A NEW MAP OF THE RUWENZORI PEAKS

By D. L. BUSK

The Director of Lands and Surveys of Uganda has courteously informed us that the long-awaited four sheets[1] of the recent survey of the Ruwenzori area on a scale of 1 : 50,000 have now been published. One sheet (No. 65/II Margherita) covers the central group of peaks on both sides of the Belgian Congo-Uganda border, some 17 miles square, and is of the greatest interest to mountaineers.[2] Of the other three sheets, one covers the area immediately to the east (including the approach by road and track to the mountains); the other two are to the south. The whole form a square of some very impenetrable country, some 34 miles from north to south and as much from east to west. Before discussing this valuable cartographical achievement, honourable mention should be made of the work of the previous cartographers.

I. The first good and complete map of the range was produced by the massive expedition of the Duke of the Abruzzi in 1906. It was published on a scale of 1 : 50,000 in the *Geographical Journal* (Vol. XXIX, p. 121) in 1907, in *A.J.* 23. 392 and in de Filippi's book about this expedition (*Ruwenzori*; Archibald Constable, London, 1908), where the scale is 1 : 40,000. These maps are still very good and so clear that they will be much valued by modern climbers. Occasional inaccuracies are more remarkable for their rarity than for their obtrusiveness. Reprints on the 1 : 50,000 scale can still be obtained from the Royal Geographical Society.

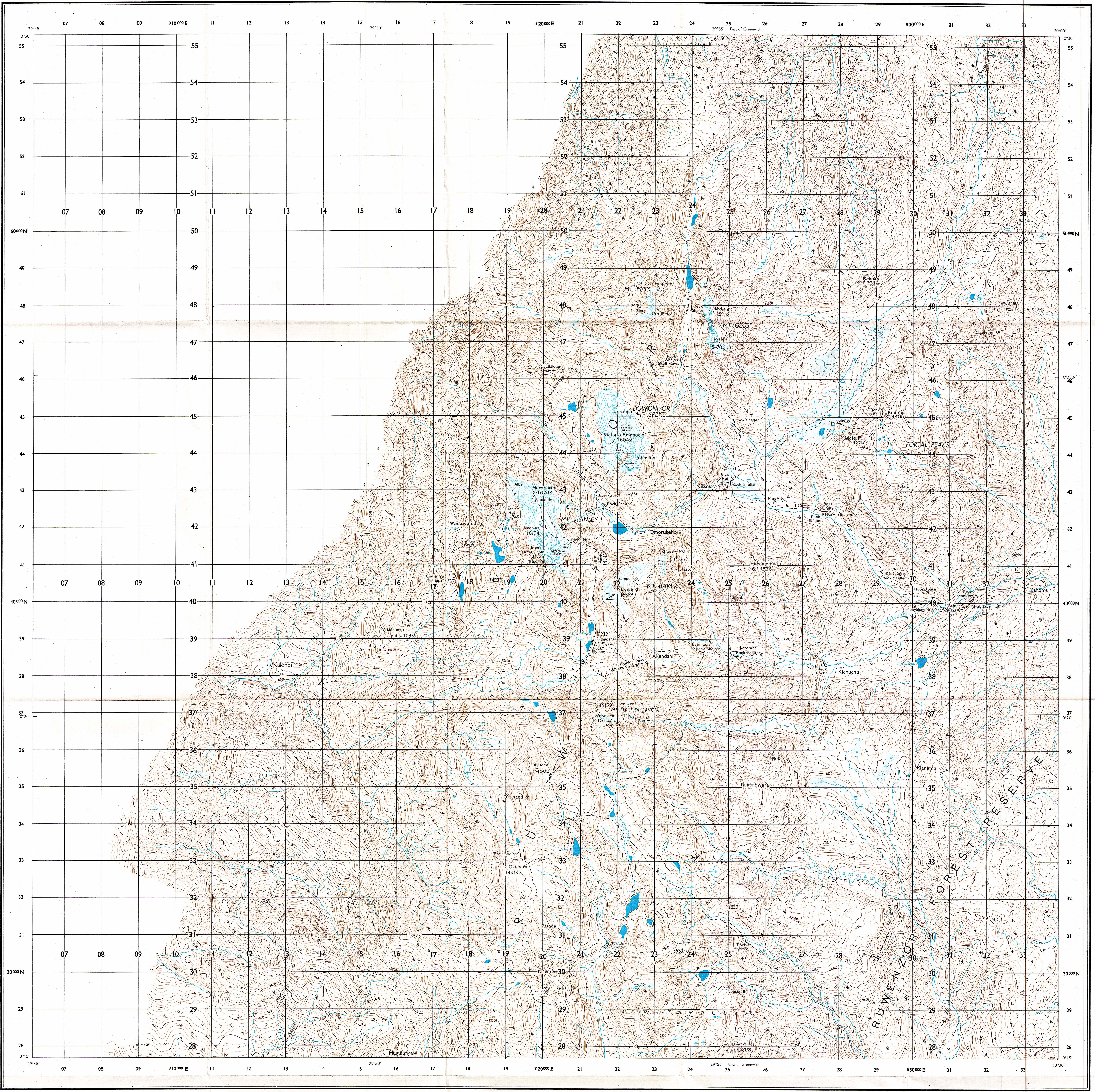
II. The range remained unvisited for twenty years until Humphreys (and independently Shipton and Tilman, who did no cartography) climbed in the Ruwenzori. Humphreys' map, which is of course based on the Duke's, appeared in 1927 in *Geogr.J.*, LXIX, p. 516 on a scale of 1 : 50,000 and is equally legible. A list of heights of peaks is appended. It is also still available at the R.G.S.

