What is claimed is:

1. A rocket launch system comprising:

a set of electric power lines for carrying electrical power from a remote electrical power system on earth, the electric power being continuously withdrawable along said set of electric power lines, said set of power lines having a low end portion for being positioned at a low altitude and a high end portion for extending into high altitudes;

a set of rocket-transporting device lines for transporting a rocket-transporting device between a low altitude and a high altitude, said rocket-transporting device lines having a low end portion for being positioned at a low altitude and a high end portion for extending into high altitudes; and

lighter-than-air balloons connected to said sets of power lines and said rocket-transporting device lines for holding said sets of power lines and said carriage transporting lines upwards to a high altitude.

2. A rocket launch system according to claim 1 wherein the respective power lines of said set of electric power lines and the respective rocket transporting device lines of said set of rocket-transporting device lines are integrally combined into a power and transporting primary cable forming part of a set of power and transporting primary cables.

3. A rocket launch system according to claim 2 wherein said set of power and transporting primary cables are three in number for carrying three-phase electrical power.

4. A rocket launch system according to claim 2 wherein said lighter-than-air balloons are operatively attached to said set of power and transporting primary cables intermittently along the length of said set of power and transporting primary cables to support cumulatively said set of primary cables, and any other structure carried by said set of power and transporting primary cables.

5. A rocket launch system according to claim 8 ~~2~~ and further including sets of spacer assemblies located intermittently along said set of power and transporting primary cables, each of said sets of spacer assemblies having cable-engaging structure for engaging respective ones of said set of power and transporting primary cables to maintain a spaced separation between said respective power and transporting primary cables in said set of power and transporting primary set of cables, and wherein said lighter-than-air balloons are respectively, operatively connected to at least one of said spacer assemblies.

6. A rocket launch system according to claim 2 and further comprising a docking station operatively connected to said set of power and transporting primary cables at a terminal position along the length of said set of power and transporting primary cables, said docking station being structured to receive a rocket-transporting device as part of a preparation for a launch of a rocket being transported in a rocket-transporting device.

7. A rocket launch system according to claim 6 and further comprising power and guiding secondary cables operatively attached to said docking station and being extendable to a higher altitude than the altitude of said docking station, said rocket launch system further comprising lighter-than-air balloons operatively connected to said power and guiding secondary cables for holding and tensioning said power and guiding secondary cables aloft above said power and transporting primary cables.

8. A rocket launch system ~~according to claim 7 and further~~ comprising

an integrally combined set of power and transporting primary cables comprising the following combination:

a set of electric power lines for carrying electrical power from a remote power system on earth; and

a set of rocket-transporting device lines for transporting a rocket-transporting device between a low altitude and high altitude;

said power and transporting primary cables having a low end portion for being positioned at a low altitude and a high end portion for extending into high altitudes;

lighter-than-air balloons connected to said power and transporting primary cables, said lighter-than-air balloons being operatively attached to said set of power and transporting primary cables intermittently along the length of said set of power and transporting primary cables to support cumulatively said set of primary cables and any other structure carried by said set of power and transporting primary cables;

a docking station operatively connected to said set of power and transporting primary cables at a terminal position along the length of said set of power and transporting primary cables, said docking station being structured to receive a rocket-transporting device as part of a preparation for a launch of a rocket being transported in the rocket-transporting device;

power and guiding secondary cables operatively attached to said docking station and being extendable to a higher altitude than the altitude of said docking station;

primary tensioning lighter-than-air balloons operatively connected to said power and guiding secondary cables for holding and tensioning said power and guiding secondary cables aloft above said power and transporting primary cables; and

a lift ring assembly in operative engagement with said power and guiding secondary cables for deriving electrical power from and being guided by said power and guiding secondary cables, said lift ring assembly being positionable above said docking station and being operatively engageable with a rocket-transporting device disposed in said docking station for lifting the rocket-transporting device out of said docking station and having a rocket-transporting device pivoting assembly for being tilted to a desired

rocket launch angle.

9. A rocket launch system according to claim 8 wherein said rocket-transporting device pivoting assembly is a tubular lift ring configured to surround and operatively engage a carriage ~~rocket-transporting device~~, and being tiltable to orient the carriage ~~rocket-transporting device~~ and the rocket disposed in the carriage ~~rocket transporting device~~ to a desired launch angle.

10. A rocket launch system according to claim 8 ~~9~~ and further comprising:

a lower hoist assembly located above said lift ring assembly when said rocket launch system is in operation,

a set of supporting tertiary cables extending from said lower hoist assembly for being operationally connectable to and supporting said lift ring assembly,

and a rocket-transport device end gripper disposed ~~disposable~~ between said lower hoist assembly and said lift ring assembly, and being operatively attached to said lower hoist assembly, said end gripper being releasably and lockably engageable with a carriage ~~rocket-transport device~~ in said lift ring assembly, said lower hoist assembly lifting said end gripper for lifting a carriage ~~rocket-transporting device~~ into engagement with said rocket-transporting device ~~carriage~~ pivoting assembly prior to the launching of a rocket from a carriage ~~rocket-transporting device~~ disposed in said lift ring assembly.

