

INDEX

CARBONIFEROUS, TERTIARY AND QUATERNARY	19	Pliocene (marline) and Pleistocene	Stiff soft sand and clay
	18	Oligocene and Eocene	Sand and clay, loam, limestone bands, shell-beds and pebbles
	17	Chalk	Fragile limestone with soft and hard beds, flint and marl; all hard and non-fractile in N. Ireland
	16	Upper Greensand and Gault	Duff blue-grey clay partly overlain by fine-grained green sand or sandstone
	15	Lower Greensand and Speeton Series	Variable coarse sand and clay, with limestone
	14	Wealden	Alternations of clay and fine-grained sandstone
	13	Gault	Mainly clay with limestone and sandstone
	12	Liasic and Rhaetic	Clay and subordinate sandstone
	11	Keuper Marl and Sandstone	Red and grey marl, sandstone and concretion
	10	Bunter Sandstone	Coarse and fine-grained sandstone with some pebble beds
MESOZOIC	9	Permo-Triassic Sandstone	Marl, sandstone, conglomerate, breccia and volcanic rock (partly Carboniferous)
	8	Magnesian Limestone	Delicate limestone and red marl
	7	Coal Measures	Sandstone, shale, variegated and coal
	6	Millstone Grit Series Calm Measures (15-17)	Massive grit, sandstone, shale and coal
	5	Carboniferous Limestone Series	Grey limestone, shale, dolomite, sandstone and coal
	4	Upper Old Red Sandstone	Conglomerate and sandstone; shale, siltstone, sandstone and volcanic rock
	3	Middle Old Red Sandstone	Sandstone, flagstone, conglomerate, shale, shale, limestone and volcanic rock
	2	Lower Old Red Sandstone and Devonian	Red and green marl and sandstone; flagstone, grit, conglomerate; slate, shale, sandstone and grey, volcanic rock
	1	Silurian	Shale, siltstone, sandstone and impure limestone
	0	Ordovician	Slate, shale, grit, chert and volcanic rock
UPPER PALAEOZOIC	18	Devonian and Brian Volcanic Belt Old Red Sandstone	Sandstone, grit, flagstone, shale, conglomerate, breccia, shale, limestone and volcanic rock
	17	Carboniferous	Shale, flagstone and grit
	16	Permian	Shale, siltstone, sandstone and impure limestone
	15	Triassic	Shale, siltstone, sandstone and volcanic rock
	14	Jurassic	Mainly clay with limestone and sandstone
	13	Cretaceous	Gault and shaly limestone, sandstone and clay
	12	Tertiary	Clay and subordinate sandstone
	11	Quaternary	Red and grey marl, sandstone and concretion
	10	Pleistocene	Coarse and fine-grained sandstone with some pebble beds
	9	Holocene	Marl, sandstone, conglomerate, breccia and volcanic rock (partly Carboniferous)
LOWER PALAEOZOIC	18	Devonian and Brian Volcanic Belt Old Red Sandstone	Sandstone, grit, flagstone, shale, conglomerate, breccia, shale, limestone and volcanic rock
	17	Carboniferous	Shale, flagstone and grit
	16	Permian	Shale, siltstone, sandstone and impure limestone
	15	Triassic	Shale, siltstone, sandstone and volcanic rock
	14	Jurassic	Mainly clay with limestone and sandstone
	13	Cretaceous	Gault and shaly limestone, sandstone and clay
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	9	Holocene	Marl, sandstone, conglomerate, breccia and volcanic rock (partly Carboniferous)
METAMORPHIC ROCKS	18	Devonian and Brian Volcanic Belt Old Red Sandstone	Sandstone, grit, flagstone, shale, conglomerate, breccia, shale, limestone and volcanic rock
	17	Carboniferous	Shale, flagstone and grit
	16	Permian	Shale, siltstone, sandstone and impure limestone
	15	Triassic	Shale, siltstone, sandstone and volcanic rock
	14	Jurassic	Mainly clay with limestone and sandstone
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	9	Holocene	Marl, sandstone, conglomerate, breccia and volcanic rock (partly Carboniferous)
IGNEOUS ROCKS	18	Devonian and Brian Volcanic Belt Old Red Sandstone	Sandstone, grit, flagstone, shale, conglomerate, breccia, shale, limestone and volcanic rock
	17	Carboniferous	Shale, flagstone and grit
	16	Permian	Shale, siltstone, sandstone and impure limestone
	15	Triassic	Shale, siltstone, sandstone and volcanic rock
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	9	Holocene	Marl, sandstone, conglomerate, breccia and volcanic rock (partly Carboniferous)

Boulder clay and other superficial deposits are omitted. Some major faults are shown.

