CLAIMS

What is claimed is:

1. An apparatus comprising:

a memory, wherein said memory retaining raw maritime data, wherein the raw maritime data is indicative of a geolocation of vessels at different times, wherein the raw maritime data comprises duplicative data obtained from separate sources;

a processor configured to:

analyze the raw maritime data to produce for each vessel a vessel story, wherein the vessel story comprises a set of activities and corresponding timestamps, wherein the set of activities are deduced from the raw maritime data, wherein the set of activities associated with the each vessel is smaller by at least one order of magnitude than the raw maritime data associated with the each vessel;

identify a pattern in the vessel story associated with a first vessel, wherein the pattern conforms with a risk event; and

validate the risk event using the raw maritime data or using one or more vessel stories;

whereby identifying the risk event using reduced resources in comparison with resources required to identify the risk event in the raw maritime data, and without increasing false positive metrics.

2. The apparatus of Claim 1, wherein the raw maritime data is obtained from a plurality of sources, wherein the plurality of sources comprises a risk events data source, wherein said processor is further configured to update the risk events data source based on the validated risk event.

3. The apparatus of Claim 2, wherein the risk events data source is an insurance claims database, wherein said processor is further configured to obtain the risk event from the insurance claims database, wherein said identify the pattern and said validate the risk event are performed to validate the risk event appearing in the insurance claims database.

4. The apparatus of Claim 1, wherein said validating the risk event comprises: using validating data occurring after the risk event had occurred.

5. The apparatus of Claim 4, wherein the validating data comprises at least one of the following:

one or more tugboats reaching the vessel and moving together with the vessel to a destination;

a destination change to a location where the vessel can be repaired;

a movement pattern conforming with repairing the first vessel; and

a multi-port route, wherein the multi-port route comprises visiting a port and a shipyard thereafter, wherein the port is closer to a location of the risk event than the shipyard.

6. The apparatus of Claim 1, wherein said validating the risk event comprises: using validating data occurring at a time of the risk event.

7. The apparatus of Claim 6, wherein the validating data comprises the first vessel being located in a location where a depth is shallower than a draught of the first vessel, wherein the draught of the first vessel is determined based on the raw maritime data.

8. The apparatus of Claim 6, wherein the validating data comprises the first vessel maintaining position at sea for a minimal time threshold.

9. The apparatus of Claim 8, wherein the raw maritime data does not indicate the first vessel anchoring when maintaining position at sea.

10. The apparatus of Claim 6, wherein the validating data comprises a collision vector between the first vessel and a second vessel.

11. The apparatus of Claim 10, wherein the validating data comprises an indication of a collision from the second vessel.

12. The apparatus of Claim 1, wherein the raw maritime data is exclusive of data for the first vessel at a time of the risk event, whereby raw maritime data from before and after the risk event is utilized to identify the risk event.

13. The apparatus of Claim 1, wherein the processor is further configured to determine a resource allocation plan and send the resource allocation plan for execution, wherein the resource allocation plan comprises a plan to distribute maritime assets associated with risk events; whereby physical location of the maritime assets is changed.

14. The apparatus of Claim 1, wherein the raw maritime data is obtained from a plurality of sources, wherein the plurality of sources comprises a first Automatic Identification System (AIS) vendor and a second AIS vendor.

15. The apparatus of Claim 1, wherein the processor is further configured to compute a risk score for the first vessel based on automatically determined risk events of the first vessel.

16. The apparatus of Claim 1, wherein the raw maritime data comprises a first raw data and a second raw data, wherein the first and second raw data comprise an identifier of a same maritime object, wherein said processor is configured to match the first raw data with the first vessel and the second raw data with a second vessel.

17. The apparatus of Claim 1, wherein said processor is further configured to compute, based on the vessel story of the first vessel, a statistical measurement of maintenance stops performed by the first vessel, wherein validating the risk event comprises identifying a maintenance stop occurring after the risk event and prior to an expected maintenance stop in view of the statistical measurement.

18. A method comprising:

obtaining raw maritime data from a plurality of sources, wherein the raw maritime data is indicative of a geolocation of vessels at different times, wherein the raw maritime data comprises duplicative data obtained from separate sources;

analyzing the raw maritime data to produce for each vessel a vessel story, wherein the vessel story comprises a set of activities and corresponding

timestamps, wherein the set of activities are deduced from the raw maritime data, wherein the set of activities associated with the each vessel is smaller by at least one order of magnitude than the raw maritime data associated with the each vessel;

identifying a pattern in the vessel story associated with a first vessel, wherein the pattern conforms with a risk event; and

validating the risk event using the raw maritime data or one or more vessel stories;

whereby identifying the risk event using reduced resources in comparison with resources required to identify the risk event in the raw maritime data without increasing false positive metrics.

