The Polish-Egyptian Archaeological Mission continued work in the area extending westward of the pyramid of Netjerikhet, from August 28 to October 22, 2000. The present work involved conservation of objects discovered during previous and current fieldwork, as well as excavations eastward in the direction of the step pyramid and westward toward the alleged “dry moat”, the latter meant to clarify the archaeological context of the western part of the necropolis. Studies on particular groups of objects, such as the pottery, skeletons and geological implements, were also pursued in the course of this campaign.

1) The Mission included the following: Prof. Dr. Karol Myœliwiec, Director; Prof. Dr. Maria Kaczmarek, anthropologist; Prof. El¿bieta Mycielska-Dowgia³³o, geologist; Dr. Salima Ikram, palaeozoologist; Dr. Kamil Kuraszkiewicz, Ms. Teodozja Rzeuska, Ms. Agnieszka Kowalska, Ms. Dorota Czerwik, Mr. Andrzej Ćwierck, Mr. Mariusz Jucha, Egyptologists; Ms. Ma³gorzata Radomska, Mr. Krzysztof Dymkowski, Mr. Marek Gizmajer, archaeologists; Mr. Zbigniew Godziejewski, Ms. Agnieszka Kijowska, Mr. Cristobal Calaforra-Rzepka, conservators; Mr. Jakub Śliwa, photographer; Mr. Marek Puszkarzki, artist; Ms. Barbara Woronko, geologist. The Supreme Council of Egyptian Antiquities was represented by Mr. Sabri Moheddin Farag, Inspector of the Mission.

Our task could not have been carried out successfully without the kind assistance of Prof. Dr. Gaballa Ali Gaballa, Secretary General of the Supreme Council of Antiquities, and Dr. Zahi Hawass, Director of the Giza Plateau. We should also like to express our gratitude to the Authorities of the Supreme Council in Saqqara, subsequent Directors of the Saqqara District, Mr. Mohamed Hagras and Mr. Adel Hussein in particular, as well as subsequent Chief Inspectors of South Saqqara, Mr. Magdi El-Ghandour and Mr. Khaled Mohamed, for their personal involvement in the project.
Fig. 1. Plan of sectors H-I with assemblage of limestone blocks from a late structure and a fragment of the enclosure wall of the Netjerikhet pyramid (in situ) (Drawing M. Puszkarski)
EASTERN SECTOR

The explorations were extended in the direction of the pyramid with the purpose of studying the relation between the Old Kingdom (lower stratum) and Ptolemaic Period (upper stratum) cemeteries and the western enclosure wall of the pyramid. Sector I of the previous campaign\(^2\) was expanded 15 m eastwards. Longitudinally, it is also 15 m long, being limited on the south by the wall of a small storeroom, which cannot be undermined, if its integrity is to be maintained.

Below the layer of pure sand constituting the thick upper stratum in the area, at c. 50-70 cm, that is, close to the present surface, there was an irregular sequence of white limestone blocks (Fig. 1). Varied in size and form, anepigraphic, they seem to be blocks reused from the enclosure wall of the step pyramid. Their location traces a longitudinal line suggestive of a destroyed wall that would have been parallel to the wall discovered in 1998 just behind the mastaba of Meref-nebef,\(^3\) erected, like it, on a layer of sand without any foundations. A similar assemblage of limestone blocks, lying on a mudbrick platform in the south of sector I, was discovered in 1999. All of them may


\(^3\) Id., Polish-Egyptian Archaeological Activities in West Saqqara, Acts of the 8th International Congress of Egyptologists (Cairo 2000), note 25 (in print).
A well preserved section of the pyramid's western enclosure wall (Fig. 2) has been unearthed in a layer of sand, 87.83 m away from the edge of the pyramid (i.e., from the middle of its western wall to the western edge of the discovered structure) and 176.1 m south of a section of the same wall preserved further to the north. The fragment, 3 m long (N-S) and 1.3 m thick, is a rectangular "bastion" having two shallow recesses in the frontal (western) face, and one recess in each lateral face. Since its bottom had not been reached at a depth of 0.65 m, the structure was documented and backfilled with sand to be explored systematically in the future.

