# THE PERMANENT COMMISSION ON METEORITES. OF THE INTERNATIONAL GEOLOGICAL CONGRESS

# THE METEORITICAL BULLETIN

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Moscow, USSR

### FALL OF KIEL STONY METEORITE, WEST GERMANY

Name

KIEL.

The place of fall or disco- Kiel, West Germany:  $\phi = 54^{\circ}24' \, N$ ;  $\lambda = 10^{\circ}9' E$ . very:

Date of fall or discovery:

FALL, April 26, 1962; 12h45m UT approximately.

Class and type: Number of individual spe- 1.

STONY, olivine-hypersthene chondrite.

cimens:

Total weight:

737.6 gr.

Circumstances or discovery:

of the fall The meteorite hit the roof of a house and made a hole about 10 × 10 cm. The tenant of the house, Mr. Esch. mat, heard the noise. On the next day he found the stone in the attic.

> Prof. C. Hoffmeister points out that there were no obt servations whatever of the fireball or acustic phenomena, which is very strange. He further points out that in the case of the Ramsdorf meteorite, July 26, 1958 (see the Meteoritical Bulletin, No. 13, 1959), the optical and acustic phenomena were insignificant.

Source:

Report of Prof. C. Hoffmeister (Sonneberg, GDR) in a letter, VII.23.1963.

### FALL OF USTI NAD ORLICI, STONY METEORITE, CZECHOSLOVAKIA

Name:

ÚSTÍ NAD ORLICÍ.

The place of fall or disco- Ústí nad Orlicí, suburb of Kergartice, region of Gradez Kralove, Czechoslovakia.

Date of fall or discovery FALL, June 12, 1963; 13h58m.

Class and type:

STONY, chondrite?

routes of individual speci- 1.

mens:

Total weight:

1260 gr; the dimensions:  $12 \times 8 \times 8$  cm.

or discovery

Circumstances of the fall The meteorite fell in an orchard on rather hard black earth and formed a hole about 40 cm deep and about 30 cm in diameter. The fall of the meteorite was observed by M. Kolmenova (suburb of Kergartice). The meteoritic nature of the stone was determined by T. Sukhomel, director of the Ústí nad Orlicí high school and V. Fric, director of the regional public observatory in Gradez Kralove. From the observatory the meteorite was sent to the Mineralogical Department of the National Museum in Prague.

Source:

Report of Dr. K. Tuchek (Prague, Czechoslovakie) in a letter, VI.28.1963.

## DISCOVERY OF KARGAPOL'E STONY METEORITE, USSR

Name:

KARGAPOL'E.

very:

The place of fall or disco- 5 km to the south-east of the village of Osinovka and 12-13 km to the north-east of the Kargapol'e RR station, Kargapol'e District, Kurgan Region, USSR.

Date of fall or discovery:

FOUND, July 1961.

Class and type:

STONY, chondrite.

Number of individual speci- 1. mens:

Total weight:

21.8 kg.

or discovery:

Circumstances of the fall The meteorite was found by a local resident during haying. The meteorite was broken into two unevan parts with a sledge hammer and left in a shed; only in July 1963 they were brought by I. A. Yudin to the Urals Geological Museum (city of Sverdlovsk, USSR). The meteorite nature of the stone was determined by I. A. Yudin and S. I. Smyshlyaev. The regmaglipts and fusion crust observed on the meteorite show changes due to weathering.

Source:

Report of Dr. I. A. Yudin, Scientific Secretary of the Commission on Meteorites of the Urals Branch of the Mineralogical Society of the Soviet Union in a letter, VII.20,1963.

## DISCOVERY OF CAPE YORK (AGPALILIK) IRON METEORITE, NORTHWEST GREENLAND

Name:

CAPE YORK (AGPALILIK).

covery:

The place of fall or dis- Agpalilik Peninsula, 125 km Southeast of Thule and 15 km North of the Savigsivik settlement, Melville Bay, Northwest Greenland.

Date of fall or discovery: FOUND, in the summer of 1963.

Class and type:

IRON, medium octahedrite.

