In May 1947 Mrs Elizabeth Gibb visited Dun Lagaidh on the west side of Loch Broom (6-inch O.S. map, XXII; National Grid Ref. 28/143914), and subsequently informed the Royal Commission on the Ancient and Historical Monuments of Scotland that the remains consisted of a broch enclosed within the ramparts of a vitrified fort. Since no vitrified fort had previously been recorded on the west coast of Scotland north of Loch Alsh, and the distribution of such forts had been thought to be "strictly complementary to, and mutually exclusive with, that of the brochs," this discovery, if established, was of outstanding importance. On behalf of the Commission, a survey of the remains was accordingly made by the joint authors in the following October, with the results detailed below. At the same time opportunity was taken to visit four other prehistoric monuments in the vicinity of Ullapool, and notes on these are therefore included in this paper. The whole is now published by the Commission's authority.

The Commission's thanks are due to Mrs Gibb, whose observations and deductions at Dun Lagaidh were fully confirmed by the survey, and to Mr R. J. A. Eckford, of the Geological Survey of Great Britain, for information on the building stones used at Dun Lagaidh and at Dun an Ruigh Ruadh.

I. VITRIFIED FORT AND BROCH, DUN LAGAIDH (fig. 1, 1).

About two miles S.E. of Ullapool a wedge-shaped tongue of land juts out 300 yards into Loch Broom from its western shore. For the most part, this tongue consists of a raised beach, now arable; but 200 yards inland a hog-backed ridge of Moine schist, measuring some 400 yards from east to west by 100 yards from north to south, rises abruptly out of the flat ground to a maximum height of 80 feet above its base. The sides of the ridge are everywhere steep, and are precipitous in places: its top is uneven, and is

1 Childe, Scotland Before the Scots, Appendix XI.
3 For another vitrified fort, discovered shortly afterwards in the same region (Gair Loch), see Proc. Soc. Ant. Scot., vol. lxxx. p. 182.
1. Broch, Dun an Ruigh Ruadh, Rhiroy: interior, showing scarcement.

2. Same, showing outer face.

C. S. T. Calder and K. A. Steer.
lightly clothed with grass and bracken, interspersed with small clusters of stunted oak, hazel and rowan. On a small knoll which crowns the ridge, 80 yards from its west end, stands the ruin known as Dun Lagaidh (fig. 2).

To-day the structure appears simply as a roughly circular, crater-shaped heap of stones, about 90 feet in diameter and 8 feet high at the rim. By clearing away the surface stones, however, we quickly revealed two segments of outer face on the south-east and west sides at a height of possibly 10 feet above the foundations: the curvature of the faces at these points indicated a circular building with an external diameter of approximately 60 feet. Owing to the amount of debris choking the interior, no inner face could be detected; but a fragment of rough walling on the west side, the joints of which show traces of lime mortar, may represent a modern rebuild of this face, in which case the original wall would be about 12 feet thick at this point. The shape and size of the structure, and its strong position, dominating an area of cultivable land and within easy reach of a good anchorage, clearly identify it as a broch. Since the amount of debris is sufficient to conceal the entrance, the foot of the stair, and perhaps chambers, it would certainly repay excavation.
The broch is enclosed within the wasted remains of a vitrified fort which occupies the west end of the ridge and measures internally 300 feet in length by about 120 feet in maximum width. On three sides the defences of this fort appears to have comprised only a single wall, drawn round the irregular rocky edge of the summit area, but on the more vulnerable fourth, or east,
side a medial ditch and an outer rampart have been added to give extra protection to the entrance. At the present time no trace of the main wall survives on either the north or south sides, but at the west end it is represented by a low mound at the base of which three short lengths of outer face are visible standing to a maximum height of 2 feet 9 inches above the turf. The dimensions of the mound indicate a wall thickness of 12–13 feet. The facing-stones are not fused, but at the three widely separated points marked on the plan vitrification can be seen in the exposed soil. Samples of the facing-stones, and of the vitrified material, have been identified by Mr Eckford as Torridon Sandstone, patches of which occur in the local Moine schist. At the east end both ramparts are reduced to low mounds, while the southern half of the inner rampart has totally disappeared: the ditch, some 10 feet wide, is almost completely silted up. An unexcavated rock traverse in the centre of the ditch presumably represents the entrance, since no other convenient access to the interior is available, although the traverse is only 3 feet 6 inches wide and is partly obstructed by the tail of a rock outcrop. Vitrification is again present at two places in the exposed core of the inner rampart, north of the entrance, and also in the fragment of outer rampart, lying to the south of the entrance, which curves outwards from the ditch in a curious manner to end against the outcrop referred to above.

