

**ARCHAEOLOGICAL INVESTIGATIONS AT
HOLMUL, GUATEMALA.**

**REPORT OF
THE FIRST FIELD SEASON
MAY-JUNE 2000**

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With contributions by Jason Gonzales (Southern Illinois U., Carbondale, Marc Wolf
(T.I.M.S.), Laura Kosakowsky (BostonU./U. Arizona) and Justin Ebersole (Boston U)*



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The goals of the Holmul Archaeological Project are to obtain an understanding on the nature of the Maya city of Holmul through information collected from field survey and excavations. It is believed that this archaeological site will provide key information to our understanding of the processes behind the development of political institutions among the Maya at the end of the Preclassic period, as evident from its architectural, artifactual and burial record. The site has frequently attracted Mayanists' attention because of its well-known Late Preclassic and Classic period burial and ceramic assemblages (Brady et al. 1995, Bullard, 1960, Hammond 1984, Pring 1977, 1995, Merwin and Vaillant 1932, Reends-Budet 1995) although the site for the most part remains archaeologically poorly known. A number of structures were excavated by Raymond Merwin in 1911 (Merwin and Vaillant 1932) in one of Harvard University's first scientific explorations in Petén, providing the first stratified chronology for the Maya Lowlands and an array of well furnished burials from Preclassic to Late/Terminal Classic periods (Merwin's Holmul I-V phases).

More specifically, Merwin's spectacular finds indicated the early development of elaborate elite tombs and funerary shrines at Holmul during the II and III centuries A.D.

Also, the site's location at the cross-roads of important geographical and political boundaries between the Tikal state and its eastern neighbors of Northeastern Petén, such as Naranjo, Yaxha, Nakum, Xultun, El Pilar, Buenavista del Cayo and Xunantunich during the Classic period, presents important implications for our understanding of the political interactions among Maya cities in this part of the Lowlands as evident from their trajectories of growth, settlement and trade patterns. In particular, it is believed that observation of the architectural configuration of the site center, elite ceramic styles, iconography and burial patterns when correlated with the layouts and patterns of growth of the residential areas may help understand the growth of the city as a political player in the complex geo-political landscape of the Classic period Maya Lowlands. This material evidence might in turn help us correlate the history of the site with that of some of its historically better documented neighbors, namely Tikal and Naranjo even though at Holmul textual evidence may be lacking.

The project's methodology includes several phases of research directed at the systematic study of the archaeological site and its environs. **Phase 1** focuses on 1) the mapping of the site center and 2) initial survey of the residential areas by way of survey transects. Additionally, 3) the use of GPS and geo-referenced aerial photos and remote sensing imagery is designed to guide surveyors to important landform features and possible archaeological sites outside of the site-center for mapping and exploration purposes. Site chronology and architectural development are to be investigated through 4) recording of looters' trenches profiles and 5) excavations.

Phase 2 includes the gathering of further information on points 1-5, in addition to 6) axial trenching on plaza structures and 7) sub-floor excavations within the site center

8) stabilizing of looted or otherwise damaged structures, 9) study of ceramic production patterns using stratigraphic evidence and chemical analysis of artifacts from site-center and residential areas and 10) mapping of outlying minor centers within 5 km radius.

Phase 3 includes completion of objectives 1-10 from previous phases and 11) test excavations at outlying minor centers, 12) consolidation of standing architecture exposed by looters trenches and archaeological excavations.

The first season of field work was scheduled to begin in May 2000 and to continue until the end of June 2000. The project team was composed of Dr. Francisco Estrada-Belli as PI (Vanderbilt University), Dr. Laura Kosakowsky (U. Arizona) as project ceramicist and co-PI, Marc Wolf (TIMS, Mass.) and Jason Gonzalez (Southern Illinois University, Carbondale) as surveyors, Justin Ebersole (Boston University), Jason Paling (Boston University), Ryan Mongaluzzo (SUNY, Albany), Anna Deeks and Harriet Lock (U. Nottingham), Lilian Rosales, Claudia Quintanilla, and Alexander Urizar (all U. San Carlos, Guatemala) as field archaeologists. The field crew also included 11 workers, a cook and a cook's assistant.

