

*New Moon Regulations*

## Determining Chodesh

I have acquired many articles on the *when* of the new moon. The studies in my possession are pretty much evenly weighed on both primary sides of the issue. There are those who believe a new moon is the first visible crescent of the moon, while others believe it is the conjunction<sup>1</sup> of the moon with the sun that constitutes a new moon day. There are still others who although they use the conjunction, still wait a day, possibly two, before observing the new moon for certain reasons. I am not here to condemn which method you may now use, or which method you currently believe is the most Scripturally accurate. There are some reasonably good points on both sides of the issue. Those who love Yahweh and genuinely are seeking to celebrate His new moon will all be on Yahweh's time one day in the Kingdom. As for now, I would like to explain to you, from the Scriptures, how I believe the new moon is to be determined. This is important because if we are to take the first new moon after the spring equinox for Abib 1, we must know what in the heavens constitutes a new moon.

In my mind, it would be extremely helpful if we had a "black and white" verse that told us exactly how to determine when the new moon day is. If we had a verse that said, "The new moon is the evening that you visualize the first thin waxing crescent in the western sky." Or if we had a verse that said, "The new moon is evening after the moon conjuncts in the heavens with the sun." The truth is that we have neither text in Scripture. This is a grey area, much like determining the new year. As I've explained throughout this work that while I do have a position I take on these matters, I believe there should be brotherly love in spite of differences among calendar students. I cannot dogmatically declare that my way is the only correct way when my way is just one among others that is trying to determine the correct method based upon "grey" instructions. I am not faulting the Creator here by any means. It is His business to inspire His word the way He chooses. I'm just making the point that I understand that it is not as "cut and dry" an issue as some people present it to be.

Most fellow believers I have personally come into contact with in my years of studying Yahweh's calendar advocate a visual sighting of a crescent moon in the

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<sup>1</sup> The Webster's Dictionary, 1828 version, gives as the #2 definition of conjunction the following: "In astronomy, the meeting of two or more stars or planets in the same degree of the zodiac; as the conjunction of the moon with the sun, or of Jupiter and Saturn." The New Book of Knowledge, Volume 12, published by Grolier Incorporated, Danbury, Conn. 1983, p.447 states the following: "The moon has no light of its own. Moonlight is really sunlight reflected from the surface of the moon. Sometimes we can see the whole lighted side of the moon, like a big shining disk. At other times we see only a part of the lighted side, so the shape is no longer a disk. The different shapes are called phases of the moon. The phases occur because the moon orbits the earth. When the moon... is at... the side facing us [it] gets no sunlight. We cannot see the moon then. This phase is the new moon." This commentary given by the authors of The New Book of Knowledge is an explanation of what I will term in this section, a conjunction.

western sky (in the evening just after sunset). They feel that this is the proper, Scriptural way of determining exactly when a new moon takes place. Usually, the first verse one hears when this argument is presented is Deuteronomy 16:1 which reads:

Observe the month of Abib, and keep the Passover unto Yahweh thy Elohim: for in the month of Abib Yahweh thy Elohim brought thee forth out of Egypt by night. (KJV)

The reasoning used in this passage is that the word translated as month is taken from the Hebrew word *chodesh*, the exact same word translated as new moon in various places throughout Scripture. Seeing that *chodesh* can be translated as new moon, and the passage states very emphatically to "*observe* (or in their interpretation, look for with your eyes) the new moon of Abib" they conclude that we are commanded here to observe or watch for the rebuilding visual crescent. They then conclude that it must be able to be seen if we are commanded to look for it. I believe there is a problem with demanding that the verse be interpreted in this manner. The problem encountered is found in the precise meaning of the Hebrew word translated observe. If the word observe can *only* mean to visually watch for a particular object then I believe their argument would definitely be solid. However, if the Hebrew word translated as observe does not have to mean this, or does not always mean this, the claim then becomes faulty being that it is not conclusive. So, what is the Hebrew word here translated as observe? The Hebrew word in view is the word *shamar*, and based upon Hebrew lexicons the primary definitions of this word are "to hedge about, guard, protect, and attend to." This obviously gives us a different outlook on what observe actually means in the Deuteronomy passage. Unless the passage explicitly states that one must visually see the light of the moon in order for it to be a new moon, we are left to believe that the passage is stating something else. In fact, when we read the passage through, just in the first part, we see exactly what is being commanded. Israel is commanded to guard or protect the new moon or entire month of Abib (which obviously begins at the new moon) seeing that this is the first month of the year when the Passover and the Feast of Unleavened Bread is kept commemorating a great deliverance for the people of Israel. There is nothing certain in this passage that teaches visual observation is the determining factor for the new moon. The new moon of Abib can be guarded, protected, and attended to, without visually sighting a crescent moon in the western sky in the evening. It is helpful to look at a few other passages in Scripture which use the Hebrew word *shamar* but do not indicate that we must visually look for a certain thing.

