her will be very welcome. Who isn't deeply grateful to Comrade Klass for having thought of Jupiter in the nick of time!

AFTERTHOUGHT: We can commend Jupiter's interest in an excellent wine, and confirm that the current lot of *Beaujolais nouveau* definitely seems to be a cut above the usual.

A REVIEW OF PROPOSED EXPLANATORY HYPOTHESES FOR UNIDENTIFIED AERIAL PHENOMENA

Dr. Richard F. Haines, PhD

FSR Consultant (Los Altos, California 94022)

How Creative Man Can Be To Conceal His Ignorance
(Dedicated, at the express request of the Author, to the Memory of his Friend and Mentor, Dr. J. Allen Hynek,
April 10, 1986.)

Introduction

A large number of explanations for directly sensed (i.e., not recorded automatically) unidentified aerial phenomena (also called unidentified flying objects, UFO) have been given over the years. Most explanations reflect the personal biases as well as the educational and cultural backgrounds of the authors. It is instructive to review these hypotheses in order to ensure that all reasonable theories have been considered. Alleged photographic, radar, or other instrumented data collection is not dealt with.

This paper presents the most prominent UFO hypotheses which may be broken down into a number of different categories. The simplest breakdown is:

Terrestrial

Extraterrestrial

According to this breakdown, the stimulus for reports of unidentified aerial phenomena may be traced to earthly or outer space origins. There are many variations within each category. Another breakdown merely adds sub-categories to the above two.

Terrestrial Human Origin/ Natural Origin Extraterrestrial Humanoid Origin/ Natural Origin

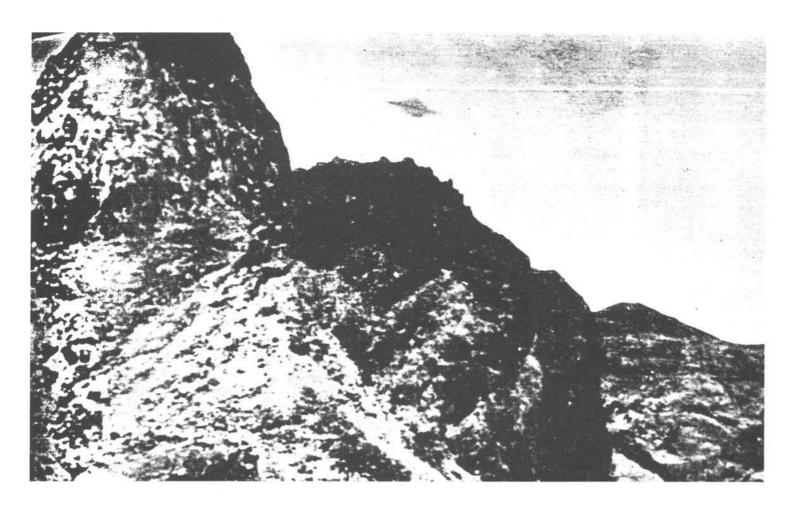
Of course the *natural origin* category may well be the same in both cases and would be addressed by such academic disciplines as earth sciences, physics, engineering, astronomy, or astrophysics. The *terrestrial — human origin* category would be addressed by the behavioral scientist (Haines, 1979), psychiatrist, military expert, and/or (government) security expert. However, there is now no specific scientific field avail-