Operations were conducted with the collaboration of IDAEH inspectors Bertila Bailey and Francisco Moro to whom we are grateful for their assistance. Funding was provided by a grant (#6394-98) from the Committee for Research and Exploration of the National Geographic Society, The Foundation for the Advancement of Mesoamerican studies (#98010) and by a grant from the Ahau Foundation (9904) to Professor Norman Hammond (co-PI) at Boston University. Boston University also provided administrative

and logistic support for the Holmul Project, until its move to Vanderbilt University with the PI in September 2000).

Preparations for Field work

After lengthy permit procedures and vehicle maintenance in Guatemala City, on May 18th, project members convened at the Hotel Palace in Melchor de Mencos, Petén, our base location outside of the Holmul field camp. Supplies were bought in Melchor and arrangements were made for all participants to be transported to the site. On May 23rd after an eventful and lengthy trip through deep mud and overgrown logging trails the project vehicles arrived at the location designated as field camp located 2 km SE of the Holmul site center (Figure 1). The 45 km trip from Melchor de Mencos to the Holmul site was made on 4-wheel drive vehicles passing through several different ecozones. From Melchor the trail ascends an escarpment into an upland region, which is mostly occupied by a bajo . Some 13 km N of Melchor is the La Zarca army outpost and a few houses, before entering the bajo and the uninhabited area. Around 21 km from Melchor is a second escarpment, rising sharply from 150 to 220 m above sea level into an area of rugged karst upland. The escarpment is also the location of a water spring at "El Manatí", shortly beyond which is a second area of "bajillos", or small seasonal swamps, then a left turn into the logging trail leading to Holmul (locally referred to as "La Riverita"). The main trail continues for another 23 km to the Yaloch lagoon where a logging camp is located. Up to this fork the trail is maintained and used by logging concessions during the dry season and as a consequence when we arrived it was in very

poor conditions due to deep ruts cut by the heavy trucks after the first rains. Beyond the fork, the Holmul trail heads N/NW on upland terrain before entering a large bajo know as bajo el Jobal which it crosses for an 8 km stretch; this portion of the trip is the most problematic since during the slightest rainfall the trail can become impassable. Also, this part of the trail had not been used for logging operation in seven years and became completely abandoned 4 years ago when IDAEH ceased to keep caretakers at the Holmul site. As a result, the road was largely overgrown and had to be cleared of vegetation to allow passage of the project vehicles. After crossing the bajo Jobal, the road rises again to an upland hilly area dominated by several streams. Among these is the head of the Holmul river to the north of the Holmul site. The camp itself is located in a clearing on the north-facing slope of an E-W ridge along which runs the seasonally dry bed of the Holmul river. In this spot the Holmul stream forms a small aguada which apparently communicates with the aquifer and holds drinkable albeit "muddy" water throughout the dry season.

A second clearing 1 km from the site center across river bed requires crossing the stream on each trip to and from Melchor, and during heavy rains the camp might become isolated from the main trail. For this reason, and because of the existence of partially built structures in the first clearing, this location was chosen as field camp for the 2000 Holmul project. Upon arrival, areas were cleared for tents and camp facilities were immediately improved or built from scratch. Thatch roofs for workers dormitory, kitchen and latrines were repaired and structures were built for a field laboratory/dining area and lavatories. In all, the first week was dedicated to setting up camp and preparing for site survey and excavations.

Mapping the Site

The site center of Holmul is located on a L-shaped ridge running NW-SE slightly above the 180 m elevation. A GPS reading from the tallest structure in the Main Plaza, Building D of Group I produced the following UTM coordinates: 258368 E, 1915384 N, or longitude 89°:16':23" W, latitude 17°:18':43" N in geographic coordinates. The site's tallest buildings were also spotted on a 1989 Landsat 5 image and the location verified in the field at a t 1.5 km distance from the Holmul stream and approximately 3 km west/north west of the camp clearing (see Figure 1). Interestingly, the previous stated location of the Holmul site, available from the "Nakum" topographic sheet of the Guatemalan "Instituto Geografico Nacional", appears to be about 2 km SE of its actual location and therefore needs to be discarded, or corrected. The site location is an especially important issue in light of the existing "Parque Arqueologico" reserve which includes a 3x3 km area around the site but presently does not include the main plaza itself. The authorities have been informed of the correct location of the site so that logging concessions that are granted in the area may not erroneously include the immediate area of the archaeological site.

