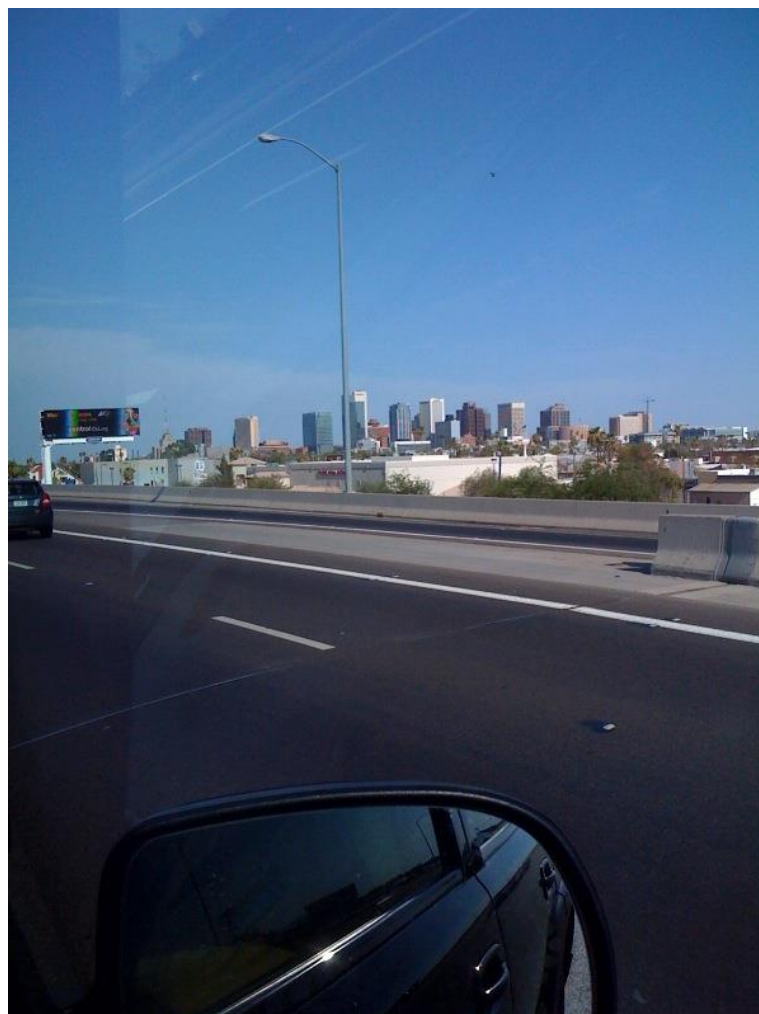
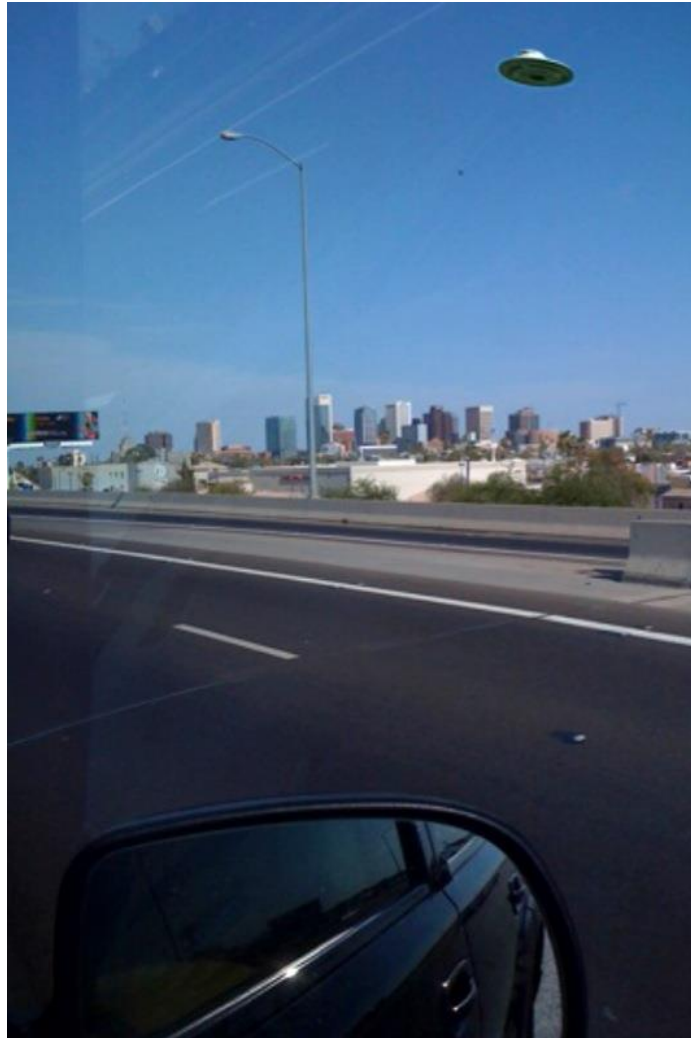