The late Old Kingdom necropolis extending between the mastaba of Meref-nebef and sector I, excavated in previous campaigns, was subject to clearing work and studies during this season. Burial chambers in some of the earlier excavated shafts were explored and new shafts were discovered in connection with the clearing work.

Shafts
Our present activities in the area excavated in 1999 (sectors I/G-H) started with an overall survey of the area and of the following shafts: nos. 2-17, 19, 21-23, 26, 28, 31, 34. While drawing and photo documentation was made of these shafts, three (nos. 11, 14, 28) were explored.

Two new shafts, no. 41 (northeast of Shaft 16) and no. 48 (east of Shaft 36), have been identified in sectors I/G-H. The chamber containing burial 63, unearthed in 1998, turned out to be the burial chamber of Shaft 36, localized in 1999. Shaft 49, with a vaulted ceiling of mudbrick, was discovered while clearing Chapel 2.

Shafts 5, 36 and 48 were found to be interconnected by holes in their walls; their chronological sequence of execution is as follows: 48, 36, 5.

Chapels
Funerary chapels 2, 4, 6 (built of mud bricks) have been explored. In each case the floor was unearthed, and in Chapel 2 also the setting of two false doors. Chapel 4 consisted of two rooms. The low walls bordering the northeastern entrance to Chapel 2 have been cleared. Adjoining the southern false door in this chapel is Shaft 49, covered with a rounded vault made of mudbrick. It was concealed when the eastern wall of the mastaba comprising Shafts 2 and 23 (i.e., western wall of Chapel 2) was erected.

The mutual relation between various structures found in sectors I/G-H, particularly in respect to their function and chronology (Harris matrix), has been established. The following units have been identified:
1) Funerary complex of Meref-nebef (rock chapel, court I, court II, upper = western court, brick mastaba with recesses, eastern chapel (=Chapel 1), shaft with burial chamber (=Shaft 1);
2) Chapel 9 with Shafts 14 and 19;
3) Chapel 2, with Shafts 2 and 23 (possibly also 49, if it was originally a "cult shaft" related to Shaft 2);
4) Chapel 3, with Shafts 31 and 34 (mastaba of Peh-en-Ptah = Pehi);
5) Shafts 26 and 28 (which had destroyed the northern wall of the mastaba of Pehi);

4) For the platform, cf. K. Myśliwiec, PAM XI, op. cit., 95, figs. 3, 5.
6) Chapel 4, with Shafts 11 and 12; 7) Shafts 5 and 6;
8) Chapel 5 (Ni-Pepy) with Shafts 29(?) and 32;
9) Chapel 6, with Shafts 18 and 21.

Documentation activities included a geological profile (layers of limestone and marl in the shafts; samples secured for geological analysis); collecting evidence of tool-use in rock-cutting techniques (photographs and casts); and a recording of bricks, plasters, and mortars, etc.

Shafts 2, 14, 19, 22, 23, 31 were backfilled, the last only partly, once the documentation had been made; only the top parts were left visible in the sand.

WESTERN SECTOR

Extending the oblong trial pit F 1, excavated in 1999,5) further westwards by 15.20 m (linking the west side of pit F 1 with the present western border of our excavations at the west edge of pit F 2) was meant to test the “dry moat” hypothesis,6)

Fig. 3. Front of rock ledge with entrances to corridors 1 and 2 and to the funerary chapel of Seshemnefer. View from the west (Photo J. Śliwa)

5) K. Myśliwiec, PAM XI, op. cit., 91 (fig. 2) and 98.
Fig. 4. Façade of the cliff ledge and cross-section through the shafts in front of it
(Drawing M. Puszkarzki)
Fig. 5. Plan of the funerary structures inside and in front of the cliff ledge
(Drawing M. Puszkarski)
while searching for an entrance to the subterranean corridor identified behind the northern wall of Shaft 37.7)

At 12.72 m away from the western edge of Shaft 37, the rock breaks off sharply, forming a ledge that overhangs a recessed rock face (about 1 m high) (Fig. 3).8) The rock surface here is irregular due to the friability of the local limestone. It is in this recess that the entrance to the corridor was found. The bottom of the entrance lies at a depth of 2.88 m below the upper edge of the rock at this point. In front of the entrance, there is a large cliff ledge extending northwards, in which several funerary shafts were hewn. On the east the shafts adjoin the rock façade, while on the west the rock slopes away slightly, although the current extent of the excavation trench to the west (a mere 8.83 m from the rock face) and the depth – 3 m high sand walls around the pit necessitating the building of reinforced intermediary terraces for the work to proceed – made it impossible to see how far down the slope runs.

