CLAIMS

1. A cantilever system for a rig, comprising:

a hull;

a beam movably coupled to the hull, wherein a first end of the beam is extendable over an edge of the hull while a second end of the beam is positioned on the hull;

a hold-down member that is spaced from a support member to support the beam, wherein the hold-down member is positioned at a predetermined distance X_3 from the support member greater than a distance X_1 to the support member such that when the beam is fully extended with the second end of the beam disposed at the predetermined distance X_3 from the support member, a maximum load that the beam supports is increased relative to a second maximum load that the beam supports when fully extended from the distance X_1 but a maximum reach of the first end of the beam from the edge of the hull is reduced relative to a second maximum reach of the first end of the beam from the edge of the hull when fully extended from the distance X_1, and wherein the beam is secured to the hull by a plate member of the hold-down member that extends below a surface of the hull; and

an extension member coupled to the second end of the beam to increase the length of the beam, wherein when the beam is fully extended with the extension member being disposed above the hold-down member at the predetermined distance X_3, the maximum reach of the first end of the beam from the edge of the hull is increased to the second maximum reach of the first end of the beam from the edge of the hull.

2. The system of claim 1, wherein the hold-down member comprises a second support member configured to apply a reactive force to the beam in a direction toward the hull when the first end of the beam is extended over the edge of the hull.

3. The system of claim 1, wherein at least one of the hold-down member and the support member is integral with the hull.