

**ABSTRACT :**

**Experimental Induction Aeronautic Lift Jet Mk 1,**

**XIAL Jet Mk 1,**

**XJ1**

The XJ1 is a dual stage short take off and landing amphibious aerospace platform that utilizes axial compressor pre thrust energy potential into applied aerospace lift via Induction Lift Traps whilst concurrently using axial compressor post thrust energy for total platform directional control movement via pilot control of Ducted Pincers whilst pilot flight control is from within a detachable secondary stage Ejection Survival Gravitational Glider capable of increasing pilot physiological and psychological endurance of g forces during extreme acrobatic flight and capable of increasing pilot survivability during high speed emergency ejection and capable of extending ejection flight glide range via pilot usage of Bio Mechanical Turbine Technology.

**DESCRIPTION :**

The XJ1 is a fully detachable and collapsible secondary stage aerospace platform that the pilot of the XJ1 will operate from within the XJ1 called the Ejection Survival Gravitational Glider hereafter named ESG2, that allows the pilot to select ergonomic position from sitting up right to that of laying forward which allows the pilot to endure more g forces and that upon high speed life threatening ejection from the XJ1 the pilot is able to survive to continue a sustained flight and or an extended glide from the physical airspace in which the ejection took place using Bio Mechanical Aerospace Turbine Technology hereafter called BAT2, in order to allow the pilot to optimize egress potential from the airspace region the ejection occurred and to further protect the pilot from the multitude of hazardous environments the pilot may encounter and or be forced to endure upon landing the XJ1 ESG2 secondary stage platform until the pilot is rescued and or retrieved to safety. The XJ1 is able to generate self induction lift by concentrating the advance inhale thrust energy of an axial compressor turbine engine into a concentrated and isolated region directly over the leading edge of the XJ1 wing area before the advance thrust energy is inhaled by the axial compressor turbine engine and then uses the exhaled thrust energy of the same axial compressor turbine engine as the primary method that the pilot controls the direction of flight of the XJ1 platform itself via control of the ducted pincers at the tail end of the XJ1 vehicle. The XJ1 is capable of enhancing the standards of short take off lifting capabilities using Induction Lift Traps hereafter named as ILT and also capable of enhancing the standards of high speed directional flight control using Ducted Pincers hereafter named DP2.

Visual images of an XJ1 with industrial design application and relative textural information of the ESG2, BAT2, ILT and DP2 is attached in the following sequential Figure listing as;

Figure 1 Text (pg. 6) ESG2 Transparent Side View.,

Figure 2 Text (pg. 7) ESG2 with BAT2 Transparent Side View and Top View.,

Figure 3 Text (pg. 8) ESG2 with BAT2 Partial Side View Extended.,

Figure 4 Text (pg. 9) ESG2 with BAT2 Top View Extended.,

Figure 5 Text (pg. 10) XJ1 with ILT and DP2 Transparent Partial and Side and Frontal Views.,

Figure 6 Text (pg. 11) XJ1 with ILT and DP2 Transparent Top View.,

Figure 7 Text (pg. 12) XJ1 with ILT and DP2 Partial Side Views.,

Figure 8 Text (pg. 13) XJ1 with ILT and DP2 Partial Side Views.,

whereas pages 3 and 4 contain information pertaining to Figures 1 to 8 whereas page 5 is the CLAIM of Andre David Milne relative to the XJ1, the ILT, the DP2, the ESG2 and the BAT2.

**Figure 1 Text --- ESG2 Transparent Side View**

The ESG2 will allow pilot to adjust body position into and out of the optimal ergonomic position capable of enduring extreme g force energy that further enhances pilot combat survival mentality by allowing the pilot to engage the reflex position of hand to hand physical combat. The ESG2 is designed in such a manner as to provide a comfortable flight position for the pilot to maintain during regular flight and to further allow pilot to engage a partial forward position that naturally provides physiological support in critical areas that will enhance pilots ability to endure more g force energy with out experiencing blackouts as would be experienced in conventional upright flight position. This positioning of partial forward further enhances pilot handling of aerospace platform from that of flying the vehicle to that of riding the vehicle identical in the experience of riding a high performance motor cycle versus driving a fast car.

