## AUENBERG WCUFO ANALYSIS

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## INTRODUCTION

On April 3, 1981, Billy Meier was taking photos of a UFO, the WCUFO, near some trees in the area of Auenberg-Hinwil. There is also a video of this UFO, static, near a tree, to which Billy zooms in with his camera. Meier says that Quetzal, an ET friend, Plejaren, was with him during this demonstration. Sometime during the demo, Meier was on top of a beamship, flying and taking photos from above, at the height of the treetops, of the WCUFO flying alongside him. The trees in the area have heights from 7 to 20 metres on average, and some perhaps larger. The trees that we see close to the WCUFO are around 7 metres tall. As will be seen in the photos in this study, the UFO called WCUFO is seen near solitary trees, which has led to various speculations as to whether Meier may have used a very small tree, one metre high, next to a small model of a WCUFO of about 55 cm in diameter.

It has been hypothesised that Meier used the false perspective trick in some of his photos, taking photos of a small model near his camera with large trees in the background, giving the impression that it is a large ship, at least 3.5 metres in diameter. This hypothesis is abolished when verifying that the WCUFO casts shadows on the trees, leaving aside the hypothesis of false perspective. So the only trick Meier could have used is to use small trees alongside his "model." (See our book They are Here..., page 71)

One of the keys to finding out if the WCUFO is a big flying object or a small model is to find the tree(s) we see in the Meier photos. If they are real trees that exist or existed in 1981, it means this object is real. We have already found this object is big by looking at the reflections in the spheres, as indicated in the 74 pages report, Analysis of the WCUFO (Zahi).

As conclusions of this report we found:

- There were 4 different trees in Meier photos. At first sight somebody may think it is the same tree taken from different angles, but they are four trees in different locations.
- Three of these trees no longer exist today. As a rule, all the trees that a beamship has touched are made to disappear. However, there is one tree that might be still there, on a Swiss farm, or there is a substitute of it in the same exact location. That has to be verified in the field.
- Some sceptics have made measurements of the tree branches width and compared them with the WCUFO's apparent size to calculate how big the WCUFO was. This method is not accurate and gives just an estimate, indicating the smaller size the WUFO must have was 1.5 metres in diameter. We do not know of any plastic barrel lids of this size to make a scale model, and it creates an additional difficulty of finding bigger household items, like the shelf supports. Why would one make a large model of 1.5 metres, which is difficult to handle, instead of making a small one using the available 55 cm lids?
- Meier could not use a small tree, and this is not what the photos shows, where we can see details of really big trees. And even if he used it, he has to put it in the same place where there are big trees. In other words, the photos would show the small tree and the big one in the same take.
- The use of old photos from the Swiss Geoportal and the use of the tool Google Earth, allows us to find the location of the trees we see in the photos. Google Earth has tools to measure elevations that allow us to draw profiles of the terrain, measure distances, and have a ground level view option that lets us see the profile of the distant mountains. We could also find the Azimuth (angle direction) of a telecom tower we see in one of the photos that allowed us to find the south direction in two photos. With this info, plus the angle and direction of the sunrays, and confirming with background details in the photos, we know for sure where Meier was located and where he was pointing his camera in each photo.
- We see in the old photos, that the area where Meier was walking (and flying) with Quetzal is surrounded by a few houses. This is common in other UFO encounters in Meier's collection. If Meier used a UFO or a WCUFO scale model, several small trees, a very long fishing rod, and other equipment, he would be spotted very easily by curious people around. So, why did he not do these fabrications on his own farm in a more private environment? On the other hand, the UFO hypothesis is correct if we consider that the beamships, like the WCUFO, have cloaking devices that allow them to be invisible to everyone around, and can be seen only by Meier's camera.


## The type of tree... is it small or large?

The tree that appears in some WCUFO photos could be a Norwegian spruce, as we have thought, or some kind of fir. This is important if we want to use the size of its leaves to compare to the size of the WCUFO, as some sceptics have done. Those trees look like the Norwegian spruce (Picea Abies). However Billy mentions it is a weather fir. (Wettertanne, in German)

In some of Meier's photos we can see the "pine cones" or fruits of this tree. In figure 1 we see a photo of the Norwegian spruce fruits, which do not completely resemble the ones we see in the indicated photos, for example, photo \# 839 from Meier's album.


## Figure 1 - Pine cones of a Norwegian spruce

Perhaps there are many varieties of firs and spruces, and a forestry expert is required to clarify this point.

Meier's photos show at least four independent trees: Photos \# 840 to \# 844 show a tree whose crown has at least 4 diagonal branches, plus a long vertical crown. Its trunk is wide and straight.


Figure 2 - Detail photo \# 841. It has a straight and wide trunk.

