area (4.13.1)
24.02.2018	V1.9	IFP	Multitude of changes: • Restablish document source • Chapter 5: Emergency equipment • List of contact persons moved to appendix E as a form • Changes of a lof of formatting • Ch 3.10 added recommendation about tracker • Ch 4.10 re-wording

02.03.2022	V2.0	TK/IFP	• Change Oslo control to “Polaris control”, and update frequency. • Revise phone lists

2 Wave Camp organization

2.1 *Staff & Responsibilities*



2.1.1 Camp leader

Responsibilities:

- Organize daily briefings
- Oversee all operational and non operational activities
- Handle all contact with media
- Contact with authorities (Police, Fire Brigade, ATC, CAA, Community)

2.1.2 Safety officer

Responsibilities:

- At daily briefing report and review the previous day operation
- Report incidents to the authorities
- Cooperate with authorities during emergencies
- Evaluate weather conditions and weather forecasts for operations

2.1.3 Ground operation officer

Responsibilities:

- Supervisor for ground control team
- Organize duty rosters for ground control station
- Opening and closing the airsports area, in cooperation with ATC

2.1.4 Chief tug pilot

Responsibilities:

- Supervisor for tug pilot team
- Organize duty rosters for tug pilots
- Organize fuel for tugs
- Consider weather conditions for operations

2.1.5 Wave Camp staff

Responsibilities:

- Organise control chief/assistant
- Guide participants as necessary (advice trailer parking on the ice, etc.)

2.1.6 Cashier

Responsibilities:

- Registration, payment and administrative issues

2.2 Main briefings

At least one main briefing for each period of the Wave Camp.

Purpose:

- Make sure everybody knows the relevant regulations, rules, and procedures, and where updated versions can be found
- Safety briefing, with emphasis on the inherent dangers of high altitude flight, and mountain flying
- Clarify any questions there might be about operational procedures
- Discuss issues that needs resolving
- Pilots unable to attend a main briefing before first flight, must contact safety officer for up-to-date information, and check notice board

2.3 Daily routine

2.3.1 Briefings

Will be held every day at Vågå Hotel at 09.00 local time.

Should contain:

- Summary of the previous day
- General information related to operations
- Weather briefing
- Safety briefing related to weather or other important issues

Attending the daily briefing is mandatory. If a pilot is not able to attend the briefing and still want to fly, must ask a member of the staff for the briefing information.

2.3.2 Flight operations

Will be conducted every day from 10.00 to 18.00 local time, weather permitting.

Exceptions may occur on religious holidays. This will be announced at the main and daily briefing.

Gliders may continue to fly below FL135 after 18.00, but no more aero-tows will be allowed, and ground station will close down around sunset. Gliders shall land on request from ground chief.

Ground station may close down after 18.00 if airborne traffic is minimal. A warning will be transmitted on the main frequency warning about ground station closing down.

2.3.3 Debriefings

If required by situation, the organizers may call a debriefing in the evening after flight operations has ended.

Information about a debriefing will posted at the hotel reception, and group leaders will be informed directly.

2.4 Information list

Prior to the Wave Camp the following persons and organizations must be informed of the operations and intentions.

2.4.1 Vågå locals

- Mayor

2.4.2 Police

- Local Vågå police
- Lillehammer police

2.4.3 Medivacs/Hospitals

- Medivac at Dombås
- Lillehammer hospital
- Red cross
- Sola/Bodø rescue centres

2.4.4 ATC/CAA

- Polaris control (Røyken)
- Bodø control

Notam must be issued well in advance of camp start.

2.4.5 Air force

- 3 months in advance of camp for information
- Daily at 08:45 to coordinate operations

2.4.6 Media

Media should be informed through a press release.

- Local media
- Regional media
- National media

The release should contain information like:

- Who, what, where, why
- Time, duration and place
- Any information that might make them interested in writing a story about Vågå Wave Camp.

3 Administrative

3.1 Pilot registration

All pilots must register and pay camp-fee before being allowed to fly at the Wave Camp.

Upon registration the pilot will be issued a pilot card with a pilots number. This card and number must be used when registering in the aero-towing queue. Pilots without a card/number will be denied aero-tows.

The registration form may be found in appendix A, and will also be available in the meeting room at the hotel.

3.2 Pilot qualification requirements and check flights

Flying at Vågå can be dangerous, unless the wave camp rules are followed. The landscape and weather are extreme compared to regular summer flying, and most pilots are starting their season on Vågå. Because of this we have to impose some rules on pilot skills:

- Valid glider pilot license and a minimum of 75 hours of flying, with at least 50 hours on gliders. Valid aero-tow rating and at least 75 aero-tows.
- Mountain soaring experience from Vågå or similar sites.
- All new pilots must do a check flight with instructor before being allowed first solo flight at Vågå Wave Camp.
- Check flights can be done with a Wave Camp approved instructor. In general all instructors that has flown at Vågå one of the last 3 years are approved as checkflight instructors.
- Check flights may be done using own two-seat gliders, or be rented from Drammen Aeroclub.
- Check flights before first main briefing may only be done using Drammen Aeroclub gliders and instructors, or by special permission.
- A check flight shall familiarize the pilot with important elements in the area. (Appendix B)

Pilots not meeting the requirements are required to fly as a student with a Wave Camp approved instructor. The instructor may approve solo-flights if he finds the student and the conditions suitable. Flying solo above 3500 m must only take place if the student meets the requirement in bullet point #1 above, and has adequate training and experience from using oxygen equipment.

3.3 Radio frequencies

At the moment all relevant frequencies are still using 25kHz separation.