III. At this stage Humphreys began his astonishing series of expeditions, which could only have been carried through by a man of immense determination and fortitude, often alone with African porters. The cartographical result will be found in *Geogr.J.*, LXXXII, p. 481 on

[1] Sheets 65/II, 65/IV, 66/I and 66/III.

[2] We are greatly indebted to the courtesy and co-operation of the Director of Lands and Surveys, Uganda, and of the Director of Overseas Surveys, who have enabled us to publish this sheet (65/II) with this number.

UGANDA 1:50,000 MARGHERITA Sheet 65/II (NORTH A-35 / X-IV-NE)



Series Y 732
Edition 3 U.S.D.
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1500-11/58

Map users are invited to inform the Director of Lands and Surveys, P.O. Box 1, Entebbe, of any errors or additions

SCALE 1:50,000

Mile 1 ¾ ½ ¼ 0 1 2 3 4 5 6 7 8 9 10 Miles

Yards 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000 13000 14000 15000 16000 17000 Yards

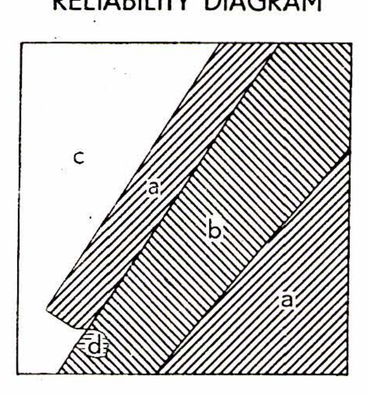
Metres 1000 500 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Kilometres

GRID ZONE DESIGNATION 35 N	TO GIVE A GRID REFERENCE ON THIS SHEET		
	LETTERS See 100,000m SQ. IDENTIFICATION. FIGURES Pay no attention to the smaller co-ordinate figures in the margins. They are for finding full co-ordinates: viz 300000m		
100,000 M. SQ. IDENTIFICATION: RL	PAY ATTENTION TO LARGER MARGINAL FIGURES AND TO THOSE PRINTED ON THE FACE OF THE MAP: viz 00		
	POINT Weismann ⊙ 15157	LETTERS	RL
	EAST Take west edge of square in which point lies and read the figures printed opposite this line (on north or south margin) or on the line itself (on the face of the map). Estimate tenths eastwards to point	21	3
	NORTH Take south edge of square in which point lies and read the figures printed opposite this line (on east or west margins) or on the line itself (on the face of the map). Estimate tenths northwards to point	36	8
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Unit ......Metre	Square 1000m	Reference to nearest 100m	

