



# REPORT

## Florida MUFON

### Answer to 3 Videos Questioning the Explosion Result

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**Statement:** This report is provided as a response to the series of 3 videos provided to MUFON. The thesis of those videos was the September explosion of the SpaceX missile, while undergoing a "Static Fire" test prior to launch, was caused by the dot that is seen crossing the frames prior to and while the rocket explodes. It is further stated in the videos that the dot represents a ship moving behind the Launch pad.



It was recently brought to MUFON's attention that a series of 3 videos investigating the have been placed on the internet that contradicted assertions in a prior MUFON document concerning the 1 September 2016 SpaceX explosion and presuming to explain the explosion as the result of a deliberate act by an unidentified object flying by. Since this writer had already completed a report for MUFON stating that the most probable cause of the explosion was a fuel leak the encountered a spark. It also looked at the unidentified object and concluded that it is believed it is an insect near the camera, crossing the picture frame. Due to that report this writer was also asked to look into the 3 U-Tube videos presented by "Chris fr921220. This report is the result.

In chronological order the videos ro be considered are:

1. 17 Sep 2016: "SpaceX explosion : mathematical proof SpaceX was fired by a UFO"  
{ [www.youtube.com/watch?v=MYK2C-Ggl0I](http://www.youtube.com/watch?v=MYK2C-Ggl0I) }
2. 13 Mar 2017 "SpaceX explosion on 09-01-2016 : the disclosure or the discovery of a secret message"  
{ [www.youtube.com/watch?v=wKB4JcfO6vc&t=6s](http://www.youtube.com/watch?v=wKB4JcfO6vc&t=6s) }
3. 11 Jine 2017 "The Disclosure about SpaceX explosion : exclusive breaking news"  
{ [www.youtube.com/watch?v=0AcPX1brDOQ&t=532s](http://www.youtube.com/watch?v=0AcPX1brDOQ&t=532s) }

Since it is probable with dates 6 and 3 months apart, that these dates indicate the thought sequence of their author it was decided to review each video independently in the same order as above. That review follows in the sections below..

## 1.0 Introduction

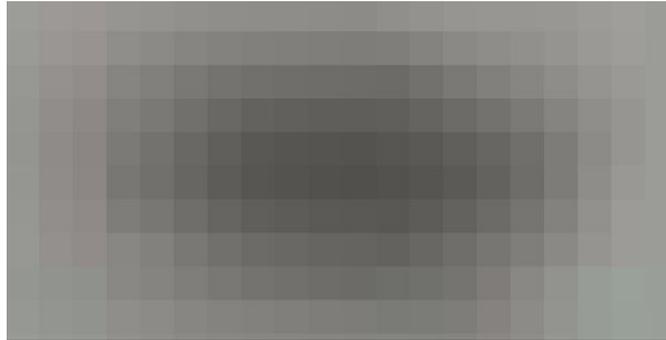
Before explicitly looking into the videos, it seems reasonable to question their overall thesis. What would be the point of any group destroying that specific rocket. Everything I can find about the proposed launch states it was to be used to insert an Israeli satellite (Amos-6) into a geostationary transfer orbit. Either the group wanted to stop that specific satellite or any other satellite that might have been secretly placed with it, or they wished to halt (or show us they can halt) rocket flights themselves. The following shows the fallacy of either possibility.

Satellite(s): The problem with geostationary transfer orbits is they require some corrective thrust by the payloads to achieve their final orbit. Destroying the satellite during that period would be much simpler and raise a lot less questions, then destroying it while on the ground. If there was any other satellite with the Amos-6, it would also require the same low thrust engine as the Amos-6 to bring it to the its final orbit. Therefore any other payload would face the same vulnerability problems Amos-6 would face.

Halt Rocket Flights: It this were the purpose, it obviously didn't work. There have been numerous other rocket launches since the explosion, including one a week later on the 8th of September. Additionally showing an enemy what one has the capability to do is self defeating. Once a tactic is known, the defender searches for ways to defeat it.

A quick view of the videos showed that their author seemed to concentrate fully on the unidentified object. Aside from noting that an explosion actually occurred, no thought seemed to be given to the explosion itself. Even if no addition information could be obtained, not looking certainly seems to raise questions as to the legitimacy of any claimed result in the videos. A portion of the MUFON report with results that can be obtained from it will be presented in this report as APPENDIX A.