# IPACO expert report

<i>Expert name</i> Antoine COUSYN	<i>Report date</i> July 05, 2012	<i>Last update</i> February 08, 2015	
<i>Type</i> <b>IFO</b>	<i>Class</i> <b>A</b>	<i>Explanation</i> Fake	<i>Complement</i>
<i>Document</i> Photos	<i>Imaging place</i> Highway 10 towards Sky Harbor Airport in Phoenix, Arizona, USA	<i>Imaging date</i> July 18, 2010, 16:49'23'' Local time	





## I. Imaging circumstances

These photos were sent to [Earthfiles](#) site with the following comments (questions are from Linda Moulton Howe):

*"1st I-Phone Digital Image*

*July 18, 2010, 4:25 PM Pacific*

*Turning East on Highway 10 toward Downtown Phoenix*

***First I-Phone digital image*** on July 18, 2010, at 4:25 PM Pacific, as John Nano, his wife and nephew (driving) were turning east on Highway 10 toward downtown Phoenix, Arizona. The nephew driving the car slowed down so his uncle, John Nano, could take photographs of the Phoenix downtown skyline to share with their Detroit relatives.

*Image © 2010 by John Nano.*

*"And I look at the second picture and I was seeing like the same picture exactly, but there is something in there that is strange. And I zoom in and it looks like a flying saucer."*

**2nd I-Phone digital Image** - 1 to 2 Seconds Later - July 18, 2010, 4:25 PM Pacific - Turning East on Highway 10 toward Downtown Phoenix

*Second photo taken 1 or 2 seconds later on July 18, 2010, at 4:25 PM Pacific.*

*Image © 2010 by John Nano.*

*So I was talking to myself, 'Is this real?' I don't know. And then I took it to my brother who is just a minute away walking from my house and I show it to them. I said, 'Listen, I have seen something strange in the picture I took in downtown. Look at it.' And they look at it and they are going crazy, 'This is a UFO! UFO!!'*

*I said, 'I don't know what it is exactly, but I have to call somebody and find out what's going on.'*

*Then some customers of mine come here and I showed it to them and they say, 'This is real interesting!' And I called Channel 10 and Channel 3 here in Phoenix and Channel 10, they tell me to call at 6 o'clock and email photo.' I tell them I don't know how to email from my phone.*

*The next day, I find out how to email from my phone to anybody and I email the photo to eight or ten people. The first response is from you at Earthfiles. I have a customer here named Tom. He asked me if he could email to you. I said, 'Yeah, email to somebody who might look at it.' I think there is something (in disc) watching us here every day maybe, you know?*

*How fast that UFO comes to that picture in the second snap! I don't know how fast, where it comes from?! If I knew a UFO was there (in the sky), I could snap ten or twenty pictures right away, but I don't see it (at the time). It surprised me when I see it in the picture!*

**YOU NEVER SAW THE CRAFT WITH YOUR EYES?**

*Right, before I never ever believed when I saw on TV they were talking about UFO they showed in Phoenix, Arizona, and China and anywhere. I never believed it until I snapped a picture myself. I look at it and now I believe there is somebody watching us every day out there.*

*And you can see when you look at the picture of the UFO; you can see the sun makes the top of the UFO shiny. But I don't know where it comes from. I look at the picture and I'm coming from west to east and this UFO shows BOOM! Right there within a second. Where does this come from? And how fast it was?*

*I think there are some more other planets, there is some more life there and they are maybe ahead of us hundreds of years. That's what I'm thinking now about it. Like I said before, I never believed in those UFOs. But now when I snapped this picture, I believe there is somebody watching us there.*

IN REPORTS OVER THE PAST SIXTY YEARS OR SO, MANY PEOPLE HAVE DESCRIBED SEEING AERIAL CRAFT "POP IN AND POP OUT" AS IF THE CRAFT OF UNKNOWN ORIGIN IS INVISIBLE AND THEN SWITCHES FREQUENCY SOME WAY AND BECOMES VISIBLE BRIEFLY BEFORE RETURNING TO A FREQUENCY OF INVISIBILITY.