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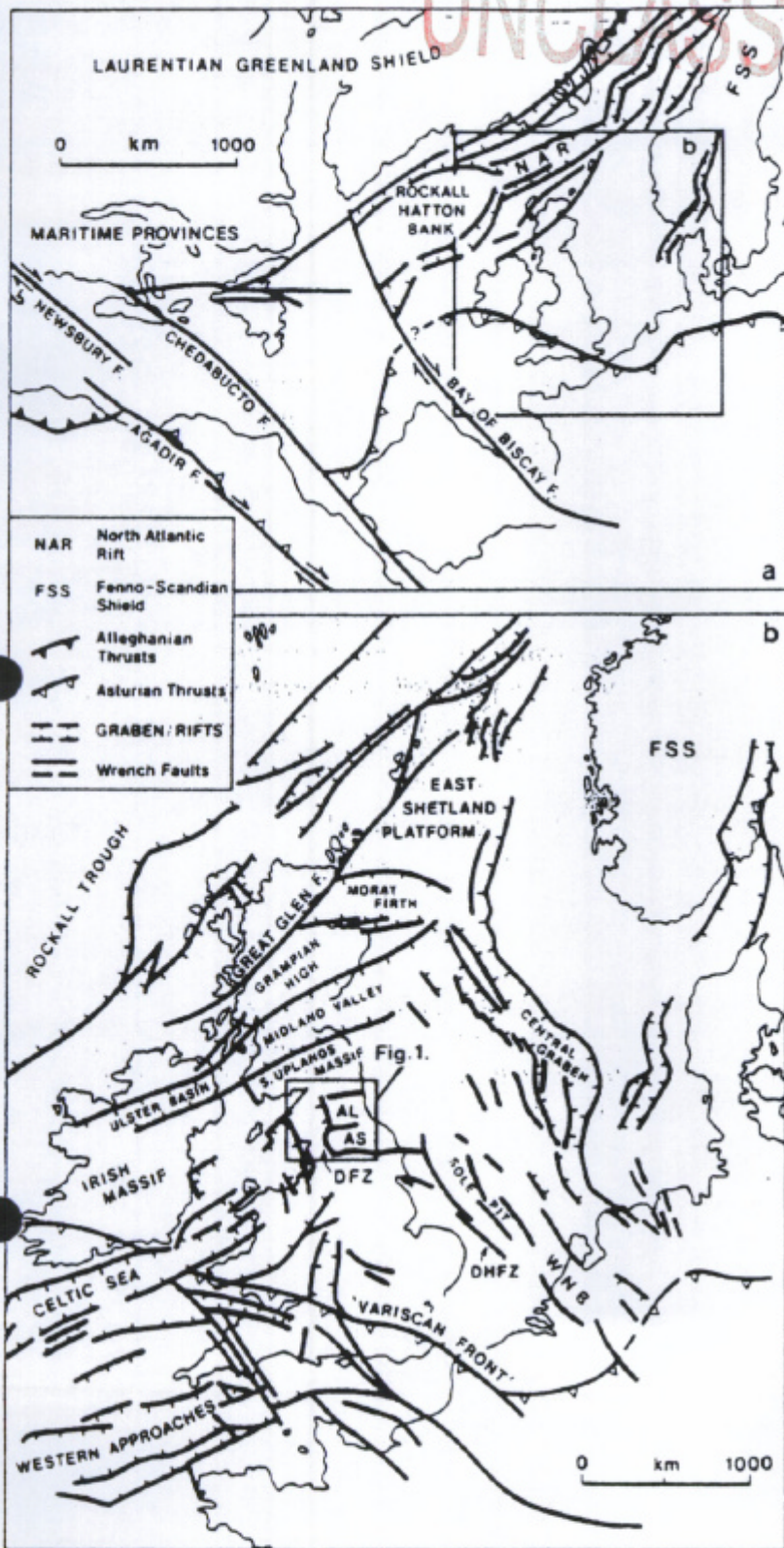