And Yahweh Elohim took the man, and put him into the garden of Eden to dress it and to **keep** it. [Genesis 2:15 KJV]

And Pharaoh said unto him, Get thee from me, **take heed** to thyself, see my face no more; for in that day thou seest my face thou shalt die. [Exodus 10:28 KJV]

Ye shall therefore **keep** my statutes and my judgments, and shall not commit any of these abominations; neither any of your own nation, nor any stranger that sojourneth among you: [Leviticus 18:26 KJV]

Command the children of Israel, and say unto them, My offering, and my bread for my sacrifices made by fire, for a sweet savour unto me, shall ye **observe** to offer unto me in their due season. [Numbers 28:2 KJV]

**Keep** the sabbath day to sanctify it, as the Yahweh thy Elohim hath commanded thee. [Deuteronomy 5:12 KJV]

And did not he make one? Yet had he the residue of the spirit. And wherefore one? That he might seek a [mighty] seed. Therefore **take heed** to your spirit, and let none deal treacherously against the wife of his youth. For Yahweh, the Elohim of Israel, saith that he hateth putting away: for one covereth violence with his garment, saith Yahweh of hosts: therefore **take heed** to your spirit, that ye deal not treacherously. [Malachi 2:15-16 KJV]

Another passage of Scripture, given by some to provide evidence that a visualization of the moon is necessary for there to be a new moon, is the passage in Genesis which mentions that Yahweh made two lights, with emphasis on the word *lights*. They reason that if Yahweh made lights, it is only a visual light that can be used as the new moon. While this appears to be sound at first, let us examine it in further detail. First of all, allow me to quote from a particular article (*Rules for the New Moon*, p.5) which comments on this visibility belief.

...there is no statement whatsoever in all of Scriptures that the moon's luminary had to actually be viewed by a man before it could be officially designated as the beginning of a month. This detail is implicit in the statement that Yahweh "made the moon for the moadim"... and by the fact that it was already designated as regulating the night, before Adam was created... Therefore, the original purpose of the moon, which existed long before any man walked upon the face of the earth, was to fulfill its role as a mechanism for calculating time. Its role is not predicated upon the existence of man.

The point to be made here is that the Scriptures give us no instruction on having to visually see a crescent in order for there to be a new moon. Furthermore, a light begins to rebuild just after the time of the moon's conjunction with the sun. Just because the light cannot be seen by the human eye does not mean it is not there. Immediately after the time of conjunction the moon begins to rebuild its light. The definition of rebuild is exactly what we find when we look at the Hebrew word (Strong's) from which the term new moon is taken.

2320 chodesh kho'-desh From H2318; the new moon; by implication a month:—month (-ly), new moon.

2318 cha'dash khaw-dash' A primitive root; to be new; causatively to rebuild:—renew, repair

These definitions have nothing to do with the *visible* light of the moon. The definitions rather mean "to be new" or to "rebuild." The word *chadash* is also used in the following passages:

2 Chronicles 15:8 ...and **renewed** the altar of Yahweh...  
 2 Chronicles 24:4 ...to **repair** the house of Yahweh...  
 Psalms 51:10 ...**renew** a right spirit within me...  
 Isaiah 61:4 ...and they shall **repair** the waste cities...