*That would explain what happened when I snapped the two pictures only a second apart and one is clear and the next one has the disc in it."*

## II. Camera settings

The camera model that was used is an [Iphone 3G](#).



## III. Analysis

### 1. Authentication

Let's name the first photo "*original*" and the second one "*disc*". We will also use a third original Iphone 3G photo under the name "*test*".

#### a. EXIF data

Using EXIFTool, we can check and compare the metadata in all the three photos.

```

ExifTool Version Number      : 7.89
File Name                    : JohnNanaPhoenixNoDisc071810.jpg
Directory                    : C:/Documents and Settings/antoine/Bureau
File Size                    : 107 kB 1
File Modification Date/Time  : 2010:08:10 19:25:50+02:00
File Type                    : JPEG
MIME Type                    : image/jpeg
JFIF Version                 : 1.01
Exif Byte Order              : Big-endian (Motorola, MM)
Make                         : Apple
Camera Model Name            : iPhone 2
X Resolution                  : 72
Y Resolution                  : 72
Resolution Unit               : inches
Modify Date                   : 2010:07:18 16:49:23
Y Cb Cr Positioning          : Centered
F Number                      : 2.8 3
Exif Version                  : 0221
Date/Time Original           : 2010:07:18 16:49:23 4
Create Date                   : 2010:07:18 16:49:23 4
Flashpix Version              : 0100
Color Space                   : sRGB
Exif Image Width              : 600
Exif Image Height            : 800 5
GPS Latitude Ref              : North
GPS Longitude Ref             : West
GPS Time Stamp                : 16:49:09.77
Image Width                   : 600 5
Image Height                  : 800 5
Encoding Process              : Baseline DCT, Huffman coding
Bits Per Sample               : 8
Color Components              : 3
Y Cb Cr Sub Sampling          : YCbCr4:2:0 (2 2)
Aperture                      : 2.8 3
GPS Latitude                  : 33 deg 27' 4.20" N
GPS Longitude                  : 112 deg 6' 5.40" W
GPS Position                   : 33 deg 27' 4.20" N, 112 deg 6' 5.40" W
Image Size                    : 600x800 5
-- press any key --

```

EXIF data of "original" photo

```

ExifTool Version Number      : 7.89
File Name                    : JohnNanaDiscCellPhone071810.
Directory                    : C:/Documents and Settings/an
File Size                    : 67 kB 1
File Modification Date/Time  : 2010:08:10 19:27:04+02:00
File Type                    : JPEG
MIME Type                    : image/jpeg
JFIF Version                 : 1.01
Exif Byte Order              : Big-endian (Motorola, MM)
X Resolution                  : 72
Y Resolution                  : 72
Resolution Unit               : inches
Y Cb Cr Positioning          : Centered
Exif Version                  : 0221
Flashpix Version              : 0100
Color Space                   : sRGB
Exif Image Width              : 533
Exif Image Height            : 800 5
Image Width                   : 533
Image Height                  : 800
Encoding Process              : Baseline DCT, Huffman coding
Bits Per Sample               : 8
Color Components              : 3
Y Cb Cr Sub Sampling          : YCbCr4:2:0 (2 2)
Image Size                    : 533x800 5
-- press any key --

```

EXIF data of "disc" photo

```

ExifTool Version Number      : 8.51
File Name                    : 4548058178_5b5bdd79c8_o.jpg
Directory                    : D:/Users/tonio/Documents/OUNI/I
                              cours/rangement en cours/JohnNanaearthfiles
File Size                    : 257 kB
File Modification Date/Time  : 2010:08:10 20:46:01+02:00
File Permissions             : rw-rw-rw-
File Type                    : JPEG
MIME Type                    : image/jpeg
JFIF Version                 : 1.01
Exif Byte Order              : Big-endian (Motorola, MM)
Make                         : Apple
Camera Model Name            : iPhone 3G
X Resolution                  : 72
Y Resolution                  : 72
Resolution Unit              : inches
Software                     : 3.1.2
Modify Date                  : 2010:04:24 13:16:01
Y Cb Cr Positioning         : Centered
F Number                     : 2.8
Exposure Program             : Program AE
Exif Version                 : 0221
Date/Time Original          : 2010:04:24 13:16:01
Create Date                  : 2010:04:24 13:16:01
Aperture Value               : 2.8
Metering Mode                : Average
Flash                        : No flash function
Flashpix Version             : 0100
Color Space                  : sRGB
Exif Image Width             : 600
Exif Image Height           : 800
Sensing Method               : One-chip color area
Exposure Mode                : Auto
White Balance                : Auto
GPS Latitude Ref             : North
GPS Longitude Ref           : West
GPS Altitude Ref            : Above Sea Level
GPS Time Stamp               : 13:16:00.61
GPS Dilution Of Precision   : 3
Image Width                  : 600
Image Height                 : 800
Encoding Process              : Baseline DCT, Huffman coding
Bits Per Sample              : 8
Color Components              : 3
Y Cb Cr Sub Sampling         : YCbCr4:2:0 (2 2)
Aperture                     : 2.8
GPS Altitude                 : 16 m Above Sea Level
GPS Latitude                 : 51 deg 25' 42.00" N
GPS Longitude                 : 0 deg 26' 49.20" W
GPS Position                  : 51 deg 25' 42.00" N, 0 deg 26'
Image Size                   : 600x800
-- press any key --

