

Module 10

Marine and Aviation Loss Exposures

Marine and Aviation Loss Exposures and Insurance

Module 10 Chapter 10

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Objectives

- ❑ Obj I: Marine Loss Exposures
- ❑ Obj II: Marine Insurance: Protection and Indemnity and Hull Insurance
- ❑ Obj III: Other Marine Insurance Policies
- ❑ Obj V: Aviation Loss Exposures
- ❑ Obj VI: Insurance for Manned Aircraft
- ❑ Obj VII: Unmanned Aviation Risk Management and Insurance

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Marine Loss Exposures

Objective I

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Marine Loss Exposures

- ❑ Owners or operators of vessels face unique loss exposures.
 - ❑ Many are excluded from coverage under standard property and liability policies.
- ❑ Primary marine liability loss exposures:
 - ❑ Injury or illness – vessel’s crew or others.
 - ❑ Property damage – other vessels and cargo.
 - ❑ Pollution.
- ❑ Another exposure is damage to own vessel.

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Injury to Crew

- ❑ Liability for injury to crew can be based on:
 - ❑ Obligation to provide maintenance and cure.
 - ❑ Medical care, food, lodging during illness.
 - ❑ Owner’s warranty of seaworthiness.
 - ❑ Promise the vessel is fit for voyage.
 - ❑ Merchant Marine Act of 1920.
 - ❑ Gives crew members right to sue ER for injuries resulting from ER negligence.
 - ❑ Death on the High Seas Act.
 - ❑ General maritime law.

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Injury to Other Persons on Board

- ❑ Owners/operators also owe a duty of care to other persons who may come on board:
 - ❑ Longshore workers who load or discharge cargo.
 - ❑ U.S. Longshore and Harbor Workers’ Compensation Act (LHWCA).
 - ❑ Passengers on cruise ships or other vessels.
 - ❑ Some cruise ships carry 2,000+ passengers.
 - ❑ Various other visitors, such as harbor pilots or employees of ship repairers.

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Injury to Persons Not on Board

- ❑ A significant loss exposure is injury to others on another vessel as the result of a collision.
 - ❑ Persons who are not on board a vessel can also be injured as a result of a vessel.
- ❑ Laws that apply to suits arising out of such accidents depend on the applicable jurisdiction.
 - ❑ Suit will likely be based on allegations of negligence or unseaworthiness of the vessel.

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Property Damage

- ❑ An owner/operator may also be liable for damage to property owned by others.
 - ❑ Damage to other vessels and their cargoes – includes wreck removal expenses and damage to other vessel's freight and cargo.
 - ❑ Damage to other structures – bridges, piers, docks, or other structures on or near water.
 - ❑ Damage to cargo of others on the vessel – ocean carrier can become liable for damage to customers' cargo on board the vessel.

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Property Damage

- ❑ Liability for cargo of others on the vessel depends on whether the carrier is a:
 - ❑ Common carrier – serves the general public.
 - ❑ Sails predetermined routes regularly.
 - ❑ Governed by U.S. Carriage of Goods by Sea Act (COGSA).
 - ❑ Contract carrier – engage in tramp shipping.
 - ❑ Scheduling each voyage separately.
 - ❑ Liability is determined by the terms agreed to in the charter party (contract).

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Pollution

- ❑ Owners and operators of tankers and tank barges have pollution liability loss exposures.
 - ❑ Liability for environmental damage, cleanup costs, and bodily injury.
- ❑ Many countries' marine pollution laws conform to an international standard.
 - ❑ Convention on Civil Liability for Oil Pollution Damage.
 - ❑ Some countries, including the U.S., have their own laws relating to oil spills.

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General Average

- ❑ General average is a partial loss that must be shared by all parties to a voyage.
 - ❑ Cargo owners and vessel owners.
 - ❑ General average originated in ancient times.
- ❑ Because of general average, a vessel owner (or a cargo owner) can become legally obligated to pay others' losses or expenditures.
 - ❑ General average sacrifices include not only sacrifices of cargo but also sacrificial damage to the vessel.

