

BUREAU OF PLANNING
GOVERNMENT OF GUAM
P.O. BOX 2950
AGANA, GUAM 96910

LAND TITLE & SURVEY

LAND TITLE AND SURVEY

BUREAU OF PLANNING
GOVERNMENT OF GUAM
P.O. BOX 2950
AGANA, GUAM 96910

BY

PAUL B. SOUDER

A little over one hundred years ago, Queen Isabella of Spain promulgated a set of laws applicable to the inscription of property titles. When these were adopted on Guam is unknown, although property records indicate their use in the 1880's.

Most of these laws pertained to property under written titles, but they recognized the possibility that some property rights were acquired by adverse possession against unrecorded owners, essentially the Crown. Provisions were thus made to permit individuals to acquire "Possession by Information" titles, which barred the Crown from making future claims against particular parcels, but which permitted third parties with better rights, to exercise them. Such titles are recognized today when properly described to permit a clear distinction between adjoining tracts of land.

After the Treaty of Paris in 1898, the Naval Government of Guam recognized the need of private individuals to obtain land titles against the government, and continued for a number of years without change Spanish "Possessory Title" methods. These laws were voided in Spain before 1890, but such action was not recognized by the Spanish governors of Guam or by their American successors.

Unfortunately, in Guam in the 1880's and 1890's, there were no methods of locating property lines except by reference to adjacent ownership or natural boundaries. The Spanish made only isolated surveys during their tenure.

Preliminary surveys were made in 1902 by the U.S. Coast and Geodetic Survey and the Army Engineers. The U.S. Navy Hydrographic Office established the first survey control points in 1910.

Early in the American occupation, the need for property descriptions and field surveys became urgent, since a system of taxation was imposed, and the entering of possessory titles made mandatory.

As a result, a minimal triangulation control system was installed in 1913 by the Army Engineers, under the direction of an officer named Butler, after whom the system was named.

Using the geographic coordinates of a U.S. Coast and Geodetic Station, "Longitude" on Orote Peninsula, and on the Beach at Sumay, horizontal control was extended, monumented, and coordinated on a Metric Grid System. The system had as its origin a large

concrete monument, known as the "Agana" Monument, which was assigned coordinate values of 50,000 meters North and 50,000 Meters East. Vertical control was established by a determination of mean-lower--low-water, established after interpolation of two years of tide observations by an automatic tide gauge located in the old Agana basin.

With the installation of these controls, Executive General Order No. 153, in addition to previous requirements for establishing or conveying title, a map had to be submitted with each such transaction. If a map was not filed with a conveyance, the recording was made but suspended, giving the action no legal recognition but recording the intent of the parties to the action.

A series of complicating elements entered the scene with reference to titles and survey which created conditions that exist as a source of confusion today. Only Naval Government surveyors were authorized to conduct land surveys, leaving the individual landowner at the mercy of the disposition of the authorities to provide approved land surveys. Thus no new titles could be established, and no conveyances properly legalized until the "official" surveyor got around to the task, which records indicate sometimes took years.

Basic 1913 surveys were inadequate to meet needs of "working level" controls, and the triangulation system was expanded by open traversing. This caused overlapping and confusion, a situation still present.

When consolidated cadastral maps were made by the Naval Government surveyors, they frequently failed to properly honor individual surveys and descriptions previously created. Many individual errors existed in the consolidated maps which made them dependent on monumentation for survey.

Compounding these problems was boundary delineation. Many legal descriptions of property lines include coconut trees as markers, or rock piles, or intermittent streams. Some use only the names of adjacent property owners. Metes and bounds descriptions utilizing the metric system have become prevalent in builtup areas, although there are discrepancies in the location of triangulation points. The use of a grid system creates problems which only identifies, approximately, a property location, as boundaries are seldom coincident with the grid. In the absence of the grid system, place names are used to identify the general location, names which have changed with every generation.

Additional problems resulted with the Japanese invasion in 1941, in which records were destroyed by the citizenry to keep them from falling into enemy hands, the ravages of war, and the decay of time resulting in disturbance or loss of land records and several monumented control points.

Establishment of title was augmented with a system of guaranteed claims, and later a system of land registration which continues today, using a modified Torrens System, based on land rather than owner. Replacement of such records lost during the Japanese occupation, and reinstitution of title registration in accordance with this system is underway undertaken, but no guaranteed titles have been issued since World War II.

The Japanese during their occupation completed only a few minor surveys. The intensive construction program after the liberation of Guam lacked sufficient survey control for the numerous surveys that were required by construction work. Practically all such construction surveys and maps referred to locally assumed coordinate grid systems or made no reference to any control. During this period, personnel from the Naval survey ships, USS Bowditch, and USS Hydrographer, endeavored to recover and extend the survey of the Butler Island Control Net.

The Navy in 1945, directed surveys be made to establish and preserve boundary lines and markers and to assist the Land and Claims Commission on Guam to permit:

- (1) Action to be taken to determine the ownership of land;
- (2) Restoration of boundaries and a land record system;
- (3) Compensation of owners in money or in kind for land used, acquired, or to be acquired by the United States, and
- (4) Procedure for the settlement, when authorized, of claims of inhabitants of Guam for damages to real property.

