

## CHAPTER 5: TREATMENT OF RISKS

### RISK MANAGEMENT

The risk management function for ports is that management function responsible for:

- Identifying exposures to accidental loss that may interfere with the port's basic objectives
- Examining the feasible alternatives for dealing with these exposures
- Selecting the best risk management technique(s)
- Implementing the chosen techniques
- Monitoring the results of the chosen technique(s) to ensure that the risk management program remains effective

The objective of this specialized management area is to protect the port from catastrophic loss of assets, earning power, and personnel. An extremely important step in the risk management process is risk reduction. Only with effective control of identified risks can a port hope to achieve long term cost reduction. The control of these risks is achieved by effective loss control and safety programs designed to reduce both the frequency and severity of losses.

### LOSS CONTROL

Loss control is a generic term covering a variety of techniques available to ports to handle the loss potential identified in the measurement step of the risk management process. Loss control has often been undervalued by management personnel and, consequently, those organizations spend substantially more of their resources on loss financing methods than on loss control programs. A properly run risk management program should first attempt to eliminate or reduce the severity and frequency of losses with loss control techniques. Those losses that then occur, in spite of these efforts, should be handled by the loss financing and other techniques chosen by the port.

The lack of hard, documented evidence of loss control effectiveness is the main reason why many entities expend insufficient resources on this important topic. Losses can be tracked by their cost to the organization, whereas losses prevented are not tangible measures that are readily convertible to budget line items. The benefits of loss control programs will normally be spread over many years. Reduced employee and public suffering are difficult to quantify. Therefore, the dollar savings are not readily calculable thus making cost/benefit analysis very difficult to perform.

The introduction of properly run safety/loss control programs into public entity management has resulted in documented cost savings. Graphic examples can be found in both public and private organizations throughout the United States. While much of this documented proof of savings is in the workers' compensation and automobile loss areas, considerable experience has also been documented in reduced frequency/severity of losses to property and buildings. In addition to the direct cost savings arising from reduced losses and/or premiums, public entities have enjoyed reduced employee lost time, enhanced employee morale, and other benefits.

Loss control can be broken down into five steps, all of which are relevant to ports.

1. Exposure avoidance
2. Loss prevention
3. Loss reduction
4. Segregation of exposure units
5. Contractual transfer for risk control.

Exposure avoidance is where a port makes a conscious decision to avoid adding a new operation or ceases a current one because the risk exposure is substantial. An example of exposure avoidance would be where a port makes a conscious decision not to provide a service such as pilotage because of the loss exposures inherent in such services.

Loss prevention is defined as the activities undertaken to prevent an occurrence that results in loss to the organization. Examples of loss prevention are: employee and fleet safety programs, housekeeping standards, operation and design planning and review for the purpose of preventing and/or reducing potential losses, and awareness programs designed to make employees and visitors aware of dangerous conditions or acts which can result in losses.

Loss reduction is any technique that lessens the amount of losses that do occur. Water sprinklers was the example used in the introduction of this *Guidebook*. However, loss reduction can be applied to areas not immediately recognizable. For example, the quick and fair settlement of workers' compensation claims or general liability claims following an injury has saved many organizations a substantial amount of money. The reason is people expect immediate attention following an accident. When they perceive that they are not receiving the proper attention, they may seek legal counsel. Attorneys' fees add another cost to the system.

Segregation of exposure units is where a port spreads its property values over a number of locations so that if loss occurs at any one loca-

tion there will not be a high concentration of its assets at stake. An example of this application, is where a port parks its motor vehicles or equipment at several locations that are totally independent of each other instead of parking all at one location. When all vehicles are parked at one location they are all susceptible to loss or damage by a single localized occurrence such as fire and explosion.

Contractual transfer for risk control is the final method of loss control. Examples of transfer for risk control would be where contractors and others who are involved with the port would be required to provide agreements which indemnify the port in event of loss or hold the port harmless, and/or insurance to make sure the port is financially able to meet its obligations.

As mentioned earlier, the support of the port's management is critical to program success. Consequently, the board, counsel, or commissioners of the port should endorse a loss control or safety policy. An example of a safety policy is shown below. Notice how it spells out the responsibilities of all port employees. The policy also spells out the objectives of the loss control program or safety program.

**Figure 6**  
**Sample Safety and Loss Control Policy**

**PURPOSE:**

The Commissioners of the Port of < \_\_\_\_\_ > highly value the safety and well being of both its employees and the public it serves. To provide a safe environment for each, we will constantly work towards:

- The maintenance of safe working conditions;
- The development of port policies and procedures which are consistent with its loss control programs designed to reduce the frequency and severity of bodily injury and property damage losses; and
- The strictest conformance to Federal, state, and local laws and ordinances.

To accomplish this purpose, the following responsibilities are assigned.

**RESPONSIBILITIES:**

*Risk Management Department* (or designated department): shall draft, promote, coordinate, and maintain a port safety program. The safety program will include educational seminars, safety meetings, and safety committees. The Risk Management Department is responsible for creating and maintaining a reporting and record keeping system that monitors accident frequency and severity. The Department shall work with all departments, customers, and

vendors to insure that loss control and safety considerations are an integral element in the design, purchase, and use of buildings, equipment, tools, and work processes.

*Departmental Responsibility:* Each department shall take an active role in the programs developed and coordinated by risk management to ensure that safety programs reach each and every employee. Each department shall be held accountable for its own losses or its portion of insurance premiums.

*Supervisory Responsibility:* Supervisory personnel at all levels will be responsible for the safety of employees under their supervision and will be expected to conduct operations in a safe manner, following established rules and best practices at all times.

*Employee Responsibility:* All employees are expected to follow safe procedures and to take an active role in the task of protecting themselves, their fellow workers, their respective work areas, and the public using the port facilities.

## Safety Committees

The establishment of safety committees is one example of programs that have been successfully implemented by many public entities in response to their safety and loss control policies. These committees are required under many state laws and recommended by OSHA. The safety committee advises management and employees on issues of safety and health.

Safety committees may be composed of management, employees, or both. If management does not directly participate, it is imperative that they support the activities of the committee. If there are unions in the port, they should have a representative included as a member. The National Safety Council lists the following items as responsibilities often assigned to safety committees.

- Actively participating in safety and health instruction programs and evaluating the effectiveness of these programs.
- Regularly inspecting the facility to detect unsafe conditions and practices and hazardous materials and environmental factors.
- Planning improvements to existing safety and health rules, procedures, and regulations.
- Recommending suitable hazard elimination, reduction, or control measures.
- Periodically reviewing and updating existing work practices and hazard controls.
- Assessing the implications of changes in work tasks, operations, and processes.

- Field testing personal protective equipment and making recommendations for its use or alteration based on the findings.
- Monitoring and evaluating the effectiveness of safety and health recommendations and improvements.
- Compiling and distributing safety and health and hazard communications to the employees.
- Immediately investigating any workplace accident.
- Studying and analyzing accident and injury data.
- Acting as advisory body to the port for all safety related problems.

The safety committee should be large enough to ensure adequate attendance and yet small enough to achieve the goals. In addition to on-the-job safety, it is advisable to have an off-the-job committee to support and promote safety activities for home and recreation. Employers incur similar indirect expenses for off-the-job injuries, illnesses, or missed work as for on-the-job. Other indirect expenses include productivity losses, hiring of temporaries, disruptions, etc.

