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# Unidentified Aerial Phenomena in the UK Air Defence Region: Volume 1

**Main Report** 

SCIENTIFIC & TECHNICAL MEMORANDUM - No. 55/2/00



December 2000

**Defence Intelligence Analysis Staff** 

UK EYES ONLY





SCIENTIFIC & TECHNICAL MEMORANDUM 55/2/00



AN EXAMPLE UAP FORMATION OF THE TRIANGULAR TYPE

i





#### PREFACE

"What does all this stuff about flying saucers amount to? What can it mean? What is the truth?. Let me have a report at your convenience".

W.S. Churchill, 28th July 1952

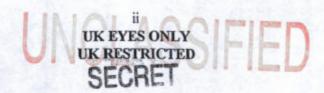
A new database, comprising separate, but linked, data-tables, covers as many as possible of the specific UAP descriptors which regularly appear in the sighting reports. A unique common identifier for each sighting enables, for example, the sounds, shapes, lights, locations, colours, velocities and many other attributes which are reported, to be cross-related; including those of possibly the same object, from multiple witnesses, and for the probable credibility (or otherwise) of a witness. The database is briefly described in the Main Text of Volume 1, and in some detail in the Annexes; which also contain the results of the first analysis. Volume 2 comprises a series of short working papers which identify the key features of the many natural phenomena and man-made phenomena which impact on human observations of objects seen both within and above the atmosphere. This has been essential in order to identify the keywords and to build on the filtering process; and to recognise, through a scientific approach, any natural, though often abnormal, phenomena.(R)

The aim throughout has been to make a rational scientific examination of the phenomena - based only on the raw material - UKADR incident reports. Every effort has been made to take a wide systems approach, to avoid over-focusing on single events. There has been neither the intention of de-bunking the extra-terrestrial lobby or of taking the opposite view - except based on hard scientific evidence. Where illustrative material has been used its copyright has been acknowledged whenever this is known.(R)

Comments on this document, which has been prepared by XXXXXXXXX are welcomed and 5.40 should be addressed to MoD, DIST, DIS5XXXXXX Old War Office Building, Whitehall, not London SW1A 2EU. Tel. XXXXXXX (R)

February 2000

Issued by XX DI 55





## UNIDENTIFIED AERIAL PHENOMENA IN THE UK AIR DEFENCE REGION

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ANNEX A - GENERATION OF PLASMA FORMATIONS

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"There seems to be a campaign building up to criticise government policy about the release of information on unidentified flying objects. The authors of the campaign are firmly convinced that extra terrestrial manifestations have appeared, whereas the Air Staff are by no means certain. As it is not possible to release official data which does not exist it is difficult enough to satisfy those with preconceived ideas to the contrary". Memo 19, August 1958

