Suggested Citation: Caraher, William R. "Extensive Team Mid-Season Report, 2001." EKAS Field Reports. Ancient Corinth: The Eastern Korinthia Archaeological Survey, July 19, 2001.

Extensive Team Mid-Season Report, 2001

Eastern Korinthia Archaeological Survey
William R. Caraher
July 19, 2001

The goal of this brief report is to provide a context for the information contained on the EDU forms (6501-6563) and to present my findings from investigative methods producing data not in keeping with the formal EKAS data collection strategy. There will be four sections: 1. a description of my topographical investigations around Korphos, with a particular emphasis on paths and routes; 2. a discussion of the sacred topography of Korphos with an emphasis on the location and dates of Christian churches in the area; 3. a brief discussion of the system of fortifications around Korphos with attention to those visited during the 2001 season; 4. some conclusions concerning both the method implemented by the extensive team and a preliminary synthesis of the data collected by extensive investigations.

The first goal of my investigation of the area around Korphos was to determine the main routes linking the Sophiko plain and town of Korphos. Six routes were identified and investigated.

1. Topographic Investigations of Roads and Routes around Korphos

This road, identified and discussed at some length by M. Dixon in his dissertation, runs south from the site at Hag. Paraskevi east of Sophiko to the south side of the Xerias river where it descends into the village. He numbered this road 3 with two branched 3a and 3b. Both roads enter the area of Korphos from the north and follow close to the modern road that forks off from the highway to Epidauros. The roads then turn slightly to the east between in a saddle between the hill with a quarry (EDU 6502-6507) to the north and the Prophet Elias hill (EDU 6509, 6510) to the south. The road then splits into road 3a and road 3b.

1a. Road 3a turns to the southeast and runs to the north of the Prophet Elias hill. Today it is a bulldozed dirt road and there are no obvious traces of the earlier road way (wheel ruts, kalderimi, et c.). The road switchbacks down a steep slope and eventually enters a terraced clearing with olive groves (EDU 6511, 6512). This triangular shaped clearing is bounded to the south by a rema and to the north by precipitous cliffs of the Xerias river. Here there are the remains of three modern farmhouses and pottery datable to the Classical/Hellenistic period and the early modern period. There is a water source and possible indications of quarrying along the western boundary of the fields. At the eastern most point of the clearing stands the substantial remains of a Hellenistic tower. Dixon (2000) deals with this clearing and tower at length referring to this area as Are Bartze. Peppas (1990, 1993) and Pikoulas (1995) discuss it as well.

- 1b. The other route, Dixon's 3b, passes to the west of Prophet Elias hill. Around a kilometer south of the Prophet Elias hill this road turns east and ultimately runs along the north side of the rema that ran to the south of the Are Bartze tower clearing. About 300 m the west of the tower, the road crosses the rema. Here are the remains of a bridge dated by Dixon to the 19th century and a substantial (approx. 6m) retaining wall (EDU 6523). The road then follows the south bank of the Xerias river and gradually descends into the village. There is evidence for kalderimi in some places and the possible remains of a fortification crossing the road (EDU 6522). I have only walked road 3b from the village of Korphos to the bridge. Villagers, however, confirmed that this was in memory the path from Korphos to the village of Sophiko. Road 3a is unlikely to continue from the tower.
- 2. The Road to the Hag. Katerini (Lakka Skoutara) Crossroads. There is evidence for another potential means of egress from the area around Korphos via the Xerias river valley. This route would connect Korphos with both the fertile land around the Hag. Katerini crossroads and the road from there to Sophiko. The route would start out toward the west and at approximately one kilometer from the village ascend a steep but negotiable promontory formed when a rema enters the river bed from the north east. The remains of terrace walls, a substantial built aloni approximately 8m in diameter, and a modern farmhouse near the tip of the promontory speak to this areas strategic location between Korphos and the settlement near the crossroads (EDU 6518). There is evidence for a retaining wall for a path north of the aloni and house complex. The wall runs for around 40m with some interruptions at a bearing of 70 degrees (EDU 6519). The fact that it runs perpendicular to the slope suggests a switchback path, which would not be inappropriate considering the slope at this point. The slope climbs for under a kilometer to the north, eventually leveling off at a plateau at an elevation of just under 300m. A modern road, field walls, and a house sit atop this high plateau. The road continues for to the north entering a fertile valley with a substantial settlement. There is evidence for alonia, cisterns, houses, field wall, and a recently constructed church (EDU 6520). Here the road meets the modern road connecting Sophiko to Korphos via the area around the church at Stiri. A dense scatter of pottery from both the ancient and early modern period spreads in the fields to the east and west of the church (EDU 6521).
- 3. Road from Sophiko to Stiri. The road from Sophiko to Stiri would provide another route into the Korphos basin. This road joins the main road to Epidauros from the east just south of the road to Hag. Marinis monastery. It would run along a series of open fields for approx. a kilometer before turning south and passing between the hills of Korphes and Rachi Zaraka. From the pass between the two hills it turns again to the east and enters the high valleys of the Hag. Katerini crossroads area. It then proceeds east through another series of fertile valleys where there is evidence for abandoned modern farmhouses. The significant heights of Pevkunas and Sphaka (not the Sphaka hill upon which a church dedicated to the Pro. Elias stands, inland and south of Lychnari) are to the north of the road and the hills of Prichea and Koriphi are to the south. It seems likely that the ancient road passed between the hills of Koriphi and Monasteri to descend to Korphos. A shepherd in the area claimed that there was still some evidence, kalderimi in particular, for the old road which would have met the modern road south of the Stiri

church for its descent into the village. The modern bulldozed road from Sophiko turns south at Steri to enter the village. This road is cut into the side of the steep hills to the north of the village and seems unlikely route for the ancient road. There is little doubt that there was a road from Stiri to the village of Korphos, although its exact route was not determined in our time there. Jay Noller claimed that a distinct step upon which the road could run was visible to the south and east of the church (see road 6).