Before considering the videos, a short statement should be made concerning how accurate any determination of the location of the object that moves across the movie creen can be. The following figure is a blown up view from a previous study (using the USLaunchReport video) of the object.



The writer dares anyone to find the center of this multipoint blob without downloading it and looking at the pixels and if that is done. determine the number of pixels between the objects. What is being said is, the accuracy of any of the measurements can be off by many pixels. Therefore while it can provide an indication of what is happening, it can't be exact.

## 2.0 Videos

### 2.1 Video 1: SpaceX explosion : mathematical proof SpaceX was fired by a UFO

I have to admit that I am impressed by the amount of work the videos author put into an attempt to prove his thesis however, I can't say the same about his use of science, The basic thesis of this video seems to be the dot that is seen crossing the frames while the rocket explodes is the proximate cause of that explosion

To obtain data about the anything in the frame required a standard ruler. Quite naturally the author chose the size of the Falcon rocket that was about to blow up. There is no argument with the author's choice of 70m for the rocket height. (The SpaceX Falcon 9 Payload User's Guide state it is 68.9 m.) There is also no argument with relating that distance to pixels covered in a frame. That relation is stated to be { 1 m ≡ 7.46 pixels } in the. That relation is then used to determine the distance traveled by the unknown dot between frames. This does present a problem.

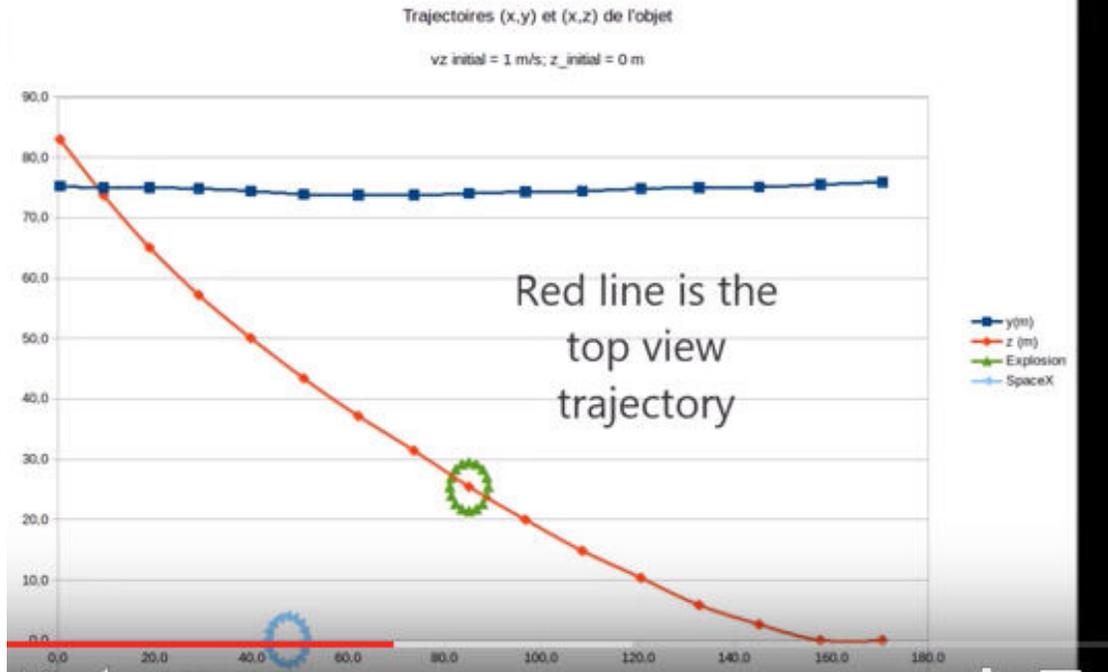
It ia well known that in photographs  $\{ \text{Size}_{(\text{Image})} = \text{Size}_{(\text{bject})} * f_{(\text{focal length})} / D_{(\text{Distance to Object})} \}$  Therefore use of the size relation (**1m - 7.46 pixels**) is only true for objects at the same distance as the missile is from the camera. Obviously if an object is X times closer to the camera than the missile, the transverse distance across the screen is also reduced by a factor of X. Also the speed require to complete the transit is also reduced by a factor of X. Finally to be size must also be reduced by a factor of X.