The ridge on which the site is located is situated in top of the watershed divide of a large limestone peninsula trending NE-SW, surrounded by extensive bajo areas to the west, south and east (Figure 2). To the west, is a massive escarpment ridge which runs from the Yaxha area to the Rio Hondo area of NW Belize dividing the watershed of the

north-central Petén upland region from the rest of the Eastern Lowlands. From a cursory observation of the topography surrounding Holmul it would appear that ancient as well as modern communication to the south and west would be impeded by the wetlands, while to the north it would be favored by the karstic uplands. However, any hypothesis linking Holmul with polities to the north, such as Xultun and/or Xmakabatun, 26 km to the north, must be contrasted with existing references in Holmul ceramic and architectural styles and textual evidence to the southern Late Classic kingdom of Naranjo (Stuart 1988), 20 km to the south. The Holmul river course might have provided a communication route through bajos and karst between Holmul, Naranjo and Nakum.

As a first step of the site mapping, a baseline was set from a datum stake (6000,6000) located near the SW corner of Group I. From that point, 2m wide brechas were cut in the four cardinal directions using an EDM Sokkia total station. The east, north and south brechas were extended to a maximum distance of up to 200 m while the western brechas was carried out to the 1 km marker from the datum to accommodate the mapping of the western transect (see WT below).

The site inventory nomenclature used in this report follows Merwin's designations of numbers for groups (acropoleis) and of letters for individual structures, whenever those are available from the Merwin and Vaillant publication (1932). Structures not reported by Merwin are assigned new Structure numbers, not letters. Stelae and altars are identified by ID numbers in separate orders (i.e. Stela 1, Altar 1).

The central area mapped in 2000 comprised three main acropolis-groups separated by plazas and causeways occupying an overall area of 14 hectares on the broad

main hill (Figure 3). The focal point of the ceremonial core is situated in the Main Plaza which measures 0.9 hectares in area, is rectangular in shape and is bound to the north by the Group I acropolis, to the south by the Group III elevated courts and to the east by the tall Ruin X pyramid.

Ruin X. This is a 12.5 m high steep-sided pyramid which supports two staggered vaulted buildings on its summit. The structure was described and excavated by Merwin (Merwin and Vaillant 1932: 50-53). Originally it comprised a vaulted room with a long, narrow E-W plan with a main doorway to the east and three doors to the west. In this room, three burials were placed prior to the doorway being sealed by a thick wall. In front of this eastern wall, a new "adosada" structure was built with three doorways opening to the east. In 2000, two large looters' tunnels were found to be cut at the base of the pyramid on the east and west sides.

On the west side of Ruin X, and in axial position, a stela was found, Stela 7, lying on its back (Figure 4) and measuring approximately 0.8x3 meters with fairly flat sides. No carving was noticeable on the three visible sides. . The stela's side facing the ground remains to be inspected for possible carving. It also remains to be determined whether Stela 7 is in its original location. Near the NW corner of Ruin X was another partial monument, Stela 6. This monument appears to be the lower half of a stela and is lying flat. No signs were observed of carving or if the stela was in situ.

To the east of Ruin X is the East plaza. This almost squared plaza measures 0.8 hectares and is bounded on the eastern side by a long range building (Str. 7), on the northern side by a short pyramid (Str. 5), and is open to the south. Structure 7 measures

79 m in length, 13 m in width at the base and is about 4 m high. The center of this structure is slightly raised but it does not appear to have supported a vaulted building. It is in axial alignment with the main doorway of Ruin X room 2 (east-facing).