Photo \#848 shows a tree with a short vertical crown, the trunk is not straight; it grows in one direction and deviates to another. The base shows a horizontal stick, which we don't know why the farmer at that place nailed it there. The trunk shows a broken branch near where the branches start, has many protrusions, and is not straight and smooth like the previous tree.


Figure 3 - Photo \# 848 detail of the tree.
Photo \#850, by enhancing the contrasts, shows what appear to be "pine cones" at the bottom. The other two trees above do not have this characteristic. And it does not look symmetrical as the other ones.


Figure 4 - Photo \# 850 - At the bottom of the tree you can see something that could be the "pine cones" of this tree. A telecoms tower is on the top of the mountain.


Figure 5 - Detail of the tree in photo \# 839.
Looking at photo \# 839 and other photos of this same tree from other angles, we notice that it has fewer branches near the crown. Additionally, it has an empty space, without branches, in the middle part.

This leads us to conclude that there were several trees. If Meier used a miniature tree, he must have used at least 4 of them, which doesn't sound logical. Nor does it sound logical that he had travelled (note: British spelling) to Auenberg, where there are several houses in the area where he was taking his photos, in exchange for doing the simulations on his own farm, in a more controlled environment.

Additionally, these trees have thin trunks when they are small as can be seen in the following photos.


Figure 6-These trees when small have thin trunks.
Not only is the trunk of a small tree thin, but it does not bear fruit and its branches are very uniform and scarcer. Some of the mature trees have fruits, much thicker trunks of their bases, and their branches present a great variety of sizes of their leaves. What Meier's photos show are large trees, not small saplings.

Figure 7 shows a fir, whose leaves create similar structures, but this one is about $10-11 \mathrm{~cm}$ wide. So depending on the variety, the width of its leaves can be very different. The literature says that on average Norwegian spruce have branches that are 2 to 5 cm thick in diameter, but we see several varieties of similar trees, fir and spruce, with thicker branches (Figure 7).


Figure 7 - Fir type, in Toronto, Canada. It has leaves that give a branch width of 10 to 11 cm .

## LOCATION AND PHOTO SEQUENCE ANALYSIS

To find the location of Meier in each photo and the existence of the trees in the Auenberg area, we used Google Earth and photos from the "Swiss Geoportal" site from old photos up to today. Google Earth has the advantage that it allows us to measure elevations of the terrain and have a view from the ground to see the profile of the mountains and hills, which allows us to verify in which direction some shots were taken with Meier's camera.

We will refer to details on some of the Meier's photos, which are reproduced in this document. To find the location of Meier in each photo we must take into account the clues that are in them.

- Meier indicates that his photos were taken on April 3, 1981, between 1:10 pm and 2:30 pm (see more details of the photos and the times in the Photo-Inventarium book). Around 1:30 p.m., the Sun was in Switzerland to the south and at about 45 degrees elevation.
- The photos of the WCUFO next to the tree \# 840 to \# 844 clearly show the Sun's brightness and shadows. We conclude that Billy begins his walk towards the WCUFO from south to north, going up a hill. In photo \# 844 Meier points his camera towards the northeast. In that direction and behind the WCUFO and the tree behind him we see a forest of tall trees.
- These same photos \# 840 to \#843 show the canopy ('canopy' usually refers to a lot of trees, would 'shadow' be more accurate?) of a tree without leaves, visible just above the edge of the hill. This tree is also seen in photo \#838, but from a higher place.
- The tree behind the WCUFO in photos 838 and 839 is not the same as the one in photos \# 840 to \# 844. It has an empty space between the branches at mid-height, and fewer branches in the crown. They are two different trees.
- In photos \# 833 to \# 835 you can see in the background the same forest that is seen in photo \#844. It means that the directions of these shoots are towards the north-east. There are some nearby tree branches between the WCUFO and the camera in these photos; the camera was behind these nearby trees.
- We find a telecom tower on the top of a mountain in photo \# 850.

Searching Google Earth and aerial photos from 1978 and 1984, we put the puzzle together and found the location of these trees and Meier's position in their photos. The following figure shows the map, comparing the aerial photo from 1984 and the new satellite photos from Google Earth (2020). We appreciate that although some trees do not currently exist, they did exist when Meier took his photos. One of the trees probably exists today and we can see its shape in the shadows that are cast on the ground in Google Earth images. (Figure 9). This indicates that Meier's photos are of real trees, close to which we see the WCUFO.


Figure 8 - Above, aerial photo from 1984. Below, Google Earth satellite photo from 2020.

Trees T1, T2, T4 and T5 do not currently exist. They existed in 1984 and in 1981 when Meier took his photos. Even in aerial photos from 1990 you can see that they have already been cut (See a sequence of the history of these trees in figures 33 and 34). The only tree still in the area, at least in 2020, is T3. This fact has to be verified at the field.

