

PUBLISHED BY NORDIC

UFO GROUPS

# NORDIC UFO NEWSLETTER No. 1/2 1984

ISSN 0800-1154

Nordic UFO Newsletter is published by Nordic UFO Groups, consisting of UFO-Norge, Norway, Riksorganisationen UFO-Sverige, Sweden and Suomen Ufotutkijat r.y. - The UFO Research of Finland. The newsletter is published two times a year and is available on an exchange basis.

### Addresses:

UFO-Norge: P.O.box 14 N-3133 DUKEN NORWAY Riksorganisationen UFO-Sverige: UFO-Sveriges centralgrupp Östra Tulegatan 43 S-733 00 SALA SWEDEN

The UFO Research of Finland: Suomen Ufotutkijat r.y. SF-17950 KYLAMA FINLAND

> Nordic UFO Groups: P.O.box 1155 N-5001 BERGEN NORWAY

EDITOR: Mentz Kaarbø NEW! → Strandgaten 221 N-5000 Bergen NORWAY

The tidings published by Riksorganisationen UFO-Sverige and UFO-Norge are still the same. RUFOS with their UFO-Sverige-Aktuellt (4 times a year) and Internt UFO-Sverige (an internal periodical); in addition to UFO-Norge's sole publication "UFO" (published 5 times a year).

### Addresses:

UFO-Sverige -Aktuellt P.O box 175 S-733 OO SALA SWEDEN UFO-Norge P.O.box 1155 N-5001 BERGEN NORWAY Additionally, The UFO Research of Finland publishes their own periodicals: "Neljannesvuosi Raportti" - Quarterly Report (4 times a year) written solely in Finnish. Once a year, the Yearly Report is published in English, which is an abstract of the former tiding giving a summary of all reports issued that year.

Addresses:

Neljännesvuosi Raportti -Quarterly Report and Yearly Report SF-17 950 KYLÄMÄ FINIAND

Yearly subscription rates: FM. 50,- for each.

Due to various reasons, among other things a heavy workload in the editor's professional career, this publication of NUFON will be the only one in 1984, i.e. a double-issue. We will however, try to make it better next year with two proper issues on schedule.

As in the previous editions of NUFON (that of no. 1 & 2 1983) we have brought a broad coverage of the on-going investigations in  $\underline{\text{Hessdalen}}$ . A relatively short summary together with a careful conclusion is presented on  $\overline{\text{pp. 12-30}}$ . This constitutes the Norwegian part of NUFON this time.

We have also material from Sweden and Finland. Although the former country hasn't been "haunted" by phenomena like the ones in Hessdalen, several interesting cases have emerged there during the last few years; Sweden is still active - at least ufologically speaking (see pp. 6-12).

The same thing can be said about Finland. Here we have selected some remarkable reports which stems from the area around  $\underline{\text{Kuru}}$  in Southern Finland. They all originated around 3-10 September 1983, i.e. a local  $\overline{\text{UFO}}$ -"wave" one might say. Presently they are all unidentified (see pp. 2-6).

### ERRATA:

In a former issue of NUFON (no. 1 1983, p.8) a Finnish observation during World War II was reported. Under the heading "A UFO Operation during the War" it was erroneously stated that the date of observation was "possibly in March 1940". The correct date should be 9 or 10 August 1944.

# **FINLAND**

### A CLOCKLIKE UFO AT NÄSIJÄRVI

From Ultra Magazine no. 11/1983.

Date: Saturday 3 September 1983 Time: From 1.15 to 2.00 am

Place: At Niemikylä in Kuru over the Kukkulanselkä in Näsijärvi Lake

Witnesses: Raimo and Terttu Niemelä

Nature of sighting: Clocklike light phenomenon disappearing with two other lights

A strange clocklike light phenomenon was seen at Niemikylä in Kuru, over the Kukkulanselkä in Näsijärvi Lake, 3 September 1983. Nearly one hour could Raimo and Terttu Niemelä follow the movements of phenomena from their summer cottage, before the light and the two other smaller lights, disappeared in the distance. The Niemelä's suspect that the cause of these light phenomena was some flying object - a UFO.

"I woke up a quarter past one o'clock in the night", says Raimo Niemelä. "I had all the time slept badly, I got up and noticed the bright blue light by accident through the window. I pulled off the curtains and saw over the opposite beach some 800 m away a big light-ball. I decided to go out to the beach to see better. The light was like a clock-table. It had twelve blue lights; their colour was similar to that spark which normally gets off from a spark plug. Between position 10 and 2 o'clock there was a reddish-yellow light in the clock-table.

"After that I went in and awakened Terttu to see the light. We went together to the beach and after a while the light started to move quickly with short, sudden

movements towards northwest, to the right from us.

"Terttu went back in, because she said she was afraid that the light would come to our beach. She asked me too, to come in, but I didn't go, instead I shouted to her to see how much the clock was. I had once read form "Ultra" or "Ufoaika" (Finnish UFO magazines) that in this kind of observations the exact time was important.

"Soon, I too went in and the time was then 1.30. I went out again, whereas

Terttu stayed inside to see through the window and to shout me the exact time.

"The light had moved fast several hundred metres towards northwest, all the time under tree-top level. The light was hovering immovable again, perhaps some one and a half km from me.

"Suddenly the light started to move again and made now a W-shaped figure, then it stopped again and became bloodred in colour. Little blue lights were still round the red centre, however, and that yellowish light up there between postion 10 and 2. You couldn't distinguish separate lights in the yellowish light, it looked like a compact sheat of light.

"After a while the vehicle or whatever it was, switched on two unbelievable bright light beams to enlighten the forest, first to the right and then to the left. In the same moment I shouted to Terttu about the time and she answered 1.45.

"During the change of colour and the light beams, the light phenomenon was in

the same place all the time.

"After that, the light moved back to where it came from by the same route, and made that W-shape once more. When it started to move, the red-yellowish light in the upper part became more narrow; from 11 to 1 o'clock.

"When making the W-shaped figure the light was in its lowest five metres from the water and in its highest 15 m above the lake. No sound could be heard at all

during the observation.

"When it had returned to the same place as I had seen it first, the light phenomenon switched off its yellowish upper light and started slowly to abandon from us. Simultaneously it continued to rise gently towards the upper part of the edge of the forest. When it had disappeared from sight, two more smaller blue lights rose from the edge of the forest. First from the right and the then from the left. They followed this bigger light and vanished after it. The time was 1.55 when the lights began to recede and it was 2.00 am when they vanished.

"I was awake to five o'clock in the morning and waited that it would come

back. But it did not return.

"Later in the night, inside the cottage, I felt that a bright yellow lightbeam was directed to my left temple. I said to Terttu: "Wonder what this light is", but the beam vanished as soon I had said it. After a while the light reappeared by my temple and the same happened. After that it did not come back any more.

"Afterwards I got a little head-ache, but I thought it might depend on the exertion of my eyes, due to the fact that I had been looking for a long time into the dark.

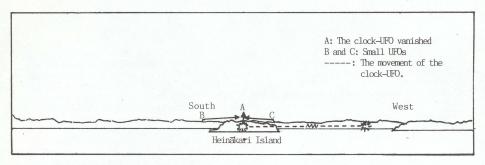


FIG. 1. The view from the observation place.

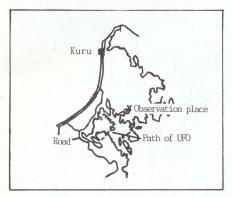


FIG. 2. A map of the observation place. Scale 1:280 000.

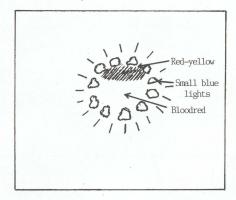


FIG. 3. The appearance of the UFO.