11. A rocket launch system according to claim 8 ~~1 and further comprising a rocket-transporting device for transporting a rocket along said rocket-transporting device lines, said rocket-transporting device including~~ wherein said carriage comprise:

traction drives for driving said carriage ~~rocket-transporting device~~ along said power and transporting primary cables ~~rocket-transporting device lines~~, said traction drives comprising:

~~an~~ a reversible electrically powered energizing apparatus for deriving electrical power from said set of power and transporting cables ~~electric power lines~~ when said traction drives require energy to cause said rocket-transporting device to travel upwards on said power and ~~rocket-~~transporting primary cables, and for reversible delivering ~~device lines, and for supplying~~ electrical power to said set of power and transporting cables when ~~electric power lines when said electrically powered energizing apparatus generates more electric power than~~ said traction drives retard said carriage under the influence of gravity to descend said power and transporting primary cables. ~~require while said rocket-transporting device travels downwards on said rocket-transporting device lines~~.

12. A rocket launch system according to claim 11 wherein the respective power lines of said set of electric power lines and the respective rocket-transporting device lines of said set of rocket-transporting device lines are integrally combined into a power and transporting primary cable forming part of a set of power and transporting primary cables, said respective rocket-transporting devices being driven along said set of primary cables by said traction drives upon energization by said energizing apparatus.

13. A rocket launch system according to claim 8 ~~12~~ wherein each of said ~~respective~~ rocket-transporting devices is a respective carriage having an interior compartment configured to contain a rocket, the rocket being ejectable from said interior compartment during launch; and

wherein said set of power and transporting primary cables are three in number and carry three-phase power, and said electrically powered energizing apparatus is powered by three-phase electrical power.

14. A rocket launch system according to claim 13 wherein said set of power and transporting primary cables are three in number and carry three-phase power, and said electrically powered energizing apparatus is powered by three-phase electrical power.

15. A rocket launch system according to claim 11 ~~13~~ wherein said traction drives comprise a set of traction drive wheels associated with said respective carriage for engaging said respective primary cables of said set of power and transporting primary cables for transporting said respective carriage along said set of power and transporting primary cables.

16. A rocket launch system according to claim 13 wherein said lighter-than-air balloons are operatively attached to said set of power and transporting primary cables intermittently along the length of said set of power and transporting primary cables to support cumulatively said set of power and transporting primary cables, and any other structure supported by said set of power and transporting primary cables.

17. A rocket launch system according to claim 16 and further including sets of spacer assemblies located intermittently along said set of power and transporting primary cables, each of said set of spacer assemblies having cable engaging structure for engaging respective ones of said set of power and transporting primary cables to maintain a spaced separation between said respective primary cables, and wherein said lighter-than-air balloons are respectively, operatively connected to at least one of said spacer assemblies.

18. A rocket launch system according to claim 15 and further comprising a docking station operatively connected to said set of power and transporting primary cables at a terminal position along the length of said set of power and transporting primary cables, said docking station being structured to receive one of said respective carriages as part of a preparation for a launch of a rocket being transported in said carriage.

19. A rocket launch system according to claim 18 and further comprising power and guiding secondary cables operatively attached to said docking station and extendable to a higher altitude than the altitude of said docking station, said rocket launch system further comprising

primary tensioning lighter-than-air balloons operatively connected to said power and guiding secondary cables for holding said power and guiding secondary cables aloft above said power and transporting primary cables.

20. A rocket launch system according to claim 19 and further comprising a lift ring assembly in operative engagement with said power and guiding secondary cables for deriving electrical power and being guided by said power and guiding secondary cables, said lift ring assembly being positioned above said docking station and being operatively engageable with said respective carriages disposed in said docking station for lifting said respective carriages out of said docking station, said lift ring assembly comprising a tubular lift ring and a carriage pivoting assembly for tilting said tubular lift ring to a desirable rocket launch angle.

21. A rocket launch system according to claim 20 wherein said tubular lift ring is a hollow apparatus configured to surround and operatively engage said respective carriage, and being tiltable to orient said respective carriage and the rocket in said respective carriage in a desired launch direction.

22. A rocket launch system according to claim 21 and further comprising a lower hoist assembly from which are extendable a set of supporting tertiary cables for being operationally connectable to and supporting said lift ring assembly, and a carriage end gripper disposable between said lower hoist assembly and said lift ring assembly and being operatively attached to said lower hoist assembly, said carriage end gripper being releasably lockably engageable with one of said respective carriages in said lift ring assembly, said lower hoist assembly lifting said carriage end gripper for lifting said carriage into proper engagement with said carriage pivoting assembly prior to the launching of a rocket from said carriage disposed in said lifting ring assembly.

23. A rocket launch system according to claim 13 wherein said lighter-than-air balloons are operatively attached to said set of power and transporting primary cables intermittently along the length of said primary cables to support cumulatively said primary cables, and any other structure supported by said primary cables.