- 122.175 MHz – Primary ground and airsports area frequency. No chit-chat allowed. All gliders in Vågå Airsports area MUST remain on this frequency. Also use for landing messages. See landing pattern
- 123.35 MHz – Secondary frequency. May be used between 500 meters and FL 135 for glider-glider communication
- 121.5 MHz – International emergency frequency
- 124.775 MHz – Polaris CTR (sector North)
- 125.70 MHz – Bodø CTR (sector South)

All radio communications should be done in English, unless special circumstances require otherwise.

3.4 Important phone numbers

See appendix P.

This appendix must be filled out before main briefing and made available to staff and participants.

3.5 Violations

The organizers reserve the right to refuse aerotow and/or ask pilots to leave the camp if a pilot fail to:

- Display proper airmanship, including but not limited to:
  - Adhear to all rules and regulations
  - Checklists
  - Ability to fly aerotow
  - Being able to assess his/hers own ability in relation to the current conditions
- Follow information/instructions give by the organizers
- Follow national and internation rules and regulations

Aviation related incidents (e.g. airspace infringements) will be reported to the CAA as required.

Violations of national law and regulations, may be reported to the local police, this include violation of non-flight related laws and regulation.

3.6 Access to the ice

Usually it is possible to drive to the parked trailers/gliders through an access road

Depending on the ice conditions, the organizers may restrict cars access to the ice

3.7 Trailer/glider parking

Gliders and trailers must be parked at the assigned areas. Contact organizers to be assigned a trailer parking spot.

Trailers must be tied down using at least 3 tie-down points secured in the ice.

Gliders that are parked overnight must be tied down with at least 3 tie-down points secured in the ice

Make sure ropes used to tie down trailers and gliders are sufficiently strong to hold the equipment even with the strong winds that may occur at Vågå. Contact organizers when in doubt. Severe aircraft damage has occurred to drifting trailers.

A glider must NEVER be left unattended unless it is tied down. This is valid for glider parking area, lineup area, free area, and landing area.

Owners are responsible for any damage to other equipment caused by their gliders/trailers regardless of why the damage happened.

3.8 High altitude flights and Oxygen

3.8.1 High altitude flights

Please refer to the Norwegian regulations on high altitude flights. Regulations can be found separately on the Wave Camp web pages, and in appendix C in this document.

3.8.2 Filling Oxygen

Oxygen filling equipment is available on the ice at the oxygen filling station.

Only pilots who have completed a “oxygen filling check” with a Drammen Aeroclub technician are allowed to use the filling station.

Misuse of the filling station will lead to restricted access for all pilots.

If your oxygen bottle doesn't use standard fitting, you need to bring your own adapter.

3.9 Tug fuel

Only fuel for the tugs is available on the ice. Visiting planes and motor gliders have to cater for their own fuel.

If necessary to ensure efficient operations, the chief tug pilot may request assistance from any participants to help and assist during refueling. Schedules will be announced at the daily briefing if this action is to be implemented.

3.10 Personal safety equipment

All pilots are responsible to bring along the necessary equipment. The following equipment is recommended in addition to the standard equipment:

- Extra warm clothes and boots
- Goggles (in case of canopy failure)
- Flares
- Good map over the area (eg. Roadmap “North part of southern Norway”)
- Hand compass
- Handheld GPS with fresh batteries
- Cellphone with fresh batteries. NOTE: There are large areas in the mountains that do not have GSM coverage. Do not depend on being able to use the cell phone. Keep the phone warm to improve battery capacity. A power bank could be a good suplement.
- Handheld air band transceiver fully charged
- Flashlight
- Personal tracker. Spot or similar. Make sure to keep tracker on body, not stored in glider. If Spot is not available a tracker app on a cell phone is a good alternative. Use a power bank to ensure good battery capacity.

4 Operational

4.1 Flight safety

4.1.1 VFR rules

There may be a lot of white gliders in the area, on a background composed of white clouds and white snow. Therefore

- Use your eyes
- Use your brain

Keep track of other gliders, and leave the area if it becomes congested.

Particularly in weak lift conditions, a lot of gliders may gather on the same ridge, and there have been some very close encounters.

4.1.2 Fluorescent Markings

- All gliders are required to be marked with high contrast (fluorescent) markings on the nose, wheel bay doors, and wings. Illustrations on how to mark the glider is available in the briefing room and on the Wave Camp website (section operational)
    - Drammen Aeroclub will have high contrast film available for purchase.
- Gliders that are already painted with high contrast colors are not required to add extra markings as long as the painted markings offer the same contrast as the required markings, according to judgment by camp leader.

4.1.3 Flarm

- All gliders flying at Vågå during the Wave Camp must be equipped with a Flarm device
- Gliders without a Flarm device will be denied aero-tow during operation. Owner/operation of a glider is responsible for correct installation, software update and operation of the Flarm device.
- The Flarm device must be fixed in the glider, i.e. no “handheld” solution will be accepted.
- The Flarm device must be activated before lining up for takeoff, and not turned off until the glider is clear of landing area, free area and takeoff runway. The

preferred solution is that Flarm is on when master switch is on.

- Stealth mode in the Flarm device shall not be activated.

- Gliders with Flarm devices that are suspected to not be working properly may be denied aero-tow until correct function is demonstrated.
- If the Flarm device fails while airborne, inform ground station and land without undue delay.

4.2 Required equipment above FL 135

4.2.1 Transponder

Transponder Mode C or Mode S is mandatory for flights above FL 135 in the Vågå Airsports Area.

The transponder shall be registered in the gliders approved instruments list.

4.2.2 Position data logging device

IGC approved logging device in mandatory for flights above FL 135 in the Vågå Airsports area

This logging device shall be calibrated at least during the previous 24 months according to competition rules.