"My own opinion about the light is that it was some flying vehicle - a UFO. I don't believe it was any weather phenomenon. The weather was cloudy, you couldn't see the moon or the stars. A gentle wind was blowing from the south. The temperature was + 18 degrees Centigrade, I had checked it on the day. The weather had been sultry and a little bit like thunderstorm.

"After a couple of days I made some inquieries at the Aitovvori radar station, but no notices were found in the diary of events during the actual time. (However, the UFO was moving so low that the radar actually could not registrate it.)

After this event unusually many observations (over ten) have come to the knowledge of our group. Most of them are made near Tampere in August-September 1983. The investigations are still going on when writing this article. A couple of events seems to be connected with the Kuru observation. The UFO-activity in Finland clearly seems to be more lively.

- Note by the translator: In the same night as this observation was made, a man disappeared on his way to his working-place. He is still missing despite of announces in the newspapers, and the local police has no clues of his destiny.

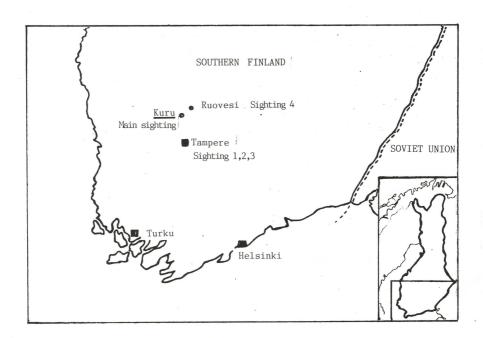
### SHORT SUMMARIES OF OTHER OBSERVATIONS

1) 3 September 1983, at 0.30 am, Tampere.

A 58-year old widow got up from her bed to take her medicine. She noticed in the northwest a light phenomenon as big as the moon, which otherwise was round, but a piece was missing in the upper part, just as if it should have been broken or the phenomenon was illuminated from underneath, so that the upper part was shadowed. The colour was metallic. The phenomenon abandoned from the observer and disappeared behind the roof of the neighbouring house. The observations lasted for 10-15 minutes. No other witnesses. During the time of observation the moon was under the horizon.

2) 3 September 1983, at 11.05 pm, Tampere.

A 50-year old seargant major (ret.) with great experience in ground observation corps, observed in the north at an elevation of 30 degrees, a moving dark blue object, which he at first thought to be a kite. Then a light was switched on in the front part, sparkling in the beginning like a piece of firework. The form of the object changed to a ball, the colour of which was yellow, like a traffic sign reflecting the car headlights, and the ball was followed by a blue veil which covered the stars. The phenomenon first got closer directly to the observer, but turned a little bit to the right when the sparkling began. When it passed, the yellow ball seemed to have a narrow ring around itself. The object suddenly vanished up in the southeast. The motion was soundless, with sudden, short movements. The size of the light was approx. 50 cm. The duration of the observation was short, only about 3 seconds. The weather was clear and the object did not illuminate the surroundings. This could have been a meteorite, but due to the great experience of the observer, this is not a very probable explanation.



3) 4 September 1983, at 1.00 am, Tampere (Lielahti).

A 25- year old woman observed through the window of her appartment house a bright yellow lightball, bigger than the moon, which was descending in the southwestern sky. She quickly alarmed her 31-year old husband and his 19-year old sister and they all went to the balcony to see better. However, the lightball had already descended so much behind the forest that only the upper part of it was visible. The light phenomenon continued to descend with decreasing speed and vanished after about two minutes down to the right. Over the landing-place of this big ball a light clearly bigger than a star was observed, moving slowly to the right and gently downwards, descending behind the forest (while blinking through the trees). The weather was clear, and no sound was heard. The total duration of the observation was about 20 minutes. The time of observation rules out the possibility of the moon or stars. No other witnesses.

4) 10 September 1983, at 10.00 pm, Ruovesi.

A 25-year old civil engineer and a woman of the same age were in a boat on the lake. The man was lying on the bottom of the boat looking for the stars, when the woman observed in the northwest just over the water, a small, but bright yellow light in front of which was like twigs. The man also began to see it and together they saw how the light which was shining with constant brightness, at first seemed to get closer to them. Then the light became brighter, like a halogene light and started to rise straight upwards, vanishing very fast without noise or other effects. The observers estimate that the rise upwards was made at the distance of about 1.5 km, the duration of the observation was about 10 seconds.

# **SWEDEN**

### URBAN SÄWSTRÖM IN HALLAND: WHEN THE PARALYSIS SET ME FREE I RAN AWAY SCREAMING

Source: UFO-Sverige-Aktuellt no. 3 1983

Date: Friday 22 July 1983

Time: At 1.30 am

Place: In Bolarp 6 miles north of Laholm

Witnesses: Karin and Urban Säwström; Larry Åberg with his father

Nature of sighting: Shining ball with paralysing effect

It was about half past one on a Friday night, 22 July 1983. Farmer Urban Sawstrom in Bölarp 6 miles north of Laholm had just gone up to feed his two horses some extra since the very dry summer had spoiled the access to pasture. The night of July was mild and calm with a clear and cloudfree sky. When with the two horses he started rationing out the hay. What then happened is really fantastic. Suddenly the field was lighted by a strong light. Urban Sawstrom looked up in surprise...

"On the clear sky was a shining ball by the size of a full moon", Urban tells. "The ball was slowly descending over the field, but from what altitude I can't

tell.

"Before my surprised eyes the horses lay down on the ground! One of the horses had been in my possession for 6 years now and during that time he has never been laying on the ground before", Urban Säwström tells. "But now they were laying both of them...

The same moment the farmer realised that he himself was standing almost paralysed beside the knocked out horses! From his shoulders and below he couldn't move

at all. It was a real chocking feeling since all Urban wanted to do then, was to get away from the spot and as fast as possible...

"Exactly how long I was standing there I don't know, Urban states. I only know that when the paralysis finally set me free I ran to the house screaming to wake up my wife Karin. While running I discovered that I was running in my stockinged feet and that my wooden shoes in some strange way were gone.

Karin who was dazed with sleep and all shook up, came out in time to see the

shining ball hover above a nearby field of oates.

Well, there was Urban standing in his stockinged feet both chocked and confused. At the same time Karin discovered that both her bracelet and necklace had disappeared from her body without a trace. The necklace was found on a table inside the house while the bracelet was really lost, in spite of that Karin had worn these trinkets for years, both day and night. Simultaneously Urban found his wooden shoes neatly arrang-300 feet from the field with horses.

"It looked like I've placed them there myself", Urban says wondering but sim-

ultaneously confused.

They also tried to wake up a family next door during the last phase of the sighting, but they didn't succeed until the ball had left. You can easily understand that Säwström's neighbours hardly believed in the story by Karin and Urban... Urban also alerted a military station in the neighbourhood and got the information that no radar had been activated in the area.

This is one of the strangest cases. Urban Säwström has in all interviews stuck to his sighting. That he stepped out of his shoes could have been an unconsious action caused by strong psycic strain. But what about his wife's lost of both neclace and bracelet? And why did the horses lay down? Afterwards Urban Säwström found out that a relative had seen the same ball during a nightly car drive along E6 between Båstad and Halmstad. An additional witness reported after the articles in the local press. It was Larry Åberg from Alingsås that on the night of 22 July was fishing pike together with his father on the lake Mjörn. At 2 o'clock Larry's father suddenly spotted an unusually long and magnificent shooting star. 30 minutes later a stange ball appeared in the sky.

"It was little less then the full moon in size and had a shining aura around itself", Larry tells. The ball slowly descended below some trees, rose again and

disappeared rapidly towards south.