The locations of three of these trees are:
Tree 1 (T1): $47^{\circ} 17^{\prime} 50.52^{\prime \prime} \mathrm{N}, 8^{\circ} 53^{\prime} 40.44^{\prime \prime} \mathrm{E}$
Tree 2 (T2): $47^{\circ} 17^{\prime} 55.00 \mathrm{~N}, 8^{\circ} 53^{\prime} 40.35^{\prime \prime} \mathrm{E}$
Tree 3 (T3): $47^{\circ} 18^{\prime} 01.77^{\prime \prime} \mathrm{N}, 8^{\circ} 53^{\prime} 36.21^{\prime \prime} \mathrm{E}$
Tree 5 (T5): $47^{\circ} 18^{\prime} 02.51^{\prime \prime} \mathrm{N}, 8^{\circ} 53^{\prime} 29.08^{\prime \prime} \mathrm{E}$
The T1 tree is seen in photos \# 833 to \# 839. The T2 tree is the one seen in photos \# 840 to \# 844 . The T4 tree is not like the others, it is deciduous (the kind that loses its leaves in winter) and is visible in photo \#839, diffusely to the left of the T1 tree that is near the WCUFO, and you can also see its top, its crown, behind the edge of the hill in photos \# 840 to \# 843, right. The T3 tree, which probably currently exists, is seen in Meier's photos \#846 to \#848 and in the only video there is of the WCUFO. T5 might be seen in photo \# 849 and \# 850 (we will talk about it in detail soon).


Figure 9 - The tree on the right could be T3. The tree on the left grew after 1981. You can see the trees from above and the shadow cast to the north. (To be confirmed in the field)

In figure 9 we see two trees that cast their shadows towards the north in the satellite photos of Google Earth (2020). We notice their shadows on the ground and when we measure them, and by the position of the Sun, we estimate that they are between 9 to 11 metres high. A field check is required on these trees. It should be noted that in the 1984 photo there is a wide white stripe, from left to right reaching T3, which appears to be excavation or field work that does not appear in the 1978 photo and is not seen in the Meier photos. That excavation was probably made to remove several small trees of a tree-fence that was moved to the south later.

The following is an aerial view that gives an idea of the general location that includes more details. Trees T1 to T5 are again marked. There is a forest to the east, marked "B" consisting of tall trees that appear in several of the photos. The south grove is marked " A " and behind it Meier took some of the photos. With the letter "C" we indicate the fence of trees that separates two farms and is seen in photo \# 849 and \# 850. The telecommunications tower is also indicated, marked as "torre-auenberg)/tower-Auenberg" that can be seen in photo \# 850, where the WCUFO can be seen behind a tree and in the background a mountain covered with trees is seen and at its top a tower.


Figure 10-General location of various details.
In Google Earth we measured distances and elevations from the south road (close to T1) moving north to the north road as indicated as a dotted yellow line in figure 10.

|  | Dist | Elev. |
| :--- | :---: | :---: |
| North Road | 201,0 | 994 |
|  | 175,9 | 988 |
|  | 150,8 | 982 |
|  | 125,6 | 972 |
|  | 100,5 | 963 |
|  | 75,4 | 954 |
|  | 50,3 | 947 |
|  | 25,1 | 943 |
| South Road | 0,0 | 938 |

Table 1 - Elevations along the dotted line of figure 10.
As we see in the sequence of photos \# 840 to \# 844, Billy is walking towards the north (given by the direction of the Sun rays) and going up a hill.

This is the profile we obtained, graphically:


Figure 11 - Terrain profile of the line from south to north. Measured values from Google Earth.
"S" indicates the location of the south road, very close to T 1 , and " N " the north road. The distance between both roads is 201 metres. Billy travelled about 130 metres when he was taking photos \# 840 to \# 845, while he climbed about 35 metres uphill, on foot. The red dot indicates Meier's location in photo \# 841. Horizontal distances and elevation above sea level are in metres. Tree T4 is 30 metres from Tree T2. From the shape of the terrain, we see that Meier will only observe the crown of the T4 tree from his location when he took photo \# 841 (and other photos close to it).

It is interesting to see a grove that is near the T1 tree, towards the south. There is a road near the T1 tree and the grove. In photos \# 833 to \# 839 we see the WCUFO flying near the T1 tree and we see closer tree branches in the foreground. If this WCUFO is a large object, this grove would explain why closer tree branches are seen. As already indicated in the original WCUFO research, the 74-page report by Rhal Zahi (2013), when seeing reflections in the WCUFO spheres in these photos \# 833 to \# 839, we see shadows of trees from a forest or a grove; they do not seem to be very close to the WCUFO, perhaps more than 15 metres. If the WCUFO was a model, it would be only 3 metres from Meier's camera, practically tucked inside the grove and the reflections of the branches and trees on the spheres would be much larger than what we see in Meier's photos, covering almost the entire image on the sphere. In our original calculation in this 74-page report, we estimated in 2013 that the WCUFO would be at a distance of 20 to 25 metres from the camera. It is surprising to note now that this fits very well with the configuration of this grove if we think that Billy was flying right behind it, taking pictures of the WCUFO near the T1 tree.

