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A New Age of Space

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Abstract:- "The time will come when man will know even what is going on in the other planets and perhaps be able to visit them".

In today's era, the entire world is in a sensational run for conquering Space. This race will only be won by the person, agency or country that will crack the code of energy and speed, using unconventional technologies, to reach those places in the space that are beyond our reach today. Many space agencies are working on accomplishing this goal, using multiple technologies, with varying degrees of success.

I propose a simpler way of achieving this goal. This method will deliver more than the necessary speed and energy, applying a simpler, but superior technology.

I believe that my proposal will shepherd a revolutionary change in Space exploration, and will lead us towards the dreamed and the desired future. It will show us our aspired destiny and thereby it will become the default technology of the future of space automation.

The proposed technology will be the world's first Perpetual Motion Machine (PPM). It will be a turbine-based machine, based on renewable energy. It will the also be the world's first machine to provide the spacecraft a Direct Brake. Another of its most thrilling features is that it will reduce the size of the mammoth rocket to only the size of a satellite. The satellite-sized spacecraft can be directly launched into space, thus eliminating phase-wise propulsions. It will have many more astonishing sci-fi-movies-like features.

In this research paper, we will take a detailed view on the concepts of the machine, and their applications leading to the above-mentioned technological benefits in greater detail.

1. Introduction:-

Since ages we have dreamt of a source of energy which will never get over and to achieve this dream of ours, we have been working hard since decades, many trial and error experiments were done but they were unsuccessful, being a human there many other attempts yet only failure was showed up, but still the smartest organism of the world strived and then finally concluded up with the prosperous technology needed. This tech is termed as "Utkarsh" which means success and rising sun as it has propelled the world in the high sky of destiny brightness and prosperity. This tech is actually a machine which would have the potential to fabricate exceedingly huge quantity of energy than the required demand of energy. As mentioned above the ensuing automation will be a turbine-based tech, the subsequent turbine will be an entirely improved and modified version with some other major equipment's connected to it in order to work and generate the needed electricity. The kind of propulsion system used in the tech is "Electric Propulsion Rocket Engine" whose past has been in vain due to several reasons, the main cognition behind this is the sky-scraping energy needed by it in once. With the use of current technology it is unfeasible to provide the needed electricity to the succeeding propulsion at once, yet electric engines are having some advantages for instances it is more efficient than the traditional chemical rocket engine, it is eco-friendly, it will aid us to save natural fuels like liquid oxygen, liquid hydrogen, and so forth. As divulged above the main issue with the electric propulsion is the energy demand, and the following automation will be competent to fabricate the needed quantity of vigour and then with the help of tech this problem will be resolved, also with the succour of the machinery the undivided earth would become capable to endlessly use electric propulsion. Let's see one of the most fascinating traits of the tech which is size. Do you know? That the dimensions of the satellite are as same as of a nano car, but do you know why then the size of the rockets are too big? The riposte to this inquiry is "fuel" of the traditional chemical rocket engine and as it is known by the information given above that the electric propulsion will directly get energy from the automation, there would be no requirement of fuel as the fuel of the electric engine is electricity which would be directly produced with the help of the tech. This symbolize that the necessity of the fuel is no more which signify that the satellite can be directly launched with the aid of the satellite's propulsion and if this machinery is used in the near upcoming future then

the satellite can be directly launched with its own propulsion by just casing with the rocket cap in order to save the satellite from damage during the launch and if this get possible then the size of the rocket will be only of the nano car which would be a very big achievement for the humanity. Let's see one more dominant aspect of the propulsion which its high speed, electric propulsion's speed can be determined by the proportion of the energy provided to it, if the statement is simply then it can be said that the thrust produced by the electric propulsion rocket engine depends on the amount of electricity given to it, higher the electricity high thrust and lower the supply of electricity lower the thrust. the energy produced by the tech would be so high that it would easily aid the satellites connected to it in fetching the highest speed than the world's fastest satellite voyager satellite and help the subsequent satellite in being entitled with the name of the world's highest speed by any man-made satellite and this ability of the satellite would help it to cover the long distances in small time, like the travel time will be incredibly decreased to reach Proxima centauri the nearest star from the "Blue Planet" and even the subsequent automation will make sci-fi movies intergalactic travel realistic in the near future. The succeeding paragraph shows some significant features of the tech and about the automation in the small and as its name suggest the machinery will definitely take the world towards the success and the rising destiny.

2. Principle:-

The ideal principle of the automation is that it is fabricated using law of conservation of energy which states that energy is something which neither be created nor be destroyed it can only be changed from one form to another and the tech will be coupled using the same, as the vigour will be swapped from one form to another namely it will be switched from chemical to rotational or angular kinetic incarnation subsequently it will be changed to electrical form and afterwards the further summon will happen.

The contiguous fundamental on which the tech would toil is PMM (Perpetual Motion Machine), the succeeding ethic hypothesize that if the input of the machine is 100 volts then the output of the machine ought to be 100 volts, if elucidate unpretentiously a tech with 100% efficiency. The PMM was initiated by Bhaskar Acharya and he endeavoured to formulate a PMM by himself but he stalled to make it tough he accomplished to construct the first proximate Perpetual Motion Machine and it proceed to be publicized as Bhaskar Acharya Wheel. This automation is based on the same basis of PMM as it is capable to indemnify all the loses using variegated oddities. So this is the tremendously rudimentary and substantial principle of the mechanism.

3. Advantages:-

Now I would like to tell you about some advantages of my machine:-

First of all my machine will be able to produce a very amount of electricity forever, the dimensions of my machine are also very small that it will be able to fit in the space of the fuel tank of the satellite, even the weight of my machine will be very less when compared to the weight of the fuel carried by the satellite, the cost of my machine will be equivalent to the cost of the fuel carried by the satellite, as by the help of my machine the electric rocket engine will be able to produce a high force than chemical rocket engine, so we can directly launch the satellite with the help of electric rocket, even due to my machine the size of the rocket will decrease and then we will be able to launch the satellite directly by covering it with the rocket cap as with the help of my machine the electric rocket engine will be able to produce more force than the chemical rocket engine at that time we will not need chemical fuel and then at that time we will not need a huge rocket as we don't need chemical fuel and then we will be directly able to launch the satellite by covering it with rocket cap, my machine will also decrease the launch cost and it will bring the launch cost from "60 Million" to few thousand rupees, with the help of my machine the satellites and other space vehicles fuel will not get over and then they will be able to work forever, we will also be able to adjust the energy production of my machine if we want to increase the production of electricity then we can and if we want to decrease it then we can also be able to decrease the energy production and even now we are planning to send our mission beyond our solar system to other stars like "Proxima Centauri" and other places and at that time there will be no solar energy to make the equipments work and if we will use my machine then we will be able to get the electricity to make the equipments work and if we try to go to the other stars with the help of hibernation technique then it will take a lot time for us to reach there but if we will use my machine then we will not have to use such technique and then the electric engines will be able to work forever and then the satellite will also have a very high speed and then it will be able to reach the other star in less time. So this are some of the advantages of my machine. Even if we plan to go by using thermocouple technique which is currently being used in voyager

missions to energise the communicating equipments then to it will be in our contry as the thermocouple will stop working after few years and then the satellite will be a floating space debris but with my machine it will not be wasted as all the parts including the communicating ones will get energy forever with the help of this new tech. If we will use my machine we will not have the problem of fuel so we can easily go to missions which are very far away from our planet Earth like the missions to Pluto, Proxima centuari or to the other stars and even the satellites fuel will not get over which are very advantage for us like the Hubble telescope as we all know the Hubble telescope fuel got over so due to Hubble's this problem it won't be able to work for future and then Hubble telescope will not give us information about many other stars and even it will not be able to explore other stars .So as you all know that my machine can reduce electricity or we can see energy forever, and even my machine I have a many more abilities which can't be seen next 40 to 50 years will go by a normal speed, but now I have made a machine which will help us to directly go 40 to 50 years ahead from today and even I think so that as my machine is having so many abilities regarding energy it will bring revolution in the space industry and even in the energy industry and this revolution will really come into existence then it will help us to take a use step towards a bright future. Even my machine will make many future missions very easy and if this machines will become, then very easily we can take the steps towards a more bright future at a very high speed and in the future they will be many modification in my machine so my machine will help us to take the steps to a bright future at very high speed in this way we will be able to become a more advanced civilization and I don't think so that it will take a huge amount of time for us to become advanced civilization with the help of my machine and we will become an advanced civilization then we can go to many other planetary missions or to other solar systems or galaxies very easily and even we will be able to make our bases on various planets . So this are some of the advantages of my machine.