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Damage to Vessel Owner's Vessel

- ❑ Vessels can be damaged or destroyed by a wide variety of perils.
 - ❑ When a vessel is inoperable during repair, its owner loses freight or passage money.
 - ❑ Freight – compensation received for transporting cargo.
- ❑ Vessel owner may also incur additional expenses to perform promised services.

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Practice

- A vessel valued at \$30,000,000 is carrying the following cargo for three customers:
 - Customer A: \$4,000,000 fireworks.
 - Customer B: \$6,000,000 produce.
 - Customer C: \$10,000,000 electronics.
- During a fire on the ship at sea, all of the fireworks are thrown overboard to prevent an explosion. What is the contribution to general average for Customer A?
 - A. \$0.
 - B. \$320,000.
 - C. \$800,000.
 - D. \$4,000,000.

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Marine Insurance: Protection and Indemnity and Hull Insurance

Objective II

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Marine Insurance

- Main coverages needs by vessel owners:
 - Protection and Indemnity (P&I) – covers various liability claims resulting from operation of a vessel.
 - Parallels auto liability insurance.
 - Hull – covers physical damage to vessels, including machinery and fuel.
 - Does not cover cargo.
 - Parallels auto physical damage coverage.

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P&I Insurance

- ❑ The P&I insuring agreement limits coverage to liabilities the assured may incur as an owner.
 - ❑ Indemnity policy.
 - ❑ Coverage is restricted to the types of claims described in the policy.
- ❑ Coverages include:
 - ❑ Defense costs – included in limit of insurance.
 - ❑ Bodily injury.
 - ❑ Property damage.
 - ❑ Unique coverages.

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P&I Insurance Coverages

Bodily Injury Coverages	Description
Loss of life, injury, and illness	Applies to crew members, the vessel's own passengers, and other vessels' passengers.
Repatriation expenses	Reasonable expenses incurred to return crew members to their sign-on port because of illness, injury, or an accident that results in termination of the voyage.

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P&I Insurance Coverages

Property Damage Cov.	Description
Other vessels – collision	Covers damages to another vessel resulting from a collision with insured's vessel.
Other vessels – not caused by collision	Covers losses caused as a result of assured's negligence.
Property other than vessels	Covers property such as bridges and piers, but does not cover cargo.
Wreck removal expenses	Covers expenses when vessel owner is required by law to remove wreckage of a sunk vessel.
Cargo of others	Covers cargo of other vessels.

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P&I Insurance Coverages

Unique Coverages	Description
Fines and Penalties	Covers liability for fines or penalties for violating federal or state laws.
Cost of resisting mutiny/misconduct	Expenses incurred in resisting any unfounded claim by persons employed on vessel.
Quarantine	Expenses incurred when authorities place a vessel in isolation to prevent spread of disease.
Putting-in expenses	Expenses of deviating from a route to deliver sick/injured crew member or passenger to a port.
Cargo's proportion of general average	Pays portion of a general average assured is unable to collect from the owners of cargo aboard the insured vessel.

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P&I Insurance Exclusions

- General exclusions:
 - War or vessel seizure or detention.
 - Towage of any other vessel, unless the purpose is to assist a vessel in distress.
 - Liability exceeding the liability that would be imposed by law in absence of a contract.
 - Pollution liability is excluded under certain forms.

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P&I Insurance Exclusions

- Additional exclusions and special conditions applicable to cargo:
 - Valuable property such as jewelry, furs, and bullion.
 - Refrigerated cargo when the assured does not meet certain conditions.
 - Liability expanded by contract.
 - Cargo on land.

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Hull Insurance

- Hull insurance is property insurance for a vessel plus collision liability coverage.
 - Each vessel to be insured is named in the policy or in a schedule attached to the policy.
- Hull insurance can cover:
 - Vessel owners.
 - Agents who operate vessels for the owners.
 - Bareboat charterers of vessels – charterer that agrees to be responsible for operating and insuring the vessel.

