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In Loving Memory

of

Dr. Charles V. Dorothy

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We are grateful to those who have contributed to the support of this journal. The donations that we received have not only made it possible for us to continue publishing the Report but also to begin to publish over 50 years of Biblical research on our new Internet *SkyDrive Archival System*. This entire body of research is being provided free of charge to help our brethren grow in the knowledge of God's Word and avoid being led astray by false doctrines.

If you would like to contribute to the work of service that my wife and I are providing for our brethren (and future brethren) around the world, please send your donation to Carl D. Franklin, 58775 Klumbis Road, Dowagiac, Michigan 49047-9779.

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Introductory Remarks

Issue 29

August 31, 2014

Dear friends,

The false teaching that the calculations of the Hebrew Calendar are a product of Rabbinical Judaism is again gaining ground, persuading some who keep the annual holy days of God to reject the Hebrew Calendar and place their faith in visual observation of the new moon.

Gainsayers over the years have argued that there is no Biblical record of a calculated calendar. They point to Exodus 12 to support their belief that the calendar of ancient Israel was based on observation of the new moon. To the contrary, the Scriptures do not support the interpretation of the word “observe” in Exodus 12:2 as visual sighting. The Hebrew verb that is translated “observe” in Exodus 12 as used throughout the Old Testament specifically refers to keeping the feast days that God has ordained. Accordingly, God’s command in Exodus 12:2 is followed by instructions for observing the feasts of the first month.

While the English word “observe” may refer to seeing with the eyes, the Hebrew verb that is used in Exodus 12:2 does not. The Hebrew text uses an entirely different word for observing with the eyes. Those who use this English definition to interpret Exodus 12:2 are promoting a grievous heresy.

There is not one passage in the Old Testament that supports a calendar based on visual observation. Contrary to the claims of gainsayers, the calendar that God delivered to Israel was based on calculation. This calendar was ordained by God at the creation of the world and was brought through the Flood by Noah.

Support for a calculated calendar can be found in a number of passages that give specific dates of events. These chronological records confirm that the calculations of this calendar included intercalation and postponement in the same manner as the Hebrew Calendar of today. This is the calendar that God delivered to Israel for observing His feasts.

In an endeavor to contend for the faith once delivered, I have compiled evidence tracing the calculation of the calendar back to the earliest times in the history of mankind—many generations before the birth of Judah, father of the Jews, and several generations before the birth of Eber, father of the Hebrews. This compilation of Biblical and historical records verifies the calculations of the Hebrew Calendar over thousands of years, demonstrating that the calendar that we use today to determine God's Appointed Times has not changed since the days of Noah. The chronology of the Flood in the book of Genesis is evidence of the practice of intercalation and the use of the rules of postponement more than 2500 years before the time of Hillel II, who is presumed by some to have contrived these calculations.

The Biblical and historical records that I have compiled were published over a period of many centuries. These records will be presented in chronological order in the next two issues of the Report, beginning with the Flood in the days of Noah (2369 BC) and extending down through the centuries to 1940 AD—a period of 4309 years.

It is my earnest hope that this material will stir those who are strong in the faith to reach out to their brethren who are being drawn away by false teachings. The exhortation in the epistle of Jude is especially urgent for us at the present time.

In Christian love,
Carl D. Franklin

NOTE: All Hebrew Calendar dates in this issue are from the Calculated Hebrew Calendar developed and programmed by Carl D. Franklin and Alan Ruth. This project was funded by the *Christian Biblical Church of God*. The calendar may be accessed on the CBCG website by **Ctrl-Left Clicking** on the following link: [Biblical Holy Day Calendar 1.0 - Christian Biblical Church of God](#). Feel free to contact me if you experience problems running this automated calendar on your computer.

An Overview of the Biblical, Historical and Archaeological Evidence Presented in this Issue

Exhibit 1—This Biblical evidence, published in Issue 5 of the *Theological Research Report*, verifies that the calendar Noah inherited and carried through the Flood (2369 BC) was calculated. The account of the Flood in the book of Genesis reveals that the length of the Flood was 385 days, which is possible only with intercalation and the application of the postponement rules.

Exhibit 2—This Biblical evidence dates to the year of the Exodus from Egypt (1486 BC) and is recorded in Exodus 12 and Psalm 81. The phrasing of these two passages, when interpreted in the light of the Hebrew text, demonstrates that the calendar of the children of Israel was calculated. The calculations of the calendar were delivered to Moses by God at the time of the Exodus and were committed to the Levitical priesthood. The priests used the average lunar cycle to calculate the Molad of Tishri and applied the rules of postponement to determine the date of Tishri 1. The months of the year were then calculated backward from Tishri 1 to Nisan 1 to set the dates of the holy days for the entire year.

Exhibit 3—This archaeological evidence is from Dynasty I of Babylon and is dated by Dr. Herman L. Hoeh to the reign of King David of Israel (1051-1011 BC). These ancient records bear witness to the intercalation of the Hebrew Calendar by preserving a contract dated to Adar 30. Adar, the 12th month of the Hebrew Calendar, has a fixed length of 29 days. It is Adar II, the 13th month of an intercalary year, that has 30 days.

Exhibit 4—This archaeological evidence dates to the 7th year of the Persian King Cyrus II, the Great (532 BC). In this evidence, Babylonian month names are used interchangeably with Hebrew month names, demonstrating that the Hebrew Calendar held equal status with the Babylonian Calendar. The assertion that the Hebrew Calendar is nothing more than the Babylonian Calendar “warmed over” is pure myth.

Exhibit 5—This archaeological evidence uncovered in ancient Babylonia, is dated to the 8th year of the Persian King Cyrus II, the Great (531 BC). The evidence, a legal contract, was discovered at the ancient Babylonian religious center Nippur. The dates that are recorded in this contract confirm that the Hebrew Calendar was intercalated and that the cycle of intercalation was the same as it is today. The contract spans a period of 60 years, demonstrating that the Hebrew Calendar was calculated far in advance.

Exhibit 6—This archaeological evidence dates to the time of the 2nd year of the Persian King Darius Hystaspes (519 BC). The book of Haggai records that the building of the temple began on the 24th day of Elul in that year. Since the month of Elul has 29 days, this was only six days before the Feast of Trumpets on Tishri 1. According to the calculations of the Hebrew Calendar, Elul 24 fell on Sunday and Elul 29 fell on Friday. This is significant because the Molad of Tishri occurred on that Friday at 5:31 PM Jerusalem time. According to Postponement Rule 2, this was too late in the day, and Tishri 1 was declared on the following day. If Tishri 1 had not been postponed, Elul 24 would have fallen one day earlier, placing it on the weekly Sabbath, and the building of the temple would not have begun on that day. The eyewitness testimony of the prophet Haggai and the calculations of the Hebrew Calendar are in full harmony.