The port safety committee should meet monthly, or whenever the committee chairman deems that such a meeting is necessary. Reports and recommendations arising out of the meeting should be distributed to employees and management.

If the fleet exposure is adequate the port may wish to consider a Vehicle Accident Review Committee (VARC). This committee should consist of drivers who receive additional training on the determination of preventability of acci-

dents. The VARC reviews accident reports, police reports, maintenance reports, and other information that may lead to determination of cause. They make needed inquiries of the supervisors and drivers when questions exist as to the issues surrounding an accident. They then make a determination as to the cause of the accident, and if it could have been prevented. If it is preventable due to driver error, the information is provided to management for action. If they find the accident preventable due to other than driver causes, they will make recommendations for the desirable corrective actions. The purpose of the committee is to prevent future accidents from the same cause.

Guidelines for committee development and the preventability of accidents can be obtained from the National Safety Council, state, and federal transportation agencies, and other groups such as insurance carriers, brokers and agents. The organization's safety personnel are often members of the VARC and safety committees.

Even with the establishment of safety policies, safety committees, and vehicle accident review boards, many public entities have found that there still is a problem of gaining complete supervisor support.

One technique that has worked effectively for many organizations is a charge back of premiums and losses, or a percentage thereof, to the departments which are responsible for the losses. Department heads are more inclined to support and participate in port safety programs when they are held responsible for their own losses and must budget for them. In addition, loss trends and safety problems can be more easily identified when losses are charged back to the appropriate department. When the losses of the port are financed by insurance, the basis for the allocation of insurance premiums among departments should be each department's proportionate share of losses. When the port has a self insured program, losses that occur can be charged back directly to the department that causes them. Of course, not all losses can be attributed to a certain department. The appropriate treatment for these losses may be to charge them to overhead accounts.

Many public ports nationwide are unable to employ safety specialists because of their small size. Just because a port is small does not

mean it should not be developing safety programs. Most insurance companies have safety personnel that will develop safety programs for their clients upon request. The more a port can reduce its losses by loss control, the less the insurance company has to pay out of its pockets. Insurers offer many services to their clients, but insurance buyers must sometimes press them to get the loss control services that they desire.

Similarly, many insurance agencies and brokerage houses have trained safety personnel which can provide assistance in the development of safety programs. When negotiating insurance policy renewals, ask your broker(s) what services are included within the commission fees that are being paid. If safety consulting is provided, make sure that it is adequate, and they provide you with this service.

Finally, for those ports that retain a substantial portion of their own losses, there are independent loss control and safety specialists available to assist in the development of loss control programs.

## NON-INSURANCE TRANSFER OF RISK

One of the important methods of handling risk is transfer. The insurance mechanism is essentially a form of risk transfer. Other transfer techniques exist, including:

- Hold harmless agreements (indemnity).
- Requirements that others provide the port with insurance protection.
- Requirements that others provide minimum insurance coverage for themselves in order to defend suits against the port.

If properly handled, these non-insurance transfer techniques shift the port's risk-of-loss to another party. It is important to ascertain the contracting party's ability to pay its own losses, and limit the port's acceptance of another party's risk. The port and its attorneys should use these risk transfer techniques when dealing with contractors, suppliers, and lessees.

The person who contractually assumes the liability of another is known as the "indemnitor." The "indemnitee" passes the risk of loss to the

indemnitor. It is important to understand the contractual transfer of risk from both the position of an indemnitee and indemnitor since a port may find itself in either position when negotiating contracts.

When a port assumes the liability of another, this creates a contractual liability exposure that is not normally covered under the standard general liability policy unless they are "insured contracts" as defined and limited in the policy. Generally insured contracts under standard policies are:

- Lease of premises;
- A sidetrack agreement;
- Any easement or license agreement, except in connection with construction demolition operations on or within 50 feet of a railroad;
- An elevator maintenance agreement; or
- That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another to pay damages because of "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in absence of any other contract or agreement.

Contractual liability protection to expand this coverage area can be added to the general liability policy by endorsement.

When the port either passes or accepts risk, this will have a direct effect on its loss experience and the price it pays for its risk financing. This area of risk management can be difficult and should be reviewed by your broker/agent and legal council. The rules and court interpretations vary by state and application.

Discussions of risk transfers by ports through non-insurance methods can be divided into two general categories: (1) contractual transfers of risk to contractors, lessees, suppliers, and (2) transfer of risk by port tariff provision.

## **Contractual Transfer to Contractors, Suppliers, Etc.**

The use of the non-insurance transfer technique is more important to ports than most organizations because of the number of contracts that ports enter into with contractors, lessees, or suppliers. For those ports that operate solely as "landlords," the use of non-insurance transfers can be used to both control and finance losses.

There are many forms of indemnification language that are used by organizations in transferring responsibility for losses. Each port working with its attorneys must develop indemnification language which it feels comfortable with. Ports should make sure that the language used is reviewed on an annual basis to keep abreast of changes in the law and interpretations of such clauses. Below are samples of indemnification language used in regards to contractors. Each passes a different degree of risk on to the contractor. The indemnity language in the contract should be in bold or larger type so it is conspicuous to anyone reading the contract.

### **Limited Form Hold-Harmless**

"The contractor agrees to defend, protect, indemnify, reimburse and save harmless the Port of *'Insert'*, their agents and employees, from and against all loss and damages including attorneys fees, by reason of liability imposed by law upon the Port of *'Insert'* for damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons or on account of damage to property, including loss of use thereof, arising out of or in consequence of the performance of this work, provided such injury or damage is due to negligence of the contractor, his subcontractors, employees, or agents."

The limited form provides protection to the port where the contractor's activities or negligence causes harm to a third party. This really does not provide any more protection than what is normally found under the law. A contractor is responsible for those claims and legal fees that arise due to his sole negligence. A limited form indemnification is generally nothing more than an affirmation of the contractor's legal responsibilities. Thus, very little, if any, of the liability of the port may be passed on to the contractor.

### Intermediate Form Hold-Harmless

"The contractor agrees to defend, protect, indemnify, reimburse, and save harmless the Port of 'Insert', their agents and employees, from and against all loss and damages, including attorneys fees, by reason of liability imposed by law upon the Port of 'Insert' for damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons or on account of damage to property, including loss of use thereof, arising out of or in consequence of the performance of this work, whether such injuries or damage is due to the negligence of the contractor, his subcontractors, the Port, their agents and employees, except only such injury or damage as shall have been occasioned by the sole negligence of the Port."

This intermediate form of hold harmless makes the contractor responsible for all claims and legal expenses which result from any negligence on his part or joint negligence by both the port and the contractor. Note that the contractor is not responsible for the sole negligence of the port. Where the port is solely negligent, no protection will be provided by the contractor. However, where both parties are at fault, instead of apportioning responsibility for a claim as would normally occur, the contractor assumes the full cost. Problems can arise when the parties end up arguing as to whether the contractor has any negligence or not. Thus, the hold-harmless language developed under intermediate hold-harmless form to eliminate possible conflicts could ultimately lead to a lawsuit among parties.

### Broad Form Hold-Harmless

"The contractor agrees to defend, protect, indemnify, reimburse and save harmless the Port of 'Insert', their agents and employees, from and against all loss and damages, including attorneys fees, by reason of liability imposed by law upon the Port of 'Insert' for damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons or on account of damage to property, including loss of use thereof, whether caused by or contributed to by the Port and its agents and employees."