The following figure shows a close-up of the grove south of the road. We indicate the location of the trees T1 and T2 and the possible route that Meier made in the air to take the photos of the WCUFO near T1. This photo of the grove is from Google Earth shown from the direction from where the satellite took the photo, to show it correctly.


Figure 12-Google Earth image from the west in the approximate direction from which the satellite took the photo.

In figure 12, the south grove is seen near the road. North is to the left. The shadows of the trees are cast to the north. It is possible that the photo was taken by the satellite around noon. The
location of the T1 and T2 trees are indicated, and the possible path that Meier made in the other beamship when flying near the treetops.

Looking at the comparison of the old and recent photos, we found T1 tree was felled after 2002.

## Sequence and location of the photos:

To determine where Meier was when each photo was taken, we can see the trees and hills in the background in each photo. We can also determine the distance that the WCUFO was, if it were an object of 3.5 m in diameter. We can also calculate the distances that a 55 cm diameter model would have to be if Meier had used it near small trees. The following table shows the results.

| Photo \# | WCUFO <br> Size in pixels | Photo Width <br> Pixels | Distance for <br> WCUFO of 3.5m | Distance for <br> Model of 0.55m |
| :---: | :---: | :---: | :---: | :---: |
| 834 | 504 | 2346 | 19,01 | 2,99 |
| 838 | 429 | 1596 | 15,19 | 2,39 |
| 839 | 512 | 2378 | 18,97 | 2,98 |
| 841 | 192 | 2370 | 50,40 | 7,92 |
| 844 | 788 | 2398 | 12,43 | 1,95 |
| 848 | 298 | 2362 | 32,37 | 5,09 |
| 849 | 495 | 2378 | 19,62 | 3,08 |
| 850 | 228 | 1600 | 28,65 | 4,50 |

Table 2

These distances have been calculated using the camera's formula that is based on the geometric ratio between the distance to the object, the focal length of the camera lens, the actual size of the object, and the size of object on the film negative, 35 mm (whose width is 36 mm )

Figure 13 shows our best estimate of the location of Meier in each photo. The arrow indicates the approximate direction in which the photo was taken. The start of each arrow, marked with a small perpendicular segment, indicates the location of Meier with his camera. The 1984 map is used as the basis for this analysis; we may expect what Meier found on 1981, three years before, would be not much different. For photos \#849 and \#850 we have two possibilities and we will cover them in detail in this document.


Figure 13-Location and direction of each photo taken by Meier.

## Photo 834:

In this photo, we find that close-up branches of several trees are seen in the foreground. These branches are from the trees in south grove (south of the south-road). The top of the T1 tree is seen very close to the WCUFO to the left. In the background are the tall trees of the eastern forest.

Note the different hues and grey tones of each plane in the image, from dark tones of the nearby branches in the foreground, less dark tones of the WCUFO and the T1 tree, and light tones of the forest to the east. The WCUFO is at 19 metres and the forest at about 230 metres.

The T 1 tree could be 7 to 9 metres tall. The south grove is almost the same level as the T1 tree or perhaps one or two metres below it (see profile Fig. 9). That tells us that Meier could be above the ground at about 9 to 11 metres high. The trees in the background are taller, 20 to 30 metres, some perhaps 40 metres.

If the WCUFO was a scale model, it would be about 3 metres away. Later we will talk about the depth of field of the camera and how that strongly proves that Meier did not take photos of a small model.


Figure 14 - Photo \# 834.

## Photo 838:

Meier moves in an easterly direction with his camera. The tree T1 now looks to be to the right of the WCUFO. There are some nearby branches with their fruits from in the south grove where Meier is located. Meier is still elevated off the ground, but at a lower elevation. In the background are the hills to the north (compare with Figure 10). From the perspective we notice in the photo, Meier is now a little lower than the WCUFO in front of him (around 2 to 3 metres lower). The result being that when looking slightly upwards, the T2 and T4 trees are not visible in this shot, only a distant hill to the north.

Meier is closer, about 15 metres from the WCUFO. It is possible that this distance could be a little greater, as we are not sure that this copy of the photo shows the entire frame. The camera formula is very accurate when using full frame photos, not cropped or close-up. We see in some photos of Meier's, as usual, a dark frame with rounded edges, which is typical for his Olympus camera. When that dark frame appears we can be sure that the photo is full frame and the distance values obtained with the camera formula are very accurate.