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Hull Insurance

- Hull policies ordinarily exclude:
 - Cargo – can be insured under ocean cargo policy or P&I policy.
 - Cargo containers – insured by their owners or lessees under special policies.
 - Passengers' or crew's property – vessel owner's liability is covered under P&I policy.
 - Barges – coverage is usually obtained by endorsement.
 - Transport cargo between ship and shore.

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Hull Insurance

- Coverage is usually provided for:
 - Perils of the seas – rough seas, strandings.
 - Fire, lightning, and earthquake – while vessel is at sea or docked.
 - Assaulting thieves – those who attempt to steal property; excludes passengers and crew.
 - Jettison – voluntary throwing part of vessel overboard when ship is in danger.
 - Barratry – misconduct by the crew.
 - All other like perils.

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Hull Insurance

- ❑ Basic hull insurance generally excludes:
 - ❑ War and its aftereffects.
 - ❑ Piracy – eliminates much of the coverage granted under the assailing thieves peril.
 - ❑ Strikes and other labor disturbances.
 - ❑ Riot.
 - ❑ Taking or hindering of vessel by another.
- ❑ An endorsement is generally added to exclude losses resulting from nuclear reaction, radiation, or radioactive contamination.

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Hull Insurance

- ❑ Most hull policies are issued for one year.
 - ❑ Some are issued for a specific voyage.
- ❑ Events that can trigger automatic termination:
 - ❑ Change in ownership, management, or vessel's flag designating country in which vessel is registered.
 - ❑ Charter/requisition of vessel on a bareboat basis.
 - ❑ Change in the vessel's classification.

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Hull Insurance

- ❑ Clauses found in hull insurance:
 - ❑ Sue and labor clause – covers the cost of reasonable measures to protect property from damage at the time of loss.
 - ❑ General average and salvage clause – pays assured's contributions to general average and pays for salvage.
 - ❑ Collision liability clause – Collision liability claims are payable subject to a separate amount of insurance equal to the policy limit.

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Hull Insurance

- Towers coverage applies to those who operate vessels that tow cargo barges.
 - Covers damage to other vessels or structures (such as bridges or a dock) resulting from collision by the insured vessel.
 - Covers damage to the barges and their cargoes being propelled by the insured tug.

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Practice

- Which one of the following represents expenses of deviating from a stated route to deliver an injured passenger to a port for medical care?
 - A. Quarantine expenses.
 - B. Putting-in expenses.
 - C. Repatriation expenses.
 - D. Defense expenses.

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Other Marine Insurance Policies

Objective III

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Marine Builders Risk Policy

- A marine builders risk policy covers:
 - Physical loss or damage to the vessel during the entire course of the vessel's construction.
 - Property and liability losses for a completed vessel during trial trips or delivery.
 - Shipbuilders may operate the vessel before turning the vessel over to its owner.

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Ship Repairers Liability Policy

- A ship repairers liability policy covers:
 - Liability loss exposure to the shipyard from the possession and repair of vessels.
 - Liability arising out of the insured's operation of customers' vessels.
- Some policies also offer general liability coverage.

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Terminal Operators Liability Policy

- A terminal operator is an owner of a facility for docking and loading/unloading vessels.
 - Terminal operators liability policy covers the bailee liability loss exposures of the insured.
- Similar marine policies are available for stevedores and wharfingers.
 - Stevedores are independent contractors that provide loading and unloading services.
 - Wharfingers are facilities that provide docking space and services for vessels.

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Marina Operators Liability Policy

- ❑ A marina is a waterfront facility that provides a variety of services for owners of pleasure craft.
 - ❑ Lease of dock space, repair services, fueling services.
- ❑ Marina operators liability policy covers liability for damage to boats in the care of the operator.
 - ❑ May also cover additional exposures, such as liability for injuries to marina customers.

