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In neither case has it been used as a primary lift-producing surface. However, an extension of the Prandtl theory of lift indicates that a fuselage of the dimensions reported by the German Airline pilots Whited and Chiles in the Montgomery, Alabama, incident could support a load comparable to the weight of an aircraft of this size at flying speeds in the subsonic range. The Prandtl theory probably gives very conservative values of maximum lift for bodies of this shape. German experience indicates that the maximum lift may be twice as high as that given by the theory.

Although the craft sighted by Whited and Chiles was reported to be without wings and fins, it is possible that it could have been equipped with extendible wings for take-off and landing, contained within the fuselage in cruising flight.

This type of aircraft could also be partially supported in the take-off and landing condition by the vertical component of the jet thrust, if the landing and take-off took place with the fuselage axis, or the jet stream direction in a vertical or nearly vertical attitude. The further possibility that an extendible rator, concealed within the fuselage, could have been used, would provide another method for landing and take-off that would allow wingless flight at very high speeds. Such a system could result in a relatively large duration of flight and corresponding range.

While no stabilizing fins were apparent on the "flying fuselage" reported by Whited and Chiles, it is possible that vanes within the jet, operated by a gyro-armed system could have provided static stability, longitudinally, directionally and laterally. The same vanes could also have been used for accomplishing static balance or trim, as well as control for maneuvering.

The above discussion regarding weight, controllability, stability, etc. is not intended to represent deductions regarding the exact nature of the torpedo or ship-shaped aircraft which were sighted by the airline pilots, Whited and Chiles, and others. They are merely statements of possibilities, which are intended to show that such an aircraft could support and control itself by aerodynamic means.

The propulsive system of this type of vehicle would appear to be a jet or rocket engine. The specific fuel consumption of engines of this type would bear rather high. This coupled with the fact that aerodynamic lift on such a body would be accompanied by high drag, placed a serious limitation on the range of this aircraft for any particular gross weight. If this type of unidentified aerial object has extremely long range, it is probable that the method of propulsion is one which is far in advance of presently known engines.

Round Objects (Spherical and Balloon-Shaped Objects)

Spherical or balloon-shaped objects, are not usually considered as efficient aircraft. Not only would the drag of such bodies be high, but the energy expenditure that would be required to develop lift by aerodynamic means would be excessive. The only conceivable