Under the broad form hold-harmless, the port is completely absolved from claims and legal ex-

penses that arise out of contractor activities regardless of whether the port is fully responsible or not. Here the port can be found solely negligent and all claims costs and attorney fees would revert back to the contractor.

The hold-harmless language used will have an effect on a port's loss financing costs. The amount of risk passed onto contractors, lessees, and suppliers through the various indemnification forms presented above will influence insurance underwriters when they determine premium costs for port insurance policies. Therefore, deciding what form is appropriate should be an important negotiating point when entering into contractual agreements.

Local, state, or Federal law may affect hold harmless and indemnity agreements. It is important, therefore, when developing hold-harmless provisions or indemnity agreements to have your legal counsel review applicable local, state, or Federal statutes that might influence the contract. For example, many states do not allow construction contracts to require the contractor to indemnify the owner for his/her sole negligence. It is important to verify whether your state may have any legislative restrictions or prohibitions against indemnity and hold-harmless agreements.

### Transfer of Risk by Port Tariff Provisions

In contrast to agreements between ports and their contractors, lessees, and suppliers, risk-transfer provisions in port tariffs have been limited by rulings of the Federal Maritime Commission (FMC) in rulings issued under Section 10(d)(1) under the Shipping Act of 1984 (46 U.S.C. app. §1709(d)(1)) and its predecessor provision, Section 17 of the Shipping Act, 1916 (46 U.S.C. app. §816).

The Commission has declared two categories of risk-transfer provisions invalid and published regulations prohibiting their inclusion in the tariffs of marine terminal operators regulated by the agency. The prohibitions are published in the Commission's regulations, 46 C.F.R. §514.4 (b)(3)(i) and (ii) (1997 ed.):

- (i) *Limitation of liability.* Tariffs may not contain Tariff Rules purporting to limit liability for loss or damage in a manner that is prohibited by applicable statute or regulation.

(ii) *Exculpatory tariff provisions.* No terminal tariff may contain provisions that exculpate or otherwise relieve marine terminal operators from liability for their own negligence or that impose upon others the obligation to indemnify or hold-harmless the terminals from liability for their own negligence.

The first tariff-limiting provision applies to ocean carriers as well as to marine terminal operators, and is a general admonition that any tariff rule or provision included in a tariff filed with the FMC must comply with other provisions of law, such as the Carriage of Goods by Sea Act.

The second provision, prohibiting "exculpatory" clauses, applies by its terms only to marine terminal tariffs. It expressly prohibits a marine terminal operator from attempting to protect itself from its own negligence, whether by use of an exculpatory clause or by means of an indemnity provision in the tariff. This limitation has its origin in a line of Commission cases holding that it is unjust and unreasonable for a marine terminal operator to attempt to shield itself from the effects of its own misconduct.<sup>1</sup>

The risk transfer provisions which the FMC does not permit a port to include in its tariffs may very well be permissible in contracts between ports and their contractors, lessees, and suppliers. In contractual relationships, the parties bargain at arms length, and the resulting contract reflects the mutual agreement of the parties. If the port's demands are too onerous, the other party is under no compulsion to enter into the contract. The decision as to whether risk transfer provisions are agreed to is made based upon commercial considerations. Port tariffs, on the other hand, are unilaterally promulgated, and the users of the facilities of the ports and services lack the bargaining power of parties to contractual negotiations.

A word of caution is in order. The prudent risk manager should not expect that the FMC will necessarily endorse an onerous risk transfer

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<sup>1</sup> See, for example, *Pate Stevedore Co. of Alabama v. Alabama State Docks Dept.*, \_\_\_ F.M.C. \_\_\_, 24 S.R.R. 1222 (1988); *Lucidi v. Stockton Port District*, 22 F.M.C. 19 (1979); and *Truck and Lighter Loading and Unloading Practices at New York Harbor*, 9 F.M.C. 505 (1966).

clause in a lease that might be attacked under Section 10 (d)(1) as being unjust and unreasonable. The Commission decides cases in this area on a case-by-case basis, and the outcome of each case depends upon its own facts. For example, it has held some agreements which restrict competition in the tug business to be unlawful,<sup>2</sup> while it has found similar agreements to be proper.<sup>3</sup>

The Commission will, upon the complaint of a port customer (in this case a stevedore), examine the provisions of a terminal agreement which was reached in arms length bargaining, and hold them to be unlawful under the provisions, *inter alia*, of Section 10(d)(1), despite the fact that the stevedore obtained the benefits of the agreement for a number of months before complaining about its economic provisions.<sup>4</sup>

A port cannot protect itself by arguing that a "use equals consent" provision in a tariff creates a contractual relationship between the parties and thus justifies an otherwise onerous prohibition or restriction. The Commission has taken the position that a "use equals consent" clause adds no independent validity to provisions imposing liability. Regardless of the "use equals consent" provision, substantive restrictions or rules in the tariff are subject to FMC scrutiny under the reasonableness standard.<sup>5</sup>

Another area in which ports have attempted to shift risk of liability to their users involves the "borrowed servant" doctrine. This typically is the situation created when a stevedore company leases a container crane and its operator from the port, and the port tariff specifies that the operator is the "borrowed servant" of the stevedore, meaning that the port intends to shift

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<sup>2</sup> *A.P. St. Philip, Inc. v. Atlantic Land & Improvement Co.*, 13 F.M.C. 166 (1969).

<sup>3</sup> *Petchem, Inc. v. Canaveral Port Authority*, \_\_\_ F.M.C. \_\_\_, 23 S.R.R. 974 (1986) *aff'd sub nom Petchem, Inc. v. Federal Maritime Commission*, 853 F.2d 958 (1988).

<sup>4</sup> *Ceres Marine Terminal, Inc. v. Maryland Port Administration*, \_\_\_ F.M.C. \_\_\_, 27 S.R.R. 1250 (1997) now pending appeal in the U.S. Court of Appeals for the Fourth Circuit, *Maryland Port Admn. v. Federal Maritime Commission*, Docket No. 97-2418.

<sup>5</sup> *West Gulf Maritime Ass'n v. Port of Houston Authority*, 22 F.M.C. 420 (1980).

liability for the crane operator's actions to the stevedore. The FMC is hostile to "borrowed servant" provisions, and while not prohibiting them as a matter of law, the agency has twice refused to enforce them in recent years.<sup>6</sup>

### Contractor Insurance Requirements

The use of hold-harmless or indemnification language is only effective if the party who accepts another's liability has adequate insurance or risk financing to pay for claims and attorney's fees. If they are unable to satisfy the judgement and legal fees, these costs could ultimately revert to the port. Consequently, the port should make sure that its contractors have adequate insurance protection. This is important for two reasons. First, if the contractor is unable to satisfy a judgment made against him, the person who was injured may ultimately make a claim against the port. When the contractor has adequate insurance, the injured party will be less likely to entertain such a notion to sue the port. Second, the port would find it desirable for its contractors to carry insurance should it decide to take legal action against the contractor.

There are a number of things that a port should include in its minimum insurance requirements to ensure that the contractors' insurance coverage is available when losses arise.

