## WASHINGTON D. C. GEOMETRY

When the site for Washington D.C. was chosen to be the national capital of the United States, it was an undeveloped area. George Washington selected Pierre L'enfant to design the layout of the city. George Washington was the highest ranking member of the Masons at the time and the Masons were ardent students of ancient civilizations such as those of the ancient Egyptians and Greeks. This is evidenced by many of the monuments in and around the city. It has also been suggested that the streets, the broad diagonal avenues, and the blocks and circles left open for monumental structures, incorporated geometric designs of Masonic relevance, as shown in the 1862 map of Washington D.C. pictured below.


Lohnson's Georgetown and the city of Washington
The island known today as Roosevelt Island (due west of the White House in the middle of the Potomac) was called Mason's Island until early in the 20th century. George Mason originally owned the island and he built a bridge from the Virginia side. He had a large retreat house on the island where he entertained friends and guests. George Washington was a neighbor and very good friend of George Mason. Mason was the author of the Virginia Bill of Rights, which became the U. S. Bill of Rights when it was added as the first ten amendments to the constitution of the U.S. There is some evidence that George Mason was a Mason, but it is not certain. Extending New Hampshire Avenue to the southwest, into the Potomac, it crosses over the southern tip of Mason's Island. The Masonic Headquarters of the Scottish Rites of the 33rd degree is just south of the point where New Hampshire Avenue crosses 16th Street, due north of the White House.

Highlighted below are Massachusetts and Connecticut Avenues radiating from the upper left circle, Rhode Island and Vermont Avenues radiating from the upper right circle, and the horizontal street is K street. The White House is located at the apex of the pentagram.


Highlighted below are Massachusetts Avenue and 19th Street radiating from the upper left circle, Rhode Island Avenue and 13th Street from the upper right circle, New York Avenue and 19th Street from the lower left square and Pennsylvania Avenue and 13th Street from the lower right square. The White House is located at the lower intersection point of the two large triangles that form the Hexagram.


The pentagram and the hexagram are perfectly integrated with the White House.


Below is a diagram of a pentagram drawn into a true hexagram. Each of the six lines that form the hexagram are three inches long and each of the short segments of the hexagram are one inch long.


$$
\begin{array}{llll}
\mathrm{AH}=1.0010 \text { inches }=\sqrt{1} & & \\
\mathrm{AB}=1.732 \text { inches }=\sqrt{3} & & & \\
\mathrm{HD}=2.010 \text { inches }=\sqrt{4} & & & \\
\mathrm{AE}=2.646 \text { inches }=\sqrt{7} & \mathrm{FH}=1.000 \text { inches } & \mathrm{AG}=0.882 \text { inches } & \mathrm{CI}=0.866 \text { inches } \\
\mathrm{AD}=3.000 \text { inches }=\sqrt{9} & \mathrm{FG}=0 . \overline{33} \text { inches } & \mathrm{GJ}=0.706 \text { inches } & \mathrm{IJ}=0.520 \text { inches } \\
\mathrm{CD}=3.464 \text { inches }=\sqrt{12} & \mathrm{GH}=0 . \overline{666} \text { inches } & \mathrm{JE}=1.058 \text { inches } & \mathrm{IK}=0.693 \text { inches }
\end{array}
$$

One is also the square root of one and three is the square root of nine. The distance between the adjacent outer points of the hexagram is 1.732 inches ( $A B, A C, B D$, etc.) 1.732 is the square root of three. HD and all of the other segments that are comprised two of the short segments of the hexagram are two inches long. The distance HE is also two inches long. Two is the square root of four. The two diagonal lines of the pentagram (AE and BE) are 2.646 inches long. 2.646 is the square root of seven. The horizontal line of the pentagram (CD) is 3.464 inches long. 3.464 is the square root of 12 .