The logging device need not be fixed in the glider.

Owner/pilot of this glider is responsible of correct operation and antenna position for good reception of GPS signals.

4.3 Aero-tow safety

4.3.1 Markings

All tugs are required to be marked with high contrast markings. Exceptions are tugs that are already painted with high contrast colors.

4.3.2 Flarm

All tugs flying at Vågå during the Wave Camp will be equipped with a Flarm device.

The rules in 4.1.2 also apply to the tugs.

4.4 Ground station marking

The corners of the ground station area will be marked with branches

4.5 Aerodrome

4.5.1 Layout

Lake Vågå aerodrome is located in position 61.51.500N 009.01.000E, close to the north bank of the lake.

DANGERS:

- There is a power line crossing the lake approximately 5 km west of the aerodrome.
- There is also a somewhat less exposed power line east of the aerodrome closer to the end of Vågåvann

The aerodrome layout is illustrated in Figure 1 below.

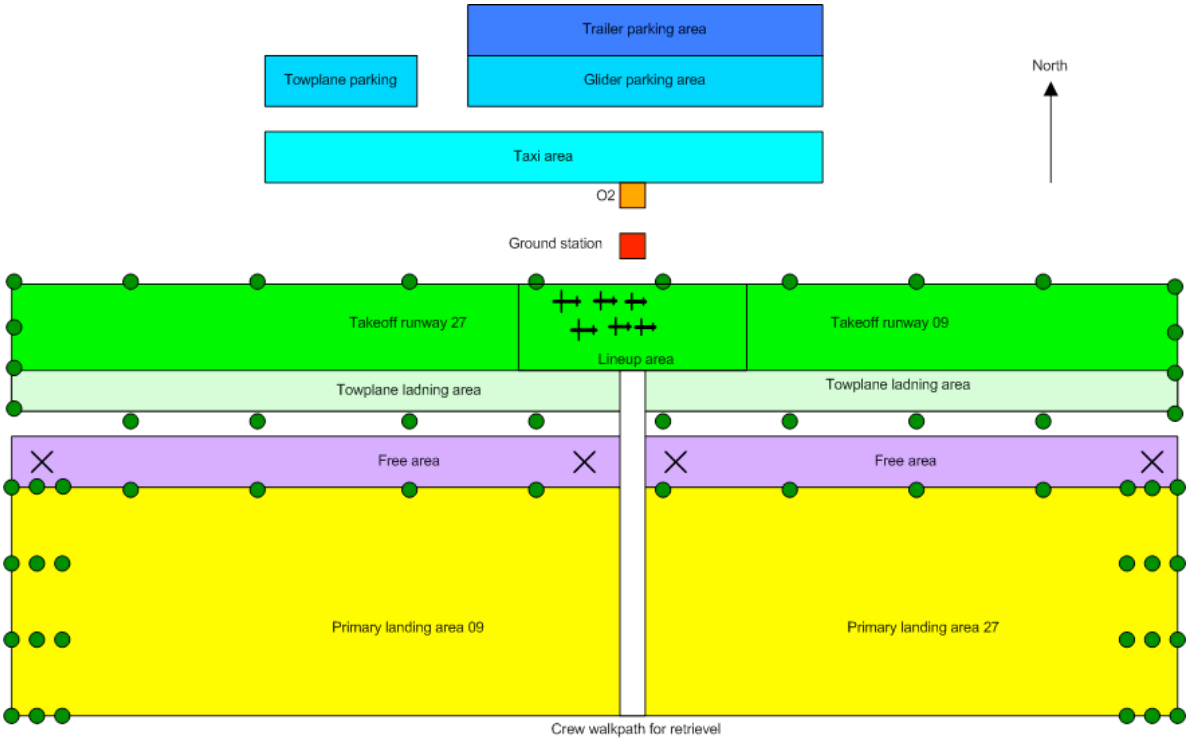


Figure 1 Lake Vågå Aerodrome

Conspicuous runway markings (usually branches) will be selected based on conditions (ice/snow)

4.5.2 Runway details

The runway headings are 09 and 27. The elevation is 370m QNH. Grid and Take-off runway

Takeoff runway is 1000x60 meters, marked by branches every 100 meters

Grid at the center of the takeoff runway. Gliders line up in two rows if sufficient space

- Make sure the wings are not overlapping in the grid area
- Gliders should be lined up so that tugs may pass south side of the gliders.

The grid area will be filled up from the downwind side until the ground control decides it is time to move the gliders to the forward position. When the gliders are moving no aero-towing operation will take place.

If wind changes direction the gliders already lined up will just be turned around, and aero-towing will continue from the new front of the grid.

Ground chief may order a glider out of the grid if the pilot is not ready, or if deemed necessary for any other reason. If a glider is ordered out of the line it must re-enter at the back end when ready.

4.5.3 Tug landing area

Tugs will land on the tug landing area, see Figure 1

Tugs may use glider landing area if necessary

4.5.4 Free area

The free area is an area between the takeoff runway and the landing area that are not to be used for takeoff or landings.

This area is marked with branches every 100 meter on both sides

4.5.5 Glider landing area

Gliders should land in the primary landing areas, see Figure 1

The landing area will have marking for each 25 meters indicating spacing on the landing area

The end of the landing area will be marked with branches as well as the threshold (start) of the landing area

In case the landing area gets congested with gliders, the area south of the landing-area should be used as alternate runway.

4.5.6 Glider ground transport

When landing a glider, the pilot should attempt to stop just aside the end of the current grid

Ground crew should always be observant of approaching gliders.

Ground crew should follow the walkways as indicated on the area overview, and try not to obstruct the landing area for landing aircraft.