4. Working:-

Battery (lithium-ion battery) will be attached to a motor and it will give the needed electricity to the motor so that the motor can work. This type of lithium-ion batteries was used in submarine during world war 2 to give the submarine electrical power and this battery will be rechargeable and will work as reserved batteries for different equipments like electric pulley, etc.

Motor (synchronous AC 60hz 2 pole motor with 3600 RPM) will be attached to the wind turbine, the wind turbine will rotate at a very high torque and the rotation of the wind turbine will also rotate the wind turbine as both will be attached, so this means that the wind turbine will also rotate at 3600 RPM with the motor.

Wind turbine will be attached to the motor and it will rotate with the rotation of motor, there will be no blades in the wind turbine, the turbine will be directly attached to the motor with its rotor, so in simple word we can say that the motor and the turbine will be attached with the rotors. The turbine will be a bit modified turbine so that it can work in s space and its weight can be reduced. The generator of the turbine will convert all the rotational and rotational kinetic energy into electricity and by the conversion of the energy got to turbine by the rotation we will get usable electricity, so we can say that the turbine is the power producing house of my machine and it is one of the main component of my machine.

So now after the turbine there will be voltage boosters, voltage boosters are converts which give a greater output than the input which means if the input is of 2 volts then the output will be of 5 volts, so in simple words voltage boosters boost electricity. This boosters will be coil boosters which means the boosters will use coil to boost the input electricity and bigger the coil the bigger will be the output .So in my machine I am going to use 5 boosters among which 2 will be reserved boosters and 3 will be using boosters and I am using 3 boosters in a different way, I will explain you this technique with the help of an example, so for example if the booster1 can boost by 20% then the capacity of the second booster will double of the first booster which means it will be 40% and then same for the 3rd booster which means the capacity of the booster3 will be 80% and to do this we just have to increase the coil size, so in this way or by using this technique I will use to boost the electricity produced by the wind turbine and now I will tell you about 2 reserved voltage boosters. So I will use this two boosters mainly at two times, at the first time I will use this two or one of the one reserved voltage booster when I have to increase the output electricity and secondly, I will use it at the time when for example any booster stops working due to some technical issue or at the time when it stops working so by using the booster at this time, we can cover the loss of electricity, so this are the use of reserved boosters and of the boosters.

The next component of my machine is MCB (miniature circuit breaker), it is a circuit breaker which breaks the circuit at the time when there is a sudden flow of large

electric current or at the time when there is an overheating or overloading, so the MCB will protect my machine from overloading and from overheating and if in any case the MCB gets off due to some sort of overloading or any other thing then at that time to again on the MCB so that there could be again flow of electricity I will use electric pulley, I will use electric pulley to again start the MCB. The electric pulley will be connected with the switch of the MCB, so when the MCB will be off which means its switch or button will be down the electric pulley will start and it will come up and as it is connected with the button it will again pull the button up and then the MCB will start working and the current flow will also again start in the machine which means the whole switched off machine will be again started and the electric pulley will work on reserved batteries, so this is all about MCB.

The next thing towards which we will see now is the distribution box. So basically the work of the distribution box will be to distribute electricity to all the parts of my machine and I have divided the distribution of electricity in two parts, so the 1st part will give electricity to the electric propulsion rocket engine, the second part will give electricity to all the equipments of the machine, so this is the distribution box and in simple words its work will be to distribute electricity to all the parts of my machine and to the electric propulsion rocket engine.

So now we will move forward and see the next thing which is stabilizer So the stabilizer will be placed after the MCB and it will protect my machine against short circuit. Basically, a short circuit is a sudden flow of very large current due to a direct live and neutral wire. The stabilizer will protect my machine and its equipments from short circuit. So, in this way my machine will be safe from short circuit. The current will flow from MCB machine to stabilizer where the stabilizer will neutralize the large flow of current then as the output, we will get perfect/pure electricity.

5. Design:-

I have created a design of my machine, in this design I have arranged all the equipments, so in this subsequent design I have divided my machine into three levels.

1. Booster
2. Turbine
3. Distribution

So the first level will be the "BOOSTER" level, in this level the all the 5 booster will be there, in the second level which is the "TURBINE" level, in this turbine layer the battery, motor and the wind turbine will be there and then the third level comes which will be the "DISTRIBUTION" level in this level there will be the MCB, stabilizer and distribution box. So this are three levels, I have planned to keep this all three levels one above the other, if we say in simple words then I have planned to keep all the equipments of my machine according to their levels in floors and between this three floors there will be a special thing which will protect the equipments from destroying each other, this special thing will be a layer which will be present between all the floors, this layer will be of metal and "X" joining and this type of layer I have used before also and I don't think so I have to again tell about this layer but I have done some changes in this layer I have changed the material of this layer because by changing the material the durability and tensile strength of the layer will increase and by doing so the layer will become very strong and then it can easily be able to take the all the equipments and this layer will be of "TUNGSTEN TITANIUM CARBIDE" or we can say "TTC", TTC is an alloy made by mixture of titanium and tungsten, TTC is having a very high durability and tensile strength and this high quality of TTC is needed by us as if the layer will have high durability and tensile strength it will be easily able to take weights on it and if the layer is easily able to take weights then there would be no colliding of equipments or we can say that there would be very less chances of colliding of equipments of my machine. So this is the reason why I am using this layer of TTC, so now let us move towards the next topic of this part, now you would be thinking that where is the software and artificial intelligence program (AIP) boxes will be placed, wait I will tell. In the third level of my machine which is the distribution level , so in this layer we all know that there are only three parts which are MCB, stabilizer and distribution box and as we all know that this three parts occupy very less space there would be a space left so I am thinking to put the software and artificial intelligence box there, the main three equipment will be at left side and both the boxes will be at the starting of the right side of the distribution box, by placing like this both the boxes will be easily fitted and the space will be properly utilized and there won't be any wastage of the space, so the boxes will be place in the third level.

Now I would like to tell you one more advantage of third level. As we all know that there is MCB in this third level and as I said before that MCB is going to have a small electric pulley and before I didn't mentioned that where I am going to place this electric pulley and even you would be thinking that where I am going to place it, so now I will

tell you that where I am going to place this electric pulley, as I told you before that there are going to be layers between the levels, so I am thinking to place the electric pulley on this layer and then the electric pulley will have a proper and fixed place and then the electric pulley will be able to work with the MCB, so now the electric pulley will be on the layer with the MCB.

Now we will move forward and see towards the next thing of this topic. You would be thinking that after changing the arrangement where will be the fire extinguishers, wait I will tell you. I have planned to place the extinguisher beside the three levels, as there are two fire extinguisher I am going to keep the both the extinguisher at each side which means at both the sides of the three levels (Right and Left) there will be fire extinguisher and both the fire extinguisher will be facing towards the three levels and this new arrangement of fire extinguisher is profitable for us that the fire extinguisher will be easily able to cover the whole machine and it will be able to give most of the spray thrown by it to the machine which is a very good thing for us because all the parts will be covered and then there will be less risk of spreading fire in the whole machine because the extinguisher will be easily able to cover the whole machine and as they are near to the machine to spray thrown by them will go to the machine fast and will be easily go to all the parts, so the both the extinguishers will be place beside the three levels. Now I would like to tell you about the electric pullies of the fire extinguisher. So now I have told you about the fire extinguishers position but where do you think that there electric pulley will be placed, wait I will tell you. So as we all know that fire extinguisher will be placed beside the three levels, so this means that the fire extinguisher will be very close to the roof and it will be kept on the floor of the machine beside the three levels, so I have planned to place the electric pulley of extinguisher on the roof of the machine and that I will do in the following way. So now I have planned to place the one more layer above the first level and this layer will be the same layer of TCC and this layer will be attached to the roof, the pullies will be attached or we can say that it will be placed on this layer. I am using this layer of TCC again because the electric pulley will be having a weight of itself and even it will be having an external weight also for pressing buttons and if we will attach such heavier object to the roof there are chances of roof breaking and a part of roof falling down, so I am using the layer of TTC so that it can hold the electric pulley and the external weight and then there won't be any chances or risk of the roof falling and the roof will not be harmed in any and even this layer of TTC will be a bit extended from both the sides so that the electric pulley can be placed or it can be fitted and even the floor will be a bit extended so that the fire extinguisher can be placed, so in simple words we can say that the new TTC layer, floor and the roof will be extended, I have said that the roof will be extended because if floor will be extended then the roof has to be also extended, so I have said that the roof will be also extended. So now this is the reason why I am using another layer of TTC and even this will be the final position of both the electric pullies.