The segment FH in the hexagram is bisected at G by line AE of the pentagram. The proportion FG : GH is $1: 2$. The proportions of the segments in the entire line CB are as follows:

CF:FG: GH: $\mathrm{HB}=3: 1: 2: 3$
The proportions of the line AE as bisected by the lines of the hexagram and the pentagram are as follows: AG: GJ :JE:=5:4:6

The proportions of the line CD as bisected by the lines of the hexagram and the pentagram are as follows: CI: IJ : JK: KL: LD = 5: 3: 4:3:5

In the diagram below, points J and K from the diagram above are the centers and the segment JK is the radius of two circles, forming a vesica pisces that is perfectly inscribed by the four diagonal lines of the hexagram.


The intersection point of the two circles ( $M$ ) and the two intersection points of the hexagram diagramed below ( N and O ) form a triangle with angular dimensions close to the Great Pyramid.


In the diagram below, a hexagram is drawn into a true pentagram. All five of the lines that form the pentagram are 1.618 inches long. The distance between all of the adjacent outer points of the pentagram, and all of the adjacent outer points of the hexagram, is one inch. The $\boldsymbol{\varphi}$ proportion is 1.618 to one.


All of the lines of the pentagram are divided into three segments by the other lines of the pentagram. Each line is divided as follows:
$.618: .372: .618>.618 / .372=1.618>.618+.372=1>1 / .618$ also equals 1.618
The length of the vertical lines in the hexagram are 1.902 inches long. The vertical lines are divided by the intersections of the diagonal lines as follows:
$.7265: .449: .7265>.7265 / .449=1.618>.7265+.449=1.1755>1.1755 / .7265$ also equals 1.618.

All of the isosceles triangles in the hexagram have an apex angle of $72^{\circ}$ and base angles of $54^{\circ}$. Bisecting these isosceles triangles forms $36^{\circ}-54^{\circ}-90^{\circ}$ right triangles. This particular right triangle was an important geometric form known as the mr triangle in ancient Egypt.

As shown in the diagram above, all six of the outer points of the hexagram are perfectly inscribed by a vesica pisces. The pentagram and the hexagram are also combined in the Great Seal of the United States, displayed on the back of one dollar bills.


The traditional explanation of the 13 stars is the same as the 13 arrows and the 13 leaves and berries on the olive branch, representing the 13 original states, but the 13 five pointed stars form a hexagram. The truncated pyramid below the eye is also comprised of 13 courses of masonry.


The boundaries of the District of Columbia, established by George Washington in 1791, formed a square with sides ten miles long, centered on the originally proposed location for the Washington Monument. The east-west diagonal of the square also crosses over the Capitol building and the north-south diagonal also crosses over the White House as well as the Masonic headquarters.


The length of the north-south and east-west diagonals is ten miles times the square root of two, or 14.142 miles. This distance converts to 43,455 ancient Egyptian royal cubits, the same figure as the ratio between the Great Pyramid and the dimensions of the earth. The height of the Great Pyramid is 481.13 feet, divided by 5280 equals . 0911231 miles. The mean radius of the earth is 3,960 miles, divided by . 0911231 equals 43,457 . The perimeter of the Great Pyramid is 3023 feet, divided by 5280 equals .5725 miles. The mean circumference of the earth is 24,880 miles, divided by $.5725=$ 43,458 .


In his book, The Secret Architecture of our Nation's Capital, David Ovason describes in great detail the astrological underpinnings of Washington, D.C. and its connection to the sign of Virgo and the ancient Goddess mysteries. Ovason stresses that the Masons, who were among the city's architects and planners and who were present at the groundbreaking foundation ceremonies, were knowledgeable about astrology. In the tradition of ancient astrologers, they would have recognized the link between the stars and the destiny of cities.