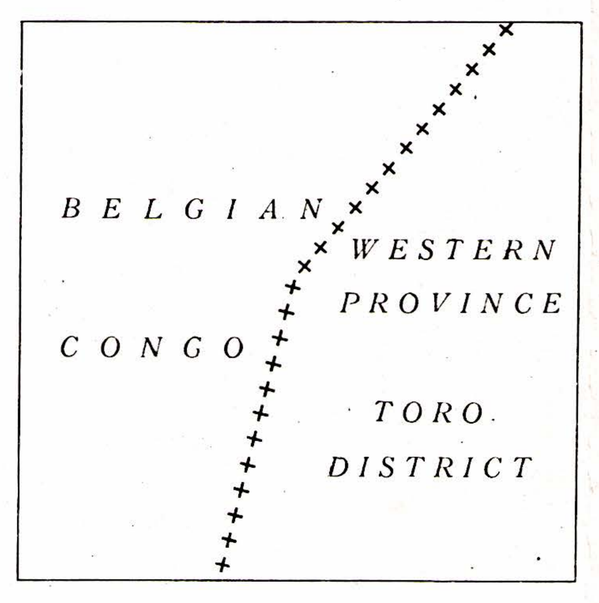
SHEET HISTORY

Constructed, drawn and photographed by Directorate of Overseas Surveys 1957 (D.O.S. 26)
Field Survey Data supplied by Survey, Land and Mines Dept., and D.O.S.
Computed by D.O.S.
Additional information supplied by Survey, Land and Mines Dept., February 1957.
Air Photography by Hunting Aerosurveys Ltd., June and Oct. 1955. and R.A.F. April 1952.
Grid added by Lands and Surveys Department, Uganda, 1958.