- 4. The modern road. The modern road to Korphos, with the exception of the area where it parallels the Dixon road, was bulldozed and blasted into the mountain heights south of the village and is unlikely to have served as a route during the pre-modern period.
- 5. Two possible unexplored passes. Two passes run from the high fertile valley to the east of the Hag. Katerini crossroads area down into Korphos village.
- a. One runs between the hill of Spata and Prosili Togia and would have possibly descended into the village past the Hag. Pantes church. From the hill of Prichea the route of this pass is clearly visible as it runs along the ridge between Spata and Prosili Togia. A conspicuous scatter of stones with some ceramics on Prichea suggests the remains of a tower watching this approach to the village (6543).
- b. Another easy pass runs to the east of the Spata hill and to the west of Koriphi. In his investigation of the area, M. Dixon identified a watchtower on the western slope near the summit of Koriphi that might have served to guard this pass. Neither of these passes were investigated during my time there. The descent into the village from these high passes (roughly 300m) would have been quite steep and were unlikely to have been oft traveled thoroughfares. They might, however, have served as routes for transhuments allowing their flocks access to the protected valleys to the north of the village or served the village in times of emergency.
- 6. The Road from Stiri to Sarakina, Ak. Trelli, and Korphos. I have investigated the path from the hill with the geodetic marker (alt. 223) southeast of the Byzantine church at Stiri. T. Tartaron suggested that a series of walls south of the geodetic marker might be the remains of a switch back road from Mycenean times. While this is possible, there is little evidence for a path sufficiently wide to accommodate cart traffic to the lower on the hill than these walls. The steepness of the rema further west of the slope would be an unlikely path for either individuals or carts. It seems most reasonable now for foot traffic to have ascended the western side of the rema and then enter the fields around Stiri from the southwest. The effects of erosion on the rema which appear quite dramatic make determining the exact path in antiquity difficult.

From the base of hill 223, it would be reasonable to walk from the district known as Sarakina to the site at Ak. Trelli. While development in this area limited any extensive exploration for ancient remains, there is a large limekiln at the beach to the south and east of the hill 223. From the base of this hill the path to the south and east would be easy passing out of the Sarakina along the path of the modern road. Following the modern road east toward the coast, I turned to the south to walk along the flank of a hill with an elevation of 86 m. I walked along the seaward flank of the hill and then cut inland to the

summit. No trace of a Mycenean road could be identified along the eastern flank of the hill. Between this hill and the next hill (elevation 73 m) is the remains of a modern farm house and what might be a fortification (see Investigation of Fortifications and Border Cairns around the Korphos Area and EDU 6561). I continued along the east, seaward flank of these hills veering gradually toward southeast. I noticed no sign of ancient or early modern road along this stretch of coast.

Conclusions Concerning the Roads around Korphos: The mains routes from Korphos to the interior have been walked and recorded. The most pressing remaining issue concerning roads in the area around Korphos is the path linking the village to area around Stiri. Little conclusive evidence has been noted for either the early modern road or the ancient roads linking the sizable Mycenean settlements at Ano Korphos and Kato Korphos. Further investigation in this area might produce some addition information concerning the route between the village and monastery, but this might best be done with full field teams walking the landscape at regular intervals. A report of kalderimi to the southwest of the church at Stiri might also warrant additional investigation, although a preliminary search of the area could not substantiate the claims of the informant. The final area for possible further investigation is the area to south west of the village known as Choraphi tou Ellina. Dixon reports that the early modern road which leaves the modern village along the southern bank of the Xerias river would pass to the north of this region. An addition source of information, particularly for early modern roads, would be the earlier set of aerial photographs taken by the RAF during 1944 or 1945. While they were taken at a higher altitude than the 1967 aerial photos we now use, it might be possible to see features that vegetation or construction obscured on the more recent photographs.

The Sacred Topography of Korphos.

The best evidence for the sacred topography of the village of Korphos comes from the six churches around the village. These churches dating from quite recent times to the 11th or 12th century served both to define the village, particularly its boundaries, and reflect the relationship between the village of Korphos and its inland neighbor Sophiko. The research for this report was done mainly during the first week of the 2001 field season when I conducted a brief survey of these churches. Shortcomings in my method for collecting data about these churches became clear during my visits to these buildings and in my subsequent efforts to summarize my findings. Return visits to all of these churches will be necessary. Consequently all the conclusions in the following report are merely tentative reflections on my recent experiences with the topography of the region.

1. Hag. Anna. This church is the southern most church in the village situated atop a high bluff on the north bank of the Xerias river. The church is a simple single naved barrel vaulted structure with a polygonal apse and some toothed friezes. An inscription in the south wall dates it and its frescoes to the 18th century (1744) and asserts that it was built in response to an appearance of St. Mary and her mother St. Ann to a farmer in the area. According to the inscription he was from Sophiko and tending his crops in this area. The position of the church on the north bank of Xerias river and the two routes that entered

Korphos from Sophiko in the region makes this area a key point of contact between the harbor of Korphos and the interior. Moreover, on the west interior wall there is a dedicatory inscription for the fresco crediting to a man from the village of Adamia (modern Adami?), which is in the Argolid likely reflecting the ties between Korphos and the sea. The church might well have defined the southwestern extent of the dense settlement of Korphos as well, although there is evidence for farms during the modern period to the west and southwest of the church. Immediately adjacent to the church, to the south, is the remains of a modern farmhouse. A local informant in the village who cared for the church told Lita Diacopoulos that the church had been associated with a monastery and had once been quite wealthy. There is evidence for additional walls projecting from the west and the south side of the church.