Using the time (0.25 seconds), speed (1790 mph) and x axis distance (170.6 - 39.8 = 130.2 m) derived by the video's author as the objects speed and distance, new distances (d) and velocities (V) for different values of X can be derived for other distances ( d ) for the object (called dot above). These are shown in the following table.

X	1	3	5	10	11.756	20	30	50	75	100
d ( m )	130.2	43.4	25.04	13.02	11.175	6.51	4.34	2.604	1.736	1.302
V (m/sec)	520.8	173.6	199,16	52,08	44.7	26.04	17.36	10.416	6.944	5.208
V (mph)	1165	388.3	445.5	116.5	100	58.24	38.83	23.3	15.53	11.65

Everything to the right of the bar near the center are values for the object that indicate a bird or insect could be the object.

The statement about being impressed about amount of work done by the author referred to the unknown object's trajectory and the calculations involving it. It was clever, however it was also misleading. The following figure was copied from the video.



In this frame the black line shows the y trajectory, the red line the z trajectory and the dots show the delta x values. The video's author stated in the video that the y doesn't change much and can be ignored. That leaves only two coordinates; a and z. From the above it is easy to see that delta x is decreasing as the object moves from right to left. Since it is assumed that the total velocity of the object is constant, the reduction in the x velocity is the source of the increasing z-velocity. This is an additional assumption but it is agreed that it makes sense.

At this point, the author defined a new variable; the the distance between the missile and the object. It is helpful in seeing the relationship, however it does not relate to any physical object. The only velocities that relate to a physical object are those of the moving object:  $V_x$ ,  $V_y$ , and  $V_z$ . Therefore any accelerations derived from it would be a pseudo "**acceleration**" (fictitious). That also applies to the radii of curvature defined later using this new variable. No physical object is following the curved path.

Finally the last few frames discusses an electrogravitic propulsion system. Additionally the author tells readers to look up the "ARV Flux Liner" if they don't believe in electrogravitic propulsion. The problem with this is the flux liner is science-fiction with a patent. I remember reading somewhere that the A & V in ARV stand for Alien and Vehicle. I forget what the R stands for. In any case any vehicle operating by generating gravity or antigravity would not be a very efficient space ship. It could only push or pull against other sources of gravity. In all cases, gravity is a vector sum at a point of all gravity sources in the universe. In most areas that vector sum is very weak.

As a final statement, I know there is a patent for the ARV Flux Liner, but obtaining a patent does not indicate the patented object will work. It just indicates some patent official decided it was a design not already patented. (This writer did a quick scan of weird patents. Did you know there is actually a patent for a "Paddle-Board Airplane".). Personally this writer believes a new design of nothing is still nothing

**2.2 Video 2: SpaceX explosion on 09-01-2016 : the disclosure or the discovery of a secret message**

I will start this section by thanking the author. I had not seen the video of 19 Feb.2017 missile shot before. It was interesting. Specifically it shows the first stage of a falcon rocket almost immediately after the second stage has disengaged. As the video progresses, a relatively large not quite spherical shape with a little knob seems to pass under the first stage. This is shown below. (The picture is from a different location in the videos.)



The video then asks the viewer "What is this object that has just passed?" Actually that is easy to answer. Since it is known that we are looking at the video from a camera mounted on the first stage of a Falcon rocket which has just disengaged from the upper portion of the rocket, the most likely answer has to be the upper portion of the rocket.

The next figure is provided to allow the reader to picture how the object in the previous figure could be the upper portion of the rocket. That portion consists of Stage 2 the Fairing in which the rocket's payload is kept.



Although the author of the video has obviously tried to link this object to the object that passes the SpaceX missile that blows up in the video of the rocket lowering up, the most probable object remains the upper portion of the rocket seen almost head on. It is, after all, up there with stage 1. The nose of the fairing is to the upper left and the little knob to the lower right is the back portion to Stage 2 (most of stage 2 is hidden) which is a tube with a smaller diameter than the Fairing. Importantly the object seen here is certainly not the same object seen in the explosion video.

This writer found the section locating the view seen using Google Earth, interesting. He also liked the calculation using the 12 second difference between seeing the explosion and hearing the sound it made to estimate the distance to the camera as 2.5 miles. In fact, it is admitted this writer probably would not have thought of it. Following the location of the viewing angle, the video author used the size of objects to determine an approximate zoom factor of 18.