From examination of the superficial remains it is clear, therefore, that a substantial part, if not the whole, of the fort defences contains vitrified matter, which, as Professor Childe and Mr Wallace Thorneycroft have shown, results from the combustion of the wood in a wall composed of stone and timber after the fashion of a murus gallicus. As far as is known this type of construction was never used for the external defences of brochs which are built either of stone or earth, and the fort and broch may be regarded, therefore, as the separate works of two peoples. Although the relative dates are not evident from the plan, since neither work impinges upon the other, it can hardly be doubted, from a comparison of the state of the remains, that the broch is the later of the two. The denuded condition of the fort walls, in marked contrast to the substantial debris of the broch, coupled with the fact that the broch masonry is also Torridon Sandstone, can only mean that the fort has served as a quarry for the broch builders. This conclusion is not prejudiced by the apparent absence of vitrified material in the broch debris, since the broch builders would presumably select only unfused facing-stones; on the other hand, it derives support from two stony mounds, representing ruined walls, that radiate respectively from the north-west and south-east arcs of the broch debris and terminate on opposite edges of the ridge top. The inner ends of these walls are covered by the broch debris, and it seems likely that they have bounded a contemporary

enclosure; while the fact that their outer ends overlie the site of the vitrified wall is proof that they are later in date than the fort.

II. BROCH, DUN AN RUIGH RUADH, RHIROY (fig. 1, 2).

This broch is situated a quarter of a mile from the western shore of Loch Broom, on the lower slopes of Carnan Ban and behind the crofts at Rhiroy (6-inch O.S. map, XXII; National Grid Ref. 28/149901). It stands on the edge of a precipitous rocky bluff, some 30 feet high, and commands an extensive view along the margin of the loch to N.N.E. and S.S.W., and eastwards across the narrow strip of arable land that falls gently from the foot of the bluff to the water’s edge. A constant supply of fresh water is provided by a hill burn, Allt na Crìche, 80 yards to the north-west.

Roughly one-third of the broch wall on the north-east arc has fallen over the edge of the bluff (fig. 3), but the remaining two-thirds still stand to a maximum height of 7 feet 9 inches externally and 9 feet 6 inches internally: the depth of masonry beneath the present surface may be as much as 4 feet. It is unlikely that the vertical cliff on the north-east has been affected to any extent by erosion since the broch was built, so that the tower will have been slightly oval on plan, measuring 65 feet over the walls from north-west to south-east by 56 feet at the most from north-east to south-west. The missing segment of walling must have been somewhat flatter than the rest. The wall varies from 12 feet to 14 feet thick at the present ground-level, and is reduced in thickness by an internal scarcement (Pl. XVI, 1) at a height of 3 feet 8 inches above the debris which chokes the interior. This scarcement projects 2—5 inches from the under face, and is 1 foot 4 inches wide on the top. Above it the wall converges inwards in beehive fashion, developing an overhang of 1 foot 5 inches in a height of 5 feet 9 inches. At this point there may have been a second scarcement, as at Mousa,¹ although no parallels have been found for the convergence of the inner face immediately above the first scarcement. The outer face is vertical (Pl. XVI, 2).

Within the wall, round the west arc, a gallery, 2 feet 3 inches wide, can be traced for a length of 45 feet on a level approximating to that of the lower scarcement. This gallery, which still retains its lintels for a distance of 8 feet, is choked with tumbled stones, so that without excavation it is impossible to determine its height, or to ascertain whether a lower gallery or cells exist beneath it. In the south arc, however, a lower gallery, also 2 feet 3 inches wide, survives for a length of at least 12 feet. The upper courses of masonry are visible and show a closed end on the east. Near the other, broken end, one lintel remains on a level with the lower scarcement, while a second lies dislodged in the ruins of what may have been an

¹ R.C.A.M., Shetland, fig. 533.
opening leading from the interior of the broch to the gallery. An opening at this point would be suitably placed to give access to a stair in an extension west of the gallery.

The wall is dry-built of fairly heavy stones, mostly Moine schist, and pinnings are inserted where necessary to level irregularities in the jointing. The local tradition that the building stones are of a different material from that found in the vicinity of the broch, and that they were transported from the east side of Loch Broom "by men stationed at regular intervals upon rafts," is unfortunately untenable, since outcrops of Moine schist are common on both sides of the loch.

The entrance to the broch must have been situated practically on the edge of the cliff in either the north or east arc. There is no trace of

---

any external defences. Although sheep fanks have been built from the debris against the outer face on the south-west, there does not appear to be any immediate risk of further deteriorations.