**Figure 2 Text --- ESG2 with BAT2 Transparent Side View and Top View**

The ESG2 will allow safe pilot ejection at any velocity and further allow pilot to escape the airspace environment the ejection occurred. The ESG2 converts to a lithium cell powered direct current electric turbine drive micro glider with supplemental pilot thrust energy potential being generated from the BAT2. Pilot will engage ejection by locking self into full forward position then trigger separation of ESG2 from XJ1 via controlled rocketry and or explosive charge ignition for zero zero ejections and or ESG2 micro fins insertion into relative external airflow to achieve optimal cold signature ejection from XJ1. After ESG2 separation has fully stabilized pilot engages ESG2 glider wings and further engages the ESG2 micro turbine disk with either the Lithium Electric Cell Motor System and or the ESG2 BAT2 to extend glider flight range.

**Figure 3 Text --- ESG2 with BAT2 Partial Side View Extended**

Pilot controls direction of ESG2 via relative gravitational adjustment of self in ESG2 harness that articulates at centre of gravity moment located between the ESG2 structure and the ESG2 wing in a relative format as the prototype bio mechanical jet flow aircraft named Stealth Arrow. The solar fabric wings of the ESG2 hinge out in opposite directions from the nose of the ESG2. The capsule shell of the ESG2 is aquatically and or environmentally sealed in order to ensure the pilot is not exposed to thermal injury upon landing the ESG2 in arctic waters and or terrain. Further protection is assured to the pilot should final landing be ESG2 parachute deployment over jungle or forest areas where pilot may then use the ESG2 as a platform to safely rappel down to the surface area should the ESG2 parachute get tangled in the jungle or forest ceiling.

**Figure 4 Text --- ESG2 with BAT2 Top View Extended**

Activation of the ESG2 as a separation stage platform from the XJ1 during emergency situations ensures the pilot will have enhanced capabilities to endure the extreme blast of cold air that currently is the leading cause of pilot fatalities upon ejection at plus Mach 1 velocities. The wings of the ESG2 articulate out from the nose of the ESG2 and self lock into a rigid position that places no impediment upon pilots ability to continue controlled flight of the ESG2

### Figure 5 Text --- XJ1 Transparent Partial and Side and Frontal Views

The XJ1 axial compressor turbine engine air inhalation scoop is stretched out as its own air foil shape along and over the primary leading edge of the XJ1 wing which is the actual ILT system. Pilot increase of engine throttle and control of the inter dependant DP2 system will allow the pilot to begin to generate lift by increasing relative airflow over the leading edge of the XJ1 wing with the relative exhaled energy of the same airflow being directed outwards in opposite centre line directions of the XJ1 which increases the Vertical Take Off Landing potential of the XJ1 prior to pilot letting DP2 release exhale energy directly aft of the XJ1 as seen in Figure 5 to allow the XJ1 to operate as a Short Take Off Landing aerospace vehicle. The DP2 system consists of twin interdependent vectorable and directional ducts to allow XJ1 pilot to achieve a broad range of flight control as discussed in the Flight Protocols within Figures 7 through 8. The XJ1 profiles of side and frontal show the emphasis on pilot visibility via canopy position.

### Figure 6 Text --- XJ1 Transparent Top View

The ILT System is more visually evident in this illustration as the small arrows representing air flow into the ILT system and then travelling over the leading edge within the overall wing system of the XJ1 and then being converted and or utilized into applied direction thrust energy which in this illustration will allow for the XJ1 to rotate to the left whilst flying forward.

