

The Templar's Secret Island – A Critique

Wallace S. Venable

Emeritus Associate Professor of Mechanical & Aerospace Engineering
West Virginia University

I was introduced to *The Templar's Secret Island* as part of a course at our local life-long learning group. Prior to the start of the class I bought a copy of the 2002 hard-back edition of the book, and some of my observations may be specific to that edition.

As an engineer and a student of navigation, I was hoping to find “secrets,” or the history of techniques, related directly to the construction of buildings, machines, and maps. As an engineer and a student of navigation, I am also not particularly intimidated by mathematics.

The book contains a huge number of facts. I use the word “fact” in its legal sense, information presented as objectively real. Any statement by a witness is a fact, and in court the primary duty of the jury is to determine which facts are true. As a reader of the book, I am part of the jury assessing its truth. I believe that the large number of facts presented is intended to intimidate the reader, as much as to provide “proof.” Since I approach this as a jury member, not a scholar, I have provided few footnotes or references.

About half way through the book I began to be concerned by the lack of specific evidence that any Templars had ever been present on the island. My Internet searches of pages describing Bornholm Island, primarily Danish but in English, did not provide any evidence that they had been there, other than a single somewhat oblique reference to this book.

After completing my reading of the book I discovered Sharan Newman's more recent book (2007), *The Real History Behind The Templars*. She devotes her eight page Chapter 45 (with 31 footnotes) to Bornholm, and she says succinctly in the first line “There are no records of any Templar activity in Denmark.” If she is correct, this casts significant doubts about the “secret island,” unless, of course, we wish to hold that this confirms the degree of secrecy. Her book also expresses doubts about the accuracy of the Haagensen/Lincoln book on some matters of French history.

I have not finished reading the rest of the Newman book, but it seems to be something worth the effort.

General Mathematical Considerations

The authors imply that the Templars must have used a great deal of multiplication and division in arranging the churches. The truth is that most numerical arithmetic in Europe was done or reported in Roman numerals before about 1600. Few men of that time were particularly skilled in adding or subtracting numbers in that form, let alone doing multiplication and division in Roman numerals.

Yes, it is true that we can use $22/7$ as a good approximation of π (Pi) in calculating the radius of a circle whose circumference is 2217 yards, but try calculating MMCCXVII times VII divided by XXII.

I have significant doubts that the Templars – fighting men – were highly skilled with actual numerical calculations. If they did somehow acquire knowledge of Arabic numbers in Jerusalem, it would appear that they did not bring that knowledge home with them because Arabic numbers were reportedly introduced to the west through North Africa and Spain. In fact, $\pi = 33/8$ or even $\pi = 3$ is often precise enough for everyday problems.

The authors put some emphasis on figures which may be constructed solely with a pair of compasses (usually simply called a compass in American daily conversation) and a straight-edge – a “ruler” without a scale. This restriction may be of considerable importance to a geometer, whether sacred or profane, who is concerned with theorems. Most practical folks will add at a minimum a scale for measurement of lengths, a pair of dividers, and a piece of string to the basic kit. All of these were

available thousands of years ago. With those, and the “secrets rituals” which I learned in 10th grade geometry (c. 1955) and middle-school mechanical drawing in the late 1940s I can divide a circle in numerous equal parts, construct polygons and stars of many configurations, relate the circumference and radius of a circle, and much more.

Measurement

“The Secret Island” began to fall apart for me in Chapter Six – Units of Measure.

This is where the authors declare that the English Mile is derived from measurements of the polar circumference of the earth, and that the Egyptian Royal Cubit is derived from the same principal.

There is, in fact, general consensus that “the English Mile” is not particularly English. It is derived from distance measures used throughout the Roman world.

The Roman Mile, or “mille passuum,” was the distance marched by a Roman army unit in 1000 paces, (two strides) each of which was 5 Roman feet. Thus the Roman Mile was expected to be 5000 Roman feet.

The mile is a unit based on the human body. The problem with such units is, of course, that human beings differ a bit both in proportion and behavior. Not only did Roman infantrymen differ in stature, but the distance covered in 1000 paces varied with terrain, the physical condition of the soldiers, and their motivation. The actual length of a mile, as measured along the ground, therefor varied considerably across Europe. The mile was divided into feet, with varying degrees of precision.

The illustration below illustrates how creating a standardized rod of 16 feet was attempted in Frankfurt, Germany about 1536. “You stop 16 men departing from church ...”