The glider may be pushed straight out to the “free area”.

Before lining up a glider for a new take-off, the pilot shall have entered the aero- towing queue, at the ground station.

Cars are not allowed on the aerodrome area, except for the trailer parking area, see Figure 1. The ground chief, on strong reasons, may grant exceptions.

4.6 Hand signals

All hand signals (tighten line [rope for aero-tow], stop etc.) must follow Norwegian standard hand signals

A brief summary of the hand signals will be given during the main briefings.

4.7 Glider pre-flight checklist

All pilots must execute their standard pre-flight checklist to avoid accidents like open canopies, open airbrakes/spoilers etc.

Ground chief may stop a take-off if it is suspected that the checklist is not executed

4.8 Aero-tow routes

Tugs will climb 8-900 meters along standard aero-towing routes, before aiming for areas with expected rising air (e.g. Lake Tesse)

Aero-tows will avoid ridges if there are ridge soaring conditions

4.9 Wave, ridge, thermal flights

Pilots are expected to know the basic wave and ridge flying techniques as well as rules. A short summary of these rules will be given during the main briefing.

- Within a 5 km radius off the runway all thermalling should be left turns.

4.10 Aero-tow release

Before aero-tow release, the glider should be positioned gently to the left, flying parallel to the tug. After pulling the tow release do not turn left before visually confirming rope has released and (Yes you all know this :) DO NOT:

- Winch up before release
- Bank left before release
- Dive down after the tug/line

Failure to follow these simple rules may result in a serious situation, and hence you may be refused aero-tows for the reminder of the camp.

4.11 Landing patterns

4.11.1 Tugs

Please refer to appendix E for landing patterns.

Tugs will usually not fly the crosswind leg

4.11.2 Gliders

Please refer to appendix E for landing patterns

Descend on north side of the lake, and try to coordinate such that one gliders enter crosswind at a time. Lowest glider first.

Report crosswind

Subsequently, use radio if necessary for flight safety

4.12 Ground control station

4.12.1 Personnel

The ground control station will be manned by experienced Wave Camp personnel.

During normal operations the ground control station is responsible for:

- Keeping track of all traffic: airborne, landed, towing queue, in/out of boxes etc
- Give information about changing weather conditions
- Keep a day logg of all activities

During operations, a ground chief will at all times man the ground station. During periods of heavy traffic an assistant may work along the ground chief. If an assistant is on duty all questions, towing queue etc should be adressed to him instead of the ground chief.

Ground staff will at all times wear yellow vests. The chief vest is marked “CHIEF” , the assistant’s vest is marked “ASSIST”.

Do not disturb the ground station personell unnesessary.

4.12.2 Aero-tow queue

The ground station will maintain an aero-tow queue

Pilots wishing to join the aero-tow queue should approach the assistant if on duty otherwise the ground chief.

The ground chief may change the order of the aero-tow queue if deemed necessary.

If necessary to change take off direction, the gliders are turned around. The ground chief will decide the new aero-towing order.

Tugs will line up with the gliders in front of the line. If it is not obvious which glider is next in aero-tow queue, the ground crew will give directions to the tug pilot.

4.12.3 Operating limitations

If conditions demand, the ground chief and/or the safety office may restrict the number of gliders in the air. This may for instance happen if:

- Only ridge condition and the ridge is becoming crowded
- Only one wave, and all gliders are in that single wave

4.13 Information service

The ground station will periodically transmit information about weather conditions on the ground. This information will primarily be transmitted on the primary frequency (122.175), but may optionally also transmit on secondary frequency (123.35)

Do not request weather information unless special circumstances require it. Instead pay attention to the information broadcast from ground.

4.14 Loss of communication

In case of loss of VHF communication, glider shall return to aerodrome, and land without undue delay, according to normal procedure. Special care should be taken before entering the landing circuit. So ***look out even better***.

4.15 Emergencies

The ground chief shall handle emergency situations immediately, until the camp leader, safety officer, or authorities (e.g. police) request taking over command.

- During an emergency the checklists in chapter 5 will be used.

4.16 Logging

The ground station will log all takeoffs with the following information

- Tug
- Glider pilot
- Glider registration
- Takeoff time
- Landing time, if landing is observed

The logs will be complemented with aero-tow heights during the day, and in the evenings at the latest. Daily logs are retained in a dedicated file marked “DAGLOGG” available in the briefing room or with the cashier.

4.17 Operating hours of Ground station

Ground station will be manned before first launch during the Vågå Wave Camp schedule.