### Figure 7 Text --- XJ1 Flight Protocols Partial Side Views

- A Flight Protocols Hover., Pilot aims DP2 opposite XJ1 centre line then increases thrust
- B Flight Protocol Forward., Pilot aims DP2 aft XJ1 centre line then increases thrust
- C Flight Protocol Climb., Pilot aims DP2 aft upwards XJ1 centre line and controls thrust
- D Flight Protocol Descend., Pilot aims DP2 aft downwards XJ1 centre line and controls thrust

### Figure 8 Text --- XJ1 Flight Protocols Partial Side Views

- E Flight Protocol Rotate Port., Pilot aims port side DP2 opposite XJ1 centre line and concurrently aims starboard side DP2 aft XJ1 centre line and controls thrust
- F Flight Protocol Rotate Starboard., Pilot aims starboard side DP2 opposite XJ1 centre line and concurrently aims port side DP2 aft XJ1 centre line and controls thrust
- G Flight Protocol Roll Port., Pilot aims port side DP2 aft upwards XJ1 centre line and concurrently aims starboard side DP2 aft downwards XJ1 centre line and controls thrust

NOTE Pilot control of XJ1 in full synthesis of engine thrust management in conjunction with the DP2 system will allow pilot to direct XJ1 in many more flight options than discussed above

**CLAIM :**

I, Andre David Milne claim;

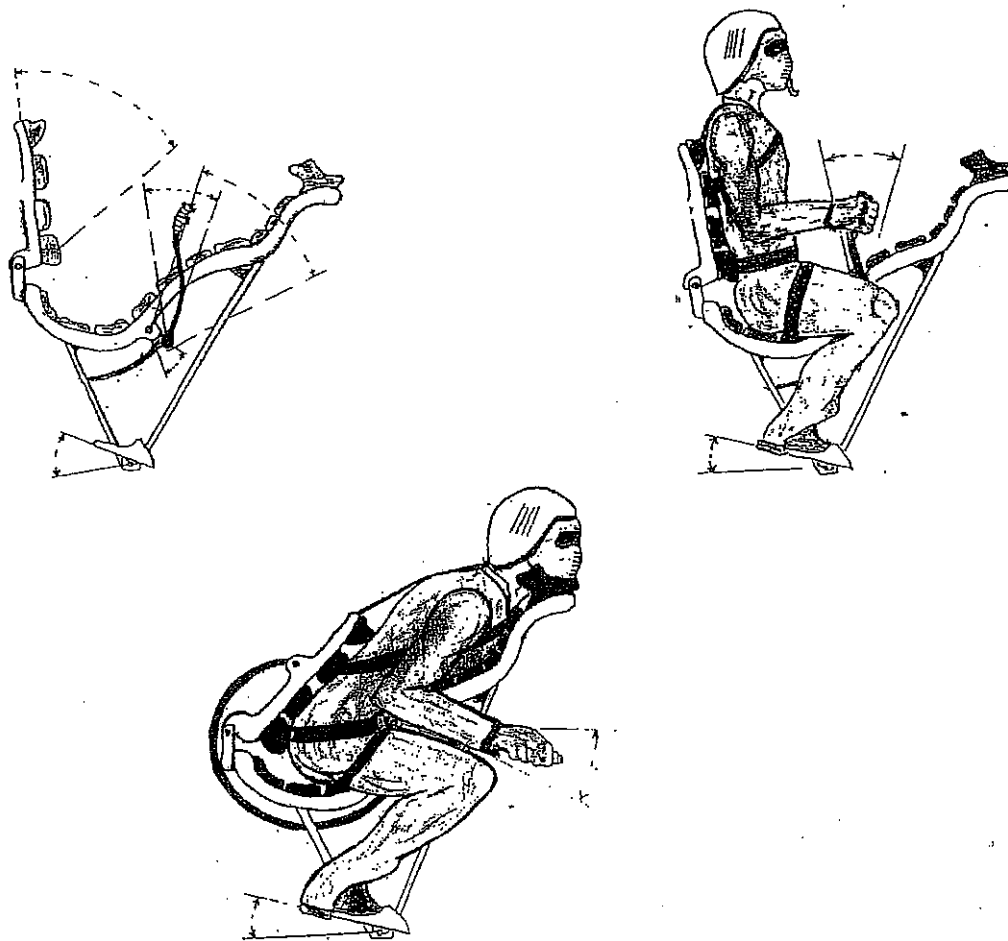
XJ1 is any controllable aerospace lifting platform capable of sustained directional movement that relies upon;

usage of any aeronautic lift generated via drop in air pressure via resultant controlled passage of inhaled airflow within an ILT system,