All of Larry Åberg's description is in accordance with Urban's description of the UFO, but one has to pay attention to the distance between the two sighting spots;



almost 125 miles!

When Larry and his father was to start the boat engine after the ball had disappeared, the engine was running irregular anf coughing, although it was recently renovated and had been working perfectly only an hour earlier. The next day the engine ran normally again...

### UFO WITNESS IN MALMÖ ALERTED NATO

Source: UFO-Sverige-Aktuellt no. 4 1983

Date: Monday 19 September 1983

Time: 8.30 to 9.00 pm

Place: Malmö (Västergatan 40)

Witnesses: Tareq, Zaper and Ann Taylor

Nature of sighting: Five formations of light-balls

Monday 19 September 1983 at 8.30 pm, 14 year old Tareq Taylor steps out on the balcony, on Västergatan 40 in Malmö where his family lives, to get some fresh air. The sky is clear and calm. Suddenly Tareq spots a yellow ball gliding across the sky from southwest. He keeps looking at the ball and sees it split up into five glowing spots. Confused Tareq calls his mother Ann who comes out on the balcony and discovers the group of lights.

"The lights had a formation reminding me of a clothes-hanger", Ann Taylor

tells.

"In the center was the largest source of light with a size of a 1/4 of the moon. It pulsated with a clear red light while the other were yellow-blue and green.

"Not a sound could be heard from the phenomenon which glided past me in a 180 degrees turn, before they were lost over the horizon. We remained on the balcony until suddenly a new similar group of lights passed by", Ann Taylor continues.

"During a total of 30 minutes we saw five formations of lights - all without a sound and similar moving pattern. Simultaneously we saw an airplane pass, but we could hear a clear engine sound from it, Ann mantains.

"During the sighting my youngest son Zaper came home. He had been out at Lockarp driving gocart and when we showed him one of the passing formations of lights he bursted out: "Yes, I saw those lights from the car while driving home!"

Ann Taylor is not just another witness like many others in Sweden - witness-

es who can see incredible things without reacting. Ann Taylor reacted.

The next day she started by checking up the incident with the civil aviation staff at Kastrup in Copenhagen. No, there had been no traffic of that proportions over Malmö monday evening. (Sometimes parts of the air traffic to and from Kastrup are forced to "borrow" waiting space above Malmö.) Ann Taylor's next call to the Defense Staff in Stockholm, where Stig Öhman at the Air Command took charge of the incident. He could, after checking with among others F10 in Ängelholm, tell that there had been no military activities over Malmö during 19 September.

But Ann Taylor was not just another witness. She really wanted to know what she and her sons had seen. So this time Ann called the Danish NATO Air Base at Varløse. From there she was passed on to another NATO base, but none of them could solve the

mystery.

Ann Taylor then contacted KvällsPosten(after a suggestion from UFO-Sverige-Aktuellt) - the largest newspaper in Malmö. Some publicity about Ann's sighting ought to get more witnesses to the incident! In a large city like Malmö lots of persons ought to have seen and wondered at the shining formations. But KvällsPosten refused to print Ann's story, just because no one else had called about light phenomena...

### CHOCKED UFO OBSERVER IN BORAS: "I NEVER BELIEVED IN SEEING MY SON AGAIN"

Date: Friday 21 October 1983

Time: About 9.00 pm

Place: At Tokarpsberg in Borås

Witnesses: Christoffer Holmstrand, Joakim Ljungqvist and Birgit Ljungqvist among others

Nature of sighting: Egg-shaped object at close range

Will Friday 21 October 1983 become a historical UFO date, just like Thursday 15 October 1981? Yes, a lot speaks for it. In 1981 it was the famous Hällefors incident when a giant UFO circled round the little village and frightened hundreds of witnesses.

Friday 21 October 1983 the turn had come to the city Borås to be visited by something from the unknown. It was as frightening and powerful as in Hällefors. Just as unexplained and mysterious if you can believe the military authorites. As usual they had seen nothing, heard nothing and knew nothing about this violation of Swedish air.

Friday evening was clear and a bit chilly. At Bergdals School in Borås a school party had just finished and the kids were on their way home. It was about 9 pm. Christoffer Holmstrand, 10 years of age, and Joakim Ljungquist, 9 years of age, walked along Torkarpsgatan that ran across a small hill called Tokarpsberg, from which you had a good view. When reaching the top something occurred...

"At first it looked like a shooting star in the sky", Christoffer tells. "A shining object came closer with a tremendous speed and with jerky movements. We got scared when the object just grew larger and at the same time we began feeling strange and stiff in our legs", Christoffer continues.

"Joakim cried and we threw ourselves into a hedge when the object was right above us. The whole street was lightened by a strong light shining directly down towards us.

The object was now right over the boys in altitude with the treetops. Both Joakim and Christoffer have made identical drawings of the UFO, which they had drawn like a round egg-shaped thing. Along the outer edges of the phenomenon were a lot of different coloured lights, and the whole "body" glowed in an orange colour. Christoffer even saw something like a hatch on the top of the object. Christoffer described this intensive light down on them "as stronger than the lights on Ryavallen" - the Elfsborg's ground for the Swedish football league. No wonder the boys got real scared...

"We tried to run away", Christoffer tells, "but at first our legs refused to move and first after a while we could run normally. The object followed us, and when it moved the trees swayed! Not once during the sighting could we hear a sound from the shining thing - the only thing we heard was the humming from a broken street lamp close by.

When the frightened boys reached a relay station beside the Bergdals School the unknown object stood up on one edge and disappeared as fast as it had appeared!

Once again Christoffer and Joakim could see how the trees bent when the UFO left and then everything was back to normal again. From an empty sky the stars twinkled over two chocked school kids that with high speed ran to Bergdals Scool to alert teachers and student.

An imaginative story by two small kids you might think. But no, there were adult witnesses to this unknown phenomenon's visit to Borås, too. One of these witnesses was Birgit Ljungqvist, the mother of Joakim. She wondered why the boys were late from the party and went out on the balcony to take a look.

"I immediately spotted a strange thing hovering in altitude with the treetops over Tokarpsberg", she tells."The object reminded mostly of a large car with strong red lights both in front and back. The distance between the lights was about 30 feet!

"Simultaneously the thought passed through my head - if Joakim is where the object is I will never see him alive again!

All upset Birgit Ljungqvist ran into the apartment and threw on some clothes. She didn't dare to tell her husband what she'd had seen. The same moment she heard Joakim come home crying and both parents had their hands full trying to calm the poor boy.

Simultaneously the same thing happened at the family Holmstrand. Christoffer

also was very chocked and his father Osborne tells that the boy had nightmares and wet the bed and behaved very uneasy.

"It's totally clear that the boy has experienced something extraordinary",

Osborne Holmstrand says. Even he was upset by Christoffer's story.

The incident was reported to Military District Staff West that started an investigation that ended up with the standard answers: "No military activity in the area, and no radar sightings - of course..."

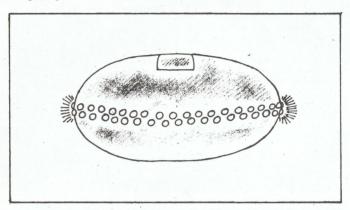


FIG. 1. A drawing of the egg-shaped object.

### UFO SHINING LIKE COPPER OVER NYKÖPING

Source: UFO Aktuellt no. 2 1984

Date: Friday 16 March 1984

Time: Between 10.30 and 10.40 pm Place: 2 miles west of Nykoping

Witnesses: Aina Krantz, Gunvor Åkermand, Dagmar Gustavsson, Elisabeth Sagebrand and

Ruth Storm

Nature of sighting: Bowl-shaped UFO with Copper lustre

It was an unusually pleasant evening, 16 March 1984. Clear sky and no wind.

