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# Third-Millennium and Later Pottery From Abu Dhabi Airport

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Surface pottery collected from a site on Abu Dhabi airport indicated sporadic occupation from the Hafit period, *c.* 3100–2700 BC, with maximum settlement in the second half of the third millennium BC. The ceramics, which could be related both to the coastal Umm an-Nar culture and to the sequence established at Hili 8 in Period II, included wares of probably Mesopotamian and Eastern Arabian origin. The site was unused throughout most of the second millennium BC and the Iron Age but pottery of first century BC-second century AD date suggested that it may have served as a point of entry or transit at that time, the first to be recognised in the coastal area of Abu Dhabi.

Few of those flying between Heathrow and Abu Dhabi will know that both airports were once occupied by Bronze Age settlers. In fact, it was not until February 1995 that a site adjacent to Abu Dhabi airport was recognised when Peter Hellyer, co-ordinator of the Abu Dhabi Islands Archaeological Survey, noticed surface pottery there. The Director of the Survey, Dr Geoffrey King, visited the site and it was subsequently agreed with his Excellency Sheikh bin Mubarak al Chairman of the Abu Dhabi Department of Civil Aviation, that excavations should be undertaken in the winter of 1995/96. However, by midsummer it was revealed that bulldozers had destroyed part of the site and rescue excavations were mounted immediatly (1).

Discussion of the pottery must be prefaced by reference to the havoc wrought both by the elements and by man. Had its archaeological significance been realised at an earlier stage, it might have been possible to piece together the history of the site in some detail from the early third millennium BC to the present day. However the natural surface of the site had been largely destroyed by earth-moving operations before rescue excavations could be undertaken and thus, lacking any stratigraphical framework to provide temporal guidance, the history of the site is inevitably episodic and uncertain. Much of the original ground level in the main settlement area had been bulldozed and the only structures which remained intact were several wells which have produced no stratified pottery to show when they were in use. The main area of occupation was gridded by the excavators before the surface pottery was collected. Their contexts showed more thirdmillennium BC pottery in the southern area of the grid (Squares L.23, L.26 and M.20–23) but scatters occured both in the southeast (Squares R.27, S.24 and V.22) and in the northwest (Squares C.4, C.8, C.16, D.17, J.8, J.13 and J.16). Some sherds were also recovered from the periphery and from an area designated Limestone Hill.

Pottery attributable to the Parthian period was more dispersed, occuring in the north (Square A.4), the south (Squares L.23 and S.25) and in the central area (Squares C.12, E.12, F.13 and J.15). Whether the precise location of individual sherds has much significance in view of the earth-moving activities across the gridded area is doubtful but their provenance is included in the catalogue (see below, p. 165).

Much of the pottery was in poor condition and comprised featureless body sherds which had been sandblasted to such an extent that in some instances only an unidentifiable core remained. Very few sherds retained traces of painted decoration or glaze and their surfaces were often overlaid by thick deposits which distorted the profile and rendered identification uncertain. Furthermore, most of the third-millenium material consisted of rims which had been broken at the neck. Lacking either a shoulder or body profile they gave little indication as to their original shape and made comparison with pottery in the Mesopotamian and Hili 8 chronologies difficult. The same applied to other diagnostic features such as spouts which were too fragmentary to show their position on the body of the jars of which they had formed part. Given the nature of the ceramic evidence the conclusions reached are necessarily tentative.

Although lithics ascribed to the fifth and fourth millennium BC were found on the airport site no pottery of 'Ubaid-type was recognised in the sherd collection. Its absence was surprising since recent research has shown the extension of 'Ubaid material as far north as the Emirate of Ras al-

Khaimah on an increasing number of U.A.E. coastal sites.