2. Haghioi Pantes. This church sits just below a conspicuous fault above the village on the high ridge that runs between Prosili Togia and Spata. To the west of the church is the path of a possible pass between the hill of Spata and the hill of Prosili Togia. The church itself is a simple barrel vaulted nave with a single semicircular apse. Surrounding it are the remains of several buildings, two large cisterns, and, to the south of the apse, an attached osteotheke. While today the church is the private church of a local family, the villager responsible for the church suggested that the church was once associated, like Hag. Anna, with a monastery. An inscription above the door in the southern wall lends support to his claim. Moreover, he said that he lived in a house to the east of the church which was destroyed only recently by fire. A possible monastic or domestic function for the ancillary buildings would account for the large cisterns (these were measured by R. Rothaus) and the osteotheke. Both of these structures have parallels at the Stiri church. The frescoes inside the church are recent, probably from the early part of the 20th century or end of 19th century. The exterior of the church has been well maintained enjoying a seemingly recent coat of white wash. A poured concrete pad, roof and a northern wall have been recently added to the west of the church.

There is some evidence to suggest that this church had an earlier predecessor. To the east of the nave approximately 2 m of a possible apsidal wall foundation survives. The course of this apsidal wall, if extended, would likely meet with the northern wall of the current nave. Around 2.5 m to the south of the nave stands a fragmentary wall running parallel to the south wall of the current church. This may have been the southern wall or more probably rest atop the foundations of an earlier larger building. Further evidence for an earlier structure comes from spolia built into the walls of the current church. Below the window in the apse is a possible mullion capital. A probable early Christian mullion of approximately 1.5m in length rests atop the cistern to the south of the church. The remains of the mullion, southern wall, and apse suggest that a larger basilica once occupied this spot, and an early Christian date for this structure is not impossible. One additional piece of spolia deserves mention. Above the south door in the church is an elaborate marble cornice with egg and dart pattern topped by a frieze decorated with a Greek key motif. The quality of the marble and the carving mark its unmistakable antiquity. T. Gregory has suggested an Epidaurian provenience for this architectural sculpture.

A tentative date for the existing church can be drawn from the last line of the inscription found above the south door to the church. The last line of the inscription

which includes a date allows for several possibilities contingent upon the identification of the second and third characters in the four character date. If the inscription reads (AYLG) then 1733 is a possible date for the church. Reading the second characters as an omega produces a date of 1833 (AwLG). The reading of the third character could be either kappa or lambda producing a date of either 23 or 33. The construction and style of the inscription are not particularly similar to Hag. Anna which was constructed in 1744. This would suggest the later date for the construction of the Hag. Pantes, although this is by no means certain.

- 3. Hag. Andreas. Directly to the north of harbor at Korphos on the shore side of the road that runs along the shore stands the church of Hag. Andreas. The church has a single barrel vaulted nave with a semicircular apse. The exterior of the apse has a band around the top that overhangs the wall of the apse. There are doors in the south, west and north walls of the church. The external walls are plastered and white washed. The church is surrounded by several fig trees suggesting either a natural source of water or a cistern. While all appearances suggest a modern date for this building, an informant told Lita Diacopoulos that the church was one of the oldest in the village with frescoes. Since the church was locked I was not able to investigate this further.
- 4. The Panaia at Stiri. This church is the oldest standing church in the Korinthia. It is located to the north of the village of Korphos to the south of a hill locally known as Monasteri. It sits adjacent to an ancient lake which now provides fertile fields. To the north of the church there are two large cisterns and to the east exist two large alonia. To the south of the church are the remains of several houses which families occupied within the last generation. Elsewhere around the building there is evidence for settlement both ancient and modern reflecting the importance of this area throughout time.

The church is described fully by Orlandos (1935). Briefly, the church itself is an early cross-in-square church. A broad and short central dome rises from a square core. Cross arms extend from a cubic central core with the western arm appearing to extend further than the northern, southern, and eastern arms. They are covered with double pitched roofs. There is evidence for eight windows in the octagonal dome, monolobe windows under the arches of the north and south arms and, bilobed windows lower in the north and south walls. A tall trilobed window, now partially filled, pierces the polygonal eastern apse. Elaborate brickwork frames the windows with toothed friezes outlining windows lobes. Despite the churches currently whitewashed state a pseudo-cufic brick design is clearly visible on either side of the monolobe windows below the arches of the north cross arm.

Inside the church it is apparent that the north and south arms are longer than the east and west arms. The eastern arm serves as the chancel area and terminates in a polygonal apse. It is flanked by two barrel vaulted pastophoria. The western arm of the cross is quite truncated and flanked by two narrow barrel vaults that are hardly more than arches. At the same height, but unrelated structurally, a barrel vault continues west from the truncated western cross arm into the narthex. Two transverse barrel vaults flank this narrower vault of the central narthex bay. The impression this produces is that the western cross arm extends further to the west than the eastern cross arm extends to the east creating a pronounced longitudinal axis. Arches springing from heavy piers support

a pendentive dome. A solid wall separates the main nave from the narthex. The east narthex wall was originally pierced by three doors, but now only the central is open. The west wall opens to the exterior of the church through a single door. While the exterior of the church underscores the longitudinal dimensions of the building, the interior of the church, interrupted by the narthex wall and partitioned by heavy piers appears wide in proportion to its length.

The decoration of the church reflects at least three periods. There is some evidence to suggest a nearby early Christian building. The angular mullion capitals in the apse windows are decorated on the outside with a cross in low relief surrounded by inward pointing vegetation. The interior face of the mullion capitals are decorated with simple rough crosses in very low relief. The decoration is difficult to date on style alone, but may well be early Christian. The simple rough carved crosses on the interior faces of the mullion capitals have definite parallels in 5th and 6th century architectural decoration. In the Korinthia, the Ionic impost capitals of the Lechaion basilica show a similar practice. The northern mullion of apse window is a Roman funerary inscription which M. Dixon has recently documented (2000). The southern mullion is clearly spolia as well, but its original function is less clear. Its dimensions are 1.14m x 0.40m x 0.15m. While mortar and the filling of the southern most lobe of the trilobe window has obscured the edges of the block, its decoration, raised longitudinal bands, and size suggest a possible identification as part of a door molding. More elaborate comparanda exist at the Lechaion basilica and at basilica B in Nikopolis.