The full moon shone inviting for a walk.

Aina Krantz, Gunvor Åkermand and Dagmar Gustavsson, three ladies living in Nyköping, decided to take a walk and entice tawny owls to come. At 10 pm they left and at 10.30 they reached the Working Dog Club's cottage 2 miles west of Nyköping. The ladies didn't see any owls, but on the other hand something they would never forget — a UFO.

Aina can imitate the tawny owl and sometimes the three of them go out together to listen to the owls. When standing on the path close to the forest without being able to hear anything Dagmar says: "Look, what's that approaching". Through the tree tops all three could catch a glimpse of a circular, light-yellow shining object heading directly towards them from the south-southwest.

Gunvor understands that this isn't anything ordinary and puts on her glasses to be able to see better. The object is still on the same course. Although there is no

wind, not a sound can be heard!

When the object approaches it glows in a copper-like colour, like a new polished copper pan. Gunvor thinks she can distinguish three lighter parts on the bottom of the object, surrounded by darker circles.

For a short moment Aina becomes very scared, doesn't dare to look any more and turns her eyes to the ground and holds her hands above the head. "I'm gonna die", is her thought. But soon the curiosity is too strong and she looks up again towards the object, now larger than the moon and glowing beautifully. It looks like it was lighted from inside through small "windows". Aina gets a clear impression of a three-dimensional object, shaped like a bowl or pan.

The object passes rather slowly and without a sound almost over the heads of the three ladies and provides them with a fair chance to take a look. The object continues with the same speed towards north-northeast and disappears behind the branches of the trees while it becomes more yellow. The witnesses now move to get another glimpse of the object and spot it now and then before it disappears totally. Gunvor now looks at her watch and it's 10.40 pm. The sighting has lasted for 5-10 minutes.

The witnesses didn't know where to report their sighting. Aina reports her experience to an engineer at Studsvik, believing he would laugh at her. But he doesn't and takes it for real and insists on contacting the UFO society of Nyköping.

When the UFO society hears about the incident they try to reach further witnesses through an advertisment in Sodermanlands Nyheter 31 March. Another two witnesses are found.

Mrs. Elisabeth Sagebrand, living in Östra Kyrkogatan, is going to watch TV. It's past 10 pm 16 March. Trough the window she discovers something that looks like the moon. She approaches the window to take a closer look at the object and finds that it isn't the moon. But she can't understand what it is. The object is in west-southwest in an angle of 45 degrees and standing still. Mrs. Sagebrand continues to watch TV but after five minutes she returns to the window to look at the object. Now it's gone.



Mrs. Ruth Storm in Fågelbovägen is also watching the TV-program "Nöjemaskinen". At 10.30 pm 16 March a "rocket" suddenly appears in her window. The rocket is shining strong and passes straight over the house when Mrs. Storm spots it. It disappears in a few seconds towards the south (the opposite direction of the main sighting!).

Mrs. Storm finds it so strange that she makes a note in her diary.

The witnesses' reports of the weather are correct: a stable high pressure had reached in from Norway this day. No large changes of air pressure happened within 6 hours before and after the sighting. It was 3 degrees Centigrade below zero and a clear sky. The wind came from northeast, which means that the object moved towards the wind. According to the witnesses there was no wind on the ground level. At sea the wind was 7 m/s at Gustav Dahle'n.

No weather or visaing balloon were in the air according to SMHI (Swedish Meteorologic and Hydrologic Institute) and Brandholm Airport. The two airports in Nyköping were not manned at this hour of the day.

# NORWAY

### PROJECT HESSDALEN

"Project Hessdalen" was initiated in June 1983 during a meeting between representatives from UFO-Norge, Riksorganisationen UFO-Sverige and Förening för Psykobiofysik (Sweden). The aim was to launch an ambitious research program designed to investigate the UFO-phenomena which had frequently been observed in and near the valley of Hessdalen since December 1981 (see also NUFON no. 1 & 2 1983).

The project was divided into two main parts: Part A, an exhaustive analysis of earlier observations together with photographs and other material already collected;

Part B, a field survey making use of technical equipment of various kinds.

The daily management of the project is in the hands of a committee consisting of five persons (the Hessdalen Committee): Leif Havik (Project Leader), Erling P. Strand (Instrumentation Leader), Odd-Gunnar Røed (Project Coordinator); all members of UFO-Norge. Additionally, Håkan Ekstrand and Jan Fjellander represent Riksorganisationen UFO-Sverige, the latter also Forening for Psykobiofysik. This working group was founded in connection with BUFORA's 3 rd International Congress in London in August 1983, where the project was presented to an international audience for the first time.

Somewhat later an international "Project Advisory Committee" was founded, consisting of four persons: Dr. J. Allen Hynek (USA), Dr. Harley Rutledge (USA), Paul Devereux (Britain) together with Prof. Jens Tellefsen (Norwegian living in Sweden). The

group should give professional assistance to Project Hessdalen, if necessary.

Execution

Part A - the analysis of existing reports and material - was started just after the BUFORA congress. The main part of the work, however, consisted of sending self-addressed, stamped envelopes with a questionnaire to 3300 housholds in the areas in and <u>around</u> Hessdalen, e.g. Holtålen and Midtre Gauldal, in an attempt to establish how many observations had been made in these areas which had passed unnoticed by our teams. The mailing was carried out in January 1984. Additionally, all existing reports, pictures and movies together with other material were thoroughly investigated.

The public response to the questionnaire, however, was rather disappointing. Of the 3300 envelopes sent out, only 25 - 30 were returned, showing that local interest

in the project and phenomena in Hessdalen was at a low level.

The project management arranged a meeting with the people in Hessdalen on 19 November 1983. Here they performed almost the same questioning of witnesses as the one in March 1982.

The result from this informal poll can be seen in the following table:

	Ålen Hessdalen (26 march 1982) (19 Nov. 1983				
Total audience	130		44		
audience from Hessdalen	14	11%	26	59%	
elsewhere	116	89%	18	41%	
sightings since December 1981	30	23%	. 30	68%	
sightings of yellow, spherical lights	17	13%	11	25%	
sightings of possible cigar-shaped objects	12	9%	13	29%	
sightings of possible egg-shaped objects	8	6%	3	6%	
sightings of oblong objects with 2 yellow and					
1 red light	6	4%	10	22%	
sightings in daylight	100	-	13	29%	
sightings at the same time as TV-sets were on	?	-	3	6%	
failures on radio/TV-sets during a sighting	3	2%	0	0%	
influence on animals	1	-	1	-	
no sightings at all	?	-	6	13%	
sightings before December 1981	?	-	4	9%	

Part B - an instrumental survey of Hessdalen. This operation commenced 15 November 1983 when a representative from the Seismological Observatory at the University of Bergen mounted a seismograph just underneath Aspäskjølen (about 0.5 km west of the planned headquarters). This instrument should be capable of registrating earthquakes over the whole world, and sensitive enough to measure just very small movements and displacements of the earth's crust in the Hessdalen area. Additionally, aerial photographs of the valley were ordered from a national air-cartographic company (Fjellanger Widerøe). Requests about mining schedules from various mining and construction firms/sites in the vicinity of Hessdalen were forwarded in order to exclude any noise from human activities.

However, the main part of the technical equipment didn't appear in Hessdalen before the end of January 1984. A <u>test-weekend</u> was arranged from Friday to Monday 20-23 January in order to co-ordinate the equipment together with all the persons on watch. An around-the clock surveillance of the valley was carried out with between 20 an 30 persons (both Swedish and Norwegian) in total. From Monday 23 January, the manning was reduced while the project passed into a more quiet phase. Then, from Saturday 11 February an intensive watch of the valley was started, with a maximum of people on watch, together with many sophisticated instruments. This phase was terminated Sunday 26 February (after 14 days) and with it "Project Hessdalen, Part 1" definitely ended.