The renewing process begins as soon as the altar began to be rebuilt, as soon as the house of Yahweh began to be repaired, as soon as David's spirit began to be fixed, and as soon as the waste cities began to be restored. Nothing at all indicates that a light had to be visibly seen in these instances. Therefore the word *chadash* (from which *chodesh* comes) does not automatically indicate that a light must be seen. What this **doesn't** mean is that at the time of the new moon there will never be a visible crescent. What this **does** mean is that there is nothing in the definition of new moon that would indicate visibility as a necessity.

Anyone should be able to discern that when an old moon ends, a new moon begins. At what point then does an old moon end? It would have to be at its last stage of waning (decreasing) just at the time immediately prior to conjunction when the sun and moon "cross paths." As soon as the moon crosses this path with the sun, it begins to *chodesh* or *chadash*, i.e. rebuild.

One dilemma we face however is that the conjunction of the sun and the moon can happen at any time of the day. A conjunction may occur at 10:37 p.m. or 8:56 a.m. Seeing that this *lunar-solar event* does not usually happen in our locality at the precise time the day begins (evening or sunset), how are we to determine which day is the day of the new moon? Do we observe the day the conjunction happens in? Do we wait until the next day or day after the next? I believe the answer can be found in Scripture, but before we touch on this let me speak a little more about the idea of a visual new moon. Seeing that most believers I have personally met believe this to be the Scriptural way for the new moons determination, I want to delve into more detail as to why I have not chosen to use this method in my personal calendar observance.

Generally speaking, those who promote the position of a visualization of the new moon give many reference works which tell us that ancient Israel went by the visual sighting of the new moon in the evening. One reference work (*Universal Jewish Encyclopedia*, p.632) I found to be interesting.

**Little is known of the procedure of determining the calendar up to the 2nd cent. C.E.**, when a description is given of the traditional practice, it ran as follows: On the thirtieth day of the month a council would meet to receive the testimony of witnesses that they had seen the new moon. If two trustworthy witnesses had made deposition to that effect on that day, the council proclaimed a new month to begin on that day... If no witnesses appeared, however, the new moon was considered as beginning on the day following the thirtieth.

What often goes overlooked by our visualization brethren is that this reference work tells us that *little is known* concerning just how ancient Israel determined the calendar up to the 2nd century C.E. or A.D. Therefore I must ask, what are they basing their statements and beliefs upon? It is very easy to say that ancient Israel would wait for witnesses who had seen the waxing crescent moon in the western sky at sunset (then declaring the new moon), but it is an entirely different matter to prove that to be a historical fact. Interestingly enough, we find that another reference (*The Commandments*, Maimonides p.160) tells us that although seeing the new moon was involved in declaring a new moon, calculation was also used.

That is to say, when the Great Court existed in the land of Israel **the first month was determined both by calculations and by seeing the new moon**. With the Great Court no longer functioning in the land of Israel, the first of the month was established only by calculations.

Based upon this particular reference work there were some calculations that had to be made in ancient times. In fact, even those who strongly advocate visualization as a must sometimes keep a new moon day without ever seeing a crescent. I remember one formal, friendly debate I participated in with one brother who believed the new moon was the visible waxing crescent moon in the evening. As I was questioning him I asked, "So, at the end of the 29th day of the month, if you do not see the waxing crescent what do you do?" He responded by saying that they would add a 30th day onto that month. I then asked, "What if you still do not see the waxing crescent moon in the evening following the 30th day?" His response was that they would go ahead and declare the new moon even though they could not visibly see the crescent. In other words, they celebrated the day of the new moon without seeing the crescent because they knew it was there whether they visualized it with the naked eye or not. This is due to clouds, haze, snow, rain, smoke, poor eyesight, etc. Therefore, they really *cannot* believe a new moon *has to be seen* in order for it to be a new moon. Although they do not like to admit to this, they must. I have seen many months where a moon had a definite possibility of being seen, yet due to certain natural circumstances visibility was impaired. What did those promoting visualization do? Did they have month of 31 days? No, they simply began the next month without seeing the new moon. Again I must ask *why* for the sake of emphasis. It is because they knew the light was there **without seeing it**. This is exactly the point I want to make. I know the light of the moon is there after the time of conjunction. As a result, it is a rebuilding light. Me seeing it is not what makes it a light.