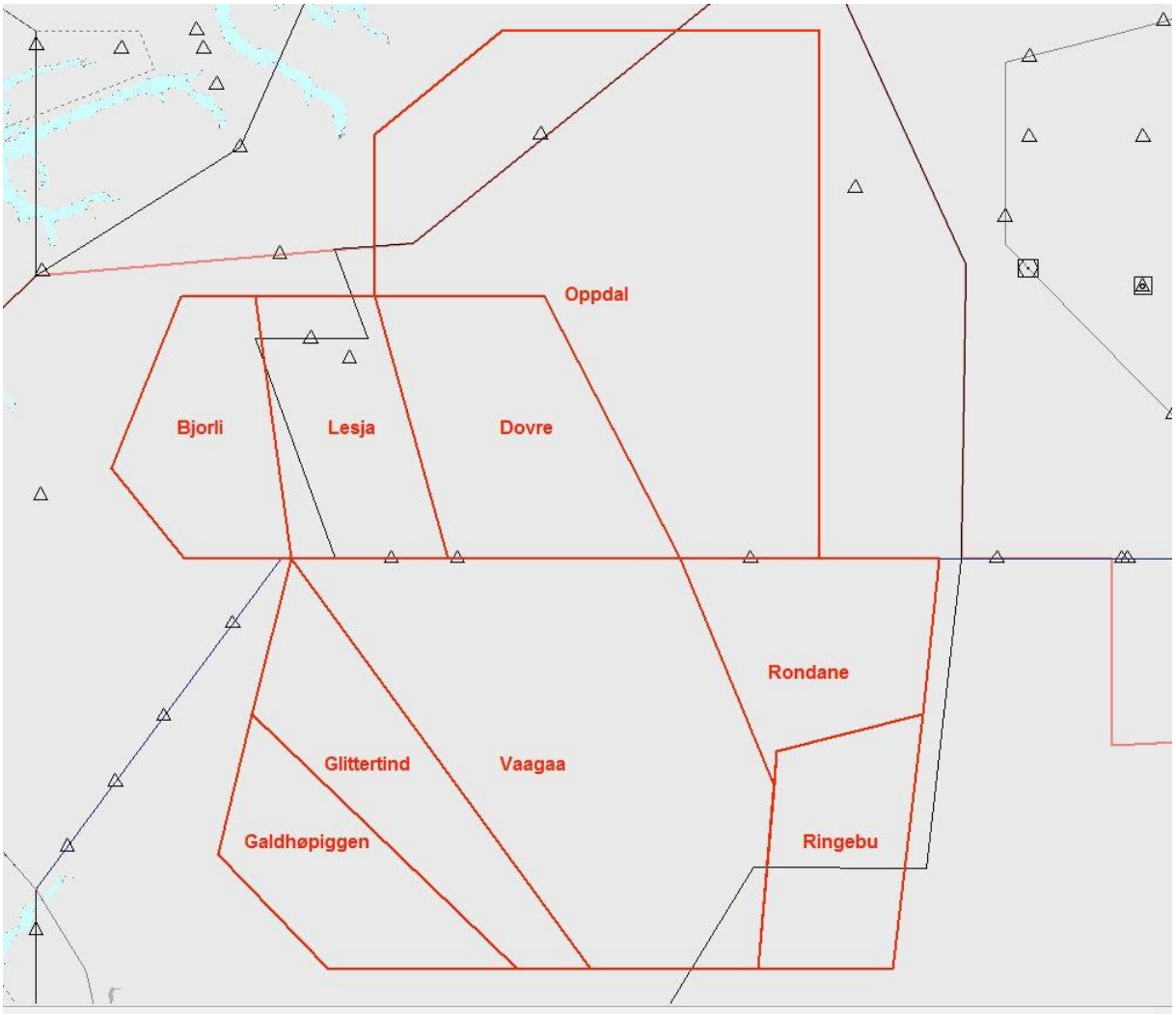
Ground station will stay manned until 18.00. Depending on traffic it may be shutdown earlier. There will always be a warning transmitted on the primary frequency before the ground station is shut down for the evening.

Days with non-VFR conditions, Wave Camp staff will not permit any flights, and for these days the ground station will not be manned.

If weather condition change from VFR to non-VFR and there are aircraft (gliders/tugs) airborne, the ground station will be manned until all aircraft has landed. If deemed necessary for flight safety and ground handling, ground chief may request gliders to land.

4.18 Flying above FL 135

4.18.1 Airsports Area, AIP ENR 5.1 -1



Norway FIR:

EN D357 Oppdal, FL135 – FL285:
625000N-0090459E - 625000N-0101000E - 620000N-0101000E –
620000N-0094138E - 622500N-0091354E - 622500N-0083909E –
624020N-0083909E - (625000N-0090459E)

EN D358 Dovre, FL135 – FL285:
622500N-0083909E - 622500N-0091354E - 620000N-0094138E -
620000N-0085415E - (622500N-0083909E)

EN D359 Lesja, FL135 – FL285:
622500N-0081450E - 622500N-0083909E - 620000N-0085415E -
620000N-0082200E - (622500N-0081450E)

EN D360 Bjorli, FL135 – FL165:
622500N-0075934E - 622500N-0081450E - 620000N-0082200E -
620000N-0080020E - 620840N-0074525E - (622500N-0075934E)

EN D161 Ringebu, FL135 – FL185:
614125N-0100125E - 612010N-0095735E - 612010N-0102500E - 614500N-0103110E – (614125N-0100125E)