The three-meter deep upper stratum in the depression extending westwards from the façade (i.e., from the present surface of the area down to the upper level of the shafts) was filled with fine yellow sand, containing more than 70 burials of the Late Period/Ptolemaic Period: simple ones (skeletons or mummies, sometimes with remains of cartonnages), occasionally collective burials (even one – burial no. 68 – of a human and a lamb). These burials may be dated with the help of pottery found in context with them. Imported amphorae are represented, and one fragment of a black-glazed jug with stamped decoration, identified as an Attic vase of the 4th cent. B.C.9)

Below the upper level of the shafts a stratum of compact dakka begins, containing considerable amounts of local limestone chips and clay. In this layer, potsherds of the late Old Kingdom

Fig. 6. E-W section through Corridor 1 and other structures (Drawing M. Puszkarski)

7) K. Myśliwiec, PAM XI, op. cit., 98-99, fig. 9.
9) Cf. contribution by T. Rzeuska in this volume.
predominate, and there are no finds of later date.

The extension of pit F 1 westwards has been designated as F 2. Parallel to it are subsequent zones (F 3-F 5) extending the excavation northwards. The overall width (N-S) of the area excavated this year in this sector is 21 m (from the southern edge of F 2 to the northern edge of F 5). The stratigraphic configuration is always the same: a thick upper layer containing sand with late burials and a lower layer containing dakka and Old Kingdom pottery.

The monumental façade of the rocky shelf facing west has entrances to three structures hewn in the rock: two corridors, no. 1 on the south and no. 2 on the north, and a funerary chapel in between (Figs. 3, 4). Each is different in shape and dimensions.

CORRIDOR 1
The corridor is 22 m long and ends in a plain wall, close to the place where the present surface of the rock forms a downcast separating the “lower plateau” (western side) from the “upper plateau” (eastern side) (Figs. 5, 6). This coincidence does not seem to be accidental, so much more so as there are remains of two parallel walls (N-S), built of limestone blocks set on a mudbrick floor, at both the eastern and western ends of the “upper plateau”.

An irregular entrance at the northeastern corner of the corridor leads to an oblong rectangular room extending E-W. The corridor is from 1.20 to 1.80 m high, and 1.55 m wide. Its floor is laid with irregular slabs of local limestone, bonded with mud. At some points, several (at least three) layers of this filling may be discerned. The floor rises to the east, where it almost looks like a blockage of the entrance to the “chapel”. The “chapel” - 4.60 m (E-W) by 2.10 m (N-S), maximum height 2 m - was filled with debris up to c. 1 m below the ceiling. On the surface of the debris, there was a deposit of animal bones, including, among others, at least 7 (perhaps up to 12) catfish of large size, one antelope, and two wild pigs (a small and a big one). In each case the only remains were those of the front part of the animal’s. At a lower

Fig. 7. Wooden harpoon found in Corridor 1 (in situ) (Photo J. Śliwa)

level, 0.70 m below this deposit, the stratum of debris contained a completely preserved wooden harpoon lying inside a cylindrical wooden box made of two pieces of cedar(?) wood (Figs. 7, 9). Its lateral faces are decorated with images of a snake, sculpted in fine bas-relief (Fig. 8). It was found lying alongside the southern wall of the chapel, c. 20-25 cm above bedrock.