5. Zoodochos Pigi Church. The main church in the village of Sophiko is located in the cramped central quarter of the village about 100 m inland from the central harbor area. The church is likely a cross-domed basilica with a short transept with narrow arms that do not exceed the north and south walls of the building. A high narrow dome stands at the crossing. The roof is double pitched with slightly higher pitched roofs over the transept arms. There are doors in the west, north, and two in the south side. To the east there is a polygonal apse. A pleasant courtyard surrounds the church. In the northwest corner of the court stands a clock tower, 10 m from the church, stands a clock tower linked to the main nave by an arcade. An inscription dates the clock tower to 1992. To the north of the church there is a large cistern as well as several associated buildings. Outside the south door of the church stand two narrow unfluted columns possibly ancient spolia. Above the west door of the church is an inscription dating the building to 1904.

Perhaps the most interesting thing about this modern church is its dedication to the Zoodochos Pege. In a town without a regular supply of natural water this is a striking dedication. It seems to coincide, however, with a tendency for the churches in the Korphos area to have cisterns associated with them. There are conspicuous cisterns visible to the north of the church at Stiri, to the south of the church of Hag. Pantes, to the northeast of Hag. Anna, and to the north of Hag. Nikoloas.

6. Hag. Nikoloas Cemetery church. This is most recent church in the village of Korphos and was built to be the new cemetery church for the village, replacing, apparently, Hag. Anna. The church is a simple single nave church, barrel vaulted with a semicircular apse. It has doors on the north and west sides. A significant and quite recent cemetery surrounds the church and to the north of the main nave there is a cistern. Perhaps the

most striking feature of this church is its location. Hag. Nikoloas is much closer to the center of the village than Hag. Anna. This could reflect, among other possible explanations, availability of land, a contraction of the village, a change in the notion of a village center, or a change in the burial practices in modern times.

Conclusions: There are four interesting, if tentative, observations concerning the churches of Korphos that might be worth making now. First, the village of Korphos has 6 church in its immediate vicinity (and at least one more, at Hag. Katerini, that is associated with the village through shared clergy). This is more than the number of church associated with similarly sized villages at Hexamilia or Xylokeriza. This might reflect differences in settlement practice, ecclesiastical organization, land tenure, or even differences in the conception of sacred space. Second, the churches of Korphos tend to be associated with the major routes in and out of the village. They might define the furthest extent of village influence, if we assume that settlement in the area of Korphos is similar in extent as it is today. They likely, however, reflect fundamentally different forms of sacred and social organization. The evidence of links to both Sophiko and the Saronic world (particularly towns in the Argolid) is worthy of note and speaks of a possible integrative function for these churches – drawing the interior around Sophiko to the wider world through the village of Korphos. Third, three of the six churches have evidence for either spolia or earlier buildings. In some cases this spolia is evidence for earlier construction on that spot, but in other cases the spolia appear to have been imported from elsewhere perhaps signifying links to regions or communities abroad. Finally, five of the six churches have substantial cisterns. These cisterns are not typical of churches elsewhere in the Korinthia that I have seen and appear far in excess of the needs for the function of the church. While in most cases they might reflect the needs of associated buildings, their continued upkeep, such as those at the Hag. Pantes, which the informant claimed to have filled regularly, seem suggest a more complex reason for their existence. These features make the churches of Korphos an interesting corpus for study and demonstrate how careful description can provide important information concerning settlement practices, intercommunity ties, and possibly even ideas of the sacred from a feature that too often tends to be treated as part of the "background interference" by the EKAS.

In addition to the Korphos study, numerous additional churches have been located and described during short "church hunting" ventures by the Extensive Team this season. It is my hope to continue this project both this season and into next season in cooperation with the Modern Survey Team, The EKAS Site Register, and the LoCA database. I have made every effort to ensure that my database for churches will relate to the Site Register database and the GIS. Currently I have made some record of over 30 churches in the Eastern Korinthia ranging from the Late Roman period through Quite Recent Times. This project should, in the end, include detailed descriptions, dates, and locations for over 60 churches. By integrating this database with the GIS some spatial analysis will be possible and, ideally, some like between the distribution of churches during various periods and the data collected through intensive survey. As this brief summary of my Korphos findings should show, the location and date of churches alone could provide important information for understanding settlement patterns and relations within the survey area.

Investigation of Fortifications and Border Cairns around the Korphos Area

One of the major projects of the Extensive Team this season was the investigation of some of the fortification in the area around Korphos. This project is directly related to the survey's interest in the possible fortification on the hill of Vigla and wall near the Hag. Demetrios ridge, my research interest in the late classical fortifications at Oneion and Stanotopi and the recently completed dissertation by M. Dixon. This dissertation provided a guide for this project. His primary interest concerned the Hellenistic period in the area around Korphos. In keeping with the diachronic nature of the EKAS it seemed advisable to investigate the areas identified by M. Dixon with an eye toward expanding the chronological range for human activity there as well as gaining a better understanding of the fortification strategy in place in the Korinthia. Six places identified by Dixon were investigated to this end: the quarry site to the east of Korphos, the site at Pr. Elias, Are Bartze, Monasteri Hill, Koryphis Hill, and the location of the so-called "Dixon Cairns". Additional exploration identified two other possible fortifications in the Korphos region: one on the west face of Prichea hill and another in the saddle between Ano Korphos and the Ak. Trelli site. The goal of this report is not to describe data collected but rather to attempt a preliminary synthesis of this data and propose a working hypothesis for the method of fortification employed in the Eastern Korinthia. It is my hope that this brief treatment will provide a background for the data collected from these important sites.