Now you would be thinking that where the sensors will be placed, wait I will tell you. So as we all know that sensors are used for specific purposes of finding things like temperature, smoke, etc. and I have planned to place this sensors at specific places where they will be needed, for example if the sensors which will show the total electricity produced, I will place that sensor before the distribution box so that I will get an accurate amount of electricity produced, so in this way all the other sensors will be placed according to their work. So now you would be thinking that where will be the wires in this arrangement will be placed, need not to worry I will tell you that where I have planned to keep the wires. I have planned to make a section at the borders of the three levels or in simple words we can see that I have planned to make borders in the space between three levels and the fire extinguishers, I have kept wires in the between of the extinguisher and the three levels because it will properly utilise space and no space will be wasted and even it will help me in making the dimensions of my machine small as far as possible and even there is one more advantage of keeping the wires at that position, this advantage is that the wires will be easily able to go or reach at each and every place where it is needed, the section of wires will be at both the sides so that all the wires can be fitted easily and there won't be a mess of wires, the wires which are attached to the boosters or to the thermocouples or to any other equipment coming inside the three levels that wires will be at their place, they will be inside the three levels and they come in the wire section when they have to go to any other level, so the wires will be placed in the wires section box which will be present on both the side

Now you would be thinking that where will be all insulation and other types of layers which will be placed on the walls like radiant panels, RCC, MLI, etc., so don't worry because I am telling you. So in this part of the different layers there is not any change, all this different type of layers will be placed on the walls only in the manner in which they were before placed, just there is one change and that change is the position of the walls, only the position of the walls are changed but different layers will be placed on the walls whether they are a new position or old position. So it is final that all the different

layers will be placed on the walls only wherever they are, so now we know the final position of the different layers and even we are done with all the things on the topic or we can say we are done with all the parts on this topic and the position of all the things is also informed or we can say that it is mentioned above, so here we end with the design topic of machine.

6. WIRE:-

So now we have moved forward and reached to the part of the wiring. Wiring is also one of the essential part of my machine, as all the electricity will be passed through the wires only. So, the wires will be divided into 3 parts and these 3 parts will have switch on and off system which will be controlled by software or by the "AIP" about which I will tell you later. The part one will give energy to the satellite engine and its parts, the part now will be the most important part among all the three parts and this part will share a large amount of the produce of the electricity which is made by the wind turbine. Now, comes the second part, the second part will provide or give energy to the motor which will rotate the rotor of the wind turbine and now this will make a cycle which will produce the electricity forever and then this will help the satellite to work forever and then the satellites will not stop working and then it will be working forever. Let's come to the third part, the third part will give the energy to the battery which is used to give power to the motor to start the machine, we can use the battery as an electricity or power storing place and then if the machine will stop working then we can use the battery as a backup system temporarily till the time we repair the machine or till the "AIP" repair the machine in our absence. So the battery can work as backup system, when the battery will be fully charged then we can switch off the 3rd part which gives energy to the battery and the power which is stored by saving the energy of the third part will be equally distributed to the first and the second part which will help us to increase the speed of the satellite. The percentage of electricity which I will give to all the 3 parts out of hundred is: -

1st part: - 50 % out of 100 %
2nd part: - 45% out of 100 %
3rd part: - 5 % out of 100 %

When the 3rd part is not working then the first part will get 52.5 % of the electricity out of 100% and the second part will get 47.5 % of electricity out of 100 %. Now I would like to tell you about one more important thing of the wiring part that is that the first part of electricity distributer also has two parts. The first part of the main first part will provide electricity to all the parts and the scientific equipment of satellite and the second part of the first main part of the satellite will provide electricity to the electric propulsion rocket engine. As we all know that the first main part will get 50% of the total electricity production, so we will divide this 50% into two parts, so the first part of the first main part will get 40% of the 50% and the second part of the first main part which is rocket engine part will get 60% of the 50 %.

Note: - we can change the percentage of electricity given to different parts of machine as per our need.
Now we will see one more important part of the wiring system which is the fourth part. This fourth part will not give electricity to the satellite and its parts, it will take electricity from different parts like thermocouple, wires and from other different parts and it will bring all this electricity to the boosters (About this parts I will tell you later), this 4th part will also take electricity directly from the wind turbine and then it will send the electricity to the boosters (About this boosters I will tell you afterwards). Now let us move toward the distribution box which is also the part of the wiring system. Basically this distribution box will distribute electricity to all the three parts according to their percentage. Electricity after getting boosted from the booster will come to the distribution box through the 4th part wire, I am using this distribution box so that the purpose of distributing electricity to all three parts according to their percentage can be simplified. Now we will move towards the last part of wiring system, so let's start. We have to switch off the battery after starting the machine for the first time and then after that we will switch off the battery and then we will leave it for charging, when we have to switch off the battery we will cut off the connection between the battery and the motor with the help of the switch system which will work automatically with the help of the software (About this software I will tell you later) and when it will be off we will switch on the third part wire and then we will charge it, after it is charged we will switch off the third part wire, if there will be any emergency then we will use the energy stored in the battery to solve the problem, and when emergency will be over and all the problem will be solved and everything will be normal we will again recharge the battery in the same way. So now we end with the wiring part.

7. Boosting and regaining loss

7.1 Booster

Let's see that how we will boost the energy produced in the machine and how we will stop from losing them. So, let

us first start with boosters. Boosters are machine which boost electricity from their original voltage to a very high voltage, boosters boosting capacity can be set by us, we can also boost 1 voltage to 50,000 Kilovolts but the condition is that the booster should have the needed number of turns or rings in the coil of the booster, the boosting capacity of the booster depends on the number of turns or rings of the coil, so we just set up the coil according our need and then we can boost the electricity according to our need. So we will use three type of these boosters and each booster will have a higher boosting capacity than another booster, which means that 2nd booster will have a higher boosting capacity than the first booster and the third booster will have a higher boosting capacity than the second booster. So, for example if the output of the wind turbine is 1 volt then this 1 volt will be boosted to 20 volt by the 1st booster, then this 20 volt will be boosted to 80 volt by the second booster, then this 80 volt will be boosted to 320 volt by third booster, so in this way energy will be boosted (This numericals are not real they are just for example). So, now we have ended with booster's part

7.2 Thermocouple

now we will move towards the thermocouple part. So, typically when an object is in motion it produces kinetic energy and heat energy, the thermocouple converts this heat energy into electrical energy, a thermocouple is a very simple machine to make and its working principle is also very easy. For making a thermocouple we need a wire, two dissimilar metals which are good conduct of electricity and heat also, then we have to join it by keeping both the metals at a bot little distance one above the other and then join both the metal using wire from both the side by joining the wire and the metal in a triangular way.

Now I would like to tell you about the working principle of a thermocouple. So, now as we all know that a thermocouple converts heat energy into electrical energy (electricity), so now let's see that how it converts heat energy into electrical energy, do in a thermocouple there are two metal so we will keep both the metal at a different temperature, one metal we will at a higher temperature and the second metal we will keep at a different temperature or at a colder or at a higher temperature from the first metal and this I will do in the following way:- As we all know that as our distance will increase from the wind turbine the heat energy emitted from the wind turbine will decrease which means that when our distance will increase from the wind turbine the temperature will also decrease so in this way we will be able to get temperature difference and then we will be able to keep both the dissimilar metal at different temperature. After keeping both the metal at a different temperature, then after some time at the joining point of wire at both the side or at both the junctions we will be able to get a voltage or electric energy, so this is the working principle of a thermocouple, so now energy produced in this way will be send to the boosters through the wires and then electricity produced by thermocouple will be boosted by the boosters.