24. A rocket launch system according to claim 13 wherein said carriage includes a continuous pressure and heat resistant tube for holding a rocket, said tube preventing dangerous exhaust gases from leaving said carriage through any side of said carriage and damaging said cables.

25. A rocket launch system according to claim 1 wherein said lighter-than-air balloons are operatively attached to said set of electric power lines and to said set of rocket-transporting device lines intermittently along the length of said respective sets of power and rocket-transporting device lines to support cumulatively said respective sets of lines, and any other structure supported by said respective sets of lines.

26. A rocket launch system according to claim 20 and further including a tensioning balloons attachment frame connected to said secondary cables, said primary tensioning lighter-than-air balloons being attached to said tensioning balloons attachment frame for imparting sufficient tension to support cumulatively at least one of said respective carriages, secondary cables and any other structure supported on said tensioning balloons attachment frame below said attachment frame.

27. A rocket launch system according to claim 10 ~~26~~ wherein said rocket launch system further comprises:

~~a lower hoist assembly operatively attached to said tensioning balloons attachment frame located above said lift ring assembly when said rocket launch system is in operation, a set of supporting tertiary cables extending from said lower hoist assembly for being operatively connectable to and supporting said lift ring assembly, and a carriage end gripper disposed between said lower hoist assembly and said lift ring assembly and being operatively connected to said lower hoist assembly, said carriage end gripper being releasably and lockably engageable with one of said respective carriages in said lift ring assembly, said lower hoist lifting said carriage end gripper for lifting one of said respective carriages into engagement with said carriage pivoting assembly prior to the launching of a rocket from said carriage disposed in said lift ring assembly; and~~

an upper hoist assembly attached to said tensioning balloon attachment frame and being operatively connected to said lower hoist assembly and to said power and guiding secondary cables, said upper hoist assembly drawing power from said power and guiding secondary cables for selectively raising and lowering said lower hoist carrier assembly to lift or assist in lifting one of said respective carriages into and out of engagement with said lift ring assembly.

28. A rocket launch system according to claim 26 wherein said docking station has connected thereto an upper ring part having an axis of rotation, a lower ring part coaxial with said upper ring part, said upper ring part and said lower ring part being connected together by a lower ring bearing, said upper ring part and said lower ring part being rotatable relative to each other, and a lower rotational drive system for driving said upper ring part and said lower ring part in counter rotation about said lower ring bearing and wherein said tensioning balloons attachment frame has connected thereto an upper ring having an axis of rotation, a lower ring coaxial with said upper ring, said upper ring and said lower ring being connected together by an upper rotary ring bearing, and an upper rotational drive system for driving said upper ring and said lower ring in counter rotation about said upper rotary ring bearing; said upper rotational drive system and said lower drive system being operatively connected to each other to coordinate the rotation of

connected intermittently to each of said primary cables between said primary cables and said respective lighter-than-air balloons, said respective stabilizers including respective connecting members for connecting said respective stabilizers to said respective stabilizing straps.

60. A rocket launch system according to claim 59 wherein each of said respective stabilizers is composed of three stabilizing arms which collectively intersect to form an equilateral triangle.

61. A rocket launch system according to claim 60 wherein a pair of stabilizing straps is attached to said respective connecting members, said respective pairs of stabilizing straps form various angles, and wherein said rocket launch system includes strap connectors attached to said lighter-than-air balloons for enabling said stabilizing straps to contact said respective lighter-than-air balloons longitudinally.

62. A rocket launch system according to claim 4 and further including at least one large harness for being operatively attached to said lighter-than-air balloons, said rocket launch system further including basal connectors extending from said respective large harnesses to said respective lighter-than-air balloons to connect said lighter-than-air balloons to said respective large harnesses, said respective basal connections being tangent to said respective lighter-than-air balloons.

63. A rocket launch assembly according to claim 10 ~~22~~ wherein said carriage pivoting assembly is in a freefall condition upon the launch of a rocket, and wherein said secondary cables are of sufficient length to safely allow a time period of sufficient length at the local acceleration due to gravity of lower hoist assembly with any items suspended therefrom, to be sufficiently long for ~~after~~ a rocket to be ~~is~~ launched from a carriages, and safely decelerate the carriage and rocket to rest in the event of a misfire. ~~, and said secondary cables being free and clear of a rocket transport device supported by said secondary cables while said carriage pivoting assembly is in the freefall condition.~~

64. A rocket launch system according to claim 22 wherein said carriage pivoting assembly is in a freefall condition upon the launch of a rocket, and wherein said secondary cables are of sufficient length to safely allow a time period of sufficient length at the local acceleration due to gravity of said lower hoist assembly with a rocket-transport device having a rocket disposed therein in the event of a misfire while said tilting structure is in the freefall condition.

65. A rocket launch system according to claim 2 wherein said power and transporting primary cable is a body of cable composed of strands of wire having looped-out portions extending from said body of cable for securing items to said primary cable, each looped-out portion exiting from and returning to said body of said primary cable.

66. A rocket launch system according to claim 65 and further including an adaptive connector having aligned wall orifices therein, and a connector for extending through a pair of said aligned orifices and one of said looped-out portions for connecting said adaptive connector to