# The Third-Millennium BC Pottery (Figs 1 and 2)

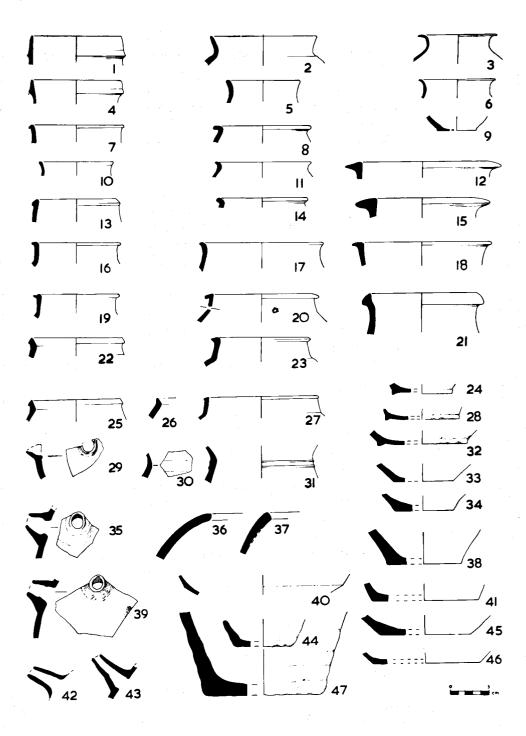
The earliest pottery on the airport site was probably represented by a couple of bevelled rims in a much eroded sandy tan ware (Fig. 1, 12 and 15). Although lacking the biconical body and decorative treatment of the jars usually found in burials of the Hafit period, the angle of the rims was virtually identical to that of jars found, for instance, in Cairn 22 at Hafit (2). Recent research based on archaeometrical analyses has shown that all biconical jars found in Hafit cairns throughout the Oman Peninsula were made in Mesopotamia (3) and the airport sherds may well be imports from the west, although that has not been chemically attested. Assuming them to be of foreign origin, one might have expected similar biconical jars to occur on sites in the Eastern province of Saudi Arabia but only one example can be cited from Tarut (4). Along the coast of Abu Dhabi a rim like those on the airport was recovered from Jebel Dhanna and related both to Jamdat Nasr/ED I sites in Mesopotamia and to the Hafit period, c.3100–2700 BC (5). In the interior the limited range of Period I pottery at Hili 8 included Mesopotamian vessels and although none were directly comparable to the Hafit jars, similarities in both fabric and form suggested some degree of contemporaneity. In the context of the Hili 8 chronology the airport site may have been visited, if not permanently settled, during Hili 8 Period I. It could thus be marginally earlier than the settlements or. the islands of Ghanadha and Umm an-Nar which are not thought to have been established before Hili 8 Period IIa-c<sub>1</sub>, in the

second quarter of the third millennium BC.

By then both the island settlements were importing their pottery from the west and much of it could be matched on the airport site. No analyses have been undertaken to check their origin but it is more than likely that straight band-rim or collared jars (Nos 1 and 4) and a number of shoulder spouted vessels (Nos 29, 35, 39, 42 and 43) should be regarded as foreign imports. The bandrim jars which are thought to have contained liquids were current in southern Mesopotamia between ED I and III and many have also been found in the Eastern province of Saudi Arabia (6). Others are known from sites along the Abu Dhabi coast including Ras-al Aysh (7), Umm an-Nar and Ghanadha. The Ghanadhan jars (8) bear little resemblance to the two rims from the airport which are better related to vessels from Umm an-Nar with necks of varying length, a pyriform body and either pointed or flat bases. Such vessels were predominant in Period 0 in the settlement's limited stratigraphy (9) and various types were also found in the tombs. Those most closely analogous to the airport sherds, but differing in fabric and slip, were found in Graves I and VI (10). Mesopotamian pottery had for the most part ceased to reach Hili 8 during Period IIc<sub>2</sub> when local products became more readily available but imported vessels, including band-rim jars, continued to be in demand on the coastal sites until the early Akkadian Period (11). Some Umm an-Nar band-rims have been shown by analyses not only to match Mesopotamian pottery in eastern Arabia but to be directly comparable to ED IIIa vessels at Abu Salabikh (12). However, in the absence of sherds with a body profile, the airport rims cannot be closely related to types elsewhere with certainty.

Similar problems arise in the case of shoulder-spouted jars from the airport, another type of vessel known at Abu Salabikh which died out towards the end of ED IIIa (13). To the four spouts illustrated (Nos 35, 39, 42 and 43) should be added three small fragments from Grid Squares J.16, M.22 and M.23. The first, in a hard buff ware, was a fairly broad cylindrical spout with a tip diameter of 2 cm, the other two were narrow unattached spouts in a sandy tan ware with tip diameters of 1.5 cm and 1.1 cm. No. 43 was similar in type to the latter being long and narrow, but No. 42 differed both in fabric and construction being made in a sandy buff ware luted to the side of a globular jar. Too little of the body remained to show whether the spout drooped (as drawn) or curved upwards. Nos 35 and 39 were both short broader spouts, with tip diameters of 1.7 cm and 1.8 cm respectively. The latter was exceptional in being cream slipped. Both broad and narrow types of spout were found on jars in the Umm an-Nar settlement (14) and a decorated version on Ghanadha was regarded as being of Mesopotamian origin (15). A plain everted rim on a wide-mouthed jar (No. 2) was similar in shape to another Ghanadhan import and might have formed part of a shoulder-spouted jar, to judge by comparable rims on Umm an-Nar (16).