7.3 magnetic field

So now we will move towards the magnetic field which is the next part of this topic. As we all know that there are three effect of electric current and they are: -

1. Chemical effect of electric current
2. Magnetic effect of electric current
3. Heating effect of electric current

So now we will talk about heating effect and magnetic effect of electric current. First, we will talk about the magnetic effect of electric current. So as we know when the electric current is flowed from a wire at that time the flowing current produces a magnetic field which has magnetic energy in it or electrons in it. So now I am having an idea to convert this magnetic energy into electrical energy as any form of energy can be to any form of energy. So we will do this conversion of magnetic energy into electrical energy in the following way. So we will cover the original wire from a hollow wire in which electrons can flow and this hollow wire will surround the original wire from all the sides and this hollow wire will be covered by a layer of magnet and this magnet will cover the hollow wire from some distance. So when the current would be flowing from the original wire, it will create a magnetic field which will have electrons in it. So when the magnetic field will be created, the layer of magnet will attract electrons towards it, at that time when electrons will be attracted towards the magnet, they have to pass the hollow wire, and when they will reach at the hollow wire they will be trapped in the hollow wire and they will start to flow in the hollow wire, so in this way electrons present in the magnetic field will be trapped and can be used. When the electrons will be flowing in the hollow wire, they will flow towards the boosters and they will be boosted and they can be then used. Now we end with magnetic field part.
Now we will move towards the heating effect. Whenever electric current flow from the wire it also produces heat energy, so we will convert this heat energy into electrical energy in the same way which we used for conversion of heat energy into electrical energy produced by the wind turbine. We will convert the heat energy produced by the

wire into electrical energy using thermocouple. We will make a thermocouple on the same way of the wires. If the wire is going zig-zag or crossing or in a curve shape somewhere, so at that time we will make the shape of the metal curve, crossing or zig-zag for that particular part, in simple way we will make the metal according to the shape and route of the wire, and energy produced from the thermocouple will be send to the boosters their it will be boosted with all the energy. So in this way the total energy output will increase very much which will be beneficial for us and we will be able to give more electricity to the rocket engine and we will also be able to give electricity to more scientific equipments.

So this are some of the major way of boosting and regaining loss and it will really help machine in producing high amount of energy and it will stop us from losing the most precious energy.

7. Protection

7.1 Overloading

So now friends I would like to tell you that how I will protect my machine from overloading. Directly a bit before from the distributer point, the point from where the electricity will be distributed in all the three parts, just a bit before it I will put a machine for protecting my machine from overloading, the "MCB" (Miniature circuit breaker) machine, so whenever there would be overloading or the overheating of the wire due to large flow of electric current, the switch of the MCB machine will go down and in simple word we can say that the MCB machine will trip and it will protect my machine from damage, but when the MCB machine will trip at that time it will break the flow of current and to make the flow of current again, so for that we have to switch on the MCB machine, so for putting on the switches of the MCB machine I have a trick, we will be keeping small flashlight cameras near the MCB. Machine which will keep a watch on machine and even we will keep some sensors on the wire at some particular places which will check that the flow of current through wire is there or not. So when the sensor will send the message that there is no flow of current in the wires and there is overloading due to which the MCB machine is tripped, so at that time we have to put the MCB machine switch up again and for that I am having an idea, we will be keeping an electric pulley above the MCB machine, whose rope will be connected to the switch of the machine, the electric pulley will be double sided, the pullies which we see in ships, which are used to take up and down the anchor, we will keep a miniature form of the pulley and electricity to the pulley will be supplied from the electricity came out from the boosters, a bit part of electricity came from the boosters, upto 4-5 volts
(just for example) would be send to the electric pulley and whenever the MCB machine will be tripped at that time the electric pulley will pull up the switch and the current will again start to flow and the machine will again start to work and the electric pulley will be controlled by a switch which will be controlled by the software and the software will be controlled by us, when we will get information about the tripping of the MCB, we will send a message to the software to start the MCB by starting electric pulley, and when the MCB will be started the electric pulley will be switched off by the software as per our command, if we do not respond within 1 hour then the AIP will automatically start the MCB. (About software and AIP I will tell you later) So in this way we will protect our machine from overloading.

7.2 short circuit

So now I would like to tell you about another problem which is of short circuit. Basically a short circuit is a sudden flow of very large current due to a direct live and neutral wire and is known as a short circuit. So now I will tell you the way to protect the machine from short circuit. We will be using a stabilizer to protect our machine from short circuit. We will place the stabilizer before the MCB machine, the stabilizer will protect our machine and its equipments from short circuit. So in this way my machine will be safe from short circuit. The current will flow from stabilizer to MCB machine where the stabilizer will neutralize the large flow of current then after the perfect/pure electricity will go to distributer and then it will be distributed to all the parts of the space machines and if their will be no short circuit then electric current will simply flow from the stabilizer and then the further process will happen. So this is everything about the stabilizer.

7.3 Fire

So now I would like to tell you about another problem which is of fire. So in my machine there can be two type of fire, 1st the normal fire and 2nd is electric fire, and to protect my machine from both type of fire I am going to use fire extinguisher. A fire extinguisher is a machine which helps us to protect our machine from fire, it has certain fluid liquid and gases which it releases and when these materials come in contact with fire, they neutralize the fire and blow off the fire. So there are many type of fire extinguisher and in my machine, I am going to use the carbon di oxide fire extinguisher which is the best fire extinguisher for electric and normal fire, but we will do

some modification in the fire extinguisher, we will change the opening of the fire extinguisher, the place from where the CO2 and water and other thing will come out. We will keep its opening like a spray opening which is like an opening in scent. So we will keep an electric pulley above the fire extinguisher and on this electric pulley we will hang a weight and we will be keeping fire and smoke sensors in the machine at particular places, so when the sensors will sense fire or smoke it will send the message to the software and then the software will send a message to us and if we didn't respond within 30 to 45 seconds then the AIP will take over the situation and then it will start the electric pulley and then the weight will go down and then it will press the spray like opening and when the fire will get over and the sensors will send message that fire has got over to the software and to the AIP, then the AIP will stop the electric pulley and it will also stop working and the software will send us the message that fire is over, the leftover CO2 and water will be thrown out of the machine through a vacuum chamber, all the CO2 and water will be sucked out of the machine through the vacuum chamber and all the CO2 and water will be removed out of the machine and the machine then will be clean and safe, there will be two fire extinguisher for the safety of the machine, at one time one fire extinguisher will only work and both the fire extinguisher will work in the same way and the electricity used for extinguisher will be same for both. As at one time one extinguisher will only work.

One more important thing that the fire extinguisher will get power from the 1st part. So this is everything about the fire.

7.4 Heat

So now we will move towards the next problem which is of heat, if there will be an immediate heat fluctuation then heat energy in the machine will increase and if at that time the tech won't be able to take the extra amount of heat energy then the automation may be get damaged and at that time the temperature of the machine will increase and then my tech could be in danger and then at that time if the temperature will rise my machine could get damaged and the other thing is that due too high temperature all the scientific equipment or the electronic equipment may get damaged and then the satellite or the space vehicle and my machine would be of no use and will become a space junk as both the things will be damaged and destroyed, so to protect my machine and the satellite or space vehicle from this problem I am having an idea to fabricate a heat shield of multiple layers so that at the time when the temperature will increase immediately then at that time we will have a powerful heat shield which will be able to take the heat energy and then all the amount of heat energy will be taken by this successive shield and then there will be no more heat will be left and if no heat energy will be left then there would be no more risk and then my machine will be save from heat energy and it will not be damaged or destroyed and even all the scientific equipment and all the electric equipment will also be saved. So let's put a view on this heat shield.

7.41 Radiant Panel

So now we will move towards the next topic which is radiant panel. Now you would be thinking that what is this radiant panel, wait I will tell you. So basically a radiant panel is a panel which can chill or heat a room or a place according to our need. So we will use the radiant panel which can cool the place as there
are two types of radiant panel in which one panel can cool the place and another panel can heat the place. So we are using the panel which will cool the place as we have to decrease the heat energy in machine . So now we will see about the cooling radiant panel. A radiant cooling system is a temperature-controlled surface that cools indoor temperatures by removing sensible heat and where more than half of heat transfer occurs through thermal radiation. Heat will flow from objects, equipment and lights in a space to a cooled surface as long as their temperatures are warmer than that of the cooled surface and they are within the line of sight of the cooled surface. So if we will say in simple word then cooling radiant panel is a row of panel which cold down the temperature of a place by using thermal radiation. This radiant panel will help us to cool down the temperature of the machine or from the extra remaining heat emitted by the machine. So in this way I will protect my machine from extra heat and high temperature, I have planned to cover my machine from a layer of radiant panel from all the sides so that my machine can be save from all the sides. One more impatient thing that if my automation will go out of the solar system or beyond the heliosphere at that time the machine will not get any heat energy emitted by the sun and at that time everywhere there will be cold, so for that time I am having an idea to protect the scientific equipment from extra cold. So as my machine will produce heat, I am planning to give another part of this heat energy to the equipments so that they don't freeze or stop working. We will move the panel from their own position for a bit time so that a part of this heat energy can be given to the scientific equipment So I have planned to make a Radiant panel of the middle 'movable' so whenever needed we can just remove the radiant panel and provide heat energy to the scientific equipments so that they cannot be damaged. I have planned to open this Radiant panel in time

slot so that there would be a balance of temperature at the place where are scientific equipments so in this way my machine will also safe scientific equipments from cold or from freezing them so this way extra heat energy emitted by my machine will also save scientific equipments, now you will be thinking that how this radiant panel will move, the retort to this query is 'small electric pullies and ropes', so there will be two pullies on both the sides and whenever the mid radiant panel has to be opened both the pullies will take it up and then it will be opened and the heat will be distributed to all the equipments and the energy to both the pullies will get in the older form, in the form in which all the other pullies will get. Thus this is everything about the radiant panel and in this way my machine will be save from excessive heat and in this way my machine will not be damaged by high temperature and by the high heat and in this way even all scientific equipment will be saved from heat emitted by my machine.