RELIABILITY DIAGRAM



AIR PHOTOGRAPHY
a OCTOBER 1955
b JUNE 1955
c NO AIR PHOTO COVER
d APRIL 1952

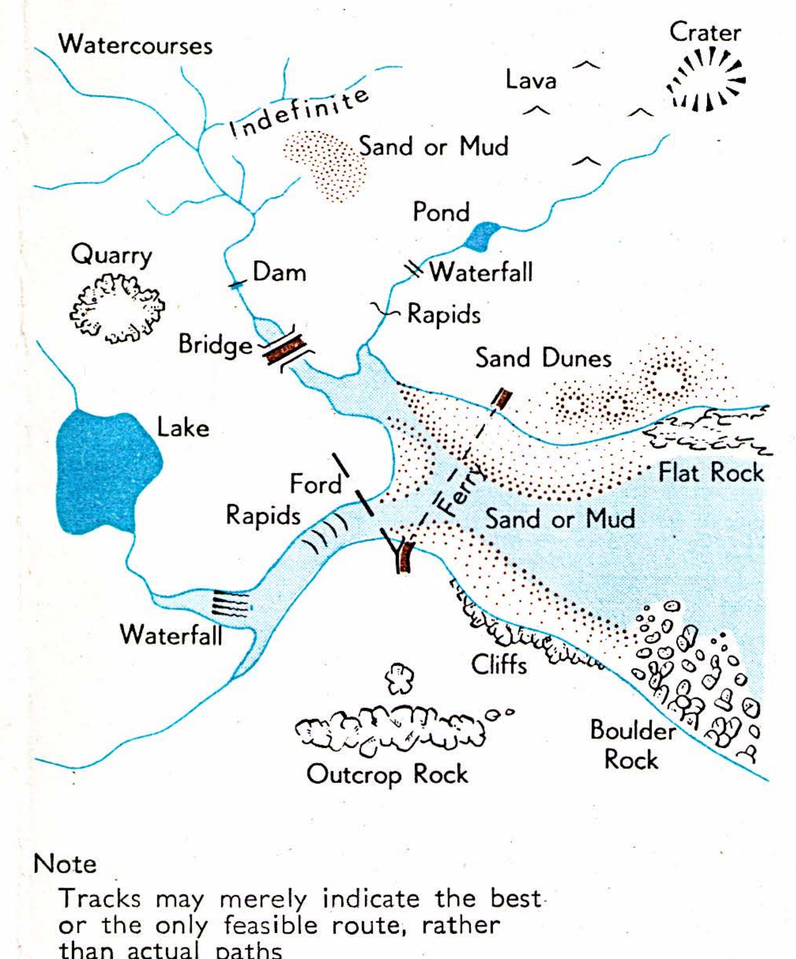


Refer to this map as:-	Series Y 732 Sheet 65/II

Town areas with permanent buildings
Other populated areas
Villages, Huts
All Weather Roads – Hard Surface
All Weather Roads – Loose Surface
Dry Weather Roads
Minor Roads
Motorable Tracks
Other Tracks and Footpaths
Railways, Station, Siding, Level crossing — Sta LC
Light
Under Construction
Telegraph or Telephone Lines
Power Transmission Lines
Post, Telegraph Office — P T
Dispensary — Disp
Wireless Station
Antiquity
Mineral Workings
Hotel, Rest House — H RH

Boundaries :- International or Inter-Territorial
Provincial
District
Saza or County
Gombolola
National Park or Game Reserve
Boundary Pillar — BP
Headquarters:- Provincial — GULU
District — MASAKA
Saza or County — SHQ
Gombolola — GHQ
Trigonometrical Stations :- Primary
Secondary
Minor
Spot Heights in Feet — ·5653
Contours (V.I. 100 ft.) — 1000, 800
Police Station, Police Post — PS PP
Hospital — + Hosp
Church, Mission — + Ch + M
Mosque, Temple
School — Sch
Court House — Ct H

Forest
Thicket
Wooded Grassland
Open Clump Thicket
Grassland
Scrub
Bamboo
Giant Heath
Scattered Cultivation
Plantation
Swamp Forest
Swamp or Bog
Papyrus Swamp
Seasonal Swamp
Borehole, Waterhole, Well, Spring — BH WH W S
Glacier or Snowfield



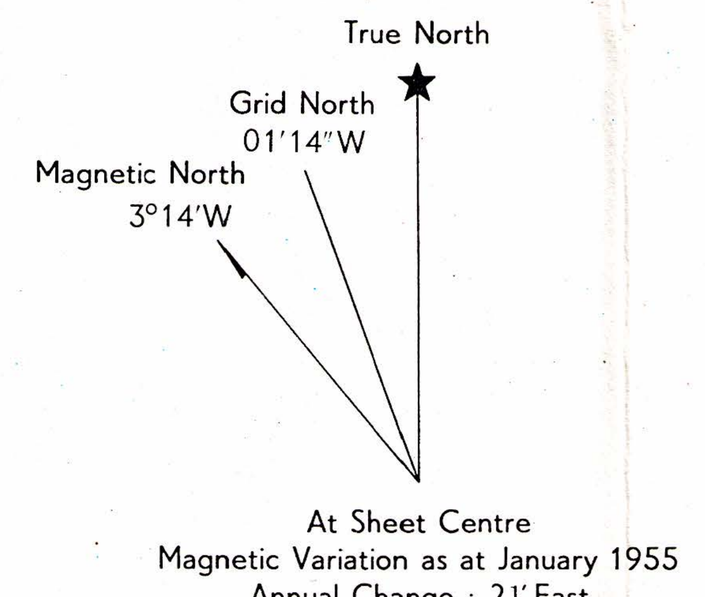
Note
Tracks may merely indicate the best or the only feasible route, rather than actual paths

