



The French alliance revived

by Anton Chaitkin

The first part of this series (Vol. 14, No. 28, July 17, 1987) described how Alexander Hamilton's alliance with France helped to win the Revolution.

France had sent men, arms, and money to aid the American Revolution. As the new American government went into practice, British and other anti-republican forces unleashed an irrational movement in France that broke the American-French Alliance. But during the French Revolution, and during the Napoleonic wars that followed it, French scientists improved the means men have of observing lawfulness in nature. They applied this new geometric science to their own nation's warfare, as engineering and as military strategy. There they were defeated. But their contribution of this knowledge to the Americans, as the gift of *competence*, was to be of vast historical importance.

Republicans in other countries knew their future depended on the success of our constitutional experiment. As God said to Abraham, in that other Promised Land, "in thee shall all families of the earth be blessed." America must be "a father of many nations."

In 1815, Europe and the United States emerged from war. France was occupied by the armies of the victorious monarchs of the Holy Alliance. The U.S.A. had finally stood off the British in the War of 1812, but the enemy had easily invaded and burned the city of Washington. Postwar British commercial imports were crushing the small U.S. economy.

A younger generation of American republicans, fierce nationalists who had led the country in standing up to the British militarily, now resolved to build the country's defenses in depth, militarily and economically. A sort of extended national "leadership council" included Kentucky Congressman Henry Clay; Pennsylvania's Nicholas Biddle and Matthew Carey; two Europeans, France's Marquis de Lafayette and German scientist Alexander von Humboldt; U.S. Gen. Winfield Scott; Secretary of State James Monroe; and John Quincy Adams, who would be Secretary of State under Monroe's presidency (1817-25) and then be President himself (1825-29).

They launched a period of government-sponsored construction and innovation, following the *laissez faire* years of the Jefferson and Madison administrations. To the success of

this new era of American growth, the French contribution would be essential.

This story of international development may be of more interest to today's Third World leaders, than advice to "pull yourselves up by your own bootstraps," or to wait for "the magic of the marketplace." Americans who give that kind of advice display ignorance of their own country's history.

Secretary of State James Monroe sent army engineer Sylvanus Thayer, Gen. Winfield Scott, and other officers to Europe, to acquire for American use whatever resources of knowledge could be salvaged from the wreckage of Napoleon's collapse. Through the personal intervention of old Gen. Tadeusz Kosciuszko and Alexander von Humboldt, Scott and Thayer were put in touch with French scientists and the remnants of France's republican military elite.

The American officers immersed themselves in the methodology of the Ecole Polytechnique, where Gaspard Monge, Lazare Carnot, and others had educated a new generation of French leaders in science and military strategy. After a year of study, Sylvanus Thayer returned with a 1,000 volume library on military art, engineering, and mathematics, and a collection of maps from the Napoleonic campaigns. French experts were brought to the U.S.A., who would help to organize the training of Americans in these methods.

The French engineers

With the recommendation of the Marquis de Lafayette, Gen. Simon Bernard, Napoleon's aide-de-camp, intelligence and engineering officer, was commissioned an assistant to the U.S. Army Corps of Engineers on Nov. 16, 1816. General Bernard arrived laden with his "collection of engineering plans and data, unequaled in all Europe."

Bernard and U.S. Gen. Joseph Totten organized a government engineering board which, over the next 15 years, planned practically every fortification on the Atlantic and Gulf coasts. Bernard planned the mighty Fortress Monroe at Hampton Roads, Virginia, "as a great naval and military rendezvous."

Under Bernard's leadership, the Engineering Board surveyed for the system of national roads, organized the clearing of rivers as inland waterways, and planned the Dismal Swamp canal, the Chesapeake and Ohio canal, Ohio's Erie Canal,

and “the Allegheny and the Susquehanna, the Susquehanna and Schuylkill, the Delaware and Raritan, the Buzzards and Barnstable Bay and the Narragansett and Boston Harbor canals. . . .”

Gen. Simon Bernard returned to France in 1830. He was French Minister of Defense in 1834, and again from 1836 to 1839.

Simon Bernard had in fact continued the French engineering tradition from the American Revolutionary War including that of chief army engineer Louis Lebegue Duportail, and French-trained Polish patriot Gen. Tadeusz Kosciuszko, whose work had helped defeat Burgoyne at Saratoga, and who had built the fort at West Point.

While Bernard headed the Engineering Board, Isaac Roberdeau was chief of the U.S. Army’s Topographical Corps—the surveyors and mappers. The son of a French immigrant and American Revolutionary patriot, Isaac Roberdeau served under Pierre Charles L’Enfant in laying out the new city of Washington, and again in planning Alexander Hamilton’s new industrial city of Paterson, New Jersey.

After army engineering service in the War of 1812, Roberdeau joined the new Topographical Bureau, headquartered at West Point, from 1816 to 1818. He then went to Washington, as the Bureau’s chief until his death in 1829.

Isaac Roberdeau was assisted, and succeeded in 1829 as chief of the Army Topographers, by John James Abert. Abert’s father had come over with the French army during the American Revolution. Abert’s remarkable career will be discussed below.