See direction of this photo indicated in figure 13.


Figure 15 - Photo \# 838.

## Photo 839:

This photo is in full frame. Meier turns slightly to the west and ascends a bit. It is located behind the branches of the tree that we see in the previous photo. We see in this photo, in the distance, the tops of the tree T4, are very diffuse. (See the direction of the photo in figure 13).

It is interesting to note that this tree, T4, can be seen in photo \# 841 and in other photos taken near it. But in photos \# 840 to \# 843 you can see this T4 tree trimmed down by the hill. Here in the photo of Meier we see that the T4 tree has two crowns or are two trees very close together. These details of this photo, compared to photos \#840 to \#843, indicate that in this photo \#839 Meier is higher. It cannot be at ground level as it would be difficult to see the T4 tree from there, as seen in this photo. (See profile in figure 11).

The WCUFO is 19 metres from the camera and the T4 tree is 188 metres to the north.


Figure 16 - Photo \# 839.

## Photo 841:

We see in full frame one of the photos of the series from \# 840 to \# 844 . Meier is now at ground level and walking uphill. We now see the WCUFO near another tree, T2. Notice Meier's position of walking uphill. The T4 tree that we see in the previous photo, here we see just the upper part of its tops behind the edge of the hill and to the right. The distance between the two trees, T2 and T4 is about 30 metres, but due to the curvature of the terrain, the $T 4$ tree cannot be seen completely from where Meier is, only its crown. (See profile in figure 11)

The Sun creates shadows from the WCUFO on the tree. By the time and direction of the sun's rays, we know that Meier is walking uphill to the north.

It is curious to note the contrast between the previous photos and these photos \#840 to \#844. It gives the impression that the day was somewhat cloudy in the first photos and now there is a radiant Sun. In the Photo-Inventarium book it is indicated that they were taken minutes apart. We believe that the first photos were taken at an earlier time. We don't think the weather changes that fast in a few minutes. Perhaps the times indicated in some photos in that book are not so accurate. You can see the shadow that the WCUFO casts on the T2 tree, indicating that they are close to each other. (More details in our book They are Here... page 71)

The WCUFO is 50 metres away.


Figure 17 - Photo \# 841.

The following is a view from the ground in Google Earth, looking uphill (to the north) near where Meier took this photo. Keep in mind that the ground level images of this tool show the profile and undulations of the ground, but do not show the trees and houses sticking out of the ground. To do this, they would have to be modeled with tools that make 3D buildings in cities that allow the buildings to be seen in 3D in Google Earth. This means that we can see the profile of the mountains well, but not their trees protruding over them.


Figure 18 - Left: Ground level image using Google Earth. Right: photo \# 841 of Meier. The red box shows the visual field of Meier's photo.

The terrain profile of the hill, where Meier walked, and the hill in the background, closely resembles what we see in Google Earth, thus confirming the location of this photo. Meier was there and the tree was real and big, in 1981. And not only the T2 tree but also the T4 tree tops. This is not a scale model near a small tree.

## Photo 844:

This is another photo in full frame, enhancing the brightness a bit to notice the shadows inside the tree. The tall trees of the forest to the east are seen to the right. The crown of one of the trees to the north, which is near a house uphill, can be seen on the edge of the hill to the left. The T4 tree is right behind the T2 tree and we cannot see it in this photo.

The WCUFO is only 12.4 metres away. The tall trees in the forest are 170 metres (measured on Google Earth). If this were the 55 cm model suggested by the sceptics, it would be only 2 metres away. With a 42 mm lens camera, such as Meier's Olympus, which is stuck at infinity, this image would not be seen. With this camera, due to depth of field effects, the model would be out of focus. There is evidence from early researchers that his camera was blocked at infinity. In the section of the WCUFO photos above the trailer, in our book They Are Here... (page 83), we give more details on the subject of the camera focus and its effects on depth of field.

Meier's camera points to the northeast, indicated by the direction of the sun's rays. And it matches what we see in figure 13.


Figure 19 - Photo \# 844.

We clearly see the shadow that WCUFO casts on this tree. Comparing photo \# 841 and this photo, it is seen that it is the same tree and the same WCUFO that remains static. This tree has been estimated to be about 7 metres high and the WCUFO 3.5 metres in diameter.

Some sceptics have made analysis of the width of the branches in these photos, comparing them with the theoretical width that the branches of a Norwegian spruce would have, and use this as proof that the tree is small. Here we are going to do a similar analysis but with more data.