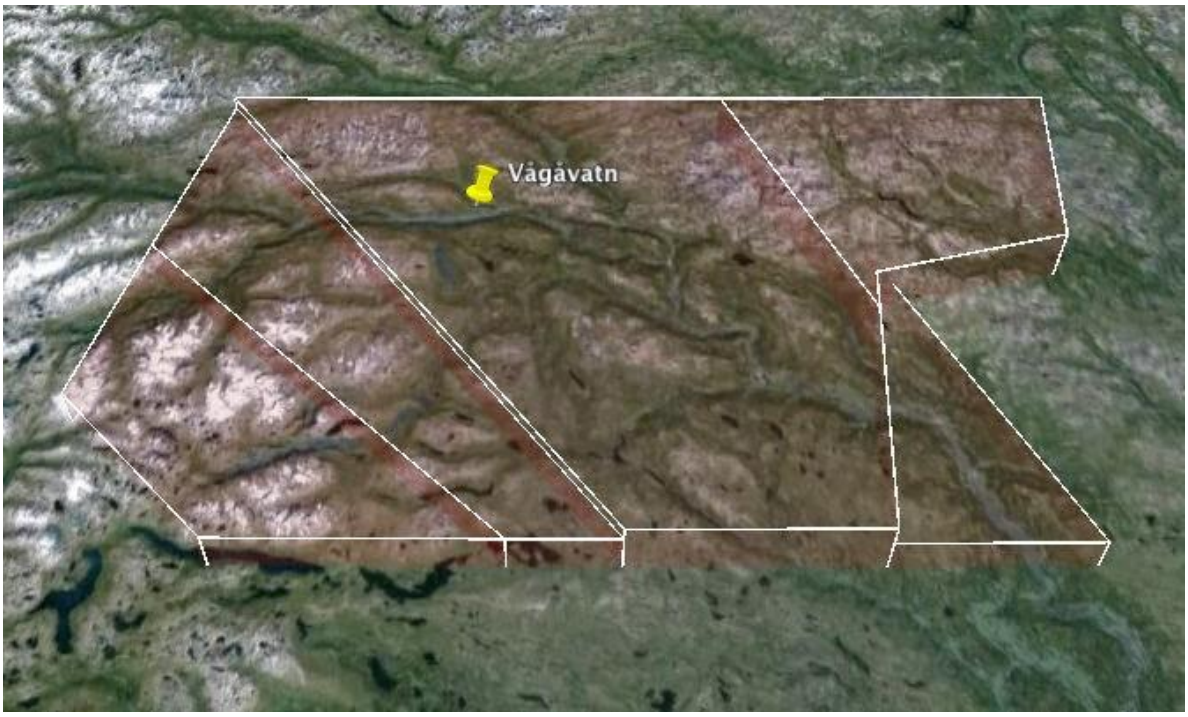
EN D162 Rondane, FL135 – FL285:
620000N-0094138E - 620000N-0103425E - 614500N-0103110E – 614125N-0100125E - 613804N-0100049E - (620000N-0094138E)

EN D163 Vågå, FL135 – FL285:
620000N-0082200E - 620000N-0094138E - 613804N-0100049E - 612010N-0095735E - 612010N-0092320E - (620000N-0082200E)

EN D164 Glittertind, FL135 – FL225:
614456N-0081401E - 620000N-0082200E - 612010N-0092320E - 612010N-0090820E - (614456N-0081401E)

EN D165 Galdhopiggen, FL135 – FL225:
613118N-0080704E – 614456N-0081401E - 612010N-0090820E - 612010N-0082948E - (613118N-0080704E)

From Google Earth: http://nug.4d.no/wavecamp :



Airspace in the Vågå area below FL 135 is Class G. In the Vågå Airports Area the airspace is Class C, which is transponder mandatory. Within the entire airsports area, VFR flight is permissible. (Outside the area, VFR is not allowed above FL195, without special permission).

All gliders in the airsports area MUST remain on 122.175. If contact with ground is lost (poor battery, radio failure, etc.), aircraft must immediately descend below FL135. After landing, pilot must report to ground station and an incident report will be filled out afterwards.

4.18.2 Opening Vågå Airsports Area

In case high altitude flights are deemed possible the ground chief will call Oslo ATCC Supervisor to request opening the Vågå Airsports Area.

4.18.3 Closing Vågå Airsports Area

After having confirmed all gliders under surveillance under Vågå ground station have left the Vågå Airsports Area and usually shortly after 18:00 hours local time, the ground chief will call Oslo ATCC to close the Vågå Airsports Area. All gliders in the Vågå Airsports Area must be prepared to leave this area in due time before 18:00 local time.

4.18.4 Entering Vågå Airsports Area

Every glider that intend to enter this area climbing must in due time:

- Report intention to Vågå ground station and have this confirmed.
- Enter designated transponder code (squawk) with altitude reporting (Mode C or S).
- Make sure the ICG data logger is operating.
- All radio communication shall remain on the primary frequency 122.175 Mhz

4.18.5 Leaving Vågå Airsports Area

Every glider that leaves this area descending must (i.e. is below FL 135):

- Report intention to Vågå ground station and have this confirmed.

4.18.6 Individual flight above FL135

According to Norwegian regulations a glider with transponder may ask for clearance from ATC to enter airspace outside Vågå Airsports Area or inside Vågå Airsports Area at time when Vågå ground station is not present. Note that VFR flight outside Airsports area above FL195 requires special permission.

Glider, which has entered Vågå Airsports Area and wish to leave this area at FL 135 or above must ***before leaving airsports area***:

- Contact Vågå ground station and report intention and have this confirmed
- Contact authoritative ATC on proper VHF frequency for clearance ***before entering non airsports area***
- If contact with ATC is not established return to wavecamp frequency, report and do not enter non airsportsarea above FL135.

4.18.7 Loss of radio

If the VHF-radio in the glider shows any sign of malfunction either temporary or permanent, the pilot is obliged to descend in the area as soon as possible and leave the Vågå Airsports Area.

After landing pilot must report to ground station and an incident report will be filled out afterwards.

4.18.8 Report position log

Every glider that has entered Vågå Airsports Area is compelled to deposit the position log to Wave Camp staff in the evening the same day of flight.

The format is IGC file format and file name according to the ICG convention.

More specific information will be given at the main briefing.

5 Emergencies

5.1 General

5.1.1 Procedure

- An emergency may be transmitted on any frequency, however the primary frequency for distress traffic is 122.175 MHz
- If transmitted on a Wave Camp frequency ground station will take charge of the handling.
- If transmitted on the international emergency frequency a official rescue center will immediately take charge of the situation
- Emergencies transmitted on the alternate Wave Camp frequency should be relayed to ground station on the primary frequency. The ground station will then change frequency.
- As soon as the distress call is received the pilot registration form is added to the emergency report form.
- Checklists for each kind of emergency are available on the ground station. See appendix F

5.1.2 Ground control station

- When a distress call is received all other operation is halted and ground chief will handle and assist the station in distress.
- When a distress call is received the ground chief or assistant will start filling out an emergency report. If ground chief is alone when an emergency occurs any participant may be asked to assist during the emergency. See appendix G for the emergency report template
- Emergency reports are filed in a folder, and is used during the debriefing and reports to officials.
- Ground chief are making all decisions during an emergency until the safety officer, or an official (e.g. Police) are ready to take over.