A few paragraphs ago I mentioned that in order for a reference work to make a claim they must give sufficient historical documentation, or more importantly Biblical evidence on the matter. This would prove that what they are claiming carries substance. It does not matter if one gives dozens of encyclopedia articles which claim something, the claims must be backed up by evidence. I have been shown only one historical document that interested me in regards to proving a visualization of the new moon. It is from the Israelite historian Philo, a very prominent Israelite of Alexandria Egypt which

lived before, during, and after the life of Yeshua the Messiah. He speaks to some degree of the new moon in this manner.

Special Laws 2.26(140)

...we record the third type of feast which we will proceed to explain. This is the New Moon... when it arrives, nothing in heaven is left without light, for while at the conjunction, when the moon is lost to sight under the sun, the side which faces earth is darkened, when the new month begins **it resumes its natural brightness... for it is just then that the sun begins to illumine the moon with the light which we perceive and the moon reveals its own beauty to the eye.**

This is definitely telling us that a new moon can be seen, but is it telling us that it must of necessity be seen every single month of the year? I believe the answer to this question is in the negative. I have already shown that even the visualization brethren do not always see the new moon upon proclaiming the new moon. Philo would have definitely understood this as well. He seems to be an intelligent man when reading his writings. Nevertheless, we learn here, that at least in the days of Philo, if we accept his account, there were times when the new moon was able to be seen.

I must however show that Philo did know that an old moon ended at the point of conjunction. If he understood this fact, then he would have also understood that a new moon began immediately after the point of conjunction. We see a mention of this where he writes the following:

Special Laws 1.35(178)

...there are two motions of the moon as it continually runs its double-course – the motion of waxing until the full moon and **the motions of waning until its conjunction with the sun...** the moon waxes and wanes in equal intervals, both as it increases and diminishes in illumination... it receives the perfect shapes in periods of seven day – the half-moon in the first seven day period after its conjunction with the sun, full moon in the second; and when it makes its return again, the first is to half-moon, **then it ceases at its conjunction with the sun.**

This shows us that Philo did recognize that at the point of the moon's conjunction with the sun, an old lunation or moon cycle ended. By default, where an old moon ended, a new moon began. Notice also what he states on page 25 of this particular translation (C.D. Yonge) of his works.

Allegorical Interpretation 1.1(1)

...all those [things] which are accomplished by the knowledge of God are moved at subsequent times. For their ends are the beginnings of other things; as, for instance, **the end of day is the beginning of night.** And **in the same way we must look upon months and years when they come to and end as the beginning of those which are just about to follow them.**

The beginning or new moon would come after conjunction. Conjunction being the time when the end and beginning of a lunation meet, thus Philo writes:

Special Laws 2.11(41)

The third [festival] is that which **comes after the conjunction**, which happens **on the day of the new moon** in each month.

Special Laws 2.26(140)

...the New Moon, or beginning of the lunar month, **namely the period between one conjunction and the next**, the length of which has been accurately calculated in the astronomical schools.

When placing all the statements Philo made concerning the new moon, one does not have to conclude that Philo meant for us to understand that a visualization of the moon was a must for determining when a new moon actually was. Thus, Philo's writings, the only writings I have seen that come close to proving visualization, do not prove visualization is a necessity.

If we teach that visualization is a necessity we will often bypass an entire 24 hour period within the rebuilding moon. Say for example that sunset occurred on a particular day and the conjunction of the moon and sun occurred 8 hours later. The next evening (sunset) the moon would be about 16 hours old yet those who advocate only going by the rebuilding visible crescent would wait yet another 24 hours before declaring the new moon. This makes the moon 40 hours old at this time when it is being declared a new moon. Can we really say that a moon 40 hours old is a new moon?

We earlier covered how that the time of conjunction can be at any given hour of the Scriptural 24 hour day. We must now tackle the question of which day are we to observe as the new moon? First of all, we know by approved biblical example, that a new moon was calculated in advance. It does not matter what these men in Scripture were actually calculating to be the new moon, the example shows that it was definitely known in advance what day the new moon would be. In First Samuel 20:18 we see that Jonathan said to David, "Tomorrow is the new moon." The issue here is not *how* did Jonathan and David know tomorrow was the new moon (or even what method they were using). The issue is rather that Jonathan and David definitely knew when the new moon would be in advance before ever visibly seeing a crescent. They did not have to wait to see a rebuilding crescent in order to declare a new moon. This phrase by itself shows us that people in ancient times knew in advance when the new moon would be.