Between Ruin X and Str. 7, in axial alignment with these, and roughly at the center of the east plaza are Stela 1 and Altar 1. Stela 1 is standing apparently in situ with its base set into the plaza floor. It is currently wrapped by a strangler tree which also covers most of Altar 1 within its buttresses (Figure 5). The stela is roughly carved with a rounded tip and very uneven, plain sides. Merwin's measurements for Stela 1 are 3.7 m in height and 1.75 m wide. Altar one is located in front of the west face of Stela 1 and appears to be fragmentary. Merwin apparently found it intact, " 5' 4" in diameter and 1' thick. A test excavation by Claudia Quintanilla in front of Stela 1, centered upon the altar's main fragment, found that the latter had been repositioned in front of the stela on top of loose fill and humus. Moreover, Claudia found that looters had cut the altar fragment off from the rest of the altar which is still under the tree (in original location) and dug a pit into the two latest plaza floors underneath the altar to a depth of 0.8 m (Figure 6).

In front of Str. 5, on the north end of the east plaza are Stela 2 and Altar 2 (Figure 7). These monuments are both fragmentary, lying on their sides and partially covered by a tree's buttress. The stela's largest fragment measures about 2 m in length and has fallen away from the altar, on its back. Test pit 2 by Alexander Urizar in this location has found that a pit had been cut by looters underneath altar 2, cutting away and removing half of the altar from its original location and cutting through at least 3 plaza floors underneath

the altar. The main fragment of the altar and the nearby stela butt appeared to be inserted into the latest plaza floor.

Group I.

Group I is a rectangular acropolis mound surmounted by a long and spectacularly high vaulted masonry building on its southern side, designated Buildings A and B by Merwin (Merwin and Vaillant 1932: 9). This structure actually appears to represent a single building. The foot of this building's outer wall stands 20 m above the plaza floor, while its top is about 5 m high above the acropolis floor. This is a multi-roomed building with six broad doorways in the center and two smaller doorways on each corner. The interior is divided into south-facing and north-facing non-communicating halves with narrow vaulted rooms. On the south, rooms are free from tumble from the partially collapsed vaults (Figure 8). These rooms are very narrow and unusually tall, and have suffered very little decay since Merwin's visit, as it can be seen from his excellent photos. Very narrow S-shaped passages connect each of the three main rooms. The terminal rooms at each side of the A and B building have a single narrow doorway on the front. On the north face of the building only one room is free from rubble. This is Merwin's room B6 and it exhibits an unusual four-spring vault still in fairly good condition (Figure 9). Access to the south-facing room was probably not possible from the steep-sided south face of the mound, but only through a narrow passage through the west end of Building B leading to the court behind it. The court on Group One measures 79x59m on its sides and rises 20 m above the surrounding plazas, as noted above. A steep sided pyramid, Building D, rising to a 13m height and with its stairway to the south, dominates it; on the summit of the pyramid is a masonry building which originally may have opened

onto a narrow terrace to the north from its back room. However because of the looting on the summit and the large amount of rubble the locations of this building's doorways and room partitions are yet to be determined.

Abutting the western base of Building D is a one-story masonry structure, Building C, with rooms opening onto the north side, facing a narrow space in front of the steep side of the acropolis (Merwin and Vaillant 1932:11). In its interior is a north-facing room with an axial bench (Figure 10) with an armrest still in place. Narrow vaulted doorways lead to side rooms. Because of its configuration and seclusion (access from the narrow north side of the building) this structure may be one of the best candidates for investigating a throne room at Holmul.

On the western side of Building D is another one-story masonry building, Building E. Merwin does not provide a floor plan, but this appears to be a two-roomed building with benches and a doorway to the north. The rubble from the collapsed vaults obscures much of the interior.

On the SE corner of the acropolis is Building F (Merwin and Vaillant 1932:13). This appears to be a solid mound containing the famous burial exposed by Merwin which produced the "Holmul Dancer" vase (Merwin and Vaillant 1932: Plate 30 a and c). His trench through the middle of the mound is still open. Between Building E and F the edge of the mound the floor has a small horizontal recess or indentation which could represent the location of a narrow stairway to the plaza below. On the opposite, western side, there is a much wider recess in the mound floor forming two broad terraces on each side and marking the summit of an inset stairway. At the base of the acropolis, and on axis with the stairway there is a large tunnel left open by looters, the rubble from which

partially covers a large altar (Altar 3) which appears to be in situ and in one piece. It is about 0.7 m thick and 1.5 m in diameter. Altar 4 is located not very far from the SW corner of Group I, fragmentary and measuring about 1.5m in diameter and .7m in thickness; it appears to have been pushed to the side of the logging trail by a bulldozer .