Rock Shelter

Boundaries are not shown on this Edition

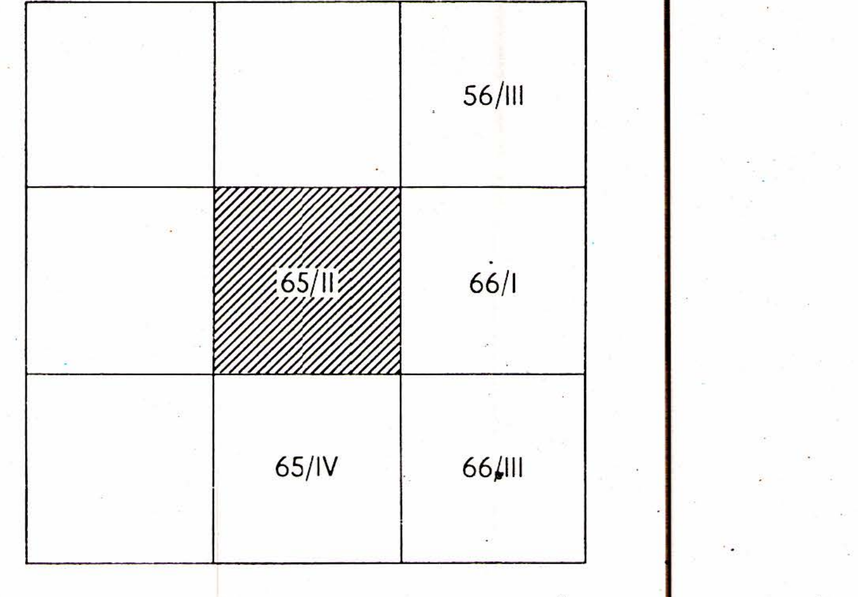
The representation on this map of a Road, Track, or Footpath, is no evidence of the existence of a right of way.

Vegetation "Congregations" are bounded by a dotted line



At Sheet Centre
Magnetic Variation as at January 1955
Annual Change : 2½' East

INDEX TO ADJOINING SHEETS



Grid :-	UTM Zone 35
Projection :-	Transverse Mercator
Spheroid :-	Clarke 1880 (Modified)
Unit of Measurement :-	Metre
Meridian of Origin :-	27°00' East of Greenwich
Latitude of Origin :-	Equator
Scale Factor at Origin :-	0·9996
False Co-ords of Origin :-	500,000 m. Easting Nil m. Northing
Datum :-	New (1950) Arc

a scale of 1 : 125,000, covering a much larger area, particularly northwards and southwards. This map, though excellent, is on too small a scale to be of interest to mountaineers in the central group, except as a convenient and accurate guide to the general layout of the range and routes of approach. It is available at the R.G.S.

IV. During the same period the Belgians were active, for the most part on the Congo side, under the leadership of the gallant Count Xavier de Grunne, who perished as a Resistance leader at the hands of the Gestapo during the war. His expedition was made in 1932, but the results were only fully published in 1937 (*Le Ruwenzori*; R. Dupriez, Bruxelles). As far as the Congo side is concerned, this is as thorough a work as the Duke's, but coming later, when the veils of mist and mystery had been drawn aside, it made less impact. A portfolio of maps is bound into the back of the volume, but of those of interest to us as mountaineers, the majority are black-and-white sketch maps. These are of the type known in German—I can find no English equivalent—as *Kammverlaufkarten*, i.e. they show the ridges as thick, dark lines, with rivers, glaciers, lakes and peaks all indicated. They are cheap to produce and, if well drawn, exceedingly clear, but necessarily lacking in detail.

V. In 1938 a German expedition had with it a surveyor with modern instruments. The published account (*D.A.V. Zeitschrift* for 1939) included only a sketch map on the scale of 1 : 100,000, but later a three-colour map was produced, based on phototheodolite surveys, on a scale of 1 : 25,000. This is now difficult to obtain. It is entitled *Zentralgruppe des Ruwenzorigebirges* and covers much of the Stanley, Speke and Baker groups (though nothing on the Congo side) with the Bujuku and Kitandara Lakes as its foci. It is clear, but its strict limitation of area to the surrounding skyline is a severe drawback. It is unfortunate that the phototheodolite was not carried higher to the peaks. However, many summit heights are given.