Figure 1. Woodcut published in the book ***Geometrei*** by Jakob Köbel.

Measures based on the human body are a fact, and the “modern” relationships between feet, rods, inches, chains, miles, etc. were arbitrarily established by Royal/Parliamentary/Congressional decrees.

I will add an aside that the kilometer and Nautical Mile are based on earth measurement, although neither is based on an actual measurement of the circumference. Rather it is the circumference which has been estimated from astronomical measurements combined with rather short distance measurements along a meridian of longitude.

It is also generally agreed that a “cubit” is the distance from elbow to extended middle finger. In Egypt it was divided into 7 palms which were in turn divided into 4 fingers. At least a dozen Egyptian

cubit sticks have survived as well as similar measures from other parts of the ancient world. Returning to practical arithmetic for a moment, if you measure the length of a foundation to be 2 cubits, 4 palms and 3 fingers, it is very difficult to divide the measurement into five equal numbers, but it is a rather simple matter to divide a line of that length into five equal segments with triangles constructed with a compass and straight-edge.

The Haagensen/Lincoln book says Egyptian cubit was defined as 20.625 inches, based on circumference of the earth. In reality, surviving Egyptian cubit rulers varied from about 20.6 to 20.8 inches. The Hebrew cubit was about 18 inches. (Other measurements based on the length of the forearm include the Chinese *chi*, the Japanese *shaku*, the Indian *hasta*, the Thai *sok*, and the Khmer *hat*.)



Figure 2. A cubit rule with graduated markings and other Egyptian standards in the Louvre.

The “Map Problem”

The book provides only one “map” of the island, although there are many construction drawings. In my copy this is presented in color on the back of the book jacket, and on page 67 in black and white. I put map in quotation marks, because, as a navigator, I immediately recognized it as a *marine chart*, not a map drawn for use on land, or an air navigation chart.

For a variety of reasons, charts used in marine navigation are generally what are called Mercator (cylindrical) projections. The parallel lines of longitude on the illustrations are strongly suggestive that this is a Mercator chart, and the illustration of arcs of illumination of lighthouses, inclusion of water depths, the compass rose, and what appear to be LORAN or Decca lines of position provide further evidence that this is a marine chart. Most people are vaguely aware of the problem of this type of map. It is the construction which makes Antarctica, Canada, and Russia appear huge. It distorts the size and therefore the shape of objects at high latitudes.

At higher latitudes, and Denmark is above 50° north latitude, variations of the Lambert (conical) projection are generally employed. One reason for this is that this provides better conformation between the flat surface of a paper and the actual surface of the earth. On these projections lines of longitude appear as curves, or as converging straight lines for small areas. The information which I have found on the internet shows that many, if not all, land maps of Denmark are based on Lambert projections.

For many purposes both work equally well, but if the Mercator projection is used for precise land mapping on an area as large as Bornholm, significant errors are introduced.

I was not able to find a suitably sized Lambert projection map of Bornholm, but I did find a Landsat image. This allowed me to construct overlays comparing a geometric construction from the book with the two projection forms. These constructions are shown in Figures 3 and 4, and appear to confirm that the authors did, in fact use the Mercator projection as a basis for their investigations.

I believe that in the case of the figures used by the authors, the resulting errors may be tens of meters. My guess is that ground testing of critical points of the drawings using high precision GPS, or other electronic methods, would confirm these errors.