...in the story of Jonathon and David, Jonathon mentions that the next day is going to be a new moon day... To do so he had to have been already cognizant of the fact that the day in which he spoke was the last day of the old month. (Rules for the New Moon, p.8)

Our dilemma though is still at hand. Which day is kept? Before demonstrating the best possible, Scriptural choices, I will now show why the choice of *the day that the conjunction happens in* is not the Scriptural position to take.

Let's say for instance that a conjunction happened right in the middle of the day, giving approximately 12 hours on either side of the day. This would mean that there would be 12 hours in an old waning moon, and 12 hours in a new waxing moon. It is not Scriptural to use this day as day 1 of a month for various reasons. First, part of this day is in an old moon. If this happened to be the 1st or 7th month of the year, the festivals in that month would be calculated from an old moon. One may acknowledge that this is true, but then point out that part of that day is in the new, rebuilding moon

as well. I do agree that this is the case, but the fact remains that the day *began* in an old moon. Therefore, because it began in an old moon, the day must finish out its course until the following evening.

Second, this day does not fit the phrase in Scripture, "the day of the new moon." The broader definition of the calendar word *day* is defined in Scripture as being from "evening to evening" (Exodus 12:17-18; Leviticus 23:32). A new moon is defined by various Hebrew lexicons as meaning "a rebuilding." Thus, the day of the new moon is the first 24 hours (evening to evening) of the rebuilding. This could not be the day the conjunction happens in, seeing that some hours of the day were not in a rebuilding moon, but rather in an old, waning moon.

Thirdly, let's approach this by way of analogy or illustration. We read in Scripture that Yahweh is only light and that there is not any part of darkness in Him at all (First John 1:5). Any amount of darkness in Yahweh would make Him not all light. Using this analogy, any oldness in a new moon day would corrupt the actual first official day of the new moon. The article Rules for the New Moon (p.6) also makes some interesting statements in regards to this issue.

Under the Torah of Moses, one could not be ceremonially clean the same day the person was unclean – even after that person had completely washed his body, changed into new clothes, and was absolutely clean from head to toe – until the arrival of the new day at sunset and the time of arab... If that person waited to accomplish these chores until just after sunset, he was still counted as unclean and would be required to wait until yet another sunset arrived before being declared clean.

The day of the new moon I presently observe is the first evening to evening after conjunction. If conjunction happens at 10:00 p.m. the following evening (approximately 20 or so hours later) would be the first full 24 hour period of the rebuilding moon. However, even if a conjunction happened at 5:30 p.m. with only a short time till evening, I would still take the very next evening as the first official day of the new moon or rebuilding. After all, that's exactly what this day is.<sup>2</sup> My reasons for making this choice are based on what I feel at this present time makes the most Scriptural and logical sense. There will be many times when the new moon is visible, but this visibility does not mean that the moon has to be visible every month of the year. Hopefully this will help in determining the Scriptural way.

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<sup>2</sup> There is another choice that is similar, yet different to this. I, for now, do not feel this choice to be the best Scriptural choice. This choice would take the very next evening to evening if conjunction happened at 10:00 p.m. or any time in the night. It would not however take the very next evening if conjunction happened at 5:30 p.m. Why? The advocates believe that the conjunction can only be calculated if it happens during the night time hours. They believe that the conjunction is only a lunar event, thus the conjunction only "counts" if it occurs during the night. If the conjunction occurs during the day, one must wait out the next night and day period as the last official day of the month, and the following 24 hour period would be the first official day of the new moon. I have an article on hand that presents this view. I personally do not feel that when the Scriptures speak of the moon ruling by night, that it means a conjunction can only be calculated if occurring during the night. Furthermore, I do not believe the conjunction is only a lunar event. It takes both the moon *and the sun* to have a conjunction so it may be termed as a lunar-solar event involving both of the heavenly lights.

I would now like to share some charts I made years ago that answers some of the common statements I have heard concerning basing the first day of the month off of the conjunction rather than solely using the visibility of the moon.