First, the contractor should name the port as an additional insured under its insurance contracts. On the surface, this seems to afford the port the insurance coverage of the contractor. However, a problem has arisen for a number of organizations that have become additional insured under other parties' policies. There is a provision in most insurance policies which addresses "other insurance." This provision states that the insurance in the policy is excess to any other valid and collectible insurance. Cases have arisen where a contractor's insurers have stated that coverage provided them is excess over what is carried by the additional insured. The end result is that the insurers of the contracting parties battle it out as to who is responsible. Court

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<sup>6</sup> Stevens Shipping and Terminal Company v. South Carolina State Ports Authority, \_\_ F.M.C. \_\_, 23 S.R.R. 684 (1986); and Southeastern Maritime Co. v. Georgia Ports Authority, \_\_ F.M.C. \_\_, 23 S.R.R. 941 (1986).

decisions indicative of issues relating to this problem are:

Gulf Oil Corp. v. The Mobile Drilling Barge Margaret, 441 F. Supp. 1 (E.D. La. 1975), *aff'd*. 565 F.2d 958 (5<sup>th</sup> Cir. 1978); see also, Old Republic Ins. Co. v. Concast, Inc., 558 F. Supp. 616 (SDNY 1984); compare, Musgrove v. Southland Corp., 898 F.2d 1041 (5<sup>th</sup> Cir. 1990); Honeywell, Inc. v. American Malousts Ins. Co., 441 NE 2d 348, 109 Ill. App.3d 955 (1982); Truck Insurance Exchange v. Liberty Mutual 428 NE 2d 1183, 102 Ill. App.3d 24 (1981).

To avoid a possible conflict between the ports insurers and those of a contractor, the contractor's insurance policy should state in the additional insured endorsement that the policy will provide primary coverage to the port for claims arising out of the contractual relationship regardless of policy language to the contrary. The policy should also state that premiums or deductibles are for the amount of the insured(s) named in the policy. It is important that the endorsement accurately depicts the agreement between the port and its contractor.

A second consideration is that insurance limits of liability should be based on the loss exposures generated by the contractual relationship. The contractual agreement should spell out what forms of insurance are required of the contractor. The required insurance coverages should be based on the "subject" of the contract being executed. Insurance coverages that may be required of contractors, suppliers, or lessees based on the nature of the contract could include:

- General Liability
- Wharfingers' Liability
- Warehouseman's Legal Liability
- Workers' Compensation (state and/or U.S. Longshore and Harbor Workers' Compensation Act) (USL&H)
- Business Automobile Liability
- Protection and Indemnity
- Jones Act Compensation



Third, the policy or endorsement should provide coverage for contractual liabilities, such as an indemnity agreement.

A hold-harmless agreement can pass liability back to the contractor but if the contractor does not have insurance protection nor the resources to satisfy the judgement and legal fees, all or a portion of the loss could revert back to the port. A similar problem could arise where the contractor has the appropriate insurance coverage but insufficient limits of liability. Again, the plaintiff could turn to the "deep pockets" of the port to fully satisfy the judgement. The insurance requirements section of the contract should define the minimum amounts of insurance to be required. The amount of insurance required of contractors, suppliers, or lessees should be based on the severity of the loss exposures generated. At the very minimum, a port should require a \$1,000,000 liability limit from all contractors in addition to full workers' compensation protection. The more hazardous the contractor's operations, the greater the amount of insurance that should be required. To ensure that the contractor is maintaining the required insurance coverages, the port should be provided with "certificates of insurance" or copies of required insurance policies. All certificates of insurance and insurance policies should be kept current to satisfy the contract. As an additional precaution, the port should require that the contractor's insurance carriers provide at least 30 days notice to the port before limits and scope of coverage are materially altered or insurance protection is canceled.

Finally, it is important for the policy to provide coverage for the consequences of the port's own negligent acts (as opposed to the vicarious liability of the insured(s) named in the policy) that arise out of operations under the contract.

### **Certificates of Insurance**

Many insurers have developed standard certificates of insurance which often contain provisions that may not be in the best interest of a port. Provisions often found in certificates of insurance that the port risk manager should be aware of include:

- Certificates often state that it is for "information purposes only" and that it does not

confer any rights to the holder nor amend, extend, or alter the coverage afforded by the policies shown in the certificate.

- Cancellation notices of certificates often state the carrier will endeavor to mail written notice of policy cancellation to the certificate holder but failure to provide such notice imposes no obligation or liability upon the insurer.
- Cancellation notices in certificates also often specify the number of days advanced notice the carrier will endeavor to provide prior to canceling a policy. Contrary to what may be specified in an agreement between the port and contractor, insurers will often insert only 10 to 15 days' notice in these provisions.
- Ports should carefully review certificates of insurance provided by tenants and contractors. The certificate should be signed by the insurance company or its agent (the agent must provide written proof that he/she has authority to issue the certificate). Standard provisions such as those listed above may not be in the best interest of the port and should generally be rejected. Insurers will generally modify or delete these provisions where a port insists on their modification or deletion.

As the port is cognizant of the financial standing and policy-holder's reputation of its own insurance companies, it should also pay particular attention to the quality of contractor, lessee, or suppliers insurance companies. Contractors' insurance coverage should be provided by reliable and acceptable insurance companies. Insurers maintaining a good or higher rating are recommended (see discussion under Insurance Company Solvency Ratings on page 2--24.).

Maintaining files on the port's contractors and the insurance policies they have in force is an important process. To streamline this process, some ports have developed computer programs which track contractor insurance programs and alert the port to possible lapses. Ports may have the computer issue form letters when contractors' insurance policies are about to expire, warning them that evidence of insurance must be provided for the new period. Such a computerized program reduces the amount of clerical time involved and often leads to greater operat-

ing efficiencies. Developing a computer program that monitors contractors' insurance is not difficult, and the benefits derived from such a system can be substantial.

The Port of Los Angeles has created an endorsement (see Exhibit H, page B--9) that must be attached to all contractors, lessees, or suppliers' policies before port insurance requirements are satisfied. This endorsement deserves particular mention since it includes many of the factors discussed above on contractor insurance requirements. Notice how this endorsement spells out that the contractors' insurance coverage is primary, that the port will be notified 30 days prior to any major changes of insurance coverage, plus a host of other considerations. Such an endorsement provides much greater protection than the standard "Certificate of Insurance" which does not state that contractor coverage is primary or guarantee that the port will be notified 30 days prior to cancellation.

## LOSS FINANCING

### Loss Development

To fully understand and appreciate alternative loss financing methods, one first needs a basic understanding of claims reserving and claims payout patterns. All factors used in this segment are those of 1997.

#### Claims Reserving

Claims cost for a particular insurance policy year is made up of two components. The first component is the amount that has actually been paid to claimants, their medical providers, etc. The second component consists of reserves established to meet future obligations. Generally, these reserves are established on a claim by claim basis, based on the particular facts and circumstances of each case. These are often referred to as case reserves. Insurers may also establish a second reserve to cover the cost of claims which have not yet been filed. These are generally referred to as "incurred but not reported" or IBNR reserve.

Estimating claims reserves can be difficult and often imprecise because it represents an estimate of future obligations. To illustrate the

difficulty, consider a workers' compensation back injury where the initial medical information indicates treatment with bed rest and traction. A reserve is established of \$1000 indemnity and \$500 medical to cover two weeks of lost work and associated medical treatment. Following this treatment, the employee continues to "experience pain" and further medical tests indicate surgery is necessary. The insurer raises the reserve to \$4,000 indemnity and \$10,000 medical. This emergency surgery fails to relieve the pain, and a second surgical procedure is undertaken. The second procedure also fails to correct the injury, and the employee is determined to have a permanent partial disability. The reserves are once again increased to \$65,000 indemnity and \$40,000 medical.