A broad causeway bound by short berms/walls leads from the western face of Group I towards Group II, located about 170 m to the NW. As one follows this path to the NW, one finds immediately Structures 11 and 12. These twin buildings measure 17x10 m on each side and 4 m in height, are parallel to one another and oriented N-S. Their sloping sides bound a 5 m-wide alley with noticeable low benches indicating their function as a ball-court. Immediately next to the ball-court one enters a C-shaped courtyard on a low platform open to the south. Structure 13, the largest in this group, occupies the north side and has at least four visible and collapsed vaults. The lateral buildings, Structures 14 and 15, are C-shaped and also exhibit collapsed vaults on their summits. Between this courtyard and Group II, a few meters to the north, is a plain stela, Stela 8.

Group II

Group II is comprised of 7 buildings (Merwin's A through F) built on a 13 m high rectangular platform which measures 89x110m on the sides. Building A is the most imposing mound of the group, a masonry superstructure with roof comb occupying most of the SE corner of the platform (Merwin and Vaillant 1932: 17). It rises on a 6m high mound. There is only one off-centered doorway on the south side, while the north side of the building is completely covered by sloping rubble from the top of the mound. The doorway is T-shaped in profile and is surmounted by the remains of a masonry mask over

its lintel, now partially eroded but still discernible. The doorway leads into an interior corridor with a finely stuccoed vault (Merwin and Vaillant 1932: Plate 3) which turns east and leads into a wide rectangular room in the center of the building with a collapsed vault. This inner room is not accessible in any other way. At the base of the South slope of the Building A mound, two deep tunnels dug by looters have exposed at least two previous phases of the building. The outer East face of Building A is decorated by a giant masonry mask (Figure 11) of which the southern half, or left cheek area, is now collapsed; a looters' tunnel is located in its center, right above the snout. The southern face of Building A is also decorated by a double or stacked mask, as noted by Merwin (Merwin and Vaillant 1932: 15, Plates 4, 5) which appears to be in stable conditions. The northern side of Building A faces a small elevated court onto which are buildings B and F. This court is now almost completely occupied by the rubble from the slopes of these buildings and probably from Merwin's excavations on some of them, but it appears to be composed of two terraces, the higher one being to the west, onto which is Building B.

Building B is a small "temple" structure which was excavated and beautifully illustrated in 1911 by Merwin's photographs (Merwin and Vaillant 1932: Plates 6-9). Here he found four construction phases including four vaulted rooms and several interments. Six of the burials were placed in masonry vaults and accompanied by rich offerings (Merwin and Vaillant 1932: 20-40). The sequence of the structure, from Holmul I to Holmul V, served as a basis for the site sequence which was adopted as the type sequence for the Maya Lowlands until the excavations at Uaxactun replaced it. The grave goods of burials in rooms 9, 8 and 7 (Merwin and Vaillant 1932: plates 18, 19) are especially important because they include early polychrome ceramics which have been

the subject of discussions about the nature of the "Protoclassic" phenomenon in the Maya Lowlands (Pring 1997, 1995, Hammond 1984, Brady et al. 1995, Laporte 1995). Our inspection of 1992 and 2000 has revealed no new looting to this structure but recent vandalism had removed all vegetation from its roof exposing its beautifully decorated stucco frieze to the elements (Figure 12, 13). Close inspection of the frieze revealed fragments of red specular paint still in place. As a temporary measure, we built a thatch roof onto the rear of the structure to protect the stucco decoration until more permanent conservation can be applied.

Building F, a small pyramidal structure on the NE corner of Group II was originally described by Merwin as having a vaulted room in the interior and only two phases of construction, the later of which sealed the room and turned it into a "solid" mound (Merwin and Vaillant 1932: 44-45). However, a looters' tunnel was apparently excavated very recently into the eastern phase of this structure. Close inspection of the interior revealed six consecutive construction stages of this building of which the two earlier ones exhibit a finely red-painted stucco facade with apron moldings. The interior of this tunnel was littered with large Sierra Red sherds suggesting the possible dating of the two earlier structures to the Late Preclassic.