By no means all the airport vessels could be related to those on Umm an-Nar and it is probable that some pottery reached the airport site when kilns in the interior began production during Hili 8 IIc<sub>2</sub>. Nos 22 and 25, both unpainted, wide-mouthed jars with diagonally cut rims and short everted necks, were similar to a type of vessel with painted decoration current in Hili 8 IIc<sub>2</sub>, while No. 26, an internally bevelled fragment, and No. 27 were rim types current on decorated jars in Period II d-f (17). With the availability of local wares at Hili, Mesopotamian imports declined in number but they continued to meet the needs of the coastal settlers. No kiln sites have yet been



located on either of the islands or along the Abu Dhabi littoral and it is likely that production was impossible in those areas for lack of an adequate fuel supply.

Even fairly basic kitchen ware seems to have been imported on the coastal sites and two hole-mouth jars (Nos 36 and 37) can be matched in the settlement on Umm

### THIRD-MILLENNIUM AND LATER POTTERY FROM ABU DHABI AIRPORT

Fig. 1. Third- and second-millennia BC pottery from the surface of Abu Dhabi airport Sandy greyish-buff ware, very worn. Rim dia. 12 cm. **1.** ADA Sq. l.26 Sandy tan-red ware. Rim dia. 14 cm. 2. ADA Sq. M.22 3. ADA Sq. N. 22/M. 21 Fine orange-red ware, self-slipped. Rim dia. 10.50 cm. Sandy tan ware with white specks. Rim dia. 12 cm. 4. ADA no context 5. ADA SQ. C. 16 Sandy tan-red ware. Rim dia. 10 cm. 6. ADA SQ. N. 22/M. 21 Fine orange-red ware, probably self-slipped, but worn. Rim dia.10 cm. Sandy buff-tan ware. Rim dia. 12 cm. 7. ADA no context Dense sandy buff ware. Rim dia. 13 cm. 8. ADA Sq. I. 16 Fine red ware. Base dia. 5 cm. 9. ADA Peripheral 10. ADA Sq. M. 22 Gritty red ware with white specks, very worn. Rim dia. 10 cm. **11.** ADA Sq. L. 23 Hard tan-red ware, badly eroded on both surfaces. Rim dia. 13 cm. Sandy tan ware, surfaces eroded. Rim dia. 21 cm. 12. ADA no context Sandy red ware, worn surfaces eroded. Rim dia. 10.50 cm. **13.** ADA Sq. L. 14 14. ADA Sq. M. 20 Gritty red ware, dark brown surfaces. Rim dia. 12.50 cm. Dense sandy tan ware, surfaces worn. Rim dia. 18 cm. 15. ADA Periphery, Green Sandy Sandy orange-tan ware, self-slipped but worn. Rim dia. 12 cm. **16.** ADA Sq. M 24 Sandy red ware with white grits; ? slipped, but worn. Rim dia. 16 cm. ADA Sq. M 20 18. ADA Sq. M. 21 Hard dense tan-red ware, probably self-slipped but eroded. Rim dia. 18 cm. Sandy tan ware. Rim dia. 11.50 cm. 19. ADA Peripheral Sandy tan ware, perforation below neck. Rim dia. 15 cm. 20. ADA Peripheral Hard sandy buff tan ware, small air holes, self-slipped. Greyish int. Rim dia. 21. ADA no context 22. ADA Peripheral Sandy tan ware. Rim dia. 12 cm. 23. ADA Peripheral Sandy tan ware. Rim dia. 13.50 cm. Sandy tan ware, some white grits. Both surfaces self-slipped. Base dia. 8 cm. **24.** ADA Sq. H.15 **25.** ADA Sq. M. 22 Dense sandy buff ware. Rim dia. 12 cm.