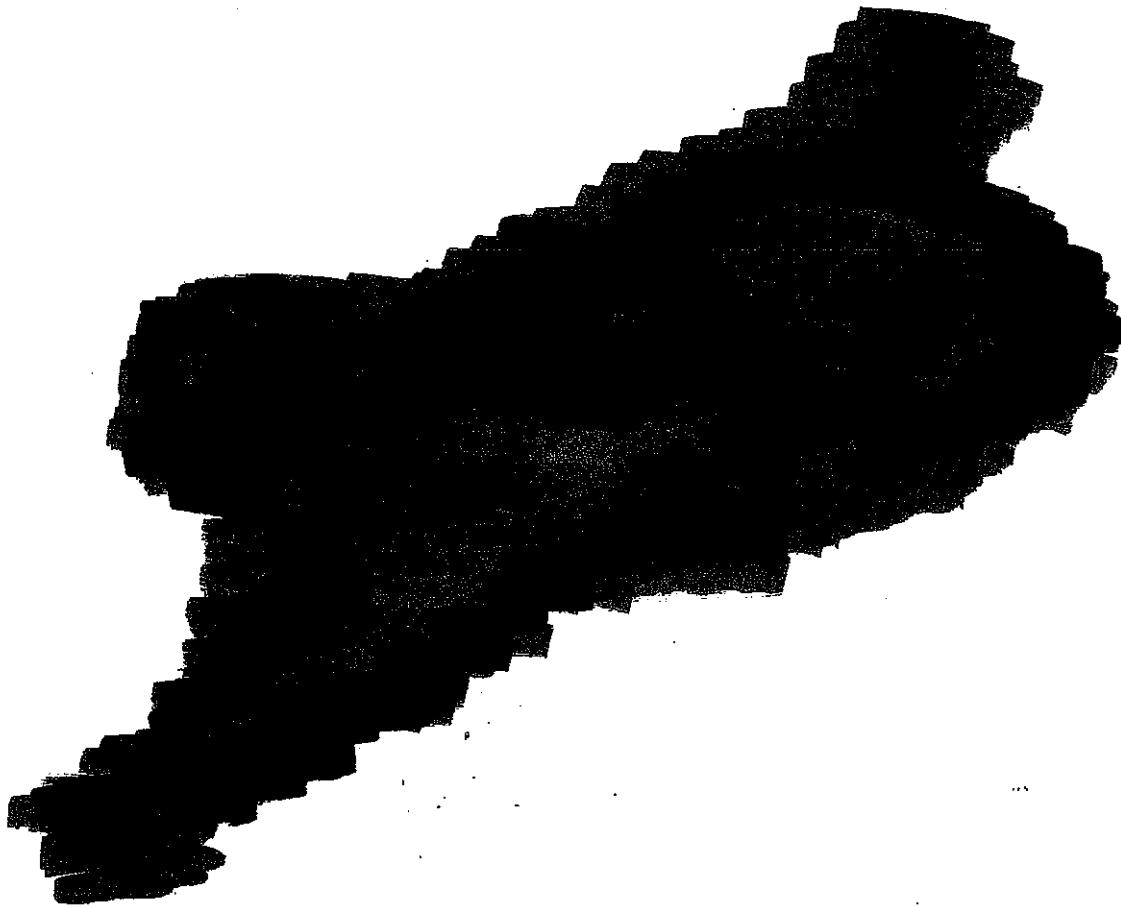
and,

usage of any exhaled thrust energy that allows directional movement upon the axis of roll, yaw and pitch via pilot control of a DP2 system,

where; said pilot control is from within an interconnected selective ergonomic positioning system of sitting upright to laying forward that enhances pilot capabilities to endure g forces as well as allows pilot to selectively become detachable from XJ1 platform in a manner that enhances pilot survivability as well as allows pilot to extend flight range via either gliding and or usage of electromagnetic turbine and or a BAT2 system from within a ESG2 system.