FIGURE 9

KEY

- AL- ALSTON BLOCK
- AS -ASTRIGG BLOCK
- DFZ- DENT FAULT ZONE
- DHFZ - DOWSING HEWITT FAULT ZONE
- WNB -WEST NETHERLANDS BASIN

FRACTURES
 ILIGHTS

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DIS SCIENTIFIC & TECHNICAL MEMORANDUM 55/2/00

WORKING PAPER NO. 11

COLLECTED IMAGERY AND CLASSIFICATION OF UAP SHAPES

January 26, 2000

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COLLECTED IMAGERY AND CLASSIFICATION OF UAP SHAPES

CONTENTS

1. The material in this section has been collected from a number of sources - news reports, photography and video records. The sources are not limited to UK reports, as the intention is to use the material as a reference/correlation catalogue and to hopefully use the material as a filter to separate the explainable from the inexplicable, if possible. In some cases - particularly since the advent of personal video cameras - the original material is in colour. Shape and lights (colours) are invariably the trigger which attracts the eye and results in incident reports. Shapes have been generically categorised as follows:

- | | | |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| - SPHERES | (Includes 'BOLS' and multiple spherical lights) | Figures 1 - 7 |
| - DISCS | (Only circular in plan - and thus, on frequent occasions from different aspects, the same events are described by other witnesses as 'balls' or spheres) | Figures 8 to 28. |
| - CIGAR | These have a larger mid-chord than discs and tend towards 'long airship' shapes, with much less 'sharp' ends than discs | Figure 29 |
| - STAR/POINT | Seen as balls of light, with the star effect due to atmospheric optics | - |
| - OVAL | Described as a variant of 'discs', but with a wider mid-chord and without the elongation of 'cigars' | |
| - TRIANGLE/PYRAMID/CONE/
RECTANGLE/CYLINDER | The outline shape is formed, not by a solid object, although at times it appears so - see Working Papers) but by three or more coloured lights at the extremities, forming the 'corners'. A cylinder is often described which is, in fact, formed by a row of lights (balls). A vertically oriented cylinder is sometimes seen - see Working Papers No 23 and 24 | Figures 30 to 35 |

- RECTANGLE/DIAMOND As for Figures 30 - 35, but where the viewing angle changes the spacing to form diamond/rhomboid patterns As for Figures 30-35

- BOOMERANG/ARC Figure 36

As can be seen (Vol. 1 Tables 1 and 2) certain combinations of shapes and lights can be attributed to definite causes. Shapes and lights are the **initial** key to filtering the known from the inexplicable. Little is gained in analysis of purely descriptive unknown shapes and lights reports unless further information, such as imagery, correlation from multiple witnesses, or data from which to obtain angles, sizes, sounds, smells, or velocities is available.

For the purposes of the database it was necessary to identify the whole range of shapes frequently reported. It is of course inevitable that these are due to a whole range of different underlying phenomena, described in the other working papers in this Volume.