26. ADA Sq. L. 25Sandy tan ware. No rim dia.27. ADA Limestone HillSandy red ware. Rim dia. 15 cm.28. ADA Sq. H. 14Sandy tan-red ware. Base dia. 10 cm.29. ADA Sq. V 22Sandy tan ware. No dia. rim edges dia.

29. ADA Sq. V. 22
30. ADA Sq. D. 18
Sandy tan ware. No dia., rim edges destroyed.
Dense red-tan ware, grey core, slight horizontal striations at neck and shoulder.

31. ADA Sq. R. 27 Sandy tan ware, two small cordons or ridges below neck. Rim missing; neck

dia. 14 cm.

32. ADA no context
Sandy tan ware, surfaces destroyed. Base dia. 12 cm.
33. ADA Sq. C. 18
Sandy buff ware, self-slipped. Base dia. 8 cm.

**34.** ADA Sq. I. 3 Sandy buff ware. Base dia. 8 cm.

35. ADA no context
36. ADA Sq. S. 24
37. ADA Peripheral
38. ADA Peripheral
39. ADA Peripheral
39. ADA Peripheral
39. ADA Peripheral
39. ADA Peripheral
30. ADA Peripheral
30. ADA Peripheral
31. ADA Peripheral
32. ADA Peripheral
33. ADA Peripheral
34. ADA Peripheral
35. ADA Peripheral
36. ADA Peripheral
37. ADA Peripheral
38. ADA Peripheral
39. ADA Peripheral
30. ADA Peripheral</li

**38.** ADA Limestone Hill Hard-fired sandy base, dia. 10 cm.

**39.** ADA no context Dense sandy tan ware with a few white specks, cream slip ext.

40. ADA Sq. D. 17 Reddish ware with black specks and grits. Part of a ring base, but ring missing.

Dia. c. 21 cm.

41. ADA no context Hard sandy tan ware, darker core. Base dia. 14 cm.

42. ADA Sq. M. 26 Dense sandy-buff ware. Spout luted to one side of globular vessel.

43. ADA no context

Hard sandy greyish-buff ware.

Hard sandy greyish-buff ware.

ADA Sq. J. 13 Hard buff-tan ware with air holes and horizontal cavities. Base dia. 8 cm.

45. ADA Sq. A. 8 Sandy buff ware. Base dia. 12 cm.

**46.** ADA Peripheral Dense sandy tan ware, greyish core. Base dia. 14 cm.

47. ADA Peripheral Grog-backed red ware with small air holes. Both surfaces laminated. Base dia.

16 cm.

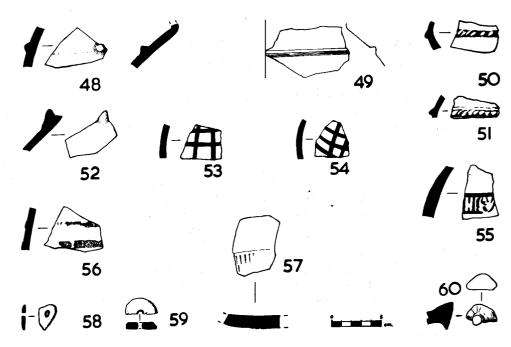


Fig. 2. Third-millennium BC pottery and small finds from the surface of Abu Dhabi airport

<b>48.</b> ADA Sq. R. 27	Sandy tan ware. Conical knob on exterior and traces of a shallow horizontal groove.
<b>49.</b> ADA Sq. C. 16	Hard orange-tan ware, probably self-slipped. Triangular cordon on shoulder, dia. c. 24
	cm.
<b>50.</b> ADA Sq. J. 8	Hard olive-buff ware, wheel-turned. Chain-ridged cordon around girth.
51. ADA Peripheral	Thin sandy tan ware with decorated cordon.
<b>52.</b> ADA Sq. M. 22	Sandy orange-tan ware, grog-backed with large red grits and many air holes. Conical
	knob on shoulder.
<b>53.</b> ADA Sq. M. 23	Hard greyish ware with red core, black painted diagonal crosshatching ext.
<b>54.</b> ADA Sq. L. 23	Ware as No. 53.
<b>55.</b> ADA Sq. M. 20	Thick sandy tan-red ware, eroded surfaces but traces of incised lines above band of
	black painted decoration comprising linear and spiral motifs.
<b>56.</b> ADA Sq. R. 27	Sandy tan ware; horizontal black painted lines project above the eroded exterior.
<b>57.</b> ADA Sq. C. 8	Hard tan ware, slip mostly eroded. Traces of incised decoration inside pedestal-dish.
<b>58.</b> ADA Sq. C. 16	Pendant, 2.30 cm×1.70 cm, made from a sherd of fine grey ware.
59. ADA Limestone Hill	Perforated disc, sandy tan ware, dia. 3 cm.
60. ADA Peripheral	Part of a small handle or knob, dense sandy tan red ware.

