Remembering Vietnam 5: Staying Ahead of the Curve

Early Cartographic Work in Vietnam, 1965-1966

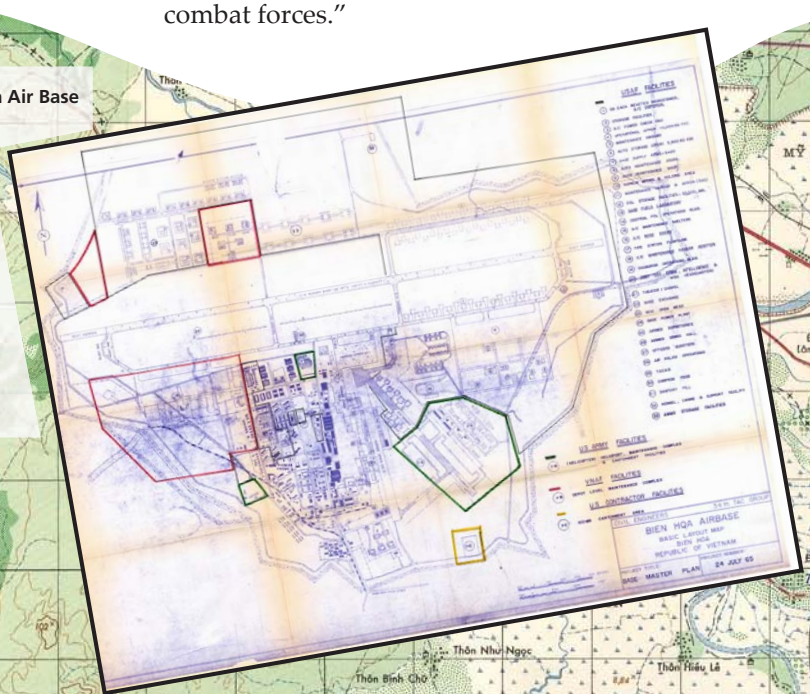
By Dr. Gary E. Weir, Office of Corporate Communications

On the 50th anniversary of the first direct American military involvement in Vietnam, the Department of Defense (DOD) has called upon U.S. citizens to remember with respect and gratitude those who served in Southeast Asia. This series of six articles—of which this is the fifth—illuminates the significant role people in the tradecraft communities that now comprise the National Geospatial-Intelligence Agency played in Southeast Asia.

As a rule, staying ahead of the curve always presents a difficult professional challenge. For American cartographers, the changing situation in Southeast Asia after World War II would prove this rule. As the Eisenhower Administration began to commit the United States to an anti-Communist advisory role in Vietnam in the 1950s the Army Map Service (AMS) discovered a major cartographic problem: the comprehensive maps of Vietnam the colonial French administration produced had become dated and showed signs of inaccuracy. How could the U.S. Army conduct advisory operations in this country with inadequate maps? Unfortunately, AMS maps did not appear much better and few sources existed to inform any program to revise the existing 1-50,000 ratio topographic maps and 1-250,000 ratio aeronautical charts.

AMS addressed the problem in 1956 by entering into a cooperative mapping agreement with the newly formed Republic of South Vietnam. American and Vietnamese cartographers and surveyors conducted topographic and geodetic surveys and took extensive numbers of aerial photographs to build a considerable knowledge base for the reconstruction of comprehensive maps of the country. They also collected place names and collaborated in choosing the natural and cultural features that would appear on the maps. Unlike similar work the Inter American Geodetic Survey in Latin America undertook at the same time, the collaborative Vietnam mapping project came to an end in 1962 because of the increasingly dangerous communist insurgency in South Vietnam.

However, during the six years of cooperative agreement the AMS used the new data to complete a revision of its large- and medium-scale maps, prompting Army Maj. Gen. Robert R. Ploger to comment in his book on the Army engineers in Vietnam that this "marked the first time that the American military mapping agencies had completed large- and medium- scale mapping of an area in advance of a major commitment of combat forces."