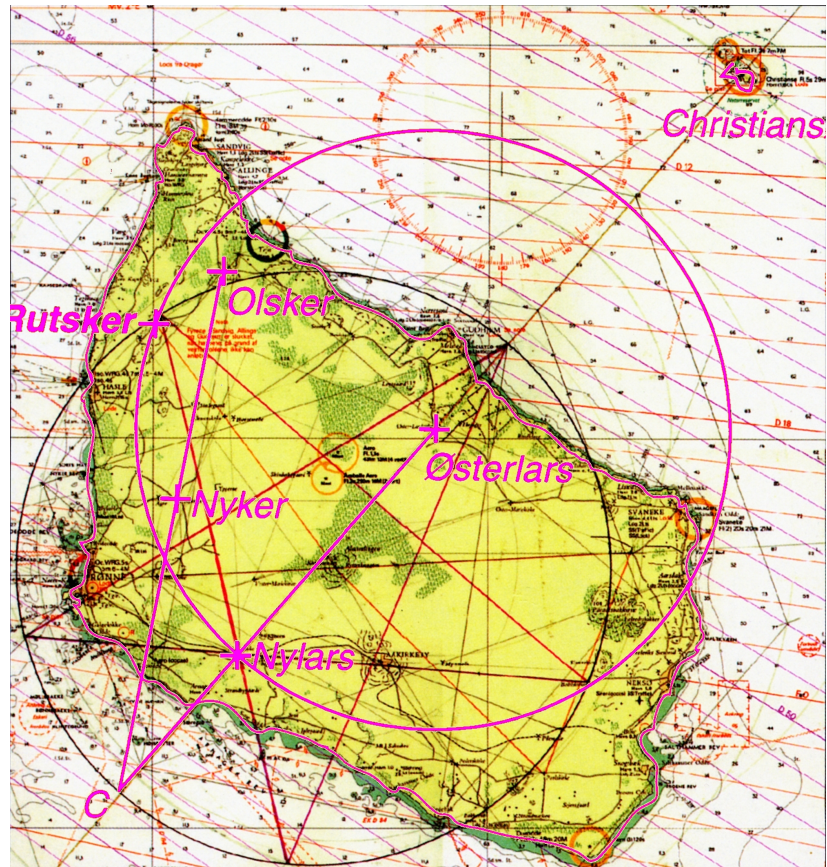


Figure 3. Superposition of a construction from the book on the marine chart illustration.

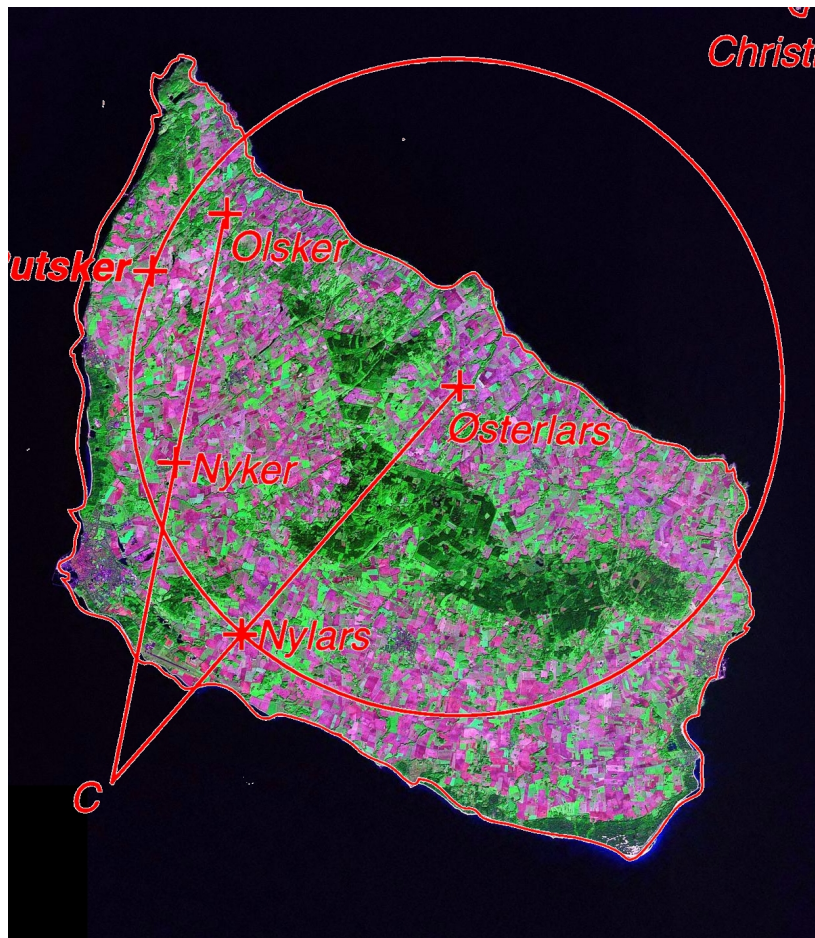


Figure 4. Superposition of a construction from the book on a LandSat image of Bornholm Island. Note that the top of the overlaid drawing is wider than the LandSat image although the bottoms match reasonably well.

Some Minor Concerns

I believe that the title of the book itself is misleading since Bornholm Island was never the property of the Knights Templar, nor entrusted to their care by the kings of Denmark, nor publicly recognized as such.