I explored two fortified areas to the north and the east of Korphos that are not directly related to the ring of mountains around the harbor and village. The first is directly to the north of the modern quarry, now out of use, to the east of the main road out of Korphos (EDU 6506). This large fortification, noted by Dixon, is over 50 m in diameter and is constructed of gray Korinthian limestone facing with a rubble fill. Parts of the wall stand to nearly a meter. The area has no associated ceramic evidence. Dixon followed Peppas in thinking that this wall was medieval. The second fortification to the north and east of Korphos sits atop the Pr. Elias hill. The fortification itself is difficult to understand and the density and chronological range of the artifactual material there mitigated against its treatment as an EDU. It deserves full LoCA coverage or, at very least, intensive survey and mapping attention. The remains on the hill likely date from many periods. There is clear evidence for a ancient construction from the Corinthian pan tiles, the two small marble columns – one serving as a lintel about the chapel door and the other on the ground near the summit – and the large ashlar blocks visible in the foundation of the Byzantine chapel there. Among the maze of rubble walls to the southwest of the summit, Dixon identified, apparently, two walls of what he interpreted to be a tower in polygonal masonry. The walls around the small chapel are not easy to date, but might well be medieval as Peppas argued (Peppas (1990) 241-242). The church itself is a simple single nave chapel with a semicircular apse and a wood roof. The walls are plastered and white washed making it difficult to date on the basis of masonry style. The ceramic evidence from an intensive survey could provide important chronological information on this site and assist in the dating of the church, the rubble walls, and tower. These fortifications certainly contributed to the defense of the harbor at Korphos and the passages leading to it, but exact relationship to the harbor itself and the chronology of these walls is difficult to ascertain. If the fortifications are medieval, they are deserving of attention since the likely Frankish medieval fortifications atop Mt. Tsalikas, north of

Sophiko, has been examined recently by Gregory and subjected to intensive survey (Gregory (1996) 61-76). Furthermore, a careful examination of the ceramic and architectural evidence from the Korphos area would contribute to the already active discussion of the medieval period in the area around Sophiko.

The harbor of Korphos is surrounded by a series of mountains separated from one another by passes and ravines. As I have already discussed the mountain passes and ravines often provided a means of access to the interior. The mountain peaks, on the other hand, became important places for towers and fortifications overlooking both the coastline and routes of communication between the coast and the interior. Previous scholars have noted fortification on the hills of Monasteri, Koryphi, and Prosili Togia. I conducted an Extensive survey on two of these hills – Monasteri and Koryphi. The fortification on Monasteri was clearly visible consisting of a oval circuit wall with a tower on its eastern interior (EDU 6515). Dixon, who identified this tower with the Hellenistic fortifications around the Bay of Sophiko on the evidence of a single Corinthia roof tile associated with a similar fortification at Koryphi, did not discuss other ceramic evidence from the summit (Dixon, 282). While the ceramic density at the summit was quite sparse and appears undiagnostic, it is possible that with an intensive investigation a better understanding of the chronology of this series of walls will be possible. Dixon also identified a fortification on the hill of Koryphi to southwest of Monasteri hill. An Extensive survey of this hill failed to locate this tower and produced only a single roof tile as ceramic evidence(Dixon 281-282). Once again, a more intensive investigation of this area would improve our ability to date and understand the topography of the Korphos region. Another tower exists atop the hill of Prosili Togia, but I have not surveyed this hill. The tower and circuit wall on Monasteri, and Dixon's assertions concerning fortifications on the other heights overlooking the harbor at Korphos suggest that two considerations dictated the placement of towers – one, their proximity to passes from the harbor area to the interior, and two, open views of the coastline.

The most dramatic fortification stands along a bluff to the south of the Xerias river known as Are Bartze. This site, locally identified as the location of the Queen of Sophiko's palace, consists of a large polygonal masonry tower and a considerable scatter of Hellenistic pottery. Dixon has studied the architecture of the tower, which is quite dramatic, and the possible function of this place during the Hellenistic period, but little beyond this. Additional attention to this area could yield interesting results despite Dixon's apparently careful examination of the remains. First, he asserts that the tower and its associated compound had architectural similarities to fortified farmsteads elsewhere in the Korinthia (at Asprokampos near Perachora), but that the identification of this site as such was unlikely because the amount of arable land to the west of it was inadequate to support a permanent settlement there (Dixon 75). This interpretation is interesting in light of the use of this area in the modern period. Putting aside the fact that he asserts the inadequacy of the land at this place to support a farm without any supporting argument, there is archaeological evidence from a later period suggesting that the area might have had sufficient arable land to support a family. There are the ruins of three "early modern" farmsteads in the arable fields to the west of the tower. While the differences between farming in the early modern period and in the classical period are significant, the presence of a farmstead is suggestive. A more careful examination of the area with the resolution provided by intensive survey could provide a better assessment

of the function of this site in both the ancient period and later. Another interesting claim by Dixon that might reward closer examination is his claim that the area had a source of water (74). The only evidence for a water supply in this area was a rather typical cistern. There are several fig trees growing in the fields to the west of the tower, however, suggesting that a fault might run through the area and well water might have been available at an earlier time. If this is, in fact, the case then this would be one of the few areas in the vicinity of Korphos with a water supply and might shed light on the hydrology of this period in earlier times – for example the dedication of the church in the center of the village to a Zoodochos Pege. (Is it possible that Thucydides description of a harbor sometimes identified as Korphos (Dixon, passim.; Salmon (1984) 6-7, 32) in 8.10.2-8.11.2 is in reference to the arid conditions in the area of Korphos, which continues to suffer from a lack of natural sources of water, rather than a description of its desolation?). While the exact function of this fortified position is unclear, its location would fit into the criteria for assigning other building in the region of Korphos the function of fortification. The harbor at Korphos is clearly visible down the valley of the Xerias river, and its position overlooking the river bed ensured that traffic making use of it or moving to the towers south along the path of the "early modern" road would pass through its viewshed. My own inadequate preparation in the earliest phase of my fieldwork leaves many questions concerning this area unanswered. A return visit to this area is probably required. A brief treatment by an intensive field team and by the modern LoCA team would also contribute to our understanding of this area.