SPHERES

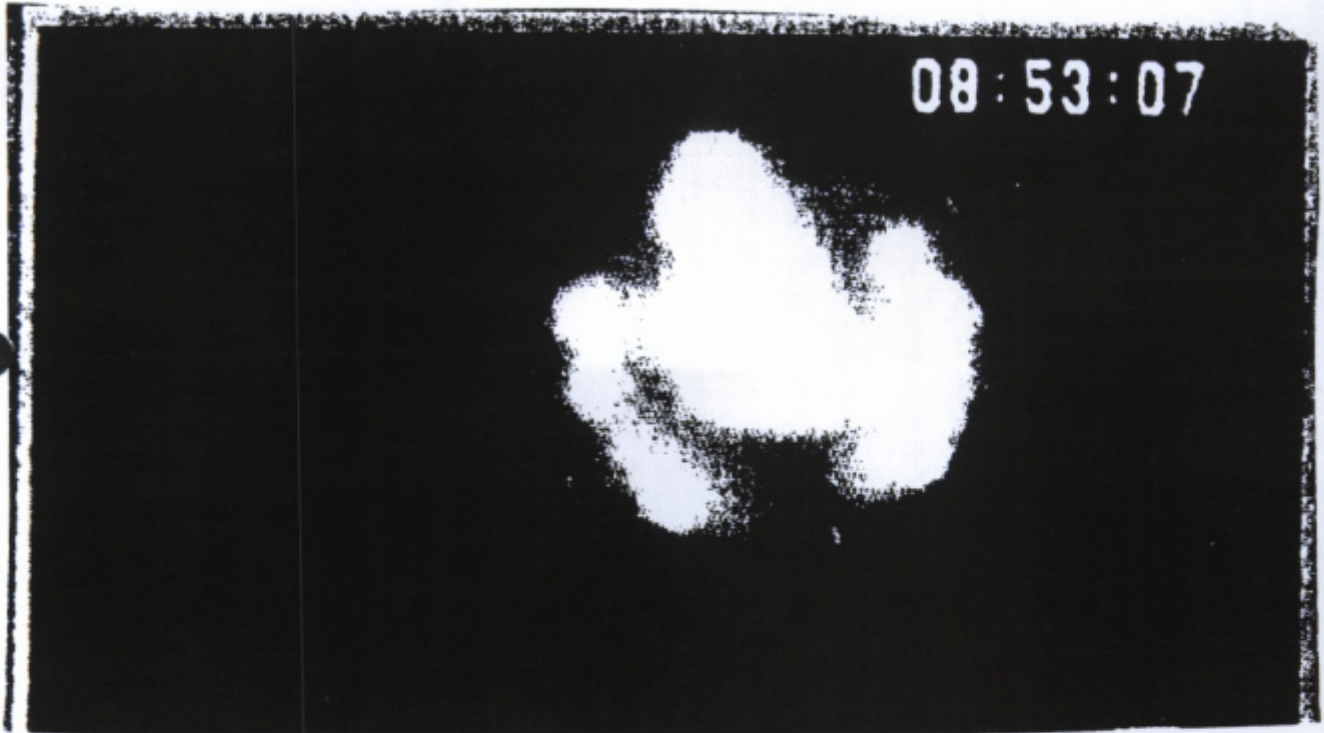


FIGURE 1: SPHERES

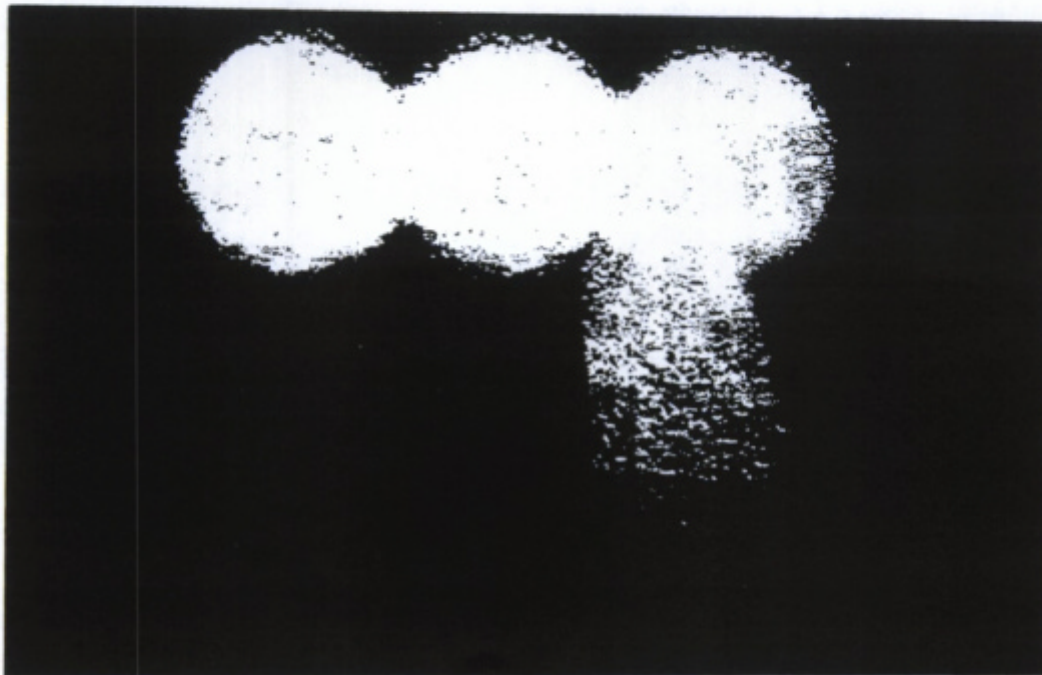


FIGURE 2: KENT UK, SEPTEMBER 17-20 1993

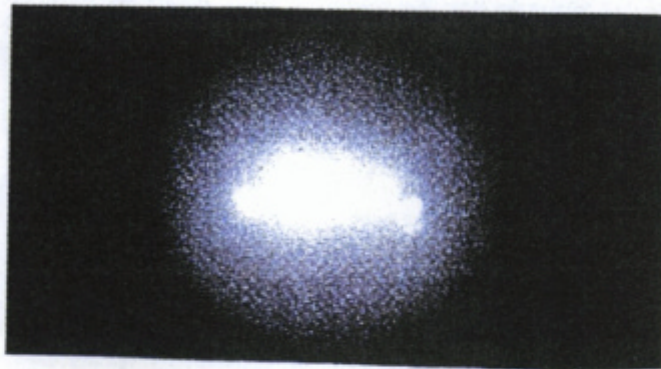


FIGURE 3: MEXICO POLICE PHOTOGRAPH ^[1] (JULY 1991)