Number of individual spe- 1. cimens:

Total weight:

Estimated 15 tons. Still not fully excavated. Dimensions: about  $210 \times 200 \times 125$  cm.

Circumstances of or discovery:

the fall The meteorite was discovered by Dr. Vagn Buchwald (Copenhagen, Denmark), during a study of the locality where the Greenland meteorites were previously discovered. It was 6 km to the west of the point where the two known specimens «Woman» and «Dog» were found and is undoubtedly a part of the Cape York meteorite shower. The meteorite lay on an ice-free slope 500 m from the shore and was partly covered with gneiss boulders. There was no crater and no crushing of rocks discovered.

The meteorite has temporarily been left where discovered.

The specimen found is the sixth from the Cape York meteorite shower. Dr. Vagn Buchwald has drawn up a summary of precise data on all the known specimens as of September 1963.

Name	Weight	Found	Place
1. Ahnighito 2. Woman 3. Dog 4. Savik I 5. Savik II 6. Agpalilik	3 tons 3 tons 400 kg 3.4 tons 7.8 kg about 15 tons	1984—1897 1913 1961 1963	Meteorite Island 76°04'N — 64°58'W } Sayeruluk } 76°09'N — 64°56'W Savequarfik } 76°08'N — 64°36'W Agpalilik 76°09'N — 65°10'W

Source:

Report of Dr. Vagn Buchwald (Copenhagen, Denmark) in a letter, IX.20,1963.

#### DISCOVERY OF MUONIONALUSTA HI IRON METEORITE, SWEDEN

Name:

covery:

MUONIONALUSTA III.

The place of fall or dis- About 3.5 km ENE of the village of Kitkiojoki, Sweden;

 $\varphi = 67^{\circ}47'N; \ \lambda = 23^{\circ}21'E.$ 

Date of fall or discovery:

FOUND, June 7, 1963.

Classe and type:

. IRON, octahedrite.

Number of individual spe- 1.

cimens:

Total weight:

6.20 kg.

or discovery;

Circumstances of the fall The meteorite was found by Mr. Carl Henriksson in excavated material used for the construction of a causeway. The meteorite is now in the possession of the Swedish Museum of Natural History (Stockholm,

Sweden).

Source:

Report of Dr. F. E. Wickman (Stockholm, Sweden) in a letter, IX.20.1963.

### NEW RIDGECREST STONY METEORITE, USA

Name:

RIDGECREST.

The place of fall or disco- Ridgecrest, California, USA.

very:

Date of fall or discovery:

FOUND, May 1958.

Classe and type:

STONY, chondrite.

Number of individual spe-1.

cimens:

Total weight:

9.685 gr; dimensions:  $2.5 \times 2.0 \times 1.0$  cm.

or discovery:

Circumstances of the fall The meteorite is of oriented shape: the forepart is rounded and smooth and the rear is flat. It is covered by an obvious fusion crust although its surface was corroded. A small fragment has been chipped from the meteorite.

Source:

Articles: L. E. Humiston (California, USA) «A Preliminary Report on the Ridgecrest, California, Meteorite, a New Aerolite (C - 1176, 356)» an F. C. Leonard (Los Angeles, USA), «Further Remarks on the Ridgecrest, California, Aerolite (CN-1176, 356)» in the «Meteoritics», the Journal of the Meteoritical Society, v. 2, No. 1, May, 1963.

#### NEW KIRKLAND IRON METEORITE, USA

Name:

KIRKLAND. (See: Seattle, M. B., No. 25, 1962).

The place of fall or disco- Approximately two miles northeast of Kirkland, Washington, USA:  $\varphi = 42^{\circ}41'35''N$ ;  $\lambda = 122^{\circ}10'13''W$ .

Date of fall or discovery: FALL, January 17, 1955, approximately 11<sup>h</sup>a.

Classe and type:

IRON.

Number of individual spe- 2

cimens:

232.4 gr (119.2 and 113.2 gr).