### Manning

During the  $\underline{\text{test-weekend}}$  (20 - 23 January) the following observation sites were manned:

- 1. Headquarters, Aspåskjølen (700 metres above sea level); caravan connected to mains, (220 V/50Hz); equipped with a telephone (mobile) and with most of the below mentioned instruments (see section about instrumentation).
- 2. Fieldstation 1: Fjellbekkhøgda (1078 m)
- 3. Fieldstation 2: Finnsåhøgda (1068 m)
- 4. Fieldstation 3: Lit1fjellet (1072 m)

A total of about 20 to 30 persons were on watch during these three days. Later, the observation posts were partly removed; in the remaining period to 26 February the following observation sites were in use:

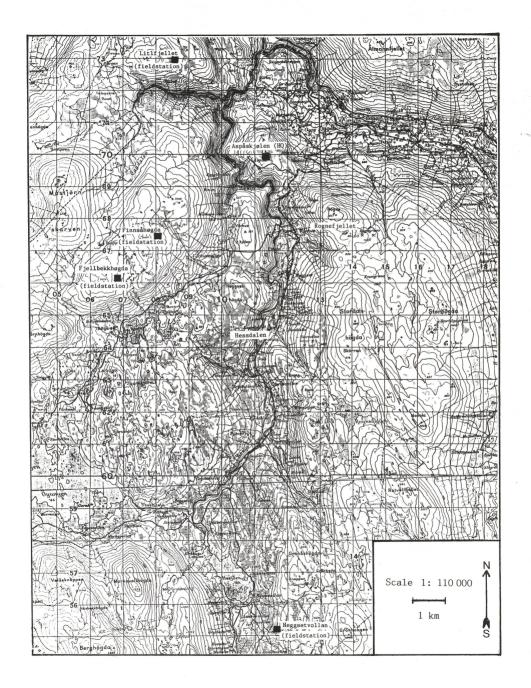
- 1. Headquarters, Aspåskjølen (as before)
- 2. Fieldstation 1: Lit1fjellet
- 3. Fieldstation 2: Lake Hesjøen, i.e. Heggsetvollan situated ca. 1 km SE of Lake Hesjøen (820 m).

All of the above mentioned stations were manned during the rest of the project period though the number of persons could vary. Please refer to map over the Hessdalen area at page 15.

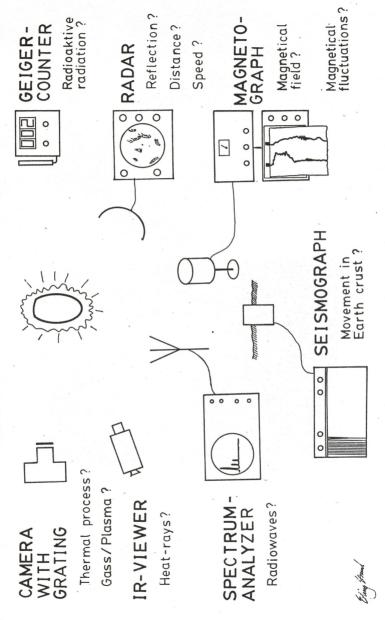
### Instrumentation

All of the below mentioned instruments have been monitoring Hessdalen for a shorter or longer time during the period from 20 January to 26 February 1984:

- 1. Spectrumanalyzer, Hewlett-Packard (100 kHz 1250 MHz)
  Hewlett-Packard 8554-RF Section, 8552 A-IF Section and 141 S Display Section.
- 2. Broad-band antenna, for use together with the spectrumanalyzer.
- 3. Radar, Atlas 2000. Range max. 18 nautical miles (33 km).
- 4. Seismograph, MEQ-800 Portable Seismic System; W.F. Sprengnether Instrument Co. Inc.
- 5. Magnetometer, Fluxgate Magnetometer Model FM 100, Serial 73. EDA Electronics Ltd.
- 6. Radio interference and intensity meter, Singer NM-25 T. (150 kHz 32 MHz).
- 7. Video recorders. 1) Graetz Telerecorder 4943 (VHS)
  - 2) Akai Portable VTR, VT 100 S
  - 3) Sony
- 8. Video cameras, 1) RCA (B/W)
  - 2) Akai Portable camera, VC 100 S
  - 3) Sonv
- 9. Laser, a Helium-Neon laser, wavelength 633 nm.
- 10. IR viewer, 2 FJW 80045 (700 1100 nm).
- 11. Cathode ray tube, RCA TC 1212.
- 12. Geiger counter, 1) Radiation Alert Mini
  - 2) Homemade with a digital readout
- 13. Printers, 1) TOA Electronic Polyrecorder Model EPR-200 A
  2) Esterline-Angus Graphic Ampmeter, RD-59/U
- 14. Filters with gratings, 1) 3 Paton Hawksley TE.216 E (300 lines/mm)
  - 2) 1 Paton Hawksley TE.218 C
  - 3) 1 filter with 300 lines/mm
  - 4) 1 filter with 13000 lines/inch



# **HESSDALS-PHENOMENON**



### 'Instrumentation (continued):

### 15. Camera equipment,

1) Polaroid CU-5 (for instrument readout)

- About 20 cameras with different lenses (mostly single lens reflex (SLR) cameras)
- 3) About 8 Instamatic cameras
- 4) About 10 tripods
- 5) 3 8 mm movie cameras

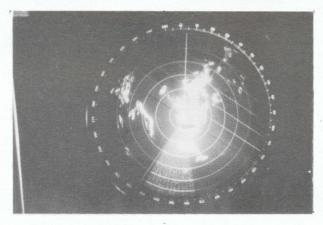
The number and types of cameras with accessories varied, while most of them were privately owned. The technical equipment, however, was more permanent with a few exceptions.

To get an idea of why and how the different types of instruments were used, we will here give a presentation of the most important ones (see also drawing at page 16):

### 1. Radar

Radar equipment could be a valuable aid in order to establish position and speed of an (radarreflecting) object. If the Hessadalen phenomenon should turn out to be just mirages, they wouldn't be detected in this way.

However, reflection of radar beams does  $\underline{not}$  necessarily show that one is dealing with a solid object. Unusually large gradients in temperature, moisture etc.  $\underline{could}$  possibly cause a reflection. Due to these possibilities, all the radar observations were thoroughly examined by radar experts in order to eliminate sources of error.



A picture showing the radar image of Hessdalen.

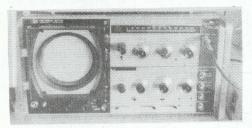
### 2. Spectrographic photos

A spectrographic photo of the phenomenon (taken by an ordinary camera with a grating in front of the lens) would definitely reveal the nature of the light source, whether it be a solid object, a luminous gas (plasma), or a combination. Such photos could also help to establish the chemical composition of the phenomenon.

### 3. Spectrumanalyzer

This can register electromagnetic waves (radio-waves) between 100 kHz and 1250 MHz. When connected to a broad-band antenna it would be able to show if the phenomenon interfered with ordinary radio- and TV-signals and/or emitted electromagnetic

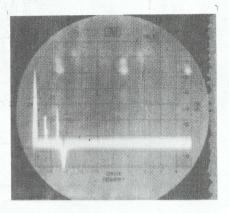
noise in these frequencies.



The spectrumanalyzer.



The broad-band ante



A close-up of the display unit on the spectrumanalyzer.