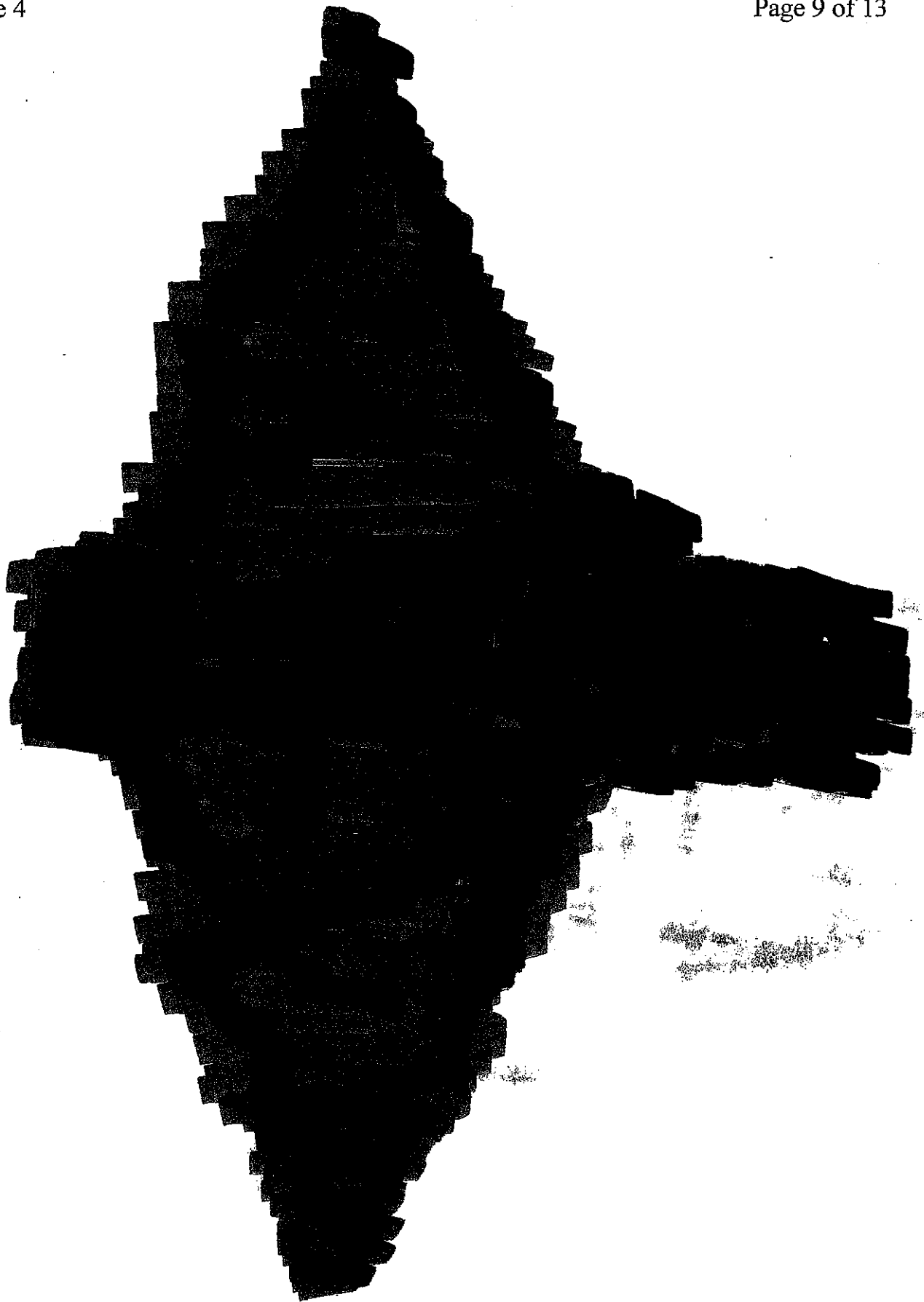


Figure 5