```

EXIF data of "test" photo

Notes :

1. The "weight" of the image is smaller in the "disc" photo.
2. The name of the camera model used (An iPhone 3G) appears only in the "original" photo and, furthermore, in an incomplete way; indeed, this tag should have been named as « iPhone 3G » and not « iPhone ».
3. The technical tags of the photo about the aperture value (« Aperture » and « F Number ») appear only in the « original » photography.

4. The same goes as well for the date/hour ("*Date/Time Original*").
5. Image size is 600 x 800 in the "*original*" photo, while it is only 533 x 800 in the "*disc*" photo.
6. The number of EXIF tags is less than those contained in the picture "*test*" for both the "*original*" and "*disc*" photo.

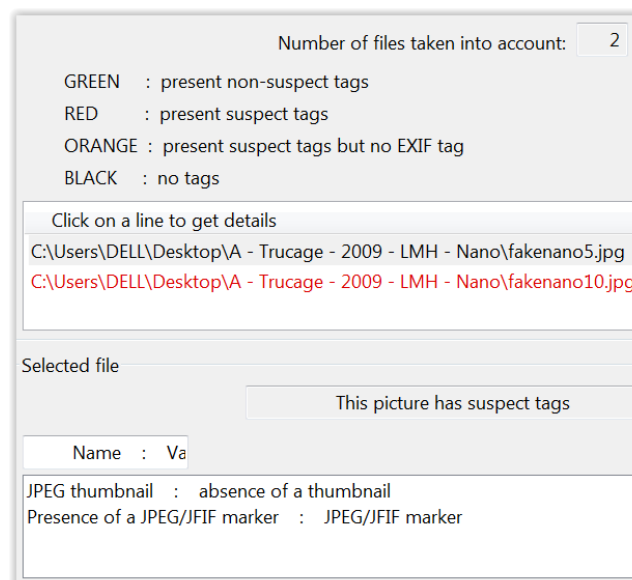
### Comments:

The 533 x 800 size is not that of a native iPhone photo, as it can be seen in the technical specifications.

It lacks lots of EXIF data in both photos, but it's more visible in the « *disc* » photo, where there are neither the date and hour data nor some technical data (such as exposure program, flash, aperture value, etc...).

### b. IPACO authentication remote check

In addition to the previous verification, we can use the IPACO tool "*remote check*", that allows the user to check in a few clicks if the concerned documents can effectively be defined as "*original authentic*":



This is not the case for both pictures, they lack JPEG thumbnail and show the presence of a JPEG/JFIF marker.

### Conclusion:

The « *disc* » photo has been cropped to decrease its breadth.

The effect of this manipulation was a modification of the EXIF data, both in the tags numbers and in their values.

Furthermore, any use of post-process software, such as Photoshop, should have left traces in the EXIF data, in the form of specific tags (« *IPTC Digest* », « *Instance ID* », « *XMP* », « *APP* »...) as well as another tag that specifies the name of the software that was used ("*software*"), which is not the case.

It is therefore certain that further EXIF data manipulation was done to hide these markers, manipulation easily achievable using either specific programs ("*Exifer*" ...) or a hex editor.