The cover of the book, and bits of text, imply that we will be given ties between the Guldgubber (“little golden men”) from SorteMuld on Bornholm and “the Templar churches.” No such ties are actually presented, and as the little gold pieces have been found in contexts at other sites which indicate that they originated ca. 600-800 AD, it is unlikely that they are related in any way.

We are promised links between the Bornholm churches and the introduction of Gothic architecture. All of the ancient churches on Bornholm are, in fact, Romanesque.

Despite the authors' contention that division by 5 and 11 are essential operations to a craftsmen, I can not recall any instances of using these operations in carpentry, furniture making or auto repair.

Several of the points revealed in the drawings actually lie in deep water, and could not have been used for actual layouts or measurements.

Geometrical Constructions

Whether the text contains errors or not, the heart of the book is the geometrical constructions which are presented. Two types of questions may raised regarding these. The first is the question of the

accuracy of the drawings. The second is the one of whether they actually reveal some sorts of hidden truth.

I will accept Professor Lind's statement on page 144 that the constructions have been accurately drawn and that they match the “map” which the authors' have provided. The careful reader will observe that Lind hedges his statements on several issues not directly dealing with the accuracy of the authors' drawings.

As the authors note in the beginning of the book, much of what is presented concerns matters of faith and/or belief. The issue of the meaning of the drawings is, in my view, such an issue. If you believe in the existence of “sacred geometry” which reveals truth, then any arguments I might present explaining my doubts are unlikely to convince you that the book offers erroneous conclusions.

As an engineer and scientist, I have a strong belief in the power of geometry in solving practical problems. I do not believe that logic, whether numerical, geometrical, or algebraic, reveals truth in the abstract. We test mathematical solutions based on precisely described models against actual results.

The authors have not provided us with a model on which their constructions are based, nor a clear and convincing set of facts which they explain. As a result, we have few grounds on which to test the truth of their models.

I do believe, however, that their procedures may easily be used to “prove” false hypotheses. To that end I have constructed two models of my own which I believe to be totally false. These are based on a Google map of my hometown, Morgantown, West Virginia, USA.

Hypothesis 1. Proof by means of the Golden Ratio that Suncrest Towne Center rests on a site of spiritual importance.

Suncrest Towne Center rests on a site which was once home to the Monongahela tribe of native Americans and archeologists had found a total of seven graves in the area, as well as an oval field that had been used for ceremonies and sporting events and an area used as living quarters. It was bull-dozed for the construction of a shopping center.

To verify the modern importance of the site we will construct several lines connecting related points within the community. These lines will be divided according to the Golden Ratio, and a perpendicular to the line will be constructed through the division point. In the drawing below, the red line segment represents the larger proportion and extends from the point of origin, and the green line the smaller proportion. The perpendiculars are drawn in black.

