CLAIMS

What is claimed:

Claim 1. A gap fairing comprising:

a plurality of panels, wherein the plurality of panels are interconnected utilizing connectors to form an aerodynamic extending from a front portion of a trailer; wherein the plurality of panels form a half conical shape; and

supports connected between the plurality of panels through a support structure of the trailer.

Claim 2. The gap fairing according to claim 1, wherein the trailer is a pneumatic container trailer, and wherein a bottom portion of the plurality of panels is connected to the support structure of the trailer.

Claim 3. The gap fairing according to claim 1, wherein components of the gap fairing including the plurality of panels and the supports are shippable as a flat package.

Claim 4. The gap fairing according to claim 1, wherein the plurality of panels include ~~form a half conical shape and include~~ at least four plastic panels.

Claim 5. The gap fairing according to claim 1, wherein a bottom edge of the plurality of panels is positioned against the support structure of the trailer.

Claim 6. The gap fairing according to claim 1, wherein the supports are connected to the plurality of panels by connectors utilizing carriage bolts with a defined separation to support thermal expansion of the plurality of panels.

Claim 7. The gap fairing according to claim 1, wherein the connectors include metal strips for connecting the plurality of panels.

Claim 8. The gap fairing according to claim 1, wherein the plurality of panels includes at least two front panels that are interconnected, and at least two rear panels that are connected to each of the at least two front panels.

Claim 9. The gap fairing according to claim 1, wherein the supports form a reinforcing box that extend through the support structure of the trailer.

Claim 10. The gap fairing according to claim 1, wherein the plurality of panels are bent into shape.

Claim 11. A pneumatic container trailer with a gap fairing, comprising:

the pneumatic container trailer including a support structure;

a plurality of panels interconnected to form a substantially half conical shape, wherein the plurality of panels are interconnected utilizing connectors; and

supports connect the plurality of panels through the support structure of the trailer.

Claim 12. The pneumatic container trailer according to claim 11, wherein the plurality of panels include at least four plastic panels that are positioned around the support structure to enhance aerodynamics of a front portion of the trailer and wherein a bottom portion of the plurality of panels is connected to the support structure.

Claim 13. The pneumatic container trailer according to claim 12, wherein the supports are connected to the plurality of panels by connectors utilizing carriage bolts with a defined separation to support thermal expansion of the plurality of panels.

Claim 14. The pneumatic container trailer according to claim 12, wherein components of the gap fairing including the plurality of panels and the supports are shippable as a flat package.

Claim 15. The pneumatic container trailer according to claim 11, wherein the supports form a reinforcing box that extend through the support structure of the trailer, and wherein the plurality of panels are bent into shape.

Claim 16. A gap fairing comprising:

a plurality of panels, wherein the plurality of panels are interconnected utilizing connectors to extend over a support structure of a pneumatic container trailer, wherein the plurality of panels form a partial conical shape, the particle conical shape comprising a partial conical frustum; and

supports connected to the plurality of panels extend through the support structure of the trailer to secure the plurality of panels.

Claim 17. The gap fairing according to claim 16, wherein one or more of the plurality of panels are modified to fit the support structure of the pneumatic container trailer.

Claim 18. The gap fairing according to claim 16, wherein the supports include one or more horizontal supports or diagonal supports connected between the plurality of panels and wherein a bottom portion of the plurality of panels is connected to the support structure of the trailer.

Claim 19. The gap fairing according to claim 16, wherein the plurality of panels form a rounded aerodynamic shape for a front portion of the pneumatic container trailer.

Claim 20. The gap fairing according to claim 16, wherein the connectors are connected to the plurality of panels utilizing bolts with a defined separation to support thermal expansion of the plurality of panels.