Note [1] Four police officers at range ~50 yards. Some lens distortion.



FIGURE 4: LOWESTOFT 1997

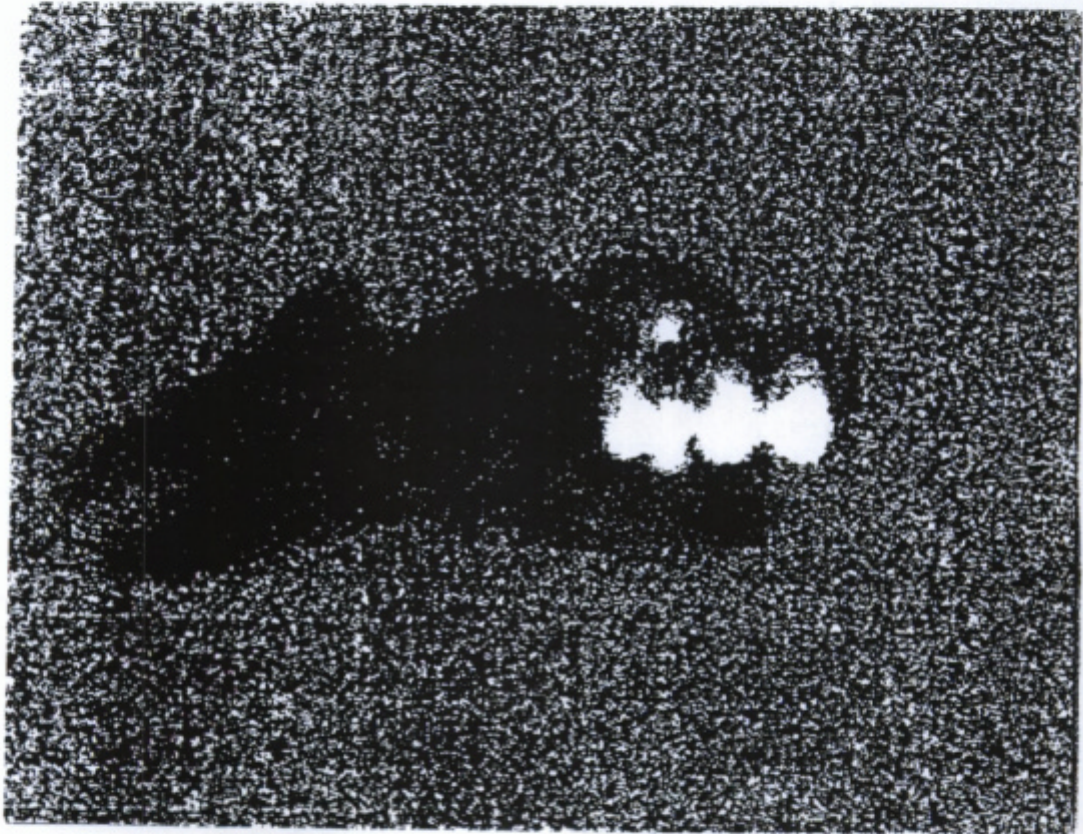


FIGURE 5: GULF OF MEXICO (DARK SHAPE IS THE ACCOMPANYING F15 AIRCRAFT)