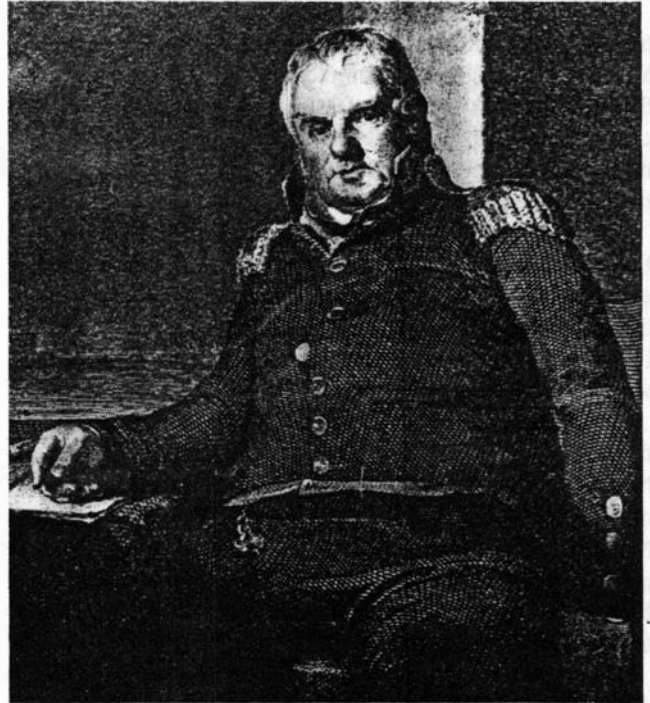
Charles Gratiot, who under General Bernard’s leadership had superintended the construction of Fortress Monroe, served as chief engineer of the U.S. Army, 1828-38. Gratiot’s father was a French immigrant, who for several decades beginning in the Revolutionary War, was a principal American intelligence agent in the frontier Mississippi River area.

The great canal

Coinciding with the 1816-17 officers’ reconnaissance mission to France, the old party of the French Alliance successfully launched the building of the Erie Canal, by far the world’s largest canal at that time.

Between the Hudson River and Lakes Erie and Ontario, lies the easiest route for the passage from the Atlantic Ocean, across the Appalachian mountain chain, to the great lakes. Gen. George Washington had mapped and proposed large-scale east-west waterway development in New York during a tour after the Revolution in 1783, and the state responded with the first canal survey.

Treasury Secretary Alexander Hamilton’s father-in-law, Gen. Philip Schuyler, set up the Western Inland Navigation Company in 1792. Chartered and financed by New York State to open up navigation between the Hudson and Lake Ontario, Schuyler and Hamilton’s ally Gouverneur Morris began drumming up support for a canal to Lake Erie.



Col. Jonathan Williams: private secretary for his great-uncle, Benjamin Franklin; first superintendent of West Point; organized the Military Philosophical Society; pushed for the Erie Canal and for upgrading West Point to be America’s great school for development.

President Thomas Jefferson and his Treasury Secretary Albert Gallatin turned down federal support for an Erie Canal as “100 years premature.” Gouverneur Morris, who as U.S. ambassador to France had been kicked out of the country by the Jacobins, was appointed president of the New York State Canal Commission in 1810. The following year he and New York City’s longtime Mayor DeWitt Clinton were again turned down when they went to Washington for canal support.

Clinton and his allies—the party of the old French alliance—revived the canal project and pushed it to success after the War of 1812. Who were these men?

DeWitt Clinton ranked very high in General Lafayette’s republican branch of freemasonry, as did Daniel D. Tompkins. They opposed the Boston Tory-British freemasonic branch, in a secret societies’ conflict still talked about by 20th-century masons. Tompkins was governor of New York State from 1807 to 1817. Clinton held that office from 1817 to 1823, while Tompkins was U.S. vice president under James Monroe.

In the years before the War of 1812, Col. Jonathan Williams, Chief Engineer of the U.S. Army, collaborated with Mayor Clinton and Governor Tompkins to build fortifications in New York harbor in the face of the threat of the British Navy. Williams had been private secretary and intelligence agent for his great-uncle, Benjamin Franklin, throughout Franklin’s residence in France as American Minister during

the American Revolution.

Colonel Williams, commandant of the Hudson River fortress at West Point, had organized the Military Philosophical Society, focusing American and French military minds on the problem of American infrastructure development as the chief defense task. The Erie Canal, and the creation of a full-fledged U.S. military academy at West Point, were among their great goals.

With financing by New York State, construction on the Erie Canal began July 4, 1817. The completion of the canal eight years later transformed the American economy. The development of the American West was given a giant push forward, as the Canal drastically cut the costs of shipping western produce to market.

On Aug. 15, 1824, the ship bearing the Marquis de Lafayette on his famous return visit to the U.S.A. arrived at New York, and the general spent his first night in the home of Vice President Tompkins. On Sept. 11, French citizens in New York City hosted Lafayette at a banquet, whose centerpiece was an 80-foot-long model of the now nearly complete Erie Canal, complete with miniature boats, locks, tunnels, towns, forests, and mountains.

