OFFICE OF THE REGISTRAR   . March 20, 1969

Dear Mr.

The problem of producing a calendar from astronomical observation
is not at all a simple one. Mr. Albert brought in your letter and we
discussed a number of the variables that enter in. It is easy to look
at a table and conclude that maybe God's Church is keeping holy days
several days late. But consider the basis of timekeeping. When would
you begin a day? At sunrise, noon, midnight, sunset, 6 p.m. when the
sun is due west? Or 6 a.m. when the sun is due east?

Revelation is needed. We need an Oracle from God to keep time
His way. What advantage hath the Jew? Much in every way . . . . Romans 3.

Let's continue with the problem. When would you begin the week?
With which day? It would have to be revealed. No? When would you begin
the month? With full moon or new moon? With the sunset (or 6 p.m.) that
preceded the molad (the conjunction or the astronomer's new moon) or with
the sunset that followed it? Man can observe but he is going to need
revelation to carry out timekeeping God's Way.

Search out the problem further. When would you begin the year?
With the spring equinox? With the summer solstice? With the fall equinox?
With the winter solstice? Or with the new moon preceding (or following)
which of the above four? Or would you allow the Passover to "wander 40
days in the wilderness" of the other days of the year as is the present
rule?

Now another problem. The tropical year, (the year of the return
of the seasons) is a fairly stable quantity though it changes slowly with
time. The average synodic month (from new moon to new moon) is also a
fairly stable quantity though it also changes slowly over the centuries.
But this 29.53059 average synodic month is an average. "The length of
the synodic month may vary by as much as thirteen hours, chiefly because
of the eccentricity of the orbit and the consequent nonuniformity of
motion." Even the more stable siderial month (the period of revolution
with regard to the stars "may vary by as much as seven hours." Both
quotes from Introduction to Astronomy by Cecilia Payne-Gaposchkin, page
120, a Prentice Hall book.

Before we come to the answer let's expand the problem a bit further. Knowing now that the average synodic month is 29.53059 and that each synodic month has a different length, how many days are you going to put in each month? The present series of 30, 29, 30, 29, 30, 29, 30 for the first seven months of the Sacred Calendar would obviously be at times just a bit out of step with astronomical observance.

And the insertion of a 13th month is another problem. Would any two church members agree as to when to add a thirteenth month, how many days it should have, whether to insert this extra month just before Nisan or the twelve other possible places? Do you see the problem? At present extra months are inserted seven times in nineteen years; they are inserted just before Nisan; they always have 29 days (and then a 30th day is added to the previous month) and when Passover would have stepped one day beyond its 40-day revealed limit, there was a postponement of that intercalary month. Not only that intercalary month but the whole sequence was moved one year later in the 19-year pattern. And that change was made, not by the Church of God but by a duly constituted Sanhedrin. And the Church of God followed. The Catholic Church did not. Nor do Jehovah's Witnesses, nor do dozens of "splinter groups" each with its own way of calculating. "What advantage hath the Jew?"

More problems. The day comes to us from the east. It sweeps across the earth at a thousand-mile-an-hour speed in the equatorial regions. It begins at that International Date Line and sweeps all the way around and ends once more there, Jerusalem being rather central. A day thus begins 24 hours earlier for an individual on an island on one side of the Date Line that it does for the observer on the east of that line.

More problems. The month sweeps across the earth from west to east, opposite to the direction that the day moves. The eclipse path from west to east demonstrates this, a solar eclipse being the very moment of astronomical new moon. Thus if each man were to depend upon local observation, the Californian would note his new moon earlier in the calendar day and even earlier on his calendar than the man in India. The man in India would begin and end his day earlier but note the new moon a day later on his count of days.

The conclusion is inescapable, there is no way to avoid it. If man is to have any calendar at all it must come from Authority. Apart from Authority on the Calendar and Sabbath every man would go his own way, and the Calendar that had been intended to give unity to mankind would disintegrate into thousands of conflicting designs.

The principle is clear. Now all that remains is the question of why the new moon dates on God's Sacred Calendar will at times follow a day or two after the astronomical new moons. The question of whether God's Church might just be keeping God's Holy days a day or two days or a month late is just not a proper question. God's Church follows the Oracle that God guides the Jews to preserve.

Why are the dates of the new moon later on the calendar? I've photostated a few pages from an authoritative source, The Comprehensive Hebrew Calendar by Arthur Spier and it gives the rules for delaying the 1st of Tishri. If the 1st of Tishri is delayed, all the new moons through that year are likewise delayed.

Why does God insist that the new moons of His Calendar be delayed? So that certain festivals do not fall on certain days of the week. The fact that He does so is certain because that is the way the Sacred Calendar is given to us. Why it does? It is not really necessary for us to know ahead of time. I know He has good reason. You might consider that in the year of the Crucifixion, Passover had to be on Wednesday (observed Tuesday night by Christ and the Disciples) in order that there be three days and three nights by the end of the weekly Sabbath. And in order that the Messiah be cut off in the "midst of the week" on a Wednesday. Hindsight explains this occurrence.

An Oracle is a God-given communication. It has God to back it up. Thus if God's Church is following that Oracle faithfully it is completely impossible that we would be wrong on any of these dates for the Holy Days. That one basic fact every Church member must know and trust. We lay members merely take instructions in the Hebrew Scriptures (an Oracle) and the Sacred Calendar (an Oracle), and check whether this Church is following faithfully. Pentecost's date depends upon a revealed Sabbath.

A few more final thoughts. The beginning of the month depends upon the observer's ability to see that first crescent (also called the new moon) in the west after sunset. But that ability to see will vary with the clarity of the atmosphere in his region, with the observer's keenness of eyesight, with the latitude of the observer, with the hemisphere he lives in, and with the time of the year (these last factors because of the angle the new moon makes with the horizon and the sun).

The Sacred Calendar today is a mathematical sequence of months and years. In the time of Christ the knowledge of its patterns was not given to the laymen of the congregation. Observation and mathematics were combined and the new moons were announced one at a time. The scattering of the Jewish people and the rise of Christianity led God to have the Jewish leaders make a strictly mathematical formula public, yet the authority remained in their hands. When there was need to adjust the Calendar it was done by a duly-constituted Sanhedrin. We only copy the Sacred Calendar as a scribe would make a copy of the Bible, fearing to change a letter of punctuation mark.

The final two pages I've photostated for you show that the length of year and month used for the calendar were a bit longer than the gradually changing heavens. And that the Jewish leaders are well aware of it. It is not in any way our appointed job to "steady the ark" for them. "Hands off" is the only rule to follow.