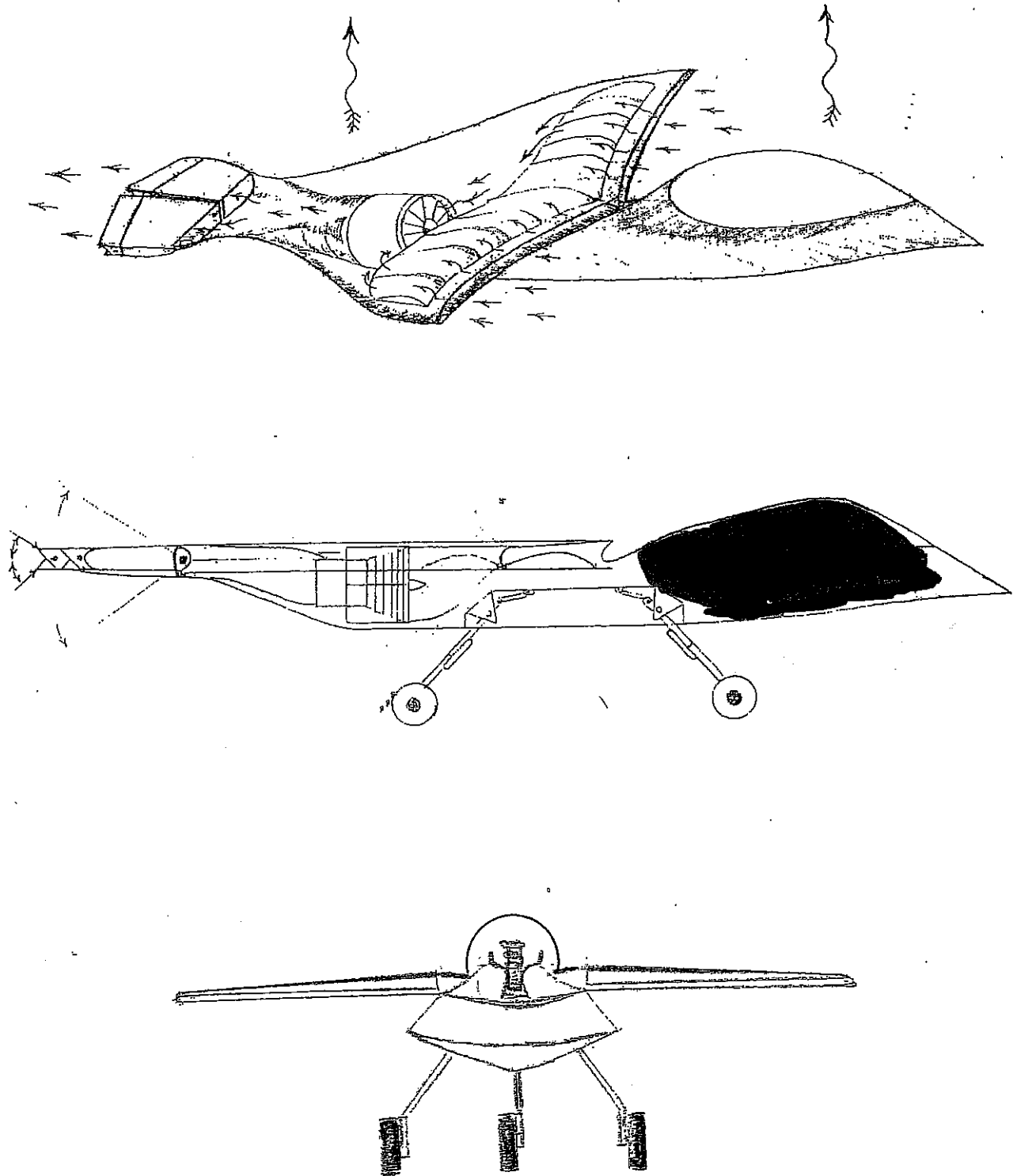


Figure 6