America's school for nation-building

As the Erie Canal construction began in 1817, Sylvanus Thayer returned from France with the treasures of the Ecole Polytechnique.

President James Monroe immediately appointed Thayer Superintendent of West Point, with the mission of transforming the chaotic, ineffective officers' school there. Thayer created at West Point the modern U.S. Military Academy, modeled closely on the Ecole.

Claudius Crozet, an Ecole graduate, taught descriptive geometry, the first time the new science had been taught in America. French was essential, as most of the military and relevant science books were in that language.

Thayer's regime at West Point brought French science into full flower there. Legendre's *Elements of Geometry* spread from West Point to American schools generally, after its translation by West Point professor John Farrar. Cadets studied analytical geometry and calculus in Jean Baptiste Biot's *Essai de geometrie analytique*, and Lacroix's *Traité élémentaire de calcul différentiel et de calcul intégral*.

Charles Davies, head of the West Point mathematics department beginning in 1823, eliminated all British texts, brought in newer Continental European books, and wrote more than 20 of his own excellent texts based on Continental science.

Manufacture, transportation, and use of weapons and gunpowder were taught with Henri D. Lallemand's *Treatise on Artillery*, translated from French. Classes in civil engineering, field and permanent fortification, and the organization of armies read J.M. Sanazin's 1809 book *Programmes ou résumés de leçons du cours de construction*, and Gay de Vernon's Ecole Polytechnique text, *A Treatise on the Science*

of War and Fortifications, translated for the cadets in 1817.

First-rank classes in perspective, drawing, light and shadow, and optics and astronomy, coupled with a rigorous regime of drill and exercise, created army engineers qualified to build a nation. West Point was, in fact, the only American school actually training engineers until the 1830s, and the most important engineering school for many decades after that.

The Army builds west

President John Quincy Adams assigned U.S. army engineer and former West Point mathematics teacher Stephen H. Long, to direct the planning, design, and construction of America's first commercial railroad, the Baltimore and Ohio. Working under Long were two West Point graduates, William Gibbs McNeill and George Washington Whistler.

The privately owned Baltimore and Ohio Railroad broke ground for construction July 4, 1828. That same day, President J.Q. Adams turned the first shovel for the digging of the Chesapeake and Ohio Canal, to be built entirely by the U.S. government and the army engineers. Both railroad and canal were publicly financed, and designed by West Pointers. They pushed west side-by-side and opened the frontier still faster to the waves of settlers, farmers, and city-builders.

George Washington Whistler went from the B.&O. to other army railroad-building assignments: the Baltimore & Susquehanna, the Paterson & Hudson, and the Boston & Providence Railroads. After work as a civilian canal and railroad engineer for private New England firms, Whistler was hired by Russian Czar Nicholas I. He built the great railroad between St. Petersburg and Moscow, beginning in 1842, and died in Russia in 1847 just before the line's completion.

Army-trained engineers formed the core of technical competence in the new machine-building industries, on which America built its permanent foundation of prosperity. But most prominent to the world were the mappers, the "geometers."

John James Abert, head of the Topographical Bureau from 1829 to 1861, led West Point engineers to work in the mapping of the American West for settlement and development. Army engineers were ubiquitous in surveying and construction of the roads, the railroads, the forts, and the western cities, even in the military protection of the workers from Indian raids. This tradition reached its high point after the Civil War, when the railroads commissioned by President Lincoln were built to the Pacific coast.

John James Abert worked in particular with two republican leaders in Washington, who further organized the U.S. military establishment around the revived French alliance, transatlantic intelligence cooperation, and the lights of Continental European science: These two men were Joel Poinsett and Alexander Dallas Bache.

Poinsett was U.S. Secretary of War from 1837 to 1841, his term coinciding with the French War Ministry of Simon

Bernard, formerly the leading American engineer. Joel Poinsett reorganized the U.S. Army, and further strengthened West Point—during his years the cadets included the great American generals of the Civil War—Grant, Sherman, etc.

Bache, Benjamin Franklin's great-grandson, made the U.S. Coast Survey into the most powerful scientific organization in the world from the early 1840s through the Civil War. Their mapping of the coasts and seas, their astronomy and explorations, were directed with the cooperation of French scientists with whom Bache was intimate.

One of Bache's closest friends, Dominique Arago, became French War Minister and head of the government Executive Council in 1848. Arago's new republican government was quickly recognized by the U.S. ambassador to France, Richard Rush, in the name of the alliance of Lafayette and Washington; but it was soon overthrown by oligarchs who turned France toward imperialism and inevitable collapse.

America's achievements as a developing nation, aided by foreigners who were truly inspired by America's potential, and guiding its own national growth by government patronage and military-civilian cooperation, ought to shine today for developing nations. Should they allow themselves to be limited to any less a career of greatness than America herself reached for?

LaROUCHE

YOU MAY LOVE HIM

YOU MAY HATE HIM

BUT

YOU'D BETTER

KNOW WHAT

HE HAS TO SAY



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