III. Fort, Dun Canna (fig. 1, 3).

The fort of Dun Canna, 4 miles north of Ullapool (6-inch O.S. map, VII; National Grid Ref. 29/112008), occupies a strong position on a rocky promontory which juts out into the sea between Camas Mor and Camas Beag. On three sides the promontory is girt with cliffs which rise abruptly on the north-west and south-east to a height of 40 feet above the high-water mark, while the neck of land connecting it with the mainland on the fourth or north-east side is reduced to a width of 37 feet by a narrow steep-sided gully opening into Camas Mor. Both Camas Mor and Camas Beag possess gently inclined shingle beaches on which boats may be safely hauled up under the lee of the promontory.

The fort (fig. 4) comprises an inner enclosure, or citadel, which occupies the whole of the level summit of the promontory, and a large outer enclosure or annexe to the east. On plan the citadel is roughly rectangular with rounded angles, and measures 140 feet in length by 30 feet in width within a single massive dry-stone wall now heavily denuded and overgrown by vegetation. At the south-west end one course of the outer face of the wall is traceable for a distance of 20 feet, but elsewhere no facings can be seen, so that its width is uncertain. Except on the north-west side, where it has almost entirely disappeared, the debris varies from 10 to 18 feet thick. A gap, 6 feet 6 inches wide, at the north-east end, presumably marks the position of the original entrance. The interior is thickly carpeted with bracken- and peat-mould and contains no sign of structures. The annexe, which is of irregular shape, measures internally 140 feet from north-north-east to south-south-west by 95 feet from east-south-east to west-north-west, excluding the neck that connects it to the citadel. Like the latter it has been surrounded by a single dry-stone wall, whose substantial character may be gauged from the fact that on the east side the debris is no less than 40 feet thick at the base and up to 12 feet high above the interior. On first inspection only a few facing-stones were visible, but by clearing away the loose surface stones we succeeded in tracing the upper courses of both faces as shown on the plan, revealing a wall thickness of 12–14 feet. A narrow gap through the debris in the curving north-east corner of the wall, opposite the foundations of a late cottage, is obviously intrusive; and the original entrance to the fort is situated in a re-entrant angle on the north side, at the head of an easy approach up the side of the cliff. In the exposed wall face, on the south side of the entrance, there is a rebate, three courses high and 3–4 inches deep, resembling the check of a door. On the west side of
the annexe the wall may have returned southwards from the north-west corner along the edge of a rock face at right angles to and a few feet higher than the neck, leaving only a narrow entrance leading to the citadel. The north side of the neck was, however, defended by a wall, a fragment of which can still be seen abutting the base of the transverse rocky face, while the south side may have been similarly protected. The interior of the annexe, which falls unevenly from north-east to south-west, is featureless.
IV. An Dun, Drienach, Strath Kanaird (fig. 1, 4).

An Dun, 300 yards south-east of the River Kanaird and 700 yards due east of Drienach (6-inch O.S. map, VIII; National Grid Ref. 29/106019), occupies the flat-topped summit of a rocky knoll lying in the angle formed by the confluence of two burns, Allt na Feithe Riabhaich and Allt an Easach. The site commands a wide view eastwards up the valley of the first-named burn and westwards along Strath Kanaird, but it is level with the ground to the north and on the south is overlooked by a high range of hills. The north and east sides of the knoll are precipitous and some 70 feet high, while the west side is steeply inclined: thus the only easy approach to the dun is by a more gradual slope on the south, where a gap in the debris of the wall probably represents the site of the entrance.

Owing to the wasted condition of the remains no useful plan can be made without excavation. Superficial indications, however, suggest that the structure was shaped like a squat letter D with rounded corners, the west side forming the upright stroke, and that it measured about 34 feet from east to west by 32 feet from north to south within a wall some 14 feet thick. At the north-west corner a short segment of the outer face of the wall is visible, a few courses high, behind which two slabs, embedded in the soil, may indicate the presence of a chamber. Another stretch of the same face, 10 feet long, can be seen on the straight west side, rising with a batter of 1 foot 6 inches to a height of 6 feet 6 inches: its top is approximately level with the present ground surface in the interior. It is built of large blocks of local freestone levelled and jointed with pinnings. Elsewhere the walling has either disappeared over the precipices or lies in a heap of debris on the upper slopes of the knoll: natural erosion has no doubt been accelerated by stone-robbing to build a late cottage and a dyke at the foot of the approach on the south. It is probable, however, that the foundations and floor of the structure are still intact and that it would repay excavation.

V. “Pictish Tower,” Leckmelm (fig. 1, 5).

The O.S. map marks the site of a “Pictish Tower” between the high right bank of the Allt Raon a’ Chroisg and the side-road leading to the schoolhouse at Leckmelm (6-inch O.S. map, XXII; National Grid Ref. 28/170901). There is now no trace of this structure, and the oldest local inhabitant had never heard of its existence.