The most recent New Moon that occurred on Monday, September 17th was at 24 degrees of Virgo. Ovason cites 24 degrees of Virgo as a "critical degree" that repeatedly recurs in the city's most important horoscopes. In the federal city's founding horoscope of April 21, 1791, the day the city foundation stone was laid, Virgo was on the ascendant, with Jupiter rising at 23 degrees Virgo. On October 13, 1792, the day the foundation stone for the White House was laid, both the moon and the North node were conjunct at 23 degrees Virgo. "On September 18th, 1793, when President George Washington in his role as Grand Master laid the foundation stone for the Capitol," writes Ovason, "the Sun was in 24 degrees of Virgo, and thus reflected the Virgoan nature of the new city. When the cornerstone for the Washington Monument was laid July 4th, 1848, the moon went into Virgo; more importantly, the north node was at 25 Virgo."
"According to medieval Arab astrologers," writes Ovason, "this degree had a particular importance: it marked that point in the zodiac where the Moon was thought to promote the greatest happiness and well-being. We must presume, then, that the intention behind the choice of moment was that this beneficial influence would be transmitted into Washington, D.C."

## Aligned with the Stars

Ovason suggests that Washington's planners followed the teachings of the ancient Greek and Egyptian mysteries by aligning the city with a constellation's fixed stars. His well-researched book explores the mystery of the 1791 planning of the city's Federal Triangle, consisting of the Washington Monument, White House and Capitol building and their alignment with the three main stars of the constellation Virgo.

On August 10, 1791, the three fixed stars Arcturus, Regulus and Spica rose at sunset, forming a celestial triangle, and the city's Federal Triangle was engineered to mirror the constellation's pattern. Why fixed stars? They appeared to be permanent, therefore suggesting stability and spiritual benevolence, desirable traits when constructing a powerful institutional setting. "A sunset leading to the rise of three stars is rare," Ovason writes, "And a city's alignment with it is unique."

## Virgo Symbols in the Nation's Capital

The designers' choice to link Virgo with the capital indicates that they may have had a mystical intention to establish balance between the masculine and feminine. Ovason cites the numerous images of a beautiful woman holding a sheaf of grain, the symbol for Virgo, appearing on the nation's architectural decorations. This woman, the virgin, is the only female character in the entire zodiac. Therefore, the most feminine archetypal energy offering healing, purity and wisdom is permanently linked with what appears to be a highly masculine world.

Virgo also appears with a cornucopia, symbolizing the fulfillment of time, prosperity and agriculture. This sign associates with traits of redemption and organization, desirable in a post-war society.

The signs Gemini and Virgo are associated with the planet of communication, Mercury. As the female Mercury (Virgo is considered a "feminine" sign in astrology, while Gemini is considered "masculine"),
she represents analysis and critical thinking, qualities that the forward-looking planners knew would play an important role in the nation's future.

## Virgo Prevalent in the Charts of Washington, D.C. Buildings

Astrological charts cast for the laying of important building marker stones involve Virgo in a significant way, and point to the sure knowledge of planetary movement. Jupiter was ascending in Virgo when the city's first marker stone was laid on April 15, 1791. On October 13, 1792, the marker stone for the White House was laid with the Moon ascending in Virgo. The Capitol was founded with Mercury conjunct the Sun in Virgo on September 18, 1793, and the cornerstone for the Washington Monument was laid when the Moon was in Virgo.

## Zodiacs of Our Nation's Capital

There are 23 zodiacs in public government buildings in W-D.C. and many more on monuments and room interiors. The National Academy of Science has a statue of Albert Einstein overlooking a granite horoscope of the actual chart for the statue's dedication ceremony on April 22, 1979. The Academy building also has 12 bronze stylized zodiacal characters on the south entrance hall door.

Astrological motifs appear in the Library of Congress on a clock, painted tondos (a round painting or relief) on the ceiling and a splendid marble floor in the great hall. The Federal Reserve Board building has a beautiful 1937 Steuben glass ceiling lamp depicting the zodiac, including a version of Virgo as the Virgin Mary. President Garfield's memorial statue has both astrological signs and planets on the pedestal. The Mellon Memorial fountain's rim is decorated with all twelve signs, and the Dirksen Senate office building's interior features zodiacal characters.

The 1st astrological reference in the capital was the Car of History, sculpted in 1819 for the Statuary Hall. Images of Sagittarius, Capricorn and Aquarius appear on the front of the winged chariot.