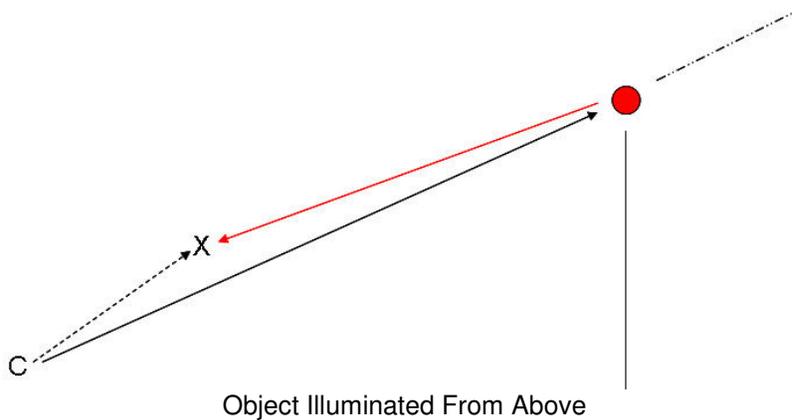
The video then proceeds to stating the the explosion is created by a shot triggered just behind the rocket. Since this is all predicated on the fallacious trajectory calculations discussed earlier they are meaningless. The video concludes with a statement that it has determined a number of object parameters such as object speed, radial acceleration, and a radius of curvature and states all numbers are within 1% of 777. (Actually the video calculated a speed of 1790 mph which converts to 800 m/sec which is not within 1% of 777. ). As for the number "777" that the author stated was a secret message from the aliens, this writer admits to having no idea what it is supposed to mean.

### 2.3 Video 3: The Disclosure about SpaceX explosion : exclusive breaking news

This video start with a statement that "spherical looking objects have also been seen in other videos. Two such videos shown were of a Concord flight and an F-15 flight. This writer agrees that something that looked like a small dot on the screen could be seen in each video but admits he doesn't know what they are.

At about 3.08 minutes into the video. the video's author notes that in this frame, it can be seen that although thr object is shown in the frame as higher than the fire, it is also shown to be lit from above. It surprises this writer that the author of the video would use this example since it is believed It proves the distance from the camera to the object, is **less** than the distance from the camera to the explosion; not greater as believed by the author of the video. The following figure is provided to show this.

This figure shows a camera located at the letter "C", filming the SpaceX fire ( Red ball ) the object is located at the letter "X". The solid black arrow is the camera's sightline directly to the fire. The dashed line to the right of the fire is the continuation of the that sightline. The red line is the path the light from the fire travels to the object and the dotted line is the camera's sightline to the object



Obviously anything above the solid black arrow to the fire and its dashed continuation to the right of the fire will appear in the video as being above the fire. Anything below those lines will appear in the video as being below the fire. Additionally for an object to be lit from above the object has to be lower than the fire. Putting those requirements together yields the fact that the only way for an object to appear in the video as higher than the fire and also be lit from above is to be closer to the camera than the fire is (as is seen in the figure). Therefore, as per optics, the object in the video cannot be on the other side (to the right) of the fire as the videos where the videos show it..

This brings us back to a subject that I believe is, at best, pseudo science, electrogravitics. According to Chris fr91220, at the moment the object is being lit from above, "the gravity field" of the electrogravitic drive "exceeds 300g". That field deflects the flash upward to illuminate the top of the object. The following figure was taken from the video showing the electro-gravitics field assumed by the video's author.

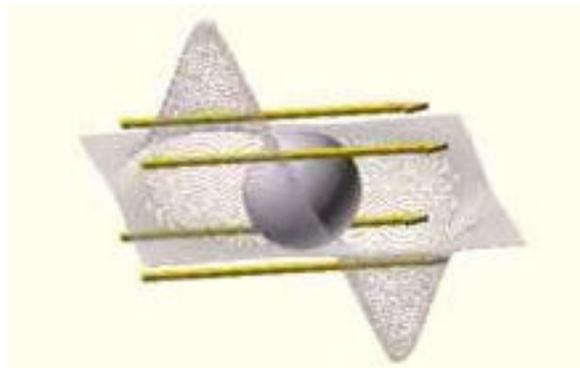


Figure: Electrogravitic Field



It is accepted by the writer that gravity deflects light, That is particularly true when considering high fields. In this video, the video's author has stated this gravitational field to be 300 g, Since Jupiter's surface gravity is 2.4 g (2.4X Earth's gravitational field) and the Sun's Surface gravity is 28g (28X times that of Earth), a factor of 300 would indeed be very high. It therefore that field were generated, it would be possible it could deflect the light, possibly even in the method described in the video. However since it was shown above (end of video 1) that the huge acceleration is a consequence of using an incorrect trajectory and is fallacious.