4. Magnetometer

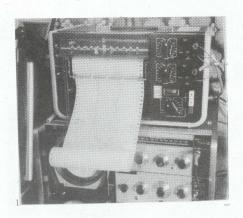
A magnetometer measures the strength and direction of the earth's magnetic field. We used a type of equipment (FM 100) which also could detect magnetic activity in the upper atmosphere. "Magnetic storms" (due to activities on the sun or the aurora borealis) would give strong deflections on the instrument.

The magnetometer was connected to a printer; in that way we could continuously monitor any variations in the surrounding magnetic field. Due to the sensor used, the field could be measured in three dimensions (x,y,z). Registrations were later compared to similar readouts from other (official) magnetometer stations: Dombås (130 km SW of Hessdalen) and Andøya (750 km north in Northern Norway).

Having these properties of the instrument in mind, we could find out

- 1) if there was any kind of a special magnetic activity over Hessdalen
- if the phenomenon appears during periods of special magnetic activity in the atmosphere
- 3)  $\underline{\text{or}}$  if the phenomenon surrounds itself with a strong magnetic field.

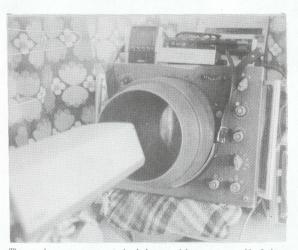
Roughly speaking, we could decide if the phenomenon has anything to do with magnetism.  $\hfill \hfill \hfi$ 



Some of the print-out from the magnetometer.



The magnetometer's detector.





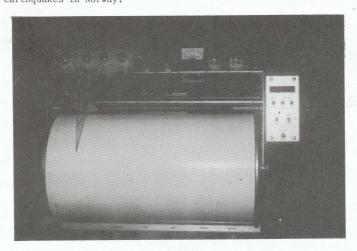
The radar screen watched by a video camera (left); to the right the radar antenna.

### 5. Seismograph

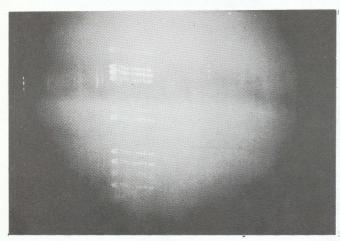
A seismograph measures movements in the earth's crust. The one installed in Hessdalen could detect most of the larger earthquakes in the world; in addition also small, local trembles in the Hessdalen area. Registrations from this seismograph together with registrations from other seismologiacal stations in Norway could give a clue if the phenomenon correlates with movements in the earth's crust.

We decided to use a seismograph because the hypothesis of UFOs having connection with geophysical mechanisms is rather popular at the moment. Paul Devereux has made a comparison of earthquakes and UFO-events in England, presented in his book <u>Earthlights</u> (Turnstone Press, 1982). Dan Mattson in Riksorganisationen UFO-Sverige is working on a similar analysis of Swedish UFO observations, especially in the so called "Kolmgården window".

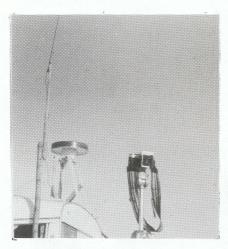
NORSAR (Norwegian Seismic Array, an official geophysical research and control program for nuclear explosions), is working on a detailed study of earthquakes in Norway for the period between 1980 and 1984. This implies among other things that smaller local quakes in the Hessdalen area will be registered and stored in a computer archive of earthquakes in Norway.



The seismograph, MEQ 800, which could measure movements in the earth's crust.



A photo showing the spectrum of (among other things) an illuminated ski-path in Hessdalen. (Left)





IR-viewer.

Camera with a mounted grating.

### 6. Geiger-counter

This measures radioactive radiation. 3 different units were used at the same time, situated at two locations. If the phenomenon should emit significant amounts of such radiation, it would very probably be detected with these instruments.

### 7. IR-viewer

An IR-viewer can be used to observe visually in the infra-red (IR) part of the spectrum (i.e. heat radiation). If the light from the phenomenon originates due to the heating of a solid physical object, a quite intense IR radiation will result. Eventually this will be seen in an IR-viewer.



Leif Havik outside the caravan at HQ. Much of the camera equipment is present.

### Observations

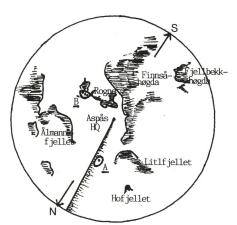
Most of the observations mentioned below were made directly in connection with Project Hessdalen., i.e. visually by the observers or from instrument readouts. The latter part will deal with reports made by external observers, people living in the valley who have seen the strange phenomenon before and during the execution of the project.

Some observations made in connection with Project Hessdalen:

- 1) Saturday 21 January 1984:
  a) 06.05 pm (radar/visual) A red/silvery blinking light in southerly direction; turned out to be two objects.

  Seen visually and on radar from the headquarters at Aspäskjølen. Photographs were taken. (See also a sketch of the radar image below.)
  - b) 07.22 pm (visual) Yellowish object from the south, passes the observation posts. Distance less than 1 km, altitude some 700 m. Photographs were taken.
  - c) 09.20 pm (visual) Series of flashing lights appears over Litlfjellet. Keeps flashing from time to time during the evening and night. No explanation to what it might have been. Photographs were taken.

Drawing showing the radar screen (left). Point A was first seen visually at 06.05 pm 21 January - then on the radar. Point B was seen 04.27 am 22 January, only on radar. It was seen during three scans, enabling the operators to calculate its speed to about 360 km/h.



- 2) Sunday 22 January: a) 04.27 am (radar) point on the radar display having a speed of about 360 km/h. No visual observation.
  - b) 07.20 pm (visual) The same flashing lights as seen the night before (21/1). Keeps on during the evening.
  - c) 07.44 pm (visual) A light very similar to the one from 07.22 the day before, comes in from the south. Photographs were taken.
- 3) Wednesday 25 January: 05.32 pm (radar/visual) Blinking light from the south, passing the headquarters and disappears in a northwesterly direction. Followed by radar and 10x50 fieldglasses. Oblong shape.
- 4) Friday 27 January: 10.58 pm (radar/visual) A shining ball of light appeared above Finnsåhøgda. Disappears at a tremendous speed towards northwest.

- (Friday 27/1-84, contin'd): Registrated on radar. Distance estimated to object 22.5 km; speed: 28 300 km/h.
- 5) Saturday 28 January: 03.49 pm (radar) Object observed on radar between Finnsåhøgda and headquarters. Distance less than 500 m, speed 1620 km/h.
- 6)  $\underline{\text{Sunday 29 January:}}$  04.19 pm (radar) Same kind of observation as above, going in the opposite direction. Same speed, no visual contact.
- 7) <u>Tuesday 31 January:</u> 07.01 pm (radar) Three echoes registrated from Rognefjellet and passing over the headquarters. No visual contact.
- 8) Wednesday 1 February: 03.49 pm (radar) Radar contact with an object travelling northwards from Vårhuskjølen along Finnsåhøgda towards Aspåskjølen.

  No visual observation.
- 9) Thursday 2 February: a) 02.05 pm (radar) 3 echoes east of Aspåskjølen (H.Q.) moving northwards. Distance (according to the radar image) about 600 m. No visual observation.
  - b) 02.35 pm (radar) Several echoes observed west of the H.Q.
  - c) 03.46 pm (radar) 2 echoes observed on the screen south of  $\mathrm{H}_{\bullet}\mathrm{Q}_{\bullet}$
  - d) 03.49 pm (radar) 1 echo west of H.Q.
  - e) 03.51 pm (radar) 1 echo south of H.Q.
  - f) 04.03 pm (radar) 2 echoes moving northwards og H.Q.
  - g) 08.11 pm (visual) A lighted, oblong object with yellow-white lights and a red one in front travelling northwards. Seen by 9 different witnesses (Leif Havik was one of them) on 3 different locations.
- 10) Friday 3 February: 03.12 pm to 05.04 pm (radar) an intense "wave" of echoes in this period. At least 11 radar observations with a total of 31 echoes. Distance from 450 to 1800 m. No visual observations.