Exhibit 7—This rabbinic tractate is one of many that make up the Babylonian Talmud. Tractate Mas. Sukkah 54b is a compilation of discussions that took place c. 300 AD. All but two or three of the rabbinic authorities who are cited had died many years previously. The discussions center on the application of Postponement Rule 1 and begin with the words of Rabbi Akiba, who taught at the temple in Jerusalem more than 300 years before Hillel II. This tractate demonstrates that Rule 1 was known among the Rabbinic community of Palestine and Babylonia long before Hillel II revealed the secrets of calculating the Hebrew Calendar.

Exhibit 1

2369 BC

The Calendar of Noah

The following article, previously published in Issue 5 of the *Theological Research Report* was written by Don Roth. In studying the Scriptural chronology of the Noachian Flood, he discovered that **the year of the Flood was 385 days in length. This year length is the maximum number of days that the Hebrew Calendar allows and occurs only when an intercalary month is added and the rules of postponement are applied.**

When I constructed a timeline of chronological records in the book of Genesis many years ago, I concluded that the year of the Flood took place during 2369 BC. When I checked Don's work against the Calculated Hebrew Calendar that was developed in recent years, the Hebrew Calendar verified that 2369 BC was indeed a year of 385 days. Don's analysis of the Flood account in Genesis 7 and 8 verifies the accuracy of the Hebrew Calendar and supports the calculations that produce a 385-day year.

Noah's Flood and God's Calendar

© *Don Roth*
August 26, 2008

In light of the recent unprecedented floods in the Midwestern United States, I decided to review the account of Noah's flood in Genesis 7 and 8. This study resulted in bringing to my attention the very detailed recording of the passage of time as the events of the Flood took place. These events are given to us as inspired by Christ, the Word, in a chronology of days and months through which God reveals a system for measuring time that parallels the present calculations of the Hebrew Calendar.

A number of assumptions have been made about how time was measured when the events in the book of Genesis took place, the most prominent being that a year was comprised of twelve 30-day months. According to this view, the forty-two months and the 1260 days that are prophesied in Revelation 11:2-3 are identical. It should be noted, however, that the 42 months of the prophecy in Revelation 11 represent the period of time of the treading down of the Holy City while the 1260 days represent the period of time that the two witnesses prophesy. Neither the assumption that there were originally only 30-day months nor the premise that the moon's orbit originally matched the yearly cycle of the sun is verifiable by this scripture.

Many believe that both of these conditions existed at the creation of the world but that through the passage of time and events the relationship of the sun and moon to the earth was altered, giving us the average lunar month of 29 days, 12 hours, 44 minutes, 3 and 1/3 seconds. However, a study of the Scriptural account of the Noachian Flood will demonstrate that the moon's orbit has never changed. The irregularity of its orbit does not allow a calendar with the same number of days in each year.

The rather wobbly orbit of the moon periodically requires the addition of one or two days to the year to keep the months aligned with the phases of the moon, and the length of the moon's orbit periodically requires the addition of a thirteenth month to the year to align the calendar with the solar seasons in order to keep the holy days of God at their appointed times. This intercalary month is necessitated by the yearly cycle of the sun, which is longer than the lunar cycle. All moon-based calendars, including those based on moon sighting, require some type of intercalation in order to prevent seasonal shifting.

In the Hebrew Calendar, the length of the year is regulated by an established intercalary cycle and by four mathematically-based rules of postponement. When neither intercalation nor postponement is needed, the year is composed of six 30-day months and six 29-day months, which makes a year of 354 days. However, many years have a greater number of days due to the need for intercalation or postponement to align the calendar with the actual positions of the sun and the moon. The necessity to adjust the calendar to the orbits of the sun and moon results in six different lengths of years: defective common years with 353 days, regular common years with 354 days, excessive common years with 355 days, defective leap years with 383 days, regular leap years with 384 days, and excessive leap years with 385 days.

Knowing the number of days in a specific year enables us to determine whether or not intercalation or postponement was needed that year. Some years may require both processes in order to keep the calendar in time with the movements of the sun and moon. The excessive leap year of 385 days occurs only when both intercalation and the rules of postponement are applied.

This fact has great bearing on the chronology of days and months in the Scriptural account of the Noachian Flood. If the chronological record reveals that the year of the Flood was 385 days in length, it is unequivocally established as an excessive leap year and demonstrates that the calculations of the Hebrew Calendar were in effect many centuries before Moses received them from God. Let us examine the Scriptural account of the Flood.

Genesis 7:11: *“In the six hundredth year of Noah’s life, 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.”* This verse gives us the starting day of the Deluge: the seventeenth day of Iyar, the second month. The fact that the Noachian Flood began in the second month of the year tells us that it was the season of spring.

Some may question this statement in the belief that the seventh month, Tishri, should start the year. They may even claim that Adam and Eve had to have been created in the fall of the year in order for them to have food to eat. But the garden was tropical, or semi-tropical, producing food throughout the year. Moreover, the calendar that God delivered to Moses clearly began in the spring of the year.

Exodus 12:2: *“This month shall be your beginning of months; it shall be the first month of the year to you.”* God gave Moses specific instructions for determining the beginning of the year. This is the first of many scriptures designating the time that God ordained to start the liturgical year.

It should be noted that at this time Moses was not in Jerusalem but in the land of Goshen. According to some, Jerusalem is the only geographical area from which to sight the new moon of the first month. In addition, when God gave His instructions to Moses, the first month had already begun. As the new moon had already arrived, it was too late for Moses to determine the beginning of the year by observation. Instead, Moses received instructions from God for determining the months of the year by calculation.

According to the calculations of the Hebrew Calendar, the first month of the year is composed of 30 days. The account of the Flood states that the forty days of rain started on the seventeenth day of the second month, revealing the passage of 46 days from the first day of the year to the beginning of the Flood. Genesis 7:11: *“In the six hundredth year of Noah’s life, 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.”*

The breaking up of the fountains of the deep depicts massive earthquakes releasing immeasurable quantities of water, producing incredible tsunamis and storms of violence that modern man has never witnessed. No man-made shelter could have withstood the enormity of the violence that passed over the face of the earth. Verse 12: *“And the rain was on the earth forty days and forty nights.”*

This verse records that the initial length of the outpouring of water was forty days, and Genesis 7:17 confirms it: *“Now the flood was on the earth forty days. The waters increased and lifted up the ark, and it rose high above the earth.”*

Note that it was the accumulation of water during the forty days that resulted in lifting the Ark high above the earth. The description in Verses 17 through 23 is relating what took place as a result of the forty days of rain and the breaking up of the fountains of the deep. At the end of forty days, the Ark was fifteen cubits above the highest mountain (v. 20).

Genesis 7:24: *“And the waters prevailed on the earth one hundred and fifty days.”* The basic meaning of the Hebrew word that is translated “prevailed” is to be “strong, mighty” (Brown, Driver and Briggs, p. 149). The waters did not prevail over the earth on the first or second day of the Flood. They prevailed at the end of the forty days when the Flood reached its maximum depth, making the one hundred and fifty days of prevailing consecutive to the forty days of rain. Both periods of time need to be included in order to determine the total length of time of the events of the Flood.

As recorded in the Scriptural account, God did not allow the level of the Flood waters to drop until they had prevailed for one hundred and fifty days. He prevented this by sending additional rain and by bringing up waters from the fountains of the deep. God caused the waters to continue for one hundred and fifty days to maintain the level at fifteen cubits above the highest mountains. This ensured the death of all air-breathing life on land.