On the right is a map of Bien Hoa Air Base with planned improvements. At the left and on p. 23 are pages from the Army Map Service report on Phan Rang, highlighting the Buddhist Temple, the Protestant Church, the old airfield and the construction of new government buildings.

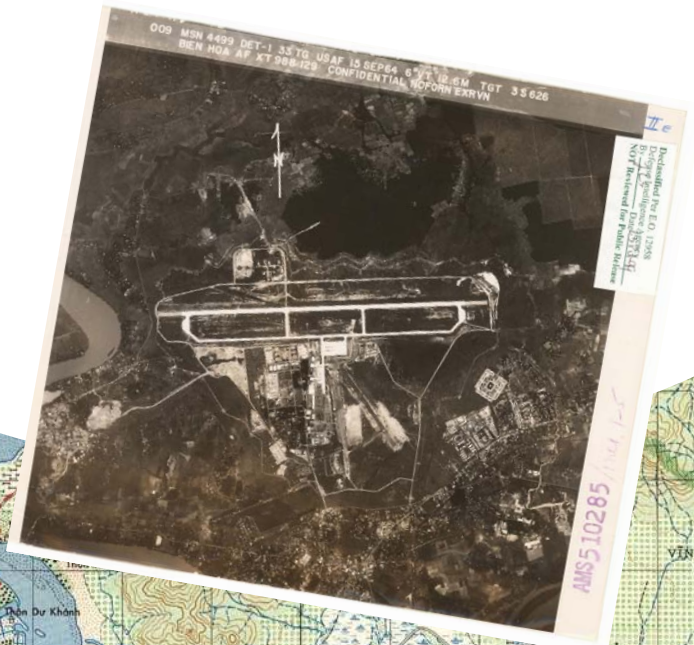
NGA Historical Research Center images

Once the American commitment began to accelerate significantly, especially in 1965 and 1966, so did the collection of data. Ground surveys in the south and aerial photography all across the divided country kept the large-scale maps current. In months to come more precise maps would inform new tactics and weaponry.

This data collection came to AMS as Intelligence Information Reports that could cover everything from a proposed airfield to the extension of a university campus, to the location of quarries and many other even more precise details. The March 18, 1966, AMS report on the Phan Rang area of Ninh Thuan province included bridges, main roads and highway routes and details on the city of Phan Rang. Annotated photos marked the Catholic Church, the city square complete with its monument, provincial headquarters, a hospital and the railway station sitting outside the city in an open field seemingly in exile. In addition to the Buddhist temples and the Protestant church, the collected details included a soccer field that doubled as a helicopter landing area and its French control tower, as well as recent flood damage to a school. The report paid particular attention to the railway network and a shore location that would accommodate shallow draft naval vessels. The report packages AMS personnel prepared usually included a 1:250,000 aeronautical chart and a 1:50,000 map, both keyed to the accompanying photographs.

In many cases, these early data collections enhanced cartographic renditions of areas that would become vital to the American effort in Southeast Asia. A report AMS compiled on April 6, 1966, focused in part on Bien Hoa Air Base, 15 miles north of Saigon, provided greater detail on the location through which the U.S. Air Force would begin its work in Vietnam, both in attack and reconnaissance support. The report indicated that a new parallel runway would soon complement the main airstrip. The accompanying 1:50,000 topographic map, keyed to the photographs in the report, also demonstrated the various locations south of Bien Hoa that would play a role in the increasing commitment, providing space for an infantry school, a training area and sites for military staging activity.

This basic cartographic effort formed a vital source of timely in-country knowledge at a critical time for American defense policy in Asia. The resulting maps and charts, far more accurate than the imperial French versions, first supported the military assistance groups DOD sent to Vietnam and then the much more ambitious commitment of the Johnson administration to address the communist threat in Vietnam.



The 1:50,000 map in the background of this two-page spread displays annotations derived from the photos. It was intended as a tool to revise and improve future maps. The aerial photo, at right, shows Bien Hoa Air Base in 1964. The photo was yet another resource for improving the maps and charts of this region.