  A series of odd occurrences happened during later observations: power failures, instrument malfunctioning, 2 TV-sets dropping out simultaneously at local residents, etc.
- 11) Wednesday 15 February: An oblong object, lighted in both ends, observed in Bjørgen north of Hessdalen. Point of time unknown.
- 12)  $\underline{\text{Thursday 16 February:}}$  Same kind of observation at the same place as 15/2. Time unknown.

### Registrations made by the spectrumanalyzer:

29 January: 7.25 - 7.33 pm

9.38 pm

31 January: 3.42 pm

4.42 pm

3 February: 4.44 pm

6.08 pm

7.51 pm

7.52 pm

7.55 pm

8.01 pm

9 February: 7.36 pm

17 February: 5.49.51 pm

19 February: 8.59 pm

## Registrations of earthquakes made by seismograph:

1 February: 8.00 am approx.

12 February: 3.42 pm

15 February: 11.57 - 12.00 am

16 February: 6.26 - 6.42 pm

18 February: 0.14 am

0.15 am

0.34 - 0.37 am

6.31 am

If the reproduction of this photo is good enough, two small, white dots can be seen to the right of the arrows. Possibly two objects also seen on radar Saturday 28 January at

3.49 pm. (Right)





The caravan at Aspås-Kjølen (main head-quarters). The radar-antenna together with the broad-band areal can easily be seen. (Left)

22 February: 6.30 am approx.

24 February: 1.59 - 2.03 pm

23 February: 4.31 pm

Some observations made by external observers (not part of the Hessdalen teams) from November 1983 to January 1984:

- 1) Monday 7 November 1983: 06.45 pm The witness, Jon Arvid Aspås, noticed a globelike object following an airplane from south to north in Hessdalen.
- 2) Monday 14 November: 07.45 pm Asbjørn Furunes with his wife came driving from Singsås to Støren. At Rognes (ca. 60 km north of Hessdalen) they saw a red globe-like object passing to the east, then moving to the south near the Budalen valley. Observation time more than 20 seconds.
- 3) Saturday 19 November: 06.10 pm Jon Johansen together with three others observed 10 to 15 very short blinking lights south of Fjellbekkhøgda.

  The colours were yellow-white and blue.
- 4) Thursday 24 November: 06.00 10.00 pm The witness saw several blinking lights near Finnsåhøgda and Litlfjellet. He was situated at Hessdalskjølen. At 06.23 pm he saw an oblong object with 3 red lights in the front and 1 white in the rear part. At 09.58 pm he saw (probably) the same object when it passed near Vårhuskjølen.
- 5) Wednesday 30 November: 04.50 pm A globe-like object could be seen from Aspås in the northern part of Hessdalen when it passed southwards.

  After a few seconds it moved to the east.
- 6) Wednesday 14 December: 05.35 pm The witness, Åge Moe, was driving his car from Ålen to Hessdalen when he saw an object north of Hessdalen.

  No sound could be heard.
- 7) Thursday 15 November: 08.06 pm Jon Johansen was driving his car from Støren to
  Rognes when a "star" dived behind a mountain called Rødstenen.
  He stopped the car, and suddenly the object reappeared, passing behind some trees on top of the moutain and finally moving slowly to the northeast.
- 8) Friday 16 December: 10.50 pm P. Rekstad and his wife saw a yellow globe passing from south-west to northeast at Singsås. Another globe came from the opposite direction. When the objects met, the latter disappeared.
- 9) Thursday 22 December:

  O5.05 pm and 11.20 pm Jon Arvid Aspås and his daughter saw a cigar-shaped object with a red light in front, a yellow light, and finally two yellow lights in the rear part. The shape could also be compared to that of a projectile. This object passed near the top of Finnsåhøgda at 11.20 pm. It came from the highest point of this mountain, moving to the northeast, then to the north. After 2 3 minutes the object suddenly disappeared. In addition to Jon Arvid Aspås and his daughter (situated at Aspåskjølen) the object was seen by Martin Aspås (near the main road to Ålen) and Bjarne Lillevold (at Hessdalskjølen, near the radio/TV-antenna).
- 10)  $\underline{\text{Friday 23 December:}}$  Point of time unknown A woman in Haltdalen saw an object west towards Finnsåhøgda, near Ledalen. No further details.
- 11) Wednesday 4 January 1984: 10.54 pm The witness, Ruth Mary Moe, saw an object as it passed from south-west to northeast from Finnsåhøgda and above the witness at Aspås. A lot of lights in different colours could be seen on the object. An aeroplane was passing from north to south at the same time.

12) Sunday 8 January: Between 10 and 11.30 pm - The witness, Mr. H. Kosberggrind situated in Bjørgen, saw a shining object in the south at the actual time. The object was shining in different colours. (Suggested course: Sirius (?).)

Up to the moment of writing, a total of 176 reports have been registered: made by both internal and external observers from 20 January to 26 February during the project. Each report is awarded a credibility index (G) and an index of explicability (F): each index ranges from 1 to 10 (G1/F1 - G10/F10). Thus, G1 would mean that the report is very poorly documented, while G10 means that it is documented very well with a wealth of technical detail from one or more dependable witnesses. F1 (of the explicability index) means that the phenomenon very possibly is of a known origin, for instance an airplane. F10 indicates that it is very likely that the phenomenon is of unknown origin - in other words, the "Hessdalen phenomenon" whatever it may be.

 $\,$  76 of the 176 reports have been clasified as F1, i.e. it is likely that they describe a known phenomenon. Moreover, the reports have been screened very criti-

cally in order to silt out any natural or man-made objects.

The hitherto sum total of the 176 reports (although many more remain unchecked) and their F/G rating may be presented in a matrix in the following way:

	G1	G2	G3	G4	G5	G6	G7	G8	G9	SUM	
F1		8	6	4	1	4	1	47	5	76	
F2	2	8		2	3		1	1		17	124
F3		3	1	1	2	1				8	124
F4	,	1	7	1	4	2	7			23	,
F5		9	3	2	2		4	5		16	
F6		4	1		1	3	4	3	,	16	
F7	1 1	1		1		2	1	3		9	52
F8						2	3			5	32
F9		2								2	
F10	0				,		2		2	4	
SU	М	3 27	18	11	13	15	23	59	7	176	

(The results are preliminary.)

### Conclusion

At the time of writing (November 1984) it is very difficult to draw any clear cut conclusions from the observations during the project. The results are currently being examined and analyzed by the project management together with researchers from Norwegian Defence Research Establishment (NDRE) and from the University of Oslo. This will result in a comprehensive report in English, "Project Hessdalen, Final Technical Report, Part 1", which hopefully will be published before the end of 1984. Interested readers who want this report as soon as possible may apply to the project management at the following address:

Project Hessdalen P.O.Box 14 N-3133 Duken NORWAY

Please write "Technical Report" on the counterfoil. The price is not yet stated.

As early as during the test-weekend(20-23 January) several interesting registrations were made on the instruments in use. These registrations continued also during the following week (see report summary). Additionally, many pictures were taken, both with and without grating. Unfortunately, the number of persons on watch the first weekend was insufficient to perform a thorough monitoring of all instruments simultaneously. The shortage of volunteers poses a problem for the project as a whole. Nevertheless, in spite of this fact, we can mantain that we have enough observational data in order to draw some very tentative conclusions. In order to substantiate these, I will briefly present the instrumental registrations we made and indicate their possible significance.