5.1.3 Tugs

- When a distress call is made the tugs should land after completing aero-tows in progress and line up beside the gliders and await further instructions
- Tug chief should join ground station to plan further actions

5.1.4 Gliders

- Pilots should make a mental note about where the glider in distress was last seen. Ground station may request this information.
- Do not offer this information unless requested by the ground station. This is to avoid transmission collisions.

5.1.5 Other personnel

- Depending on the emergency other personnel may be requested to contribute to the emergency handling.
- If the glider in distress is a member of a club, or group of pilots, a member of the club or group must report to the ground station to assist.

5.1.6 Radio silence

- All stations should maintain radio silence on the primary frequency 122.175 MHz during an emergency situation
- Exceptions are as follows:
  - Important information directly related to the situation
  - Other emergencies high importance
  - Relays of same information as above
- Ground will inform when radio silence ends
- All stations in the vicinity shall listen on the primary frequency 122.175 MHz

5.2 PAN-PAN

5.2.1 Procedure

A PAN-PAN call is a distress call without immediate danger to aircrafts, pilots, or people. For instance a glider that is lost, but still at altitude, and thus have time to decide what to do.

A PAN-PAN situation may be upgraded to a MAYDAY situation by both the station in distress and the handling station.

If contact with the station in distress is lost the situation immediately upgraded to a MAYDAY situation. When handling a PAN-PAN situation the ground station should prepare phonelists, report forms etc in case the situation is upgraded to a mayday situation.

5.2.2 Report form

See appendix G

5.2.3 Phone list

- Safety officer
- Club or group leader

5.3 Mayday

5.3.1 Procedure

A MAYDAY situation is a situation where it is immediate danger to people and/or aircraft(s). This may be outlandings in the mountains, structural problems, mid-air collisions etc.

5.3.2 Report form

See appendix G

5.3.3 Phone list

- Police, (co-ordinate with them about the rest of the contacts on this list)
- Search and rescue centers
- Safety officer
- Club/group leader
- ATC
- Ambulance services/medivac, if situation requires it

5.4 Emergency equipment

5.4.1 Fire equipment

At leat 3 fire exstinguishers will be located around the fuel filling station. These are not to be placed to close together.

The ground station will have at least 1 fire extingusher available.

5.4.2 First aid

All gliders are to be equipped with a first aid kit. If a situation occurs the nearest kit should be used regardless of owner.

In addition there is a firstaid kit in the ground station.

5.5 Outlandings

- Outlandings in the mountains in dangerous areas (sparsely populated areas, small fields) or at an unknown location are to be treated as MAYDAY situations
- Outlandings at known safe locations (e.g. lake Tesse) are to be treated as PAN-PAN situations.
- If immediate contact is not made on primary Vågå frequency, switch immediately to international emergency frequency, and report before and after landing.
- Attempt to make contact with Vågå ground as soon as possible after landing.
- After landing consider whether it be best to stay with the glider or try to reach population/housing. If possible confer with pilots with local knowledge over the radio before making a decision.

5.6 Incident reports

- All emergencies are to be reported to aviation authorities. This is done by the pilot(s) involved along with the camp leader/safety officer, and if necessary police/SAR personnel.
- Also other incidents than PAN-PAN/MAYDAY calls must be reported. In general everything not part of the standard flight is to be reported. (E.g. Airbrakes open during takeoff, canopy not locked, near miss etc.)

5.7 Exercises

Organizers will consider having exercises.

Only the safety officer, police, or other SAR officials may initiate an exercise.

Exercises may be a joint operation with police/SAR if they request it.

During an exercise all calls are to begin with the phrase: “This is an exercise”

All should treat an exercise as a real situation.

6 Appendix A: Registration form

Vågå Wave Camp
Pilot registration

Name			
Address			
Email		Membership NLF	
Tlf home		Tlf work	
Tlf mobile		Telefax	
Aeroclub			
Accommodation at Vågå			
☐ Hotel	☐ Appartment	☐ Cabin	☐ Other
Next of kin at home or closest person at Vågå			
Name			
Address			
Tlf			
Aviation license valid until:		PPL-A valid until	
Pilot signature and date			

Administrative Drammen Aero club		Pilot number:
Camp fee paid	Date:	Sign:
Aero-towing bill paid	Date:	Sign
Other		

7 Appendix B: Checklist for Vågå Wave Camp check flights

- Hand signals during takeoffs
- Aero-towing routes
- High voltage cables crossing lake Vågå east and west of the runways
- Release procedures
- Familiar points
    - Lake Tesse
    - Blåhø
    - “Sugartop”
- Landing pattern

8 Appendix C: National standards

8.1 NLF regulation

8.1.1 Altitude flight with a glider

All heights are QNH (altitude above mean sea level)

8.1.2 Flying below 3500 meter

Flights below 3500 meter do not require oxygen. But flights over hours in altitude 2000 meter to 3500-meter oxygen supplementation are recommended.

8.1.3 Flying between 3500 meter and 7000 meter

In this altitude area oxygen equipment is mandatory. Oxygen supplementation should be used from the ground level and not later at 3000 meter when climbing. If the flight is no longer than one hours of duration above 3500-meter personal equipment or glider installed equipment is accepted. The equipment shall be checked before every flight. No other periodic maintenance is required.