### 3.0 Description of the explosion

Since the author of the videos did not consider look at the explosion itself, this portion was added bt the witer. It was actually written as a section of amn earlier report by this writer.

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The first flame in the explosion is seen in frame #03969. The following are cropped versions of it and the preceding frame (#03968).



Fig. 4a: Frame 03968

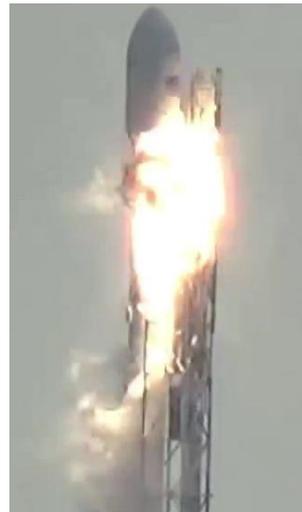


Fig. 4b: Frame 03969

Each of these frames provide an item of interest:

Figure 4a shows that ~15 milliseconds prior to the explosion nothing seemed to be happening. That includes nothing approaching the missile. Even in a full view of this frame, the only oddity seen is a little dot just to the right of the top of the middle light tower.

Due to the vapor seen near the rocket's fairing and going off to the left, the frame also shows that the second stage was either in the process of being fueled or its fueling was complete. It should be noted that a fuel leak down along the missile or gantry would not be seen in a picture such as this.

Figure 4b shows that in the 15 milliseconds between the frames a full explosion has occurred near the top of the second stage. It can be seen that the explosion is not omni-directional. It has a definite shape (up-down oval). It is believed that is a function of gravity. This figure also shows a tail at the bottom of the flame that falls almost straight down and then hooks in the same direction as the previous vapor trail.

Elon Musk (SpaceX Chief Executive) stated<sup>3</sup> the explosion originated around the Falcon 9's upper stage liquid oxygen tank while it was being loaded. This statement is almost certainly true. The explosion definitely occurred and by inspection, it is obviously occurring near the top of the second stage. However it points toward the oxygen and oxygen by itself is not flammable. Therefore, at best, the statement is misleading. There had to be some fuel to burn and an initial spark to start the



explosion. Since there is plenty of oxygen in the air, regardless of what the oxygen system was doing the existence of a spark and fuel would have caused the fire.

If it weren't for the tail, it would be reasonable to assume a break in the fueling system opened the fuel line and possibly the oxygen to the outside and also caused the spark. However a simultaneous oxygen-fuel leak and spark would have immediately erupted in a ball of flame consuming all available fuel. No fuel would run down to create the tail. It would be oxidized almost immediately near the location it emerged. To create the tail some fuel had to fall down alongside of the rocket prior to the explosion. It is accepted the time difference between the start of the leak and the explosion would be very short, but it had to exist. Figures 5a, b, and c substantiate this statement. Figure 5a (the same as 4b above) shows the initial flame; 5b shows the situation 15 m-sec later; and 5c shows 30 m-sec after the initial flame. Although the times between these figures is extremely small, it can be seen in these figures that the tail is basically consumed in the 15 m-sec between 5a and 5b and the flame is moving upwards. The explosion was consuming the tail. Therefore the fuel that became the tail had to exist prior to the fire that consumed it. Additionally the top of the fireball is slowly expanding horizontally as more fuel and oxygen is added.