The survey group arrived on Guam in April 1945, and organized a search for existing land records. Four survey note books, given to the group by a prewar Naval Government surveyor, which contained data transcribed from other sources, was invaluable in identifying and locating existing triangulation stations and land survey control markers.

The records of the former Department of Records and Accounts were found practically intact. The surveys recorded in these books were transcribed by members of the field survey parties and plotted as tract maps.

All maps of the survey division of the pre-war Naval Government Public Works Department were lost, but as property surveys were completed, individual property owners were given a blueprint of the plat which contained their land.

Triangulation data which had been compiled by the USS Bowditch and the USS Hydrographer was used in an attempt to reconcile the existing land coordinate system established in 1913-1914 with a Polyconic Grid Projection of plane rectangular coordinates. Analysis of the existing records available left uncertainties as to the exact method employed in establishing the land coordinate system.

It was decided to re-triangulate the island and establish a plane rectangular coordinate system, having as its origin the geographic position, East longitude 144°-44'-55.520" and north longitude 13°-28'-20.870". This point was assigned a value of 50,000 meters east and 50,000 meters north, these values being the same as assigned to this geographic position by the military land survey of 1913-1914.

The Land and Claims Commission established a control system in 1945. Consisting of 69 primary control points (some of 1913 origin, and others new) and over 52 secondary control monuments.

Plane rectangular coordinates were computed using the Polyconic method of Grid Projection from their 1913-1914 Military Survey Geographic positions.

The triangulation system was established solely for use in cadastral surveys.

Realizing the shortcomings of the triangulation network as developed by the Land and Claims Commission in 1945 for Geodetic surveying, topographic mapping and cadastral surveys, the Pacific Island Engineers established a primary control network system between 1946 and 1948.

Although this network decided improvement from an accuracy standpoint over the Land and Claims 1945 system, it was little used. More than 95 percent of all surveyed property on Guam in 1950 was tied to the Land and Claims 1945 grid system. Although the P.I.E. network extended the entire length of the island, there were several small areas in which the only control available was that tied to the Land and Claims System.

These cadastral maps prepared in 1945 in part from old land descriptions and old original property plots which survived the occupation, have not been kept current.

The survey control system was revised in 1963 by United States Coast and Geodetic Survey personnel. Such controls are being integrated with the Guam Geodetic Triangulation net. All control monuments of the other triangulation networks are also being tied into the new system and being assigned 1963 coordinate values.

The new triangulation net replaced the 1913 Butler system, the 1945 Land and Claims system, and the 1949 Pacific Island Engineers system and made possible accurate relocations of private and public lands on the island in addition to accurate mapping.

The new triangulation net does not, of itself, resolve the land description and land title problems. A major survey program is required to tie existing surveys to the new system. It will be necessary to make surveys of unsurveyed private land and government land. This program was accelerated in 1968 by aerial photographic methods. Aerial photographs are used for the

foundation of a complete cadastral mapping program and to help accelerate the surveys of all government land.

Progress on accomplishing the tie-in of private and public lands to the established triangulation nets depends upon the tempo of economic development. The government of Guam now requires all private land be tied in before it can be registered.

Repeated affirmation of the critical need for accurate land descriptions leading to insurable and marketable titles has been stressed since 1950. An acceptable survey of a parcel of private land is part of the action required to obtain a certificate of title. The certificate is the instrument which now conveys land ownership and is presently the only document upon which title insurance can be drawn that is acceptable to local banks for mortgage loans. Land by which ownership is so evidenced is termed "registered land". About 85 percent of Agaña is now registered, the percentage dropping sharply in outlying areas. A certificate of title is obtained by a court action and has the effect of negating further litigation by other claimants. The party wishing to obtain the certificate files an action in Guam district court which after publishing public notice, hears any other claims, and rules on the issuance of the certificate. Property deeds which date back before World War II are not considered acceptable as sole proof of ownership.

As of the outbreak of the war in December 1941, there were 5,249 recorded tracts of land owned by private individuals, covering 58,324 hectares, and valued at \$610,985.00. Four thousand nine hundred and one of these parcels had title, in the form of guaranteed claims.

The distribution of residential, commercial and industrial areas suggests the scattered and small-scale character of land parcels. In 1967, tracts between 5 and 9.9 hectares comprised about 55 percent, 25 percent in the 10 to 19.9 hectare group, 8 percent in the 20 to 29.9 hectare group, 6 percent in the 30 to 49.9 hectare group, 4 percent in the 50 to 99.9 hectare group, and 1 percent between 100 and 250 hectares and less than 1 percent for the 500 to 1,000 hectare group.

At the time of Thphoon Karen there were 11,180 tracts of recorded private property valued at \$13,300,850.00. Of these, 10,116 possessed guaranteed claims or certificates of title. As of June 30, 1972 registered land parcels had increased in number to 19,854 valued at \$90,005,000. As of the time of time of Typhoon Karen (November 1962), the military had 35% of the land area (47,331 acres), the government of Guam 23% (31,000 acres) and private interests 42% (55,996 acres).

In 1973, land ownership (4136,960 acres) was distributed between the Federal Government, 33.7% or 46,357 acres, the government of Guam, 21.2% or 28,800 acres and 45.1% or 61,200 acres were in private hands.