## The 'Perfect Cubit'......What's a Cubit????

From back in the late 1980's, up until about six months before he entered the Celestial Lodge, I had the good fortune to occasionally spend some one-on-one time with Mt. Wor. Lloyd U. Jefferson, Virginia's Grand Master in 1982. My Masonic journey, and most certainly my life, is richer because of the time he shared with me. Yes, he was a Grand Master, but he was 'Brother Jeff' to every one he met, and he loved to talk about the craft and its history. Several of our discussions took us to some rather odd and unusual topics. He wrote some very insightful dissertations on a host of Masonic things, one of which was the 'cubit'. Wait a minute; did I just say that the cubit was Masonic?

I'll share some of Bro. Jeff's thoughts and some of my research in a moment...but first, I want to take you back in time...several thousand years. Picture in your mind, if you will an old gray haired man, with a long beard...he's very old, 600 years old according to the Scriptures....Yes, it's Noah. He's a very busy man, but he's managed to find some personal time away from the wife and kids, and he's tinkering away at a project in his workshop. Suddenly a blinding ray of light blasts through the clouds, and a booming voice is heard from the heavens above:

NOAH!".....no response.....

Again, the voice from above..."NOAH!"

NOAH replies: ...what?....somebody called?...

LORD: ...It's the LORD, Noah!

NOAH: ...Waddya want?...I've been good.

LORD: ...I want you to build an Ark!

NOAH: ...Ok....What's an Ark?

LORD: ... Never mind, we'll talk later....build it of gopher wood, and make it 300 cubits long, 50 cubits wide, and 30 cubits high.

NOAH: ...Right....What's a cubit?

Ok, I don't think that's quite the way it happened, but we've all heard about the measurement known as the 'cubit'....so, I echo Noah's question...what the heck is a 'cubit'?

We are told in II Chronicles, Chapter 2, that Solomon recruited over one hundred and fifty thousand stone masons, hewers of timber, workers in brass and precious metals, laborers and overseers from all over the country. Many of them speaking in strange tongues made communication among the workers difficult, to say the least. There were three thousand of them designated as bearers of burdens and eighty thousand to be hewers in the mountains, and three thousand, six hundred overseers to set the people to work.

I have to tell you, that I am in absolute awe of the mega task that Solomon took on just to meld such a huge body of workmen, sorting out their various skills, talents and knowledge, and organizing them into an effective and peaceful work force to build his Temple. Can you imagine how long it would have taken to build the temple if a local union was involved?...way more than seven years, I'll bet. Well, Solomon had the people he needed, yet, perhaps one of his first problems to overcome was the lack of a uniform measure of length among the various workers by which the stones, timbers and other materials could be cut and joined with such exact nicety.

Did you know the word 'cubit' is derived from the Latin word for 'elbow', and is found in most Biblical translations? From history we know this about the cubit...it was a measure of length used by the Hebrews, Egyptians, Babylonians, and others. It was the distance from the elbow to the tip of the middle finger...or approximately eighteen inches. Obviously, the cubit could vary just by the physical size of the workman or overseer, and thus using a 'personal cubit' to measure things was most certainly not the best way to construct a temple.

Today's Encyclopedia 'Britannica on line' states that 'generally, the cubit was the measure of a man's forearm from his elbow to the tip of the middle finger. So, history and today's reference books seem to agree on a general length...but wait, there's more! The cubit of the Ancient Egyptians was about 21 inches long, that of the Ancient Romans was 17.5 inches, the Sumerian cubit was 19.8 inches long, and the Jewish cubit was nearly 22 inches. Had I been working on the Temple, my personal cubit of measure would be 20.4 inches.

To add insult to injury the Egyptian Royal cubit was set at 20.64 inches; and the Roman Attic cubit was 17.57 inches. On top of that, there were two other kinds of cubits: the Sacred (25.26 inches) and the Profane, or common cubit (yes, it was the old familiar 18 inch measure). The measurements given in the Bible relating to Solomon's Temple are all based on the common cubit. Many different societies and lots of different measurements, but the majority opinion is that a cubit was about 18 inches.

Now, here we are talking all these different 'cubits' and we haven't even touched on the topic of how they correlate to today's 'inches'. If you stop and apply some critical thinking to it, inches didn't exist during Biblical times, so we are back to using body parts as a measurement. Just how we converted cubits to inches will take a lot more research and is, perhaps, another nugget for another time. Cubits...inches....it's like comparing apples and pomegranates...it's all so confusing.

In the middle of all this confusion about a seemingly simple unit of measure I found some rather sketchy information noting that the Ancient workmen from the Temple fashioned a 'rope of human hair' which was knotted at three, five, and seven cubits. Human hair was reportedly used because it was basically unaffected by heat or cold, and thus the rope maintained a constant length. This was the reference piece, called "The Perfect Cubit," which enabled the workmen to join the stones, timbers and other materials with great accuracy.

What was the significance of the three knots in the so called Perfect Cubit made of human hair? In the spirit of symbolic reference, I believe it refers to the steps of the winding stairs leading to the middle chamber in the temple. They were divided into a series of three, five, and seven. I can also tie it back to the Euclid's 47<sup>th</sup> theorem...the old 'a2+b2+c2', or 3, 5, 7 theory that you most certainly remember from Geometry class in High School.

Devised about 3000 B. C., this perfect cubit became the standard, and was reportedly used to set the dimensions for a highly polished stone of black granite. The stone was known as the royal 'master cubit', and was the standard against which each 'cubit stick' used in Egypt was measured. Each cubit stick was verified against the master cubit at regular intervals to ensure accuracy.

The accuracy of the cubit stick has also been verified against the dimensions of the Great Pyramid of Giza. Wor. Jerry Harmon, from Richmond Lodge #10, provided me with a lot a lot of historical data about the pyramids and various Egyptian Temples that were built using the cubit stick. Many thousands of men were employed in building the Pyramids, yet its side measurements vary less than 3 inches in 755 feet...pretty impressive, I'd say. So, perhaps we have found the standard measure in this 'perfect cubit'.

For the Temple, every stone, every log of timber, was carved, numbered, and cut in the quarry or the forest; and then nothing remained for the workmen at Jerusalem but to join the materials with precision, using the reference marks and numbers. From history we know that this project was accomplished without the use of axe, hammer, or any tool of iron during construction. What a testimony to the skill of our ancient Brethren. Perhaps it was due in part to the use of the measuring standard, the' perfect cubit'.

In the late 1880's a team of British archaeologists uncovered what they believed to be the original black granite stone...the royal master cubit. But, I will leave it to historians and scientists to determine if the rope of hair...."The Perfect Cubit"...was real....or perhaps just a legend.

So, back to the question that Noah asked....'Right, what's a cubit?' Take your pick from the answers I provided. It's most likely 18 inches, but it's open to interpretation depending on what part of the world your ancestors came from, I guess.

Acknowledgements: From the writings of Mt. Wor. Lloyd Jefferson, and Wor. Walter J. Harmon, Mackey's History of Freemasonry (Volume I, 1921), Coil's Masonic Encyclopedia, The comedy of Bill Cosby (Noah and the Ark), and personal research. Douglas Messimer, PM, LEO Tuckahoe Lodge 10-08