The transition of reserves from initial estimates to final cost is referred to as "development" or "loss development." Historically, claims reserves develop upward (increase). National statistics indicate that it takes claims reserves from one policy year, five years or more to fully develop to their ultimate cost. For some insurance lines such as product liability, it may take 10 to 20 years for claim costs to develop fully. Figure 7 on the next page provides a general overview of loss development factors for several lines of insurance. The reserve development will vary depending on the organization, geographic location, reserves and claims handling practices, etc.

#### Claims Payment Patterns

To appreciate the benefits of various loss financing techniques, one must understand claims payment patterns.

The important element is that it takes many years to pay off the total claims incurred in a single insurance policy year. Workers' compensation is a good example. The incurred to ultimate development for a loss which occurs in

one policy year may take up to 13 years. The development factors vary by jurisdiction and type

of claim. A typical workers' compensation payment pattern is as follows:

**Figure 7  
Loss Development Factors**

Months from Policy Inception	Workers' Compensation	Automobile Liability	General Liability Including Products
12	1.612	NA	NA
18	1.437	1.154	3.966
24	1.261	1.114	3.169
36	1.171	1.045	2.082
48	1.131	1.019	1.600
60	1.109	1.009	1.390
72	1.095	1.005	1.290
84	1.830	1.000	1.228
96	1.075	1.000	1.183
108	1.050	1.000	1.160

\* To estimate ultimate claims cost, multiply total incurred (reserved plus paid) losses by the factor in the above table which corresponds to the valuation age of the loss. For example, \$100,000 of workers' compensation losses at 12 months would be multiplied by 1.612 to find the expected ultimate cost.

<i>Year of Payment</i>	<i>Percent Paid Out*</i>
1 <sup>st</sup> .....	22
2 <sup>nd</sup> .....	25
3 <sup>rd</sup> .....	15
4 <sup>th</sup> .....	9
5 <sup>th</sup> .....	6
6 <sup>th</sup> .....	4
7 <sup>th</sup> .....	3
8 <sup>th</sup> .....	2
9 <sup>th</sup> .....	1
10 <sup>th</sup> .....	2
>10 .....	11
	100

\* Annually

The claim payment lag occurs for a number of reasons. Claims will occur throughout the year and some will take longer to treat and close out. A serious injury may require prolonged medical treatment. A contested claim must be heard by a State Board or appropriate judicial body. Even when a serious claim is well valued, it can take time to close it out as the workers' compensation system is predicated on benefits being paid in weekly installments. As an example, an employee who is considered temporarily totally disabled may be paid \$425 per week. This same claim, however, may carry a total estimated reserve of \$60,000 or more, even though the obligation is only to pay the prescribed weekly installment. In such a case, the entire estimate claim cost of \$60,000 would be recognized as a liability. The difference between the estimated total cost and the amount actually paid is the reserve for future estimated payments.

Payment patterns for claims vary by line of insurance coverage, jurisdiction, and claims management practices. Property damage claims generally are paid out in a relatively short period of time. Liability and workers' compensation claims tend to be paid over a longer period. Figure 8 provides a schedule of representative payout patterns for workers' compensation and

general and automobile liability claims. It should be noted that these averages are based on national statistics. The payout distributions of individual organizations will vary from this. It is important, therefore, that each organization develop its own payout profile based on credible historical loss data, if possible.

**Figure 8**  
**Claims Payout Profile**  
**As a Percentage of Ultimate Incurred Losses**

<b>Months from Policy Inception</b>	<b>Workers' Compensation</b>	<b>General Liability</b>	<b>Automobile Liability</b>
12	22	8	32
24	25	10	31
36	15	12	16
48	9	12	10
60	6	12	5
72	4	9	2
84	3	7	1
96	2	5	1
108	1	4	0
120	2	3	1
>120	11	18	1

Since claims reserves have an investment value until they are finally paid, the interplay between the creation of reserves, timing of claims payments, and the investment value of unpaid reserves can have a significant impact on the cost of an insurance program. Figure 9 illustrates this interplay and its impact on cost. For ease of understanding, the illustration is limited to a single policy year for workers' compensation and is limited to 10 years, although 11 percent of claims remain open and will be paid out after the 10-year cut-off date. From this illustration, it can be seen that the interplay or "cash flow" of these components can have a significant impact on costs. It should be kept in mind that the illustration is for a single insurance year. The cost impact becomes

even more significant when one considers multiple insurance policy years.

### **Loss Financing Alternatives**

Loss financing can be defined as a plan permitting a port to provide funds to handle losses that occur. Loss financing alternatives can be broken down into loss transfer and loss retention alternatives. Loss transfer alternatives include insurance and non-insurance techniques. Non-insurance techniques are generally achieved through contractual transfers using indemnification or hold harmless clauses such as often exist in a port's

lease agreement. Since these are discussed in greater detail in another section of this *Guidebook*,

the emphasis of this section is on insurance loss funding techniques.

**Figure 9**  
**Illustration of Workers' Compensation**  
**Loss Development, Payout Profile, and Investment Value of Unpaid Reserves**

	Months from Inception									
	12	24	36	48	60	72	84	96	108	120
A. Loss Development	620,000	793,000	854,000	884,000	902,000	913,000	923,000	930,000	952,000	1 M
B. Claim Payout										
- Period	220,000	250,000	150,000	90,000	60,000	40,000	30,000	20,000	10,000	20,000
B1. - Cumulative	220,000	470,000	620,000	710,000	770,000	810,000	840,000	860,000	870,000	890,000
C. Unpaid Reserves (A-B1)	400,000	323,000	234,000	174,000	132,000	103,000	83,000	70,000	82,000	110,000
D. Investment										
Income	20,000	16,150	11,700	6,700	6,600	5,150	4,150	3,500	4,100	5,550
- Period	20,000	36,150	47,850	56,550	63,150	68,300	72,450	75,950	80,050	85,550
- Cumulative										

Assumptions: (A) Workers' compensation ultimate losses of \$1,000,000 (1M).  
(B) Investment rate of 10% simple interest.

Another financing method (that began as a transfer method but now may include insurance) is pooling. Groups of similar entities pay the group's collective losses thus evening out the annual costs and softening the impact of occasional large losses. Insurance is the most commonly used means of providing funds for those situations when assets or earnings could otherwise be impaired by some unforeseen or unpredictable event. With the possible exception of the federal government, insurance generally plays some role in the loss financing programs of all organizations.

When insurance markets are "soft," i.e., most coverages are available and affordable, insurance may be the best choice. Most ports experience difficulty obtaining some coverages so that port risk managers know it is not the only means for loss funding. In some situations, full insurance may be appropriate. However, many exposures are insured today for which the purchase of insurance may not be necessary or for which alternative financing approaches may prove more efficient and cost-effective.

Insurance contracts transfer the risk of loss from the port to an insurance carrier. The amount of risk transferred depends on the limits of liability, the deductible or self-insured retention level, policy conditions and exclusions, and the rating

plan. Rating Plans can be classified as guaranteed cost or loss sensitive.

### Guaranteed Cost Plans

Guaranteed cost programs are often referred to as prospectively rated insurance plans. They provide that for a fixed annual premium, the insurer will pay for all losses incurred during the policy term. While the premium is generally considered fixed, typically the premium rate is constant while the premium is subject to an adjustment due to variation in the exposure rating base used to calculate the premium. As an example, a port may obtain a workers' compensation policy that provides for a premium rate of 25 cents per \$100 of payroll. If the port generates \$100,000 of payroll, its premium would be \$250. However, if the port generated \$150,000 of payroll, its premium would be \$370.

