What is claimed is:

1. A turret cage for an FPSO vessel equipped with a buoyant turret mooring system comprising:

a generally bell-shaped structure having an open, top end and an opposing, open, bottom end and an inner surface between the top and bottom ends at least of portion of which is in the shape of a conical frustum;

a plurality of through holes in the conical frustum portion of the inner surface.

2. The turret cage recited in claim **1** wherein the generally bell-shaped structure comprises a framework that is open on a first, outer side and is at least partially sheathed on a second, inner side.

3. The turret cage recited in claim **2** wherein the portion in the shape of a conical frustum is sheathed.

4. The turret cage recited in claim **2** further comprising an annular projection on the outer side having a plurality of axial through holes therein.

5. The turret cage recited in claim **1** further comprising a curved section of the inner surface adjacent an upper end of the conical frustum portion and a plurality of through holes in the curved section.

6. The turret cage recited in claim **1** further comprising a plurality of radial through holes in a upper, generally cylindrical portion of the inner surface proximate the top end.

7. The turret cage recited in claim **6** wherein the plurality of radial through holes are sized and spaced to permit water flowing up and out the open top end to drain over an outer side of the generally bell-shaped structure.

8. The turret cage recited in claim **1** wherein the total area of the through holes is between about 5 percent to about 20 percent of the total area of the turret cage surface.

9. An FPSO vessel comprising:

a hull having a moonpool therein;

a rotatable turret within the moonpool;

a generally bell-shaped structure attached to a lower end of the turret and having an open, top end and an opposing, open, bottom end and an inner surface between the top and bottom ends at least of portion of which is in the shape of a conical frustum; and,

a plurality of through holes in the conical frustum portion of the inner surface.

10. The FPSO vessel recited in claim **9** wherein the generally bell-shaped structure comprises a framework that is open on a first, outer side and is at least partially sheathed on a second, inner side.

11. The FPSO vessel recited in claim **10** wherein the portion in the shape of a conical frustum is sheathed.

12. The FPSO vessel recited in claim **10** further comprising an annular projection on the outer side having a plurality of axial through holes therein.

13. The FPSO vessel recited in claim **9** further comprising a curved section of the inner surface adjacent an upper end of the conical frustum portion and a plurality of through holes in the curved section.

14. The FPSO vessel recited in claim **9** further comprising a plurality of radial through holes in a upper, generally cylindrical portion of the inner surface proximate the top end.

15. The FPSO vessel recited in claim **14** wherein the plurality of radial through holes are sized and spaced to permit water flowing up and out the open top end to drain over an outer side of the generally bell-shaped structure.

16. The FPSO vessel recited in claim **9** wherein the total area of the through holes is between about 5 percent to about 20 percent of the total area of the turret cage surface.

17. The FPSO vessel recited in claim **9** wherein the generally bell-shaped structure is sized to fit within the moonpool such that the bell-shaped structure is spaced apart from an inner wall of the moonpool.

18. A method of disconnecting a mooring buoy from an FPSO vessel equipped with a buoyant turret mooring system comprising:

providing a turret cage within a moonpool on the FPSO vessel said turret cage having an inner surface at least of portion of which is in the shape of a conical frustum and having a plurality of through holes in the conical frustum portion of the inner surface; and,

releasing the mooring buoy from the turret cage.

19. The method recited in claim **18** wherein the plurality of through holes in the inner surface have a sum total area that is between about 5 percent and about 20 percent of the total area of the turret cage inner surface.

20. The method recited in claim **18** further comprising filling at least a portion of the moonpool above an upper surface of a mooring buoy secured within the turret cage with water prior to releasing the mooring buoy.

21. A cylindrical turret for a FPSO vessel wherein the turret at its lower end is provided with a generally bell shaped structure attached to a lower end of the turret and having an open, top end and an opposing, open, bottom end and an inner surface between the top and bottom ends at least of portion of which is in the shape of a conical frustum, a plurality of through holes in the conical frustum portion of the inner

surface and wherein no porosity is present in a lower turret wall in an area above the generally bell shaped structure.