## The Inauguration and Astrology

The connection between Washington, D.C. and astrology doesn't end with the capital's buildings. Astrological timing determined the original choice for the presidential inauguration date. The founding fathers, many of whom were Masons and therefore astrologically savvy, chose the first week of March for the inauguration because on that day the Sun, in the sign of Pisces, created a trine (favorable 120 degree angle) to the Scorpio Sun on Election Day in November and most importantly, the Cancer Sun of the birthday of the United States on July 4. Each of these is a water sign, and the intention of the founding fathers was to establish a beneficial grand water trine to ensure harmonious adjustment. The March date remained unchanged until the adoption of the Twentieth Amendment in 1933 moved it to J anuary.

Ovason concludes that 2 centuries ago, designers George Washington, L'Enfant and Ellicot sought to align the city, and therefore the nation, with the stars, knowing that the power of the combination of the celestial and earthly would affect its destiny. He writes, "A city that is laid out in such a way that it is in harmony with the heavens is a city in perpetual prayer. It is a city built on the recognition that every human activity is in need of the sanctification of the spiritual world, of which the symbol is the light of the living stars."

The Washington Monument reflects the star Spica, the White House the star Arcturus, the Capitol the star Regulus. The angle between the W-Monument, the Mall, and the White House is $>90^{\circ}$ but exactly equal to the angle between the stars Spica, Arcturus, and Regulus as seen from Earth!

The lines between the stars close to the elliptic in the constellation Virgo projected on W-DC result in the streets in the Federal Triangle, the land South of Pennsylvania Ave, North of Constitution Ave. and East of the White House. This triangle has a $90^{\circ}$ angle.

Among his many astute observations relating to esoteric astrology is that pertaining to the triad of stars surrounding the constellation Virgo. As Brunet points out, the constellation of Virgo is encased in a stelar triangle traced between the three first-magnitude stars, Regulus (alpha Leonis), Spica (alpha Virginis), and Arcturus (alpha Boötes).



#### Abstract

While one should not confuse the tropical sign Virgo with the constellational pattern Virgo, the undeniable fact is that this triangle of stars seems to reflect the central triangle in the plan of Washington, D.C. The


The International Astronomical Union (IAU) divides the sky into 88 official constellations with exact boundaries, so that every direction or place in the sky belongs within one constellation. In 3D space, most of the stars have little or no relation to one another, but can appear to be grouped in the night sky. A star pattern not recognized by the IAU is called an asterism, such as the Big Dipper.

The naming and selection of stars which constitute a constellation is largely arbitrary. Many stars are not included in the Greek letter designations and are not linked by imaginary lines. So, these stars (like 109 Virginis) may still be included in a traditional view of Virgo. Named stars like Gienah Ghurab and Denebola are part of an expanded view of Virgo. The 4 bright stars: Arcturus, Denebola, Zubenelgenubi, and Gienah Ghurab nicely frame Virgo, and thus seen by the designers of the Northern France cathedrals as an integral part of the Virgo symbolism in their plans.

The stars $\gamma$ Vir, $\eta$ Vir, $\beta$ Vir, $\nu$ Vir, and o Vir form the virgin's head. The stars $\gamma$ Vir, $\delta$ Vir, $\zeta$ Vir, $\alpha$ Vir (Spica), and $\theta$ Vir form the virgin's blouse. The stars $\alpha$ Vir, $\zeta$ Vir, $\tau$ Vir, 1 Vir, and $\kappa$ Vir form the virgin's skirt. The stars 109 Vir and $\mu$ Vir represent the Virgin's feet, and $\varepsilon$ Vir represents the virgin's hand.


## South

The Constellation of Virgo itself had long been associated with almost every major female deity in any of many early civilizations worldwide. Virgo is the 2nd largest in the sky (after Hydra) and the 6th member of the zodiac. Allegedly based upon the Babylonian description of the constellations, the pattern of Virgo is pictured as a female.

Virgo is rich in galaxies. It's most outstanding Supercluster of galaxies is 44 million light-years away. Its 9 brightest stars are between 36 and 261 light-years away. The brightest star is alpha Vir, or Spica ("the ear of wheat").

