Do you see what I see?

Two hangars on Langley trumpet architect's vision

By Vic Johnston 1st Fighter Wing Public Affairs

Two brick hangars on Sweeney Boulevard are among the most historically significant structures in aviation history. Even a quick glance at the masonry work reveals the architect and masons had long-range plans for the buildings. The five-pointed stars at each end of the buildings harken back to the Army Air Service's earliest days. But wait; do you see what I see?

Above each one of the doors facing Sweeney is a concrete emblem, and they're not all the same. Ever wonder what those intricate symbols on Hangars 777 and 781 really mean?

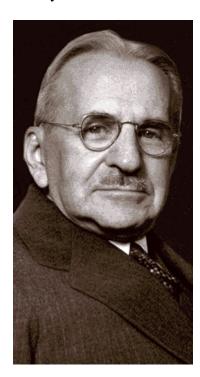
A present-day look around Langley Air Force Base reveals one key thing; the base is in the midst of the most significant transformation in a number of years. In the Shellbank section of the base there is a new fitness center ready to open in just a few days. Many of the new 1+1 dormitories are complete. The Air Combat Command Operations Support Center construction site looms at the LaSalle Gate entrance and more than \$100 million of construction projects to support the beddown of the F/A-22 Raptor are in work across the base.

Such hustle and bustle of activity also existed 86 years ago as Langley Field emerged from plantation land to budding experimental airfield facility.

But those early days of construction at the flying field were an ordeal. According to the 1977 edition of *Langley Field, the Early Years*, one of the first soldiers to arrive there

recorded that it was "Nature's greatest ambition to produce in this, her cesspool, the muddiest mud, the weediest weeds, the dustiest dust and the most ferocious mosquitoes the world has ever known. Her plans were so well formulated and adhered to that she far surpassed her wildest hopes and dreams."

But at this wretched location, a man with a vision for America's journey with aviation, worthy structures would be designed and built.



Albert Kahn was born in 1869 in Rhaunen, Germany and had an astonishing career from the beginning of this century. He is best known for his industrial architecture for the rising auto industry and the U.S. war effort in World War I and World War II.

From information at the website for Brooks AFB, Texas, Hangar 9 at Brooks is the oldest military aircraft hangar in the U.S. Hangar 9 was constructed between 1917 and 1918 as one of twelve wood airplane hangars on the hangar line at the new Brooks Field.

Both the site plan for Brooks Field and the original buildings were designed by Kahn. He supplied standardized plans for a number of U.S. Army Air Corps installations, including Langley and Arcadia Field in California. Kahn later achieved fame as the designer of numerous industrial facilities worldwide, including the Ford Model-T factory in Detroit, Michigan (1909), the Goodyear Airdock dirigible hangar in Akron, Ohio (1929), and the Dodge Half-Ton Truck Plant in Detroit, Michigan (1938).

Kahn's industrial designs are characterized by the use of complex truss systems to span vast spaces, as well as the adaptation of modular architecture to production processes. The only original Kahn building still standing today at Brooks City-Base is Hangar 9, which was restored in the 1960s and now houses the Edward H. White II Museum of Aerospace Medicine.

Langley is much more fortunate because we have many more Kahn designed buildings. A total of eight major structures and 26 houses which still stand today.

And although the two hangars on Sweeney aren't the oldest, they're next to the oldest; made of brick –and the real bonus – we've got twins.

The hangars were built from 1918 to 1919. The sides of the buildings closet to the dirt runway originally were fitted with overhead doors which rolled up. To help illuminate the building there were skylights and the sides towards Sweeney were almost entirely filled with windows – but now are filled in with concrete.

The 1st Civil Engineer Squadron contracted a Langley AFB Emblem Documentation study done December, 2000. The study reveals the elements having to do with flight, power and authority on those concrete emblems above the doors.

On one is a circular emblem with a U.S. shield with a single wing projecting from the left side. At the top is a winged cherub with a smooth helmet. On each side of the shield are fasces, also known as bundles of lictors, with axes, which in Roman times symbolized power and authority. They are a sort of cylinder, made of wood branches tied together around an axe. The symbolism of the fasces is that of strength through unity. The same symbol can be found on the backs of Mercury dimes and in the halls of Congress. But in the 1920s it became the symbol of fascism.

Another also features the U.S. shield, this time with a single star and projecting wings. At the top of the shield is a front view of a circa 1920s airplane, one of several designs created in 1917 to represent a military aviator. On either side are sheathed swords representing justice and military power, referring to both reserved strength and active warfare. The laural plant sprigs at the bottom symbolize achievement and excellence. Next features the U.S. shield with a vertical two-bladed propeller attached to the ring gear of an airplane engine – representing flight engineering. The winged cherub with a helmut represents dignity, honor and glory. And there are fasces on this emblem too. From the article by Edward G. Longacre, A Place like no other: The origins of Langley Field, 1916 – 1921; As an experimental station and proving ground, a permanent facility for testing not only American but also allied aircraft, Langley deserved an architecture inherently its own, one that drew on classical as well as New World forms and adhered to exacting standards of design. Khan resolved to create a unique installation, a place like no other in military history, and the care he gave his work would be commensurate with this grandiose vision.

Those magnificent hangars and accompanying concrete crests are to this day reminders of his vision and make Langley all the more significant as an early home for aviation pioneers.