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Boat Dealers Policy

- ❑ Boat dealers policy covers both property and liability loss exposures.
 - ❑ Property coverage is ordinarily limited to covering pleasure craft and other merchandise held for sale by the dealer.
 - ❑ Liability coverage is usually limited to P&I insurance.
- ❑ Policy may be endorsed to cover bailee liability.

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Charterers Liability Policy

- ❑ Bareboat charterers rent a vessel from the owner, who provides no crew or services.
 - ❑ Charterer usually must obtain P&I, collision liability, and hull insurance.
- ❑ Voyage and time charterers can direct where vessel will go, but owner employs the crew.
 - ❑ Charterers face breach of duty liability loss exposures.
 - ❑ Exposures can be insured under a charterers liability policy.

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Marine Policies for Oil & Gas Facilities

- Various coverages are available to insure property used in the exploration and production of oil and gas at offshore locations.
 - Types of property insured include drilling units, production platforms, and undersea pipelines.
- Limits of insurance needed can be so high that no single insurer provides them.
 - Offshore oil and gas facilities may be insured by multiple insurers.

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Marine Policies for Oil & Gas Facilities

- Available coverages include:
 - Builders risk coverage.
 - Physical damage coverage after property becomes operational.
 - Loss of business income coverage.
 - Wreck removal coverage.
 - Coverage for the costs of controlling well blowouts.
 - P&I and other liability coverages.

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Practice

- A retired Navy SEAL is starting a company that will build boats for sale to the general public. He is considering risk management options for the business, and would like to find a policy that would provide coverage for losses incurred during any point during the course of the boats' construction, including launch. The most appropriate policy for the business would be a:
 - A. Hull liability policy.
 - B. Ship repairers liability policy.
 - C. Marine builders risk policy.
 - D. Boat manufacturers policy.

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Aviation Loss Exposures

Objective V

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Aviation Industry Sectors

- Sectors of the aviation industry:
 - General aviation – all civil aviation that does not involve passenger airlines.
 - Charter flights, law enforcement, training.
 - Airlines – major and national airlines.
 - Aviation manufacturing and distribution – manufacturers of general aviation and airline aircraft, engines, and equipment.
 - Airports and fixed base operators – includes airports and repair operations.

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Aviation Loss Exposures

- Most individual insurers lack the capacity to write aviation insurance.
 - Also lack underwriting expertise.
- A large share of commercial airline business is handled by two multi-company aviation pools.
 - Manage and underwrite business on behalf of its members.
 - A pool is a group of insurers that join together to insure loss exposures.

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Aviation Loss Exposures

- Characteristics of aviation loss exposures:
 - Catastrophic loss potential – aircraft accidents can become major disasters.
 - Limited spread of risk – number of airplanes is small compared to exposure units (such as cars) covered by other types of insurance.
 - Legal foundations of aircraft liability – liability generally is determined according to the law of the state where accident occurs.
 - Some states require proof of negligence.

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Criteria for Exposure Evaluation

- When selecting and rating applicants for aircraft insurance, insurers use the following criteria:
 - Aircraft type – loss can be influenced by factors related to age, construction, and general configuration.
 - Pilots – experience and ability are crucial because of potential effects of human error.
 - Geography – terrain and prevailing weather conditions can affect aviation loss exposures.
 - Purpose-of-use category.

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Criteria for Exposure Evaluation

Purpose-of-Use Category	Description
Airline	Most definitive of all categories. Only class that provides statistics to insurers allowing them to make reasonably accurate loss projections.
Business and pleasure	Individually owned aircraft used for personal purposes. Includes exposures to hazards such as inexperienced pilots and low-value aircraft.
Industrial aid	Corporate owned aircraft used for transporting employees and executives. Flown by professional pilots. Lower premiums than business and pleasure due to favorable accident record.