The remaining structures of Group II, Buildings C, D, E and G were partially excavated by Merwin who documented their floor plans and burials associated with the later phase of construction. All are described as domiciliary masonry structures with ample room space. Building C, a low rectangular structure, seems to fit this description best, as well as Buildings E and G which are long multi-room range structures with a number of benches. Building D, on the other hand, is built on an elevated platform and

has two rooms with doors opened to the east and west, respectively. The west room apparently had a bench and may resemble a "residence" while the eastern room had probably a different function and was found sealed by a rubble wall. In all, this configuration does not appear to be consistent with a residence.

Group III

Group III is a well-preserved "palace" complex that was poorly described by Merwin (Merwin and Vaillant 1932:48-50). It lies at the south end of the main plaza and it is composed of two elevated and secluded courts of similar squared shape and size, identified as court A to the south and B to the west. The two courts rise about 6 m above the main plaza and are connected by a wall/walkway near the SE corner of B and NW corner of A. Court A, the southwesternmost, measures 31x37 m at the top. It is bound on the north, south and east sides by long range buildings with visible collapsed vaults, while on the west side it is dominated by a 12 m high steep-sided pyramid, Structure 2. This pyramid was the most interesting feature of the court and received some attention in 2000; among its features was the unfortunate one of being completely dissected by three looters tunnels, east, north and south, penetrating at multiple levels. The east and west tunnels cut the building completely from top to bottom, while the north and south ones penetrated it from the base.

A complete profile was drawn of the eastern trench, the most complex, by Anna Deeks and Justin Ebersole, revealing at least five construction phases and six plaza floors associated with it (Figure 14). In its inner part, a beautifully preserved stucco building was observed. It had a sloping talud and a vertical wall decorated with red painted stucco and an apron molding on the western face. The surviving portion of this building stands

about 3 m above its associated plaza floor. The two subsequent stages of Structure 2 were clearly visible on the eastern profile as having a stairway. Both are lined with plaster and one, the later of the two, with possible stucco masks on each side. The latest construction phase of Str. 2 appears to have been a complete re-surfacing of the mound with several meters thick layers of rubble covering a possible masonry structure on the summit with a structureless flat surface. This last re-facing of the mound appears to match well with the last construction phases of several other "pyramid" buildings at the site (Building IIB and IIF, Building ID, and Str. 8)..

A third tunnel was investigated on the southern slope of Court A of Group III. This tunnel was cut on the back or outer slope of a range-vaulted structure on the south edge of the platform, penetrating 5 meters into the structure. The profile drawn by Ryan Mongeluzzo and Harriet Lock shows three plaster floors which pre-date the construction of any building on this side of the court (Figure 16). In the inner chamber of the tunnel, a cave was carved by the looters into the rubble on each side. Here a number of bone and ceramic fragments, some of reconstructable, pieces were observed. The amount of disturbance, and lack of any remains of a formal vault or cist visible in profile prevents the identification of this feature as a looted burial or cache. The ceramics found in this "feature" are consistent with a Late Classic date.

Court B of Group III presents a different layout from Court A, measuring 39x43m and rising 6m from the main plaza. On the western side, a row of at least seven vaulted rooms with masonry wall still preserved up to a 1.5-2 m height or up to the vault spring. These rooms apparently form an L-shaped building with the shorter side to the south. In front of this building is another row of vaulted rooms opened onto the eastern half of the

court. This building actually appears to occupy also the remaining north, east and south edges of the court with a continuous sequence of vaulted rooms now largely collapsed and buried by rubble. In connection with the western row of rooms, in the center of Court B, a small cavity was noticed. Inspection of this opening in the court's floor revealed an E-W vaulted L-shaped 5-7 m long corridor which connected the western and eastern halves of Court B in an earlier stage of construction and was likely buried under the last court floor. It was re-opened by looters in recent times and is presently largely empty of rubble up to a 1.5 m height, exposing very well preserved masonry walls with finely dressed stones and a short vault.