an-Nar from periods 0 to II (18). They do not occur in the Hili repertory and may have been produced in the Eastern Province of Saudi Arabia where such vessels were made at Tell Ramadh in the region of Hofuf (19). An east Arabian origin has been suggested for the few rim-spouted bowls which occured in the house complex on Umm an-Nar during Period I; although fragmentary, No. 29 is clearly comparable

(20). It was exceptional in being the only bowl identified among the airport's third-millennium sherds and the absence of goblets, beakers and cups must be noted as the latter were fairly common on Umm an-Nar.

Vessel bases are rarely informative but several call for comment. Nos 28 and 32 appeared comparable to the pinched rim bases common on jars in the Umm an-Nar settlement (21) and it is relevant to add that

a similar type of base was used on a spouted jar at Abu Salabikh (22). Both there and in the house complex on Umm an-Nar applied ring bases similar to No. 40 were in use: the encircling ring was sometimes made in coarser ware which became detached from the jar as had happened in the case of the airport vessel (23).

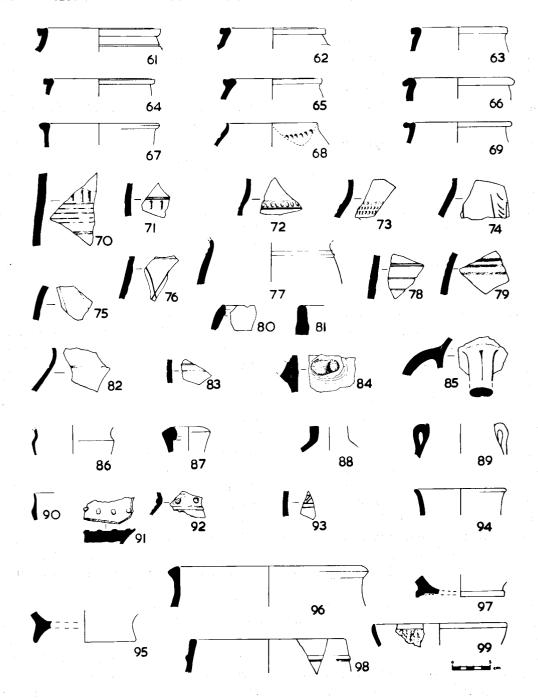
In addition to the common ware and imported pottery, the airport collection included a small amount of fine red ware of the kind associated with funerary deposits. Even before the Umm an-Nar graves had been fully published an initial comparison of their contents with assemblages from tombs in Hili had shown that they were not all contemporary. In terms of those at Hili, graves V and VII comprised an early group constructed during Period IIa-c<sub>1</sub>, while graves I, II and VI formed a later group equated with II d-e (24). The recent excavation of an Umm an-Nar tomb and three ossuary-pits at Al Sufouh, a coastal site in Dubai (25), has extended those correlations to include Ajman Tomb B. Within that general framework two fragmentary jars (Nos 3 and 6) resembled painted vessels in the same red ware in Umm an-Nar Grave V although no trace of the customary black painted decoration survived (26). A flat slightly expanded base in the same ware (No. 9) could also be matched in Grave V.

When the collection was examined, sherds displaying any unusual features or diagnostic details were noted and several body sherds in a sandy tan ware (Fig. 2, 48 and 52) were of interest. Both bore a pronounced conical knob on the upper part of the body. Whether the projections were functional, decorative or a means of identification is uncertain but they could be recognised as a feature that occurred also on several large jars in different wares found among material of Periods I and II on Umm an-Nar (27).