Genesis 8:1-3: "Then God remembered Noah, and every living thing, and all the animals that were with him in the ark. And God made a wind to pass over the earth, and the waters subsided. The fountains of the deep and the windows of heaven were also stopped, and the rain from heaven was restrained. And the waters receded continually from the earth. At the end of the one hundred and fifty days the waters decreased."

These verses describe the process by which God began to dry up the Flood waters. This process continued for an extended period of time as demonstrated by the word translated "decreased" or "abated" ²⁶³⁷ at the end of Verse 3. This word is used in the account to describe the removal of the waters from the flooded earth. Gesenius gives the following definition of this word: "(1) To be devoid of anything, to lack, to be without, followed by an accusative." As we continue to examine the Scriptural account, we will learn the exact length of time that it took for the waters of the Flood to recede and the ground to become dry.

Genesis 8:4: *"Then the ark rested in the seventh month, the seventeenth day of the month, on the mountains of Ararat."* This verse gives the impression that the Ark settled down on the mountains of Ararat because the waters had started to decrease. However, for the Ark to rest on the ground would have required the depth of the water to have fallen considerably. The highest mountains were covered to a depth of fifteen cubits—not a great depth until you consider that fifteen cubits of water above Mt. Everest at 29,000 feet would make a depth of more than two miles above Mt. Ararat at 17,000 feet.

In addition, consider that the date given for this occurrence, the seventh month, the seventeenth day, was only 194 days into the six hundredth year (Nisan 1 through Tishri 17). However, the Scriptural account records that 236 days of that year had passed before God started to dry up the Flood waters (46 plus 40 plus 150 equals 236). If you figure that the forty days of rain were part of the 150 days, the total would still be 196 days before the waters began to decrease. It was therefore impossible for the Ark to have lodged on the ground on the seventeenth day of the seventh month as the waters had not yet begun to decrease.

What then is the meaning of the word “rested” in Genesis 8:4? The word “rested”⁵¹¹⁷ is describing a stopping of movement or activity. The same Hebrew word is used in Exodus 20:11: “*God rested on the seventh day.*” His activity or movement ended.

The use of this word in Genesis 8:4 tells us that the Ark remained immobile at a specific location. It was no longer rolling and plunging through churning, turbulent Flood waters. The winds that had driven it ceased to blow, the waves subsided, and the waters surrounding the Ark became calm and placid. The Ark came to a stop as if God had anchored it above the tops of the mountains. God maintained the location of the Ark at Mt. Ararat not because it was physically stuck but because God wanted it there. It did not settle upon the ground until after the waters had fully abated from their two-mile depth above Mt. Ararat.

The Scriptural account reveals that the decreasing of the waters took place gradually over the remaining months of the year. To determine the total passage of time in the account of the Flood, it is necessary to know the exact date that the last of the waters dried up. This date is recorded in Genesis 8:13: “*And it came to pass in the six hundredth and first year, in the first month, the first day of the month, that the waters were dried up from the earth; and Noah removed the covering of the ark and looked, and indeed the surface of the ground was dry.*” This verse tells us that the waters were dried up on the first day of the six hundredth and first year, and Noah’s removal of the covering confirms this fact. This state of dryness was reached exactly one hundred and fifty days from the time that the waters had ceased to prevail.

It should be noted at this point that counting the initial forty days of the Flood as part of the one hundred and fifty days of the waters prevailing would make the six hundredth year only 345 days in length (46 days to the beginning of the Flood plus 150 days of the waters prevailing plus 150 days of the waters decreasing equals 346 days, minus 1 day for the first day of the 601st year equals 345 days). There is no yearly cycle, either calculated or observed, that would fit a 345-day year.

This fact confirms that the 40 days of rain and the 150 days of the waters prevailing were two separate periods of time, just as the 150 days of the waters abating were separate from the 150 days of the waters prevailing. These three periods of time extended from the second month of the six hundredth year of Noah's life to the

first month of his six hundredth and first year. Genesis 8:13: *“And it came to pass in the six hundredth and first year, in the first month, the first day of the month, that the waters were dried up from the earth; and Noah removed the covering of the ark and looked, and indeed the surface of the ground was dry.”*

This verse states that on the first day of the first month all the Flood waters were gone and the earth was dry, but the Scriptural account extends beyond this point. Genesis 8:14: *“And in the second month, on the twenty-seventh day of the month, the earth was dried.”* This verse may seem to contradict the preceding verse, but the word used in Verse 13 to describe the dryness of the earth does not have the same meaning as the word used in Verse 14. The Hebrew word that is translated “dried” and “dry” ²⁷¹⁷ in Verse 13 is *chareb*. However, the Hebrew word translated “dry” ³⁰⁰¹ in Verse 14 is *yabesh*. Gesenius notes that these two Hebrew words represent different levels of dryness. The first denotes an absence of water, and the second represents a condition more akin to that of a lack of moisture, or withered. Verse 13 depicts a condition of no standing water whereas Verse 14 is describing dry soil that is no longer saturated. This stage of dryness was reached 56 days after the Flood waters dried up.

The account records that Noah remained in the Ark until the earth reached this second stage of dryness. There was good reason for waiting to leave the Ark until the soil had dried. If Noah had released the animals before the ground was dry, the elephants and other large animals might have gotten bogged down and entrapped in mud.

After the withdrawal of the Flood waters and drying of the ground, the earth was prepared to receive the survivors of the Flood. They had entered the Ark on the seventeenth day of the second month in the six hundredth year of Noah's life. Below is a computation of the number of days that passed in the year of the Flood.

| Scripture | Event | Day Count |
|---|---|------------------|
| Gen. 7:11 | Flood begins on 17 th day of 2 nd month of Iyar (30 days in the 1 st month of Nisan, 2369 BC plus 16 days in Iyar the 2 nd month) | 46 days |
| Gen. 7:12 | Rain for 40 days and 40 nights | 40 days |
| Gen. 7:24 | Waters prevail | 150 days |
| Gen. 8:3 | Waters abate | 150 days |
| Day Count Total: | | 386 days |
| Gen. 8:13 | Water dried on first day of the next year (First day of new liturgical year = Nisan 1, 2368 BC) | -1 day |
| Total day count for flood year-Nisan to Nisan: | | 385 days |

The chronological facts that are recorded in the account in the book of Genesis clearly establish a period of 385 days in the year of the Noachian Flood (Nisan 1 2369 BC to Nisan 1 2368 BC). This year length is significant because it is the exact number of days required for an excessive leap year in the Hebrew Calendar. This remarkable account of the Flood, which God inspired to be recorded in his Word, is indisputable evidence that the Hebrew Calendar bears His stamp of approval. There can be no doubt that the calculations of the Hebrew Calendar have been the basis of God's true calendar from the beginning.