Total weight:

or discovery:

Circumstances of the fall The meteorite fell on a cloudy winter day typical of the seaboard. Mr. Hawthorne, owner of an amateur astronomical observatory was puttering about when he

heard a sudden loud report like «dynamite exploding». The meteorite pierced the observatory dome at azimuth N 12.5° E at angle of 27° to the horizontal. Mr. Hawthorne found the two meteorite fragments inside

the observatory.

Cloudiness prevented observation of the bolide.

Source:

An Article: W. F. Read (Appleton, USA), «Kirkland — A Questioned Fall», «Meteoritics», the Journal of the Meteoritical Society, v. 2, No 1, May, 1963, 56-64.

#### REPORTS ON NEW METEORITES

The article by O. E. Monnig, «The Bells, Texas, Meteorites, «Meteoritics», the Journal of the Meteoritical Society, v. 2, No. 1, May, 1963, contains the following additional information on the Bells carbonaceous chondrite, stony meteorites, whose fall was reported in the Meteoritical Bulletin No. 25, December 1962:

The fall of the Bells meteorites was accompanied by a detonating bolide observed over the north-east part of Texas. Seven fragments with a total weight of about 280 gr were collected over distance of about 7.5 km. The first fragment hit the roof of a house and was picked up the following morning in a perfect state. The remaining specimens were found after a hurricane and rainfall in a more or less altered state. Two of these were substantially intact but the other four had shattered on impact or crubled through weathering. The fragments, an even powder, were admirably picked up by Alnico magnet.

Proffessor R. E. Folinshee (Edmonton, Canada) reports in a letter of June 19, 1963, the discovery of a new meteorite shower, the Peace River, in Canada. Its fall was reported in the Meteoritical Bulletin. No. 27, July 1963. As of June 19, 1963, five individual specimens weighing 16.5, 11.3, 9.6, 8.0 and 0.36 kg (including the specimen reported in Bulletin No. 27) were recovered. The total weight of the specimens recovered is 45.76 kg. The length of the large axis of the ellipse of scattering is 8 km; the axis azimuth equals N65°E with the head of the ellipse in tis Northeast part. Liance AV MA Sursha

Dr. K. Niinomy (Hinaga, Japan) in a litter of June 1, 1963, informs of the discover of new specimen of the Kuga iron meteorite, Yamaguchi prefecture, Japan, weighing nearly 6 kg. The discovery of the first specimen, weghing 11 gr, in 1950 was not included in the Prior-Hey catalogue, 1953, was reported in the Meteoritic Bulletin No. 8, April 1958, in List of Meteorites No. 3.

## BRIGHT BOLIDE OVER EASTERN VICTORIA, AUSTRALIA

A bright bolide was observed on July 17, 1961, at 21 hours 50 minutes local time (11 hours 50 minutes G.M.T.). The bolide appeared a height at 30 to 35° (near the Altair) and disappeared at 15° to 20° (in the Pegasus), i. e., it moved from northwesto southeast over the eastern part of Victoria.

The bolide was observed at many points and according to eyewitnesses was visible from a few seconds to 1.5 min. (?). Initially it was a orange-yellow to whitist

yellow cone-shaped body with a long fiery red to greenish tail.

It mushroomed into a large, brilliant, bluish-white flash resembling a magnesium flar To some observers it disappeared as a red glow behind a cloud layer. During trast, the light became so bright that it momentarily illuminated roosmand whole districts.

The atmospheric flight path was approximately 130 km long. Near the end of fligh the bolide was a little larger than the size of a full Moon, and disintegrated in four or five smaller bodies. After the disappearance of the bolide a series of expl sions and noises as of rumbling thunder or twenty-five pounders were heard. The explosions caused buildings to vibrate, crockery cracked, people were startled are cattle and dogs were frightenel.

Nearer the end of the flight path, several people heard pattering as of rain on th roof, but inspection and tests with a hand magnet of the roofs, gutters and the ou

lets of downpipes revealed no minute meteoritic spherules.

Nothing unusual was revealed by aerial reconnaissances by the Royal Australian Ai Force and a series of aerial photographs taken along the presumed path of the bolid at its southeastern end. The terrain here is hilly and mountainous with dee gorges.

Source: Report of Dr. G. Baker (Melbourne, Australia) in a letter, VII.22.196;

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