7.42 White Black Marble Layering

This heat shield will be a white Black marble layering, wait about this white Black marble layering I will tell you in detail. White Black marble tile layering is a type of layering which is used to protect object from heat energy, this white Black marble tile layering is mainly used in spacecraft, it is used or installed at their bottom so that at that time when this spacecraft are again re-entering in the earth's atmosphere at that time whatever heat energy is produced due to speed, G-plasma and other thing can burn the spacecraft so to protect the spacecraft from such a high heat white Black marble tile layering is used. So I have planned to use this white Black marble layering in my machine as the extra or as the 2nd heat shield after the radiant panel. This 2nd shield will be installed or placed directly above the radiant panel and the middle radiant panel which is open able, above this radiant panel a separate layering will be placed which will not be directly connected to all the other layering, so in simple words we can say that this layering well also be open able like the middle radiant panel and at that time when layering will be closed then it will join all the other layering and or will be properly joint when them with no place leaving and then no heat energy will come out our will be escaped without our permission, so in this way the second marble layering will be placed above the radiant panel, this is our second protection layer.

7.43 RCC/ MLI

If the heat energy increase more than I am having one more idea of one more shield. So let's see this shield, so basically this shield can be of RCC (reinforced carbon carbon) or it can be of MLI (multi-layer insulation) if the heat energy will be very high and then both the shields agree not able to take this heat energy then this layer of RCC or MLI can be used (we can take any later according to our need or our choice and even this layer is optional if we want them we can take it but if we don't want them we will not take it) So at the time when the heat energy will increase very high due to some reason and then if both the heat layer or both the heat shields are not able to take this heat energy this layer of RCC (reinforced carbon carbon) or MLI (multi-layer insulation) can be used, (this layer has to be chosen by us according to our need and even this layer is optional if we want then we can keep it and if we don't want then we will not keep it, this layer is just for precaution)and then if this layer will be used then if in any case there would be very high heat energy which cannot be taken by both the shields then at that time this layer will be very useful for us because this layer will be able to take all the extra heat energy and then my machine will be save from the extra heat energy and then even all the scientific equipment or electric equipment w will also be save from an all the extra heat energy then at that time there would be no such risk off my machine and equipment getting damaged. So this is everything about this extra heat layer of RCC or MLI and now also I am telling you that we can take any layer or can be of reinforced carbon-carbon or else it can be of multi-layer insulation, the selection of the layer material is upon us, so we can take any of the layer among this two material according to our need and choice and even this layer is also optional, so if we want them then only, we can keep it or else if we don't want them, we will not keep it.

So here I end with this heat shield part.

Note:- the arrangement of the heatshield layer- 1st the radiant panel layer will be there, then at the second position white black marble layering will be there and then at the last or at the top the MLI and RCC layer will be there (third layer is optional).

7.5suspension and vibration

So now we will see the next problem which is of vibration of the wind turbine and its rotors at a very high RPM. When the AC motor will rotate the rotors of the wind turbine at 3600rpm, which is a very high rpm, at that time there would be very high vibration and now I am having an

idea to neutralize this vibration. So let's see the idea. I have divided my idea into two parts, the first part will be rotor part and the second part will be the wind turbine part. So now we will see the first part. So as I told you that whenever the motor will rotate the rotor there would be a very high rpm and then there would also be high vibration, so to neutralize this high vibration I am planning to use suspensions in the following way but before seeing that how we will use suspensions I would like to tell you in short that what are suspensions. So basically a suspension is essentially a damped spring producing opposing force when being compressed. The force produced by the dampers depend on how fast the suspension is being compressed or elongated (contact speed), opposing the movement. When a wheel is lifted from the ground the suspension produces no force. So this is a suspension. So I am thinking to cover the rotor rod with the layer of suspension and then this layer of suspension will be covered by a layer of metal, wake I will explain you about this in detail. So the vibration will be there in rotor rod, which means we have to neutralize vibration in the rotor rod. The rotor rod is a rod which rotates with the help of the rotation of rotors. So I have planned to cover this rotor rod with a layer of suspension so that the vibration can be neutralized and then this layer of suspension will be covered by a layer of natural so that the suspensions could get a compressed place and then if the suspensions will get a compressed place the n it will be easily able to neutralize and even this layer of metal will be thick enough so that it would not be damaged by the immediate relaxation and contraction of the suspension and even by the vibration and pressure, I am planning to make the metal layer 1inch thick so that it could be able to attend in this all conditions and this metal will be aluminium, I have used aluminium because it is a very hard metal and it is also able to work in very high pressure and even all the aeroplane are made with this aluminium because they are very strong. So because of all this reasons I have chosen aluminium as the metal layer (we can choose any other metal according to the need and condition, I have chosen aluminium because I found the that it can stand in all this conditions, of we want we can change the metal) I am planning to make the aluminium layer hollow and then I will install some "X" shape joining in the hollow place, by doing this the metal layer will become more powerful and then it will be easily able to take pressure on it and then the metal layer will not be damaged and then it will be easily able to work. Now I will tell you one of the most important thing of this part, all this layer of the suspension and neutral which will be joined to the rotor rod will also be rotating with the their rotor rod so that the rotation of the rod will not be affected and even there would be no problem or there would be no obstacle which will come between the rotation of the rotor rod and if the rotation will not be affected then the energy production will also be not affected and then the energy production will note decrease send it will produce energy in a maintained level or in the needed amount. So this is everything about the first part or about the rotor rod part of the suspension part.

Hollow metal layer is also very important as this part will help in stopping the high vibration with the help of the suspensions, even I would like to tell you a very good thing about this hole metal layer and is going. The fighter jet like Eurofighter use this technique of home metal in their wings so that their wings can take more pressure on them and even they can work in harsh conditions result.

So now we will move towards the second part of the suspension part which is wine turbine part. So let's see about this part. So as now we have mostly neutralized all the internal high vibration made by the wind turbine, but still there would be a bit vibration may be left which can vibrate the wind turbine and if wine turbine will also vibrate and then this vibration may cause damage to my machine, so to protect my machine from damage caused by the vibration I am going to use the same technique of suspension in the following way. I will cover the wind turbine again with the layer of the suspension and again this layer of suspension will be covered by a layer of hollow metal which will be having" shape joining. By converting the while wine turbine by this layer is the suspension and metal all the remaining vibration will be neutralized and then my machine will be save from any type of damage caused by the wind turbine and we will not have any tension of damage caused by the very high vibration to the wine turbine and its internal parts as we have protected the wind turbine internally and externally also by converting it by a layer of suspension and hollow metal which is having X joining, so in this way I will protect the wind turbine and my machine from high vibration. This is everything about the suspension part.