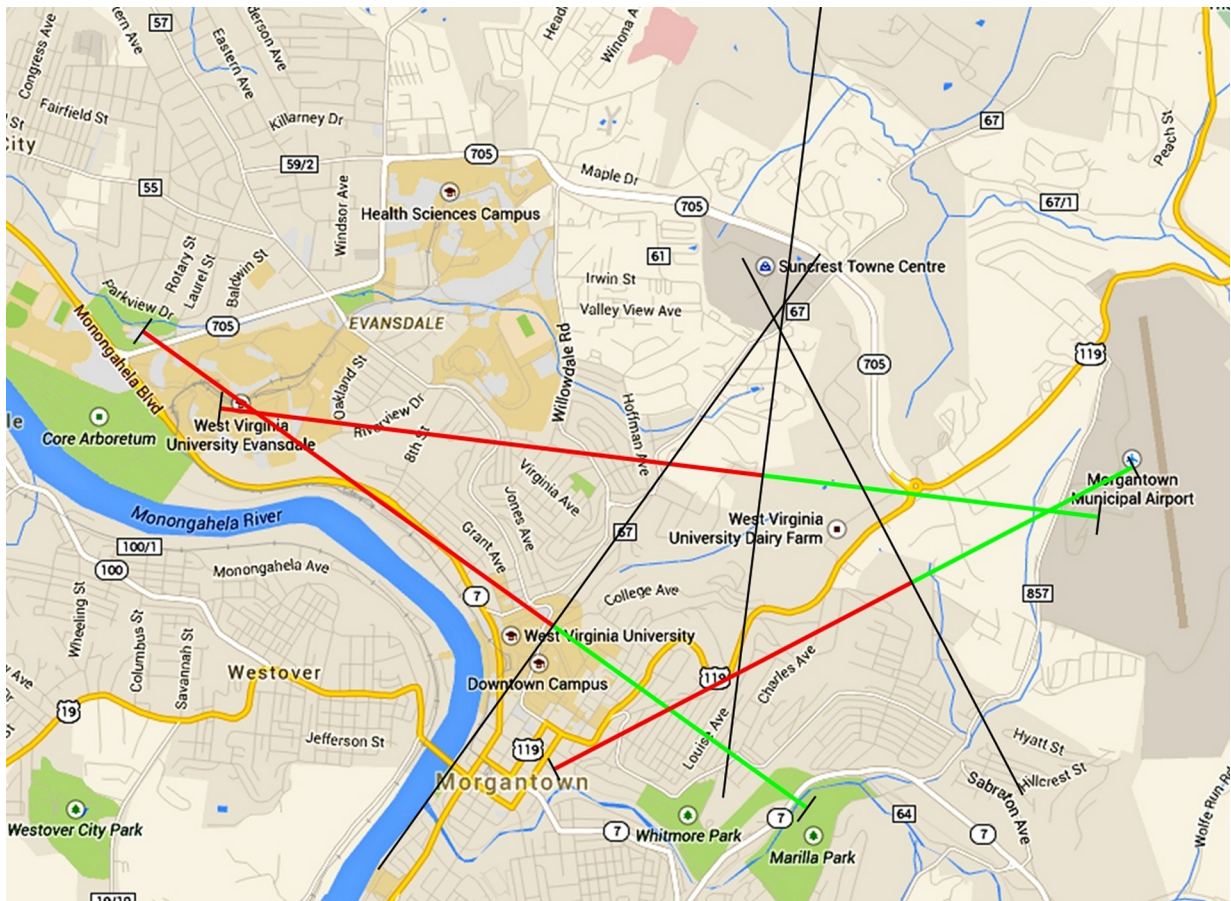
The pairs of related locations are the following:

- The City of Morgantown Administration Building and the Administrative office of the Morgantown Airport
- The Subsonic Wind Tunnel of West Virginia University and the WVU Hanger where the Experimental STOL airplane was built for the US Navy
- The Kreps Park Swimming Pool and the Marilla Park Swimming Pool

The three perpendiculars pass through a point within Suncrest Towne Centre, forming a very small triangle, indicating a very small error. The lines appear to constitute a pentacle but this is not considered significant because it was not part of the original hypothesis. Refinement of the points on a larger map could probably reduce or eliminate the error.

Surely this could not have been done unless there was a greater spiritual value in the new commercial center than in the historical site. (Or perhaps it indicates that a very powerful spiritual site was destroyed.)

See <http://mountaineernewsservice.com/native-american-burial-site-bulldozed-over-for-suncrest-towne-centre/> for background information.