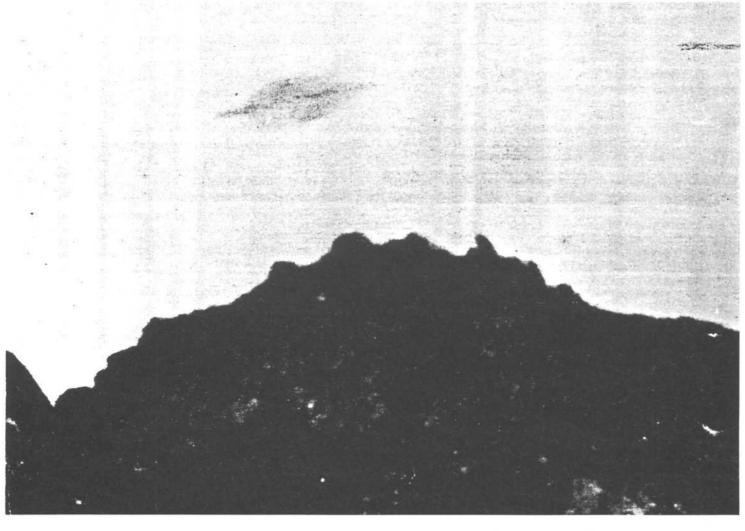
able for studying the extraterrestrial — humanoid origin category. This raises some fundamental problems, since a growing number of UFO reports involve extraterrestrial (E.T.) humanoid creatures associated with the aerial phenomena (cf. Bowen, 1969).

In the following section a listing of explanatory hypotheses is given which breaks down existing UFO hypotheses into even smaller sub-categories.

UFO Explanatory Hypotheses

- A. Man-Made Objects
 - 1. Aircraft
 - 2. Balloons
 - 3. Fireworks
 - 4. Flares
 - 5. Kites
 - 6. Missiles and rocket tests
 - 7. Models (research or hoaxes)
 - 8. Orbital satellites
 - 9. Parachutes
 - 10. Radar chaff (reflections)
 - 11. Secret (flying) weapons
- B. Man-Caused Luminous or Reflective Events (innocent act or deliberate hoax)
 - 1. Low earth atmosphere tests (e.g., Barium release tests)
 - Laser beams on clouds, fog, rain, airborne objects (reflections)
 - 3. Lights (all kinds) on tall structures (e.g., water tanks)





- 4. Plasma (research) experiments
- 5. Searchlights on clouds, fog, rain, airborne objects (reflections)
- 6. Static electricity discharge (e.g., from power lines)
- C. Man-Caused Perceptual, Psychological, Social Experiences
 - 1. Cold war tactic (deliberate diversionary tactic)
 - 2. Control system (cultural manipulation)
 - 3. Covert activity (liquor smuggling, military exercises, etc.)
 - 4. Drug experience
 - 5. Hypnotic implant (UFO details implanted into persons to cause them to believe they had a real experience; Keel, 1970)
 - Magnetic field interaction with central nervous system
 - 7. Microwave interaction with central nervous system
 - 8. Psychic forces (UFO experiences are manifestations of some forces) (from the collective unconscious of mankind; Clark & Coleman, 1975)

D. Intra-Personal

- 1. Birth trauma memories
 - 2. Delusions
 - 3. Dreams
 - 4. Drug experience flashback, etc.
 - 5. "Floaters" within the eye
- Hallucinations in waking state (physical stimulus triggers subconscious to produce a vision; Monnerie, 1979)
- 7. Hypnotically triggered imagery by oneself
- 8. Phosphenes (Finch, 1970)
- 9. Psychic projection (Clark & Coleman, 1975)
- Sleep interface state imagery (e.g., hypnopompic, hypnogogic imagery (Basterfield, 1981)

E. Known Natural Phenomena

- 1. Air pressure/temperature inversions/differential related (mirages, lenticular clouds) Condon, 1969; Keel, 1970)
- 2. Astronomical (planets, stars, comets, meteors, sundogs, fireballs, other)
- 3. Atmospheric (wind) effects (e.g., dust devils, stationary whirlwind)
- 4. Auroras/Northern Lights
- 5. Ball lightning
- 6. Birds in flight
- 7. Dust related (direct viewing or optical scattering)
- 8. Earth crust dynamics related (e.g. short-term luminous plasma) (Altschuler; Persinger, 1979)
- 9 Earth surface related (e.g., swamp gas)

- 10. Electrostatic discharge (e.g., high tension power line arcing)
- 11. Fog, mist related (direct viewing or optical scattering)
- Insects (swarming, in flight) (Callahan & Mankin, 1978)
- 13. Lightning related (electrostatic discharge)
- 14. St. Elmo's Fire (also known as "Saint Erasmus' Fire")