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Criteria for Exposure Evaluation

Purpose-of-Use Category	Description
Commercial use	Aircraft used to transport persons/cargo for a fee. Charter operators, air taxis, and high-altitude photography.
Special use	Exposure to unique hazards. Includes crop dusting, law enforcement, firefighting, banner towing, and low-altitude photography.
Instruction and rental	Flight schools that instruct potential pilots. High loss exposure due to inexperienced pilots.
Sales demonstration	Dealers and brokers who demonstrate planes to buyers.

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Practice

- The aviation purpose-of-use category used to classify and rate exposures such as charter operators, high-altitude photography, and air taxis is:
 - A. Commercial use.
 - B. Special use.
 - C. Instruction and rental.
 - D. Airline.

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Insurance for Manned Aircraft

Objective VI

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Insurance for Manned Aircraft

- ❑ The general aviation sector includes all civil aviation not involving passenger airlines.
 - ❑ Private aircraft owners often have difficulty obtaining adequate liability limits.
- ❑ Typical coverages for general aviation:
 - ❑ Liability coverage on owned aircraft.
 - ❑ Coverage for use of nonowned aircraft.
 - ❑ Physical damage coverage on owned aircraft.
 - ❑ Medical expense coverage.
 - ❑ Passenger voluntary settlement coverage.

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Liability Coverage on Owned Aircraft

- ❑ Aircraft insurance is specialized insurance with no standard policy.
 - ❑ Can be structured as one coverage with a single limit.
- ❑ May be structured with separate limits for:
 - ❑ Bodily injury (excluding passengers) liability.
 - ❑ Also covers mental anguish and death.
 - ❑ Passenger bodily injury liability coverage.
 - ❑ Property damage liability coverage.

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Liability Coverage on Owned Aircraft

- ❑ Some of the exclusions applicable to aircraft liability coverage are similar to those found in other liability policies.
 - ❑ War, workers compensation, pollution, etc.
 - ❑ Most aircraft policies contain additional exclusions that pertain to the safe operation of the insured aircraft.
- ❑ A policy extends its liability provisions to cover another aircraft used as a substitute for an insured aircraft.

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Coverage for Use of Nonowned Aircraft

- ❑ Many policies cover the named insured for an aircraft not owned.
 - ❑ Named insured must be an individual.
 - ❑ No coverage for liability for aircraft rented or chartered in the name of the organization.
 - ❑ No coverage for employees who rent or charter aircraft and fly on company business.
- ❑ If the named insured is an organization, coverage gap can be remedied with a nonownership liability coverage endorsement .

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Physical Damage Coverage

- ❑ Aviation insurers use the “all-risks” approach for physical damage coverage.

All-Risks	Covered	Not Covered
Ground and flight	In flight (includes takeoff and landing); taxiing under its own power; pushed into a hangar; towed by tractor	N/A
Not in motion	Pushed into a hangar; towed by tractor	In flight; taxiing under its own power
Not in flight	Taxiing under its own power; pushed into a hangar; towed by tractor	In flight

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Physical Damage Coverage

- ❑ Aircraft physical damage coverage is usually subject to only a limited number of exclusions.
 - ❑ War, strikes, hijacking, seizure, confiscation, and several other similar perils apply.
 - ❑ Most of the remaining exclusions are similar to auto physical damage exclusions.
- ❑ Approaches to valuation:
 - ❑ Agreed value – value shown in declarations.
 - ❑ Actual cash value – insurer pays lesser of the actual cash value or policy limit.

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Physical Damage Coverage

- ❑ Aircraft physical damage coverage is usually subject to a deductible.
 - ❑ Expressed as either a dollar amount or as a percentage of the aircraft's insured value.
 - ❑ Some insurers apply a dollar deductible with respect to ground losses and a percentage deductible with respect to flight losses.
- ❑ Deductibles for aircraft in the commercial category are higher than those for aircraft in the business and pleasure category.

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Medical Expense Coverage

- ❑ Medical expense coverage is normally available to noncommercial aircraft insureds.
 - ❑ Provides payment for all reasonable medical, surgical, hospital, and related expenses.
 - ❑ Resembles medical payments coverage in auto insurance policies.
- ❑ The insurer is obligated to pay medical expense claims regardless of whether the insured is legally liable.