Most of the original wall and ceiling surfaces of the chamber have crumbled away due to the friability of the limestone they had been hewn into, but surviving corners in three places indicate that the room must have been of regular shape.13)

CORRIDOR 2

The northern of the two corridors in this sector resembles “catacombs”, in size as well as in form (Figs. 3, 4, 5 and 10). It is 12.5 m long (from the entrance to the façade of chapel E) and 3.6 m high, the width varying between 1.2 m and 2.6 m. Opening off the irregular corridor are six chapels with facade entrances and a court with four steps hewn in the rock at its

---

13) Cf. remarks on this room by K. Kuraszkiewicz in this volume.
Fig. 10. Corridor 2 ("catacombs") with façades of lateral chapels
(Photos J. Śliwa)
western extremity. The steps lead down eastwards from a higher level, which has to be cleared in the next campaign. The floor of the corridor lies 5.15 m below the upper edge of the monumental facade. The latter does not run in a straight line, being broken at one point to form a wide angle opening westwards (cf. plan in Fig. 5).

The corridor was found filled practically up to the ceiling. The huge upper stratum was pure sand. At c. 0.9 m (in the west end of the corridor) above the floor there is a c. 6-cm thick flood-related layer of mud, reeds, wood and large quantities of small rodent remains.14) The layer of debris on the corridor floor contained some pottery sherds and a single human skeleton burial (no. 170), discovered between chapels C and D; it was probably removed from a burial chamber. The stratigraphy of the chapel fill is similar.

There are six chapels: four with entrances in the northern wall, one in the eastern, and one in the southern. Each of them is different in size, shape and furnishings.

Chapel A has a false door on the west wall, damaged and repaired with plaster. Of the original inscription just the offering formula can be read. Near the southern end of the wall there are traces of a second false door, partly sculptured in stone and partly shaped in mortar. There is a shaft (C2/22) in the northeastern corner of the room.

Chapel B has a shaft (C2/21) in the southeastern corner.

Chapel C has an inscribed false door in the western wall and an offering table (73 x 10 cm) with two basins in front of it. It is made of good limestone and mounted on a base of mud and stones.

Chapel D is the smallest of the chapels and contains a small anepigraphic offering table (26 x 29 cm), with two basins and a htp-sign, fixed to the western wall of the chamber.

Chapel E has three shafts cut in the floor: C2/1 (N/W), C2/2 (S/E), C2/3 (S/W). Above shaft C2/1, in the western wall, some 0.4 m from its northern corner, there is a small niche (c. 30 x 40 cm) with traces of whitewash.

Chapel F has four shafts in the floor: C2/4 (N/W), C2/7 (S/E), C2/8 (S/W), C2/13 (N/E). A section of mudbrick wall (N/S), whitewashed on both sides, is preserved between shafts C2/13 and C2/4; another wall of irregular stones was found between shafts C2/4 and C2/8.

Another thirteen shafts are cut in the floor of the corridor and in the court. Altogether there are 22 shafts inside Corridor 2. They have been secured with stone walls at the end of this campaign and will be explored next year.

MASTABA OF SESHEMNEFER

The rock-hewn tomb is located between corridors 1 and 2 (Figs. 3, 4 and 5). It has a regular court, measuring 2.55 m (E-W) by 3.26 m (S-N), cut in front of the facade, i.e., on its western side. The floor of the court and that of the chapel lies at 5.1 m below the upper edge of the monumental facade. The court has two rectangular pillars made of sand-reinforced mud, lined up with two pilasters on the northern and southern walls. Inside the chapel there are two rooms: a larger one in front (north wall 3.06 m; south wall 3.3 m; N-S length 6.9 m) and a smaller one (chapel) behind it (1.36 m wide and 1.62 m long). A false door in the southern end of the western

---

14) Cf. contribution by S. Ikram in this volume.
wall of the first room gives the name and titles (\textit{smr,hrp \'{h}} - companion; overseer of the palace) of the deceased (Fig. 11).\textsuperscript{15}) Its surface is covered with whitewash.

In front of the façade, there are six shafts (nos. 42-47) of various form and size. Three of them still contained the original burials. Fragments of polychrome painting on a thick whitewashed mud coating that must have originally decorated the walls of a burial chamber were found in the filling of Shaft 42.

\textit{Fig. 11. Inscription on the false door in the funerary chapel of Seshemnefer (Photo J. Śliwa)}

\textsuperscript{15}) Cf. also the contribution by Z. Godziejewski in this volume, Fig. 2 on p. 122 and description.