8. Brakes:-

So now I would like to say you about the brake and in brief. So now as we all know that my machine is also going to have brake and this brakes will be used to stop the space vehicle or the satellite and even, we all know that the today's technologies spacecraft are not having brakes, my machine brakes will solve this problem of not having brakes in today's satellites, if my brakes will be made and used then it will also solve one of the biggest problem of the space industry. So as we all know that I am going to use electric propulsion system or in simple words the engine which will work on electricity in my machine and this

engines are present at the back of the space vehicle so that they can get push and they can move ahead (According to Newton's third law of motion). For example if the main engine capacity is 1,00,000 km/hr, if we will install nine mini engines whose total capacity is 1,00,000 km/hr. So whenever we want to apply brakes, we will start the front nine mini engines which will be present at the front of the machine, wait I will explain you about this topic in brief:-

For example if the satellite is moving and we want to apply the brakes and at that time if the speed of the space vehicle is 50,000 km/hr and the engine is working on electricity, at that time we will provide the engine half of amount of energy then the original amount and the other remaining half energy will be equally distributed among all the nine mini engine(this nine mini engines will be placed in front of the satellite), so now we are having engine on both the sides with equal amount of energy. So now we know that there is no gravity in the space which means that there is no external force to stop the object from moving or accelerating as according to Newton's first law of motion if there is no external force acting upon an object then that will continue to move or accelerate at the same speed or at that constant speed forever and on earth this external force is gravity which helps the object to stop itself from moving, but in space there is no such external force or gravity, so only we are not able to apply brake. But if there will be nine mini engines then they will act as an external force, as they are putting force in the opposite direction of motion and due to this force satellite's or the space vehicles speed will decrease and then it will be able to work as brakes. We can understand this with the help of an example. So for example if a car is moving at the speed of 50 km/hr and the car stops getting acceleration it will slowly-slowly stop due to an external force is getting applied on it which is gravity and weight and similarly if we will take the same example of the car moving at the speed of 50 km/hr and if we will provide more acceleration then it will start moving faster due to gravity and its weight as when we are accelerating the car, the gravity and the weight pulls the car and the car starts moving faster, but in space we are not having such force or gravity to stop or accelerate the satellite to move fast, so this is the reason why we are using nine mini engines, as there is no gravity to act as an external force, so here the speed and the energy gained by the nine mini engines will act as the external force for the space vehicle to stop or to decrease its speed. So with the help of this example you would have understood that how the brakes will work. If we want to decrease the speed and not want to stop the machine then at the time when we will reach nearby the required speed at that time, we will switch off all the nine mini engines, by stopping it a bit before from the required speed the engines will slowly-slowly lose their power and shut down as we are not giving it electric energy and while it will be shutting down at that time a bit amount of energy will be remaining their which will help the machine to reach at the required speed. One more important thing that all this switching off and on of the mini engines, main engine and of all the other part will be controlled by the software about which I will tell you afterwards. So now this is everything about the brakes of the machine and according to me this technique will be very fast and very easy to use and this technique will change the future years of the space industry. So now I finally end with the braking part.

Speed Control:-

So now I would like to tell you about the speed control part of my machine. Now I will tell you that how we will control the speed of the space machine through my machine. Actually the speed will be controlled by the brake system of nine mini engines as I told you before that the brake system can also
be used for the speed control, as when the brakes will be applied at that time the speed of the whole space machine will reduce so while reducing if we will stop the brakes system or the nine mini engines, so at that time the speed has been reduced, at that time the speed can be controlled. So in this way speed will be reduced and now we will see that how we will increase the speed of my machine. So while applying brakes we have given 50% of the energy to the nine mini engines but now when we want to increase speed at that time, we will give 25% of the energy to the nine mini engines and 75% of the energy will be given to the main engine. As we want to increase the speed this time, we are giving 75% of electricity to the main engine. So now as we have given 25% of electricity to the nine mini engine, less external force will be created and the energy created by the main engine will have more force, so if the main engine will have more force than the external force then the speed will not decrease it will increase because the external force is less, so at that time there would be less opposition of motion and the machine will not reduce its speed but it will increase its speed and their but it will increase its speed and there would be more acceleration in the straight direction and there would be less opposition so the speed will increase than the original speed. So in this way speed will increase. So now we will see that how we will divide electricity into the main engine and the nine mini engines. You would be remembering about the distribution box, the box from where electricity is divided to all the three parts, so I am going to use this distribution box to divide the electricity between the main and the nine mini engines, as we all know that the

distribution box will be controlled by the software, all the data will be given to the software that how much electricity it has to divide among all the three parts and how much electricity has to be divided in first part between the satellite part and engine. So as we all know that this software will be controlled by us. So my plan is to use this distribution box to distribute electricity among the engine and the nine mini engines so at the time when we want to distribute the electricity between the engine and the nine mini engines we will send the software command to distribute electricity between the engine and the nine mini engines with the percentage of distribution between both the engines and then electricity will be distributed to both the engines with the help of us and the software and at the time when we have to stop the distribution of the electricity between the main engine and the nine mini engines and we have to stop the nine mini engine and we just have to give electricity to only the main engine at that time at that time we will send message to the software to stop the distribution of electricity between the main engine and the nine mini engines and then the software will accept our command and will stop the distribution of energy between main and nine mini engines and then the energy will only be given to the main engine and no energy will be given to the mini energy and if energy will only be given to the energy will be given to the mini engine, then without the electricity the mini won't be able to work and the mini engine will be stopped and only the main engine will work. So in this way we will distribute between both the engines, so in this way energy will be distributed both the engine and now here I end with the energy distribution part between.

9. Energy Production Increase & Decrease:-

So the next topic towards we will move now is that how we will increase or decrease the energy production. So as we all know that energy will be produced by the wind turbine will need rotational and rotational kinetic energy to produce electricity and to produce this electricity wind turbine will need rotation of its rotors and for this rotation of rotors, we are using a low voltage motor which will be powered by a very big battery. So to increase or decrease the energy production we will take help of the low voltage motor which will rotate the rotors of the wind turbine of the wind turbine. So now I am having an idea to make the low voltage motor software connected, which means that I am planning to connect the software which I have been using in the whole machine even to the low voltage motor I am planning to install a software connected panel to the low voltage motor which will be connected to the machine software, this panel will control the rotation per minute (RPM) of the low voltage motor, this panel will have three options which will help us to control the production rate of the machine, this three option are:-

1-Low
2-Normal
3-High

Now I would like to tell you about all this three options, so let's see. First were will see about the Low option, when we will select this low option it will be activated and it will decrease the RPM of the motor and if RPM will be decreased then there will be less rotation of the rotors and if there will be less rotation of the rotors then less energy will be produced, which means we can say that litre option will help us to decrease the energy production of the machine, so this is everything about the Low option and now we will move towards the next topic of this post which is the normal option, so let's see that what is this normal option So basically the normal option will keep the energy production of the machine at a normal rate, the normal option will be the default option, this normal option will allow the motor to rotate at is normal rate and is the motor will rotate at the normal rate then then energy production will also be normal, which means that energy production will not be too high or it will not be too low, so this normal option will keep the energy production normal, so this is everything about the normal option. So now we will move towards the third and the last option which is the high option. As the word high suggests itself that when this option will be selected the energy production of the machine will be very high so let's see about this option in brief. So at the time when this option will be selected the rotation per minute or the rpm of the machine will be increased and if the room will increase then the rotation is rotors will also increase and if the rotation of the rotors will be increased then the energy production is the machine will also be increase which means that we will get more energy and if we will get more energy than we can give more power to the rocket engine and we can use it for more other purposes also. So in simple words we can say that high option will increase the energy production of the machine. So now we here end with all the three options and now we will see the users of all the three options so now let's see the uses of all the three options. So first we will start with the low option.

1:-We can use low option at the time when we don't have to use many parts or else at the time when the speed will be decreased, so to maintain that speed we have to decrease the power given to the rocket and if the power given to a part is decreased, so to prevent the production of extra energy we have decrease the energy production, so at that time this option will be very useful and in many

other situation where the energy production has to be decreased, at that time also this option will be very useful. So this is the uses of the low option and now we will move towards the uses of the normal option.

2:-So, as we all know that normal option is a default, so it will be normally used. So, we can say that this normal option is not having much uses it will be used when everything is normal and at the time when we have to do no changes in the speed or no changes in any other part of the machine where anything related to the energy hasn't to be changed. So we can say that the normal option will be normally used or else it will be in use when everything is normal. So this is all uses of the normal option and now we will move towards the uses of the last and the third option which is the high option, so let's see.

3:-So now we will see the uses of the third option which is the high option. So basically this high option will be used at the time when there will be use of more energy like at the time when we have to activate all the parts or at the time when we have to increase the speed is the movement speed of the machine and for that we have to increase the speed of the rocket and for that we will need more energy, so at that time we will need more energy and if we want more energy than we have to increase the energy production of the machine and in that situation this option will be very useful or we can use this option at the time when we do not have to decrease the energy given to the rocket and at that time only we have to use all the nine mini engines so at that time also we will need more energy and for that situation this option will only be useful and this option can be used in many more situation like this. So this are all the uses of the third option and now we are done with the uses of all three options and now we will move towards the last and of the most important topic of this part which is the software part. So let's see about this in brief.