For flights of more than one hour at 3500 meter and above, equipment and knowledge according to 8.1.4.

8.1.4 Flying above 7000 meter

Flights above 7000 meter require equipment approved for such operation from appropriate suppliers. The oxygen mask shall be adapted and tested for leaks for individual pilots. Backup equipment shall also be available. The pilot shall do appropriate actions for avoiding hypoxia. That might include breathing 100% oxygen before the flight starts and during the whole flight. The pilot shall have completed training in a low-pressure chamber to know his/her individual reaction on low-level oxygen. The pilot shall also have studied the knowledge of hypoxia and know the danger of physiological limits in these altitudes. Planning shall be conducted to ensure the presence of sufficient oxygen supply.

8.2 National rules from Norwegian Aviation Authorities

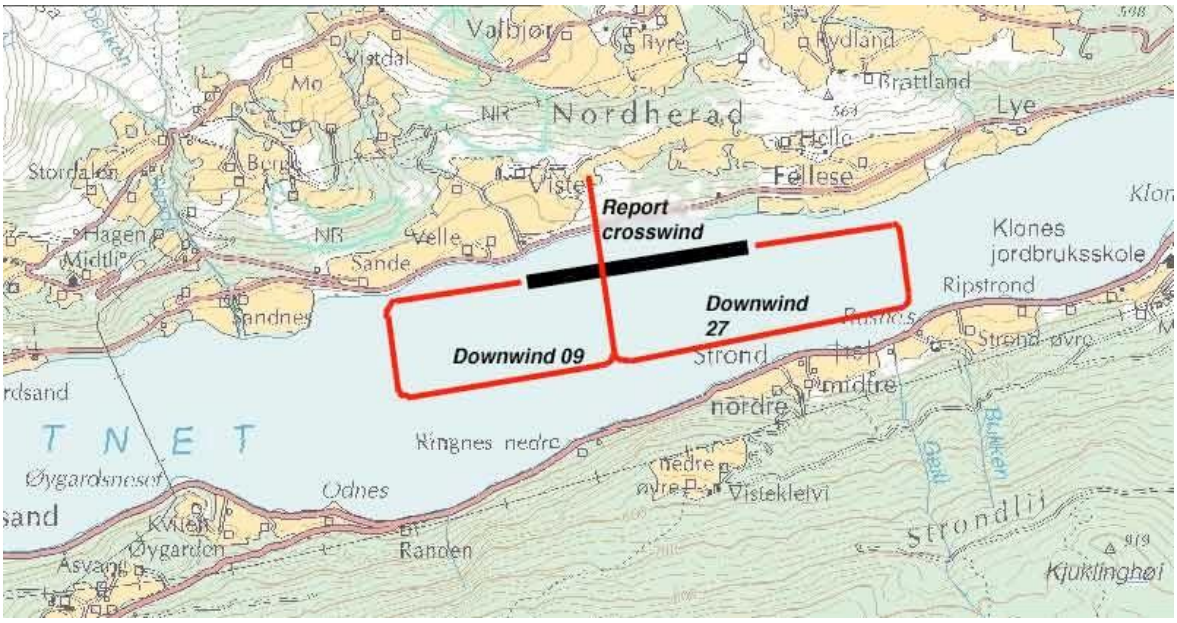
http://www.luftfartstilsynet.no/regelverk/aic-n/article1554.ece

Short version of this article is:

Above 10000 feet oxygen supplementation should always be present and used.

9 Appendix D: For future use

10 Appendix E: Landing patterns



11 Appendix F: Emergency checklists

These checklists are to be available at the ground station in a folder along with report forms.

11.1 PAN-PAN checklist

1. Note glider registration, location and type of distress on report form
2. Locate position on map
3. Clarify what assistance ground or other may offer
4. Execute any actions necessary to aid glider in distress. This may include
    a. Guide glider towards known safe landing position
    b. Depart tug to act as relay station
    c. etc.
5. Halt normal operations if necessary
6. Look up registration form, inform group leader, if any.
7. When situation has ended transmit message informing other gliders that normal operation is resumed.

11.2 Mayday checklist

1. Note glider registration, location and type of distress on report form
2. Clarify if actions of ground or other may help situation
3. Inform police, and coordinate with them about contacting ATC and Stavanger rescue center
4. Locate position on map
8. Execute any actions necessary to aid glider in distress. This may include
    a. Launch tug to act as relay station
    b. Any action necessary to aid pilot in distress
5. Halt normal operation, and prepare tugs for SAR operations
6. Find registration form, locate and inform group leader
7. When situation has ended transmit message informing other gliders that normal operation is resumed or operations are cancelled depending on the nature of the incident.

12 Appendix G: Report forms

The following form must be filled out for any kind of incident

Glider registration:		
Location/Coordinates:		
Type of incident:		
Time (and date):		
Pilot:		
Ground chief:		
Distress/Incident details:		
Action log	Time	Action
Information log		
Other info:		

13 Appendix P

This appendix should be printed and filled out. This table should be available on the ground station as well as at the hotel/briefing room.

Function	Name	Phone number
Fire department		110 (emergency only)
Police department		112 (emergency only)
Medical emergency		113 (emergency only)
Ground control station		481 75 195
Camp leader		
Safety officer		
Cashier		
Vågå local police	Lom Lensmannskontor	62 53 90 00
Emergency room		116 117
Air Force (FOH)		75 53 69 30
Police (info and inquiries)		0 28 00
Lillehammer hospital		91 50 62 00
Joint rescue coordination center southern Norway		51 51 70 00