CLAIMS

That which is claimed is:

1. An arresting cable retraction system for securing a cross-runway cable across an aircraft runway, comprising:

a support arm assembly (52) comprising a cable support block assembly (80) configured to receive a cross-runway cable (12);

a first axis of rotation (54) about which the support arm assembly (52) rotates during an aircraft rollover event, wherein the cable is maintained above the runway;

a second axis of rotation about which the cable support block assembly (80) rotates during a retraction event, wherein the cable is retracted into a runway trough;

a lock mechanism (66) that secures the support block assembly (80) to the support arm assembly (52), wherein when the lock mechanism is locked, the support arm assembly rotates about the first axis of rotation upon aircraft will pressure to the cable support block assembly; and

a retraction arm assembly (68), wherein the retraction arm assembly functions to release the lock mechanism (66) to decouple the support block assembly (80) from the support arm assembly (52), wherein when the lock mechanism is unlocked, the support block assembly rotates about the second axis of rotation to retract the cable into the runway trough,.

42. The system of claim 21, wherein the lock mechanism comprises one or more lock blocks (160) configured to receive a lock pin (162).

3. The system of any of the preceding claims, wherein the system is housed within a support box (22) mounted within an aircraft runway and covered by cover plate (20).

4. The system of any of the preceding claims, where in the support block assembly is modular.

5. The system of any of the preceding claims, wherein the support block assembly comprises a cable support block and a housing, wherein the cable support block is removably securable with respect to the housing.

6. The system of any of the preceding claims, further comprising a support arm assembly (52) and a retraction arm assembly (68), wherein the support arm assembly comprises a main shaft (60) that functions as the first axis of rotation, and wherein the retraction arm assembly has a support block shaft (70) that functions as the second axis of rotation.

7. The system any of the preceding claims, wherein the support block assembly comprises a housing (82) that supports a lock pin.

8. The system of claim 7, further comprising a support arm that comprises one or more lock blocks that receive the lock pin in order to secure the support block assembly to the support arm assembly.

9. The system of any of the preceding claims, further comprising a retraction arm (76) and a motion actuator (74), wherein the motion actuator is operably coupled to the retraction arm assembly (68).

10. The system of any of the preceding claims, further comprising a motion actuator that is coupled to a latch lock via a cable.

11. The system of any of the preceding claims, further comprising a movable trolley (132), wherein when the movable trolley is in a first position, the cable support block is permitted to rotate with respect to the movable trolley, wherein when the movable trolley is in a second position, the cable support block is prevented from rotation with respect to the movable trolley.

12. The system of any of the preceding claims, wherein the arresting cable retraction system comprises a top cover with a cable relief indentation.

13. A modular cable support clock for an arresting cable retraction system for securing a cross-runway cable across an aircraft runway, comprising:

a modular support block (80) defining an opening for receiving a cross-runway cable;

a housing (82) configured to receive the modular support block, wherein the modular support block is removably secured with respect to the housing; and

a lock mechanism (88) that secures the modular support block with respect to the housing.

14. The system of claim 13, wherein removable securement is achieved via insert grooves positioned along one of the modular support block or the housing that cooperate with tracks positioned on the other of the modular support block or the housing.