19. The method of Claim 18, wherein the raw maritime data is obtained from a plurality of sources, wherein the plurality of sources comprises an insurance claims database, wherein said method further comprises updating the insurance claims database based on the validated risk event.

20. The method of Claim 18, wherein said validating the risk event comprises: using validating data occurring after the risk event had occurred, wherein the validating data comprises at least one of the following:

one or more tugboats reaching the first vessel and moving together with the first vessel to a destination;

a destination change to a location where the first vessel can be repaired;

a movement pattern conforming with repairing the first vessel; and

a multi-port route, wherein the multi-port route comprises visiting a port and a shipyard thereafter, wherein the port is closer to a location of the risk event than the shipyard.

21. The method of Claim 18, wherein said validating the risk event comprises at least one of:

identifying the first vessel being located in a location where a depth is shallower than a draught of the first vessel at a time of the risk event, wherein the draught of the vessel is determined based on the raw maritime data;

identifying that the first vessel maintaining position at sea for a minimal time threshold at a time of the risk event;

identifying a collision vector between the first vessel and a second vessel; and obtaining an indication of a collision from raw maritime data associated with the second vessel.

22. The method of Claim 18, wherein the raw maritime data is exclusive of data for the first vessel at a time of the risk event, whereby raw maritime data from before and after the risk event is utilized to identify the risk event.

23. The method of Claim 18 further comprises:

determining a resource allocation plan, wherein the resource allocation plan comprises a plan to distribute maritime assets associated with risk events;

implementing the resource allocation plan, whereby physical location of the maritime assets is changed.

24. The method of Claim 18, wherein the raw maritime data comprises a first raw data and a second raw data, wherein the first and second raw data comprise an identifier of a same maritime object, wherein said method comprises matching the first raw data with the first vessel and matching the second raw data with a second vessel.

25. The method of Claim 18 further comprises computing, based on the vessel story of the first vessel, a statistical measurement of maintenance stops performed by the first vessel, wherein said validating the risk event comprises identifying a maintenance stop occurring after the risk event and prior to an expected maintenance stop in view of the statistical measurement.

26. A method comprising:

obtaining raw maritime data from a plurality of sources, wherein the raw maritime data is indicative of a geolocation of vessels at different times, wherein the raw maritime data comprises duplicative data obtained from separate sources;

analyzing the raw maritime data to produce for each vessel a vessel story, wherein the vessel story comprises a set of activities and corresponding timestamps, wherein the set of activities are deduced from the raw maritime data, wherein the set of activities associated with the each vessel is smaller by at least one order of magnitude than the raw maritime data associated with the each vessel;

identifying a pattern in the vessel story associated with a first vessel, wherein the pattern conforms with a risk event; and

validating the risk event using the vessel story associated with a second vessel, wherein the second vessel story is consistent with the risk event occurring to the first vessel;

whereby identifying the risk event using reduced resources in comparison with resources required to identify the risk event in the raw maritime data without increasing false positive metrics.

27. The method of Claim 26, wherein said validating comprises detecting a second vessel story consistent with a collision between the first vessel and the second vessel.

28. The method of Claim 26, wherein said validating comprises detecting a second vessel story consistent with the second vessel towing the first vessel after the risk event occurred.

29. The method of Claim 26, wherein according to the raw maritime data the first and the second vessel are located in proximity to one another at a time of the risk event or within a time window thereafter.

30. The method of Claim 26, wherein said validating comprises:

filtering from the plurality of vessels a subset of vessels, wherein the subset of vessels are vessels that at the time of the risk event or within a time window thereafter are located in proximity to the first vessel;

examining vessel stories of each vessel in the subset of vessels to detect the second vessel, whereby checking consistency of vessel stories with the risk event occurring to the first vessel for a reduced number of vessels, whereby reducing computational resources required for said validating.

31. A non-transitory computer readable medium retaining program instructions, which program instructions when read by a processor, cause the processor to perform a method comprising:

obtaining raw maritime data from a plurality of sources, wherein the raw maritime data is indicative of a geolocation of vessels at different times, wherein the raw maritime data comprises duplicative data obtained from separate sources;

analyzing the raw maritime data to produce for each vessel a vessel story, wherein the vessel story comprises a set of activities and corresponding timestamps, wherein the set of activities are deduced from the raw maritime data, wherein the set of activities associated with the each vessel is smaller by at least one order of magnitude than the raw maritime data associated with the each vessel;

identifying a pattern in the vessel story associated with a first vessel, wherein the pattern conforms with a risk event; and

validating the risk event using the raw maritime data or one or more vessel stories;

whereby identifying the risk event using reduced resources in comparison with resources required to identify the risk event in the raw maritime data without increasing false positive metrics.