WHAT IS CLAIMED IS:

1. A liner wiper plug system comprising:

a liner wiper plug body; and

a release mechanism detachably coupled to the liner wiper plug body, the release mechanism comprising:

a mandrel having an inner circumferential surface with at least one load-bearing shoulder formed thereon;

an actuation sleeve disposed within the mandrel, the actuation sleeve having an outer circumferential surface with a helical slot formed therein; and

a release sub having a first end disposed within the mandrel and a second end disposed within the liner wiper plug body,

the release sub further having an inner circumferential surface with a pin formed thereon, which is adapted to be disposed within and move along the helical slot of the actuation sleeve, thereby causing the release sub to rotate relative to the mandrel when the actuation sleeve moves in an axial motion, and

the release sub further having an outer circumferential surface with at least one load-bearing shoulder formed thereon, which is adapted to engage the at least one load-bearing shoulder formed on the mandrel.

2. The system as defined in claim 1 wherein:

said actuation sleeve has an outer circumferential load shoulder;

said liner wiper plug body has an inner circumferential load shoulder; and

at the completion of said axial motion, the outer circumferential load shoulder of the actuation sleeve contacts the inner circumferential load shoulder of the liner wiper plug body, thereby detaching the liner wiper plug body by transmitting any axial load due to the actuation sleeve's axial motion from the actuation sleeve to the liner wiper plug body.

3. The system as defined in claim 1 wherein:

said helical slot is formed such that an axial motion of said actuation sleeve causes said rotation of said release sub.

4. The system as defined in claim 3 wherein:

said mandrel is attached to a downhole running tool; and

said actuation sleeve further comprises a seat operable to receive a drill pipe cementing dart or ball.

5. The system as defined in claim 4 wherein:

said liner wiper plug body further comprises shear screws, shear tabs, or shear rings operable to prevent said axial motion by said actuation sleeve until sheared.

6. The system as defined in claim 1 wherein:

said inner circumferential surface of said mandrel has a plurality of slotted load-bearing shoulders formed equidistant thereon; and

said outer circumferential surface of said release sub has a corresponding plurality of complementary slotted load-bearing shoulders formed thereon, which are adapted to engage the plurality of slotted load-bearing shoulders formed on said mandrel.

7. The system as defined in claim 6 wherein:

at the completion of said rotation of said release sub, said slotted load-bearing shoulders on said release sub are aligned with the slots in the slotted load-bearing shoulders of said mandrel, thereby allowing the release sub to detach from the mandrel.

8. The system as defined in claim 1 wherein:

said outer circumferential surface of said actuation sleeve has one or more helical slotted guides formed therein; and

said inner circumferential surface of said release sub has a corresponding plurality of pins formed thereon, which are adapted to be disposed within and move

along the one or more helical slotted guides of the actuation sleeve thereby causing the release sub to rotate relative to the mandrel.

9. The system as defined in claim 8 wherein:

said pins on said release sub are shear screws, dowel pins, or lugs.

10. A method of detaching a downhole liner wiper plug from a liner wiper plug body comprising:

lowering a liner wiper plug system into a wellbore or section of downhole tubing, the liner wiper plug system comprising the liner wiper plug body, a mandrel, an actuation sleeve, and a release sub,

wherein said mandrel has an inner circumferential surface with a plurality of slotted load-bearing shoulders formed equidistant thereon,

wherein said actuation sleeve is disposed within the mandrel,

wherein said release sub has a first end disposed within the mandrel and a second end disposed within the liner wiper plug body; and

moving said actuation sleeve in an axial direction.

11. The method of claim 10:

wherein said release sub has an outer circumferential surface with a corresponding plurality of complementary slotted load-bearing shoulders formed thereon, which are adapted to engage the plurality of slotted load-bearing shoulders formed on said mandrel.

12. The method of claim 11:

wherein the axial motion causes the release sub to rotate with respect to said mandrel,

wherein at the completion of said rotation, said slotted load-bearing shoulders on said release sub align with the slots in the slotted load-bearing shoulders of said mandrel, thereby allowing the release sub to detach from the mandrel.

13. The method of claim 12:

wherein said actuation sleeve has an outer circumferential load shoulder;

said liner wiper plug body has an inner circumferential load shoulder; and

at the completion of said axial motion, the outer circumferential load shoulder contacts the inner circumferential load shoulder, thereby detaching the liner wiper plug body by transmitting any axial load due to the actuation sleeve's axial motion from the actuation sleeve to the liner wiper plug body.

14. The method of claim 10:

wherein said release sub has at least one slotted outer-circumferential load collet which is adapted to engage the at least one of the plurality of load-bearing shoulders formed on the mandrel.

15. The method of claim 14:

wherein the actuation sleeve further comprises a raised outer diameter surface adjacent to a lowered outer diameter surface,

wherein the raised outer diameter surface is in contact with the at least one slotted outer-circumferential load collet in a locked position; and

at the completion of said axial motion, the at least one slotted outer-circumferential load collet contracts and contacts the lowered outer diameter surface, thereby releasing the release sub and detaching the liner wiper plug body from the mandrel.

16. The method of claim 10:

wherein said mandrel is attached to a downhole running tool.

17. The method of claim 10:

wherein said axial motion is caused by a drill pipe cementing dart or ball that lands on a seat formed within the actuation sleeve which in turn blocks the flow of fluid downhole thereby generating a downward acting pressure force, which is applied to the actuation sleeve.