Some insurers offer guaranteed cost programs that incorporate a dividend feature. The dividend under these programs is generally not contingent upon individual loss experience. The dividend is generally stated as a percentage of standard premium and payable after expiration of the policy. Generally, the dividend must be declared by the insurer's board of directors and approved by the state insurance departments. In evaluating insurance proposals, it is helpful to

evaluate the historical dividends paid by the insurance company. However, it should be kept in mind that by law, insurers cannot guarantee the payment of future dividends.

### Loss Sensitive Rating Plans

These premium rating plans tie insurance premiums to the actual loss experience of the port. They go by a variety of names, including retention and retrospective rating plans. They are generally considered viable for those ports which generate large premium volumes or where frequency and severity of loss can be forecast with some predictability.

Retention plans are generally limited to workers' compensation exposures only. Under a retention plan, at policy inception the insurer calculates the manual premium as if it were for a guaranteed cost rated plan. A retention factor covering the insurer's overhead, direct expenses, and profits is established as a percentage of the manual premium. A loss conversion factor covering loss adjustment expenses may also be stipulated.

During the policy year, the manual premium is paid to the insurer. Generally, six to eight months after policy expiration, the actual premium is calculated. The actual premium is calculated by applying the retention factor times the manual premium plus incurred losses times the loss conversion factor. The sum of these is the actual premium. If the actual premium is less than the manual premium paid to the insurer, the policy-holder receives a premium dividend or return. The manual premium is generally considered the maximum premium which an insured port can pay. Therefore, if the calculated actual premium exceeds the manual premium, the port is not required to make up the difference to the insured. Some insurers will continue to recalculate the actual premium for several years after expiration of a policy to account for loss development in reserves and for claims which are slow to surface. Other carriers perform the actual premium calculation only once but add an "incurred but not reported reserve" to the equation to account for loss development.

The advantage that these plans have over a guaranteed cost rating plan is that it provides the opportunity to reduce cost where a port has fa-

vorable loss experience. Also, since the maximum premium is generally equal to the manual premium, the port is guaranteed a fixed maximum insurance cost. As a general rule of thumb, ports that generate workers' compensation premiums in the range of \$100,000 to \$175,000 and have good loss control and better than average loss experience may find these plans advantageous.

Retrospective rating plans also tie premiums to actual losses by determining the actual premiums after the expiration of the policy. There are five basic retrospective rating plans which are referred to as Plans A, B, C, J, and D. Plans A, B, C, and J are used solely for workers' compensation exposures. Plan D can combine workers' compensation, general liability, and automobile exposures.

*Plan A* is a retrospective plan without surcharges, where the policy-holder's maximum premium will not exceed the standard premium. It's comparable, therefore, to a retention plan. Because the plan does not allow surcharges, the premium savings available to a port are limited by a relatively high basic and minimum premium requirement. This rating plan typically appeals to a port which has poor loss experience that it hopes to improve.

*Plan B* allows for a small surcharge should the insured port incur poor loss experience. This plan, typically, appeals to a port with relatively good experience and financially able to risk the possibility of incurring a small surcharge above its manual premium, in order to obtain a reduced basic and minimum premium.

*Plan C* eliminates the minimum premium factor in return for larger surcharges if the port's losses are heavy. The elimination of the minimum premium provides the opportunity for greater premium savings compared to Plan B. However, the surcharges are generally higher. This plan is beneficial to a port which generates a substantial premium volume and relatively low losses.

*Plan J* provides for a slightly higher minimum premium than Plan B, but the maximum is lower. A port with poor loss experience would not incur as high a premium as it would with Plan B. A port with favorable experience would not save as much premium because of the higher minimum.

Plan J generally appeals to a port whose losses are relatively stable from year to year and fall within the range of average to slightly above average expected losses.

*Plan D* permits workers' compensation, general liability, and automobile exposures to be combined into one master rating plan. Plan D, because it combines multiple lines of insurance and allows insurers almost infinite variations in plan rating factors, permits greater flexibility in designing the plan for a port. Typically, these plans are used by larger ports which generate a substantial premium volume for workers' compensation, general or automobile insurance.

As with other rating plans, the starting place of a retrospective plan is the standard premium. For workers' compensation, this premium is developed by manual rates. General and automobile premiums are generally based on exposure units, i.e., square footage and number of automobiles.

Under a retrospective rating plan, the insurance company charges a percentage of the standard premium, called the "basic premium," to cover its costs to administer the program. A maximum premium is established which is the largest amount which can be charged the insured. A minimum premium is also established which is the lowest premium which the insurance company can receive. A loss limitation may be established which limits the maximum amount the insured can be charged for any one claim under the rating formula. In addition, a loss conversion factor is established which is applied to incurred losses to reimburse the insurance company for loss adjustment cost. A tax factor is applied to the premium developed under the rating formula to meet the premium tax requirements of the various states. Figure 10 provides an illustration of the premium calculation under a retrospective rating plan.

The standard premium is paid to the insurer during the policy year. The actual premium is calculated, typically, 18 months after inception (six months after policy expiration). The formula is the basic premium plus losses times the loss conversion factor, both times the tax multiplier. If the amount calculated is less than the standard premium, the insured receives a return premium. If the amount is more, an additional premium charge may be made by the carrier

depending on the retrospective rating plan being used. The total premium an insured can incur is limited by the minimum and the maximum premium factor. Generally, the retrospective premium is re-calculated every 12 months until such time as it is determined that all losses are properly valued.

In a normal retrospective rating plan, the losses used to determine the retrospective premium are the incurred losses which are the sum of paid losses and the reserves established by the carrier as its estimate of the future cost of settling known open claims. The amount of reserve dollars that can be set aside by an insurer to pay future claims can be substantial. It must be remembered that none of these reserve dollars have in fact been paid out to claimants. Charging premiums on the basis of reserve dollars, therefore, denies a port the use of monies it could otherwise invest and generate income.

Two approaches have been developed by insurers to respond to this problem. The first is named a "depressed premium plan." In plans of this nature, the insurer estimates both the "standard" premium applicable to the insured and the actual retrospective premium which would be calculated at the first retrospective adjustment. Instead of the policyholder paying the insurer the standard premium as it does under a normal retrospectively rated plan, the estimated first retrospective premium is paid during the first 12 months of policy coverage. Since the retrospective premium is generally less than standard premium, this provides the insured with a substantial cash flow benefit. A normal retrospective adjustment is then performed based on losses evaluated as of 18 months after policy inception and every 12 months thereafter until all claims are closed.

Even though this approach materially improves cash flow over a normal retrospective rating plan, premiums are still based on incurred losses. The result is that the benefits derived from holding unpaid loss reserves accrue to the insurance carrier instead of the port.

In response to this disadvantage, insurers under certain circumstances have consented to the use of a retrospective rating plan in which premiums are based on paid losses rather than incurred losses. "Paid loss retrospective plans" are not standardized and may vary significantly

among insurers. Typically some important elements are changed in the way a plan is developed compared to an incurred loss retrospective plan. Included in these changes are:

- The loading for claims overhead and the administration contained in the loss conversion factor continues to be applied against incurred losses and not paid losses to develop the charge used for normal loss handling expense.
- The insurer may make a charge to offset its loss of profits from no longer being able to invest claims reserves. This additional charge is generally hidden in the basic or minimum premium factor.
- Since the insurer is not collecting the full amount of premium, some form of collateralization is typically required for the difference between the standard premium and that premium actually being collected. The four most commonly used forms of collateralization are (1) a letter of credit, (2) a

surety bond, (3) a compensating balance account, and (4) a secured interest bearing note.

