**INVESTIGATION TECHNIQUES/Formula**



**INVESTIGATION TECHNIQUES/Length of the UFO: Metadata**

Example:

The camera used was an iPhone 11 Pro Max that has a **sensor** with 1.4 micron size of its pixels, or .0014 mm/pixel. The image used came from frame 1:22:15 which measured 24 pixels in length. Size calculation assumes the following **relationship**:

**Li = Di**  To calculate length of object: **Li** x **Do = Lo**

**Lo Do Di**

--**Li** (Length of the image): 24 pixels x .0014 mm/pixel = .0336 mm.

--28 mm is the focal length of the image for the iPhone 11 pro Max. (**Di**).

(where **Li** = Length of the image .0336 mm, **Lo** = Length of the object = 7.2 m, **Di** = Distance of the image 28 mm, **Do** = Distance of the object 5,996 m, line-of-sight). Image in this case is the small image within the camera.

How to find the line-of-sight distance?

(Cont’d)

**INVESTIGATION TECHNIQUES/ 3 Formulas**

**Getting Line-of-Sight distance**



**Good Metadata sites:**

Jeffrey Friedl’s Exif Metadata Viewer: http://exif.regex.info/exif.cgi

Metadata 2 Go: https://www.metadata2go.com/

(Formula calculation next page)