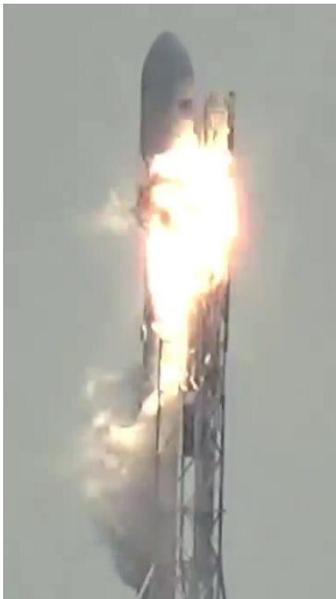


Figure 5a: Initial Explosion



Figure 5b: 15 m-sec later

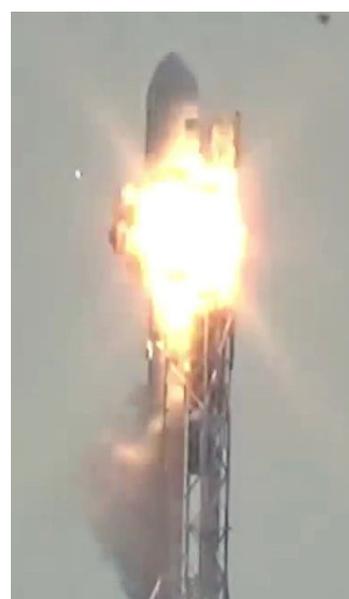


Figure 5c: 20 m-sec later

Although the above seems to indicate that it takes both fuel and a spark to cause an explosion, that may not be true. Both the 1st and 2nd stages use a hypergolic ignition system. That system contains 2 chemicals (TriEthylAluminum and TriEthylBorane) which ignite when they come into contact. The problem with assuming this to be the spark that ignited the explosion is its location in the missile. It has to be near the engines and they are at the bottom of each stage. It could be argued that the fairing is just above the explosion location, however to this writer's knowledge, the fairing is just a box for carrying the payload and has no engines, fuel or ignition system.

Prior to stating what the writer considers the most reasonable answer to the cause of the explosion some consideration has to be made of possible external events. Any external exploding object would produce both fire and a blast (shock) wave. Normally the blast wave would precede the fire. In this case the shock wave could rip apart the fueling system so the following fire could ignite it. However it is believed the time difference between the blast wave and the fire would be too small to produce the shape (tail) seen.

It is accepted that 2 external events could produce the effect seen. It is however difficult to understand why any outside party would wish to do that. Using 2 items doubles the possibility of the overall effect not occurring. Additionally since an outside party could not know the exact time any camera frame is exposed, two items doubles the possibility of one of them occurring exactly during the frame exposure and thus being detected. The only gain would be confusion on our side and it



will be discussed later that nothing was seen. It is therefore believed this indicates a local cause is a much more reasonable conclusion than something coming in from the outside.

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#### 4.0 Conclusion

It is believed that the writer has shown that although clever and interesting, the conclusions which have been stated to be obtained from these videos are invalid. That does not mean that there is any proof that the basic thesis is invalid, just very improbable. It was quoted in the third video that "extraordinary claims require extraordinary evidence" On this point, this writer agrees with both the author of the videos of the videos and Dr Sagan, but he does not believe the videos passed that test

The following paragraphs will outline the reasoning for the above.. They will start with a short listing of the problems seen in the main portion of the paper.

1. An extreme zoom (from the USLaunReport video) of one of the objects has shown the object to be oval with the major axis in the x direction (horizontal). It shows how difficult it is to obtain an accurate location for the object by a simple measurement. To use measurements of this object would therefore require error bars for all of the measurements. Additionally those error bars would propagate downward into all derived results.
2. The trajectory paths shown for distances between the object and missile are fine. What they provide is basically a field of possibilities for various initial  $V_z$  values. They however represent an idea, not a physical object. It can be argued that they can be used to determine how the initial velocity would affect rapidity of effects. However there is no mass at all flying along that trajectory to actually feel an effect. (It should be noted that this item invalidates most of what is stated in the 3 videos.)
3. Throughout the videos, it is stated "can a bird do this?" Invariably the answer would be "No". That however is meaningless since the it is always predicated on item 2 above
4. A true scientific study would not use a non-proven concept such as the ARV Flux Liner to prove its point. However, the need for the Flux Liner is also also dependent on item 3 above. Without item 3, it has to be stated the object s in front of the missile not behind it.
5. IN the 2nd and 3rd videos a semispherical object is seen in another launch and it is asked if the object is familiar. The most reasonable anser to that question is ye, it is the second stage of the rocket and the fairing.
6. Aside for stating an explosion occurred, the videos made no attempt to analyze it. It was shoen in another document by thsi writer (and above in section 3 that if the explosion occurred in 2 steps. The first allowed for an exhaust of fuel while the senced, slightly later, provided a spark. Hence the explosion was required at least 2 shots slightly separated.
7. The principle of Occam's razor states that the simplest answer is almost always the correct one. Even if it had been correct, the procedure outlined in the videos could never be considered the simplest.