Western Transect

The western transect survey, led by Jason Gonzalez, began from the site datum at 6000E, 6000N up to a distance of 450 m (Figure 3). First a 2 m wide baseline was cut (up to 1 km distance) placing stakes at 25 m intervals. Subsequently, two two-member mapping crews spaced at 25 m intervals advanced for 125 m perpendicular to the west base line, thus completing 125 m deep and 125 m wide sweeps on each side of the west base line (see also Puleston 1983, Tourtellot 1970, Tourtellot, et al. 1993, 1994). In future field seasons, the operation will be repeated to complete the 3 km projected length of each base line in the cardinal directions. In 2000, we were able to complete mapping of a swath along the west base line that was 250 meters wide and 450 meters long from the center point. Even within this relatively small area, we found a variety of structures and landform modifications. In brief summary, we mapped 43 structures, 4 stelae, 1 altar, 10

chultuns, 3 terraces, 2 long berms, 4 quarry pits, and 4 quarry marks with cut stone blocks on the bedrock surface.

As the survey proceeded east to west from the datum (near the west edge of the Main plaza), we mapped a drainage area sloping to the south which had two terracing structures lying perpendicular to the drainage. Just to the west of this drainage was a stela (Stela 5) standing in apparent in situ position that appears to be in line with Structure 8 and Ruin X in the Main Plaza. Stela 5 stands about 1.70 m above the ground. It is roughly cut with an oval top end and round short sides. Its main sides face E-W and bear no signs of inscriptions (Figure 17). To the south and east of Group II was a large 20 by 30 meter low platform structure, at which one of the berms bounding the causeway ended. On the right side of the western base line, are buildings lying on a 100 meter by 100 meter modified ledge/platform on which Group II was located. On this large platform was the ball-court (strs. 11 and 12) and one long berm/walkway that terminates at a central C-shaped group (strs. 13-15) described above. On the western edge of this platform were two pyramid structures connected by a low wall, with room depressions on top of each structure. In front of these two pyramids were two small and low square platforms. Off the western edge of this platform was another drainage sloping southwest with one terrace/check dam.

South of this large platform is a scatter of structures, including several pyramidal structures, including Structure 8. In addition, evidence of landform modifications existed in terms of quarrying activities in pits, quarrying with cut marks and half finished construction blocks, as well as various chultuns.

Structure 8 is a 15 m high flat-topped and steep-sided pyramid. Two large looters trenches bisect it completely top to bottom and from side to side. Upon cursory inspection, at least one earlier phase of construction was observed including a vaulted superstructure covered by the flat top mound summit. On the eastern front of Structure 8 several limestone fragments were found in paired axial position. Among these, were at least one altar (# 4) and two stelae (# 3 and 4). Stela 3 appeared to be the butt end of a large stela about 1 m wide which was found to be still standing about .7m above the ground (Figure 18, 19). A test excavation revealed it to have been reset on the humus layer without any formal layer of rubble or other preparations most likely in the post-abandonment period of the city. Stela 4 appeared to have been tipped and laying on its front over another stela/altar fragment. The "in situ" nature of Stela 4 and nearby fragments remains to be determined.

A small "elite" courtyard group is located to the SE of Str.8. This includes two long range buildings on the east and west sides and a small pyramid structure on the south side of the platform. Continuing to the west are several mound groups, including one on the northern side of the baseline that had several buildings with visible masonry walls. To the south of the baseline, the topography was very rocky and sloped gently to the southwest. Directly on the baseline at approximately N6000 E5650, is what appears to be a small radial pyramid, approximately 4-5 meters high, which will be the focus of further investigation in 2001. At the western end of the mapped area was a small group of mounds lying on the bottom of the slope directly before entering a flat area (possibly a bajo) that lies off the western edge of this map.

Minor Centers

A number of minor centers were reported during work at the Holmul site. Of these, only the site of "Caracol" was briefly inspected. The site is located about 5km SSW of our base camp or about 3.5-4km due south of the Holmul center. The site is composed of at least 3 tall pyramids clustered on a broad platform. Str. 2 appears to be the main structure measuring about 20 m in height and supporting a vaulted building on the summit. Serious damage to the superstructure and body of this pyramid has been inflicted by deep looters' trenches. At about fifty meters to the north is Str. 2 which is about the same height as Str. 3 although no masonry superstructure was noted due to the massive disturbance by looting. Str. 1 is located to the west of Str. 2 and appeared to measure about 15 m in height and have a stairway on the southern side. Four major trenches had bisected the structure on all sides.