Exhibit 2

1486 BC

The Calendar of Moses

Biblical Evidence from Exodus 12 and Psalms 81 of the Intercalary Cycle and the Application of Postponement Rule 1

When God sent Moses to lead His people out of Egypt, He began to restore the knowledge of His appointed times. Exodus 12 records His instructions for the feasts of the first month:

And the LORD spoke unto Moses and Aaron in the land of Egypt, saying, “This month shall be unto you the beginning of months: it shall be the first month of the year to you” (vs. 1-2).

The following verses in Exodus 12 give instructions for the feasts of the first month—the Passover on the 14th day and the Feast of Unleavened Bread on the 15th through the 21st day. These are the only feasts that are recorded in Exodus 12. Although the other feast days are not listed in Exodus 12, God gave Moses instructions for them also. Psalm 81 testifies that God delivered instructions for all His appointed times when He brought Israel out of Egypt:

Blow up the trumpet in the **new moon**, in **the time appointed**, on our solemn feast day. For this was a statute for Israel, and a law of the God of Jacob. **This He ordained** in Joseph **for a testimony**... (vs. 3-5).

Verse 3 is referring to the new moon of the seventh month. This is the only new moon of the year that God appointed as a feast day. The New King James Version of Psalm 81:3 gives the complete meaning of the Hebrew text, confirming that this verse is speaking of the seventh month:

Blow the trumpet at the time of the New Moon, at the full moon, on our solemn feast day. For this *is* a statute for Israel, A law of the God of Jacob. This He established in Joseph *as* a testimony...

There is no question that Psalm 81 is referring to the seventh month. No other month of the year has a commanded feast on both the new moon and the full moon. The seventh month is the last month of the annual holy day season. Thus Psalm 81:3 confirms that God delivered a complete calendar for observing His appointed times when the Exodus took place.

The Hebrew word that is translated “new moon” in Psalm 81:3 is *chodesh*. This same Hebrew word is translated “month” in Exodus 12. *Chodesh* is used numerous times in the Old Testament and may be translated either “month” or “moon” depending on the context in which it is used. Its literal meaning is “new moon,” which is the first day of each month in the Hebrew Calendar.

The fact that the Hebrew text uses the same words for “new moon” and “month” gives us insight into the calendar that God delivered to His people. The months of this calendar are set by the lunar cycle—not by the equinoxes and solstices of the solar cycle.

Because the lunar cycle varies from month to month due to irregularities in the moon’s orbit, the Hebrew Calendar uses the *average* length of the lunar cycle to calculate the months. The average lunar cycle is 29.53 days (rounded off to the nearest one hundredth). Since months cannot consist of half days, the months of the Hebrew Calendar are alternately assigned 29 and 30 days. This sequence of 29 and 30 days works very well to keep the months aligned with the new moons.

Based on the average lunar cycle of 29.53 days, a 12-month year will have 354.36 days (12 x 29.53). As the monthly average of 29.53 days is attained by a combination of 29 and 30-day months, so the yearly average of 354.36 days is attained by a combination of 353, 354 and 355-day years.

These three year lengths keep the calendar aligned with the movement of the moon, but they do not keep the calendar aligned with the seasons of the solar cycle. Lunar years that are 353 to 355 days in length are 10 to 12 days shorter than solar years.

If the Hebrew Calendar consisted only of 12-month years, all the annual feasts of God would drift farther and farther from their correct seasons. To prevent this from happening, the calendar uses intercalation. Intercalation is the process of adding a 13th month every 2 or 3 years. The result is a combination of 12-month “common” years with 353 to 355 days and 13-month “leap” years with 383 to 385 days. There is a fixed cycle of 12 common years and 7 intercalary years in each period of 19 years, producing an average of 365 days per year.

Adding a 13th month to the end of a year does not change the length of the holy day season, which begins in the first month of the following year. In every year, there are 177 days from the new moon of the first month to the new moon of the seventh month. The new moon of the seventh month is the pivotal point for calculating the holy days for the year. The Hebrew Calendar calculates this moon first, and then counts back to the new moon of the first month.

This procedure is supported by the decree of God in Psalm 81 concerning the new moon of the seventh month. The word “testimony” in Verse 5 is translated from the Hebrew *aydooeth* and is elsewhere used of the Ten Commandments, which were inscribed in tables of stone by the hand of God. In like manner, the calendar that God delivered to Moses was a written decree for calculating His appointed times. In ancient Israel, the blowing of the trumpet on the first day of the seventh month was a proclamation of the “New Moon of the Year”—so named because it determines the beginning of all the months of the year (Franklin, “Understanding the Hebrew Calendar”).

Exhibit 3

1050-1011 BC

The Calendar During the Reign of King David

Evidence of Intercalation during the First Dynasty of Babylon

Archival records from the First Dynasty of Babylon demonstrate that the Hebrew Calendar was not based on observation but on calculation utilizing the intercalary cycle in the same manner as today. According to Dr. Herman L. Hoeh, the First Dynasty of Babylon ruled at the time of King David. However, many scholars date Dynasty I long before David's time—as far back as the time of Abraham or even earlier.

The most famous king of the First Dynasty was Hammurabi, who was sixth in the dynastic line of kings. Whether the following cuneiform record is from his reign or another king's, we do not know, as the cuneiform text does not include the name or year of any king. It records a legal contract extending for a nine-month period from Siwan (Sivan) 21 to Adar 30. The fact that the contract was to end on Adar 30 is significant because the Hebrew month Adar has only 29 days. However, intercalary years have a 13th month named Adar II, which has 30 days.

This cuneiform record testifies to the intercalation of the Hebrew Calendar many generations before the people of Judah were carried captive to Babylon. There were no rabbis in the First Dynasty of Babylon to meddle with the calendar that God had delivered to Moses at the time of the Exodus. We can rest assured that the practice of intercalation was not instituted by any rabbinical authority.

An English translation of this record is published in *The Babylonian Expedition of The University of Pennsylvania, Series A: Cuneiform Texts edited by H.V. Hilprecht, Volume VI, Part 2, Legal and Business Documents from the time of The First Dynasty of Babylon, Chiefly from Nippur by Arno Poebel*. The tablet that records Adar 30 is translated on Page 43. Great effort by brilliant men and women was exerted to literally unearth, translate and publish this record from the ancient past. I have reproduced the title pages of the publication in which this record is found to give you a feel for the time during which this text was published (See Exhibits 1 & 2 at end of Report for facsimiles of this 1909 publication). You will find a translation of the text on Page 8 of this Report.

I have reviewed the entire publication listed above, and the cuneiform tablet that records the Hebrew months of Sivan and Adar is unique. No other Hebrew months are listed in the tablets that were unearthed. No Babylonian months are even listed as most events are dated by extraordinary accomplishments of the reigning king.

The inscription of the month names Sivan and Adar in a cuneiform tablet of the first Dynasty of Babylon is remarkable in consideration of the fact that the Babylonian Calendar of that period did not use these names. The month names that were in standard usage in Babylon at that time bear no resemblance to these month names. The names Sivan and Adar, and all other month names of the Hebrew Calendar, closely resemble the names of the Akkadian months and are believed to have been derived from the Akkadian. For example, the Hebrew month Adar is almost identical to the Akkadian Addaru. In contrast, the kings of Dynasty I of Babylon used the month names of the Nippur Calendar, which were Sumerian. The first month of the Sumerian Nippur Calendar was BARAG.ZAR.GAR and the last month was SE.GUR₁₀KU₅. These month names were in standard use throughout the Old Babylonian period.