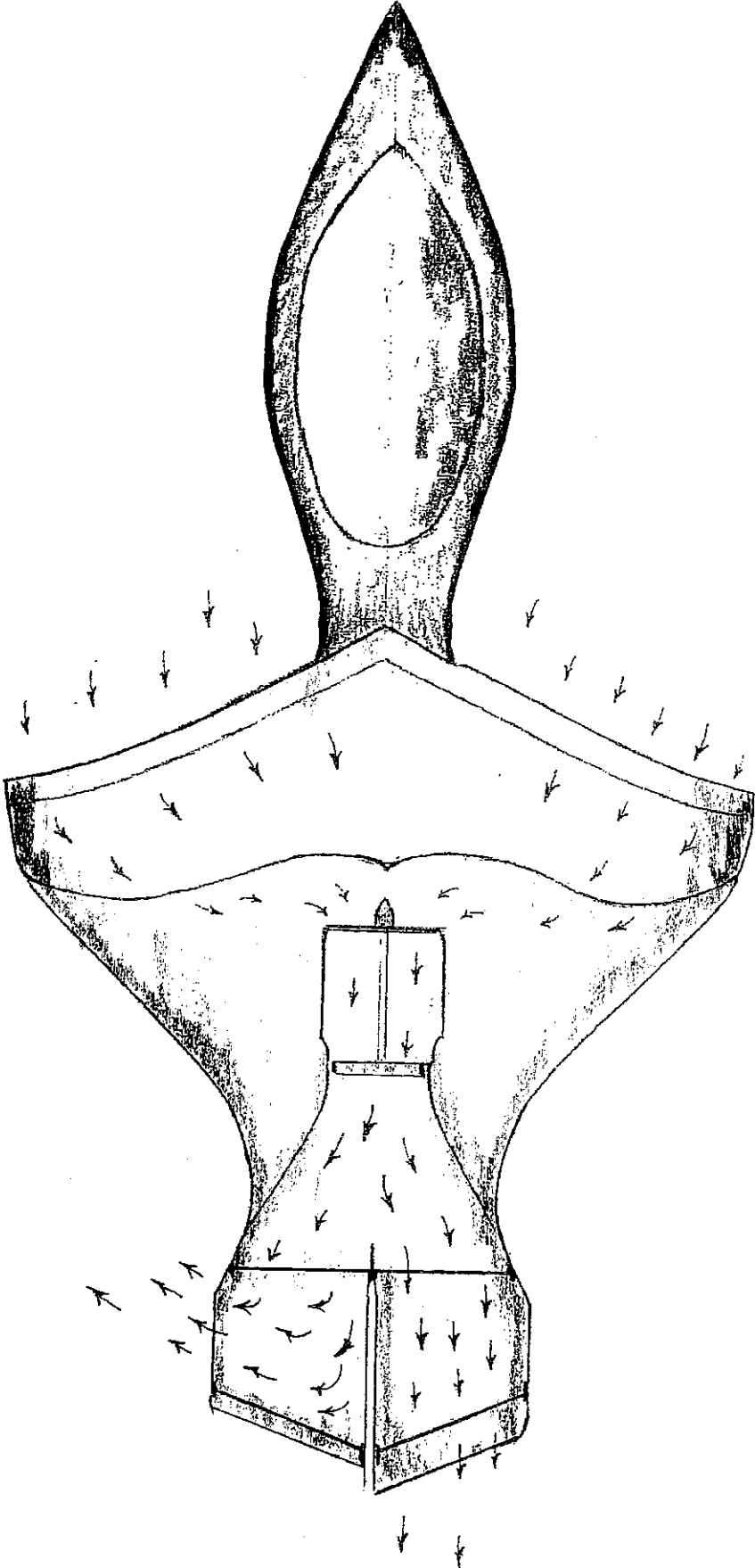


Figure 7