- A claims escrow deposit, usually in the amount of an estimate of two months paid claims, may also be required. Alternatively, first year premium payments for the policy may include an estimate of annual paid claims in which event the claims escrow account would not be used.
- The plan may also contain a stipulation that the premium calculation will convert from a paid loss to an incurred loss retrospective rating plan after a specified number of premium calculations or months from policy inception. This time period can vary substantially. It should be carefully reviewed by any port considering a paid loss program. If the conversion period is relatively short, substantial cash flow benefits might be lost.

**Figure 10  
Retrospective Rating Plan  
Premium Calculation**

Assume:			
A.	Workers' Compensation Manual Premium of \$1,300,000		
B.	Incurred Losses of \$700,000		
C.	Retrospective Rating Plan Factors of:		
	Basic:	.18	
	Loss Conversion Factor:	1.12	
	Premium Tax Multiplier:	1.039	
	Minimum Premium:	.19	
	Maximum Premium:	1.15	
	Incurred Losses:		\$ 700,000
	Loss Conversion Factor:		x 1.12
			\$ 784,000
	Basic (\$1,300,000 x .18):		+ 234,000
			\$1,018,000
	Tax Multiplier		x 1.039
	Total Retrospective Premium		\$1,057,702
	Less: Premium Deposit		\$1,300,000
	Premium Returned to Policyholder		(\$242,298)



## **Retention Loss Financing Alternatives**

Retention can simply be defined as assuming loss within the financial structure of the port. Retention loss financing alternatives include self-insurance with or without pre-planned funding and captive insurance company approaches. Insurance policy deductibles are a form of self-insurance, although the insurer is still obligated to defend the port. For self-insured retentions, the port would defend itself until the claim costs exceed the retention amount.

### **Self-Insurance Without Pre-Planned Funding**

This type of funding generally involves assuming losses within the financial structure or operating budget of the port without the benefit of pre-planning or setting aside funds for the purpose of paying losses. Generally, this is the most efficient and cost effective financing method for those risks which represent a low severity and high frequency of loss. An example of this might include thefts of office supplies or automobile collision losses. Improper loss identification techniques which fail to discover risks can, unfortunately, force the port to accept this alternative for larger unexpected losses as well.

### **Self-Insurance With Pre-Planned Funding**

This alternative can simply be defined as assuming the risk of loss within the financial structure of the organization and simultaneously developing a plan for permitting the port to successfully finance the cost of losses that it has retained. Self-insurance is generally a viable alternative only where there is low to moderate severity of loss potential. While self-insurance can be an efficient and cost effective method of financing losses, other factors should also be considered in determining the feasibility of its use. Workers' compensation is one loss exposure which ports may choose to self-insure. Workers' compensation, however, is regulated by each state. Self-insurance of workers' compensation, therefore, requires approval from the state, which is generally granted only when a port demonstrates its financial stability and ability to meet workers' compensation obligations.

In addition, some states do not allow self-insurance.

A port may or may not be able to self-insure its general and automobile liability exposures because of requirements in bond indentures, mortgages, or other agreements that require the purchase of insurance. Automobile insurance is often mandated by state statutes and approval from the state may be required to self-insure. Also, where the port is required to provide proof of general or automobile liability insurance, the use of self-insurance may result in a significant expenditure of time in convincing the requesting party that its interest is fully protected by the port's self-insurance plan. While some larger ports may find self-insurance viable for general and automobile liability exposures, for most ports it is typically only a viable alternative for workers' compensation obligations. For this reason, the remainder of this discussion centers on workers' compensation. However, the same principles would apply to programs self insuring other exposures such as general and automobile liability.

A self-insurance plan may be viewed as consisting of a number of distinct components which work in unison. The components typically consist of:

- *The Funding Mechanism* – This is the nucleus of the plan. It may exist as a separate and distinct fund or trust in which funds are already set aside or merely be a bookkeeping entry within the port's budgets. The exact structure and operation of the plan's funding mechanism will depend on the preferences of the individual port. For control purposes, it is generally preferable to have all contributions to and expenses of the plan flow through the funding mechanism.
- *Excess Insurance* – Due to the potential severity of loss exposures, excess insurance protection is generally purchased for the self-insured plan. In many cases, it may be required by a state's regulatory body before approval is granted to self-insure. Specific excess insurance comes into play when a single claim exceeds the amount retained or assumed by the self-insurer. Aggregate excess insurance limits the *maximum annual* amount retained for all claims by the self-insurance fund.

- *Administration* – This includes the entire process of adjusting, processing, and administering claims. This can sometimes be handled in-house by port staff, or services can be purchased from outside sources who are experienced in claims handling. Outside sources would include independent adjusting companies as well as the claims departments of insurance companies.
- *Safety and Engineering* – Safety and engineering services are often overlooked in a self-insurance plan with the result that claims may increase in both frequency and severity. Safety and engineering programs should be an integral part of a self-insurance plan. The ultimate success of a self-insurance plan is directly related to the ability of the port to control claims frequency and severity. Services can be performed in-house or purchased from independent firms and insurers.
- *Legal Defense* – Legal defense for contested worker's compensation claims is generally provided by insurers under insured programs. The cost of this is generally spread over all policyholders and hidden in the insurance premiums. A port implementing a self-insurance program will need to replace these legal services. The cost can vary significantly and should be evaluated in planning any self-insurance program. (These costs are typically easier to identify in insured general and automobile liability programs because these costs are generally displayed separately in loss experience reports as "allocated claim expense.")
- *Bonds and Assessments* – For approval to self-insure workers' compensation, many states require that a surety bond or other collateral be posted. The amount of the surety bond will vary by state. In addition, the port may be subject to various assessments by the state for such things as second injury funds, the administrative cost of the state's self-insurance regulating office, etc. The amount and type of assessments vary by state. If the port employs longshore employees, it will be subject to federal assessments for its USL&H worker's compensation.

- *Other Services* – A self-insured plan may require other services in addition to those listed above. Examples might include rehabilitation services or management information systems (MIS) capabilities for loss statistical reports. These services often can be obtained through the broker, claims administrator, one of the other service providers, or through entirely independent sources, depending on the desires of the individual port.

### **Captive Insurance Company**

The captive insurance company is generally not used as a loss funding technique for ports. However, under certain circumstances, the captive approach might have some application. In addition, insurance programs of lessees, contractors, or others having dealings with ports may involve captive insurance companies. Therefore, a basic understanding by the risk manager of this technique is desirable. For this reason, a general overview of this technique is included in the *Guidebook*.

A captive insurance company is a limited purpose insurance company established and owned by an organization (or group of organizations) for the primary purpose of underwriting the insurance of its owner(s). Captive insurers may take several forms. A "pure captive" is generally considered a wholly owned subsidiary created to insure the risks of its parent owner. An "association captive" is an insurance company formed by a group and is generally created to insure those risks of all members of the group. A final captive form, the "rent-a-captive," sometimes referred to as the "non-equity" captive, is simply a technique by which an organization rents or purchases the use of an existing captive insurance company. This approach is typically used by organizations wishing to gain the advantages of a captive, but for economic or other reasons, ownership is not appropriate.