Although the Akkadian month names did not become standard until the Middle Babylonian Period, they were used in local areas of Babylonia during Dynasty I. The concurrent use of the Sumerian and Akkadian month names in early Babylonian times is described by Dr. Samuel Greengus of Hebrew Union College—Jewish Institute of Religion, Israel. The information is an excerpt from Dr. Greengus' article "New Evidence on the Old Babylonian Calendar and Real Estate Documents from Sippar," which was published in the *Journal of the American Oriental Society*, 2001, Volume 121, Number 2, pages 257-267.

The Sumerian Nippur calendar, which utilizes the series of month names beginning with BARAG. ZAG.GAR and ending with SE.GUR₁₀.KU₅, **became standard in Babylonia during the Old Babylonian period.** But the familiar equivalent series of Akkadian month names, beginning with Nisannu and ending with A(d)daru, did not emerge until the Middle Babylonian period. **During the Old Babylonian period, at Sippar and elsewhere, documents are dated by local calendars which had different sets of Akkadian month names.** Recent publications of Old Babylonian real estate documents from Sippar yield important new evidence for the local month names, their place in the yearly calendar, and their equivalence with the standard, Sumerian Nippur series.

In view of the historical development of the Babylonian Calendar, it is evident that the names of the Hebrew months were not acquired from the Babylonians but were an integral part of the Hebrew Calendar many centuries before the Babylonians used them. It is a blatant fallacy to teach that the Hebrew month names are of Babylonian origin and were adopted by the Israelites during their captivity in Babylon and therefore invalid. It is equally fallacious to claim that the practice of intercalation originated in Babylon as the early Babylonian Calendar was acquired from the Sumerians. Moreover, it is historically documented that intercalation was employed by all ancient calendars that based the months of the year on the lunar cycle.

The following material concerning the calendars of the Early Babylonian Period is excerpted from a paper I wrote in 2002 entitled *Historical Evidence of the 19-Year Intercalation Cycle*, pp. 8-10. The excerpt below begins with a citation from the publication *Early Civilizations of the Old World* (see reference at end of citation).

**Early Dynastic I-III
2900-2350 BC**

The first evidence of this refinement appears during the rule of Early Dynastic I-III. Cuneiform tablets of c. 2800 BC record that **the Sumerian astronomers of Nippur made use of the 19-year cycle to synchronize the lunar calendar with the seasons of the solar calendar.** This suggests that they had mastered the intercalation cycle of seven years out of nineteen to a very high level.

Although Nippur was a religious and cultural center for all the city-states of southern Mesopotamia, not all city-states adopted this calendar. Ancient records reveal various intercalation schemes. These calendars, while they differed in certain respects, all used the principle of intercalation.

While each city-state had its own calendar, the basis was common: from the end of the fourth millennium [3000 BC], a 12-month, 360-day year was used, a rationalization of natural lunistellar divisions (Englund 1988:122-123). The 360-day(u4) calendar was then a bureaucratic systemization...of the year (mu) into **12 synodical months (iti), each consisting of 29.53 days.** The resulting year of approximately 354 days consequently fell short of the 365 $\frac{1}{4}$ days of the tropical year (equinox to corresponding equinox), **so that an intercalation** of the so-called diri-month **was necessary, on average, every three years** [Englund 1988:123] (*Early Civilizations of the Old World*, s.v., "Exact and predictive sciences: arithmetic, geometry, astronomy and a calendar," p. 181).

In addition, **archaeological records of this calendar show that it was intercalated in seven of the years in a nineteen-year cycle.** However, the records that have been translated to date do not reveal which years were intercalated, nor do they reveal which months in these years were intercalated. Based on the subsequent history of the calendar, intercalation years may have been randomly chosen within certain parameters. The most likely month or months of intercalation would have been the sixth month and the twelfth month.

One further point must be made at this time. There is no record to date of when the 19-year cycles began. It is possible that the Nippurians matched or came close to matching the cycles of the later Babylonian calendar of Nebuchadnezzar II of the Bible. This opinion is based on an interesting 19-year cyclic connection between the solar calendar of Nabonassar and the luni-solar calendar of Babylonia. Any year of a Babylonian 19-year cycle can be obtained by dividing the year of the calendar of Nabonassar by 19. The remainder is the year of the Babylonian cycle (Franklin, *Historical Evidence of the 19-Year Intercalation Cycle*, pp. 8-9, 2002, Part I).

Although the practice of intercalation was employed in all calendars used by the Babylonians during the time of Dynasty 1, the month names Sivan and Adar were utilized only by the Hebrew Calendar. The name Adar is almost identical to the Akkadian month Addaru, but the scribe who recorded the two month names in the text of the cuneiform tablet did not use the Akkadian spelling. The spelling of the name Adar identifies the calendar of the scribe as exclusively Hebrew. Like all calendars of ancient Babylonia, the Hebrew Calendar was intercalated—or Adar 30 would not be inscribed in the tablet. The implications of this legal record are undeniable. **There could not have been a set date for Adar 30 without the calculation of the *Molad* of Tishri by the application of a fixed intercalary cycle and the rules of postponement.** Legal contracts, to be binding, must be written for specific periods and known calendar dates.

The evidence in the cuneiform tablet from the Old Babylonian period demonstrates that the Hebrew Calendar was calculated 500 years before the Babylonian Captivity. The fact that Hebrew month names were used to validate a legal contract during Dynasty I of Babylon also demonstrates that the calculated Hebrew Calendar was well established and recognized by the general population of Babylonia as accurate and reliable.

A transliteration and translation of the cuneiform document in which the month names Sivan and Adar are found is presented on the following page of this report. As stated previously, this material has been published in a book entitled *The Babylonian Expedition of The University of Pennsylvania, Series A: Cuneiform Texts*, edited by H.V. Hilprecht.

FROM THE TIME OF THE FIRST DYNASTY OF BABYLON.

43

IX. CONTRACTS OF HIRE (51).
 No. 51.

- A. *Y I-din-Ishtar*
 dumu Na-bi-^dShamash
 ki Na-bi-'Shamash-ta
 Y Lu-'Nin-si-an-na
 •*itu stg-a ud-21-ta*
 itu she-giir-kud ud-30-shu
 in-KU
- B. *d-bi \d-da-shu*
 1/8 + 2/30 a she-ta-a-an
 al-dg-e

Idin-Ishtar, the son of *Nabi-Shamash*, from *Nabi-Shamash Lu-Nin-si-anna* has hired (for the time) from **Siwan 21st to Adar 30th**. As his hire he shall pay 80 qa of grain every month.

A. The technical term is *in-KU*, *igur*, "he has hired." The duration of the hiring is indicated by -to-----*shu*.

B. Cf. the deeds of loan. The wages (technical term $d^1 = idu$), which in this instance do not represent a great amount, are probably paid at the end of the time of hiring, since a specified term is not mentioned (*Theological Research Report*, Volume 1, Issue 3, August 2008).