F. Unsubstantiated Natural Phenomena

- 1. Earthlight phenomenon (Devereux)
- Hyperspace (some matter/energy transformation occurs which enters man's realm of experience)
- 3. Parallel universe (also called "Shadow universe") (Nature; New Scientist, 1985)
- 4. Photic "bacteria" (Earth intercepts highly advanced biological life-form from deep space source(s) that transmit their "desired effect" through coded light energy via any intelligence (man) capable of decoding it and, thereby, being influenced by it)
- 5. Superstring theory (Green & Anthony, 1985)

G. Extraterrestrial (categorized by apparent motives toward humans)

Positive Motives

- 1. Biological interaction (E.T. are interbreeding with humans)
- Psychological interaction (Projections of dream-like sequences into the mind; Keel, 1970)
- 3. Human (individual) advancement (e.g., Aetherian Society; Raelian concept, Vorihlon, 1979)
- 4. Human (individual) religious formation (E.T. has come to bring a new religion)
- 5. Societal development (e.g., Alien Peace Corps; Binder, 1967) (Clarion hidden planet; Wilson, 1974)
- 6. Societal rescue (E.T. has come to save man from his self-destructive tendencies; Wilson, 1974)

Neutral Motives

- 6. Ancient astronaut (Agrest, Misraki, von Däniken, et al)
- 7. Anthropological studies (E.T. is studying man for anthropological purposes)
- 8. Bioenergetic aura (some individuals' bodies emanate different "fields" of energy which make it possible for E.T. to track/interact with them; Edwards, 1970)
- Cosmic psychic force(s) (visions are created telepathically by "The Phenomenon" which is able to extract information from man's subconscious; Rogo, 1980)

- 10. Display (UFOs are deliberate displays to mankind for some unknown reason; Salisbury, 1974)
- 11. Dying race (E.T. have come to survey Earth as a possible new home) (Binder, 1967)
- 12. Future visitors (E.T. are "humans" visiting from our own future) (Binder, 1967)
- 13. Mapping of Solar System/Galaxy, etc. (Fletcher)
- 14. Hollow earth (E.T. live inside Earth; openings at poles; Shaver)
- Paraphysical (UFOs are ultraterrestrial transmogrifications of energy and matter; Keel, 1969)
- 16. Quarantine (E.T. has placed Earth in quarantine to prevent us from negatively influencing other regions; Binder, 1967)
- 17. Radiant beings (E.T. are non-material beings in Van Allen Belt sometimes forced to Earth for their safety; Palmer)
- 18. Reflective hypothesis (UFO phenomena are tailored to man's individual beliefs and attitudes; Keel, 1969)
- 19. Secret society (E.T. live in remote regions on Earth, e.g., Siberia, etc. with unknown motives)
- 20. Spore (E.T. planted micro-organisms on earth in near/ancient past times)
- 21. Tourist (E.T. are on vacation and happen to visit earth)
- 22. Undersea (E.T. live within oceans, lakes, other bodies of water)
- 23. Vacuum creatures (E.T. are space animals living in Earth's upper atmosphere, materializing and dematerializing at will; Bessor)
- 24. Zoo (E.T. is (or already has) bred with mankind for their own purposes)

Negative Motives

- 25. Control system (E.T. is carrying out longrange behavioral conditioning; Vallée, 1975) (Cosmic Consciousness Conditioning; Sprinkle, 1976)
- Cultural manipulation (E.T. use man's prejudices, supersititions, etc. to achieve "their" own ends)
- 27. Food supply (E.T. are cannibals seeking new protein sources or just basic nutritional sources)
- 28. Subversion (E.T. intend to invade and conquer Earth)

H. Miscellaneous Concepts

- Bee analogy (E.T. overall activity resembles beehive that doesn't make sense to man as yet; Keel, 1970)
- 2. Bioenergy entities (E.T. are animals living in ether above Earth, can transform themselves into any form; Constable, 1976)