Captive insurance companies can be domiciled either on or offshore. Bermuda is perhaps the most popular offshore domicile for captives. However, the Grand Caymans, Bahamas, Barbados and other locations are also captive domiciles. Colorado, Tennessee, and, most recently Vermont, have been the more active domiciles for captives within the United States.

In selecting the domicile for a captive, factors to be considered include capitalization requirements, investment portfolio regulations, exchange controls, and the infrastructure existing for professional, banking, communications, and other services.

Captive insurance companies sometimes write insurance on a direct basis. However, statutes in various jurisdictions generally require an insurance company to be licensed in order to write certain lines of insurance such as workers' compensation or automobile liability. Due to the expense and the administrative effort required to meet and maintain licensing, most captive insurance companies operate as re-insurers. Under this arrangement, a licensed commercial insurance company would initially insure the risks of the port. The commercial insurer then enters into a reinsurance contract with the captive insurance company whereby the captive assumes the premiums and losses of the policy issued by the commercial carrier. This is referred to as a "fronting" arrangement.

Under a fronting arrangement, a commercial insurer is paid a fee for the use of its facilities and filings. However, because of the reinsurance arranged with the captive, it does not assume the risks under the policies it issues. To maintain this risk-free posture and offset the impact on its financial position in dealing with a non-admitted reinsurance source, the fronting company will generally require the captive to furnish a letter of credit or other security equal to the amount it reinsures with the captive. Figure 11 provides a schematic of a possible structure of a port's risk management program incorporating a captive insurance company. Due to the feasibility of programs incorporating captives, the situation of a port's program can vary significantly from the diagram.

The captive, of course, needs to be capitalized. Capitalization requirements vary by domicile. Most jurisdictions have regulations establishing minimum capital requirements, solvency ratios, and, in some instances, investments portfolio regulations. For example, in Bermuda, the minimum capitalization is \$120,000. In Vermont, it is \$120,000 and in Colorado, it is \$400,000 plus \$350,000 surplus for a single owner captive. One exception is in the rent-a-captive

approach where a rental fee can be paid to an existing captive insurer.

Many jurisdictions have established regulations or guidelines that the captive must meet. For the most part, these are "minimum" requirements that most captives must follow. A captive insurance company program is very similar to a self-insurance plan in terms of services that must be provided. In addition to the services such as claims adjusting, safety, and engineering, arrangements must be made for the captive's management. Generally this is done by retaining a professional management firm. Insurance companies, brokers, and independent firms can be retained on a fee basis to manage a captive. The captive manager's responsibilities include coordinating the premium and loss payments with the fronting company, handling the captive's bookkeeping, arranging for auditors, and preparing and filing reports required by insurance regulators. Captive managers may also assume responsibility for arranging the excess insurance protection of the captive or managing the investments of the captive.

The captive achieves essentially the same results as a self-insurance program and has the same advantages as a self-insurance program plus two additional advantages:

- It provides access to reinsurance markets that may help to limit the retention within the captive.
- It may be feasible for the captive to join reinsurance pools to allow for risk sharing or serve as a vehicle for pooling resources and providing a better spread of risk when several ports form an association captive.

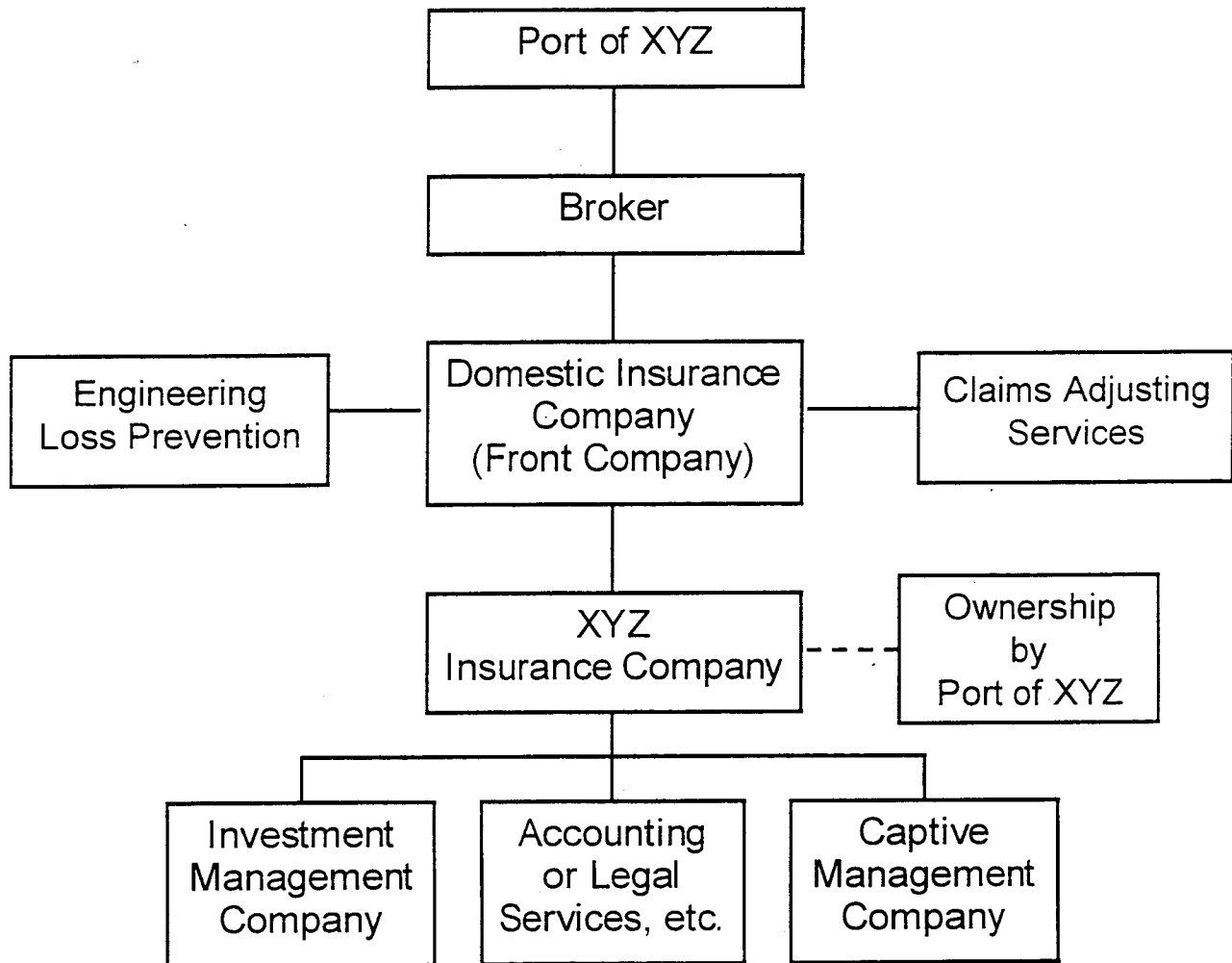
A captive may also have disadvantages that must be recognized:

- There is no spread of risk in a single owner captive.
- The capitalization of a captive may involve a significant drain of cash depending upon the location of domicile, the extent of regulation, and the amount of insurance to be written.

- The cost of a captive may exceed those of other loss funding alternatives in some circumstances. This may be particularly true

during very competitive insurance market cycles.

**Figure 11**  
**Captive Insurance Company**



*[Schematic of a possible structure of a port captive insurance company program.]*