So as I told you that the software will be following our command, so whatever command we will send to the software it will execute that command and we will send the command according to our need, so we can say that the software will complete all our need related to the machine, so for example if we will send the software command to activate the high mode and when our work will be done then we will again send the software the command to deactivate the high mode and activate the normal mode and then the high mode will be deactivated and the normal mode will be activated. So we can say that software is the thing which does all the changes in the machine and in the RPM of the machine according to our need. So we can say that software is very important for us and for the machine so that it can keep the machine stable and normal according to our need and one more important thing that the software will be connected to us through the antenna like how other software's of other satellites are connected to them. So this is everything about the software and even also about this part. Son now I would like to end with this energy production convert part .

So now we will move forward towards the next thing. Now we will see that how can we decrease more energy production. So to reduce more energy production we can put a wire from the first electric booster which will directly take the electricity to the second booster, means when the electricity the first electric booster at that time we will take a wire from a bit before starting of the electric booster which will take the electricity directly to the second electric booster, so by doing this less energy will be boosted, which means that less energy production and then the engine will get the needed amount of energy to maintain the reduced speed and if there is any situation when the satellite needs less amount of energy at that time this part will be very useful and the wire which we will put from the first electric booster will have switch which will control the switching on and off of the wire, this switch will be controlled by the software, which will be controlled by us. We will keep one more switch a bit after the wire and a bit before the first electric booster which will control the switching on and off of the electric booster, so whenever we want to close the electric booster and end the electricity directly to the second electric booster at that time, we can switch off the switch of the electric booster and switch the switch of the wire which will take the electricity to the second electric booster. So in this way the electricity will not be boosted by the first electric booster and it will directly go to the second electric booster and so in this way less energy will be produced as there will be less boosting of electricity and then the whole satellite, its parts and the engine will be able to get less amount of reduced energy. So now I here end with this part.

So now we have seen ways to increase and decrease energy but now I will like to show you one more effective way of increasing energy. So now I have planned to install two more electric booster "booster 4" and "booster 5", this boosters will be switched off when the machine will be working in normal basis and when we want to increase the energy production, we will switch on the boosters according to the need, we will switch on the boosters according to the extra energy required, if less extra energy is required then we will only on the booster 4 and we will keep the booster 5 off. We will keep a wire at the point from where the boosted energy from booster 4 come out

and then that wire will directly skip the booster 5 and then it will join directly after the booster 5 and if both the boosters are off then we will again put a wire from booster 3 and then it will join after booster 5. Both of this wire will be having switches which will be controlled by software and even the wires between the electric booster will have switches which will be controlled by the software and software will be controlled by us. So the actual reason behind installing the switches between the boosters is that whenever we want to decrease the energy level more than the normal at that time switch off one or two boosters so that less energy will be boosted and if less energy will be boosted then less amount of energy will be there and that to it will be less than the normal level, and then we will be able to get the less energy that to less than the normal level which is needed so this is the actual reason behind installing switches between the boosters. So this is everything about that how we will increase the energy production of the machine whenever needed and this option can be useful in many situations, for example if one of the normal booster is not working due to some reason so even at that time, we can activate the 4^{th} or 5^{th} booster according to our need and even this extra boosters can be useful in many other similar situation of this type.

Here, I end with energy production increasing and decreasing part of my machine.

10. Software and AIP:-

So now I would like to tell you about the software of my machine. So basically software is a program which executes our command in any software program, every software has its own coding and based on that coding the software work, we can say that coding is the way and is our command which we write in a certain format so that it can be updated in the software machines or in the software part of the machine. So basically the software of my machine will be programmed from programming language known as python. I have chosen this programming language because python has many advantages like programming in python language is easy than other programming languages such as Pascal, etc., it is having a very good speed and a good productivity, it is easy to read and learn, it is easier to write a program in python and it is the best programming language according to my personal experience. The main work of the software will be to obey and complete the commands send by us to the machine through antenna and even to send us the work and things happening in the machine, for example if there will be fire in my machine at that time the sensors on the different parts of the machine will send a message to the software and then software will send a message to us and then the further process will happen and then in this way the software will send data of various things happening in my machine through sensors and other things and if there is an emergency like a fire and if humans there are not responding till 30 to 45 seconds then an artificial intelligence program or AIP will take action on its own in order to save the machine and after the emergency is over the AIP will send a message to software that emergency is over and that message will be forwarded to us by software that the emergency is over. So in this way my machine will be saved from all the different types of emergency. Even this AIP or artificial intelligence program will be programmed in python language which will make our work easier. So now let's see about the AIP (artificial intelligence program), it will be a program which will work in the absence of human beings, it will take care of the whole tech, the tasks going in it, handling emergencies like fire, asteroids in our absenteeism, and it will be capable of doing more different things, means in simple words it will be like a guardian of the automation, so this is the "AIP" of my machine.

11. Sensors:-

Now I would like to introduce with a new topic of sensors which is a very important part of the machine. So basically sensors are the small machine which senses a particular thing and then tells about that, there are many types of sensors which have different work and there action are different. So the sensors which we will use in my machine are:-

1. Temperature sensors
2. Smoke sensors
3. Ammeter
4. Object detection sensors

So now these are the 4 major sensors that I am going to use in my machine, so let us know about them in brief:-

1. Temperature sensors:-

A temperature sensor is a device, usually an RTD (resistance temperature detector) that collect the data about the temperature from a particular source and converts the data into understandable form for a device or an observer. After the results are gained by the sensors then the result will be sent to the software box and then through the software box the software will send us the data, if the temperature is above 80 to 90 degrees then we have to stop the machine for a short period of time so that a harmful situation may not be created and if we are not taking this action when the temperature is high then this action will be taken by the AIP. The AIP is very useful as at

night time if any emergency situation is there and we are not knowing about it then this AIP will save the machine. So we can say that temperature at the time when it will come down the software will again send us a message to start the machine and then the further process will happen and if we are not taking this decision then again, this action will be taken by AIP. So in this way we can say that AIP is very useful for us. So now let's move forward

1. Smoke sensors:-

So now I have smoke sensors which will sense all the smoke or gas leaking or coming out in my machine and then it will send data to the software and then to us and if we don't respond then the AIP will take action on its own. If there is smoke leaking then a fire extinguisher will be on and all he fire will be stopped will be stopped and all the carbon-di-oxide will be removed by a vacuum chamber and if there is a gas leak first, we will open the vacuum chamber and we will remove the gas and if does not remove and gets converted into fire with the help of fire extinguisher we will stop it. So this is everything about the smoke sensors.

2. Ammeter:-

Now I will tell you that how we will measure the electricity produced in my machine.
An ammeter (from Ampere Meter) is a measuring instrument used to measure the current in a circuit. Electric currents are measured in amperes (A),
hence the name. So with the help of this ammeter we will be able to measure electricity produced in my machine. All the data gained by the ammeter will be send to the software and then to us and using this sensor we will be able to measure the electricity produced in my machine and even after the changes in the energy production for changes speed, this result of the change can be seen easily and if the machine is stopped due to any reason then with the help of this we can know it and then we can start it, it will help us to see the electrical current produced in my machine, so we can say that this sensor will make our work easier.

3. **Object detection sensors:-**

So now I will tell you about the object detection sensor of my machine. So we will keep a laser beam whose range will be upto 10km and if the beam of the light is broken then a message will be send to us by machine that the beam of the laser beam has been broken, through the software then for more confirmation the software will also activate 10km range camera which will take the photo of the object of there and then it will send us the photo taken by the camera and after all the confirmations the software will send us a message to change the route and trajectory. So in this way we will get to know that an object is coming towards the machine and then we will get time to change the trajectory or the route of my machine slightly and now in this way we will be able to save our machine from getting damaged and if we don't respond then the action will be taken by the AIP. So we will have 12 type of this sensors on the whole machine, we will keep two sensors on each side which will cover that particular side of the machine. Each sensor will take out three beams of laser, two beams will be straight and one beam will go slanting towards the edge, so we will have 4 straight and two lines at both the edges and even this sensor will tell us at how much distance the beam of laser light is broken and, in this way, we will be able to find out distance of the object from my machine. So now we have a very simple way to protect my machine from objects (Asteroids and meteoroids) coming towards my machine and which may harm my machine. So now I end with the sensor part.