### **Point #1. What if it's Cloudy?**

I agree that there are either 29 or 30 days in each of Yahweh's Scriptural months. What happens at the end of each of these days if it's cloudy? At the end of the 29<sup>th</sup> day of the month when you watch for a crescent and you don't see one because of the clouds, do you go ahead and keep it as the new moon because you know it's there? At the end of the 30<sup>th</sup> day of the month, what do you do? If you are not able to see a crescent because of reasons in nature do you keep a 31 day month?

In an article entitled Rules for the New Moon (p.5) we find the following well said statement:

Indeed, even when its crescent is large enough to be visible to people who are standing on the ground, the obstruction of clouds, snow, smoke, poor eyesight, and the like are all a constant threat as an impediment to their vision. This detail moves us away from visibility as a prerequisite for determining a new moon and emphasizes the moon's position in orbit.

If one chooses to say that they go ahead and keep the new moon if it's cloudy on either the end of the 29<sup>th</sup> or 30<sup>th</sup> day that would prove that you do not have to visibly see a moon in order for it to be a new moon. However, if one chooses to say they must wait for a crescent to be seen, then there is a logical dilemma. You will have months consisting of 31 days or longer. Why Not Go By the Scriptural Definition?

### **Point #2. Three Days of Darkness**

At [www.karaitekorner.com](http://www.karaitekorner.com), in an article entitled *The New Moon in the Hebrew Bible* we find the following written:

Another point to consider is that there is no actual "day" of concealed moon. In fact the moon stays concealed anywhere from 1.5 to 3.5 days in the Middle East.

Is this point true? Yes, the moon can remain concealed, that is unable to be seen by the naked eye for 1.5 to 3.5 days or **even longer** depending upon the effects of nature. The question is: how does this prove a new moon must be visible? Or, how does this prove that the point after conjunction is not the point of *chodesh*? Consider the following:

- The time of conjunction can happen at any given hour and minute of the 24 hour day (such as 12:00 p.m. or 12 noon).
- If conjunction takes place at 12:00 noon, the first part of that particular day (its beginning) was in an old moon; before *chodesh* / rebuilding.
- Seeing that this day began in an old moon, the following evening would commence the first complete 24 hour day in the *chodesh* period.

- This day would always be the first official day of Yahweh's month.

Where does three days of darkness or concealed moon cause this method to be faulty? We simply take the first day of the *chodesh*, i.e. the first day of the rebuilding.

### **Point #3. How Do You Look for a Dark Moon?**

The answer to this question is, you **don't** and you **can't**. It is impossible to look at something that is not visible. But where does this question prove that the moon must be a rebuilding visible crescent in order for it to be declared a new moon? Consider these points:

1. We are not saying nor implying that we should **not** watch the moon in order to determine the day of the new moon.
2. This watching would definitely have to take place at times when the moon is visible to the naked eye.
3. This watching of the moon in no way at all proves that *we must of necessity* see a rebuilding crescent in order for it to be the actual new moon day.

How do you know in advance? In observing the moon you will notice that on the 29<sup>th</sup> day of each month, the moon is capable of being seen in the early morning, the time when dark and light meet, in the eastern sky before sunrise. If we look up on this day and see a thin waning crescent we will know the month will be 30 days in length. If we look up on this day and do not see a thin waning crescent we will know the month will be 29 days in length. One may wonder, what if it's cloudy? But the same applies for those watching for the first visible rebuilding crescent. In cloudy instances calculations must be done. This does in no way prove, however, that the first visible rebuilding crescent is the new moon. ***Chodesh means rebuilding moon/light, not visible light.***

### **Point #4. A Visible, Rebuilding Crescent is at Times the New Moon**

When we take the first day (24 hours) of the rebuilding moon we find that there will at times be a visible rebuilding crescent on this day. Consider the following:

- If darkness occurs at 8:00 p.m. and the new day thus begins, and conjunction occurs at 9:00 p.m., part of this day (1 hour, the beginning) was in an old waning moon.
- This day is not to be considered as the first official day of the new month because of the beginning hour taking place in the old month.
- The next evening comes around in about 23 hours, and would begin the first 24 hour day in the rebuilding moon.
- A crescent can be visibly seen with the naked eye at 23 hours.
- Thus this particular new moon day would begin with a visible rebuilding crescent.

