The Calendar

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Today I want to talk about a subject that is important for us at this time of year. About three weeks ago, we observed the first commanded assemblies for the new Holy Day year, as commanded by God. We are charged with observing days and ceremonies each year at their appointed times. About two weeks before [the Passover], was the first day of the first month. That is the first month that contains the annual Holy Days. In order to schedule the proper timing for those appointed times, we use a calendar. For us that calendar is the calculated Hebrew calendar as published by the Sanhedrin under the guidance of a Hillel family leadership in about 359 C.E.

I want to note here for those who are not familiar with the addition of C.E. and B.C.E., they stand for Christian Era or Before Christian Era. For those of us from a few years back, they are equivalent of B.C. or A.D. They reconciled the same dates. For most of us in the churches of God community, the Hebrew calendar is only important because of God's instructions to observe certain Holy Days and assemblies at their appointed times throughout the year. The Pacific Church of God schedules the observance of all God's commanded assemblies using the structure of the calculated Hebrew calendar.

Calendar principles are not simple and straightforward. There are several methods for determining the proper timing of the Holy Days each year. Most alternate calendars are based on legitimate fundamentals and observation and logic. They are usually developed by intelligent, well-informed people. The problem is, they do not all come up to the same conclusion for scheduling the observance of God's appointed times. I believe God expects unity of attendance for His scheduled events. But the only way that will happen is if someone in authority or in charge determines when we are going to meet. My plan is to consider this topic from three perspectives.

First, I want to establish for the legitimacy of the authority for the calculated Hebrew calendar. The authority of the rules and calculations for the Hebrew calendar come from the Sanhedrin.

Second, I want to explain some of the calendar fundamentals and finally, I want to show you from the record of scripture, a recorded chronology of events in the Bible that, to my satisfaction, confirms the ancient biblical use of the current calculated Hebrew calendar as calculated with postponements.

The Sanhedrin, also known as the Great Bet Din was made up of 70 judges and the High Priest. The 71 members served asa the supreme High Court. When the temple existed, they met in the chamber of hewn stones. The Sanhedrin has not existed with full power and authority since about 30 C.E. Christian Era. According to the jewishvirtuallibrary.org under an article titled "The Sanhedrin", they state:

"In about 30 C.E., the great Sanhedrin lost its authority to inflict capital punishment. After the temple was destroyed, so was the great Sanhedrin."

The temple was destroyed in 70 C.E. Christian era, but the Sanhedrin continued to function with diminished capacity until about 425 C.E. Christian era according to Wikipedia in an article titled "Sanhedrin":

> *The last universally binding decision of the Great Sanhedrin appeared in 358 C.E. when the Hebrew calendar was established. The Great Sanhedrin was finally disbanded in 425 C.E.*

Because the Jews were dispersed and the Sanhedrin were losing ability to function, Rabbi Hillel II proposed that the mathematically based calendar be available for keeping the dispersed Jews unified in their religious observances. Some question the authority of the Sanhedrin in the matter of the calendar. The record of scripture is that Jesus submitted to the Sanhedrin in their condemning Him to death and turning Him over to the Roman authorities for execution. You can read about that in Matthew 26:57-68. We're not going to turn there for the sake of time, but if you would turn to Matthew 23. The Sanhedrin was corrupt, but neither God nor Jesus removed them from their seat of authority until much later. At some time in the future, they are expected to be reorganized. Jesus taught His followers to respect the office of the Sanhedrin but do not follow their hypocrisies.

> **Matthew 23:1** *Then Jesus spoke to the multitudes and to His disciples,*
> *2) saying: "The scribes and the Pharisees sit in Moses 'seat.*
> *3) Therefore, whatever they tell you to observe, that observe and do, but do not do according to their works; for they say, and do not do.* (NKJV)

Some may ask, why do we accept the authority of the Sanhedrin concerning the calendar and reject their authority concerning the 6th of Sivan as the set calendar date for Pentecost. Or why do we not accept the 15th of Nissan or Abid, as it is also called at Passover? The reason is that the Passover is clearly listed as a command to be observed on the 14th of Nissan. The count from the days of Unleavened Bread to Pentecost is clearly explained in the Bible. When there is a contradiction between what the authorities demand and teach with God's instruction, we must listen to God and follow His instructions. Turn to Genesis 1. In the beginning of the Bible, God begins by describing the fundamental principles of nature. He contrasts the difference between chaos and order.