Exhibit 4

532 BC

The Calendar in the 7th Year of Cyrus II (the Great)

Archaeological Evidence that the Hebrew Calendar and the Babylonian Calendar were utilized Side-By-Side

A cuneiform record dated to the 7th year of Cyrus II (532 BC) provides additional information about the Babylonian calendar. In the translation presented below, notice that the month name is Ululu. This Babylonian month equates to the Hebrew month Elul. The variation in spelling is due to the different scribes who recorded these contracts from ancient Babylonia. When a Jewish scribe was employed, Hebrew month names were used. When a Babylonian scribe was employed, Babylonian month names were used.

Contract for the Sale of a Standing Crop, Seventh year of Cyrus, 532 B.C.

This contract belongs to a class intermediate between rental and the sale of land. Instead of either, the standing crop is sold.

From a cultivated field which is situated on the alley of Li'u-Bel, Itti-Marduk-balatu, the son of Nabu-akhi-iddin, the son of Egibi, has made a purchase from Tashmitum-damqat, daughter of Shuzubu, son of Shigua, and Nadin-aplu, the son of Rimut, son of Epish-Ilu. Itti-Marduk-balatu has counted the money, the price of the crop of that field for the seventh year of Cyrus, King of Babylon, king of countries, into the hands of Tashmitum-damqat and Nadin-aplu. (The names of two witnesses and a scribe then follow) **Babylon, Ululu thirteenth, the seventh year of Cyrus.** (*Theological Research Report*, Vol. 1, Issue 3, August 2008).

Exhibit 5

531 BC

The Calendar in the 8th Year of Cyrus II (the Great)

Archaeological Evidence of the 19-Year Intercalary Cycle, the Calculation of the Molad of Tishri and the Activation of Postponement Rule 1

At the Time of Daniel, Haggai, Nehemiah and Ezra

Evidence in cuneiform records from the reign of Cyrus II the Great confirms that the Hebrew Calendar has remained constant and unchanged for more than 2500 years. Most significant among the archaeological findings is a reference to the 8th year of Cyrus' rule over Babylon.

The 8th year of Cyrus's reign is recorded in a legal document written in cuneiform by a Jewish scribe at the ancient city of Sippar, Babylonia. Sippar was situated on the Euphrates River about 50 miles above the city of Babylon. This remarkable document was deposited to Beluballit, a Jewish notary of Sippar. It is significant in that it is not dated by the Babylonian or Persian calendars, but by the Hebrew Calendar. The fact that it is dated from the 28th day of the month Adar to the 30th day of Adar reveals that the year was an intercalary year. In intercalary years, a second Adar of 30 days is added before the regular month of Adar, which has 29 days. Both Adars fall immediately before the month of Nisan.

Knowing that the 8th year of Cyrus's reign was an intercalary year enables us to determine whether the intercalary cycle utilized by the Hebrew Calendar today was being used in the days of Ezra, Nehemiah and Daniel. The intercalary cycle is based on the 19-year cycle. Because the lunar calendar is 11 days shorter than the solar calendar each year, it is necessary to add an additional month every 2 to 3 years to keep the months of the lunar calendar synchronized with the solar seasons. Although the periodic addition of these intercalary months keeps the two calendars synchronized, the number of days in each lunar year differs from the solar year over a span of 19 years. At the end of each 19-year period, the last day of the lunar year coincides with the last day of the solar year. This fact makes it possible to determine the beginning and end of 19-year cycles at any time in history.

According to the Hebrew Calendar today, there are seven intercalary years in each 19-year cycle—years 3, 6, 8, 11, 14, 17 and 19. Determining which of the 19 years was the 8th year of Cyrus enables us to know whether the present intercalary cycle was in effect at that ancient time.

Cyrus II reigned as king of Babylon for nine years. His reign began in 539 BC, which was the twelfth year of a nineteen-year cycle. Counting forward from the twelfth year places the 8th year of Cyrus in 532 BC, which was the nineteenth year of the cycle (See Exhibit 4). This intercalary year matches the present intercalation cycle of the Hebrew Calendar. Thus the archaeological evidence demonstrates that the intercalary cycle of the Hebrew Calendar has not changed since the days of Ezra, Nehemiah and Daniel.

A translation of the contract which records the 30th day of Adar in the 8th year of Cyrus is presented below. Italicized comments before the actual documents are those of the translator (*Theological Research Report*, Volume 1, Issue 3, August 2008):

A Case of Battery, Breaking & Entering, and Robbery, Eighth year of Cyrus, 529 B.C.
[Actual date is Adar, 531 BC—CDF]

This document bears the names of four witnesses and a scribe; it is dated Adar twenty-eighth, eighth year of Cyrus. This was not the end of the matter, as the next tablet will show.

NABU-AKHI-UBALLIT, son of Shu-_____, the inspector of the city Shakhrin-_____, on the **twenty-eighth day of Adar, in the eighth year of Cyrus, King of Babylon**, king of countries, deposed to Bel-uballit, the notary of Sippar, saying: 'I took Nana-iddin, son of Bau-ulid, into my house, saying: 'Am I the brother of your father and the inspector of the city? Why have you raised your hand against me?' Ramman-sharra-usur, son of Nabu-ushezib; Lulgiya and Irba, his brothers; Kutka-ili, son of Bau-ulid; Bel-uballit, son of Bariki-ili; Bel-akhi-uqur, son of Ramman-ushallim; and Iqisha-apla, son of Shamash-sharra-usur, have broken open my door like demons; and from my house, when they had forced an entrance, they took one mana of my money.' The judges came and they saw the fracture (?) of the door and the rending of the threshold. Shamash-iddin, son of Ziriya, assembled the elders of the city, and then he placed Nana-iddin under bonds to Nabu-akhi-bullit, together with Nabu-iddin, son of Pir'a, Nabu-etir-nap-shati, son of Rimut, son of _____, Iqibu, son of Pir'a, son of the priest of Gula, Shamash-lama', son of Submadu, Bel-ushallim, son of Bel-akhi-iddin, son of Shigua, Nabu-ushezib, son of Nabu-ukin-akhi, Ramman-sharra-usur, son of Abu-nu-epish, _____, son of _____. (Their hands) against him they raised, (the door of his house) (they broke), into his house (they entered). (Under the law concerning the house) they are gui(lty). Shamash-iddin, son of Ziriya, when he was rigorously examining them concerning the house, declared, saying---also Ramman-sharra-usur, son of Nabu-ushezib, Nabu-uballit, son of Bariki-ili, Irba, son of Bau-ulid, Lulgia, son of Nabu-ushezib, Bel-akhi-uqur, son of Ramman-ushallim, declared, saying---also Kutka-ili, son of Bau-ulid, Bel-Uballit, son of Bariki-ili, declared, saying: 'I was there when we drew near the door.' Ramman-sharra-usur, son of Nabu-ushezib, also declared, saying: 'I _____. **Adar thirtieth, eighth year of (Cyrus, King of Babylon).**

Exhibit 6

519 BC

The Calendar of the Prophet Haggai

Biblical Evidence of the Postponement Rules in the Days of Daniel, Haggai, Nehemiah and Ezra

“And the LORD stirred up the spirit of Zerubbabel the son of Shealtiel, governor of Judah, and the spirit of Joshua the son of Josedech, the high priest, and the spirit of all the remnant of the people; and they came and did work in the house of the LORD of hosts, their God, in the four and twentieth day of the sixth month, in the second year of Darius the king” (Hag. 1:14-15).