From the U.S. Naval Observatory, [www.usno.navy.mil](http://www.usno.navy.mil), in an article entitled "**Crescent Moon Visibility**" we find the following information: "The record for an early sighting

of a lunar crescent, with a telescope, is **12.1 hours** after New Moon; for naked-eye sightings, the record is **15.5 hours** from New Moon. These are exceptional observations and crescent sightings this early in the lunar month should not be expected as the norm."

If the record with the naked eye is 15.5 hours then we see that a moon 23 hours old should be relatively easy to see with the naked eye. This does not imply that every new moon must be a visible rebuilding crescent. Nothing in Scripture states this. **Sometimes visible does not equal every time visible.**

**Point #5. Sometimes Visible New Moon Illustration**

When we take the first complete "evening to evening" day after conjunction there will be times during the year that the rebuilding visible crescent in the western sky at evening will be the new moon. The following two charts illustrate the two realms of probability here.

**Chart A**

NIGHT	DAY		NIGHT	DAY
	Conjunction happens here at 8:00 p.m., 1 hour before evening.	C O N J.	This evening begins the day of the new moon, i.e the 1 <sup>st</sup> day of the rebuilding.	

**Chart B**

N	D	N	D	N	D	N	D
		C O N J.	Conj. Happen s one hour after evening begins. 9:00 p.m.	23 hours pass before evening ...	This evening begins the first official day of the new moon, i.e. 24 hrs. in the <i>chodesh</i> period.		

- Chart A: Shows a new moon that would not be visible.
- Chart B: Shows a new moon that would be visible.

### Point #6. Could the Ancients Have Known?

It has often been suggested that the Biblical new moon cannot be based upon the time of conjunction because ancient peoples could not have known by calculation when the conjunction would have take place. First, consider this quote from the writings of Philo, a man from the tribe of Levi that lived during both the 1st century B.C. and the 1st century A.D.

Special Laws 2.26(140)

...the New Moon, or beginning of the lunar month, **namely the period between one conjunction and the next**, the length of which has been accurately calculated in the astronomical schools.

Not only does Philo define here the lunar month as being the period between two conjunctions he goes on to say that the length of the lunar month has been calculated accurately in the schools of astronomy. This is not difficult to do. Let me give two methods that could have been used prior to the age of technology.

1. On the morning of the 29th day of the month a person can go stand outside and look in the eastern sky where the sun is going to rise. This is the place in the sky that you will see the thin waning crescent moon prior to its conjunction with the sun. If on this morning you are still able to see a crescent (it is still old enough and big enough to be seen) then you will know that conjunction will not take place until the following day yielding a full 30 day month. You will finish out the 29th day of the month you stand in and the next day as day 30. You will then count the day after day 30 as day 1 of the next month. (It is possible that Ezekiel 46:1 refers to the gate that looks towards the east in the context of the new moon mentioned in the verse. I am not saying this definitively, I am only giving you something to consider for your studies.)

2. This next method is best to use during the last week of the lunar month in which there are only about 7 remaining days in the lunation. Go outside at sunrise and look to the east. Here you will see not only the rising sun but also the waning moon. Measure the distance from the moon to the middle of the sun in centimeters and then multiply that number by 2. When you get this number divide it by 24 to turn the number into the amount of days and hours until the moons conjunction. For more precise results you divide your first sum number by .51 degrees.

For example let's say you go outside one morning to use this method and you find that there are about 42 centimeters from the moon to the middle of the sun.  $42 \times 2$  equals 84. 84 divided by 24 comes to 3 with 12 left over. This means that there is about 3 days and 12 hours till conjunction.

Those who claim that ancient peoples or civilizations would not have had such knowledge are just not correct in their claims. I have researched and documented some of the ancient monuments which were built as calendar time pieces by people

living 1,000 to 5,000 years ago. These ancient people knew so much more than we often give them credit for. They didn't have television, radio, internet, iPhone's, etc. so their minds were not cramped by technology that did everything for them. I have come to believe that they knew the heavens with precision because that is what many of them spent their time doing, looking up.

<http://www.youtube.com/watch?v=znIpnveRlkc>