12. Coupling:-

Now we will move forward towards the next problem which is joining of the wind turbine rotor and motor, wait about this I will tell you in brief:- At the time when there will be a very high rotation of the rotors of the wind turbine the joint of the wind turbine rotor and the motor may be damaged and so to protect this damage, I am having an idea. So let's see the idea. You would be knowing about an equipment named coupling, if you don't know then do not worry because I am going to tell you about the cooling. So basically a coupling is a device used to connect two shafts together at their ends. The primary purpose of couplings is to join two pieces of rotating equipment while permitting some degree of misalignment or end movement or both. So this is the coupling equipment and I have planned to use this equipment in my machine to join the rotor rod of the wind turbine and motor. If we will use coupling device then there would be no chances of getting detached of the rotor and motor as it will hold both the things very tightly and then they will not get detached and then even we will not have the problem of rotor rod of the wind turbine and motor getting detached. I have used coupling device only because experts have found that the joining of coupling is far better than the joining of the welcome offer the joining dine by any other techniques and even coupling needs less Maybe less than other joining method If we use welding then there are many chances of breaking of the welding because at the joint due to very high rpm a very high amount of tension and pressure will be created and welding won't be able to attend in this type

of harsh conditions and then the welding could breaking and then the machine would be damaged and then the machine won't be able to function and then the machine will become a waste but if we will use coupling then we will not be able to face such problem and we will not have to worry or take tension of breaking of the joint and if we will use coupling there won't be any kind of this problem and there would be no such risk everything would be fine safely author any kind of risk So this is the reason why I am using coupling in my machine and not using any other method and even this is everything about the coupling part and using this equipment there would be no risk of breaking of the joint of the rotor and motor as coupling is far better than any other joining method. So here I end with the coupling part.

13. Name & Characteristics:-

So now as we have reached to the end of my project, I would like to tell you the name of my project So the name of my machine is "UTKARSH", don't think that I have kept it on my name, wait I will tell you the actual rain that why I have kept my machine name "UTKARSH". So the actual reason why I kept my machine name UTKARSH is the meaning of the name word UTKARSH. The meaning of UTKARSH is that it means success, rising Sun and a step towards the bright future and I think so that my machine characterize and it's work represent the actions of these words only. If my machine will be made them out will give us a very big success in the space industry as my machine will be able to produce electricity forever and then the satellites and other sleeve vehicle will be able to work forever and then we don't have to make new satellite as the replacement of the old satellite and then this will save a very huge amount of money of us and then even this will help us in decreasing the present space junk or garbage as the satellites will work forever and if the satellites will work forever them there would be no retiring is satellites as they will work forever and then if a satellite will work forever then there would be no more space junk or garbage and then this will help us in making a clean space and then there would be no risk on life of astronauts and then after some years slowly- slowly we will have a clean space and then a very big problem of space junk or garbage will be solved forever and even the space exploration will become very easy your us and then going in space for space exploration will become very easy for us and then it will be a very big success for us, so this is the reason why my machine will be a very big success for us and even a very big success for the humanity. So this is the reason why my machine will be a very big success. So now I would like to tell you why my machine will be a rising Sun. So as I told you that my machine is rising Sun and now, I will tell you that why my machine is rising Sun. We all know that Sun mainly produces a very high amount of solar energy and as we all know that this solar energy is a form of energy and which means that Sun produces a very high amount of energy like my machine, so as my machine is also producing a very high amount like sun, so I don't think that it would be wrong to tell my machine arising sun as my machine and son both are producing a very high amount of energy and there is one more reason that why my machine is rising Sun I will tell you now. In many places people believe that are rising sun is a symbol of positivity and progress I think so that my machine also suits on this two words which are positivity and progress now I will tell you that why my machine suits on this two words. At the time when my machine will be made and used I think so that it will bring positivity in the space industry as my machine is a source of unlimited energy so we will not have any problem of fuel and if you will not have any problem of you they would be only positivity and positivity as we would not have any problem of fuel, we would not have to make any fuel containers in the satellite and that there would be no problem of weight and of the amount of the fuel which has to be carried like for example the fuel problem which happened and the mission of ISRO which is known as Mangalyaan So at that time we will not have any problem and if you will not have any problem of you then we can work positively and lightly on other things or we can see on other parts of the satellites like scientific equipments for electrical or we can just go to the development of the material of the satellite for the development of the material of the rocket engine and at that time if we don't have to take the fuel container satellite weight will decrease and even the space occupied by the fuel container will also decrease as the weight and size of my satellite are less than the size and the weight of the container in this way we can positively not have any problem of fuel and of weight so in this way my machine will help all the scientist and engineers positively and calmly on other part of the machine and even this will help us to decrease the budget but also a symbol of positivity as we are doing a positive progress and now I would like to tell you that I also a symbol of progress So as I told you that my machine is also a symbol of progress. So now I will tell you that by my machine is a symbol of progress like the rising Sun. As my machine is having so many advantages I think so that my machine is showing as progress in the space industry and I'm sure this progress will not be waste I will progress and I will bring a day when this progress will be at top, so as I told you that my machine is having many advantages so it will show us a huge progress and this progress will increase and increase as our technology will go ahead and ahead my machine will be a machine which will always show progress in the space industry and

this progress can be seen in many ways like now we are not having the problem of fuel so we can easily go to missions which are very far away from our planet Earth like the missions to Pluto Proxima centuari or to the other stars and even the satellites fuel will not get over which are very advantage for us like the Hubble telescope as we all know the Hubble telescope fuel got over so due to Hubble's this problem it won't be able to work for future and then Hubble telescope will not give us information about many other stars and even it will not be able to explore other stars So now I would like to tell you that my machine is a step towards the bright future. So as you all know that my machine can reduce electricity or we can see energy forever, and even my machine I have a many more abilities which can't be seen next 40 to 50 years will go by a normal speed, but now I have made a machine which will help us to directly go 40 to 50 years ahead from today and even I think so that as my machine is having so many abilities regarding energy it will bring revolution in the space industry and even in the energy industry and this revolution will really come into existence then it will help us to take a use step towards a bright future. Even my machine will make many future missions very easy and is this machines will become very easy then we can take the steps towards a more bright future at a very high speed and was in the future they will be many modification in my machine so my machine will help us to take the steps to a bright future at very high speed in this way we will be able to become a more advanced civilization and I don't think so that it will take a huge amount of time for us to become advanced civilization with the help of my machine and we will become an advanced civilization then we can go to many other planetary missions or to other solar systems or galaxies very easily and even we will be able to make a bases on various planets So this is the reason why my machine will be a step towards the bright future as it will lead to a bright future, So this is the name and characteristics of my machine.

14. Important points:-

So now we will see all the important points of my machine:-

1. We can maximize or minimize the size of the machine according to the size of the satellite or the size of the space machine, but then it will affect the production of electrical energy, if we will keep the same speed, if we will do changes in the speed then the production of electricity will become same.

2. The metal from which thermocouple will be made are Nickel, Copper or Iron. I have chosen this metal because they are inexpensive and are good conductor of heat and electricity.

3. The coding of the software or the AIP can be done in any other programming language. It is not compulsory to do programming in python programming language, I have given preference of this programming language because I found this programming language very comfortable according to my personal experience. If we want, we can use any other programming language.

4. All the parts and equipments of the satellite will be joined to the walls of my machine with the help of screws, we will take rod like structure and we will join that rod like structure to the parts of the satellite and then the combination of this rod and part will be joint to the walls, with the help of this thing all the parts will be properly fixed to the wall and when the vacuum chamber will be open and that time they will not move or float and then it can't damage the machine.

15. Conclusion:-

So now I would like to end with my project and before ending I would like to tell you some few words. So this is my plan and if my plan gets successful then it will be a very big revolution in the space industry and by using my machine in the mission the cost of the mission will reduce and then it will also help us to save our natural resources and many other things, the idea of making work a satellite forever and many other human made space vehicle will come after 40-50 years according to me and the method will also be very difficult and different from mine one but if we will use my method my machine then we will be able to get this technology 40 to 50 years ago and that too in a simple way and even this help us to decrease the size and reduce the weight of the satellite so that we can put more research equipments which will be profitable for all of us and it help us to reduce space garbage as the satellite and other space machine will work forever and will not become a garbage as its lifespan is forever and missions like Hubble will work forever and for more time, for example:- If the voyager satellite which has went beyond the solar system would have my machine then after some century when it will reach to the other star then it would be able to send us the message and picture of that other star and even it will be able to send us some detailed information of the start which we cannot gain with the help of the space telescopes and even if we will use my machine for the Mars mission then the astronaut will be able to come to come earth again as at that time the

problem is fuel will not be there and then we will be easily able to go
Mars and at other planets or solar system easily and in many other way like this my machine can be used and if this machine will be successful then it will create a new history of the space industry. So this is my research, this is everything about my machine. If you liked my project then thank you and even, I would like to thank you for reading my project. So now I end with my project.

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