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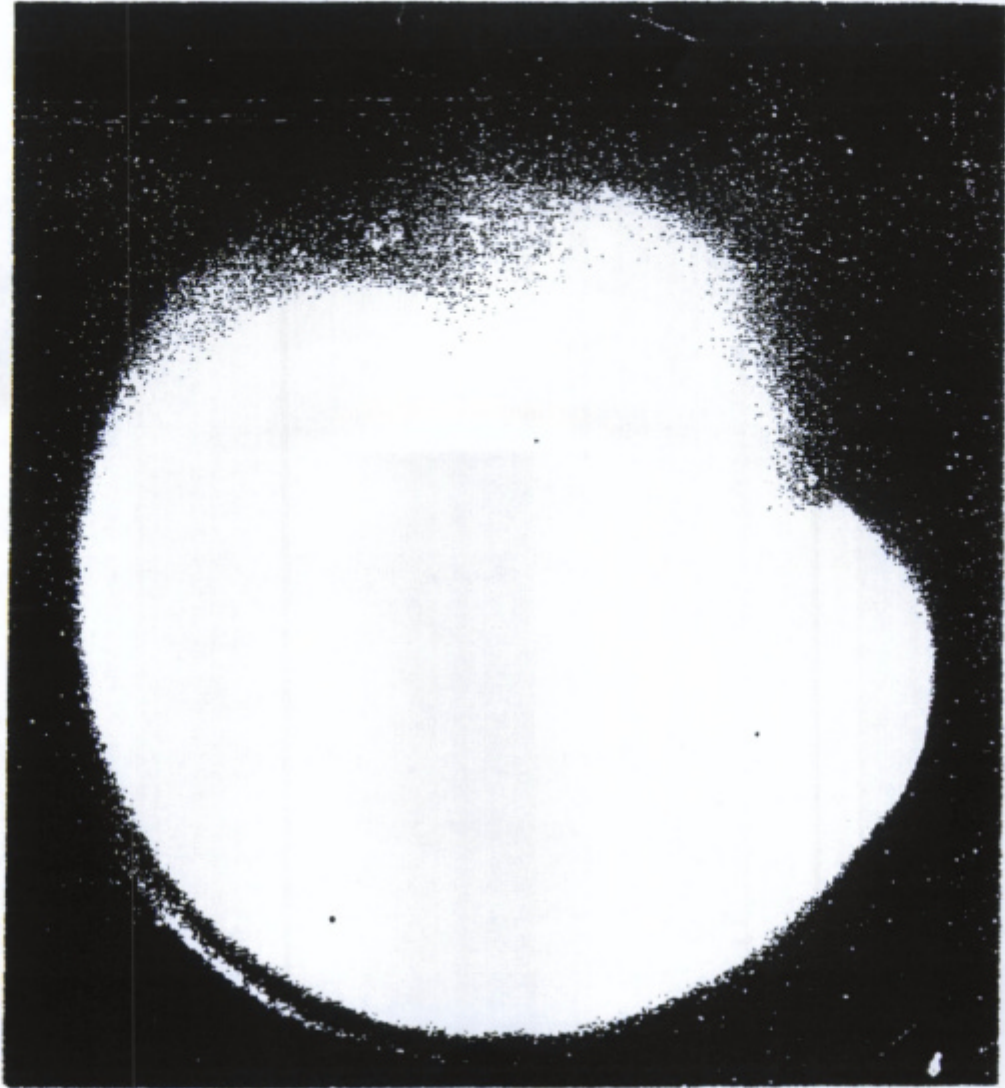


FIGURE 6: FRANCE 1974

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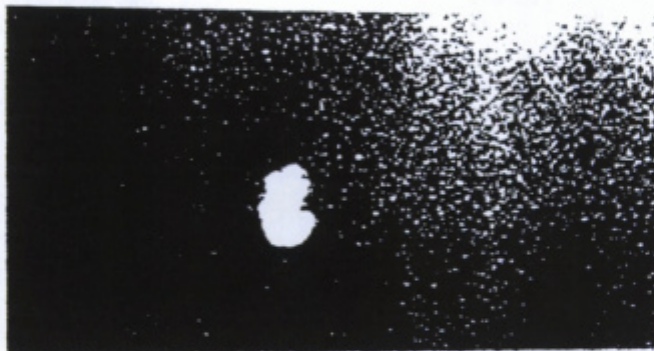
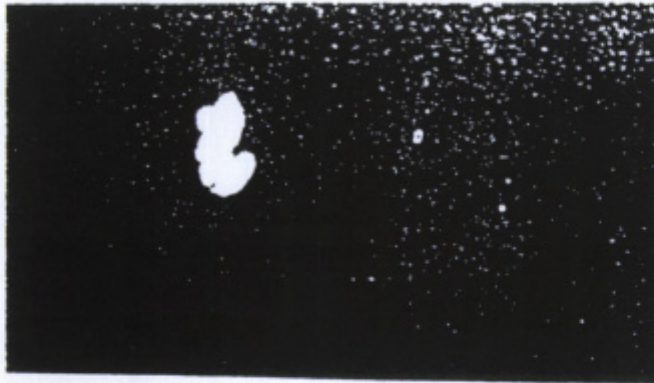