Historians place the second year of Darius Hystaspes in 519 BC (April to April, Persian reckoning). Haggai dates the beginning of rebuilding the temple to the twenty-fourth day of the sixth month, which is the month Elul. Since Elul has 29 days, this was only six days before the declaration of Tishri 1, the first day of the seventh month. According to the calculations of the Hebrew Calendar, in 519 BC the 24th day of Elul fell on Sunday, September 9, and the Molad of Tishri at 5:31 PM JT on Friday, September 14.

Since the Molad did not fall before noon on Friday, as required by Postponement Rule 2, the declaration of Tishri 1 was made on the following day, Saturday, September 15. If Postponement Rule 2 had not been activated, Tishri 1 would have been declared on Friday, September 14, the day of the Molad, and Elul 24 would have fallen on September 8, the weekly Sabbath. The following chart illustrates the dating that would have occurred without postponement:

| | | |
|-----------|--------------|----------|
| Friday | September 14 | Tishri 1 |
| Thursday | September 13 | Elul 29 |
| Wednesday | September 12 | Elul 28 |
| Tuesday | September 11 | Elul 27 |
| Monday | September 10 | Elul 26 |
| Sunday | September 9 | Elul 25 |
| Sabbath | September 8 | Elul 24 |

This dating does not fit the account in the book of Haggai. The Scriptural account rules out any possibility of Elul 24 being a weekly Sabbath as Haggai records that the people spent that day working on the temple. Haggai's record of the building of the temple confirms that the calculations of the Hebrew Calendar were in effect when a remnant of the Jews returned from captivity. It also demonstrates that the need for postponement had to be determined before the months of the year were set as the length of Elul is fixed at 29 days.

Haggai's confirmation of the Hebrew Calendar carries even more weight when we understand that the declaration of Tishri 1 was made before the new crescent was visible. Astronomical calculations for the year 519 BC place the conjunction of the moon *after* the Molad, which fell at 5:31 PM (JT) on Friday evening. Since the new crescent does not become visible until at least 17.2 hours after the astronomical conjunction, there was no possibility of sighting the new crescent until after the day had been declared. (Blevins-Franklin, "The Feast of Trumpets 2000 AD", p. 18).

Exhibit 7

50-135 AD

The Calendar in the Days of the Apostles

A Detailed Analysis of Talmudic Tractate - Mas. Sukkah 54b

Discussion of Postponement Rule 1 by Rabbinic Authorities

R. Akiba Also: Akiva ben Joseph (tan.)—c. (circa) 50–135 AD

R. Ishmael b. Elisha (100-150 AD)

R. Meir (150-200 AD)

Rab (Rebbi) Judah or Rabbenu ha-Kadosh (150-200 AD)

R. Simeon b. Pazi (Pazzi) (250-300 AD)

R. Zera or Ze'eira (c. 300 AD)

R. Safra (300-350 AD)

**R. Johanan
Rab in Babylon**

Please Note: Rabbi Friedman's comments are in brackets of this type []

Tractate Footnotes and Carl Franklin's comments are in brackets of this type { }

If [the omission is to be justified] on account of the omission of the eve of the Passover, [the latter, it may be pointed out], is no omission, for this statement ¹ is made according to ² **R. Judah** who stated, Never in the life of the third group did they reach the verse, I love the Lord, for he heareth my voice, ³ since the people composing the group were few in number. ⁴ But ⁵ did you not say that the earlier part of our Mishnah is not in agreement with **R. Judah**? ⁶

Is it not possible that our Tanna [**rabbi Akiba**] agrees with **R. Judah** on one point ⁷ though he disagrees with him on another point? ⁸ What else then was omitted that we might say that this also was similarly omitted? The other omission was the eve of the Passover **{Friday, Nisan 14}** which fell on the eve of a **weekly** Sabbath **{Sabbath then being Nisan 15}**, when six blasts are to be subtracted ⁹ and six ¹⁰ are to be added.

And never more than forty-eight. No? But is there not the eve of the Passover **{Sabbath, Nisan 14}**, which falls on the **weekly** Sabbath **{Sunday then being Nisan 15}**, on which, if the statement is in agreement with **R. Judah**, there were fifty-one blasts, and if it is in agreement with the Rabbis ¹¹ there were fifty-seven? ¹²[Our Mishnah] mentioned only those, which recur annually, but does not mention the case of the eve of the Passover **{Sabbath, Nisan 14}** which falls on the **weekly** Sabbath **{Sunday then being Nisan 15}**, since it does not occur every year.

{A Discussion of the Application of Rule 1 in Palestine}

Does then the eve of the **weekly** Sabbath **{i.e., Friday}**, in the Intermediate Days of a Festival occur every year? May it sometimes not happen at all, this being the case ¹³ when, for instance, the first day of the **Festival of Tabernacles {Tishri 15}** coincides with the eve of the **weekly** Sabbath **{i.e., Friday}**? ¹⁴ No, when the first day of the **Festival of Tabernacles** would coincide with the eve of the **weekly** Sabbath **{i.e., Friday}**, the Festival is postponed **{because the Molad of Tishri fell on a Friday}**. ¹⁵ What is the reason? ¹⁶ Because if the first day of the Festival were to fall on the eve of the **weekly** Sabbath **{i.e., Friday}**, when would the Day of Atonement [of that year] be? On the [previous] Sunday **{And Tishri 1 would then fall on a Friday}**. ¹⁷ **Therefore it {the first day of the Festival of Tabernacles} is postponed {The application of Postponement Rule 1 causes Tishri 1 to fall on the weekly Sabbath and Atonement to fall on Monday}**. ¹⁸

{A Discussion of the Application of Rule 1 in Babylonia}

But do we postpone it? **{The Babylonian authorities did not apply Rule 1 but allowed Atonement to fall on Friday}**

Have we not in fact learnt, The fats [of offerings performed on] the Sabbath¹⁹ may be offered on the Day of Atonement;²⁰ and **R. Zera** furthermore stated, When I was²¹ **in the school of Rab in Babylon**²² I used to say that that which has been taught, **'If the Day of Atonement fell on the eve of the weekly Sabbath {i.e., Atonement fell on a Friday}, they did not sound the trumpet,**²³ **{Footnote 23: To warn the people to cease work, since in any case no work was done on that Friday on account of the sanctity of the Day of Atonement.}** and if it **{Atonement} fell at the conclusion of the weekly Sabbath {on Sunday},**²⁴ **{Footnote 24: Since the Day of Atonement is no less holy than the Sabbath day.}** they did not recite the Habdalah'²⁵ **{Footnote 25: The prayer of 'distinction' between a holy day and a weekday and between one holy day and another.}** is agreed to by all,²⁶ **{Footnote 26: Sc. by R. Ishmael and R. Akiba}** but when I came up to Palestine²⁷ I found **R. Judah** the son of **R. Simeon b. Pazzi** that he sat at his studies and taught that it was in agreement with **R. Akiba** only **{who stood alone among the rabbinic community of Palestine in not postponing Atonement} ?**²⁸