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Passenger Voluntary Settlement Coverage

- ❑ Passenger voluntary settlement coverage pays a sum if a passenger dies or is seriously injured.
 - ❑ Recipient must fully release insured from liability for all bodily injury.
 - ❑ Requires the named insured to ask the insurer to offer the settlement.
- ❑ Can be extended in some cases to include crew members as well.
 - ❑ Does not apply to crew members covered under a workers compensation law.

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Practice

- ❑ Which one of the following statements is correct regarding admitted liability coverage?
 - ❑ A. It can be extended to include crew members including those who are covered under workers compensation law.
 - ❑ B. It requires the recipient to fully release the insured from liability for all bodily injury.
 - ❑ C. It requires passengers to use legal action to secure compensation for injury.
 - ❑ D. It requires the insurer to initiate the settlement offer.

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Unmanned Aviation Risk Management and Insurance

Objective VII

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Commercial Uses for Drones

- ❑ Drones enable quick access to remote areas without jeopardizing the safety of employees.
 - ❑ Claims representatives can use drones to inspect roofs and other damage locations.
 - ❑ Engineers can use drones to inspect pipelines and develop infrastructure design.
 - ❑ Architects can use drone images to create 3-D models of structures.
 - ❑ Contractors can use drones to safely inspect cranes and monitor high-rise construction.

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Regulation of Commercial Drones

- ❑ Small Unmanned Aircraft Systems Regulations.
 - ❑ Operations must take place in daylight only.
 - ❑ Flights near major airports require Air Traffic Services' approval.
 - ❑ Flights must occur within 3 miles of operator.
 - ❑ No flights may take place over persons not directly involved in the operation.
 - ❑ Operators must meet specific qualifications.
 - ❑ Ground speed may not exceed 100 mph.
 - ❑ Altitude may not exceed 400 feet.

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Drone Insurance Challenges

- ❑ Challenges associated with insuring drones:
 - ❑ Commercial insurers have little data about drones with which to make loss predictions.
 - ❑ Many operators are inexperienced.
 - ❑ Many drones are new, so insurers may not fully understand their risks.
- ❑ Inexpensive risk management solutions:
 - ❑ Operator training
 - ❑ Safety management.
 - ❑ Respect for privacy.

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Drone Insurance Market

- ❑ Current U.S. regulations do not require drone owners or operators to carry insurance.
 - ❑ Most owners choose to secure adequate liability and physical damage protection.
- ❑ Some insurers outside the aviation market have adopted endorsements.
 - ❑ Coverage may be available only to existing corporate customers.
 - ❑ Limits are typically around \$1 million.

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Commercial Drone Coverages

- ❑ Liability coverage for drone owners and operators.
 - ❑ Covers bodily injury and property damage.
- ❑ Coverage may be supplemented with:
 - ❑ Liability coverage for nonowned drones.
 - ❑ Personal and advertising injury liability coverage – protects against privacy claims.
 - ❑ Premises liability coverage.
 - ❑ War perils liability coverage.

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Commercial Drone Coverages

- ❑ Physical damage coverage for drone owners and operators.
 - ❑ Hull coverage.
 - ❑ Covers loss of or damage to the drone and the drone's platform, payload, and equipment.
- ❑ Some drone insurers include value-added services as part of their drone programs.

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Practice

- ❑ Spencer owns a ranch in western Wyoming and he checks on his livestock through the use of a drone that he purchased last year. Spencer's neighbor has complained that Spencer is spying on him with the drone. Which one of the following coverages should Spencer obtain to protect him in the event his neighbor sues him for invasion of privacy?
 - ❑ A. Liability coverage for nonowned drones.
 - ❑ B. Premises liability coverage.
 - ❑ C. Personal injury coverage.
 - ❑ D. Physical damage coverage.

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