- 3. Gate theory (E.T. and craft have a different atomic structure. A gate opens/closes periodically permitting their entry to earth; Finch, 1980)
- 4. Gulf theory (E.T. are so advanced in technology man can never comprehend them or their purpose; Binder, 1967)
- Interdimensional beings (E.T. exist in a different dimension than man; Downing; Keel, 1970; Wilson, 1974)
- 6. Modern Myth (Jung, 1959)
- 7. Mothman (Keel, 1970)
- 8. Sky people (E.T. are from another dimension, travelling through hyperspace; Le Poer Trench, 1960)

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AN AERIAL INVASION: OR WHAT DID THEY SEE, SEVENTY YEARS AGO?

By Aleksandr Beletskiy, Historian (Kharkov) and Dr. Vadim Vilinbakhov, Candidate for Degree in Historical

Sciences (Leningrad)

(Translation from Russian, G.C.)

TEKHNIKA MOLODYOZHI, Moscow, No. 6, 1983.

Readers will recall that in FSR 29/3 (1984) we published the very interesting article "Newly Discovered 'Airship' Waves over Poland", by one of our American readers, Mr Thomas E. Bullard of Bloomington, Indiana. Our Consultant/Correspondent in the USSR, Dr. V.V. Rubtsov of Kharkov, has now sent us the text of a piece of equally interesting research by two Russian historians, a young Ukrainian named A.V. Beletskiy and the late Dr. V.B. Vilinbakhov.

Like Bullard's article, this Soviet contribution deals with the activities of unknown "aircraft" over Europe during the critical years 1912/1913 — that is to say, on the eve of the Great Disaster of 1914. As time goes by it is probable that more and more light will be thrown on the link that exists between the UFOs — or *some* of them — and the two terrible World Wars which were unquestionably designed to destroy Western Civilization and which, in some way as yet unfathomed (although we can *guess* at it!) they may actually have been preparing! EDITOR

LONDON: House of Commons. "Winston Churchill, replying to questions, stated that a flying machine had passed over Sheerness on the evening of November 1. Orders were given for searchlights to be directed at it. The craft did not land. No markings indicative of nationality had been observed."

ST. PETERSBURG, RUSSIA. "Mystery aircraft. The War Ministry and the Ministry of the Interior have both been looking into the question of the increasingly frequent flights of mysterious aeroplanes over the South-West. From enquiries conducted by the aviation societies and by the military authorities it has been established that these flights were not made by Russian airmen. The two Ministries are now gathering material for a circular which they will issue instructing all rural police forces to oblige any airmen observed by them to land forthwith, failing which they are to be fired upon."

BUCHAREST. During the period from January 1, 1913 to July 1, 1913, the Rumanian Government banned foreign aircraft from crossing the Rumanian frontier with a warning that any pilot violating the order and failing to land instantly, when commanded by signal from the ground to do so, would be fired upon by the armed forces.

VIENNA: The Army Corps commanders in Przemyśl and Lvov have decided to fire upon foreign aircraft, as these have been appearing frequently over Przemyśl and Yaroslav and Kraków during December and January last.

WHAT WAS GOING ON! WHO CAUSED THESE OFFICIAL NOTIFICATIONS TO BE PUT IN THE NEWSPAPERS? FOR THEY ALL RELATE TO THE CLOSE OF THE YEAR 1912 AND THE BEGINNING OF 1913, WHEN AVIATION WAS STILL IN A RUDIMENTARY STAGE OF DEVELOPMENT. EVEN THE MOST ADVANCED COUNTRIES ONLY POSSESSED A FEW DOZEN AEROPLANES OF VERY IMPERFECT CONSTRUCTION, CAPABLE OF FLYING ONLY SHORT DISTANCES, AND ONLY IN FINE WEATHER.

Even the very idea of any sort of strategic reconnaissance from the air had not yet entered the mind of anyone, and at the very most the only use made of aeroplanes and airships for military purposes would have been confined to the observation of troop movements in the field or for bombing.

So what, in those times, could have been causing