Additionally, the site of Lechugal was reported by IDAEH inspector Moro to be located only 200 m from our base camp, but was not explored in 2000. Important architectural remains will likely be found at the site of Cival II located about 7 km to the north and at the site of Limonal in the same direction. To the west, on top of the escarpment and about 7 km from site center a number of minor centers might be located, including the site of Sufrikaya with one of the earliest reported cycle 8 inscriptions in the Maya Lowlands (Matthews 1985). A great number of smaller "minor centers" are expected to be found within the 4-5 km radius of the Holmul center and will be investigated with the use of GPS and EDM equipment in the coming years providing important information on the economic, political and ritual structure of the settlement area of Holmul.

Summary and future directions

During the first season of systematic study of Holmul, many of the initial goals of the project have been accomplished as the auspicious beginning of a long-term multi-disciplinary investigation took place. The site was accurately located using GPS coordinates and spotted on Landsat images thereby setting up a datum for the study of the relationship of the city with the surrounding ancient settlement and landforms. A preliminary map of the site core was produced at 1:500 scale with details of the main groups and plazas and the topography of the site center at 0.5 m intervals. The site layout was for the first time observable in all its defining characteristics and impressive complexity. Much of the major architecture at the site had been described only in the most cursory way in Merwin's posthumous report.

The core of the city is centered upon three major plazas separated by the imposing Ruin X pyramid and bound by an impressive acropolis, Group I, and palatial complex, Group III, to the north and south. In all, 5 stelae and 4 altars have been found within the central plazas area and a total of 8 stelae and 5 altars at the site, while only two stelae had been reported by Merwin. A broad causeway connects the main plaza to a second acropolis to the western Group II, also impressive in size and due to its giant "masks" adorning the eastern and western facades. Also intriguing is the early buildings buried under the Late/Terminal Classic mounds of Group II which may reveal more of the beautifully preserved architecture and Late Preclassic history of the site in future years. Group II is also associated with a plain stela and a large open-ended ball-court next to a

small but formally built elite domestic group. Str. 8, to the south of Group II represents a slightly peripheral but important focus of ritual activity outside of the main plaza and probably dating to the latest phase of the site. Three stela and two altars were found in its vicinity. A few hundred meters to the west, almost closing the main site area in this direction, is a small but extremely interesting radial structure which will be the subject of intensive study next year.

Group III was one of the most surprising areas of the site both for the complexity of this obviously "late" palatial complex and for the presence of extremely elaborate and well-preserved "Preclassic" temple structures inside Str. 2. This area, as well as Group II, in future years might yield invaluable information on the early history of the site as well as about the uses of space inside palatial compounds. Important areas to investigate will include sub-floor deposits as well as outer middens for the collection of elite waste in addition to primary burial or cache deposits.

In addition, new areas will be mapped to the north and east of the main plaza to include what appears to be most of the remaining ceremonial core. Due to the shape of the topography to the west and south it appears that most of the elite and public architecture should be found in the northern and eastern directions. To the south-southwest the ground appears to rise again after a broad depression at about 1 km distance and this area may reveal important settlement features in relation with the nearby stream and bajo areas.

Future efforts will focus on the relationship between the site center and important elite groups and minor centers located within the 4-5 km radius using GPS position and Landsat data for reference. The planned study of the settlement and associated landforms

using field data and Remote sensing imagery in a GIS spatial analysis will likely help elucidate the economic, political and ritual structure of Holmul as a medium-sized central Petén Maya city of the Classic period, as well as help understand its rise and demise as a focus of Maya settlement.

Finally, one major accomplishment of this first season has been to document the intensive and recent looting that has plagued this site in the last few years. When our crew arrived at the site, it found many open trenches with thatch roof still “green” as a sign that the looters had just left. More importantly, it is hoped that the project’s placement of two caretakers at the site on behalf of IDAEH will help prevent further looting between archaeological work seasons and will open the door for the permanent protection of the site as well as its development as a sustainable cultural resource.

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