Several branches were measured, four thin ones, and another four of the thickest in the image. The vertical branch of the crown was not analysed as Marcos Oksienuk did in his YouTube video, as they are actually two superimposed branches. This is a photo taken with the Olympus 35 ECR camera, with a 42 mm focal length lens. The measurements in pixels of the widths of the tubular leaves are shown in table 4. It is advisable to take several branches so that the result is statistically more accurate.

Marcos mentions that the thicknesses of the tubular branches of the Norway spruce are between 2 and 5 centimeters. However, we do not know if this is actually that type of tree, or it is a weather fir, and we do not know what the size of its leaves would be. If we strictly follow the size indicated in the literature on the Internet, as Marcos has done, the size of the thickest leaves is 2.5 times the size of the thinnest. We can see in table 3 that the size of the thinnest branch is 7 pixels and the thickest is 29 pixels. So the thickest is 4.1 times bigger, not 2.5 . It is clear that the 2 cm and 5 cm values are average values of leaves, and there could be wider or thinner leaves, or that this is not actually a Norwegian spruce, perhaps a weather fir as indicated in the first part of this analysis. So we cannot guarantee that the thickest branches are 5 cm , as they could even be double. So the method of measuring the thickness of the branches is very imprecise and does not give an exact measurement of this WCUFO.

| Item | Width (pixels) |
| :---: | :---: |
| 1 | 7 |
| 2 | 8 |
| 3 | 12 |
| 4 | 9 |
| 5 | 24 |
| 6 | 29 |
| 7 | 26 |
| 8 | 24 |
| WCUFO | 788 |
| Tree height | 1100 |
| Image width | 2400 |
|  |  |
| All Branches average | 17,4 |
| Thin branches average | 9,0 |
| Gross branches average | 25,8 |

Table 4


Figure 20 - Photo \# 844 - See high resolution image in attached file "Analysis-844.jpg".
The diameter of the WCUFO base turns out to be 788 pixels as indicated in the table. The average of the thin tubular branch is 9 pixels which dividing 788 by 9 gives 87.6 . That is, the diameter of the WCUFO can be 87.6 times the size of the thin branches. The value of 87.6 multiplied by the 2 cm size of the leaves gives us 1.75 metres. If the branch were thicker this would increase. It should be noted that the plastic container lid that sceptics say Meier used to make his WCUFO model measures between 40 cm to 55 cm . A cap of 1.75 metres has never been found.

If we now take the thickest tubular leaves, whose average is 25.8 pixels, this gives us a factor of 788 / 25.8 equal to 30.5 , which multiplied by 5 cm of the thickest branches gives a WCUFO diameter value of 1.52 metres. Again, it does not look like the lid of a container.

Now let's do the same calculation with the average of all the branches of 17.4. The average between 2 cm and 5 cm is 3.5 cm which would be the average branch of literature if this is a Norwegian spruce. The factor is now 788 / 17.4 equal to 45.3 , which multiplied by 3.5 cm of the average branch, gives us 1.52 metres. In no case does it come close to 0.55 metres that a WCUFO scale model would have. And what if the tubular leaves were larger, for example on average they were 5 cm or more? The WCUFO would have a diameter of 2.27 metres or more.

Let's do the inverse exercise, suppose it is a 3.5 m WCUFO or a 55 cm diameter model. What would the diameters of the branches be?

## For a 3.5m WCUFO

Thin branches: $350 \mathrm{~cm} / 788$ pixels $\times 9$ pixels. This gives 4 cms
Thick branches: $350 \mathrm{~cm} / 788$ pixels $\times 25.4$ pixels. This makes 11.5 cms
Does this tree have thicker branches like the one in figure 7? We might think that there may be a perspective effect, that is, the WCUFO is closer to the camera than the tree. If it is a 3.5 m WCUFO, the separation between the centers of the tree and the WCUFO could be 2 metres. This would cause a variation of $8 \%$. However, several of the branches, especially the thick ones, are on branches closer to the camera, perhaps almost the same distance from the WCUFO. So the perspective effect is not significant.

## For a scale model of 55 cm of diameter:

Thin leaves: $55 \mathrm{~cm} / 788$ pixels $\times 9$ pixels. This gives 0.6 cms

Thick leaves: $55 \mathrm{~cm} / 788$ pixels $\times 25.4$ pixels. This gives 1.8 cms
These turn out to be very thin. A branch, with its leaves, only 6 millimeters wide ( 3 millimeter leaves from a thin trunk) is too thin and the barbs on the leaves would be practically non-existent. It could not be a small fir tree. Perhaps a pine trimmed with scissors, but not a fir as seen in the photos of Meier. It does not seem logical.

## Photo 848:

This is another extraordinary photo of the WCUFO near another tree (T3). There is a sequence of several photos that show Meier approaching the tree, just like the WCUFO series of photos in front of the T2 tree, when he was walking up the hill. This tree is different from the others, as already mentioned, with an irregular trunk and a shorter crown.