FIGURE 7: AIR-TO-AIR UAP

DISCS



FIGURE 8: LAKE CONISTON ENGLAND 1954



FIGURE 9: JAPAN 1958

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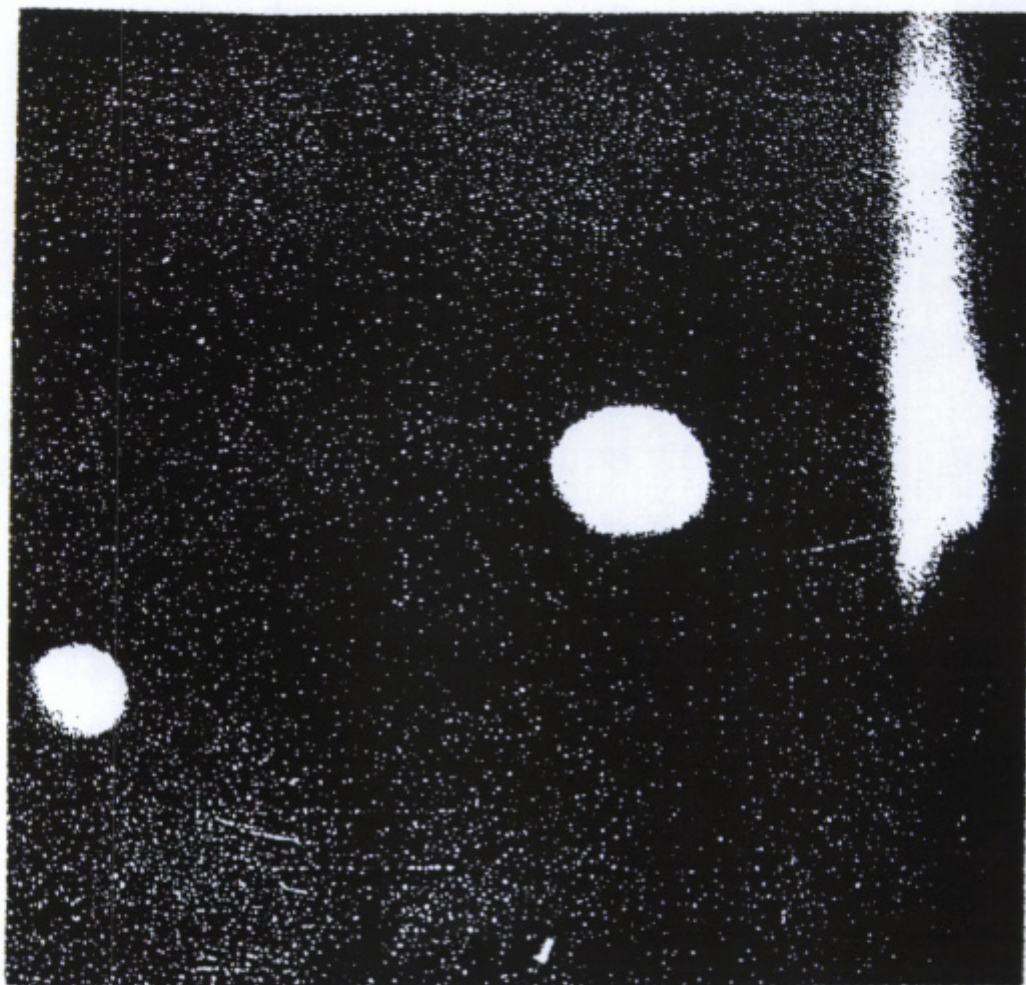


FIGURE 9: AUSTRALIA 1972

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FIGURE 10: AUSTRIA 1971



FIGURE 11: OREGON USA 1950