

MAGNETOHYDRODYNAMIC (MHD) CONSIDERATIONS

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Evidence continues to accumulate that the ionization level of the atmosphere has been modified in a significant way as a result of the aircraft aerosol operations. A current topic of research is the topic of magnetohydrodynamics, which is defined as follows:

“The study of the interactions between a conducting fluid and a magnetic field. MHD is important in the study of controlled thermonuclear reactions in which the conducting fluid is a plasma confined by a magnetic field. Other important applications include the magnetohydrodynamics power generator. In the open-cycle MHD generator a fossil fuel, burnt in oxygen or preheated compressed air, is seeded with an element of low ionization potential (such as potassium or cesium). This element is thermally ionized at the combustion temperature (usually over 2500K) producing sufficient free electrons (e.g. $K \rightarrow K^+ + e$) to provide adequate electrical conductivity. The interaction between the moving conducting fluid and the strong applied magnetic field across it generates an electromagnetic field on the Faraday principle, except that the solid conductor of the conventional generator is replaced by a fluid conductor.”

Oxford Dictionary of Science, 1999.

From Patent No. 4686605 Aug 11 1987 by Bernard Eastlund:

“The generation of electricity by motion of a conducting fluid through a magnetic field, i.e., magnetohydrodynamics (MHD), provides a method of electric power generation without moving mechanical parts and when the conducting fluid is a plasma formed by combustion of a fuel such as natural gas, an idealized combination of apparatus is realized since the very clean-burning natural gas forms the conducting plasma in an efficient manner and the thus formed plasma, when passed through a magnetic field, generates electricity in a very efficient manner. Thus the use of a fuel source [42] to generate a plasma by combustion thereof for the generation of electricity essentially at the site of occurrence of the fuel source is unique and ideal when high power levels are required and desirable field lines intersect the earth's surface at or near the site of the fuel source. A particular advantage for MHD generators is that they can be made to generate large amounts of power with a small volume, light weight device. For example, a 1000 megawatt MHD generator can be construed using superconducting magnets to weigh roughly 42,000 pounds and can be readily air lifted.”

From Conceptual Physics, by Paul Hewitt, 1998:

“Plasma Power : A higher temperature plasma is the exhaust of a jet engine.

It is a weakly ionized plasma, but when small amounts of potassium or cesium metal are added, it becomes a very good conductor, and when it is directed into a magnet, electricity is generated. This is MHD power, the magnetohydrodynamic interaction between a plasma and a magnetic field.”

From the web page <http://magnetohydrodynamics.homepage.com/>

“Weapons:

The use of MHD in weapons is endless, with an effective MHD defence system in place, it is possible to use magnets, harnessing only the power of air, to create huge electric forces, using (8-10) Tesla Coils for defence would be made possible, of course the field of High Temperature Superconductivity (HTSC) would have to be conquered.”