Figure 21 - Photo \# 848.
The sequence of the photos goes from \# 846 to \# 848 (Photo-Inventarium). Additionally there is a video in which Meier zooms in to see the WCUFO closer.

We have found Meier's location in these photos that were taken an hour later, around 2:30 pm. It is possible that Meier with Quetzal went up the road to the end. See location in figure 13. Because it is later, the Sun is now a bit more to the south-west. By looking at the sunlight reflections on the WCUFO we can determine the direction of the camera, which happens to be in an easterly direction. The hill Meier is now walking descends from left to right (north to south). The video was taken at a higher elevation on this hill, perhaps earlier than these photos, which makes the hill look steeper. See video in:

In the aerial photo from 1984 you can see an excavation that goes from east to west that is not seen in aerial photos of previous or later years, nor the terrain where Meier walked in 1981. This excavation was probably done to remove a line of small trees in a fence that was moved southward a few metres later, as aerial photos show.

The most extraordinary thing with these photos is that, unlike the others, it is possible that the tree T3 is still standing today. In figure 9 we see the satellite photo of 2020 where the tree and its shadow can be seen (tree on the right in the figure). We estimate that this tree is now about 9 to 11 metres high. In Meier's photo it is about 6 metres, shorter than the T2 tree. Figure 22 shows a zoom of this photo.


Figure 22 - Detail of the 73 tree in photo \# 848.
At the base we see a horizontal stick nailed to the trunk of the tree. We do not know the reason why the owner of this farm did this. Looking in detail at the base of the tree we see nearby grasses and possibly a glass resting on the tree, slightly inclined to the left.

Analysing the images in Google Earth, at ground level from that area, we see that the distant mountains match what we see in this photo. This confirms the direction in which Meier pointed his camera, towards the east-southeast (towards the east slightly towards the south - see direction in figure 13). See next figure comparing the photo with Google Earth images.


Figure 23 - Comparison of the profile of the distant mountains in this photo with a Google Earth image from the photo location.

To the right of the T3 tree in this photo, as in photos \#846 and \#847, you can see the crown of a deciduous tree. That leafless tree is very close to a house down the hill that is not seen in this photo, but we see it in the aerial photos from 1984.

In the aerial photos of the area where Meier took these shots, as in other sightings, we note that there are houses nearby. It is not logical that Meier was touring different farms, under the gaze of curious, using a scale model of a WCUFO, perhaps with a fishing rod that was too long, and several small trees to simulate his photos, in exchange for doing it on his own farm, in a more private place. The scale model hypothesis does not fit this. Instead, if we take into account the hypothesis of a spaceship, with the ability to make itself invisible to the curious, and only visible to Meier's camera, it can explain how he took these photos.

## Photos 849 and 850:

We are going to check now photos \# 849 and \#850 together, because they seem to be taken of a WCUFO close to the same tree, maybe another one, tree T5.

Figure 24 shows photo \# 849, taken after 2:30 PM. Again, it shows the WCUFO near another tree, perhaps two overlapping trees when seeing two trunks at the bottom. Meier's camera lens, like many cameras, exhibits cushion-like distortion, causing objects near the edges of the photo to elongate in a radial direction toward the ends. That makes the WCUFO not look symmetrical, as in other photos, because the left side looks elongated.


Figure 24 - Photo \#849
Figures 25 and 26 show the photo \# 850. We see a tower on the top right corner. This tower is indicated in figure 10, marked as "torre-auenberg". We can find it in Google Earth. There are some clues that tell us this tree in these two photos is the same and maybe a new one:

- We see in both photos the tree-fence (as marked "C" in figure 10). In photo \#849 we see these trees that divide two properties very clearly in the bottom part, from left to right. In photo \# 850 is harder to see, but it is in the bottom edge in the enhanced version of the photo. Notice the brownish color of them indicating they are closer than the distant mountain.
- The mountain in the background in both photos is the same. See the comparison in figures 27 and 28
- We know Meier was close to the fence made of trees (marked as " $C$ " in figure 10), at higher elevation. It is the same area where he took the photo \# 848 and the video of the WCUFO.
- From that location, using Google Earth, we know the tower is located at 220 degrees of Azimuth. It means, the tower is located at 40 degrees to the right of the south, very close to the south-west.

With this information we can know exactly where Meier camera was pointing in each photo.


Figure 25 - Photo \#850.


Figure 26 - Enhanced and zoomed photo \#850.

We compared the profile of the distant mountains in photos \#849 and \#850. See figures 27 and 28.


Figure 27 - Comparison of the mountain profiles in photos 849 and 850.
This image is not intended to be a wide angle view.