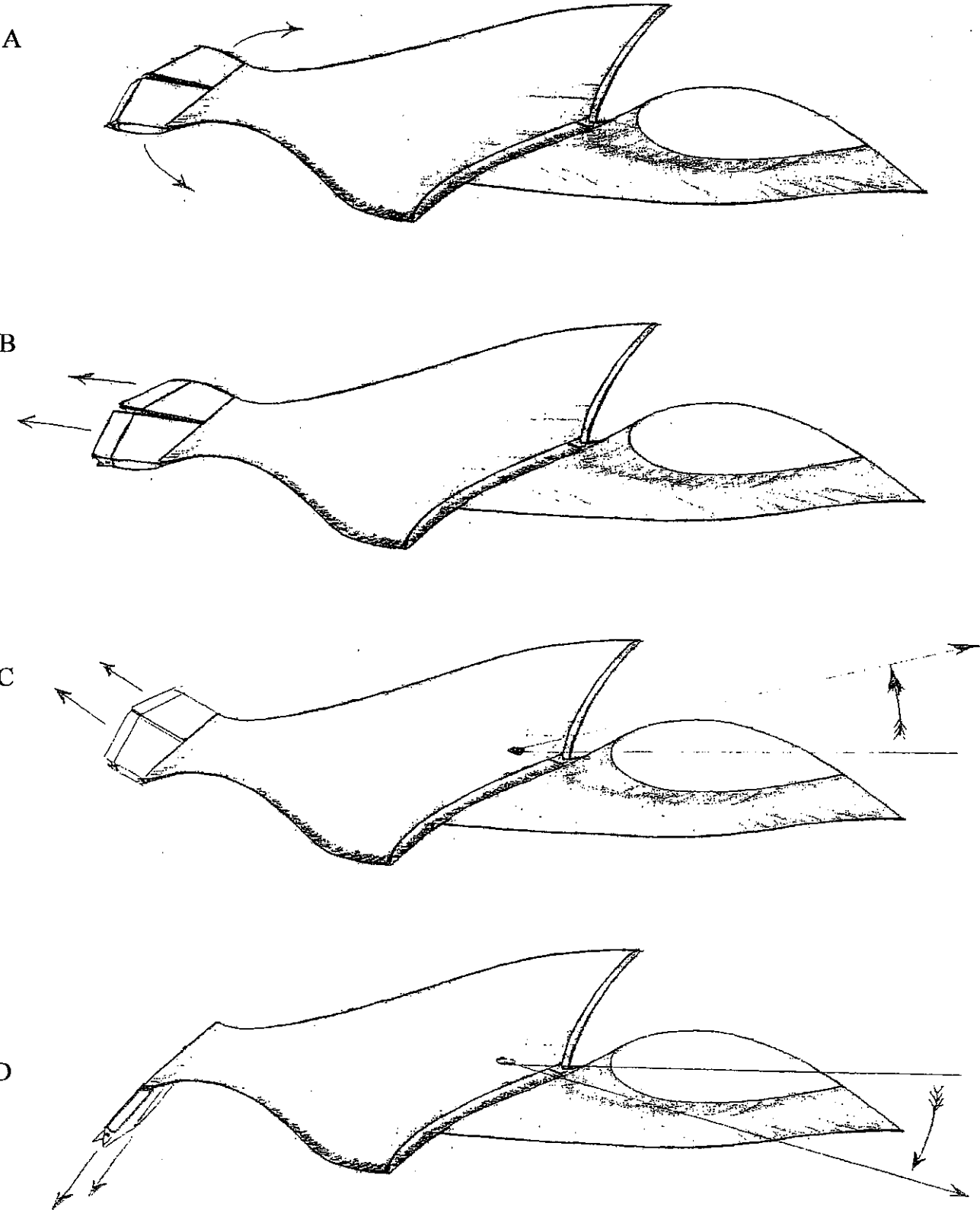


Figure 8