> **Genesis 1:1** *In the beginning God created the heavens and the earth.*
> *2) The earth was without form, and void; and darkness was on the face of the deep. And the Spirit of God was hovering over the face of the waters.* (NKJV)

Then God began organizing and separating.

> *3) Then God said, "Let there be light"; and there was light.*

4) And God saw the light, that it was good; and God divided the light from the darkness. (NKJV)

He distinguished and separated the existence of darkness from light. He designated that the changes between darkness and light would define a measure of time.

5) God called the light Day, and the darkness He called Night. So the evening and the morning were the first day. (NKJV)

A cycle of a period of darkness followed by a period of light that then repeated itself defined what we know of and can observe as a 24-hour day. I think it's worthy to note that already here within these first five verses of the Bible, God provides a basis for controversy and differences of opinion. He used the same word twice with two different meanings. The word "day" or *Yom* in Hebrew can mean "both the daylight hours of the day" or it can also mean "the combination of both the day and dark parts of the day", which equals a 24-hour day. Over the period of a year, the average total daylight hours are equal to the total dark hours. That means on average over the course of a year, there are 12 hours of darkness and 12 hours of light each day. In verse 8 of Genesis 1 it says the evening and the morning were the 2nd day. In verse 13 it says the evening and the morning were the 3rd day. The description of the 4th day starts in verse 14.

14) Then God said, "Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and years; (NKJV)

So, the first basic principle of calendars is the formation of the day. I've organized, for my way of thinking, 2nd as the designation of the years, 3rd as seasons and then 4th as signs. A year is the time it takes for the earth to revolve around the sun. We know from basic astronomy that it takes about 365¼ days for the earth to circle the sun. That measurement of a year, using the rotation of the earth around the sun is called a solar year. The official calendar for most of the world is called the Gregorian calendar. Before the Gregorian calendar was the official calendar, there was the Julian calendar. Both are solar calendars and as a general rule, add an extra day every four years. They count the days in what is called a common year as 365 whole days. In order for the start of each new year to occur at about the same time during the same season, which we saw in Genesis 1:14, each year we need a method to account for that fraction of a day. The way that is accounted for is to add an extra day every four years. The extra day is added at the end of February, giving February 29 days which postpones March 1st by one day. That means every year will not always equal the same number of days because the time it takes the earth to revolved around the sun is not equal to exact number of days.

Since January 1st 45 B.C. most of the world has added an extra day to the year every four years to account for the adjustment. In 46 B.C. Julius Caesar commanded that from the beginning of 45 B.C. the Julian calendar was considered to be the official calendar. According to Brittanica on their website—brittanica.com—the Julian calendar did not

smooth out what we know of today as the Julian calendar, until about 8 C.E. Christian Era. They had trouble getting it all figured out but by 8 C.E. then they finally got it all ironed out.

It turns out that the Julian calendar actually did not have the time correct. For the measure of how long it takes the earth to rotate around the sun, the Julian calendar is off by 11 minutes and 14 seconds each year. According to <u>Brittanica</u>,

> *"By the mid-1500's* [and I'm quoting] *the cumulative effect of this era had shifted the dates of the season by about 10 days from Caesar's time".*

Remember from Genesis 1:14, the seasons are supposed to be important for a calendar. With that in mind, Pope Gregory VIII reformed the Julian calendar to keep special days within their proper seasons. In 1582, according to <u>Brittanica</u> and again I quote…

> *restored the calendar to the seasonal dates of 325 C.E. an adjustment of 10 days.*