Figure 28 - In the overlap section of both photos we see distant trees are the same.
Figure 28 presents the same trees at the edge of the mountains in both photos. There is a small shift due to the distortion of the lens at the edges of the photos (pincushion distortion of the lens). And knowing the angle of view in Meier's camera, from the left edge to the right edge in each photo is 46.4 degrees, and the angle from the telecoms tower located at the top right area on photo \#850 is 40 degrees from the south, we can locate very accurately the location of the south in both photos) it is very close to the left edge on photo \#850).

In figure 29 we show the location on each photo. For photo \#849 the center of the image (direction where Meier was pointing his camera) was 13 degrees from the south towards the left, and for photo \#850 it (the center of the image) was pointing at 23 degrees to the right from the south.

It will help us to check if Meier was showing the WCUFO close to the tree T3 or T5.


Figure 29 - Angles and direction of photos \#849 (top) and \#850 (bottom). "S" means south, and "SW" means south-west.

In figure 30 we are indicating the location and direction on photos \# 849 and \#850 close to trees T3 and T5. There are no other trees in the area as seen in the 1984 photos. We are indicating in this image the angle of view of 46.4 degrees of Meier's camera. The distant to the WCUFO was set up based on the values from table 2.


Figure 30 - Meier's location in photos 849 and 850 close to trees T3 and T5.
The tree we see in both photos look the same, and does not look to be the same photo of tree \#848. Notice the short top and the extension of the tree towards the north. Maybe there is a small tree very close to it and this is the reason it does not look symmetrical. Figure 30 shows both images. On photo \#849, left, north is to the left. And in photo \# 850 the north is to the right.


Figure 31 - This tree might be one big tree and a smaller one very close to it.

We think this is not the same tree as in photo \#848 that looks symmetrical in figure 32. In the photo 848 , the north is to the left and we do not see the extension or the smaller companion tree. Also, the top of the tree has a loop of branches in photo \#840 that we do not see in photo \#850.


Figure 32 - Tree T3 in photo 848 is symmetrical. The crown shows a complex structure not present in the tree in photo 850.

We can also notice that the elevation of the WCUFO is different in photos \#849 and \#850. It lowered a few metres from one shot to another, and Meier is located at the same level of the WCUFO or higher. In the book Photo-Inventarium, it states that Meier went up on top of his trailer for photo \#849.

Now looking at the locations of these photos in the map in figure 30, we notice that if Meier took the photo \#849 of tree T3, we would see a discontinuity in the tree-fence we see downhill as indicated in the aerial photo of 1984. But we see it is continuous. For photo \#849, tree T5 location is better.

And for photo \#850, where Meier is a bit higher than the WCUFO, if he is looking at tree T3, he must be on the road that is 8 metres lower than the level of the terrain where T3 is located, measuring the elevations in Google Earth. In this case Meier must be flying at 15 metres above the ground level. On the other hand, if Meier is looking at tree T5 in photo \#850, he could be very close to ground level, because the hill is higher toward the north.

All of these tell us Meier is looking at another tree, T5, in photos \# 849 and \# 850. So Meier took photos of the WCUFO, on April 3, 1981, flying close to four different trees that existed in 1984 according to the aerial photos. He could not use four different little trees, locating them in a place where the big trees would be also visible in the same shots.

## EVOLUTION OF THE TREES DURING THE YEARS

In the following figures we have extracted aerial images at different years showing the evolution of the trees.

The dates of these aerial photos are:

- 1978 - July 30, 1978
- 1984 - June 19, 1984
- 1990 - May 3, 1990
- 1996 - July 22,1996
- 2002 - June 18, 2002
- Recent - Google Earth, March 17, 2020


Figure 33 - Evolution of the trees T1, T2 and T4
We notice that (figure 33):

- Tree T1, a Fir for photos \#833 to \#839 close to the south road, disappeared after 2002.
- Tree T2, for photos \#840 to \#845 might no longer exist now.
- Tree T4, that we see in some of the photos behind T2, is not observed after 1990.

We also notice that (figure 34):

- The excavation observed in 1984 was to remove a fence of little plants. That fence was not visible in Meier photos because the plants were very small, and Meier was walking along the road while taking photos \# 846 and \# 847 (see Photo-Inventarium). That fence was replanted, in 1996 in another location towards the south. Currently it shows bigger trees.
- Tree T3 has no other trees near to it in 1978. We see a little tree growing not far away to T3 towards the north in 1984. In 1981, when Meier took his photos this companion might not have existed or might have been very small. We do not see it in Meier photos \# 846 to \# 848.
- Tree T5 disappeared after 2002.
- Tree T3 might exist today or there is a substitute of this tree at the exact same place (see this tree in figure 9).







Recent

Figure 34 - Evolution of trees T3 and T5