VI. In 1939 a Polish party[3] made an expedition (the second Polish party[4] in 1943 did no mapping) to the Ruwenzori, which in a short time covered an immense amount of ground. Their account was published clandestinely during the war in *Taternik*, the organ of the Polish Mountaineering Club, and again in greater detail in the same periodical in 1948, this time with the addition of an admirable sketch map of the whole group on a scale of 1 : 50,000. A translation of this record with a photostat of the map is available in the Alpine Club Library. This is another *Kammverlaufkarte* like the de Grunne map (IV above), but it is far wider in extent, including the southern Luigi di Savoia group and the head of the Nyamgasani valley omitted by the Belgians, though visited and mapped by Humphreys (see III above).

[3] *A.J.* 59. 412. [4] *A.J.* 54. 275.

VII. Later R. M. Bere published in the *Uganda Journal* (Vol. 19, No. 2, September 1955, available at the R.G.S.) his brief but comprehensive history of the exploration of the Ruwenzori, which includes a small sketch map covering the central ranges with routes marked very clearly.

VIII. Finally in 1957 another black-and-white map embodying all information received to date was published in my own book (*The Fountain of the Sun*, Max Parrish).

This brief account perforce omits many sketch maps of limited areas, which have no pretensions to great accuracy, though they are very useful on the ground to mountaineers. It also omits some of the earlier expeditions from the east (Johnston, Freshfield, Wollaston, etc., which, owing to bad weather and difficult conditions could only produce maps that are now misleading. Mention should however be made of David's map of his 1904 expedition in the *Jahrbuch des Schweizeralpenclub* for 1909/10, which is more valuable historically than topographically; also Hicks on the Portal Peaks in *Geogr. J.*, CVIII, p. 210, and my sketch map of the Coronation Group in *A.J.* 59. 269 or *Geogr. J.*, CXX, p. 141.

In addition invaluable vertical and oblique air photographs of the Stanley Group with routes marked should be recorded. These are by Harward Maclachlan of Nairobi and two of the verticals will be found in *Geogr. J.*, CXX, p. 144 (northern section) and *A.J.* 60. 106 (southern section). The oblique photographs taken by this firm are also of the very highest value to potential visitors.[5]

We now come to the new map which has over all its predecessors the immense advantage of covering both the Uganda and Congo sides in one operation. Previously expeditions had not unnaturally tended to approach the range either from one side or the other and then return to the same base. There is as yet no record—though the matter is of no importance—of any expedition starting from the east and ending in the west or *vice versa*. The difficulty and expense of getting Congolese porters back home from Uganda or Bakonjo porters home from the Congo would account for this. It must be recalled that these porters, while admirable on their own difficult terrain below snow level, have not yet been trained or equipped to traverse glaciers. Very lengthy detours in inhospitable country would be necessary for them, in order to avoid glacier routes. Thus at the conclusion of the expedition a long and costly return journey by road would be involved, no doubt with intergovernmental difficulties in the form of demands for passports, inoculation certificates and so forth.

[5] One will be found in *Geogr. J.*, Vol. CXX, between pp. 144 and 145. Also in my book (*op. cit.*, opposite p. 153). The firm's address is P.O. Box 2159, Nairobi.

The present map was made possible by the use of air photographs with the necessary ground control. The former were made by Hunting Aerosurveys of Elstree from a height of 35,000 ft., i.e. some 17,000 ft. above Margherita Peak, the culminating summit of the Ruwenzori. Earlier photographs by Harward Maclachlan were taken from much lower altitudes, but as mentioned above their obliques are most useful to mountaineers and their verticals naturally give greater detail to the naked eye than do the mosaics of Huntings.

