## CLAIMS

1. An amusement park ride system, comprising:

a plurality of motion bases coupled to a vehicle path of a ride vehicle, wherein each motion base comprises:

a housing;

a deck configured to move relative to the housing along a guide path when actuated;

an actuator coupled to the deck and configured to cause the deck to be actuated;

a counterbalance coupled to the deck and configured to change an internal pressure or move when the deck is actuated; and

one or more motion guides coupled to the deck and configured to move in conjunction with the deck relative to the housing when the deck is actuated to define the movement of the deck along the guide path and

a controller coupled to the plurality of motion bases and configured to independently control the actuator of each of the plurality of motion bases.

2. The system of claim 1, wherein the respective decks of the plurality of motion bases are positioned on the vehicle path to align with respective supports elements of a ride vehicle when the ride vehicle is positioned on the vehicle path at a location corresponding to the plurality of motion bases.

3. The system of claim 1, wherein the respective housings of the plurality of motion bases do not contact one another.

4. The system of claim 1, wherein the plurality of motion bases are associated with a position of the amusement park ride and wherein the controller is configured to activate the plurality of motion bases to actuate independently such that a structure coupled to all of the individual motion bases of the plurality of motion bases will experience a motion about a roll axis.

5. The system of claim 1, wherein the plurality of motion bases are associated with a position with the amusement park ride and wherein the controller is configured to activate the plurality of motion bases to actuate independently such that a structure coupled to all of the individual motion bases of the plurality of motion bases will experience a motion about a pitch axis.

6. The system of claim 1, wherein the plurality of motion bases are associated with a position with the amusement park ride and wherein the controller is configured to activate the plurality of motion bases to actuate independently such that a structure coupled to all of the individual motion bases of the plurality of motion bases will experience a heave motion.

7. The system of claim 1, wherein actuation of each respective deck of the plurality of motion bases comprises movement of the deck to a position selected from a fixed range of positions along the guide path and wherein the fixed range of positions comprises positions wherein the deck is at least partially within the housing, flush with a floor surface, or above a level of the floor surface.

8. The system of claim 7, wherein the floor surface is planar or curved.

9. The system of claim 7, wherein the fixed range of positions comprises a range of distances relative to a fixed point on the respective housings of each motion base.

10. The system of claim 9, wherein the controller is configured to control actuation of the deck to cause each deck of respective motion bases to be positioned at a different distance relative to the floor surface.

11. The system of claim 1, wherein the respective decks of the plurality of motion bases actuate along respective axes that are approximately parallel to one another.

12. The system of claim 1, wherein the deck is configured to actuate along an axis approximately orthogonal to a plane formed by the deck.

13. The system of claim 1, wherein the motion guide is directly coupled to the deck.

14. The system of claim 1, wherein the motion guide comprises a rail or guide configured to slide along a wall of the housing when the deck is actuated.

15. The system of claim 1, wherein the guide path comprises a curved or angled path.

16. The system of claim 1, wherein the counterbalance comprises a fluid bladder and comprising one or more fluid reservoirs fluidically coupled to the fluid bladder.

17. The system of claim 16, wherein the pressure in the fluid bladder of each motion base of the plurality of motion bases is sufficient to support a weight of the deck when the deck is in an inactive position or is not actuated and a portion of a load positioned on the deck.

18. A motion base system, comprising:

a plurality of motion bases configured to actuate independently of one another to create motion effects for a ride vehicle in contact with the plurality of motion bases, each motion base comprising:

a housing;

a deck configured to contact a portion of the ride vehicle and move relative to the housing when actuated;

an actuator coupled to the deck and configured to cause the deck to be actuated;

a counterbalance coupled to the deck and configured to bear a weight of the deck and an additional load comprising a portion of more of a static weight and/or a dynamic inertia of a load resting on or coupled to the deck;

one or more motion guides coupled to the deck and configured to move in conjunction with the deck relative to the housing when the deck is actuated to constrain the movement of the deck; and

a controller coupled to the plurality of motion bases and configured to control the actuators of each motion base of the plurality of motion bases to actuate the decks of each motion base of the plurality of motion bases to move between a plurality of positions as part of

an actuation pattern such that the decks of the plurality of motion bases move independently of one another while in contact with the ride vehicle to create motion effects for the ride vehicle.

19. The system of claim 18, wherein the counterbalance comprises a fluid bladder.

20. The system of claim 18, wherein the counterbalance comprises a spring.

21. The system of claim 18, wherein the spring is a pneumatic spring, a magnetic spring, a quantum locking spring, or a mechanical spring.

22. The system of claim 18, wherein the counterbalance comprises a rigged weight.

23. The system of claim 18, wherein the motion base comprises one or more sensors configured to provide a signal when a vehicle is positioned on a surface of the deck.