Two additional possible fortifications were noted in the course of extensive survey in this area that might have satisfied these two requirements. I identified what might be the remains of a tower on the southern slope of the Prichea hill (6543). There was a single piece of pottery associated with this rubble. If this is in fact a tower, it would be well suited to guard the pass running between Spata hill and Prosili Togia into Korphos. The coastline was less visible from this location than from any of the summits further to the south and east. Another possible stands on the coast in a saddle between two low hills to the south of the Stiri area and Sarakina (EDU 6563). The reason for my identification of this structure as a fortification is its similarity in design to the structure atop Monasteri hill and the structure reported atop Koryphi hill. It is an oval wall approximately 15 m in diameter with a square tower on its eastern interior. The wall is constructed of loose gray fieldstones without visible mortar. Its location suggests a similar function to the fortifications atop the hills surrounding Korphos. A long stretch of the coast line ranging from Ak. Trelli in the south to the Ak. Stiri to the north is visible. A road connecting the settlement at Sarakina, below the geodetic marker to the southeast of Stiri, to the town of Korphos runs through the depression to the east of the small fort. While Sarakina has not be subject to intensive or extensive survey it seems likely that the road running from the small protected harbor there (EDU 6559) to the settlement at Korphos would be a security concern for any settlement in the area. Like many of the other fortification in the Korphos area, little to no ceramic evidence was associated with this structure. A more thorough investigation of these structures with intensive survey and mapping teams would likely shed light on their chronology and function.

The final aspect related to the fortification of the Korphos area is the presence of the so-called "Dixon Cairns" near the geodetic marker in the region known as Phanaronisi. The "Dixon Cairns" is a series of five rock piles which stand close to 2 m in

height, 8 m in diameter, and have a central depression ca. 1 m in depth. These piles have been identified by Dixon as Boleoi Lithoi and have comparanda elsewhere in the Korinthia and in the southern Argolid (Jameson 598ff.). At least two other cairns similar in size and construction stand at the Vayia hill near Lychnari. Another cairn stands atop a low rise above Sarakina (EDU 6561). A possible cairn is in the fields surrounding Hag. Katerini to the northwest of the church there near the large loose rock features. C. Bruno in conjunction with N. Levi and J. Noller has been studying the characteristics of the stone in these cairns with an eye toward determining their age and function through geomorphological analysis. The cairns at Vayia have received careful treatment by intensive survey teams, and this should have provided some material and chronological context for these features.

Some Simple Conclusions: The fortification of Korphos appears consistent with known fortifications elsewhere in the eastern Korinthia. Their function is to seal particular areas of the Korinthia taking advantage of the high fragmented topography of the region. By preventing passage from the harbor at Korphos to the interior, these fortifications transform the Korinthia into a series of separate compartments. The fortification on Oneion probably served a similar function. It prevented passage between the area around the modern village of Galataki (near Solygeia) to the area to the west of Kenchreai. The fortification at Stanotopi similarly prevented passage along the coastal road. Preventing an enemy fleet from landing was difficult in antiquity due to the limitations of ancient naval technology, and would certainly have been almost impossible in an area with as many inlets and natural harbors as the Eastern Korinthia. The defense of the ancient and probably medieval Korinthia was an inland defense that relied on the rugged topography of the country, and the necessity for invading armies to take advantage of passes to do significant damage to the countryside.

Extensive Team Survey Areas

The following section will deal with some of the areas explored using the EDU methodology outlined in the EKAS Field Manual 2001. When I employed a modified or alternate method, I have noted it in this report. Generally, I declared an area an EDU once a significant part of the area bound by the topography was investigated. For example, a circuitous route up the side of a hill would be sufficient investigation for me to declare that face of the hill an EDU. A series of strolls around the top of the hill would be enough to justify my declaring of that area an EDU. If a specific feature existed within a large EDU, I usually recorded the GPS points for that feature in the feature column of the EDU form. The general area of investigation was recorded in the GIS in accordance with the digitizing procedures for all geomorphological or discovery units. In cases where changes in the standard method for digitizing EDU data occurred, it will be noted in this report.

The advantage of this survey method is that I am able to collect data on a standard form and store it in the most basic data receptacles available to the project – the DU database and the GIS. This assures that the basic information from the areas I visited will be available. Unfortunately in many cases my sampling strategy will not provide data for determining density of artifacts. This is because the terrain made it impossible for me to walk a "swathe" as a member of a DU team might. The sample size of the total area

therefore can not be determined. In many cases, however, no pottery was noticed or the number of sherds found was so small as to produce essentially negligible density figures. In cases where team members did not walk formal "swathes" this was recorded as such on the "survey procedure" box on the form.

Hag. Katerini (Lakka Skoutara) Crossroads area

A major focus of the Extensive Team's term in Korphos was the so-called Hag. Katerini crossroads area. While the finds from this area are quite extensive and continue to be processed even now, my report will attempt to deal in as comprehensive way as possible with both the material and the possible implications of the previously unknown area of cultural activity. My report will also outline the method used by the extensive team in dealing with the dense scatter of artifacts in this area and the numerous significant features.

This area was initially investigated as the terminus of a road leading north from Korphos into the vicinity of Sophiko. The road, as described elsewhere in this report, follows the Xerias river out of the village of Korphos and then ascends the steep but even slope from the river bed on the east bank of the river opposite the promontory of the Are Bartze tower. The road proceeds north entering a high valley (ca 300m) where it intersects the main road from Sophiko to the site at Stiri. It presumably would be easily reached from either Sophiko or Korphos and frequented by residents of both areas. K. Zographos, a current resident of Sophiko, may have confirmed the functioning of this road in the modern period, but a closer inspection of L. Diacopoulos conversation with him will be necessary to determine this with certainty. He also claimed that the church in this area was served by a priest from Korphos, although most residents of this area in the modern period were more directly tied to Sophiko for such things as schooling their young and regular church services. It seems likely that the link between the church at Hag. Katerini and Korphos is a remnant of an earlier period when the settlement at Korphos extended up the Xerias river valley.