A more familiar use of applied decoration was provided by part of a jar in a hard, well levigated orange-tan ware with a straight cordon of strongly triangular shape on the shoulder (No. 49). Had the sherd been larger it might also have been decorated with a curvilinear cordon as jars on both Umm an-Nar and Ghanadha bore such combinations. Perhaps because it is easy to recognise, pottery with this type of distribution has a wide throughout the Oman Peninsula. It has been found in the interior and on such coastal sites as Al Sufouh, Tell Abrag, Shimal and Bidya in late third-millennium contexts. Immediately across the Gulf it is best related to a red ridged ware in the final, Period VI levels of Bampur in southeastern Iran and the prevalence of plastic decoration on the pottery of that region and of southwestern Makran suggests that the style, if not the actual pots, might have emanated from there (28).

Plastic decoration of a different type occurred on two sherds (Nos 50 and 51) that had formed part of small globular vessels bearing a band of impressed ornament. Similarly decorated jars were found in the late Umm an-Nar levels at Tell Abraq (29).

While the proportion of decorated to plain pottery was unusually high in burials of the Umm an-Nar culture, the settlements both there and on Ghanadha had only a very limited range of painted pots and the airport collection had even fewer. Two sherds (Nos 53-54) in a hard greyish ware with a red core, bore black painted crosshatching recognisable as the checkered kitchen ware in the Umm an-Nar settlement (30), which should not be confused with a finer fabric used for suspension vessels decorated in the same way. Sandblasting had removed most of the design on No. 55, while traces of decoration on No. 56 had only survived in the pigment projecting as two bands above the eroded body surface



in a manner reminiscent of some 'Ubaid sherds.

Among the funerary wares circulating in the Hili area in about 2300 BC was a fine painted grey ware known from numerous burial sites including Hili North Tomb A. No vessels in this ware were found on the airport site but a small pendant (No. 58) made from a broken grey ware sherd showed that those using the site had access to such pottery which has now been recognised as a product of southeastern Iran (31).

## THIRD-MILLENNIUM AND LATER POTTERY FROM ABU DHABI AIRPORT

Fig. 3.	
	ecent pottery from the surface of Abu Dhabi airport
<b>61.</b> ADA no context	Hard sandy buff ware. Rim dia. 16.50 cm.
<b>62.</b> ADA Sq. M. 22	Dense sandy buff ware. Rim dia. 14 cm.
<b>63.</b> ADA Sq. G. 16	Ware as No. 62. Rim dia. 13 cm.
<b>64.</b> ADA Sq. R. 28	Ware as No. 62. Rim dia. 15 cm.
<b>65.</b> ADA Sq. D. 17	Ware like No. 62. Rim dia. 13 cm.
66. ADA no context	Sandy tan ware. Rim dia. 13.50 cm.
67. ADA Sq. J. 9	Sandy buff ware, self-slipped but eroded. Rim dia. 16 cm.
68. ADA Peripheral	Dense sandy tan ware, traces of impressed decoration on shoulder. Rim damaged, dia.
1	12 cm.
69. ADA no context	Sandy olive-buff ware. Rim dia. 14.50 cm.
<b>70.</b> ADA Sq. C. 12	Gritty ware with black specks, red core, olive-cream slipped on both surfaces. Fine in-
1	cising and vertical slashing ext.
<b>71.</b> ADA Sq. E. 13	Gritty red ware, olive cream slip on both surfaces. Fine incising and oval indentations.
<b>72.</b> ADA Sq. J. 15	Sandy tan ware, vegetal tempering. Flattened band with vertical ovoid impressions on
1,	shoulder.
73. ADA Peripheral	Dense sandy tan ware, wheel-made. Impressed decoration on shoulder beneath cream
*	slip.
<b>74.</b> ADA Sq. F. 13	Gritty olive cream ware with pink core, incised design ext.
<b>75.</b> ADA Sq. F. 13	Gritty ware with pink core, olive-cream slip on both surfaces.
76. ADA Peripheral	Olive-cream ware, reddish core, cream slipped. Shallow horizontal groove and incised
-	design ext., girth grooves int.
77. ADA Sq. F. 8	Pinkish cream ware, vegetal tempering. Two ridges below; very worn.
<b>78.</b> ADA Sq. E 13	Ware as No. 71. Incised horizontal lines.
<b>79.</b> ADA Sq. J. 15	Sandy tan ware, black slipped ext. over horizontal grooves.
<b>80.</b> ADA Sq. E. 17	Gritty red ware, olive-green slip ext. Angle uncertain; no rim dia.
<b>81.</b> ADA Sq. D. 16	Hard olive green ware. Angle uncertain, no rim dia
<b>82.</b> ADA Peripheral	Thin red ware, some white grits. Broad shallow groove around shoulder.
<b>83.</b> ADA Sq. D. 18	Hard red ware, cream slip over incised horizontal lines ext.
<b>84.</b> ADA Sq. E. 14	Ware as No. 74. Fragment of handle.
85. ADA no context	Greenish grey sand tempered ware with white grits and air holes. Double coil handle.
<b>86.</b> ADA Sq. D. 17	Reddish ware with black specks, cream slip on both surface. Rim broken, dia. c.11 cm.
<b>87.</b> ADA Sq. E. 15	Hard greenish ware, olive cream slip. Rim dia. 4 cm. int.
88. ADA Sq. L. 23	Sandy greyish buff ware, hard fired. Dia. at base of neck 5 cm.
89. ADA Peripheral	Dense red ware, slightly micaceous. Rim missing, dia. at neck 9 cm.
90. ADA Peripheral	Sandy red ware, very worn.
91. ADA Peripheral	? Cream ware beneath thick deposit. Handle of globular vessel, four discs applied to top.
	See also No. 92.
<b>92.</b> ADA Sq. L. <b>2</b> 3	Eroded cream ware. Applied discs around neck and horizontal ridges on shoulder. See
	No. 91.
93. ADA Sq. A. 4	Buff ware, red core. Fine incising ext.
94. ADA Peripheral	Sandy cream ware with red grits. Rim diam. 12.50 cm.
95. ADA no context	Gritty grog-backed red ware, cream slipped on both surfaces. Base dia. 13.50 cm.
05 ADA	Sandy tan-red ware with white inclusions, large and small. Rim dia. 24 cm.
96. ADA no context	TT 1
97. ADA Sq. D. 18	Hard cream ware, traces of decomposed ?light green glaze. Base dia. 12 cm.
98. ADA Sq. D. 15	Gritty red ware, slipped and smoothed. Rim dia. 20 cm.
<b>99.</b> ADA Sq. M. 22/	23 Buff ware, dark brown glaze over rim, green veining int. Rim dia. 18 cm.