#### CHAPTER 1

#### HISTORICAL STUDY BACKGROUND & AIM

#### INTRODUCTION

- Historical Objects in the atmosphere, sometimes on the ground, but often much higher in visible space, have been reported for millennia. Reports from within UK airspace alone, number thousands since the 1950s, as shown at Figure 1.1. Clearly these reports are of something not being understood at the time by the observer. Since manned flight commenced and with the advent of outdoor laser displays, space flight, unmanned aircraft and greater public awareness, caused largely by media hype, the phenomenon of "unidentified flying objects" (UFOs) has reached heights of unprecedented public interest. In the past this has undoubtedly distorted the clarity of approach needed for a scientifically-based analysis. It has been recent MOD practice to refer to such phenomena, in the absence of rational explanation, as Unexplained Aerial Phenomena (UAP). Further, from the record, it is clear that it was MOD policy from the outset that any interest in UAP is only necessary as an assurance that any such object is not a threat to UK airspace or assets. In August 1950 a Working Party was set up (at the suggestion of Sir Henry Tizard) who thought "flying saucers should be investigated". Records show that the 11th meeting of the Joint Technical Intelligence Committee (Ref. DSI/JTIC(51) Item 8 (1951)) received the Chairman's Report of the "Flying Saucer Working Party". The Committee decided that "the document should be regarded as the final report and, in view of the conclusions the Working Party should be dissolved". The Chairman (Mr. G.L. Turney DSI3) went on to say that, "following the lead given by the Americans on this subject, the Report should have as little publicity as possible and outside circulation should be confined to one copy, for Sir Henry Tizard". The Report was approved. The Department does not possess a copy of this report (it may exist within Sir H. Tizard's papers), but it is implied that nothing important was found. Great Britain was happy to allow the US studies to answer any outstanding questions. However, there must have been further concern and the Prime Minister's request, quoted at the Preface, came the following year and the brief subsequent reply, produced a few days later, is shown here at the Historical Annex.(U)
- 2. The United States Air Force had started to take an official interest in 1948 (PROJECT SIGN), later changed to PROJECT GRUDGE and then to PROJECT BLUE BOOK. Such was the concern in the US that by 1952 XXXXX instigated a covert study group to investigate the "10% of incredible reports from credible witnesses". In fact, over 10,000 reports, spanning 19 years, were processed by 1965 (of which it was reported that about 7% were unexplained). It was also questioned whether any use could be made of the phenomena for psychological warfare. The covertness of this investigation subsequently contributed greatly to charges of a government 'cover-up' a notion that has continued to this day. In 1952-3 the US had set up the Robertson Panel (Intelligence Scientific Advisory Panel) and observed that British experts (Prof R.V. Jones and others) were taking the increase in UAP sightings seriously. Meanwhile, it is noted, the

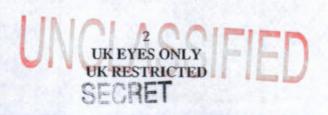
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possibility of the USSR using a UFO scare as a means of jamming communication channels, while simultaneously attacking the West was considered a serious possibility - even though the investigation team had dismissed sightings of 'UFOs' as 'explainable'! In 1953 the USAF commenced a more detailed collection of sighting information which, according to US Government statements, ceased in 1958 with no proof of extra-terrestrial origin. However, the topic would not go away and by 1966 the USA's CONDON Report had studied and reported on 59 events in detail. The report concluded "While we do not think, at present, anything worthwhile is likely to come out of research (i.e. into UFOs), each individual case should be considered on its merits. No (separate) US Agency is required - but this may not be the case for all time". Great Britain took no part in this USAF study, and there is no record of the Air Ministry requesting or receiving this report within the Department. Other nations are also known to have shown a continuing interest in this topic, especially in China, the Czech Republic, the USSR and, subsequently, the CIS and Brazil, South Africa and Spain - who, in 1997, released 66 'UFO' files to the public. However, no reports have been received from any of these nations by UK intelligence staff; any information being casually noted through open sources and publications as a matter of passing interest. Unfortunately, public interest and suspicion in the UK has also remained undiminished, resulting in a 'UFO' demonstration outside MoD in March 1995, a spate of public letters and frequent Parliamentary Questions and even debates on the topic. The Department is not tasked to collect or examine anything other than reports sent on by Air Sec (2a). Until this reporting procedure was reduced in 1997 there was an increase in reports and hence in the departmental effort required. This is the first UK detailed and authoritative report which has been produced since the 1950s.(R)

- 3. UAP Reporting Procedure In the 1950s, the then Air Ministry, produced a 'minimum format', one page, 'UFO' reporting procedure for both public and military reporting of the phenomena. This procedure has remained unchanged and all event analysis in this report is based on an analysis of a voluminous paper database, which spans about 25 years. Further, it is not within the remit of the department to pursue witnesses to elicit any further information beyond that which they have provided to the MOD on the standard form. This information source has many inadequacies and much of the initial work concentrated on the conversion of this material into computer database format. Only data which has originated within the airspace (comprising the UK Air Defence Ground and Air Environment, the UK Air Defence Region) is used in the database analysis, although the support of authoritative scientific reference sources world-wide has been made to come to a considered decision as to the most likely causes of the phenomenon.(U)
- 4. Access to individual official UAP sightings from other nations has not been possible. The MOD has no contact with other nations to supply such material and similarly, does not make UK sighting reports available to other nations - indeed, no such requests have been received.(U)
- 5. On receipt of reports from the general public, military, or other sources (e.g. police, coastguards, aircrew etc.), one report format is completed for each separate sighting and sent to MOD, usually via the police, military establishments or air traffic control centres. These are passed to MOD Sec (AS2a) and have been routinely copied to DI55 for brief scientific perusal. Reports older than 30 years are available to the public through the Public Record Office.(U)
- 6. Air Threats The Ministry of Defence, charged with the Air Defence of the Realm, are only interested in UAP reports if they are found to reveal a threat or a hazard. For the purposes of the study it has been assumed that a threat would only be identified as such, if:





- Controlled, unidentified, air-objects could successfully penetrate the defended airspace of UKADGE with hostile intent in PEACE, CRISIS or WAR.
- Damage (or potential damage or danger) could be caused in the form of physical effects or electronic effects, or if there is a possibility of an air hazard, such as a collision or damaging incident with civil or military air traffic.
- Objects within the airspace were found to be hostile if challenged and invulnerable to radar tracking and could out-manoeuvre our airborne or ground-based air defences.
- Controlled objects could enter and leave the UKADR, having possibly obtained intelligence data (e.g. Imagery, ELINT etc.).

#### AIM OF STUDY

- 7. The Terms of Reference of DI55's remit and for this investigation are at Annex A. In order to meet the aim, which is to determine the potential value, if any, of UAP sighting reports to defence intelligence, it has been considered necessary to pursue at least the following tasks:
- (a) Assess whether the UKADR airspace has been breached by any potentially hostile flying object.
- (b) Determine, if applicable, what intelligence, if any, is revealed on military capabilities of other countries.
- (c) Ascertain whether any scientific and technical information of military significance is contained in the sighting reports.
- This is interpreted, for the purpose of this Study, as:
- Determine, from the available UAP incident reports (example at Annex B), whether any scientific facts can be elicited from these phenomena - which may indicate military purposes.
- Use database technology to separate the useful from spurious information, thus
  providing a basis for any future analysis that may be tasked.
- Identify atmospheric and other conditions under which these sightings can occur thus enabling, if possible, their causes to be established and whether they can be disregarded or even predicted.
- Monitor reports (from any source) in case the underlying physical phenomena is already being exploited by another nation for potential future military purposes.
- Try to discover why some of the UAP events, seen by human witnesses, are apparently sometimes visible and sometimes invisible to the UKADGE and airborne radar reporting systems.



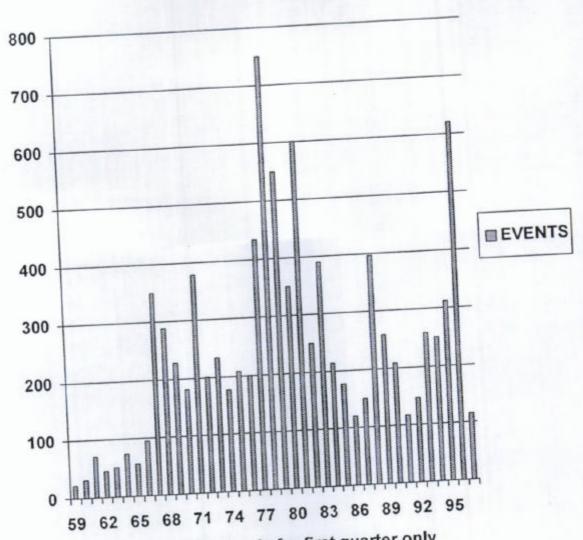
(R)



 Investigate whether any UAP report can be correlated with any 'no survivor' air accident.

In order to meet the aim of the study a detailed understanding of all reliable information is essential and it was likely that, in the search for any information of interest to defence intelligence, other related information of interest to the air defence community might be revealed. (R)





Note: 1997 value is for first quarter only

FIGURE 1-1 NUMBERS OF UAP REPORTED ANNUALLY 1959-1996(U)