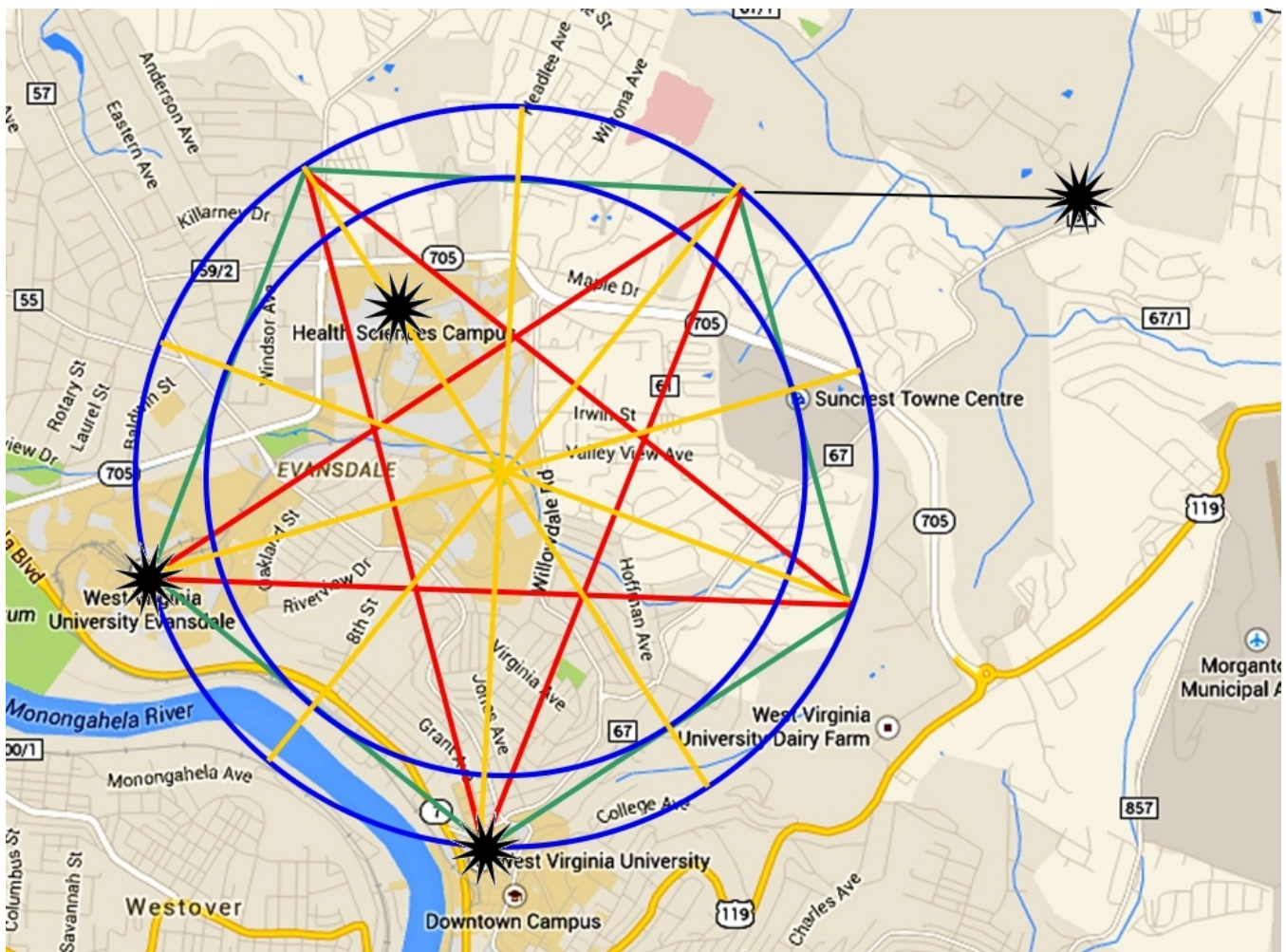


Hypothesis 2. Proof by means of the Sacred Pentagon that the Administration of West Virginia University is dominated by a coven of witches and warlocks.

West Virginia University conducts experiments on animals at several sites. i.e. The Agricultural Sciences Building, the WVU Medical Center, the Life-Sciences Building, and the University Livestock Farm. These locations are shown on the map as black stars.

We may construct a geometric figure consisting of a circle, and its inscribed regular pentagon, the inscribed pentacle, the inscribed circle for the pentagon, and the divisors of the angles of the pentacle.

We may then position the figure, constructed in the abstract and without reference to the map, in such a way that it reveals that two of the locations fall on points of the pentacle, and a third falls on a bisector. If we extend the northern side of the pentagon, we see that it passes through the fourth site. At the time of construction I had ignored the Dairy Farm since I think it is no longer in operation, but it may be seen that it falls on the projection of the next side, moving in a clockwise direction.



The fact that we have chosen a pentacle indicates that the decisions on location may have been made by a coven of witches and warlocks since the pentacle is widely known to be associated with black and/or white magic. For purposes of our final conclusions we will assume white magic. We note that many of the sites are heavily supported with Federal research grants, which may give grounds for further concern.

In both instances I chose my outcome and geometric figures before starting the “analysis.”

You may or may not believe my findings, but I have convinced myself that geometric constructions may be made to demonstrate absolute rubbish.

References:

Haagensen, Erling & Lincoln, Henry, *The Templars' Secret Island - The Knights, the Priest and the Treasure*, Barnes & Noble Books, 2002, ISBN 0-7607-3205-1

The book attempts to prove by geometric constructions using sacred figures that in the 12th century the Templars constructed churches on the Baltic Sea Island of Bornholm, Denmark, arranged to provide some sort of secret information.

Newman, Sharan, *The Real History Behind The Templars*, Berkley Books, New York, 2007, ISBN 978-0-425-21533-3