At much the same time other types of pottery were reaching the Oman Peninsula from the Indus Valley. The most commonly encountered were large black-slipped jars used as containers, although the nature of their contents is unknown. They were widely distributed both in the interior and on coastal sites including Ghanadha and Umm an-Nar (32) but no sherds were found on the airport site. The absence of this ware is difficult to explain as its presence had been expected when the pottery was examined but, as the black colour coating can wear off, the ware could have escaped notice if badly worn.

However, another type of Indus vessel was recognised. No. 57 represented part of a pedestal-dish in a hard tan-red ware with a much eroded slip. The inside of the dish bore faint traces of two concentric bands of incised lines. A comparable pedestal-dish in a Hili 8 IIf context was regarded as a local imitation of an Indus form (33) and the airport fragment may also be one because its ware lacked the mica dust often present in Harappan pottery. Three flat fragments (not illus.) from the periphery of the airport were more likely to be Indus products being in a dense micaceous orange ware with a tendency to laminate. Two of the sherds bore marine accretions, the other showed faint traces of two concentric lines incised within the dish.

A small perforated disc made from a sherd (No. 59) could be matched by one in the house complex on Umm an-Nar but no parallel could be cited for a small twisted handle (No. 60) which could be of later date.

A feature noted both on Umm an-Nar and in the airport pottery was the large number of worn potsherds of triangular or trapezoidal shape. These were thought by the Danish team to be tools for polishing and some may in fact have served that purpose. However, they were far too nu-

merous on the airport site and are more likely to owe their shape to the erosional forces of windblown sand like the *dreikanters* found in the dune areas of southern Qatar. Such 'tools' rarely occur in the assemblages of the third-millennium sites on alluvial surfaces.

By the end of the third millennium the settlements on Umm an-Nar and Ghanadha had been abandoned although the latter island may have been visited on a seasonal basis, to judge from a small quantity of second-millennium pottery and a copper/ bronze spearhead. A similar pattern of events is likely to have occurred on the airport site where only a couple of sherds (Nos 21 and 30) might be of second-millennium BC date because of their gritty ware and grey core. No parallels could be sited to the second-millennium ceramic sequence at Tell Abraq and the absence of small cups and string-cut bases - a hallmark of the Wadi Suq period – suggests that the airport site was visited infrequently. It appears to have remained unused throughout the Iron Age as none of the easily identifiable wares and distinctive vessel forms of that period were noted in the collection. Ghanadha, on the other hand, although not much used in the Iron Age, was at least visited by local fishermen whose fireplaces, dated to the first millennium BC, marked their presence on the island.