The Julian calendar has gradually been abandoned since 1582 in favor of the Gregorian calendar. The Gregorian calendar is what we keep now. His changes added the rules that if the leap year would normally fall on a year evenly divisible by 100, it would not be counted as a leap year and would only have 365 days which is a common year. That was to be the case unless it was evenly divisible by 400, in which case it would be a leap year. That means the year 2000 was a leap year and year 2100 will not be a leap year. 2100 will be a common year and not a leap year. Also from <u>Brittanica,</u> there is a proposal to modify the rules to make years evenly divisible by 4000 to be a common year instead of a leap year. As you can see there are constant adjustments that have to be made. Turn over to Numbers 28, the solar calendar—from what I just described—is not easy. However, the solar calendar is easy, compared to the lunar-solar calendar. God's calendar expectations for His people are to observe special events each year in their proper seasons. We need to always remember that God could have made it easy. He did not. God requires us to research, study, reason and make decisions even when it's difficult. We are strengthened as we navigate the difficult challenges and that, I believe, is God's purpose. Chapters 28 and 29 of Numbers describe the timing and specific instructions concerning the sacrifices and offerings on special days. Beginning in verse 16, special instructions were given concerning each of the annual Holy Days. What I want you to notice in verse 14, is that God expected offerings to be scheduled on a monthly basis throughout the year. *Monthly* refers to *moon.*

> **Numbers 28:14** *Their drink offering shall be half a hin of wine for a bull, one-third of a hin for a ram, and one-fourth of a hin for a lamb; this is the burnt offering for each month throughout the months of the year.* (NKJV)

According to Numbers 28:14, the year is to be made up of months. A month is the time it takes for the moon to revolve around the earth. The time it takes the moon to revolve

around the earth is 29 days plus a fraction. The fraction of a day is close to half a day so the Hebrew calendar compensates for much of the fraction by alternating most months as either 29 or 30 days. A calendar that considers both the months as determined by the moon and a year as a sequence of whole months that must line up with the solar year is called a lunar-solar calendar. All of the months from the beginning of the month when we keep Passover and the days of Unleavened Bread, through the end of the month, the seven months later when we observe the fall feasts consistently follow that pattern. The number of days from Nissan 1 through to the end of Tishri is always 207 days. The challenge is that according to Numbers 28:14, a year must consist of a series of complete months. If you multiply 12 months by the average number of 29.5 days per month, you will come up with a total of 354 days which is 11¼ days short of a solar year, which is 365¼ days. To make up the difference, you can only add another whole month so the issue is, we can't add partial months. You can't just add those 11 days and say "Well, we'll just catch those up." because God expects things to be done on a monthly basis.

In calculating the Hebrew calendar there are two processes for making the necessary adjustments needed to synchronize the months to the solar year. The processes are:

1. A consistent methodology for synchronizing leap years.

2. A consistent methodology for fine tuning additional astronomical adjustments. This is done systematically by what are called the "Rules of Postponement.

Everyone who creates a method for an annual calendar must factor at least an average of complete months end of the year. The year is required to be made up of months, just like the solar calendar, the lunar-solar calendar also makes up the difference by using averages. The Gregorian calendar makes the averaging adjustments every four years which we just saw, with a leap year followed by further adjustments based on 100, 400 and 4000-year increments. The Hebrew calendar makes all of the average adjustments over a 19-year period. Every 19 years contains 235 months. There are 12 common years and 7 leap years. 12 + 7 = 19. A common year is 12 months and a leap year is 13 months. In a 19-year period, just using lunar months as I have described as averaging about 29.5 days, the lunar-solar varies from the solar calendar by about 7 days. Applying the four postponement rules that are the second set of processes for making synchronization adjustments brings that number down, on average, to about half a day to a couple of days.

As you can tell, the lunar-solar calendar is complicated. I have read many articles and papers concerning the Hebrew calendar. I do not recall anyone saying that a lunar-solar calendar can be exactly reconciled to true astronomical calculations. One author claimed that the discrepancies between the astronomical values and the Hebrew calendar, over a 14,000-year period, amounts to one day. I suspect he probably means about one day. Getting down to that one day over 14,000-year period means that there will be a lot of variations based on averages over any given 19-year cycle. Reconciling all the differences—all the different factors—to come to an exact number is impossible.

In my opinion, God made it that way for our edification and for our benefit. In the final analysis it comes down to who has the authority to establish the calendar for the purpose of scheduling Holy Days each year.

The Pacific Church of God uses the calculated Hebrew calendar, systems that were published by the Sanhedrin before it's disillusioning from a governing body. We use that calendar for the scheduling of our observances of the annual Holy Days. A calendar does not schedule our Holy Days. It is the structure by which we apply God's instructions for the timing of our Holy Day observances. I'm sure many of us at various times have researched and questioned the legitimacy of the calculated Hebrew calendar. I think questioning and rechecking through prayer and study is important. Hopefully I have provided some affirmation for you today.