The method of investigation for this area was unique. The first phase of investigation for this area a typical large scale EDU. It was conducted by two people and covered large areas (6521, 6522). There was no control on spacing, and the units crossed field boundaries and geomorphological changes freely. An imminent thunderstorm was the proximate cause for this hasty and inexact method for collecting data from such a wide area with such high concentration of artifacts. Once the density of artifacts and the importance of the features was demonstrated by the two large EDUs, a more rigorous method of investigation became imperative. Unfortunately the a full DU team was unavailable to investigate the area with proper intensity, and as a result I employed a modified EDU method with the goal of extracting as much data as possible from the fields with a more limited array of resources (6528-6533; 6537-6552). I initially defined fields without the assistance of a GI, but with particular attention to changes in slope, soil color, and surface clast. I also focused primarily on fields with better than 50% visibility leaving the lower visibility fields as survey "baulks" in the event that a full survey team would have an opportunity to investigate this area later in the season. My method was to walk relatively narrow EDUs with either slightly exaggerated walker spacing to get full coverage in fields with less than a full team of five field walkers. Walker spacing rarely exceeded 20 m, and in some fields was 10 meters. Since there often only 2 or 3 walkers

and the chronotype density data would not have sufficient range to avoid potential exaggerated density reading from certain pottery types, I decided not to do a full chronotype collection for these fields. Instead I treated each unit as an ELOCA and performed a chronotype grab on each unit, where only one chronotype was collected from the entire unit. This also limited the amount of pottery removed from the individual units and made helped streamline pottery reading. The penultimate phase of survey for this area was geomorphological. A GI laid out geomorphological unites over top my ELOCA unites. Fortunately no ELOCA unit violated a GU allowing us to keep all the data generated from the ELOCA units comparable (get GU numbers). The final phase of survey in this area is still underway. The pottery from the ELOCAs is being read by T. Gregory. D. Pettegrew and myself, in cooperation with the Modern LOCA team are working to record the numerous abandoned houses in this areas with an eye toward the formation processes at work as well as traditional concerns of LOCA investigation (see DU Team 1 Final Report, 2001). The areas walked by all the various methods described above either have been or will be recorded in separate shape files in the GIS database under the supervision of L. Anderson. I recorded the various units in separate shape files in order to avoid overlapping units in the same shape file which is apparently a problem for the GIS. Additional time and resources will be needed to record the ancient features in this area as they are quite large and complex.

A partial reading of the pottery in this area confirms initial assessments of the periods represented in the Hag. Katerini crossroads. Artifacts range from prehistory to the modern period. Low density obsidian scatters and various forms of prehistoric pottery demonstrate that this area had been exploited since an early time. A significant scatter of artifacts from the Archaic period is evident. The greatest density of artifacts, however, seems to come from waning days of antiquity with significant finds from the 6th and even 7th centuries, by late versions of combed ware and wheel ridged sherds. Local forms of Phocean ware form 3 represent from earlier late antique periods. The Classical period and the Roman period also appear to be represented in the pottery of this area. There was also, as can be expected, a significant signature of modern pottery, such as local examples of the Dydimotichon ware common in the 19th and early 20th century. The survey baulks preserved around the abandoned modern structures limited the examples of modern pottery collected. Additional survey or LOCA treatment around these buildings should fill out our knowledge of this area in the modern period.

The numerous features of this area make it important and exciting for the EKAS. Over a dozen abandoned modern farmhouses exist throughout this area. These houses range from those with totally collapsed roofs relatively sparse scatters of roof tiles and pottery to those with recently collapsed roofs and dense scatters of tile, farm equipment, and domestic pottery to those still maintained by their owners. Numerous large well-preserved alonia are scattered around the modern farmhouses. Modern cisterns with large slightly concave platforms around their openings also stand in numerous fields. Numerous field wall from various periods crisscross through the fields and as the valley walls slope upward on the northern and western sides the remains of terrace walls run along the contours. Some terrace walls continue into the heavily wooded eastern section of the area suggesting that in times past, perhaps far past, an even more extensive area was available for cultivation in this regions.

Perhaps the most spectacular features of this area are the large stone structures. They stretch north to south between 6533 and 6532 for over 80 m before turning to the east and passing to the north 6532 and to the south of 6531. At their greatest width they are over 15 m wide and as such they are far too wide to be field walls. At their greatest height they stand nearly 2.5 m tall. C. Bruno's geomorphological investigation ascertained that they are not field stone but rather constructed and are likely quite old. Lichen growth in absent on the interior side of stones and considerable on the exposed sides of the stones further suggesting considerable age. At the southern end of the structure there is a modern cistern. Half way along the length of the structure there is a gap. The north and south sides of the gap appear to be constructed. B. Choi prepared a sketch of the feature. T. Gregory suggested that they are cisterns of some antiquity. I strongly recommend a more thorough documentation of these remarkable features.

The Vicinity of Hag. Katerini Crossroads

I investigated two areas in the vicinity of the Hag. Katerini crossroads to gain a better understanding of the context of this important area. The first area was on the height overlooking the valley where Hag. Katerini sits. The gradual slope from the west, sloping up on the north side of the road from Sophiko to Stiri, provides the best access to the top of the hill. Terrace walls climb the northern face of this hill from the area around the church on the north side of the road to about one-third of the way up the northern face where the incline becomes too steep for terracing. The 1:50,000 maps available to the project showed the remains of a church to the southeast of the geodetic marker on this hill. A thorough investigation of this area showed little ceramic evidence, despite good visibility on account of a recent burn (perhaps part of the Sophiko burn in 1998). There is evidence that the area is currently used by goatherds and resin collectors. Three structures were identified, however. A small building was found some distance west of the geodetic marker (6534). I initially thought this building to be the church, but its walls were not oriented east-west. A shepherd shack or small domicile is likely a better interpretation. About 220 m the northwest of the geodetic mark there is a small building that is probably a chapel. It is 4 m x 2 m with an eastern apse, built with rough fieldstone, and standing to a maximum height 1.5. Its northeastern position on the summit of the hill, however, associates it more closely with the monastery below (Hag. Marinis) than the settlement of Rachi Zaraka. Its diminutive size suggests that it might be a very simple shrine or perhaps a hermitage associated with the monastery. A tomb is also possible. A single TIAM was found in conjunction with this building.