# The Airport Site in the First Century BC and Later (Fig. 3)

A wholly unexpected and important result of this study of the airport's pottery was the recognition of a number of sherds which could be dated to between the first century BC and the second century AD (Fig. 3). Although very worn and lacking any trace of the glaze that would have helped to identify them more readily, most of the vessels could be related by shape

and occasionally decoration not only to the ceramics of Mleiha and ed-Dur but to grave goods in tombs on Bahrain during the middle Tylos phase. The pottery could have been manufactured on Bahrain and exported at a time when there was much activity on the trade routes of Arabia and the Gulf, but that hypothesis has not been tested by analyses. The re-use of the airport site is of particular interest since it is the only site of the late pre-Islamic period to be known in the coastal area of Abu Dhabi. Pottery belonging to that period is reported to have been excavated by the Department of Antiquities on a site in al-Ain but has not yet been published (34). It is not therefore possible to compare the ceramics of the interior and the coastal areas of Abu Dhabi or to say whether the imported vessels on the airport were associated with any local common ware since the latter can not yet be recognised in that emirate. However, thanks to the French mission's excavations at Mleiha and ed-Dur, the airport pottery can be related to some of the vessels on those sites.

Six jars, Nos 61–65 and 67, in a sandy buff ware, were characterised by square rims with an indentation or reeding along the top. It was a feature present, in particular, on glazed vessels at both Mleiha and ed-Dur during period PIR.C dating from the first to early second century AD (35). Vessels such as Nos 68, 72 and 73, in a sandy tan ware with impressed and incised decoration on ovoid forms could also be matched in the same contexts (36). The impressed decoration on Nos 68 and 72 was also similar in style to that used on a glazed jug with horizontal grooves and long ovoid incisions found in Grave 34 at Bu Asheira on Bahrain (37).

A probably related group comprising several vessels in a gritty ware with pink core and a distinctive olive cream slip bore similar ornamentation: Nos 70 and 71 resembled the jug from Grave 34 at Bu Asheira while No. 74 matched one from Grave 53 in the same cemetary dated to the first-second centuries AD (38). The same ware group included the necks of two juglets, Nos 87 and 88, and No. 84 which had formed part of a double core handle comparable in shape to No. 85 and two others (not illus.).

Nos 91 and 92, although not joining, had clearly been part of the same unusual type of vessel despite the fact that they were found in different areas of the site and thus reflect the disturbance the site had suffered. They comprised a small globular jar in a thin cream ware with a fragmentary flat handle projecting from the rim. The shoulder showed traces of horizontal ridges below a band of applied discs which were also set in a row on top of the handle. Both sherds bore a thick deposit which obscured the surface of the discs so it is not known if they were plain or possibly decorated. Almost certainly they fall within the period discussed, but no parallels can be cited.

The presence of this relatively small amount of early first-century AD pottery on the airport is difficult to explain. It is too scant to represent either a settlement or even a seasonal camp site and the vessels in the small assemblage appear functionally more appropriate to an urban site. One possible interpretation is that the pottery formed part of a consignment of imported goods destined for an urban centre, which was damaged in transit at a stopping place along a major route leading either north or eastwards to al-Ain.

Thereafter, the history of the site, as reflected in its ceramics, peters out with only a few stray sherds representing casual visitors in the early and late Islamic periods. Surprisingly, the sherd collection contained no hint of the great diversity of local and imported wares, including Far Eastern por-

celain and Iranian stoneware, which reached many towns and villages throughout the Emirates during the Portuguese period. One can only conclude from their absence that the airport site was unvisited at that time.

Despite the circumstances of its 'excavation' and its poor condition, the airport pottery proved to be of considerable interest and for that reason is presented in this note. A study of the cultural assemblages in their entirety can be expected to supplement this account of the site based solely on the ceramic evidence, and the lithics are likely to expand the site's prehistory when the final report is published by the Abu Dhabi Islands Archaeological Survey.

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