There is a Bible event that until I was studying for this message, I had not realized appears to confirm the existence of the calculated Hebrew Bible with postponements. The number of days in the Hebrew calendar for a common year—we have about three visual props I wanted to try today—the months are listed in the legal calendar sequence. The legal calendar starts with Tishri 1 which is the date where all calculations are made. Tishri is where all the Holy Day calculations are made from there. As you notice, there are three types of years.

On the top I have those listed as deficient year, regular year and complete year.

> *A deficient year has 353 days.*

> *A regular year has 354 days.*

> *A complete year has 355 days.*

That's three options and now you throw in a leap year. A leap year adds 30 days to that and so you have 383 days in a leap year or 384 or 385 days. The key factor that I want you to see is the civil year that starts with Tishri 1 and goes 12 or 13 months because it's a lunar calendar. Adar 1—and you can see that's about 6th down appears and disappears depending on, if it's a leap year. If it's a leap year Adar 1 comes in and it's 30 days and is always 30 days. It goes before the last month of the year which is called Adar or in a leap year it's Adar 2. That's the same month. Again, I realize it's complicated. Adar 1 is the leap year month. It does not exist in common years. The postponement months are Cheshvan and Kislev. Cheshvan and Kislev are the next two months—so months 2 and 3. This is interesting, you'll see the deficient year that Cheshvan and Kislev can be 29 days, hence it's a little short—a deficient year. In a regular year, one of them is 29 days and the other one is 30 days. But in a complete year they are both 30 days. So that year comes up in a common year as 355 days or in a leap year as 385 days.

The common years can have either 353 for a deficient year, 354 for a regular year and 355 days for a complete year. The leap year, same thing—add the 30 days for 383,

384, or 385. That would be for the 385, a complete leap year. Or a regular leap year or a deficient leap year. There are some other names—deficient, regular, there are about 3 or 4 different options. This is what I picked.

The civil year, like the Gregorian year starts January 1st. For the Hebrew calendar the year starts on Tishri 1 which we just mentioned. The Holy Day or Ecclesiastical year spans over 2 calendar years. The Ecclesiastical year starts in one year and completes the next year during the month of Tishri. Tishri is the start of the next year. When we figure in the calendar the Holy Days, that is our seventh month. So, a comparable example, we're all familiar with the normal school year. The normal school year usually starts in August or September of one year and ends the following year in May or June. We call that time the school year. In a similar manner, the Holy Day year starts in one year and ends in the next. Another example might be a fiscal year that matches the seasonal business cycle of a business. People who are focusing on Halloween might have a different business cycle than a person who is focusing on Christmas or being a farmer.

On Tishri 1, another thing to remember is that's when the year increments. On Tishri 1 that's what we call the 7th month of the Holy Day calendar. So, at the top you have the 5784 and that's a deficient leap year. A deficient leap year is going to be 383 days. Now this year 5784, we kept Passover on April 22nd. On Tuesday we did Unleavened Bread. The wave sheaf is in there because that's when we calculate Pentecost from—the last day of Unleavened Bread. In 5785 will start a complete year—it just happens it's a complete year—will start on the first day of Tishri which is the Feast of Trumpets which will be Thursday October 3rd. Atonement will be Saturday October 12th and the Feast of Tabernacles and so on. So, these are calculated based upon Tishri 1. For example, to calculate from these Holy Days that we just kept in 5784, we figure out what the date is in 5785 for Tishri 1 and then we subtract the days to get our dates for Passover and Unleavened Bread. So, subtracting 164 days from 5785, Tishri 1. For the first day of Unleavened Bread we subtract 163 days, 154 days for the last day of Unleavened Bread. Pentecost, we figure that from the first Sunday after Passover and count 50 days from there up to Pentecost. Tishri 1 we calculate—based on the Hebrew calculated calendar, authorized and published by the Sanhedrin and Hillel family. From there, going forward in the first month of the year or the 7th month of the Holy Day year, you add 9 days and that gives you Atonement and then 14 days and 21 days for Tabernacles and the Last Great Day. As you can see, it's complicated. But the process is straightforward. All that has to be done is to follow the rules of the system.