This is no difficulty since the one statement²⁹ is according to the Rabbis³⁰ and the other³¹ according to 'the Others', **{R. Meir}**³² for it has been taught, 'Others' say, **There cannot be more than four weekdays' difference between the Pentecost of one year and the next {in a common year}, and between one New Year and the next {in a common year},**³³ **and if the year was prolonged,**³⁴ **there would be five days.**³⁵

An objection was raised:³⁶ If New Moon fell on the Sabbath, the Psalm of the New Moon³⁷ supersedes the Psalm of the Sabbath.³⁸ Now if the law were [as **R. Aha** stated], why³⁹ should not one say both that of the New Moon and that of the Sabbath?⁴⁰ —

R. Safra replied: What is meant by 'supersedes'? That it⁴¹ supersedes it⁴² in the sense of taking precedence over it. But why? [Does not then] that which is constant take precedence over that which is not constant?⁴³

R. Johanan answered, [**The New Moon Psalm {Psalm 81}**] was given precedence] in order that people should know that the New Moon has been fixed ⁴⁴ at its proper time. ⁴⁵Do we then use this ⁴⁶ as a distinguishing sign? Do we not in fact use another distinguishing sign, as we have learnt: ⁴⁷ ‘The fats ⁴⁸ of the Daily Morning offering were placed on the lower half of the Ascent [of the altar] on its east side, ⁴⁹ while those of the additional offerings were placed on the lower half of the Ascent on its west side; ⁵⁰ while those of the New Moon were placed beneath the rim of the altar below,’ ⁵¹

-
- (1) The maximum of forty-eight blasts on the eve of the Passover.
 - (2) Lit., ‘this according to whom’.
 - (3) Ps. CXVI,1; sc. they did not complete the Hallel even once. The number of blasts in their case was, therefore, no more than three.
 - (4) Pes. 64a; most of the people having joined the first, or the second group. Only in the case of these two groups, the offering of whose sacrifices took longer than the singing of the Hallel owing to their large number, it was necessary to read it a second and a third time.
 - (5) For the reading cf. Rashal. Cur. edd., ‘surely we have established’.
 - (6) Who, contrary to our Mishnah, enumerates a minimum of seven and a maximum of sixteen (v. supra 53b). Now is it likely that the latter clause will be in agreement with his view while the earlier one is not?
 - (7) As regards the Passover eve.
 - (8) The number of blasts. As this is, of course, possible, the instance of the eve of the Passover could not obviously have been cited and, consequently could not be regarded as an omission.
 - (9) From the blasts for the third group, in agreement with R. Judah's statement.
 - (10) Of the blast common to every Sabbath eve, the three for ceasing work and the three that served as a mark of distinction between the holy and the profane.

(11) Who, contrary to R. Judah's statement, maintain that the Hallel was recited three times by the last group also.

(12) Six more, three for each repetition of the Hallel.

(13) Lit., 'and how is this to be imagined?'

(14) The Water-Drawing does not override the first day of the Festival if it is a Sabbath, and the following Sabbath is already the Eighth Day of Solemn Assembly on which the Water-Drawing ceremonial no longer took place.

(15) By one day. The previous month of Ellul is made to have thirty days instead of twenty-nine, so that the Friday which would have been the fourteenth of Tishri is the thirteenth of the month. {This was the practice in Babylon as the Babylonian rabbis had no knowledge of the calculations that the priesthood used to determine the need for postponement in advance; thus in Babylon Tishri 1 was postponed by extending the month of Elul }

(16) For the postponement of the first day of the Festival, and consequently, the first of Tishri by one day.

(17) Since the first day of the Festival is on the fifteenth of Tishri and the Day of Atonement is on the tenth of that month.

(18) The Day of Atonement was not allowed to fall on a Sunday on account of the difficulties involved.(V. R.H. 20a). {see footnote 31}

(19) Sc. the daily evening sacrifice.

(20) Which immediately follows it. (Shab. XV, 5).

(21) [So MS. M. V. Shab. 114b, cur. edd. 'we were'.]

(22) **R. Zera** was a Babylonian who immigrated to Palestine.

(23) To warn the people to cease work, since in any case no work was done on that Friday on account of the sanctity of the Day of Atonement.

(24) Since the Day of Atonement is no less holy than the Sabbath day.

- (25) **The prayer of 'distinction' between a holy day and a weekday and between one holy day and another.**
- (26) **Sc. by R. Ishmael and R. Akiba.**
- (27) Lit., 'there'.
- (28) **Shab. 114b. Now in any case both the Mishnah and the Baraitha cited prove that the Day of Atonement may fall on a Sunday. How then could it be maintained that if it were to fall on a Sunday it must be postponed?**
- (29) **Our Mishnah which implies that there is no Intermediate Sabbath every year.**
- (30) Who allow the addition of an extra day Ellul to meet certain exigencies. Hence the postponement.
- (31) **The Baraitha which implies that the Day of Atonement can fall on a Sunday.**
- (32) Sc. **R. Meir** who allows no addition of any extra day to a month to meet certain exigencies and, consequently, no postponement' "
- (33) I.e., if in one year it falls on a Sunday, in the next it must be on a Thursday, since the twelve months consist of 29 and 30 days alternately or $6 \times (29 + 30) = 354$ days $= 354/7$ weeks = 50 weeks and 4 days.
- (34) By the addition of an extra month.
- (35) The additional intercalated month being always twenty-nine days, R.H. 6b.
- (36) Against **R. Aha's** view (supra p. 54a) that the trumpet was sounded separately for every additional offering of the day.
- (37) Ps. CIV.
- (38) Ps. XCII.
- (39) Since the sounding of the trumpet accompanied the singing of the Psalms.
- (40) I.e., a separate Psalm for each additional offering, in the same manner as there was a separate sounding of the trumpet.

(41) The Psalm for the New Moon {Psalm 81}.

(42) The Sabbath Psalm.

(43) It is a general principle that that which has the more common incidence takes precedence over that of the less common occurrence. Why then should not the Sabbath Psalm take precedence over that of the New Moon?

(44) By the Great Beth Din {the Calendar Court of the Sanhedrin} in Jerusalem.

(45) Not every one can see the birth of the New Moon, and the fact that its Psalm was given preference served as an assurance of the official recognition of the date.

(46) The precedence of the Psalm.

(47) Cur. edd. in parenthesis, 'it was taught'.

(48) The term here refers to all parts of the sacrifice.

(49) Var. lec. 'west side'.

(50) Var. lec. 'east side'. So also Maimonides.

(51) Var. lec. 'on the rim of the altar above'. V. Shek. VIII, 8.