## 2- Visual inspection of the photos :

At first glance, the similarity between the two photographs is obvious, pointed furthermore by the presence of two additional clues:





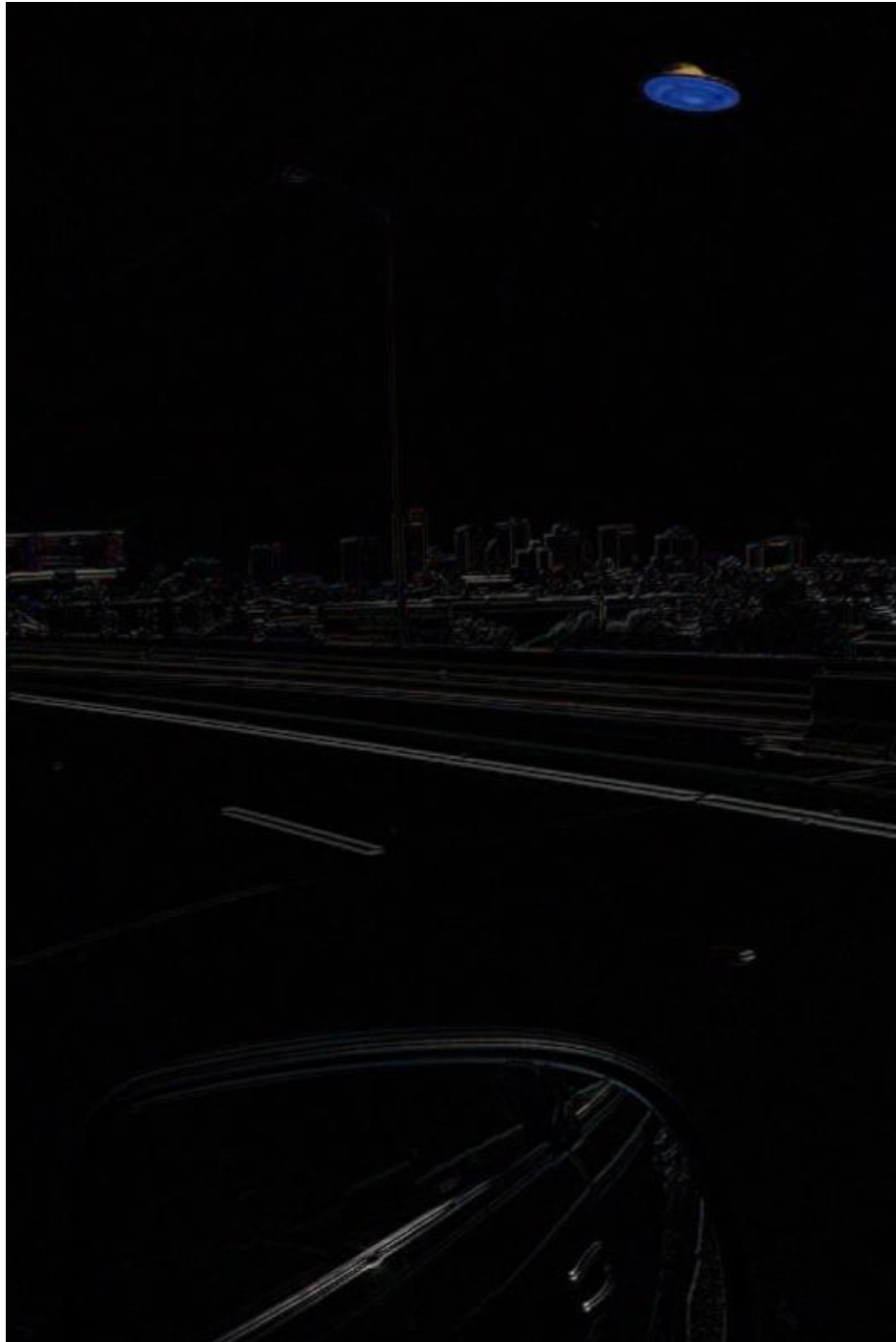
These two clues can be found in the “*original*” photo as well:



Comparison also shows the presence of a [Gaussian blur](#), uniformly applied on the whole photography.

An animated GIF that can be downloaded [here](#) and that includes both “*original*” and “*disc*” photo cropped at the same size shows this Gaussian blur.

Moreover, combination of both pictures using layers in “*fusion difference mode, opacity 255*” clearly shows firstly the presence of objects edges emphasized by the addition of the Gaussian blur, and secondly the artificially incrustation of the ‘UFO’:



Conclusion:

The “*disc*” photo is just a cropped version of the “*original*” photo, on which was artificially added some Gaussian blur and a fake ‘UFO’.

## IV. Conclusion

Given the objective data provided by the examination of the photographs, we can safely conclude that the “*disc*” photo is the result of manipulations for forgeries purposes.

## V. Sources – Photo credits

Photographs come from Linda Moulton Howe Internet site: [Earthfiles](#).