In Genesis 5 we see the genealogy of Noah and Adam. From Genesis 5 we can calculate the number of years to the flood by adding the ages of the fathers listed when their sons were begotten as it says in English. While we are looking at this, turn to Genesis 7. As we see down the list, Adam was 130 years old when he begot Seth. He was 105 when he had Enosh, 70 was Cainan, Mahalalel was 65 and I have the verses listed, verse 3, 6, 12, 9, 15, 18, down to Noah. With Noah, in verse 32 it says that when he was 500 years old he had Sham, Ham and Japheth. If you turn to Genesis 7:11, you'll see that in the 600th year of Noah's life, when he had had Sham, Ham, and

Japheth he was 500 years old. Now he is 600 years old. So, an additional 100 years has passed. By adding the ages of their fathers when their sons were born or begotten—whatever that word means in Hebrew—plus an additional 100 years, you have a Hebrew year of 1656. Continuing in the scripture.

> **Genesis 7:11** *… in the second month, the seventeenth day of the month, on that day all the fountains of the great deep were broken up, and the windows of heaven were opened.* (NKJV)

In the year 1656, on the 47th day—the end of the year—the flood started. That means in that year there were 46 days before the flood. Skipping down to verse 24.

> *24) And the waters prevailed on the earth one hundred and fifty days.* (NKJV)

Moving to chapter 8:3-4.

> **Genesis 8:3** *And the waters receded continually from the earth. At the end of the hundred and fifty days the waters decreased.*
> *4) Then the ark rested in the seventh month, the seventeenth day of the month, on the mountains of Ararat.* (NKJV)

The 17th day of the 7th month—end of the year—is equal to 196 days of the year. Subtracting 46 days from before the flood from the 196 you have 150 days. The only possible way the 17th day of the 7th month can be the 196th day of the year is if the year is a complete leap year. A complete leap year requires all possible postponements and the addition of an additional 30-day month—the month of Adar 1. The Hebrew year, 1656 is a complete leap year by the reckoning of the calculated Hebrew calendar. No one made a record of the time frames during the flood. Those records are valuable today in their support of the consistency of the calculated Hebrew calendar from ancient times. Turn over to Psalm 133. In conclusion, I want to say that I have tried to show through using the record of scripture, strong evidence that supports the practice of the Pacific Church of God in the use of the calculated Hebrew calendar for scheduling adherence to God's commanded assemblies. Also, for the sake of time, I have emphasized the consistency of the record of scripture for the authority of the Sanhedrin for an officially calculated Hebrew calendar. I do believe that consistency exists. Many of us believe that the existence of Israel as a nation state today is the result of God's promises recorded in biblical prophecy. I find it interesting that on May 15 1948 when declaring the establishment of a Jewish state in Arat's Israel to be known as the state of Israel, they recorded the date as the eve of Sabbath the 6th Iyar 5708. They used a date from the calculated Hebrew calendar as their official date for forming a new nation. I do not know if it's significant—probably not—but it also happens to be a complete leap year. The official calendar for the modern state of Israel—the tribe of Judah—is the Hebrew calculated calendar released by the Sanhedrin. It is still used today by God's people. As brethren in Christ, if we meet on different days for what we consider God's commanded assemblies we will be challenged to maintain unity. Read in Psalms 133—I want to read the whole chapter.

Psalms 133:1 *Behold, how good and how pleasant it is For brethren to dwell together in unity!*
2) It is like the precious oil upon the head, Running down on the beard, The beard of Aaron, Running down on the edge of his garments.
3) It is like the dew of Hermon, Descending upon the mountains of Zion; For there the LORD commanded the blessing— Life forevermore. (NKJV)

Where do we put our trust? Do we depend on very capable, well-intentioned scholars and mathematicians that can by observation, research, and with intellectual ability produce viable and academically supportable calendar systems? Or do we look to a council of flawed individuals who were given authority by God Almighty through the seat of Moses and his council of 70. For me, I will take my chances on the flawed individuals that bore the mantel of authority given by God that was affirmed by Jesus.