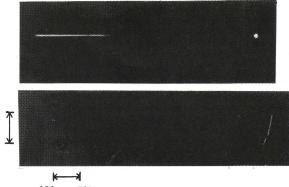
Spectrum photographing

The most interesting method of analysis we had at hand was beyond doubt the possibility of photographing the phenomenon with a grating. This would give us invaluable information about the true nature of the phenomenon, i.e. whether it is a solid object, a luminous gas (plasma) or a combination of the two. Unfortunately, we obtained relatively few good pictures which definitely show the Hessdalen phenomenon. A total of 7 B/W films (36 pictures each, Kodak Tri-X Pan 400 ASA) were taken with gratings, although without a "direct hit". 80 pictures show the phenomenon, relating to some 25-30 events. Nevertheless, we have printed a picture which probably shows the world's first spectrum of a UFO. The picture was taken by Arne P. Thomassen, Wednesday 25 January 1984, at 19.10 hrs. Exposure time 4 seconds; a 50 mm lens with f/1.7 was used. For control purposes, a picture was taken of the bright star Sirius. With the help of this last picture (e.g. the location of H beta and H camma absorption lines in its spectrum), a wavelength scale is set for the Spectral fimage of the phenomenon. Thus, the range is from about 560 to 635 nm. (See on top of page 28.)

The picture has been analyzed with the help of an image processor at the University of Oslo, but the optical density on the film is too low to justify any definite conclusion. However, no single emmission lines can be seen; in other words, it is a continuous spectrum. This means that if it is a luminous, <u>cold</u> gaseous source, it must be a mixture of various gases. They must also have a composition which makes the emission lines very close to each other and appearing with the same strength (e.g. a continuous spectrum). However, due to general physical considerations, this is not very likely and therefore we may rule out the possibility of it being a cold gaseous source. Such a source could appear with a continuous spectrum, but only when heated to a temperature of several thousands degrees Centigrade. This suggests that enormous amounts of energy may be at work, especially when one considers reports describing the phenomenon persisting for more than an hour. Unfortunately, the picture is too weak for us to say anything decisive,

The report accompanying the picture has been classified as G7,F6. In fact, we also have a spectrum image which is clear enough to really establish that it is a

Sirius with a first order spectrum (above); below there is an unknown light. (Right)



636 nm 562 nm

continuous spectrum. However, there is a small discrepancy between the report (describing the object and the circumstances of observation) and what is actually seen on the picture. The discrepancy is significant enough to invalidate the material as proof.

Generally speaking, we can say that we were close to getting successful images of the phenomenon. In order to complete this task, a special miniproject was carried out during the first week of September (2-9/9) in Hessdalen. At that occasion we tried to take pictures with gratings mounted on the lenses, setting aside all other measurements. Unfortunately, due to bad weather, we didn't get any better results from this  $\underline{photo-week}$ .

### Spectrumanalyzer

We never managed to get any deflections at the same time as the phenomenon was seen visually with this instrument. This means that  $\underline{if}$  it emits electromagnetic radiation in the range from 100 kHz to 1250 MHz, the level was to low for our instrument to detect it. The broad-band antennna in use was sensitive to radiation mostly from above.

On the other hand, several registrations were made without any accompanying visual observation. These deflections were of such a kind that one may maintain that nothing similar has ever been observed in the atmosphere. It is difficult to say if this has anything to do with the Hessdalen phenomenon; however, it may be significant that the day of most frequently observed radar reflections (Friday 3 February) was also the day on which most registrations were made on the spectrumanalyzer. On that day there was only one visual observation of light, classified as G2, F6.

Possibly, as the only <u>natural</u> explanation for these registrations, one should consider noise/wobbling in the radar equipment. No noise was seen on the radar-screen at that time. Therefore, this is not likely to believe. Hence, a spectrumanalyzer ought to be used also during the next period.

### Seismograph

We cannot find any definite correlation between the Hessdalen phenomenon and movements in the earth's crust. The seismograph which was installed in November 1983 didn't measure any local trembles; those registered (see section about observations) have all been located as originating in other parts of the world. The sensitivity of the instrument equalled that of 1.5-2.0 on the Richter scale; if any local quake occurred, it must have been weaker than this.

Detailed studies made by NORSAR for the period from 1980 to 1984 show that Hessdalen is seismologically speaking a very inactive area. Only four minor quakes

have been registered within about 60 - 70 km from the valley during the last 6 years. I should however be mentioned that the coverage of Hessdalen is rather poor. The nearest seismological stations are situated hundreds of kilometres away (Hamar to the south, Florø to the west and Tromsø to the north). This implies that an earthquake in Hessdalen would have to have a strength of at least 2.5 on the Richter scale in order to be registered by this network.

Hence, the hypothesis based on a correlation between UFO-phenomena and earthquakes doesn't seem to hold, at any rate not for the Hessdalen phenomenon. Another, similar hypothesis which has been forwarded lately, holds that the appearance of UFOs correlates with tensions in rocks (quartz). This hypothesis will be a lot harder to test practically; - the best which can be done in that respect is to measure the very minute quakes accompanying such tensions, especially in areas with geological faults. And Hessdalen abounds with faults like this.

### Radar

The next instrument we hoped to get valuable information from was the radar. Here we were lucky: on one occasion we spotted a reflection on the screen moving with a speed corresponding to 30 000 km/h. The phenomenon was also observed on several other occasions, and at the moment we are not able to give any natural explanation for these events. Additionally, sometimes distinct radar-echoes could be spotted wothout any corresponding visual observations. Two slides showing a couple of the many echoes were submitted to NDRE (in July 1984). At that time none of the radar experts there could give a logical, natural explanation, despite microscope studies on the one hand, and on the other, comparison with reflections from snow, large and small planes, large birds and other natural/man-made objects.

### Magnetometer

This instrument gave quite a number of significant deflections coinciding with occasions when the phenomenon could be seen visually. The correlation here was quite good, even though other readouts showing magnetic activity were obtained without any corresponding visual observation. By way of comparison, it was established that air planes did not rigger any deflections on the instrument.

### Other instruments

The other instruments which were used did hardly show or register anything unusual. The Geiger-counters didn't measure any extraordinary radiation. The laser was used 9 times; eight of these gave a positive reaction. More details will be given in the final report. The phenomenon could hardly be seen through IR-viewers; this means that no radiation is emitted in the near infrared range.

As a preliminary, very careful conclusion one may say that the phenomenon  $\underline{\operatorname{can}}$  be registered by instruments, although the degree of manifestation and the frequency of clear cut registrations is very variable. It seems that the term "transient phenomena" would be an appropriate one, while all our experience suggests that the visual appearance of the phenomenon and especially its instrumental registration, is very often accompanied by coincidences and accidental circumstances.

All in all, however, we may reasonably regard the findings from "Part 1" of our project as very encouraging, and fully justifying proceeding with this project. We have every intention of taking advantage of the experience already made and trying to provide resources for a "Project Hessdalen, Part II" in order to get more information and knowledge about this very strange phenomenon which is manifestly relevant to ongoing research being carried out in several parts of the world.

(Translated from Norwegian by Mentz Kaarbø with the help of Hilary Evans.)

### Sources:

- 1. Project Hessdalen Bulletin....no. 3 1983; no. 1 and 2 1984.
- 2. Project Hessdalen, journal/diary for Leif Havik.
- 3. UFO....no.3, 4 and 5 1983, no.1, 2 and 3 1984.
- 4. Press release by Erling Strand.....May 1984.
- 5. Personal communication with Erling Strand.....May-October 1984.



Two lights above Finnsåhøgda. The picture is grossly enlarged.

Possibly lights from an aeroplane above Finnsåhøgda. (Right)