The ground control of the area was in the hands of four officers of the Uganda Lands and Surveys Department, Messrs. E. Cierach, who undertook the lion's share, J. E. Thompson, L. R. Brook and D. F. Ferguson. The photogrammetric work was carried out by the Directorate of Overseas Surveys in England.

It would be almost more correct to refer to the ' legs ' rather than the ' hands ' of the ground control team; only the most robust lower limbs —and incidentally a stout heart and the tact necessary to persuade African porters to continue in bad conditions—could have permitted such rapid completion of this work. Even air photography over the Ruwenzori can be frustrating enough owing to the persistence of bad weather throughout the year, but only those who have visited the range can appreciate the endurance and patience required of the foot-slogger, encumbered, as the surveyor must be, with delicate instruments.

The new map in three colours is on a scale of 1 : 50,000 and unlike all but one of its predecessors, which relied on hachuring or form lines, is fully contoured, as was the German survey (see V above) in its limited area.

In one respect the new map is a little disappointing, the number of spot heights fixed by instruments is smaller than the mountaineer would have liked and on this score we shall have to rely for some time on earlier cartography. It is, however, essential to note that some of the heights now fixed vary considerably from those previously accepted and may therefore throw out others. It would be tedious in this review to give comparative tables. It will suffice to note that the height of the culminating summit of the Ruwenzori—Margherita Peak in the Stanley Group—is now fixed at 16,763 ft., a trifling decrease from the original 16,794[6] ft. ascribed to it in the final edition of the 1907 Abruzzi survey.[7] This difference is so slight that, in the explorers' section of

[6] The map accompanying the Duke's first account of his expedition (*Geogr. J.*, XXIX, p. 121) gave the height of Margherita as 16,815 ft. In de Filippi's book (*op. cit.* see under I above) the map gave the then ' final ' figure of 16,794 ft.

[7] It may be of interest to record here the latest heights of the higher ranges of Africa. The first is Kibo, the great peak of Kilimanjaro. Kaiser Wilhelm Spitze, the culminating knob on this vast crater rim, rises to 19,340 ft., according to new observations made in 1953. Earlier it had been given 19,718 ft. (6,010 m.)

Paradise he no doubt adorns, the Duke can justly rejoice in the accuracy of work carried out half a century ago in even more difficult conditions and without many of our modern aids—notably aircraft and wireless.

Mention must also be made of Ensonga, the northern peak of the Speke group. The Duke's map gave the honour to the central Vittorio Emanuele Peak (16,080 ft.) and attributed no height to the peak named Ensonga by Humphreys. Humphreys himself and Shipton and Tilman among other later visitors, judging by eye, thought Ensonga overtopped Vittorio Emanuele. A theodolite was taken by Thompson to the latter summit in 1955 and he told me personally that he had satisfied himself that Ensonga was higher. On the new map the height given for Vittorio Emanuele is 16,042 ft., a decrease in Vittorio Emanuele of the same order as the decrease in Margherita noted above and Ensonga has no spot height. The confusion about the height of Ensonga still persists, since I am informed by the Directorate of Overseas Surveys that the photogrammetric evidence is that Ensonga is lower.

The map also merits comment on various minor points:

The frontier between the Belgian Congo and Uganda is not marked on it, which seems strange and should be corrected in a later edition.

The footbridge over the lower Bujuku, erected so laboriously in 1954 by the Mountain Club of Uganda was, alas, swept away in a flood in 1956, but a wire suspension bridge was erected in almost the same spot in 1958.

' M. Portal ' might be taken to mean ' Mount Portal '; in fact it means ' Middle Portal '.

A number of new names are introduced, which is an excellent thing. These (and variations of old ones) are: Epikopo Abataliano, Akendahi,

possibly because any height over 6,000 m. was more attractive to mathematically minded continental climbers.

Next comes Batian, the highest peak of Mount Kenya, which recent surveys have raised from its previous 17,040 ft. to 17,058 ft.