The second area related to the Hag. Katerini crossroads is the small upland valley to the east of Hag. Katerini, to the south of the road to Stiri. Nestled in the shadows of the Koryphis hill and the hill of Prichea, this narrow, flat valley would have had easy access to the Stiri area via the pass between Koryphis and the Monasteri hill. It would also have easy access to Korphos by way of a pass that leads between Koryphis and Spata hill to the south (see discussion of roads). The land is flat and open and the remains of a farmhouse is evidence for exploitation in the "early modern" period. What is remarkable, however, is that despite relatively intensive survey by extensive team standards – I employed a team of four and a GI to survey the area – there is little evidence for exploitation during antiquity. A possible reason for this result is that the EDU team only surveyed the flat valley floor. The abandoned modern farm house stood perched on the

lower parts of the valley walls and it is possible that the scatter associated with the ancient exploitation of this area would have be there. Unfortunately time has not allowed a return visit to this area, but the lack of ancient artifacts and the manageable size of the valley commends this area to a more careful investigation.

The Lychnari Area.

An extensive survey was conducted in the area around the double port of Lychnari around the settlement of Vayia. Two main research issues guided my survey of this area. One was to determine how the area of Vayia or a settlement near the southern harbor would communicate with inland areas. I walked south up the steep rema of the Bayia river that empties into the more southern of Vayia's two harbors. The broad open delta of the valley provides easy passage for nearly 400 meters inland. Despite dense spread of cobbles, there is evidence for some modern cultivation in this area and several modern houses stand along the north bank. As the river continues inland it splits. One branch continues north terminating at the base of Pro. Elias hill – near where the modern Epidauros road runs and to the east of the hill known as Sphaka. This branch is clearly impassible and is not a route inland. I opted to take a branch that turned sharply to the east with the hope that it would gradually ascend out of the Vayais delta and provide access to the southern Sophiko area. It did not. It became steep and impassible. It is our conclusion that the only way Lychnari communicated with the interior was by a road that turns to the west and passes through a depression to the south of an unnamed hill that stands on the east bank of the Vayia river. The modern road today follows this route as it gradually ascends from the river valley and merges with the main route to the west. The main route west would pass to the south of the site on the hill the EKAS refers to as Vayia and proceeds east to the cove known as Lychnari where it ascends the southwest through the modern village of Katakali. From Katakali it passes to the north of Vigla, entering Kato Almyri and the narrow coastal plain to the east and north of Galataki.

Two LoCAs were identified by the Extensive team in this area. One sits atop an unnamed hill (elev. 156) to the west of the Vayia river valley (EDU 6524). The site consists of two buildings oriented north to south in succession. Building one, sitting to the north of building two is 9 m x 5 m with a 1.2 m opening in the northern wall. Building two, separated to the south of building one by 1.5 m, extends 11 m north - south and 6.4 m to the east - west. The walls are of rough field stone with no signs of mortar. Some examples of cut block are present. The lowest courses contain some large blocks. The walls stand to a height of almost 1 m in places and are 0.85 m thick. It is likely that these walls are of ancient construction. Further supporting this observation is the significant scatter of Classical pottery in the area. This area should be mapped and surveyed by a DU team.

The other site recorded in the Lychnari area is in the valley between Limnoula and the hill called Kakia Rachi directly to the east of the Vayia river. This steep valley shows signs of extensive terracing and there are two modern farmhouses present here. The two farmhouses are separated by 100 m and are of similar construction. They are made of rough fieldstone probably with mud mortar and solid corner stones. Pottery is present in the terraced fields, but at a low density. To the east of this cultivated valley is another area of apparently intensive cultivation on the north slope of Limnoula. The 1:5000 map indicates that an aloni is associated with this area of terraces. It would be

worth investigating these two areas which show intensive cultivation in the modern period. Wiseman and others have argued that the area between Almyri and Korphos was sparsely inhabited. Recent intensive survey of areas of modern and medieval cultivation, such as Hag. Katerini and Stiri, has painted a different picture. While this does not necessarily follow our method of selecting areas through landscape sampling, these areas could be treated in a way consistent with the survey method if they were walked as LoCAs since we know that they are, in fact, Localized Concentrations of Artifacts.

The final place investigated during the Extensive Teams survey of Lychnari was high hill to the east of the eastern harbor associated with the Vayia settlement. This hill, called Kakia Rachi, appeared to be an ideal place for a watchtower or fort. A survey of this hill revealed no ceramics or architecture.

Mt. Oneion

To this point in the season I have made three trips up Mt. Oneion. The first trip was to map the Venetian wall. We now have a map and a scale plan of the Venetian fortification. If possible, it would be useful our field teams to deploy their expertise in mapping on the Venetian wall to the north of Stanotopi. The second trip up Mt. Oneion was to correct an error in the mapping from last year. The field teams last season had incorrectly drawn (or incorrectly measured) one length of the southeastern curtain wall. A small Extensive team contingent was quickly able to correct this error and once the new dimensions of the southeastern curtain wall are entered into the GIS a complete and correct map of the fortification will exist. The third trip up Oneion this season was to plot the course of the pass as it descends into the region around the modern village of Galataki. Using GPS reference points this was done. The pass was found to wander down a series of alluvial fans to the west of the fortification in a southerly direction into a shallow rema to the north of the village of Galataki. At no place along the route was the path exceedingly steep except where it descended into the rema. Here it is possible that modern goat traffic and erosional patterns changed the slope of the rema wall. Once in the rema, it then becomes easy to ascend the walls of the rema gaining access to the fields to the south of Oneion and inland from Loutro Elenis and Almyri. The pass is entirely in the viewshed of the fortress and well to the west of the viewshed of the tower and fortification on Stanotopi. It is clear that the fortress had as at least one of its functions the prevention of unnoticed traffic from the south into the Oneion pass. It would have provided a similar function for traffic from the north, especially if the ancient path ran in the southwesterly direction from the area around Hag. Paraskevi. The location of the Venetian wall and its generally southeastern course would seem to suggest that this was the primary direction of traffic it sought to control. This would make Kenchreai the likely starting point for individuals seeking access to the Oneion pass from the north.