Third is the culminating point, Hans Meyer Peak, of Mawenzi, the lower and entirely distinct peak of Kilimanjaro about six miles from Kibo. Previously held to be 17,569 ft., it has now been reduced by the recent survey to 16,890 ft.

See *A.J.* 60. 97 for heights of these three peaks.

There follows Margherita, now, as mentioned above, allotted 16,763 ft.

The fifth is Ras Dashan (Dejen), the highest peak in the only other range on the African continent to exceed 15,000 ft., the Simien group in Ethiopia. Its height is not fixed with absolute precision, but may be taken as very close to 15,100 ft. (see *A.J.* 61. 345).

Mount Meru, some fifty miles west of Kilimanjaro, closely approaches 15,000 ft., and Mount Elgon on the Kenya-Uganda border exceeds 14,000 ft., as also does the Batu group in Ethiopia (*A.J.* 61. 347).

Neither the Simien Mountains nor the last three mentioned are glaciated or have permanent snow. Technically they are all ' walks '.

Kabamba (previously Kabwamba), Nyabitaba (previously Nyinabitaba), Kibatsi, Omorubaho, Jebson Falls, Hamugoma is omitted.

In this connection the Survey Department of Uganda state that they are in process of forming a Standing Committee on Geographical Names. This Committee will include experts in the various vernaculars. It is to be hoped that this Committee will also ascertain and publish meanings of place names and thus keep up to date work done by previous travellers.[8] The first of the names listed above approximates to the Italian for ' Italian bishop '—perhaps the Duke had to the natives an episcopal appearance.

Jebson Falls are no doubt named after T. C. Jebson, who collaborated with Humphreys in his cartography.

The new map is marked ' Edition 3 '. In fact it is a run specially made for the ALPINE JOURNAL and has a number of amendments. It should strictly be numbered ' Edition 4 '. Better still, more is promised. Work has already started on a map specially designed for mountaineers on a scale of 1 : 25,000. This will cover the six great glaciated groups of the Ruwenzori, outlying peaks and routes of approach. It is hoped to make this available in the ALPINE JOURNAL in due course.

[8] Meanings of place names ascertained to date are given in my book (*op. cit.*, pp. 165 and 201). I have since tried to ascertain other meanings by correspondence, but the results have been too confusing to be worth publishing. No native names applied to peaks have yet been identified. The climber who enquires the names of *peaks* in most primitive areas is asking for trouble. Natives, struggling for existence, have no names for such useless objects as peaks, but they will have them for grazing meadows, hunting grounds, fishing reaches, forests, sheltered spots where the night can be passed and for mountain passes—but not for peaks. However, many natives—obliging and unwilling to confess ignorance to the stranger—will provide a ' name ' if asked. Maps of Africa and Asia are dotted with peaks and other features of exciting prominence or importance to the European mind, which, when translated by the expert really mean ' I do not know ' or ' what does he say '. These ' names ' are provided by those natives frank enough to admit ignorance. See *A.J.* 58. 488 for Bere's expert opinion on native names in the Ruwenzori.

It must also be remembered that once peak names have been given they are rapidly absorbed by the locals. The well-known Wellenkuppe above Zermatt was so baptized by Conway in the eighties—for the good reason that the striking peak was then nameless. It might however be dangerous to suggest even now to a Zermatter that the name was not a local one of primordial origin.

The Bakonjo of the Ruwenzori will soon feel likewise. My own Headman already knew by experience some of our peak names and, in return for his *real* names of lower spots, I could reciprocate by giving him more of the heights. I am prepared to bet that in fifty years, all the names will be firmly of ' Bakonjo origin ' among the Bakonjo.

Similarly I should imagine that any Sherpa will tell you that the glorious Pumori facing Mount Everest has always been so called by generations of Sherpas. In fact it originated from Mallory, who wanted to give to it the name of his daughter. This was disallowed by the Mount Everest Committee and the Tibetan name for ' maiden ' substituted. It is a lovely mountain and a lovely name (cf. Jungfrau), but Pumori is not a ' native ' name.